Junos® OS

Complete Software Guide for SRX Series Services Gateways, Release 15.1X49-D40 (Volume 3)

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Supported Platforms

For the features described in this document, the following platforms are supported:

- SRX Series

Using the Examples in This Manual

If you want to use the examples in this manual, you can use the **load merge** or the **load merge relative** command. These commands cause the software to merge the incoming configuration into the current candidate configuration. The example does not become active until you commit the candidate configuration.

If the example configuration contains the top level of the hierarchy (or multiple hierarchies), the example is a *full example*. In this case, use the **load merge** command.

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If the example configuration does not start at the top level of the hierarchy, the example is a *snippet*. In this case, use the **load merge relative** command. These procedures are described in the following sections.

Merging a Full Example

To merge a full example, follow these steps:

1. From the HTML or PDF version of the manual, copy a configuration example into a text file, save the file with a name, and copy the file to a directory on your routing platform.

   For example, copy the following configuration to a file and name the file **ex-script.conf**. Copy the **ex-script.conf** file to the **/var/tmp** directory on your routing platform.

   ```
   system {
     scripts {
       commit {
         file ex-script.xsl;
       }
     }
   }
   interfaces {
     fxp0 {
       disable;
       unit 0 {
         family inet {
           address 10.0.0.1/24;
         }
       }
     }
   }
   ```

2. Merge the contents of the file into your routing platform configuration by issuing the **load merge** configuration mode command:

   ```
   [edit]
   user@host# load merge /var/tmp/ex-script.conf
   load complete
   ```

Merging a Snippet

To merge a snippet, follow these steps:

1. From the HTML or PDF version of the manual, copy a configuration snippet into a text file, save the file with a name, and copy the file to a directory on your routing platform.

   For example, copy the following snippet to a file and name the file **ex-script-snippet.conf**. Copy the **ex-script-snippet.conf** file to the **/var/tmp** directory on your routing platform.

   ```
   commit {
     file ex-script-snippet.xsl; }
   ```

2. Move to the hierarchy level that is relevant for this snippet by issuing the following configuration mode command:

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```
[edit]
user@host# edit system scripts
[edit system scripts]
```

3. Merge the contents of the file into your routing platform configuration by issuing the **load merge relative** configuration mode command:

```
[edit system scripts]
user@host# load merge relative /var/tmp/ex-script-snippet.conf
load complete
```

For more information about the **load** command, see the *CLI User Guide*.

Documentation Conventions

Table 1 on page ccxciii defines notice icons used in this guide.

Table 1: Notice Icons

Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates a situation that might result in loss of data or hardware damage.
	Warning	Alerts you to the risk of personal injury or death.
	Laser warning	Alerts you to the risk of personal injury from a laser.
	Tip	Indicates helpful information.
	Best practice	Alerts you to a recommended use or implementation.

Table 2 on page ccxciii defines the text and syntax conventions used in this guide.

Table 2: Text and Syntax Conventions

Convention	Description	Examples
Bold text like this	Represents text that you type.	To enter configuration mode, type the **configure** command: user@host> **configure**

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Table 2: Text and Syntax Conventions *(continued)*

Convention	Description	Examples
`Fixed-width text like this`	Represents output that appears on the terminal screen.	`user@host>` **show chassis alarms** `No alarms currently active`
Italic text like this	• Introduces or emphasizes important new terms. • Identifies guide names. • Identifies RFC and Internet draft titles.	• A policy *term* is a named structure that defines match conditions and actions. • *Junos OS CLI User Guide* • RFC 1997, *BGP Communities Attribute*
Italic text like this	Represents variables (options for which you substitute a value) in commands or configuration statements.	Configure the machine's domain name: [edit] root@# **set system domain-name** *domain-name*
Text like this	Represents names of configuration statements, commands, files, and directories; configuration hierarchy levels; or labels on routing platform components.	• To configure a stub area, include the **stub** statement at the **[edit protocols ospf area area-id]** hierarchy level. • The console port is labeled **CONSOLE**.
< > (angle brackets)	Encloses optional keywords or variables.	**stub <default-metric** *metric***>;**
| (pipe symbol)	Indicates a choice between the mutually exclusive keywords or variables on either side of the symbol. The set of choices is often enclosed in parentheses for clarity.	**broadcast | multicast** **(*string1* | *string2* | *string3*)**
# (pound sign)	Indicates a comment specified on the same line as the configuration statement to which it applies.	**rsvp { # Required for dynamic MPLS only**
[ ] (square brackets)	Encloses a variable for which you can substitute one or more values.	**community name members [** ***community-ids*** **]**

Indention and braces ({ })	Identifies a level in the configuration hierarchy.	[edit]
		routing-options {
		  static {
		  route default {
		  nexthop *address*;
		  retain;
		  }
		  }
		}

; (semicolon)	Identifies a leaf statement at a configuration hierarchy level.	
GUI Conventions		
Bold text like this	Represents graphical user interface (GUI) items you click or select.	• In the Logical Interfaces box, select **All Interfaces**. • To cancel the configuration, click **Cancel**.

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Table 2: Text and Syntax Conventions *(continued)*

Convention	Description	Examples
> (bold right angle bracket)	Separates levels in a hierarchy of menu selections.	In the configuration editor hierarchy, select **Protocols>Ospf**.

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can provide feedback by using either of the following methods:

- Online feedback rating system—On any page of the Juniper Networks TechLibrary site at http://www.juniper.net/techpubs/index.html, simply click the stars to rate the content, and use the pop-up form to provide us with information about your experience. Alternately, you can use the online feedback form at http://www.juniper.net/techpubs/feedback/.
- E-mail—Send your comments to **techpubs-comments@juniper.net**. Include the document or topic name, URL or page number, and software version (if applicable).

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or Partner Support Service support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at http://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf.
- Product warranties—For product warranty information, visit http://www.juniper.net/support/warranty/.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: http://www.juniper.net/customers/support/
- Search for known bugs: http://www2.juniper.net/kb/
- Find product documentation: http://www.juniper.net/techpubs/
- Find solutions and answer questions using our Knowledge Base: http://kb.juniper.net/

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- Download the latest versions of software and review release notes: http://www.juniper.net/customers/csc/software/
- Search technical bulletins for relevant hardware and software notifications: http://kb.juniper.net/InfoCenter/
- Join and participate in the Juniper Networks Community Forum: http://www.juniper.net/company/communities/
- Open a case online in the CSC Case Management tool: http://www.juniper.net/cm/

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: https://tools.juniper.net/SerialNumberEntitlementSearch/

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at http://www.juniper.net/cm/.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see http://www.juniper.net/support/requesting-support.html.

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PART 1

Configuration and Operations Automation Library

- Configuration and Operations Automation Overview on page 3
- Configuration Automation Developer Guide on page 145
- Operations Automation Developer Guide on page 333
- Event Automation and Event Policy Developer Guide on page 409

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CHAPTER 1

Configuration and Operations Automation Overview

- Overview on page 3
- Configuration on page 85
- Administration on page 142

Overview

- Introduction to Junos Automation on page 3
- Junos XML API and Junos XML Management Protocol on page 6
- Extension Functions, Templates, and Parameters in the jcs Namespace on page 8
- XML on page 44
- XSLT on page 47
- SLAX on page 63

Introduction to Junos Automation

- Junos Automation Overview on page 4

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Junos Automation Overview

Junos OS automation consists of a suite of tools used to automate operational and configuration tasks on network devices running Junos OS. The Junos automation tool kit is part of the standard Junos operating system available on all switches, routers, and security devices running Junos OS. Junos automation tools, which leverage the native XML capabilities of Junos OS, include commit scripts, operation (op) scripts, event policies and event scripts, and macros.

Junos automation simplifies complex configurations and reduces potential configuration errors. It saves time by automating operational and configuration tasks. It also speeds troubleshooting and maximizes network uptime by warning of potential problems and automatically responding to system events.

Junos automation can capture the knowledge and expertise of experienced network operators and administrators and allow a business to leverage this combined expertise across the organization.

Junos automation scripts can be written in either of two scripting languages: Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX). XSLT is a standard for processing Extensible Markup Language (XML) data and is designed to convert one XML document into another. SLAX is an alternative to XSLT. It has a simple syntax that follows the style of C and PERL, but retains the same semantics as XSLT. Programmers who are familiar with C often find it easier to learn and use SLAX. Scripts written in one language are easily converted to the other.

The following sections describe the different types of functionality for Junos automation:

- Junos Configuration Automation: Commit Scripts on page 4
- Junos Operations Automation: Op Scripts on page 5
- Junos Event Automation: Event Policy and Event Scripts on page 5

Junos Configuration Automation: Commit Scripts

Junos configuration automation uses commit scripts to automate the commit process. Junos OS commit scripts enforce custom configuration rules. When a candidate configuration is committed, it is inspected by each active commit script. If a configuration violates your custom rules, the script can instruct Junos OS to take appropriate action. A commit script can perform the following actions:

- Generate and display custom warning messages to the user
- Generate and log custom system log (syslog) messages
- Change the configuration to conform to the custom configuration rules
- Generate a commit error and halt the commit operation

Commit scripts, when used in conjunction with macros, allow you to simplify the Junos configuration and, at the same time, extend it with your own custom configuration syntax.

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Junos Operations Automation: Op Scripts

Junos operations automation uses op scripts to automate operational tasks and network troubleshooting. Junos OS op scripts can be executed manually in the CLI or upon user login, or they can be called from another script. Op scripts can process user arguments and can be constructed to:

- Create custom operational mode commands
- Execute a series of operational mode commands
- Customize the output of operational mode commands
- Shorten troubleshooting time by gathering operational information and iteratively narrowing down the cause of a network problem
- Perform controlled configuration changes
- Monitor the overall status of a device by creating a general operation script that periodically checks network warning parameters, such as high CPU usage

Junos Event Automation: Event Policy and Event Scripts

Junos event automation uses event policy and event scripts to instruct Junos OS to perform actions in response to system events.

Event Policy

An event policy is an if-then-else construct that defines actions to be executed by the software on receipt of an event such as a system log message or SNMP trap. Event policies can be executed in response to a single system event or to correlated system events. For each policy, you can configure multiple actions including:

- Ignore the event
- Upload a file to a specified destination
- Execute Junos OS operational mode commands
- Execute Junos OS event scripts

Event Scripts

Junos OS event scripts are triggered automatically by defined event policies in response to a system event and can instruct Junos OS to take immediate action. An event script automates network troubleshooting and network management by doing the following:

- Automatically diagnose and fix problems in the network
- Monitor the overall status of a device
- Run automatically as part of an event policy that detects periodic error conditions
- Change the configuration in response to a problem

Related Documentation

- Commit Script Overview on page 145
- Event Scripts Overview on page 412

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Junos XML API and Junos XML Management Protocol

- Junos XML Management Protocol and Junos XML API Overview on page 6
- Advantages of Using the Junos XML Management Protocol and Junos XML API on page 7

Junos XML Management Protocol and Junos XML API Overview

The Junos XML Management Protocol is an XML-based protocol that client applications use to request and change configuration information on routing, switching, and security platforms running Junos OS. It uses an XML-based data encoding for the configuration data and remote procedure calls. The protocol defines basic operations that are equivalent to configuration mode commands in the Junos OS command-line interface (CLI). Applications use the protocol operations to display, edit, and commit configuration statements (among other operations), just as administrators use CLI configuration mode commands such as **show**, **set**, and **commit** to perform those operations.

The Junos XML API is an XML representation of Junos configuration statements and operational mode commands. Junos XML configuration tag elements are the content to which the Junos XML protocol operations apply. Junos XML operational tag elements are equivalent in function to operational mode commands in the CLI, which administrators use to retrieve status information for a device.

Client applications request information and change the configuration on a device by encoding the request with tag elements from the Junos XML management protocol and Junos XML API and sending it to the Junos XML protocol server on the device. The Junos XML protocol server is integrated into Junos OS and does not appear as a separate entry in process listings. The Junos XML protocol server directs the request to the appropriate software modules within the device, encodes the response in Junos XML and Junos XML protocol tag elements, and returns the result to the client application. For example, to request information about the status of a device's interfaces, a client application sends the Junos XML API **<get-interface-information>** request tag element . The Junos XML protocol server gathers the information from the interface process and returns it in the Junos XML API **<interface-information>** response tag element.

You can use the Junos XML management protocol and Junos XML API to configure devices running Junos OS or request information about the device configuration or operation. You can write client applications to interact with the Junos XML protocol server, and you can also utilize the Junos XML protocol to build custom end-user interfaces for configuration and information retrieval and display, such as a Web browser-based interface.

Related Documentation

- Advantages of Using the Junos XML Management Protocol and Junos XML API on page 7
- XML and Junos OS Overview on page 46
- XML Overview on page 44

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Advantages of Using the Junos XML Management Protocol and Junos XML API

The Junos XML management protocol and Junos XML API fully document all options for every supported Junos operational request, all statements in the Junos configuration hierarchy, and basic operations that are equivalent to configuration mode commands. The tag names clearly indicate the function of an element in an operational or configuration request or a configuration statement.

The combination of meaningful tag names and the structural rules in a DTD makes it easy to understand the content and structure of an XML-tagged data set or document. Junos XML and Junos XML protocol tag elements make it straightforward for client applications that request information from a device to parse the output and find specific information.

Parsing Device Output

The following example illustrates how the Junos XML API makes it easier to parse device output and extract the needed information. The example compares formatted ASCII and XML-tagged versions of output from a device running Junos OS.

The formatted ASCII follows:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, SNMP ifIndex: 3
```

The corresponding XML-tagged version is:

```
<interface>
  <name>fxp0</name>
  <admin-status>enabled</admin-status>
  <operational-status>up</operational-status>
  <index>4</index>
  <snmp-index>3</snmp-index>
</interface>
```

When a client application needs to extract a specific value from formatted ASCII output, it must rely on the value's location, expressed either absolutely or with respect to labels or values in adjacent fields. Suppose that the client application wants to extract the interface index. It can use a regular-expression matching utility to locate specific strings, but one difficulty is that the number of digits in the interface index is not necessarily predictable. The client application cannot simply read a certain number of characters after the **Interface index:** label, but must instead extract everything between the label and the subsequent label **SNMP ifIndex** and also account for the included comma.

A problem arises if the format or ordering of text output changes in a later version of Junos OS. For example, if a **Logical index** field is added following the interface index number, the new formatted ASCII might appear as follows:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, Logical index: 12, SNMP ifIndex: 3
```

An application that extracts the interface index number delimited by the **Interface index:** and **SNMP ifIndex:** labels now obtains an incorrect result. The application must be updated manually to search for the **Logical index:** label as the new delimiter.

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In contrast, the structured nature of XML-tagged output enables a client application to retrieve the interface index by extracting everything within the opening **<index>** tag and closing **</index>** tag. The application does not have to rely on an element's position in the output string, so the Junos XML protocol server can emit the child tag elements in any order within the **<interface>** tag element. Adding a new **<logical-index>** tag element in a future release does not affect an application's ability to locate the **<index>** tag element and extract its contents.

Displaying Device Output

XML-tagged output is also easier to transform into different display formats than formatted ASCII output. For instance, you might want to display different amounts of detail about a given device component at different times. When a device returns formatted ASCII output, you have to write special routines and data structures in your display program to extract and show the appropriate information for a given detail level. In contrast, the inherent structure of XML output is an ideal basis for a display program's own structures. It is also easy to use the same extraction routine for several levels of detail, simply ignoring the tag elements you do not need when creating a less detailed display.

Related Documentation

- Junos XML Management Protocol and Junos XML API Overview on page 6
- XML Overview on page 44

Extension Functions, Templates, and Parameters in the jcs Namespace

- Understanding Extension Functions in the jcs Namespace on page 8
- Summary of Extension Functions in the jcs Namespace on page 9
- Extension Functions in the jcs Namespace on page 11
- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- Junos Named Templates in the jcs Namespace Summary on page 30
- Junos Named Templates in the jcs Namespace on page 30
- Global Parameters and Variables in the junos.xsl File on page 39

Understanding Extension Functions in the jcs Namespace

The Junos OS extension functions are used in commit, op, and event scripts to accomplish scripting tasks more easily. Extension functions allow you to perform operations that are difficult or impossible to perform in XPath. The library provides logic, data manipulation, input and output, and utility functions.

The Junos OS extension functions are defined in the namespace with the associated Uniform Resource Identifier (URI) http://xml.juniper.net/junos/commit-scripts/1.0 . To use the Junos extension functions in scripts, you must include the namespace URI in your style sheet declaration. Generally, the **jcs** prefix is mapped to the URI, and you then use the extension functions by prepending the **jcs** prefix to the function name. This avoids name conflicts with standard XSLT functions. During processing, the **jcs:** prefix is expanded into the URI reference.

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To call an extension function in a script, you include any required variable declarations, a variable call with the **select="jcs:*function-name*()"** attribute for XSLT scripts or a simple function call for SLAX scripts, and pass along any required or optional arguments. Arguments must be passed into the function in the precise order specified by the function definition. This is different from a template, where the parameters are assigned by name and can appear in any order. The return value of an extension function must always either be assigned to a variable or designated as output.

The following example maps the **jcs** prefix to the namespace identified by the URI http://xml.juniper.net/junos/commit-scripts/1.0, which defines the extension functions used in commit, op, and event scripts.The script then calls the **jcs:invoke()** function with one argument.

XSLT Syntax

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0"
    xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
    ...
    <xsl:variable name="result" select="jcs:invoke($command)"/>
    ...
</xsl: stylesheet>
```

SLAX Syntax

```
version 1.0;
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
    ...
    var $result = jcs:invoke($command);
    ...
```

Related Documentation

- Summary of Extension Functions in the jcs Namespace on page 9
- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- Global Parameters and Variables in the junos.xsl File on page 39
- SLAX Variables Overview on page 77
- XSLT Variables Overview on page 57

Summary of Extension Functions in the jcs Namespace

The Junos extension functions are summarized in Table 3 on page 9.

Table 3: Junos Extension Functions

Function	Type	Description
jcs:break-lines()	Data manipulation	Break a simple element into multiple elements, delimited by newlines.
jcs:close()	Utility	Close a previously opened connection handle.
jcs:dampen()	Utility	Prevent the same operation from being repeatedly executed within a script.

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Table 3: Junos Extension Functions *(continued)*

Function	Type	Description
jcs:empty()	Logic	Evaluate a node set or string argument to determine if it is an empty value.
jcs:execute()	Utility	Execute a remote procedure call (RPC) within the context of a specified connection handle.
jcs:first-of()	Logic	Return the first nonempty (non-null) item in a list, If all objects in the list are empty, the default expression is returned.
jcs:get-hello()	Utility	Return the session ID and the capabilities of the NETCONF server during a NETCONF session.
jcs:get-input()	Input/output control	Invoke a CLI prompt and wait for user input. If the script is run non-interactively, the function returns an empty value. This function cannot be used with event scripts.
jcs:get-protocol()	Utility	Return the session protocol associated with the connection handle.
jcs:get-secret()	Input/output control	Invoke a CLI prompt and wait for user input. The input is not echoed back to the user.
jcs:hostname()	Utility	Return the fully qualified domain name associated with a given IPv4 or IPv6 address, provided the DNS server is configured on the router.
jcs:invoke()	Utility	Invoke an RPC on the local device.
jcs:open()	Utility	Return a connection handle that can be used to execute RPCs.
jcs:output()	Input/output control	Generate unformatted output text that is immediately sent to the CLI session.
jcs:parse-ip()	Data manipulation	Parse an IPv4 or IPv6 address and return the host IP address, protocol family, prefix length, network address, and network mask.
jcs:printf()	Input/output control	Generate formatted output text. Most standard **printf** formats are supported, in addition to some Junos OS-specific formats. The function returns a formatted string but does not print it on call.
jcs:progress()	Input/output control	Issue a progress message containing the single argument immediately to the CLI session provided that the **detail** flag was specified when the script was invoked.
jcs:regex()	Data manipulation	Evaluate a regular expression against a given string argument and return any matches.

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Table 3: Junos Extension Functions *(continued)*

Function	Type	Description
jcs:sleep()	Utility	Cause the script to sleep for a specified time.
jcs:split()	Data manipulation	Split a string into an array of substrings delimited by a regular expression pattern.
jcs:sysctl()	Utility	Return the value of the given **sysctl** value as a string or an integer.
jcs:syslog()	Input/output control	Log messages with the specified priority to the system log file.
jcs:trace()	Input/output control	Issue a trace message, which is sent to the trace file.

Related Documentation

- Junos Named Templates in the jcs Namespace Summary on page 30
- Understanding Extension Functions in the jcs Namespace on page 8
- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- Global Parameters and Variables in the junos.xsl File on page 39

Extension Functions in the jcs Namespace

The Junos extension functions are discussed in detail in the following sections:

- jcs:break-lines() Function on page 12
- jcs:close() Function on page 12
- jcs:dampen() Function on page 12
- jcs:empty() Function on page 13
- jcs:execute() Function on page 14
- jcs:first-of() Function on page 14
- jcs:get-hello() Function on page 16
- jcs:get-input() Function on page 17
- jcs:get-protocol() Function on page 17
- jcs:get-secret() Function on page 18
- jcs:hostname() Function on page 18
- jcs:invoke() Function on page 18
- jcs:open() Function on page 19
- jcs:output() Function on page 21
- jcs:parse-ip() Function on page 22
- jcs:printf() Function on page 22
- jcs:progress() Function on page 23

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- jcs:regex( ) Function on page 24
- jcs:sleep( ) Function on page 24
- jcs:split( ) Function on page 25
- jcs:sysctl( ) Function on page 26
- jcs:syslog( ) Function on page 26
- jcs:trace( ) Function on page 28

jcs:break-lines( ) Function

SLAX Syntax

```
var $lines = jcs:break-lines(expression);
```

XSLT Syntax

```
<xsl:variable name="lines" select="jcs:break-lines(expression)"/>
```

Description Break a simple element into multiple elements, delimited by newlines. This is especially useful for large output elements such as those returned by the **show pfe** command.

Parameters

- ***expression***—Original output.

Return Value

- **$lines**—Output broken up into lines.

Usage Examples

```
var $lines = jcs:break-lines($output);
for-each ($lines) {
  ...
}
```

jcs:close( ) Function

SLAX Syntax

```
var $results =  jcs:close(connection);
```

XSLT Syntax

```
<xsl:variable name="results" select="jcs:close(connection)"/>
```

Description Close a previously opened connection handle.

Parameters

- ***connection***—a connection handle generated by a call to the **jcs:open( )** function.

Usage Examples The following example closes the connection handle **$connection**, which was originally generated by a call to the **jcs:open( )** function:

```
var $connection = jcs:open( );
var $result = jcs:close($connection);
```

jcs:dampen( ) Function

SLAX Syntax

```
var $result = jcs:dampen(tag-string, max, interval);
```

XSLT Syntax

```
<xsl:variable name="result" select="jcs:dampen(tag-string, max, interval)"/>
```

Description Prevent the same operation from being repeatedly executed within a script. The dampen function returns **false** if the number of calls to the **jcs:dampen( )** function exceeds a ***max*** number of calls in the time interval ***interval***. Otherwise the function returns **true**. The

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function parameters include an arbitrary string that is used to distinguish different calls to the **jcs:dampen()** function. This tag is stored in the **/var/run** directory on the device.

Parameters

- ***interval***—Time interval, in minutes.
- ***max***—Maximum number of calls to the **jcs:dampen()** function with a given tag allowed before the function returns **false**. This limit is based on the number of calls within a specified time interval.
- ***tag-string***—Arbitrary string used to distinguish different calls to the **jcs:dampen()** function.

Return Value

- **result**—Boolean value based on the number of calls to **jcs:dampen()** with a given tag and within a specified time. If the number of calls for a given tag exceeds ***max***, the return value is **false**. If the number of calls is less than ***max***, the return value is **true**.

Usage Examples

In the following example, if the **jcs:dampen()** function with the tag **'mytag1'** is called less than three times in a 10-minute interval, the function returns **true**. If the function is called more than three times within 10 minutes, the function returns **false**.

```
if (jcs:dampen('mytag1', 3, 10)) {
   /* Code for situations when jcs:dampen() with */
   /* the tag 'mytag1' is called less than three times */
  /* within 10 minutes */
} else {
  /* Code for situations when jcs:dampen() with */
   /* the tag 'mytag1' exceeds the three call maximum */
  /* limit within 10 minutes */
}
```

jcs:empty() Function

SLAX Syntax

```
var $result = jcs:empty(node-set | string);
```

XSLT Syntax

```
<xsl:variable name="result" select="jcs:empty(node-set | string)"/>
```

Description

Test for the presence of a value and return **true** if the node set or string argument evaluates to an empty value.

Parameters

- ***(node-set | string)***—Argument to test for the presence of a value.

Return Value

- **result**—Boolean value that is **true** if the argument is empty.

Usage Examples

In the following example, if **$set** is empty, the script executes the enclosed code block.

```
if ( jcs:empty($set) ) {
  /* Code to handle true value ($set is empty) */
}
```

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The following example tests whether the **description** node for interface fe-/0/0/0 is empty. If the description is missing, a message tag is output.

```
if (jcs:empty(interfaces/interface[name="fe-0/0/0"]/description)) {
  <message> "interface " _ name _ " is missing description";
}
```

jcs:execute() Function

SLAX Syntax

```
var $result = jcs:execute(connection, rpc);
```

XSLT Syntax

```
<xsl:variable name="result" select="jcs:execute(connection, rpc)"/>
```

Description Execute a remote procedure call (RPC) within the context of a specified connection handle. Any number of RPCs may be executed within the context of the connection handle until it is closed with the **jcs:close()** function.

Parameters

- *connection*—Connection handle generated by a call to the **jcs:open()** function.
- *rpc*—Remote procedure call (RPC) to execute.

Return Value

- **result**—Results of the executed RPC, which includes the contents of the **<rpc-reply>** element, but not the **<rpc-reply>** tag itself. This **$result** variable is the same as that produced by the **jcs:invoke()** function. By default, the results are in XML format equivalent to the output produced with the **| display xml** option in the CLI.

Usage Examples In the following example, the **$rpc** variable is declared and initialized with the Junos XML **<get-interface-information>** element. A call to the **jcs:open()** function generates a connection handle to the remote device at IP address **10.10.10.1**. The user's login and passphrase are provided as arguments to **jcs:open()** to provide access the remote device. The code calls **jcs:execute()** and passes in the connection handle and RPC as arguments. Junos OS on the remote device processes the RPC and returns the results, which are stored in the **$results** variable.

```
var $rpc = <get-interface-information>;
var $connection = jcs:open('10.10.10.1', 'bsmith', 'test123');
var $results = jcs:execute($connection, $rpc);
expr $results;
```

In XSLT:

```
<xsl:variable name="connection" select="jcs:open('10.10.10.1', 'bsmith', 'test123')"/>
<xsl:variable name="rpc">
  <get-interface-information/>
</xsl:variable>
<xsl:variable name="results" select="jcs:execute($connection, $rpc)"/>
<xsl:value-of select="$results"/>
```

jcs:first-of() Function

SLAX Syntax

```
var $result = jcs:first-of(object, "expression");
```

XSLT Syntax

```
<xsl:variable name="result" select="jcs:first-of(object, 'expression')"/>
```

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Description Return the first nonempty (non-null) item in a list. If all objects in the list are empty, the default expression is returned. This function provides the same functionality as an **if / else-if / else** construct but in a much more concise format.

Parameters

- ***expression***—Default value returned if all objects in the list are empty.
- ***object***—List of objects.

Return Value

- **result**—First nonempty (non-null) item in the object list. If all objects in the list are empty, the default expression is returned.

Usage Examples In the following example, if the value of **$a** is empty, **$b** is checked. If the value of **$b** is empty, **$c** is checked. If the value of **$c** is empty, **$d** is checked. If the value of **$d** is empty, the string "**none**" is returned.

```
jcs:first-of($a, $b, $c, $d, "none")
```

In the following example, for each physical interface, the script checks for a description of each logical-interface. If a logical interface description does not exist, the function returns the description of the (parent) physical interface. If the parent physical interface description does not exist, the function returns a message that no description was found.

```
var $rpc = <get-interface-information>;
var $results = jcs:invoke($rpc);
for-each ($results/physical-interface/logical-interface) {
  var $description = jcs:first-of(description, ../description, "no description found");
}
```

The equivalent XSLT code is:

```
<xsl:variable name="rpc">
  <get-interface-information/>
</xsl:variable>
<xsl:variable name="results" select="jcs:invoke($rpc)"/>
<xsl:for-each select="$results/physical-interface/logical-interface">
  <xsl:variable name="description"
     select="jcs:first-of(description, ../description, 'no description found')"/>
</xsl:for-each>
```

The code for the **description** variable declaration in the previous examples would be equivalent to the following more verbose **if / else-if / else** construct:

```
var $description = {
  if (description) {
    expr description;
  }
  else if (../description) {
    expr ../description;
  }
  else {
    expr "no description found";
  }
}
```

See also "Example: Displaying DNS Hostname Information Using an Op Script" on page 365.

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jcs:get-hello() Function

SLAX Syntax

```
var $capabilities = jcs:get-hello(connection);
```

XSLT Syntax

```
<xsl:variable name="capabilities" select="jcs:get-hello(connection)"/>
```

Description Return the session ID and the capabilities of the NETCONF server during a NETCONF session.

During session establishment, the NETCONF server and client application each emit a **<hello>** tag element to specify which operations, or *capabilities*, they support from among those defined in the NETCONF specification or published as proprietary extensions. The **<hello>** tag element encloses the **<capabilities>** tag element and the **<session-id>** tag element, which specifies the session ID for this NETCONF session.

Within the **<capabilities>** tag element, a **<capability>** tag element specifies each supported function. Each capability defined in the NETCONF specification is represented by a uniform resource name (URN). Capabilities defined by individual vendors are represented by uniform resource identifiers (URIs), which can be URNs or URLs.

Parameters

- *connection*—Connection handle generated by a call to the **jcs:open()** function.

Return Value

- **capabilities**—XML node-set that specifies which operations, or *capabilities*, the NETCONF server supports. The node-set also includes the session ID.

Usage Examples In the following code snippet, the user, bsmith, establishes a NETCONF session on the default port with the remote device, fivestar, which is running Junos OS. Since the code does not specify a value for the password, the user is prompted for a password during script execution. Once authentication is established, the code calls the **jcs:get-hello()** function and stores the return value in the variable **$hello**, which is then printed to the CLI.

```
var $netconf := {
   <method> "netconf";
   <username> "bsmith";
}
var $connection = jcs:open("fivestar", $netconf);
var $hello = jcs:get-hello($connection);
expr jcs:output($hello);
expr jcs:close($connection);
```

The CLI displays the following output:

```
bsmith@fivestar's password:

urn:ietf:params:xml:ns:netconf:base:1.0
urn:ietf:params:xml:ns:netconf:capability:candidate:1.0
urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0
urn:ietf:params:xml:ns:netconf:capability:validate:1.0
urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file
http://xml.juniper.net/netconf/junos/1.0
http://xml.juniper.net/dmi/system/1.0

20847
```


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jcs:get-input() Function

SLAX Syntax

```
var $user-input =  jcs:get-input(string);
```

XSLT Syntax

```
<xsl:variable name="user-input" select="jcs:get-input(string)"/>
```

Description Invoke a CLI prompt and wait for user input. The user input is defined as a string for subsequent use. If the script is run non-interactively, the function returns an empty value. This function cannot be used with event scripts.

Parameters

- ***string***—CLI prompt text.

Return Value

- **user-input**—Text typed by the user and stored as a string. The return value will be empty if the script is run non-interactively.

Usage Examples In the following example, the user is prompted to enter a login name. The user's input is stored in the variable **$username**:

```
var $username = jcs:get-input("Enter login id: ");
```

jcs:get-protocol() Function

SLAX Syntax

```
var $protocol = jcs:get-protocol(connection);
```

XSLT Syntax

```
<xsl:variable name="protocol" select="jcs:get-protocol(connection)"/>
```

Description Return the session protocol associated with the connection handle. The protocol values are **junoscript**, **netconf**, and **junos-netconf**.

Parameters

- ***connection***—Connection handle generated by a call to the **jcs:open()** function.

Return Value

- **protocol**—Session protocol associated with the connection handle. The values are **junoscript**, **netconf**, or **junos-netconf**.

Usage Examples In the following code snippet, the user, bsmith, establishes a NETCONF session on the default port with the remote device, fivestar. Since the code does not specify a value for the password, the user is prompted for a password during script execution. Once authentication is established, the code calls the **jcs:get-protocol()** function and stores the return value in the variable **$protocol**, which is then printed to the CLI.

```
var $netconf := {
   <method> "netconf";
   <username> "bsmith";
}
var $connection = jcs:open("fivestar", $netconf);
var $protocol = jcs:get-protocol($connection);
expr jcs:output($protocol);
expr jcs:close($connection);
```

The CLI displays the following output:

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```
bsmith@fivestar's password:

netconf
```

jcs:get-secret() Function

SLAX Syntax
```
var $user-input = jcs:get-secret(string);
```

XSLT Syntax
```
<xsl:variable name="user-input" select="jcs:get-secret(string)"/>
```

Description
Invoke a CLI prompt and wait for user input. Unlike the **jcs:get-input()** function, the input is not echoed back to the user, which makes the function useful for obtaining passwords. The user input is defined as a string for subsequent use. This function cannot be used with event scripts.

Parameters
- ***string***—CLI prompt text.

Return Value
- **user-input**—Text typed by the user and stored as a string.

Usage Examples
The following example shows how to prompt for a password that is not echoed back to the user:

```
var $password = jcs:get-secret("Enter password: ");
```

jcs:hostname() Function

SLAX Syntax
```
var $name = jcs:hostname(expression);
```

XSLT Syntax
```
<xsl:variable name="name" select="jcs:hostname(expression)"/>
```

Description
Return the fully qualified domain name associated with a given IPv4 or IPv6 address. The DNS server must be configured on the device in order to resolve the domain name.

Parameters
- ***expression***—IPv4 or IPv6 address.

Return Value
- **name**—Hostname associated with the IP address.

Usage Examples
The following example initializes the variable **address** with the IP address **10.10.10.1**. The **$address** variable is passed as the argument to the **jcs:hostname()** function. If the DNS server is configured on the device, the function will resolve the IP address return the fully qualified domain name, which is stored in the variable **host**.

```
var $address = "10.10.10.1";
var $host = jcs:hostname($address);
```

In XSLT:

```
<xsl:variable name="address" select="10.10.10.1">
<xsl:variable name="host" select="jcs:hostname($address)"/>
```

jcs:invoke() Function

SLAX Syntax
```
var $result = jcs:invoke(rpc);
```


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XSLT Syntax

<xsl:variable name="result" select="jcs:invoke(*rpc*)"/>

Description

Invoke a remote procedure call (RPC) on the local device. The function is called with one argument, either a string containing a Junos XML or Junos XML protocol RPC method name or a tree containing an RPC. The result is the contents of the **<rpc-reply>** element, not including the **<rpc-reply>** tag. An RPC allows you to perform functions equivalent to the Junos OS operational mode commands.

Parameters

- *rpc*—String containing a Junos XML or Junos XML protocol RPC method name or a tree containing an RPC.

Return Value

- **result**—Results of the executed RPC, which includes the contents of the **<rpc-reply>** element, but not the **<rpc-reply>** tag itself. By default, the results are in XML format equivalent to the output produced with the **| display xml** option in the CLI.

Usage Examples

In the following example, there is a test to see if the **interface** argument is included on the command line when the script is executed. If the argument is provided, the operational mode output of the **show interfaces terse** command is narrowed to include information about that interface only.

```
<xsl:param name="interface"/>
<xsl:variable name="rpc">
  <get-interface-information>
    <terse/>
    <xsl:if test="$interface">
      <interface-name>
        <xsl:value-of select="$interface"/>
      </interface-name>
    </xsl:if>
  </get-interface-information>
</xsl:variable>
<xsl:variable name="out" select="jcs:invoke($rpc)"/>
```

In this example, the **jcs:invoke()** function calls an RPC without modifying the output:

```
<xsl:variable name="sw" select="jcs:invoke('get-software-information')"/>
```

jcs:open() Function

SLAX Syntax

```
var $connection = jcs:open();

var $connection = jcs:open(remote-hostname, <username>, <passphrase>);

var $connection = jcs:open(remote-hostname, <session-options>);
```

XSLT Syntax

```
<xsl:variable name="connection" select="jcs:open()"/>

<xsl:variable name="connection" select="jcs:open(remote-hostname, <username>,
<passphrase>)"/>

<xsl:variable name="connection" select="jcs:open(remote-hostname,
<session-options>)"/>
```

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Description Return a connection handle that can be used to execute remote procedure calls (RPCs) using the **jcs:execute()** extension function. To execute an RPC on a remote device, an SSH session must be established. In order for the script to establish the connection, you must either configure the SSH host key information for the remote device on the local device where the script will be executed, or the SSH host key information for the remote device must exist in the known hosts file of the user executing the script.

Starting with Junos OS Release 11.4, the new parameter, ***session-options***, supports the option to create a session either with the Junos XML protocol server on devices running Junos OS or with the NETCONF server on devices where NETCONF service over SSH is enabled. Previously, the function supported only sessions with the Junos XML protocol server on devices running Junos OS.

The connection handle is closed with the **jcs:close()** function.

Parameters

- ***remote-hostname***—Domain name or IP address of the remote router, switch, or security device. If you are opening a local connection, do not pass this value. If you specify a session type, this parameter is required.
- ***username***—(Optional) User's login name. If you do not specify a username and it is required for the connection, the script uses the local name of the user executing the script.
- ***passphrase***—(Optional) User's login passphrase. If you do not specify a passphrase and it is required for authentication, you should be prompted for one during script execution by the device to which you are connecting.
- ***session-options***—(Optional) XML node-set that specifies the session protocol and connection parameters. The structure of the node-set is:

```
var $session-options := {
    <method> ("junoscript" | "netconf" | "junos-netconf");
    <username> "username";
    <passphrase> "passphrase";
    <password> "passphrase";
    <port> "port-number";
}
```

  - **<method>**—(Optional) Session protocol. The protocol is one of three values: **junoscript**, **netconf**, or **junos-netconf**. If you do not specify a protocol, a **junoscript** session is created by default. A **<method>** value of **junoscript** establishes a session with the Junos XML protocol server on a device running Junos OS. A **<method>** value of **netconf** establishes a session with a NETCONF server over an SSHv2 connection. A **<method>** value of **junos-netconf** establishes a proprietary session with a NETCONF server over an SSHv2 connection on a device running Junos OS.
  - **<username>**—(Optional) User's login name. If you do not specify a username and it is required for the connection, the script uses the local name of the user executing the script.

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- **<passphrase> or <password>**—(Optional) User's login passphrase. If you do not specify a passphrase and it is required for authentication, you should be prompted for one during script execution by the device to which you are connecting.
- **<port>**—(Optional) Server port number for **netconf** and **junos-netconf** sessions. For NETCONF sessions, **jcs:open()** connects to the NETCONF server at the default port 830. If you specify a value for **<port>**, **jcs:open()** connects to the given port instead. Specifying a port number has no impact on **junoscript** sessions, which are always established over SSH port 22.

Return Value

- **connection**—Connection handle to the remote host.

Usage Examples

The following example shows how to connect to a local device:

```
var $connection = jcs:open();
```

The following example shows how to connect to a remote device:

```
var $connection = jcs:open(remote-hostname);
```

The following example shows how the user, bsmith, with the passphrase test123 obtains a connection handle to the remote device, fivestar:

```
var $connection = jcs:open("fivestar", "bsmith", "test123");
```

The following example shows how the user, bsmith, with the passphrase test123 creates a **junos-netconf** session with a device running Junos OS:

```
var $options := {
   <method> "junos-netconf";
   <username> "bsmith";
   <passphrase> "test123";
}
var $connection = jcs:open("fivestar", $options);
```

jcs:output() Function

SLAX Syntax

```
expr jcs:output('string');
```

XSLT Syntax

```
<xsl:value-of select="jcs:output('string')"/>
```

Description

Generate unformatted output text that is immediately sent to the CLI session. In contrast, most script output is output at the end of the script.

Parameters

- ***string***—Text that is output immediately to the CLI session.

Usage Examples

SLAX syntax:

```
expr jcs:output('The VPN is up.');
```

XSLT syntax:

```
<xsl:value-of select="jcs:output('The VPN is up.')"/>
```

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jcs:parse-ip() Function

SLAX Syntax var $result = jcs:parse-ip("*ipaddress/*(*prefix-length* | *netmask*)");

XSLT Syntax <xsl:variable name="result" select="jcs:parse-ip('*ipaddress/*(*prefix-length* | *netmask*')"/>

Description Parse an IPv4 or IPv6 address.

Parameters
- ***ipaddress***—IPv4 or IPv6 address.
- ***prefix-length***—Prefix length defining the number of bits used in the network prefix portion of the address.
- ***netmask***—Netmask defining the network prefix portion of the address.

Return Value
- **result**—An array containing:
  - Host IP address (or **NULL** in the case of an error)
  - Protocol family (inet for IPv4 or inet6 for IPv6)
  - Prefix length
  - Network address
  - Network mask in dotted decimal notation for IPv4 addresses (left blank for IPv6 addresses)

Usage Examples In the following examples, an IPv4 address and an IPv6 address are parsed and the resulting output is detailed:

```
var $addr = jcs:parse-ip("10.1.2.10/255.255.255.0");
```

- **$addr[1]** contains the host address **10.1.2.10**.
- **$addr[2]** contains the protocol family **inet**.
- **$addr[3]** contains the prefix length **24**.
- **$addr[4]** contains the network address **10.1.2.0**.
- **$addr[5]** contains the netmask for IPv4 **255.255.255.0**.

```
var $addr = jcs:parse-ip("2001:DB8::c50:8a:800:200C:417A/32");
```

- **$addr[1]** contains the host address **2001:db8:0:c50:8a:800:200c:417a**.
- **$addr[2]** contains the protocol family **inet6**.
- **$addr[3]** contains the prefix length **32**.
- **$addr[4]** contains the network address **2001:db8::**.
- **$addr[5]** is blank for IPv6 (**""**).

jcs:printf() Function

SLAX Syntax expr jcs:printf(*expression*);

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XSLT Syntax <xsl:value-of select="jcs:printf(*expression*)"/>

Description Generate formatted output text. Most standard **printf** formats are supported, in addition to some Junos OS–specific formats. The function returns a formatted string but does not print it on call. To use the following Junos OS modifiers, place the modifier between the percent sign (%) and the conversion specifier.

- **j1**—operator emits the field only if it changed from the last time the function was called. This assumes that the expression's format string is unchanged.
- **jc**—operator capitalizes the first letter of the associated output string.
- **jt{TAG}**—operator emits the tag if the associated argument is not empty.

Parameters
- *expression*—format string containing an arbitrary number of format specifiers and associated arguments to output.

Usage Examples In the following example, the **j1** operator suppresses printing the interface identifier **so-0/0/0** in the second line of output, because the identifier argument has not changed from the first printing. The **jc** operator capitalizes the output strings **up** and **down**. The **jt{--}** operator does not print the **{--}** tag in the first line of output, because the associated output argument is an emtpy string. However, the tag is printed in the second line because the associated output is the non-empty string **test**.

```
<xsl:value-of select="jcs:printf('%-24j1s %-5jcs %-5jcs %s%jt{ -- }s\n',
      'so-0/0/0', 'up', 'down', '10.1.2.3', '')"/>
<xsl:value-of select="jcs:printf('%-24j1s %-5jcs %-5jcs %s%jt{ -- }s\n',
      'so-0/0/0', 'down', 'down', '10.1.2.3', 'test')"/>
```

produces the following output:

```
so-0/0/0         Up    Down  10.1.2.3
              Down    Down  10.1.2.3 -- test
```

jcs:progress( ) Function

SLAX Syntax expr jcs:progress('*string*');

XSLT Syntax <xsl:value-of select="jcs:progress('*string*')"/>

Description Issue a progress message containing the single argument immediately to the CLI session provided that the **detail** flag was specified when the script was invoked.

Parameters
- ***string***—text output to CLI session

Usage Examples SLAX syntax:

```
expr jcs:progress('Working...');
```

XSLT syntax:

```
<xsl:value-of select="jcs:progress('Working...')"/>
```

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The script must be invoked with the **detail** flag in order for the progress message to appear in the CLI session.

```
user@host> op script1.slax detail
```

```
2010-10-01 16:27:54 PDT: running op script 'script1.slax'
2010-10-01 16:27:54 PDT: opening op script '/var/db/scripts/op/script1.slax'
2010-10-01 16:27:54 PDT: reading op script 'script1.slax'
2010-10-01 16:27:54 PDT: Working...
2010-10-01 16:28:14 PDT: inspecting op output 'script1.slax'
2010-10-01 16:28:14 PDT: finished op script 'script1.slax'
```

jcs:regex() Function

SLAX Syntax

```
var $result = jcs:regex(pattern, string);
```

XSLT Syntax

```
<xsl:variable name="result" select="jcs:regex(pattern, string)"/>
```

Description Evaluate a regular expression against a given string argument and return any matches. This function requires two arguments: the regular expression and the string to which the regular expression is compared.

Parameters

- ***pattern***—Regular expression that is evaluated against the string argument.
- ***string***—String within which to search for matches of the specified regular expression.

Return Value

- **result**—Array of strings that match the given regex pattern within the string argument.

Usage Examples In the following example, the regex pattern consists of four distinct groups. The first group consists of the entire expression. The three subsequent groups are each of the parentheses–enclosed expressions within the main expression. The results for each **jcs:regex()** function call contain an array of the matches of the regex pattern to each of the specified strings.

```
var $pattern = "([0-9]+)(:*)([a-z]*)";
var $a = jcs:regex($pattern, "123:xyz");
var $b = jcs:regex($pattern, "r2d2");
var $c = jcs:regex($pattern, "test999!!!");

$a[1] == "123:xyz"   # string that matches the full reg expression
$a[2] == "123"       # ([0-9]+)
$a[3] == ":"         # (:*)
$a[4] == "xyz"       # ([a-z]*)
$b[1] == "2d"        # string that matches the full reg expression
$b[2] == "2"         # ([0-9]+)
$b[3] == ""          # (:*)  [empty match]
$b[4] == "d"         # ([a-z]*)
$c[1] == "999"       # string that matches the full reg expression
$c[2] == "999"       # ([0-9]+)
$c[3] == ""          # (:*)  [empty match]
$c[4] == ""          # ([a-z]*)  [empty match]
```

jcs:sleep() Function

SLAX Syntax

```
expr jcs:sleep(seconds, <milliseconds>);
```

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XSLT Syntax <xsl:value-of select="jcs:sleep(*seconds*, <*milliseconds*>)"/>

Description Cause the script to pause for a specified number of seconds and (optionally) milliseconds. You can use this function to help determine how a device component works over time. To do this, write a script that issues a command, calls the **jcs:sleep()** function, and then reissues the same command.

Parameters
- ***milliseconds***—(Optional) Number of milliseconds the script should sleep.
- ***seconds***—Number of seconds the script should sleep.

Usage Examples In the following example, **jcs:sleep(1)** causes the script to sleep for 1 second, and **jcs:sleep(0, 10)** causes the script to sleep for 10 milliseconds.

SLAX syntax:

```
expr jcs:sleep(1);
expr jcs:sleep(0, 10);
```

XSLT syntax:

```
<xsl:value-of select="jcs:sleep(1)"/>
<xsl:value-of select="jcs:sleep(0, 10)"/>
```

jcs:split() Function

SLAX Syntax var $substrings = jcs:split(*expression*, *string*, <*limit*>);

XSLT Syntax <xsl:variable name="substrings" select="jcs:split(*expression*, *string*, <*limit*>)"/>

Description Split a string into an array of substrings delimited by a regular expression pattern. If the optional integer argument ***limit*** is specified, the function splits the entire string into ***limit*** number of substrings. If there are more than ***limit*** number of matches, the substrings include the first ***limit***-1 matches as well as the remaining portion of the original string for the last match.

Parameters
- ***expression***—Regular expression pattern used as the delimiter.
- ***limit***—(Optional) Number of substrings into which to break the original string.
- ***string***—Original string.

Return Value
- **$substrings**—Array of ***limit*** number of substrings. If ***limit*** is not specified, the result array size is equal to the number of substrings extracted from the original string as determined by the specified delimiter.

Usage Examples In the following example, the original string is "123:abc:456:xyz:789". The jcs:split() function breaks this string into substrings that are delimited by the regular expression pattern, which in this case is a colon(:). The optional parameter ***limit*** is not specified, so the function returns an array containing all the substrings that are bounded by the delimiter(:).

```
var $pattern = "(:)";
var $substrings = jcs:split($pattern, "123:abc:456:xyz:789");
```

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returns:

```
$substrings[1] == "123"
$substrings[2] == "abc"
$substrings[3] == "456"
$substrings[4] == "xyz"
$substrings[5] == "789"
```

The following example uses the same original string and regular expression as the previous example, but in this case, the optional parameter ***limit*** is included. Specifying ***limit***=2 causes the function to return an array containing only two substrings. The substrings include the first match, which is "**123**" (the same first match as in the previous example) and a second match, which is the remaining portion of the original string after the first occurrence of the delimiter.

```
var $pattern = "(:)";
var $substrings = jcs:split($pattern, "123:abc:456:xyz:789", 2);
```

returns:

```
$substrings[1] == "123"
$substrings[2] == "abc:456:xyz:789"
```

jcs:sysctl( ) Function

SLAX Syntax

```
var $value = jcs:sysctl(sysctl-value, "(i | s)");
```

XSLT Syntax

```
<xsl:variable name="value" select="jcs:sysctl(sysctl-value, '(i | s)')"/>
```

Description Return the given **sysctl** value as a string or an integer. Use the "**i**" argument to specify an integer. Use the "**s**" argument to specify a string.

Parameters

- ***sysctl-value***—**sysctl** value to convert to a string or integer.

Return Value

- **$value**—Returned string or integer value.

Usage Examples

```
var $value = jcs:sysctl("kern.hostname", "s");
```

jcs:syslog( ) Function

SLAX Syntax

```
expr jcs:syslog(priority, message, <message2>, <message3> ...);
```

XSLT Syntax

```
<xsl:value-of select="jcs:syslog(priority, messsage, <message2>, <message3>)"/>
```

Description Log messages with the specified priority to the system log file. The priority can be expressed as a ***facility.severity*** string or as a calculated integer. The ***message*** argument is a string or variable that is written to the system log file. Optionally, additional strings or variables can be included in the argument list. The ***message*** argument is concatenated with any additional message arguments, and the concatenated string is written to the system log file. The syslog file is specified at the **[edit system syslog]** hierarchy level of the configuration.

Parameters

- ***message***—String or variable that is output to the system log file.

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- ***message2***—(Optional) Any additional number of strings or variable names passed as arguments to the function. These are concatenated with the ***message*** argument and output to the system log file.
- ***priority***—Priority given to the syslog message. The priority can be specified as a ***facility.severity*** string, or it can expressed as an integer calculated from the corresponding numeric values of the facility and severity strings. Table 4 on page 27 and Table 5 on page 27 show the facility and severity strings available and their corresponding numeric values.

  The integer value of the ***priority*** parameter is calculated by multiplying the facility string numeric value by 8 and adding the severity string numeric value. For example, if the ***facility.severity*** string pair is **"pfe.alert"**, the priority value is 161 ((20 x 8)+1).

Table 4: Facility Strings

Facility String	Description	Numeric Value
auth	Authorization system	4
change	Configuration change log	22
conflict	Configuration conflict log	21
daemon	Various system processes	3
external	Local external applications	18
firewall	Firewall filtering system	19
ftp	FTP processes	11
interact	Commands executed by the UI	23
pfe	Packet Forwarding Engine	20
user	User processes	1

Table 5: Severity Strings

Severity String	Description	Numeric Value
alert	Conditions that should be corrected immediately	1
crit	Critical conditions	2
debug	Debug messages	7
emerg or **panic**	Panic conditions	0
err or **error**	Error conditions	3

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Table 5: Severity Strings *(continued)*

Severity String	Description	Numeric Value
info	Informational messages	6
notice	Conditions that should be specially handled	5
warn or **warning**	Warning messages	4

Usage Examples The following three examples log **pfe** messages with an **alert** priority. The string "**mymessage**" is output to the system log file. All three examples are equivalent:

```
expr jcs:syslog("pfe.alert", "mymessage");

expr jcs:syslog(161, "mymessage");

var $message = "mymessage";
expr jcs:syslog("pfe.alert", $message);
```

The following example logs **pfe** messages with an **alert** priority similar to the previous example. In this example, however, there are additional string arguments. For this case, the concatenated string "**mymessage mymessage2**" is output to the system log file.

```
expr jcs:syslog("pfe.alert", "mymessage ", "mymessage2");
```

jcs:trace() Function

SLAX Syntax

```
expr jcs:trace('expression');
```

XSLT Syntax

```
<xsl:value-of select="jcs:trace('expression')"/>
```

Description Issue a trace message, which is sent to the trace file. You must configure **traceoptions** under the respective script type in the configuration hierarchy in order to output the **jcs:trace** message to the trace file. The output goes to configured trace file. If **traceoptions** is enabled, but no trace file is explicitly configured, the output goes to the default trace file for that script type.

Parameters

- ***expression***—String that is output to the trace file.

Usage Examples SLAX syntax:

```
expr jcs:trace('test');
```

XSLT syntax:

```
<xsl:value-of select="jcs:trace('test')"/>
```

Junos Script Automation: Named Templates in the jcs Namespace Overview

Junos OS provides several named templates to make scripting tasks easier in commit, op, and event scripts. The named templates reside in the **junos.xsl** import file, which is

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included with the standard Junos OS installation available on all switches, routers, and security devices running Junos OS.

The Junos OS named templates are defined in the namespace with the associated Uniform Resource Identifier (URI) http://xml.juniper.net/junos/commit-scripts/1.0 . The templates use the **jcs:** prefix to avoid conflicting with standard XSLT templates or user–defined templates of the same name in a script. To use the Junos named templates in a script, you must include the namespace URI in your style sheet declaration. Map the **jcs** prefix to the URI by including the **xmlns:jcs** attribute in the opening **<xsl:stylesheet>** tag element for XSLT scripts or by including the **ns jcs** statement in SLAX scripts. You must also import the **junos.xsl** file into the script by including the **<xsl:import/>** tag element in XSLT scripts or the **import** statement in SLAX scripts and specifying the **junos.xsl** file location.

To call a named template in a script, include the **<xsl:call-template name="*template-name*">** element for XSLT scripts or the **call** statement for SLAX scripts and pass along any required or optional parameters. Template parameters are assigned by name and can appear in any order. This differs from functions where the arguments must be passed into the function in the precise order specified by the function definition.

The following example imports the **junos.xsl** file into a script and maps the **jcs** prefix to the namespace identified by the URI http://xml.juniper.net/junos/commit-scripts/1.0. The script demonstrates a call to the **jcs:edit-path** template.

XSLT Syntax

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0"
        xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>
    ...
  <xsl:for-each select="interfaces/interface[starts-with(name, 'so-')]">
    <xnm:warning>
      <xsl:call-template name="jcs:edit-path"/>
      <message>interface configured</message>
    </xnm:warning>
  </xsl:for-each>
    ...
</xsl: stylesheet>
```

SLAX Syntax

```
version 1.0;
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";
    ...
  for-each ( interfaces/interface[starts-with(name,'so-') ) {
    <xnm:warning> {
      call jcs:edit-path();
      <message> “interface configured”;
    }
  }
    ...
```

For more information about attributes and tag elements to include in your scripts, see “Required Boilerplate for Commit Scripts” on page 166, “Required Boilerplate for Op Scripts” on page 335, and “Required Boilerplate for Event Scripts” on page 464.

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Related Documentation

- Summary of Extension Functions in the jcs Namespace on page 9
- Junos Named Templates in the jcs Namespace Summary on page 30
- Understanding Extension Functions in the jcs Namespace on page 8
- Global Parameters and Variables in the junos.xsl File on page 39

Junos Named Templates in the jcs Namespace Summary

The Junos named templates are summarized in Table 6 on page 30:

Table 6: Junos Named Templates

Template	Description
jcs:edit-path	Generate an **<edit-path>** element suitable for inclusion in an **<xnm:error>** or **<xnm:warning>** element.
jcs:emit-change	Generate a **<change>** or **<transient-change>** element, which results in a persistent or transient change to the configuration.
jcs:emit-comment	Emit a simple comment that indicates a change was made by a commit script.
jcs:grep	Search a file for all instances matching a specified regular expression and write the matching strings and corresponding lines to the result tree.
jcs:load-configuration	Make structured changes to the Junos OS configuration using an op script.
jcs:statement	Generate a **<statement>** element suitable for inclusion in an **<xnm:error>** or **<xnm:warning>** element.

Related Documentation

- Understanding Extension Functions in the jcs Namespace on page 8
- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- Global Parameters and Variables in the junos.xsl File on page 39

Junos Named Templates in the jcs Namespace

The templates are discussed in more detail in the following sections:

- jcs:edit-path Template on page 31
- jcs:emit-change Template on page 31
- jcs:emit-comment Template on page 34
- jcs:grep Template on page 35
- jcs:load-configuration Template on page 35
- jcs:statement Template on page 38

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jcs:edit-path Template

XSLT Syntax

```
<xsl:call-template name="jcs:edit-path">
  <xsl:with-param name="dot" select="expression"/>
</xsl:call-template>
```

SLAX Syntax

```
call jcs:edit-path($dot=expression);
```

Description

Generate an **<edit-path>** element suitable for inclusion in an **<xnm:error>** or **<xnm:warning>** element. This template converts a location in the configuration hierarchy into the standard text representation that you would see in the Junos OS configuration mode banner. By default, the location of the configuration error is passed into the **jcs:edit-path** template as the value of **dot**. This location defaults to " **.** ", the current position in the XML hierarchy. You can alter the default by including a valid XPath expression for the **dot** parameter when you call the template.

Parameters

dot—XPath expression specifying the hierarchy level. The default location is the position in the XML hierarchy that the script is currently evaluating. You can alter the default when you call the template by including a valid XPath expression either for the **$dot** parameter in SLAX scripts or for the **select** attribute of the **dot** parameter in XSLT scripts.

Usage Examples

The following example demonstrates how to call the **jcs:edit-path** template in a commit script and set the context to the **[edit chassis]** hierarchy level:

```
<xsl:if test="not(chassis/source-route)">
  <xnm:warning>
    <xsl:call-template name="jcs:edit-path">
      <xsl:with-param name="dot" select="chassis"/>
    </xsl:call-template>
    <message>IP source-route processing is not enabled.</message>
  </xnm:warning>
</xsl:if>
```

When you commit a configuration that does not enable IP source routing, the code generates an **<xnm:warning>** element, which results in the following command-line interface (CLI) output:

```
user@host# commit
[edit chassis] # The hierarchy level is generated by the jcs:edit-path template.
    warning: IP source-route processing is not enabled.
commit complete
```

jcs:emit-change Template

XSLT Syntax

```
<xsl:call-template name="jcs:emit-change">
  <xsl:with-param name="content">
    ...
  </xsl:with-param>
  <xsl:with-param name="dot" select="expression"/>
  <xsl:with-param name="message">
    <xsl:text>message</xsl:text>
  </xsl:with-param>
  <xsl:with-param name="name" select="name($dot)"/>
  <xsl:with-param name="tag" select="'(change | transient-change)'"/>
```

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```
</xsl:call-template>
```

SLAX Syntax

```
call jcs:emit-change($dot=expression, $name = name($dot), $tag = "(change |
transient-change)" {
  with $content = {
    ...
  }
  with $message = {
    expr "message";
  }
}
```

Description Generate a **<change>** or **<transient-change>** element, which results in a persistent or transient change to the configuration.

Parameters This template includes the following optional parameters:

- **content**—Content of the persistent or transient change, relative to **dot**.
- **dot—**XPath expression specifying the hierarchy level at which the change will be made. The default location is the position in the XML hierarchy that the script is currently evaluating. You can alter the default when you call the template by including a valid XPath expression either for the **$dot** parameter in SLAX scripts or for the **select** attribute of the **dot** parameter in XSLT scripts.
- **message**—Warning message displayed in the CLI notifying the user that the configuration has been changed. The message parameter automatically includes the edit path, which defaults to the current location in the XML hierarchy. To change the default edit path, specify a valid XPath expression either for the **$dot** parameter in SLAX scripts or for the **select** attribute of the **dot** parameter in XSLT scripts.
- **name**—Allows you to refer to the current element or attribute. The **name()** XPath function returns the name of an element or attribute. The **name** parameter defaults to the value **name($dot)**, which is the name of the element in **dot** (which in turn defaults to " **.** ", which is the current element).
- **tag**—Type of change to generate. By default, the **jcs:emit-change** template generates a persistent change, as designated by the **'change'** expression. To specify a transient change, you must include the **tag** parameter and include the **'transient-change'** expression.

Usage Examples The following example demonstrates how to call the **jcs:emit-change** template in a commit script:

```
<xsl:template match="configuration">
  <xsl:for-each select="interfaces/interface/unit[family/iso]">
    <xsl:if test="not(family/mpls)">
      <xsl:call-template name="jcs:emit-change">
        <xsl:with-param name="message">
          <xsl:text>Adding 'family mpls' to ISO-enabled interface</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="content">
          <family>
            <mpls/>
```

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```
            </family>
          </xsl:with-param>
        </xsl:call-template>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
```

When you commit a configuration that includes one or more interfaces that have IS-IS enabled but do not have the **family mpls** statement included at the **[edit interfaces *interface-name* unit *logical-unit-number*]** hierarchy level, the **jcs:emit-change** template adds the **family mpls** statement to the configuration and generates the following CLI output:

```
[edit]

user@host# commit
[edit interfaces interface so-1/2/3 unit 0]
    warning: Adding 'family mpls' to ISO-enabled interface
[edit interfaces interface so-1/2/3 unit 0]
    warning: Adding ISO-enabled interface so-1/2/3.0 to [protocols mpls]
[edit interfaces interface so-1/3/2 unit 0]
    warning: Adding 'family mpls' to ISO-enabled interface
[edit interfaces interface so-1/3/2 unit 0]
    warning: Adding ISO-enabled interface so-1/3/2.0 to [protocols mpls]
commit complete
```

The **content** parameter of the **jcs:emit-change** template provides a simpler method for specifying a change to the configuration. For example, consider the following code:

```
<xsl:with-param name="content">
  <family>
    <mpls/>
  </family>
</xsl:with-param>
```

The **jcs:emit-change** template converts the **content** parameter into a **<change>** request. The **<change>** request inserts the provided partial configuration content into the complete hierarchy of the current context node. Thus, the **jcs:emit-change** template changes the hierarchy information in the **content** parameter into the following code:

```
<change>
  <interfaces>
    <interface>
      <name><xsl:value-of select="name"/></name>
      <unit>
        <name><xsl:value-of select="unit/name"/></name>
        <family>
          <mpls/>
        </family>
      </unit>
    </interface>
  </interfaces>
</change>
```

If a transient change is required, the **tag** parameter can be passed in as '**transient-change**', as shown here:

```
<xsl:with-param name="tag" select="'transient-change'"/>
```

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The extra quotation marks are required to allow XSLT to distinguish between the string "**transient-change**" and the contents of a node named "**transient-change**". If the change is relative to a node other than the context node, the parameter "**dot**" can be set to that node, as shown in the following example, where context is set to the **[edit chassis]** hierarchy level:

```
<xsl:for-each select="interfaces/interface/unit">
  ...
  <xsl:call-template name="jcs:emit-change">
    <xsl:with-param name="dot" select="chassis"/>
      ...
```

See also "Example: Imposing a Minimum MTU Setting" on page 266.

jcs:emit-comment Template

XSLT Syntax

```
<junos:comment>
  <xsl:text>...</xsl:text>
</junos:comment>
```

Description

Emit a simple comment that indicates a change was made by a commit script. The template contains a **<junos:comment>** element. You never call the **jcs:emit-comment** template directly. Rather, you include its **<junos:comment>** element and the child element **<xsl:text>** inside a call to the **jcs:emit-change** template, a **<change>** element, or a **<transient-change>** element.

Usage Examples

The following example demonstrates how to call this template in a commit script:

```
<xsl:call-template name="jcs:emit-change">
  <xsl:with-param name="content">
    <term>
      <name>very-last</name>
      <junos:comment>
        <xsl:text>This term was added by a commit script</xsl:text>
      </junos:comment>
      <then>
        <accept/>
      </then>
    </term>
  </xsl:with-param>
</xsl:call-template>
```

When you issue the **show firewall** configuration mode command, the following output appears:

```
[edit]

user@host# show firewall
family inet {
    term very-last {
          /* This term was added by a commit script */
    then accept;
    }
}
```


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jcs:grep Template

XSLT Syntax

```
<xsl:call-template name="jcs:grep">
  <xsl:with-param name="filename" select="filename"/>
  <xsl:with-param name="pattern" select="pattern"/>
</xsl:call-template>
```

SLAX Syntax

```
call jcs:grep($filename=filename, $pattern=pattern);
```

Description Search the given input file for all instances matching the specified regular expression and write the matching strings and corresponding lines to the result tree. The pattern is matched to each line of the file. The template does not support matching a pattern spanning multiple lines.

If the regular expression contains a syntax error, the template generates an error for every line of the file. For each match, the template adds a **<match>** element, which contains **<input>** and **<output>** child tags, to the result tree. The template writes the matching string to the **<output>** element and writes the corresponding matching line to the **<input>** element.

```
<match> {
  <input>
  <output>
}
```

Starting with Junos OS Release 11.1, if an absolute path is not specified for the input file, the default path is relative to the user's home directory for op scripts, and it is relative to the **/var/tmp/** directory for commit scripts and for event scripts that are enabled at the **[edit event-options event-script]** hierarchy level. For event scripts that are enabled at the **[edit system scripts]** hierarchy level, the default path is relative to the top-level directory, */*.

Parameters

- **filename**—(Mandatory) Absolute or relative path and filename of the file to search.

  Starting with Junos OS Release 11.1, if you do not specify an absolute path, the path is relative to the user's home directory for op scripts, and it is relative to the **/var/tmp/** directory for commit scripts and for event scripts that are enabled at the **[edit event-options event-script]** hierarchy level. For event scripts that are enabled at the **[edit system scripts]** hierarchy level, the default path is relative to the top-level directory, */*.

- **pattern**—(Mandatory) Regular expression.

Usage Examples "Example: Searching Files Using an Op Script" on page 388

jcs:load-configuration Template

XSLT Syntax

```
<xsl:call-template name="jcs:load-configuration">
  <xsl:with-param name="action" select="(merge | override | replace)"/>
  <xsl:with-param name="commit-options" select="node-set"/>
  <xsl:with-param name="configuration" select="configuration-data"/>
  <xsl:with-param name="connection" select="connection-handle"/>
</xsl:call-template>
```

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SLAX Syntax

```
call jcs:load-configuration($action="(merge | override | replace)",
$commit-options=node-set, $configuration=configuration-data,
$connection=connection-handle);
```

Description Make structured changes to the Junos OS configuration using an op script. When called, the template locks the configuration database, loads the configuration changes, commits the configuration, and then unlocks the configuration database.

The **jcs:load-configuration** template makes changes to the configuration in **configure exclusive** mode. In this mode, Junos OS locks the candidate *global* configuration for as long as the script accesses the shared database and makes changes to the configuration without interference from other users.

If another user is currently editing the configuration in **configure exclusive** mode or if the database is already locked when the template is called, the call fails. In addition, if there are existing, uncommitted changes to the configuration when the template is called, the commit will fail. If the template call is successful but the commit fails, Junos OS discards the uncommitted changes and rolls back the configuration.

Parameters

- **action**—Specifies how to load the configuration changes with respect to the candidate configuration. The following options are supported:
  - **merge**—Combine the candidate configuration and the incoming configuration changes. If the candidate configuration and the incoming configuration contain conflicting statements, the incoming statements override those in the candidate configuration.
  - **override**—Replace the entire candidate configuration.
  - **replace**—Replace existing statements in the candidate configuration with the tags of the same name that are marked with **replace:** in the incoming configuration. If there is no existing statement of the same name in the candidate configuration, the statement is added to the candidate configuration.
- **commit-options**—Node-set defining options that customize the commit command. The default value is null. Supported commit options are:
  - **check**—Check the correctness of the candidate configuration syntax, but do not commit the changes.
  - **force-synchronize**—Force the commit on the other Routing Engine (ignore any warnings).
  - **log**—Write the specified message to the commit log. This is identical to the CLI configuration mode command **commit comment**.
  - **synchronize**—Synchronize the commit on both Routing Engines.
- **configuration**—XML configuration changes.
- **connection**—Connection handle generated by a call to the **jcs:open()** function.

Usage Examples The following example calls the **jcs:load-configuration** template to modify the configuration to disable an interface. The interface name is supplied by the user and

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stored in the variable **interface-name**. All of the values required for the **jcs:load-configuration** template are defined as variables, which are then passed into the template as arguments.

In this example, the configuration data that includes the changes to the configuration are stored in the variable **disable**. This is the value used for the **configuration** parameter of the **jcs:load-configuration** template. The **load-action** variable is initialized to **merge**, which merges the configuration changes in the **disable** variable with the candidate configuration. This is the equivalent of the CLI configuration mode command **load merge**.

The **options** variable uses the **:=** operator to create a node-set, which is passed to the template as the value of the **commit-options** parameter. This example uses the **synchronize** commit option . If the commit succeeds, it will commit the configuration changes on both Routing Engines. The **log** tag is also included to add the description of the commit to the commit log file for future reference.

The call to the **jcs:open()** function opens a connection with the Junos OS management process (mgd) and returns a connection handle that is stored in the **conn** variable. All of the defined variables are passed as arguments to the **jcs:load-configuration** template at the time that it is called.

SLAX syntax:

```
var $disable = {
  <configuration> {
    <interfaces> {
      <interface> {
        <name> $interface-name;
        <disable>;
      }
    }
  }
}
var $load-action = "merge";
var $options := {
  <commit-options> {
    <synchronize>;
    <log> "disabling interface on both routing engines";
}
var $conn = jcs:open();

var $disable-results := {
  call jcs:load-configuration($action=$load-action, $commit-options=$options,
      $configuration = $disable, $connection = $conn);
}
if ($disable-results//xnm:error) {
  for-each ($disable-results//xnm:error) {
    <output> message;
  }
}
var $close-results = jcs:close($conn);
```

The **:=** operator copies the results of the **jcs:load-configuration** template call to a temporary variable and runs the **node-set** function on that variable. The **:=** operator

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ensures that the **disable-results** variable is a node-set rather than a result tree fragment so that the script can access the contents. The **if** code block is included to output any error messages that may indicate a problem in committing the configuration. The **jcs:close** function closes the connection.

In XSLT, the code corresponding to the SLAX call to **jcs:load-configuration** template is:

```
<xsl:variable name="disable-results-temp">
  <xsl:call-template name="jcs:load-configuration">
    <xsl:with-param name="action" select="$load-action"/>
    <xsl:with-param name="commit-options" select="$options"/>
    <xsl:with-param name="configuration" select="$disable"/>
    <xsl:with-param name="connection" select="$conn"/>
  </xsl:call-template>
</xsl:variable>

<xsl:variable xmlns ext="http:xmlsoft.org/XSLT/namespace" \
  name="disable-results" select="ext:node-set($disable-results-temp)"/>
```

jcs:statement Template

XSLT Syntax

```
<xsl:call-template name="jcs:statement">
  <xsl:with-param name="dot" select="expression"/>
</xsl:call-template>
```

SLAX Syntax

```
call jcs:statement($dot=expression);
```

Description Generate a **<statement>** element suitable for inclusion in an **<xnm:error>** or **<xnm:warning>** element. This location defaults to " **.** ", the current position in the XML hierarchy. If the error is not at the current position in the XML hierarchy, you can alter the default when you call the template by including a valid XPath expression either for the **$dot** parameter in SLAX scripts or for the **select** attribute of the **dot** parameter in XSLT scripts.

Parameters **dot**—XPath expression specifying the hierarchy level. The default location is the position in the XML hierarchy that the script is currently evaluating. You can alter the default when you call the template by including a valid XPath expression either for the **$dot** parameter in SLAX scripts or for the **select** attribute of the **dot** parameter in XSLT scripts.

Usage Examples The following example demonstrates how to call the **jcs:statement** template in a commit script:

```
<xnm:error>
  <xsl:call-template name="jcs:edit-path"/>
  <xsl:call-template name="jcs:statement">
    <xsl:with-param name="dot" select="mtu"/>
  </xsl:call-template>
  <message>
    <xsl:text>SONET interfaces must have a minimum MTU of </xsl:text>
    <xsl:value-of select="$min-mtu"/>
    <xsl:text>.</xsl:text>
  </message>
</xnm:error>
```

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When you commit a configuration that includes a SONET/SDH interface with a maximum transmission unit (MTU) setting less than a specified minimum, the **<xnm:error>** element results in the following CLI output:

```
[edit]

user@host# commit
[edit interfaces interface so-1/2/3]
    'mtu 576;'  # mtu statement generated by the jcs:statement template
    SONET interfaces must have a minimum MTU of 2048.
error: 1 error reported by commit scripts
error: commit script failure
```

The test of the MTU setting is not performed in the **<xnm:error>** element. For the full example, see "Example: Imposing a Minimum MTU Setting" on page 266.

Global Parameters and Variables in the junos.xsl File

The **junos.xsl** import file declares several predefined parameters and a global variable of type node-set, which provide information about the Junos OS environment that is useful for creating scripts that respond to a variety of complex scenarios. The global parameters and variable are available for use in any commit, op, or event script that imports the **junos.xsl** file.

To use the parameters or variable in a script, you must import the **junos.xsl** file by including the **<xsl:import>** tag in the style sheet declaration of an XSLT script or by including the **import** statement in a SLAX script and specifying the **junos.xsl** file location as shown in the following sample code:

XSLT Syntax

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0">
  <xsl:import href="../import/junos.xsl"/>
  ...
</xsl: stylesheet>
```

SLAX Syntax

```
version 1.0;
import "../import/junos.xsl";
```

The default arguments are described in detail in the following sections:

- Global Parameters on page 39
- Global Variable on page 40

Global Parameters

Several predefined global parameters are available for use in commit, op, and event scripts. The parameters provide information about the Junos OS environment. Table 7 on page 39 describes the built-in arguments.

Table 7: Predefined Parameters Available to Automation Scripts

Name	Description	Example
$hostname	Hostname of the local device	Tokyo

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Table 7: Predefined Parameters Available to Automation Scripts *(continued)*

Name	Description	Example
$localtime	Local time when the script is executed	Fri Dec 10 11:42:21 2010
$localtime-iso	Local time, in ISO format, when the script is executed	2010-12-10 11:42:21 PST
$product	Model of the local device	m10i
$script	Filename of the executing script	**test.slax**
$user	Local name of the user executing the script	root

The predefined global parameters are declared in the **junos.xsl** file. You do not need to declare these parameters in a script in order to use them. Access the value of the global parameters in a script by prefixing the parameter name with the dollar sign ($), as shown in the following example:

SLAX syntax:

```
if ($user != "root") {
   var $script-message = $user _ " does not have permission to execute " _ $script;
   expr jcs:output($script-message);
}
```

XSLT syntax:

```
<xsl:if test="$user != 'root'">
   <xsl:variable name="script-message"
         select="concat($user, ' does not have permission to execute ', $script)"/>
   <xsl:value-of select="jcs:output($script-message)"/>
</xsl:if>
```

Global Variable

Starting with Junos OS Release 11.1, Junos OS also provides a single global variable, **$junos-context**, which is accessible for use in all commit, op, or event scripts that import the **junos.xsl** file. The **$junos-context** variable is a node-set, which has elements that mirror the original global parameters described in "Global Parameters" on page 39 as well as additional elements with information about the Junos OS environment, such as whether a script is executed on the master Routing Engine.

The **$junos-context** variable contains the **<junos-context>** node and the following hierarchy, which is common to and embedded in the source tree of all scripts:

```
<junos-context>
   <chassis></chassis>
   <hostname></hostname>
   <localtime></localtime>
   <localtime-iso></localtime-iso>
   <pid></pid>
   <product></product>
```


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```
    <re-master/>
    <routing-engine-name></routing-engine-name>
    <script-type></script-type>
    <tty></tty>
    <user-context>
      <class-name></class-name>
      <login-name></login-name>
      <uid></uid>
      <user></user>
    </user-context>
  </junos-context>
```

Additionally, script-specific information is available depending on the type of script executed. For op scripts, the **<op-context>** element is also included in the source tree provided to an op script:

```
<junos-context>
  <op-context>
    <via-url/>
  </op-context>
</junos-context>
```

For commit scripts, the **<commit-context>** element is also included in the source tree provided to a commit script:

```
<junos-context>
  <commit-context>
    <commit-comment>"This is a test commit"</commit-comment>
    <commit-boot/>
    <commit-check/>
    <commit-sync/>
    <commit-confirm/>
  </commit-context>
</junos-context>
```

Table 8 on page 42 identifies each node of the **$junos-context** variable node-set, provides a brief description of the node, and gives examples of values for any elements that are not input to a script as an empty tag.

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Table 8: Global Variable $junos-context Available to Automation Scripts

Parent Node	Node	Description	Example content
<junos-context>	<chassis>	Specifies whether the script is executed on a component of a routing matrix, the Root System Domain (RSD), or a Protected System Domain (PSD)	scc, lcc (TX Matrix) psd, rsd (JCS) others
	<hostname>	Hostname of the local device	Tokyo
	<localtime>	Local time when the script is executed	Fri Dec 10 11:42:21 2010
	<localtime-iso>	Local time, in ISO format, when the script is executed	2010-12-10 11:42:21 PST
	<pid>	cscript process ID	5257
	<product>	Model of the local device	m10i
	<re-master/>	Empty element included if the script is executed on the master Routing Engine	
	<routing-engine-name>	Routing Engine on which the script is executed	re0
	<tty>	TTY of the user's session	/dev/ttyp1
	<script-type>	Type of script being executed	op
<junos-context> <user-context>	<class-name>	Login class of the user executing the script	superuser
	<login-name>	Login name of the user executing the script. For AAA access, this is the RADIUS/TACACS username.	jsmith
	<uid>	User ID number of the user executing the script as defined in the device configuration	2999
	<user>	Local name of the user executing the script. Junos OS uses the local name for authentication. It might differ from the **login-name** used for AAA authentication.	root
<junos-context> <op-context> (op scripts only)	<via-url>	Empty element included if the remote op script is executed using the **op url** command	

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Table 8: Global Variable $junos-context Available to Automation Scripts *(continued)*

Parent Node	Node	Description	Example content
<junos-context> <commit-context> (commit scripts only)	<commit-boot/>	Empty element included when the commit occurs at boot time	
	<commit-check/>	Empty element included when a **commit check** is performed	
	<commit-comment>	User comment regarding the commit	Commit to fix forwarding issue
	<commit-confirm/>	Empty element included when a **commit confirmed** is performed	
	<commit-sync/>	Empty element included when a **commit synchronize** is performed	

The **$junos-context** variable is a node-set. Therefore, you can access the child elements throughout a script by including the proper XPath expression. The following example commit script writes a message to the system log file if the commit is performed during initial boot-up. The message is given a facility value of **daemon** and a severity value of **info**. For more information, see jcs:syslog( ) Function.

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";

import "../import/junos.xsl";

match configuration {
  if ($junos-context/commit-context/commit-boot) {
    expr jcs:syslog("daemon.info", "This is boot-time commit");
  }
  else {
     /* Do this ... */
  }
}
```

Related Documentation

- Understanding Extension Functions in the jcs Namespace on page 8
- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- SLAX Parameters Overview on page 74
- SLAX Variables Overview on page 77
- XSLT Parameters Overview on page 54
- XSLT Variables Overview on page 57

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XML

- XML Overview on page 44
- XML and Junos OS Overview on page 46

XML Overview

Extensible Markup Language (XML) is a language for defining a set of markers, called *tags*, that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Tags look much like Hypertext Markup Language (HTML) tags, but XML is actually a metalanguage used to define tags that best suit the kind of data being marked.

For more details about XML, see *A Technical Introduction to XML* at http://www.xml.com/pub/a/98/10/guide0.html and the additional reference material at the http://www.xml.com site.

The official XML specification from the World Wide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0*, is available at http://www.w3.org/TR/REC-xml.

The following sections discuss general aspects of XML:

- Tag Elements on page 44
- Attributes on page 45
- Namespaces on page 45
- Document Type Definition on page 46

Tag Elements

XML has three types of tags: opening tags, closing tags, and empty tags. XML tag names are enclosed in angle brackets and are case sensitive. Items in an XML-compliant document or data set are always enclosed in paired opening and closing tags, and the tags must be properly nested. That is, you must close the tags in the same order in which you opened them. XML is stricter in this respect than HTML, which sometimes uses only opening tags. The following examples show paired opening and closing tags enclosing a value. The closing tags are indicated by the forward slash at the start of the tag name.

```
<interface-state>enabled</interface-state>
<input-bytes>25378</input-bytes>
```

The term *tag element* refers to a three-part set: opening tag, contents, and closing tag. The content can be an alphanumeric character string as in the preceding examples, or can itself be a *container* tag element, which contains other tag elements. For simplicity, the term *tag* is often used interchangeably with *tag element* or *element*.

If a tag element is *empty*—has no contents—it can be represented either as paired opening and closing tags with nothing between them, or as a single tag with a forward slash after the tag name. For example, the notation **<snmp-trap-flag/>** is equivalent to **<snmp-trap-flag></snmp-trap-flag>**.

As the preceding examples show, angle brackets enclose the name of the tag element. This is an XML convention, and the brackets are a required part of the complete tag

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element name. They are not to be confused with the angle brackets used in the documentation to indicate optional parts of Junos OS CLI command strings.

Junos XML and Junos XML protocol tag elements obey the XML convention that the tag element name indicates the kind of information enclosed by the tags. For example, the name of the Junos XML **<interface-state>** tag element indicates that it contains a description of the current status of an interface on the device, whereas the name of the **<input-bytes>** tag element indicates that its contents specify the number of bytes received.

When discussing tag elements in text, this documentation conventionally uses just the opening tag to represent the complete tag element (opening tag, contents, and closing tag). For example, the documentation refers to the **<input-bytes>** tag to indicate the entire **<input-bytes>***number-of-bytes***</input-bytes>** tag element.

Attributes

XML elements can contain associated properties in the form of *attributes*, which specify additional information about an element. Attributes appear in the opening tag of an element and consist of an attribute name and value pair. The attribute syntax consists of the attribute name followed by an equals sign and then the attribute value enclosed in quotation marks. An XML element can have multiple attributes. Multiple attributes are separated by spaces and can appear in any order.

In the following example, the **configuration** tag element has two attributes, **junos:changed-seconds** and **junos:changed-localtime**.

```
<configuration junos:changed-seconds="1279908006"
junos:changed-localtime="2010-07-23 11:00:06 PDT">
```

The value of the **junos:changed-seconds** attribute is "1279908006", and the value of the **junos:changed-localtime** attribute is "2010-07-23 11:00:06 PDT".

Namespaces

Namespaces allow an XML document to contain the same tag, attribute, or function names for different purposes and avoid name conflicts. For example, many namespaces may define a **print** function, and each may exhibit a different functionality. To use the functionality defined in one specific namespace, you must associate that function with the namespace that defines the desired functionality.

To refer to a tag, attribute, or function from a defined namespace, you must first provide the namespace Uniform Resource Identifier (URI) in your style sheet declaration . You then qualify a tag, attribute, or function from the namespace with the URI. Since a URI is often lengthy, generally a shorter prefix is mapped to the URI.

In the following example the **jcs** prefix is mapped to the namespace identified by the URI http://xml.juniper.net/junos/commit-scripts/1.0, which defines extension functions used in commit, op, and event scripts. The **jcs** prefix is then prepended to the **output** function, which is defined in that namespace.

```
<?xml version="1.0"?>
 <xsl:stylesheet version="1.0"
xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
   ...
```

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```
    <xsl:value-of select="jcs:output('The VPN is up.')"/>
  </xsl: stylesheet>
```

During processing, the prefix is expanded into the URI reference. Although there may be multiple namespaces that define an **output** element or function, the use of **jcs:output** explicitly defines which **output** function is used. You can choose any prefix to refer to the contents in a namespace, but there must be an existing declaration in the XML document that binds the prefix to the associated URI.

Document Type Definition

An XML-tagged document or data set is *structured*, because a set of rules specifies the ordering and interrelationships of the items in it. The rules define the contexts in which each tagged item can—and in some cases must—occur. A file called a *document type definition*, or *DTD*, lists every tag element that can appear in the document or data set, defines the parent-child relationships between the tags, and specifies other tag characteristics. The same DTD can apply to many XML documents or data sets.

Related Documentation

- Junos XML Management Protocol and Junos XML API Overview on page 6
- XML and Junos OS Overview on page 46

XML and Junos OS Overview

Extensible Markup Language (XML) is a standard for representing and communicating information. It is a metalanguage for defining customized tags that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Junos OS natively supports XML for the operation and configuration of devices running Junos OS.

The Junos OS command-line interface (CLI) and the Junos OS infrastructure communicate using XML. When you issue an operational mode command in the CLI, the CLI converts the command into XML format for processing. After processing, Junos OS returns the output in the form of an XML document, which the CLI converts back into a readable format for display. Remote client applications also use XML-based data encoding for operational and configuration requests on devices running Junos OS.

The Junos XML API is an XML representation of Junos configuration statements and operational mode commands. It defines an XML equivalent for all statements in the Junos configuration hierarchy and many of the commands that you issue in CLI operational mode. Each operational mode command with a Junos XML counterpart maps to a request tag element and, if necessary, a response tag element.

You can view the XML-formatted output of any operational mode command by issuing the command in the CLI and adding the **| display xml** option. The following example shows the text-fomatted and XML-formatted output for the **show chassis alarms** operational mode command:

```
user@host> show chassis alarms
No alarms currently active

user@host> show chassis alarms | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <alarm-information xmlns="http://xml.juniper.net/junos/10.4B1/junos-alarm">
```


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```
        <alarm-summary>
            <no-active-alarms/>
        </alarm-summary>
    </alarm-information>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

You can view the Junos XML API representation of any operational mode command by issuing the command in the CLI and adding the **| display xml rpc** option. The following example shows the Junos XML API tag element for the **show chassis alarms** command.

```
user@host> show chassis alarms | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <rpc>
        <get-alarm-information>
        </get-alarm-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

As shown in the previous example, the **| display xml rpc** option displays the command's corresponding Junos XML API request tag element that is sent to Junos OS for processing whenever the command is issued. In contrast, the **| display xml** option displays the actual output of the processed command in XML format.

When you issue the **show chassis alarms** operational mode command, the CLI converts the command into its equivalent Junos XML API request tag **<get-alarm-information>** and sends the XML request to the Junos infrastructure for processing. Junos OS processes the request and returns the **<alarm-information>** response tag element to the CLI. The CLI then converts the XML output into the "No alarms currently active" message that is displayed to the user.

Junos automation scripts use XML to communicate with the host device. Junos OS provides XML-formatted input to a script. The script processes the input source tree and then returns XML-formatted output to Junos OS. The script type determines the XML input document that is sent to the script as well as the output document that is returned to Junos OS for processing. Commit script input consists of an XML representation of the post-inheritance candidate configuration file. Event scripts receive an XML document containing the description of the triggering event. All script input documents contain a common node set with information pertaining to the Junos OS environment.

Related Documentation

- *Junos XML API Configuration Developer Reference*
- *Junos XML API Operational Developer Reference*

XSLT

- XSLT Overview on page 48
- XSLT Namespace on page 50

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- XPath Overview on page 50
- XSLT Templates Overview on page 52
- XSLT Parameters Overview on page 54
- XSLT Variables Overview on page 57
- XSLT Programming Instructions Overview on page 59
- XSLT Recursion Overview on page 61
- XSLT Context (Dot) Overview on page 62

XSLT Overview

Commit scripts, op scripts, and event scripts can be written in Extensible Stylesheet Language Transformations (XSLT), which is a standard for processing Extensible Markup Language (XML) data. XSLT is developed by the World Wide Web Consortium (W3C) and is accessible at http://www.w3c.org/TR/xslt .

- XSLT Advantages on page 48
- XSLT Engine on page 49
- XSLT Concepts on page 49

XSLT Advantages

XSLT is a natural match for Junos OS, with its native XML capabilities. XSLT performs XML-to-XML transformations, turning one XML hierarchy into another. It offers a great degree of freedom and power in the way in which it transforms the input XML, allowing everything from making minor changes to the existing hierarchy (such as additions or deletions) to building a completely new document hierarchy.

Because XSLT was created to allow generic XML-to-XML transformations, it is a natural choice for both inspecting configuration syntax (which Junos OS can easily express in XML) and for generating errors and warnings (which Junos OS communicates internally as XML). XSLT includes powerful mechanisms for finding configuration statements that match specific criteria. XSLT can then generate the appropriate XML result tree from these configuration statements to instruct the Junos OS user-interface (UI) components to perform the desired behavior.

Although XSLT provides a powerful scripting ability, its focus is specific and limited. It does not make Junos OS vulnerable to arbitrary or malicious programmers. XSLT restricts programmers from performing haphazard operations, such as opening random Transmission Control Protocol (TCP) ports, forking numerous processes, or sending e-mail. The only action available in XSLT is to generate XML, and the XML is interpreted by the UI according to fixed semantics. An XSLT script can output only XML data, which is directly processed by the UI infrastructure to allow only the specific abilities listed above—generating error, warning, and system log messages, and persistent and transient configuration changes. This means that the impact of commit scripts, op scripts, and event scripts on the device is well-defined and can be viewed inside the command-line interface (CLI), using commands added for that purpose.

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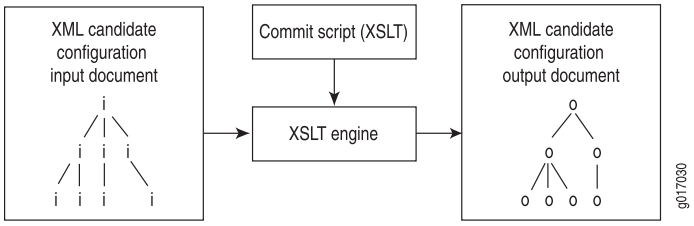
XSLT Engine

XSLT is a language for transforming one XML document into another XML document. The basic model is that an XSLT engine (or processor) reads a script (or style sheet) and an XML document. The XSLT engine uses the instructions in the script to process the XML document by traversing the document's hierarchy. The script indicates what portion of the tree should be traversed, how it should be inspected, and what XML should be generated at each point. For commit scripts, op scripts, and event scripts, the XSLT engine is a function of the Junos OS management process (mgd).

Figure 1 on page 49 shows the relationship between an XSLT commit script and the XSLT engine.

Figure 1: Flow of XSLT Commit Script Through the XSLT Engine



XSLT Concepts

XSLT has seven basic concepts. These are summarized in Table 9 on page 49.

Table 9: XSLT Concepts

XSLT Concepts	Description
XPath	Expression syntax for specifying a node in the input document
Templates	Mechanism for mapping input hierarchies to instructions that handle them
Parameters	Mechanism for passing arguments to templates
Variables	Mechanism for defining read-only references to nodes
Programming instructions	Mechanism for defining logic in XSLT
Recursion	Mechanism by which templates call themselves to facilitate looping
Context (Dot)	Node currently being inspected in the input document

Related Documentation

- XPath Overview on page 50
- XSLT Context (Dot) Overview on page 62
- XSLT Parameters Overview on page 54
- XSLT Programming Instructions Overview on page 59

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- XSLT Recursion Overview on page 61
- XSLT Templates Overview on page 52
- XSLT Variables Overview on page 57

XSLT Namespace

The XSLT namespace has the Uniform Resource Identifier (URI) http://www.w3.org/1999/XSL/Transform. The namespace must be included in the style sheet declaration of a script in order for the XSLT processor to recognize and use XSLT elements and attributes. The following example declares the XSLT namespace and associates the **xsl** prefix with the URI.

```
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
    <xsl:template match="route">
    ...
    </xsl:template>
</xsl:stylesheet
```

Once the XSLT namespace is declared in a script, you use elements and attributes from the namespace by adding the associated prefix, which in this case is **xsl**, to the tag or attribute name. In the preceding example, the XSLT processor knows to treat **xsl:template** as an XSLT instruction. During processing, the **xsl** prefix is expanded into the URI reference, and the functionality of the **template** element is defined by the XSLT namespace. For more information about namespaces, see "XML Overview" on page 44.

XPath Overview

XSLT uses the XML Path Language (XPath) standard to specify and locate elements in the input document's XML hierarchy. XPath's powerful expression syntax enables you to define complex criteria for selecting portions of the XML input document.

Nodes and Axes

XPath views every piece of the document hierarchy as a *node*. For commit scripts, op scripts, and event scripts, the important types of nodes are *element nodes*, *text nodes*, and *attribute nodes*. Consider the following XML tags:

```
<system>
  <host-name>my-router</host-name>
  <accounting inactive="inactive">
</system>
```

These XML tag elements show examples of the following types of XPath nodes:

- **<host-name>my-router</host-name>**—Element node
- **my-router**—Text node
- **inactive="inactive"**—Attribute node

Nodes are viewed as being arranged in certain *axes*. The *ancestor axis* points from a node up through its series of parent nodes. The *child axis* points through the list of an element node's direct child nodes. The *attribute axis* points through the list of an element node's

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set of attributes. The *following-sibling axis* points through the nodes that follow a node but are under the same parent. The *descendant axis* contains all the descendents of a node. There are numerous other axes that are not listed here.

Each XPath expression is evaluated from a particular node, which is referred to as the *context node* (or simply *context*). The context node is the node at which the XSLT processor is currently looking. XSLT changes the context as the document's hierarchy is traversed, and XPath expressions are evaluated from that particular context node.

NOTE: In Junos OS commit scripts, the context node concept corresponds to Junos OS hierarchy levels. For example, the **/configuration/system/domain-name** XPath expression sets the context node to the **[edit system domain-name]** hierarchy level.

We recommend including the **<xsl:template match="configuration">** template in all commit scripts. This element allows you to exclude the **/configuration/** root element from all XPath expressions in programming instructions (such as **<xsl:for-each>** or **<xsl:if>**) in the script, thus allowing you to begin XPath expressions at a Junos hierarchy level (for example, **system/domain-name**). For more information, see "Required Boilerplate for Commit Scripts" on page 166.

Path and Predicate Syntax

An XPath expression contains two types of syntax, a path syntax and a predicate syntax. Path syntax specifies which nodes to inspect in terms of their path locations on one of the axes in the document's hierarchy from the current context node. Several examples of path syntax follow:

- **accounting-options**—Selects an element node named **accounting-options** that is a child of the current context.
- **server/name**—Selects an element node named **name** that is a child of an element named **server** that is a child of the current context.
- **/configuration/system/domain-name**—Selects an element node named **domain-name** that is the child of an element named **system** that is the child of the root element of the document (**configuration**).
- **parent::system/host-name**—Selects an element node named **host-name** that is the child of an element named **system** that is the parent of the current context node. The **parent::** axis can be abbreviated as two periods (**..**).

The predicate syntax allows you to perform tests at each node selected by the path syntax. Only nodes that pass the test are included in the result set. A predicate appears inside square brackets (**[ ]**) after a path node. Following are several examples of predicate syntax:

- **server[name = '10.1.1.1']**—Selects an element named **server** that is a child of the current context and has a child element named **name** whose value is **10.1.1.1**.

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- ***[@inactive]**—Selects any node (***** matches any node) that is a child of the current context and that has an attribute (**@** selects nodes from the **attribute** axis) named **inactive**.
- **route[starts-with(next-hop, '10.10.')]**—Selects an element named **route** that is a child of the current context and that has a child element named **next-hop** whose value starts with the string **10.10.**.

  The **starts-with** function is one of many functions that are built into XPath. XPath also supports relational tests, equality tests, and many more features not listed here.

XPath Operators

XPath supports standard logical operators, such as AND and **|** (or); comparison operators, such as **=**, **!=**, **<**, and **>**; and numerical operators, such as **+**, **-**, and *****.

In XSLT, you always have to represent the less-than (**<**) operator as **<** and the less-than-or-equal-to (**<=**) operator as **<=** because XSLT scripts are XML documents, and less-than signs are represented this way in XML.

For more information about XPath functions and operators, consult a comprehensive XPath reference guide. XPath is fully described in the W3C specification at **http://w3c.org/TR/xpath**.

XSLT Templates Overview

An XSLT script consists of one or more sets of rules called *templates*. Each template is a segment of code that contains rules to apply when a specified node is matched. You use the **<xsl:template>** element to build templates.

There are two types of templates, named and unnamed (or match), and they are described in the following sections.

- Unnamed (Match) Templates on page 52
- Named Templates on page 53

Unnamed (Match) Templates

Unnamed templates, also known as match templates, include a **match** attribute that contains an XPath expression to specify the criteria for nodes upon which the template should be invoked. In the following example, the template applies to the element named **route** that is a child of the current context and that has a child element named **next-hop** whose value starts with the string **10.10.**.

```
<xsl:template match="route[starts-with(next-hop, '10.10.')]">
  <!-- ... body of the template ... -->
</xsl:template>
```

By default, when XSLT processes a document, it recursively traverses the entire document hierarchy, inspecting each node, looking for a template that matches the current node. When a matching template is found, the contents of that template are evaluated.

The **<xsl:apply-templates>** element can be used inside an unnamed template to limit and control XSLT's default, hierarchical traversal of nodes. If the **<xsl:apply-templates>** element has a **select** attribute, only nodes matching the XPath expression defined by

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the attribute are traversed. Otherwise all children of the context node are traversed. If the **select** attribute is included, but does not match any nodes, nothing is traversed and nothing happens.

In the following example, the template rule matches the **<route>** element in the XML hierarchy. All the nodes containing a **changed** attribute are processed. All **<route>** elements containing a **changed** attribute are replaced with a **<new>** element.

```
<xsl:template match="route">
  <new>
    <xsl:apply-templates select="*[@changed]"/>
  </new>
</xsl:template>
```

Using unnamed templates allows the script to ignore the location of a tag in the XML hierarchy. For example, if you want to convert all **<author>** tags into ** ** tags, using templates enables you to write a single rule that converts all **<author>** tags, regardless of their location in the input XML document.

For more information about how unnamed templates are used in scripts, see *xsl:template match="/" Template*.

Named Templates

Named templates operate like functions in traditional programming languages, although with a verbose syntax. When the complexity of a script increases or a code segment appears in multiple places, you can modularize the code and create named templates. Like functions, named templates accept arguments and run only when explicitly called.

You create a named template by using the **<xsl:template>** element and defining the **name** attribute, which is similar to a function name in traditional programming languages. Use the **<xsl:param>** tag and its **name** attribute to define parameters for the named template, and optionally include the **select** attribute to declare default values for each parameter. The **select** attribute can contain XPath expressions. If the **select** attribute is not defined, the parameter defaults to an empty string.

The following example creates a template named **my-template** and defines three parameters, one of which defaults to the string **false**, and one of which defaults to the contents of the element node named **name** that is a child of the current context node. If the script calls the template and does not pass in a parameter, the default value is used.

```
<xsl:template name="my-template">
  <xsl:param name="a"/>
  <xsl:param name="b" select="'false'"/>
  <xsl:param name="c" select="name"/>
   <!-- ... body of the template ... -->
</xsl:template>
```

To invoke a named template in a script, use the **<xsl:call-template>** element. The **name** attribute is required and defines the name of the template being called. When processed, the **<xsl:call-template>** element is replaced by the contents of the **<xsl:template>** element it names.

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When you invoke a named template, you can pass arguments into the template by including the **<xsl:with-param>** child element and specifying the **name** attribute. The value of the **<xsl:with-param> name** attribute must match a parameter defined in the actual template; otherwise the parameter is ignored. Optionally, you can set a value for each parameter with either the **select** attribute or the content of the **<xsl:with-param>** element. If you do not define a value for the parameter in the calling environment, the script passes in the current value of the parameter if it was previously initialized, or it generates an error if the parameter was never declared. For more information about passing parameters, see "XSLT Parameters Overview" on page 54.

In the following example, the template **my-template** is called with the parameter **c** containing the contents of the element node named **other-name** that is a child of the current context node.

```
<xsl:call-template name="my-template">
  <xsl:with-param name="c" select="other-name"/>
</xsl:call-template>
```

For an example showing how to use named templates in a commit script, see "Example: Requiring and Restricting Configuration Statements" on page 306.

Related Documentation

- XSLT Parameters Overview on page 54
- xsl:apply-templates on page 130
- xsl:call-template on page 130
- xsl:param on page 136
- xsl:template on page 138
- *xsl:template match="/" Template*
- xsl:with-param on page 141

XSLT Parameters Overview

Parameters can be passed to either named or unnamed templates. Inside the template, parameters must be declared and can then be referenced by prefixing their name with the dollar sign ($).

Declaring Parameters

The scope of a parameter can be global or local. A parameter whose value is set by Junos at script initialization must be defined as a global parameter. Global parameter declarations are placed just after the style sheet declarations. A script can assign a default value to the global parameter, which is used in the event that Junos does not give a value to the parameter.

```
<?xml version="1.0" standalone="yes"?>
  <xsl stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
    xmlns:junos="http://xml.juniper.net/junos/*/junos"
    xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
    xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0"
    xmlns:ext="http://xmlsoft.org/XSLT/namespace" version="1.0">
```


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```
<!-- global parameter -->
<xsl:param name="interface1"/>
```

Local parameters must be declared at the beginning of a block and their scope is limited to the block in which they are declared. Inside a template, you declare parameters using the **<xsl:param>** tag and **name** attribute. Optionally, declare default values for each parameter by including the **select** attribute, which can contain XPath expressions. If a template is invoked without the parameter, the default expression is evaluated, and the results are assigned to the parameter. If you do not define a default value in the template, the parameter defaults to an empty string.

The following named template **print-host-name** declares the parameter **message** and defines a default value:

```
<xsl:template name="print-host-name">
  <xsl:param name="message"
        select="concat('host-name: ', system/host-name)"/>
  <xsl:value-of select="$message"/>
</xsl:template>
```

The template accesses the value of the **message** parameter by prefixing the parameter name with the dollar sign ($).

Passing Parameters

When you invoke a template, you pass arguments into the template using the **<xsl:with-param>** element and **name** attribute. The value of the **<xsl:with-param> name** attribute must match the name of a parameter defined in the actual template; otherwise the parameter is ignored. Optionally, for each parameter you pass to a template, you can define a value using either the **select** attribute or the contents of the **<xsl:with-param>** element.

The parameter value that gets used in a template depends on how the template is called. The following three examples, which call the **print-host-name** template, illustrate the possible calling environments.

If you call a template but do not include the **<xsl:with-param>** element for a specific parameter, the default expression defined in the template is evaluated, and the results are assigned to the parameter. If there is no default value for that parameter in the template, the parameter defaults to an empty string. The following example calls the named template **print-host-name** but does not include any parameters in the call. In this case, the named template will use the default value for the **message** parameter that was defined in the **print-host-name** template, or an empty string if no default exists.

```
<xsl:template match="configuration">
    <xsl:call-template name="print-host-name"/>
</xsl:template>
```

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If you call a template and include a parameter, but do not define a value for the parameter in the calling environment, the script passes in the current value of the parameter if it was previously initialized, or it generates an error if the parameter was never declared. The following example calls the named template **print-host-name** and passes in the **message** parameter, but does not include a value. If **message** is declared and initialized in the script, and the scope is visible to the block, the current value of **message** is used. If **message** is declared in the script but not initialized, the value of **message** will be an empty string. If **message** has not been declared, the script produces an error.

```
<xsl:template match="configuration">
     <xsl:call-template name="print-host-name">
         <xsl:with-param name="message"/>
     </xsl:call-template>
</xsl:template>
```

If you call a template, include the parameter, and define a value for the parameter, the template uses the provided value. The following example calls the named template **print-host-name** with the **message** parameter and a defined value, so the template uses the new value.

```
<xsl:template match="configuration">
     <xsl:call-template name="print-host-name">
         <xsl:with-param name="message"
               select=concat"('Host-name passed in: ', system/host-name)"/>
     </xsl:call-template>
</xsl:template>
```

Example: Parameters and Match Templates

The following template matches on **/**, the root of the XML document. It then generates an element named **<outside>**, which is added to the output document, and instructs the Junos OS management process (mgd) to recursively apply templates to the **configuration/system** subtree. The parameter **host** is used in the processing of any matching nodes.The value of the **host** parameter is the value of the **host-name** statement at the [**edit system**] level of the configuration hierarchy.

```
<xsl:template match="/">
   <outside>
    <xsl:apply-templates select="configuration/system">
         <xsl:with-param name="host" select="configuration/system/host-name"/>
    </xsl:apply-templates>
  </outside>
</xsl:template>
```

The following template matches the **<system>** element, which is the top of the subtree selected in the previous example. The **host** parameter is declared with no default value. An **<inside>** element is generated, which contains the value of the **host** parameter that was defined in the **<xsl:with-param>** tag in the previous example.

```
<xsl:template match="system">
   <xsl:param name="host"/>
   <inside>
      <xsl:value-of select="$host"/>
   </inside>
</xsl:template>
```


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Example: Parameters and Named Templates

The following named template **report-changed** declares two parameters: **dot**, which defaults to the current node, and **changed**, which defaults to the **changed** attribute of the node **$dot**.

```
<xsl:template name="report-changed">
  <xsl:param name="dot" select="."/>
  <xsl:param name="changed" select="$dot/@changed"/>
  <!-- ... -->
</xsl:template>
```

The next stanza calls the **report-changed** template and defines a source for the **changed** attribute different from the default source defined in the **report-changed** template. When the **report-changed** template is invoked, it will use the newly defined source for the **changed** attribute in place of the default source.

```
<xsl:template match="system">
  <xsl:call-template name="report-changed">
    <xsl:with-param name="changed" select="../@changed"/>
  </xsl:call-template>
</xsl:template>
```

Likewise, the template call can include the **dot** parameter and define a source other than the default current node, as shown here:

```
<xsl:template match="system">
  <xsl:call-template name="report-changed">
    <xsl:with-param name="dot" select="../../>
  </xsl:call-template>
</xsl:template>
```

Related Documentation

- XSLT Templates Overview on page 52
- xsl:param on page 136
- xsl:with-param on page 141

XSLT Variables Overview

You declare variables using the **<xsl:variable>** element. The **name** attribute specifies the name of the variable, which is case-sensitive. Once you declare a variable, you can reference it within an XPath expression using the variable name prefixed with a dollar sign (**$**).

Variables are immutable; you can set the value of a variable only when you declare the variable, after which point, the value is fixed. You initialize a variable by including the **select** attribute and an expression in the **<xsl:variable>** tag. The following example declares and initializes the variable **location**. The **location** variable is then used to initialize the **message** variable.

```
<xsl:variable name="location" select="$dot/@location"/>
<xsl:variable name="message" select="concat('We are in ', $location, ' now.')"/>
```

You can define both local and global variables. Variables are global if they are children of the **<xsl:stylesheet>** element. Otherwise, they are local. The value of a global variable

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is accessible anywhere in the style sheet. The scope of a local variable is limited to the template or code block in which it is defined.

XSLT variables can store any values that you can calculate or statically define. This includes data structures, XML hierarchies, and combinations of text and parameters. For example, you could assign the XML output of an operational mode command to a variable and then access the hierarchy within the variable.

The following template declares the **message** variable. The **message** variable includes both text and parameter values. The template generates a system log message by referring to the value of the message variable. The resulting system log message is as follows:

Device *device-name* was changed on *date* by user '*user*.'

```
<xsl:template name="emit-syslog">
  <xsl:param name="user"/>
  <xsl:param name="date"/>
  <xsl:param name="device"/>
  <xsl:variable name="message">
    <xsl:text>Device </xsl:text>
    <xsl:value-of select="$device"/>
    <xsl:text> was changed on </xsl:text>
    <xsl:value-of select="$date"/>
    <xsl:text> by user '</xsl:text>
    <xsl:value-of select="$user"/>
    <xsl:text>.'</xsl:text>
  </xsl:variable>
  <syslog>
    <message>
      <xsl:value-of select="$message"/>
    </message>
  </syslog>
</xsl:template>
```

Table 10 on page 58 provides examples of XSLT variable declarations along with pseudocode explanations.

Table 10: Examples and Pseudocode for XSLT Variable Declaration

Variable Declaration	Pseudocode Explanation
<xsl:variable name="mpls" select="protocols/mpls"/>	Assigns the **[edit protocols mpls]** hierarchy level to the variable named **mpls**.
<xsl:variable name="color" select="data[name = 'color']/value"/>	Assigns the value of the **color** macro parameter to a variable named **color**. The **<data>** element in the XPath expression is useful in commit script macros. For more information, see "Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements" on page 207.

Related Documentation

- xsl:variable on page 140

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XSLT Programming Instructions Overview

XSLT has a number of traditional programming instructions. Their form tends to be verbose, because their syntax is built from XML elements.

The XSLT programming instructions most commonly used in commit, op, and event scripts, which provide flow control within a script, are described in the following sections:

- <xsl:choose> Programming Instruction on page 59
- <xsl:for-each> Programming Instruction on page 59
- <xsl:if> Programming Instruction on page 60
- Sample XSLT Programming Instructions and Pseudocode on page 60

<xsl:choose> Programming Instruction

The **<xsl:choose>** instruction is a conditional construct that causes different instructions to be processed in different circumstances. It is similar to a switch statement in traditional programming languages. The **<xsl:choose>** instruction contains one or more **<xsl:when>** elements, each of which tests an XPath expression. If the test evaluates to true, the XSLT processor executes the instructions in the **<xsl:when>** element. After the XSLT processor finds an XPath expression in an **<xsl:when>** element that evaluates to true, the XSLT processor ignores all subsequent **<xsl:when>** elements contained in the **<xsl:choose>** instruction, even if their XPath expressions evaluate to true. In other words, the XSLT processor processes only the instructions contained in the first **<xsl:when>** element whose **test** attribute evaluates to true. If none of the **<xsl:when>** elements' **test** attributes evaluate to true, the content of the optional **<xsl:otherwise>** element, if one is present, is processed.

The **<xsl:choose>** instruction is similar to a switch statement in other programming languages. The **<xsl:when>** element is the "case" of the switch statement, and you can add any number of **<xsl:when>** elements. The **<xsl:otherwise>** element is the "default" of the switch statement.

```
<xsl:choose>
  <xsl:when test="xpath-expression">
    ...
  </xsl:when>
  <xsl:when test="another-xpath-expression">
    ...
  </xsl:when>
  <xsl:otherwise>
    ...
  </xsl:otherwise>
</xsl:choose>
```

<xsl:for-each> Programming Instruction

The **<xsl:for-each>** element tells the XSLT processor to gather together a set of nodes and process them one by one. The nodes are selected by the XPath expression specified by the **select** attribute. Each of the nodes is then processed according to the instructions held in the **<xsl:for-each>** construct.

```
<xsl:for-each select="xpath-expression">
```

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```
    ...
</xsl:for-each>
```

Code inside the **<xsl:for-each>** instruction is evaluated recursively for each node that matches the XPath expression. That is, the current context is moved to each node selected by the **<xsl:for-each>** clause, and processing is relative to that current context.

In the following example, the **<xsl:for-each>** construct recursively processes each node in the **[system syslog file]** hierarchy. It updates the current context to each matching node and prints the value of the **name** element, if one exists, that is a child of the current context.

```
<xsl:for-each select="system/syslog/file">
  <xsl:value-of select=”name”/>
</xsl:for-each>
```

<xsl:if> Programming Instruction

An **<xsl:if>** programming instruction is a conditional construct that causes instructions to be processed if the XPath expression held in the **test** attribute evaluates to **true**.

```
<xsl:if test="xpath-expression">
  ...executed if test expression evaluates to true
</xsl:if>
```

There is no corresponding else clause.

Sample XSLT Programming Instructions and Pseudocode

Table 11 on page 60 presents examples that use several XSLT programming instructions along with pseudocode explanations.

Table 11: Examples and Pseudocode for XSLT Programming Instructions

Programming Instruction	Pseudocode Explanation
<xsl:choose> <xsl:when test="system/host-name"> <change> <system> <host-name>M320</host-name> </system> </change> </xsl:when> <xsl:otherwise> <xnm:error> <message> Missing [edit system host-name] M320. </message> </xnm:error> </xsl:otherwise> </xsl:choose>	When the **host-name** statement is included at the **[edit system]** hierarchy level, change the hostname to **M320**. Otherwise, issue the warning message: **Missing [edit system host-name] M320**.
<xsl:for-each select="interfaces/interface[starts-with(name, 'ge-')]/unit">	For each Gigabit Ethernet interface configured at the **[edit interfaces ge-*fpc/pic/port* unit *logical-unit-number*]** hierarchy level.

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Table 11: Examples and Pseudocode for XSLT Programming Instructions *(continued)*

Programming Instruction	Pseudocode Explanation

<xsl:for-each select="data[not(value)]/name">	Select any macro parameter that does not contain a parameter value.
	
	In other words, match all **apply-macro** statements of the following form:
	
	apply-macro *apply-macro-name* {
	parameter-name;
	}
	
	And ignore all **apply-macro** statements of the form:
	
	apply-macro *apply-macro-name* {
	parameter-name parameter-value;
	}

<xsl:if test="not(system/host-name)">	If the **host-name** statement is not included at the **[edit system]** hierarchy level.
<xsl:if test="apply-macro[name = 'no-igp']	If the **apply-macro** statement named **no-igp** is included at the current hierarchy level.
<xsl:if test="not(../apply-macro[name = 'no-ldp'])	If the **apply-macro** statement with the name **no-ldp** is not included two hierarchy levels above the current hierarchy level.

Related Documentation

- xsl:choose on page 131
- xsl:for-each on page 133
- xsl:if on page 134
- xsl:otherwise on page 135
- xsl:when on page 141

XSLT Recursion Overview

XSLT depends on recursion as a looping mechanism. Recursion occurs when a section of code calls itself, either directly or indirectly. Both named and unnamed templates can use recursion, and different templates can use mutual recursion, one calling another that in turn calls the first.

To avoid infinite recursion and excessive consumption of system resources, the Junos OS management process (mgd) limits the maximum recursion to 5000 levels. If this limit is reached, the script fails.

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In the following example, an unnamed template matches on a **<count>** element. It then calls the **<count-to-max>** template, passing the value of the **count** element as **max**. The **<count-to-max>** template starts by declaring both the **max** and **cur** parameters and setting the default value of each to **1** (one). Although the optional default value for **max** is one, the template will use the value passed in from the **count** template. Then the current value of **$cur** is emitted in an **<out>** element. Finally, if **$cur** is less than **$max**, the **<count-to-max>** template recursively invokes itself, passing **$cur + 1** as **cur**. This recursive pass then outputs the next number and repeats the recursion until **$cur** equals **$max**.

```
<xsl:template match="count">
  <xsl:call-template name="count-to-max">
    <xsl:with-param name="max" select="."/>
  </xsl:call-template>
</xsl:template>

<xsl:template name="count-to-max">
  <xsl:param name="cur" select="'1'"/>
  <xsl:param name="max" select="'1'"/>

  <out><xsl:value-of select="$cur"/></out>

  <xsl:if test="$cur &lt; $max">
    <xsl:call-template name="count-to-max">
      <xsl:with-param name="cur" select="$cur + 1"/>
      <xsl:with-param name="max" select="$max"/>
    </xsl:call-template>
  </xsl:if>
</xsl:template>
```

Given a **max** value of **10**, the values contained in the **<out>** tag are **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, and **10**.

XSLT Context (Dot) Overview

The current context node changes as an **<xsl:apply-templates>** instruction traverses the document hierarchy and as an **<xsl:for-each>** instruction examines each node that matches an XPath expression. All relative node references are relative to the current context node. This node is abbreviated " **.**" (read: dot) and can be referred to in XPath expressions, allowing explicit references to the current node.

The following example contains four uses for "**.**" . The **system** node is saved in the **system** variable for use inside the **<xsl:for-each>** instruction, where the value of "**.**" will have changed. The **for-each select** expression uses "**.**" to mean the value of the **name** element. The "**.**" is then used to pull the value of the **name** element into the **<tag>** element. The **<xsl:if>** test then uses "**.**" to reference the value of the current context node.

```
<xsl:template match="system">
  <xsl:variable name="system" select="."/>
  <xsl:for-each select="name-server/name[starts-with(., '10.')]">
    <tag><xsl:value-of select="."/></tag>
    <xsl:if test=". = '10.1.1.1'">
      <match>
        <xsl:value-of select="$system/host-name"/>
      </match>
    </xsl:if>
  </xsl:for-each>
```


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```
</xsl:template>
```

SLAX

- SLAX Overview on page 63
- Converting Scripts Between SLAX and XSLT on page 65
- SLAX Syntax Rules Overview on page 67
- SLAX Elements and Element Attributes Overview on page 69
- XPath Expressions Overview for SLAX on page 70
- SLAX Templates Overview on page 71
- SLAX Parameters Overview on page 74
- SLAX Variables Overview on page 77
- SLAX Statements Overview on page 78
- XSLT Elements Without SLAX Equivalents on page 82
- SLAX Operators on page 82

SLAX Overview

Stylesheet Language Alternative Syntax (SLAX) is a language for writing Junos OS commit scripts, op scripts, and event scripts. It is an alternative to Extensible Stylesheet Language Transformations (XSLT). SLAX has a distinct syntax similar to that of C and Perl, but the same semantics as XSLT.

- SLAX Advantages on page 63
- How SLAX Works on page 64

SLAX Advantages

XSLT is a powerful and effective tool for handling Extensible Markup Language (XML) that works well for machine-to-machine communication, but its XML-based syntax is inconvenient for the development of complex programs.

SLAX has a simple syntax that follows the style of C and PERL. It provides a practical and succinct way to code, thus allowing you to create readable, maintainable commit, op, and event scripts. SLAX removes XPath expressions and programming instructions from XML elements. XML angle brackets and quotation marks are replaced by parentheses and curly brackets (**{ }**), which are the familiar delimiters of C and PERL.

The benefits of SLAX are particularly strong for programmers who are not already accustomed to XSLT, because SLAX allows them to concentrate on the new programming topics introduced by XSLT, rather than concentrating on learning a new syntax. For example, SLAX allows you to:

- Use **if**, **else if**, and **else** statements instead of **<xsl:choose>** and **<xsl:if>** elements
- Put test expressions in parentheses (**( )**)
- Use the double equal sign (**==**) to test equality instead of the single equal sign (**=**)
- Use curly braces to show containment instead of closing tags

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- Perform concatenation using the underscore (_) operator, as in PERL, version 6
- Write text strings using simple quotation marks (**" "**) instead of the **<xsl:text>** element
- Define named templates with a syntax resembling a function definition
- Invoke named templates with a syntax resembling a function call
- Simplify namespace declarations
- Reduce the clutter in your scripts
- Write more readable scripts

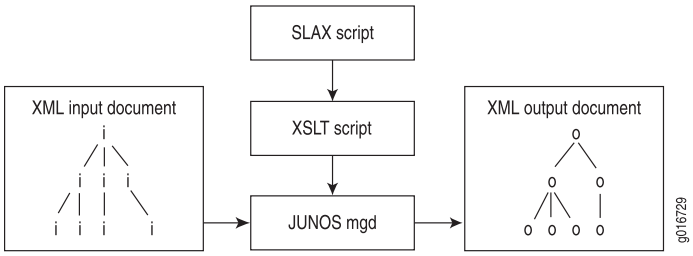
How SLAX Works

SLAX functions as a preprocessor for XSLT. Junos OS internally translates SLAX programming instructions (such as **if** and **else** statements) into the equivalent XSLT instructions (such as **<xsl:if>** and **<xsl:choose>** elements). After this translation, the XSLT transformation engine—which, for Junos OS, is the Junos OS management (mgd) process—is invoked.

SLAX does not affect the expressiveness of XSLT; it only makes XSLT easier to use. The underlying SLAX constructs are completely native to XSLT. SLAX adds nothing to the XSLT engine. The SLAX parser parses an input document and builds an XML tree identical to the one produced when the XML parser reads an XSLT document.

Figure 2 on page 64 shows the flow of SLAX script input and output.

Figure 2: SLAX Script Input and Output



Related Documentation

- Converting Scripts Between SLAX and XSLT on page 65
- SLAX Elements and Element Attributes Overview on page 69
- SLAX Statements Overview on page 78
- SLAX Syntax Rules Overview on page 67
- SLAX Templates Overview on page 71
- SLAX Variables Overview on page 77
- XPath Expressions Overview for SLAX on page 70
- XSLT Overview on page 48

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Converting Scripts Between SLAX and XSLT

SLAX is a C-like alternative syntax to XSLT and can be viewed as a preprocessor for XSLT. Before Junos OS invokes the XSLT processor, the software converts any SLAX constructs in the script (such as **if/then/else**) to equivalent XSLT constructs (such as **<xsl:choose>** and **<xsl:if>**). For more information about SLAX, see "SLAX Overview" on page 63.

You can use the **request system scripts convert** operational mode command to convert a script written in SLAX or XSLT into the alternate language. If you have existing XSLT scripts, conversion to SLAX allows C and PERL programmers to more easily read and maintain the scripts. In addition, converting a script and studying the results facilitates learning the differences between the two languages.

The following sections explain how to convert a script from one language to the other:

- Converting a Script from SLAX to XSLT on page 65
- Converting a Script from XSLT to SLAX on page 66

Converting a Script from SLAX to XSLT

To convert a SLAX script to XSLT, issue the **request system scripts convert slax-to-xslt** operational mode command, and specify the source file, the destination directory, and, optionally, a destination file. The source script is the basis for the new script. The source script is not overwritten by the new script.

The command syntax is:

user@host> **request system scripts convert slax-to-xslt source** *source* **destination** *dest*

The following three examples show the command using a source and destination directory relevant to the default storage location for the type of script being converted:

```
user@host> request system scripts convert slax-to-xslt source /var/db/scripts/op/script1.slax
destination /var/db/scripts/op/script1.xsl
conversion complete

user@host> request system scripts convert slax-to-xslt source /var/db/scripts/event/script1.slax
destination /var/db/scripts/event/script1.xsl
conversion complete

user@host> request system scripts convert slax-to-xslt source
/var/db/scripts/commit/script1.slax destination /var/db/scripts/commit/script1.xsl
conversion complete
```

When you issue the **slax-to-xslt** conversion command, the **script1.slax** file remains unchanged in the source directory and a new script called **script1.xsl** is added to the destination directory.

```
user@host> file list /var/db/scripts/op
script1.slax
script1.xsl
```

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If you specify only the destination directory and do not specify a destination filename, the generated file is named **SLAX-Conversion-Temp.*xxxxx*** where ***xxxxx*** is a randomly generated series of characters.

```
user@host> request system scripts convert slax-to-xslt source /var/db/scripts/op/script1.slax
destination /var/db/scripts/op/
conversion complete

user@host> file list /var/db/scripts/op
SLAX-Conversion-Temp.SlhIr
script1.slax
```

Converting a Script from XSLT to SLAX

To convert an XSLT script to SLAX, issue the **request system scripts convert xslt-to-slax** operational mode command, and specify the source file, the destination directory, and, optionally, a destination file. The source script is the basis for the new script. The source script is not overwritten by the new script.

The command syntax is:

user@host> **request system scripts convert xslt-to-slax source** *source* **destination** *dest*

The following three examples show the command using a source and destination directory relevant to the default storage location for the type of script being converted:

```
user@host> request system scripts convert xslt-to-slax source /var/db/scripts/op/script1.xsl
destination /var/db/scripts/op/script1.slax
conversion complete

user@host> request system scripts convert xslt-to-slax source /var/db/scripts/event/script1.xsl
destination /var/db/scripts/event/script1.slax
conversion complete

user@host> request system scripts convert xslt-to-slax source /var/db/scripts/commit/script1.xsl
destination /var/db/scripts/commit/script1.slax
conversion complete
```

When you issue the **xslt-to-slax** conversion command, the **script1.xsl** file remains unchanged in the source directory, and a new script called **script1.slax** is added to the destination directory.

```
user@host> file list /var/db/scripts/op
script1.slax
script1.xsl
```

If you specify only the destination directory and do not specify a destination filename, the generated file is named **SLAX-Conversion-Temp.*xxxxx*** where ***xxxxx*** is a randomly generated series of characters.

```
user@host> request system scripts convert xslt-to-slax source /var/db/scripts/op/script1.xsl
destination /var/db/scripts/op/
conversion complete

user@host> file list /var/db/scripts/op
SLAX-Conversion-Temp.Vosnd
script1.xsl
```


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Related Documentation

- SLAX Overview on page 63

SLAX Syntax Rules Overview

SLAX syntax rules are similar to those of traditional programming languages like C and PERL. The following sections discuss general aspects of SLAX syntax rules:

- Code Blocks on page 67
- Comments on page 67
- Line Termination on page 68
- Strings on page 68

Code Blocks

SLAX delimits blocks of code with curly braces. Code blocks, which may define the boundaries of an element, a hierarchy, or a segment of code, can be at the same level as or nested within other code blocks. Declarations defined within a particular code block have a scope that is limited to that block.

The following example shows two blocks of code. Curly braces define the bounds of the **match /** block. The second block, containing the **<op-script-results>** element, is nested within the first.

```
match / {
  <op-script-results> {
      <output> "Script summary:";
  }
}
```

Comments

In SLAX, you can add comments anywhere in a script. Commenting a script increases readability for all users, including the author, who may need to return to a script long after it was originally written. It is recommended that you add comments throughout a script as you write it.

In SLAX, you insert comments in the traditional C style, beginning with **/*** and ending with ***/**. For example:

```
/* This is a comment. */
```

Multi-line comments follow the same format. In the following example, the additional "*" characters are added to the beginning of the lines for readability, but they are not required.

```
/* Script Title
* Author: Jane Doe
* Last modified: 01/01/10
* Summary of modifications: ...
*/
```

The XSLT equivalent is:

```
<!-- Script Title
 Author: Jane Doe
```

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```
 Last modified: 01/01/10
 Summary of modifications: ...
-->
```

The following example inserts a comment into the script to remind the programmer that the output is sent to the console.

```
match / {
  <op-script-results> {
    /* Output script summary  to the console */
      <output> "Script summary: ...";
  }
}
```

Line Termination

As with many traditional programming languages, SLAX statements are terminated with a semicolon.

In the following example, the namespace declarations, import statement, and output element are all terminated with a semicolon. Lines that begin or end a block are not terminated with a semicolon.

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match / {
  <op-script-results> {
    <output> "Script summary:";
      /* ... */
  }
}
```

Strings

Strings are sequences of text characters. SLAX strings can be enclosed in either single quotes or double quotes. However, you must close the string with the same type of quote used to open the string. Strings can be concatenated together using the SLAX concatenation operation, which is the underscore (_).

For example:

```
match / {
  <op-script-results> {
    /* Output script summary  to the console */
      <output> "Script" _ "summary: ...";
  }
}
```

Related Documentation

- SLAX Elements and Element Attributes Overview on page 69
- SLAX Overview on page 63
- SLAX Statements Overview on page 78SLAX Templates Overview on page 71
- SLAX Templates Overview on page 71

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- SLAX Variables Overview on page 77

SLAX Elements and Element Attributes Overview

SLAX Elements

SLAX elements are written with only the opening tag. The contents of the tag appear immediately following the opening tag. The contents can be either a simple expression or a more complex expression placed inside curly braces. For example:

```
<top> {
  <one>;
  <two> {
    <three>;
    <four>;
    <five> {
      <six>;
    }
  }
}
```

The XSLT equivalent is:

```
<top>
  <one/>
  <two>
    <three/>
    <four/>
    <five>
      <six/>
    </five>
  </two>
</top>
```

Using these nesting techniques and removing the closing tag reduces clutter and increases code clarity.

SLAX Element Attributes

SLAX element attributes follow the style of XML. Attributes are included in the opening tag and consist of an attribute name and value pair. The attribute syntax consists of the attribute name followed by an equals sign and then the attribute value enclosed in quotation marks. Multiple attributes are separated by spaces.

```
<element attr1="one" attr2="two">;
```

Where XSLT allows attribute value templates using curly braces, SLAX uses the normal expression syntax. Attribute values can include any XPath syntax, including quoted strings, parameters, variables, numbers, and the SLAX concatenation operator, which is an underscore (_). In the following example, the SLAX element **location** has two attributes, **state** and **zip**:

```
<location state=$location/state zip=$location/zip5 _ "-" _ $location/zip4>;
```

The XSLT equivalent is:

```
<location state="{$location/state}"
          zip="{concat($location/zip5, "-", $location/zip4}"/>
```

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In SLAX, curly braces placed inside quote strings are not interpreted as attribute value templates. Instead, they are interpreted as plain-text curly braces.

An escape sequence causes a character to be treated as plain text and not as a special operator. For example, in HTML, an ampersand (**&**) followed by **lt** causes the less-than symbol (**<**) to be printed.

In XSLT, the double curly braces (**{{** and **}}**) are escape sequences that cause opening and closing curly braces to be treated as plain text. When a SLAX script is converted to XSLT, the curly braces inside quote strings are converted to double curly braces:

```
<avt sign="{here}">;
```

The XSLT equivalent is:

```
<avt sign="{{here}}"/>
```

Related Documentation

- XML Overview on page 44

XPath Expressions Overview for SLAX

XPath expressions can appear either as the contents of an XML element or as the contents of an **expr** (expression) statement. In either case, the value is translated to either an **<xsl:text>** element, which outputs literal text, or to an **<xsl:value-of>** element, which extracts data from an XML structure.

You encode strings using quotation marks (single or double). The concatenation operator is the underscore (_), as in PERL 6.

In this example, the contents of the **<three>** and **<four>** elements are identical, and the content of the **<five>** element differs only in the use of the XPath **concat()** function. The resulting output is the same in all three cases.

```
<top> {
  <one> "test";
  <two> "The answer is " _ results/answer _ ".";
  <three> results/count _ " attempts made by " _ results/user;
  <four> {
    expr results/count _ " attempts made by " _ results/user;
  }
  <five> {
    expr results/count;
    expr " attempts made by ";
    expr results/user;
  }
  <six> results/message;
}
```

The XSLT equivalent is:

```
<top>
  <one><xsl:text>test</xsl:text></one>
  <two>
    <xsl:value-of select='concat("The answer is ", results/answer, ".")'/>
  </two>
  <three>
```


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```
    <xsl:value-of select='concat(results/count, " attempts made by ", results/user)'/>
  </three>
  <four>
    <xsl:value-of select='concat(results/count, " attempts made by ", results/user)'/>
  </four>
  <five>
    <xsl:value-of select="results/count"/>
    <xsl:text> attempts made by </xsl:text>
    <xsl:value-of select="results/user"/>
  </five>
  <six><xsl:value-of select='results/message'/></six>
</top>
```

Related Documentation

- **concat( ) on page 124**
- SLAX Elements and Element Attributes Overview on page 69
- SLAX Syntax Rules Overview on page 67
- XPath Overview on page 50
- **xsl:text on page 139**
- **xsl:value-of on page 139**

SLAX Templates Overview

A SLAX script consists of one or more sets of rules called *templates*. Each template is a segment of code that contains rules to apply when a specified node is matched.

There are two types of templates, named and unnamed (or match), and they are described in the following sections.

- Unnamed (Match) Templates on page 71
- Named Templates on page 72

Unnamed (Match) Templates

Unnamed templates, also known as match templates, contain a **match** statement with an XPath expression to specify the criteria for nodes upon which the template should be invoked. In the following commit script sample, the template matches the top-level element in the configuration hierarchy.

```
match configuration {
  /* ...body of the  template goes here */
}
```

By default, the processor recursively traverses the entire document hierarchy, inspecting each node, looking for a template that matches the current node. When a matching template is found, the contents of that template are evaluated.

The **apply-templates** statement can be used inside an unnamed template to limit and control the default, hierarchical traversal of nodes. This statement accepts an optional XPath expression, which is equivalent to the **select** attribute in an **<xsl:apply-templates>** element. If an optional XPath expression is included, only nodes matching the XPath expression are traversed. Otherwise all children of the context node are traversed. If the

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XPath expression is included but does not match any nodes, nothing is traversed and nothing happens.

In the following example, the template rule matches the **<route>** element in the XML hierarchy. All the nodes containing a **changed** attribute are processed. All **route** elements containing a **changed** attribute are replaced with a **new** element.

```
match route {
  <new> {
    apply-templates *[@changed];
  }
}
```

The XSLT equivalent:

```
<xsl:template match="route">
  <new>
    <xsl:apply-templates select="*[@changed]"/>
  </new>
</xsl:template>
```

Using unnamed templates allows the script to ignore the location of a tag in the XML hierarchy. For example, if you want to convert all **<author>** tags into ** ** tags, using templates enables you to write a single rule that converts all **<author>** tags, regardless of their location in the input XML document.

Named Templates

Named templates operate like functions in traditional programming languages. When the complexity of a script increases or a code segment appears in multiple places, you can modularize the code and create named templates. Like functions, named templates accept arguments and run only when explicitly called.

In SLAX, the named template definition consists of the **template** keyword, the template name, a set of parameters, and a braces-delimited block of code. Parameter declarations can be inline and consist of the parameter name, and, optionally, a default value. Or you can declare parameters inside the template block using the **param** statement. If a default value is not defined, the parameter defaults to an empty string.

The following example creates a template named **my-template** and defines three parameters, one of which defaults to the string **false**, and one of which defaults to the contents of the element node named **name** that is a child of the current context node. If the script calls the template and does not pass in a parameter, the default value is used.

```
template my-template ($a, $b = "false", $c = name) {
  /* ... body of the template ... */
}
```

An alternate method is to declare the parameters within the template using the **param** statement. The following code is identical to the previous example:

```
template my-template {
  param $a;
  param $b = "false";
  param $c = name;
  /* ... body of the template ... */
}
```


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In SLAX, you invoke named templates using the **call** statement, which consists of the **call** keyword and template name followed by a set of parameter bindings. These bindings are a comma-separated list of parameter names that are passed into the template from the calling environment. Parameter assignments are made by name and not by position in the list. Alternatively, you can declare parameters inside the **call** block using the **with** statement. Parameters passed into a template must match a parameter defined in the actual template; otherwise the parameter is ignored. Optionally, you can set a value for each parameter. If you do not define a value for the parameter in the calling environment, the script passes in the current value of the parameter if it was previously initialized, or it generates an error if the parameter was never declared. For more information about passing parameters, see "SLAX Parameters Overview" on page 74.

In the following example, the template **my-template** is called with the parameter **c** containing the contents of the element node named **other-name** that is a child of the current context node.

```
call my-template {
  with $c = other-name;
}
```

In the following example, the **name-servers-template** declares two parameters **name-servers** and **size**. The **size** parameter is given a default value of zero. The match template, which declares and initializes **$name-servers**, calls the **name-servers-template** three times.

The first call to the template does not include any parameters. Thus **name-servers** will default to an empty string, and **size** will default to a value of zero as defined in the template. The second call includes the **name-servers** and **size** parameters but only supplies a value for the **size** parameter. Thus **name-servers** has the value defined by its initialization in the script, and **size** is equal to the number of **name-servers** elements in the configuration hierarchy. The last call is identical to the second call, but it supplies the parameters using the **with** statement syntax.

```
match configuration {
  param $name-servers = name-servers/name;
  call name-servers-template();
  call name-servers-template($name-servers, $size = count($name-servers));
  call name-servers-template() {
    with $name-servers;
    with $size = count($name-servers);
  }
}
  template name-servers-template($name-servers, $size = 0) {
    <output> "template called with size " _ $size;
  }
```

The XSLT equivalent is:

```
<xsl:template match="configuration">
  <xsl:variable name="name-servers" select="name-servers/name"/>
  <xsl:call-template name="name-servers-template"/>
  <xsl:call-template name="name-servers-template">
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
  <xsl:call-template name="name-servers-template">
```

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```
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
</xsl:template>

<xsl:template name="name-servers-template">
  <xsl:param name="name-servers"/>
  <xsl:param name="size" select="0"/>
  <output>
    <xsl:value-of select="concat('template called with size ', $size)"/>
  </output>
</xsl:template>
```

Related Documentation

- SLAX Parameters Overview on page 74
- XSLT Templates Overview on page 52
- apply-templates on page 111
- call on page 112
- match on page 117
- param on page 119
- with on page 123

SLAX Parameters Overview

Parameters can be passed to either named or unnamed templates. Inside the template, parameters must be declared and can then be referenced by prefixing their name with the dollar sign ($).

Declaring Parameters

In SLAX, you declare parameters using the **param** statement. Optionally, you can define an initial value for each parameter in the declaration. For example:

```
param $dot = .;
```

The scope of a parameter can be global or local. A parameter whose value is set by Junos at script initialization must be defined as a global parameter. Global parameter declarations are placed just after the style sheet declarations. A script can assign a default value to the global parameter, which is used in the event that Junos does not give a value to the parameter.

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
ns ext = "http://xmlsoft.org/XSLT/namespace";

/* global parameter */
param $interface1 = “fxp0”;
```

Local parameters must be declared at the beginning of a block and their scope is limited to the block in which they are declared. In a template, you declare parameters either in a parameter list or by using the **param** statement in the template block. Optionally, declare

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default values for each template parameter. If a template is invoked without the parameter, the default expression is evaluated, and the results are assigned to the parameter. If you do not define a default value in the template, the parameter defaults to an empty string.

The following named template **print-host-name** declares the parameter **message** and defines a default value:

```
template print-host-name ($message = "host name: " _ system/host-name) {
  <xnm:warning> {
    <message> $message;
  }
}
```

An alternative, but equivalent, declaration is:

```
template print-host-name () {
  param $message = "host name: " _ system/host-name;
  <xnm:warning> {
    <message> $message;
  }
}
```

The template declares **message** and accesses its value by prefixing the parameter name with the dollar sign ($). In XSLT, the parameter name is prefixed by the dollar sign when you access it but not when you declare it.

Passing Parameters

When you invoke a template, you pass arguments into the template either in an argument list or by using the **with** statement. The name of the parameter supplied in the calling environment must match the name of a parameter defined in the actual template; otherwise the parameter is ignored. Optionally, for each parameter you pass to a template, you can define a value using an equal sign (=) and a value expression. In the following example, the two calls to the named template **print-host-name** are identical:

```
match configuration {
   call print-host-name($message = "passing in host name: " _ system/host-name);
}
match configuration {
   call print-host-name() {
      with $message = "passing in host name: " _ system/host-name;
   }
}
```

The parameter value that gets used in a template depends on how the template is called. The following three examples, which call the **print-host-name** template, illustrate the possible calling environments.

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If you call a template but do not include a specific parameter, the default expression defined in the template is evaluated, and the results are assigned to the parameter. If there is no default value for that parameter in the template, the parameter defaults to an empty string. The following example calls the named template **print-host-name** but does not include any parameters in the call. In this case, the named template will use the default value for the **message** parameter that was defined in the **print-host-name** template, or an empty string if no default exists.

```
match configuration {
   call print-host-name();
}
```

If you call a template and include a parameter, but do not define a value for the parameter in the calling environment, the script passes in the current value of the parameter if it was previously initialized, or it generates an error if the parameter was never declared. The following example calls the named template **print-host-name** and passes in the **message** parameter but does not include a value. If **message** is declared and initialized in the script, and the scope is visible to the block, the current value of **message** is used. If **message** is declared in the script but not initialized, the value of **message** will be an empty string. If **message** has not been declared, the script produces an error.

```
match configuration {
   call print-host-name($message);
   /* If $message was initialized previously, the current value is used;
    * If $message was declared but not initialized, an empty string is used;
    * If $message was never declared, the call generates an error. */
}
```

If you call a template, include the parameter, and define a value for the parameter, the template uses the provided value. The following example calls the named template **print-host-name** with the **message** parameter and a defined value, so the template uses the new value.

```
match configuration {
   call print-host-name($message = "passing in host name: " _ system/host-name);
}
```

Example: Parameters and Match Templates

The following example matches the top level **configuration** hierarchy element and then instructs the Junos OS management process (mgd) to recursively apply templates to the **system/host-name** subtree. The parameters **message** and **domain** are used in the processing of any matching nodes.

```
match configuration {
  var $domain = domain-name;
  apply-templates system/host-name {
    with $message = "Invalid host-name";
    with $domain;
  }
}

match host-name {
  param $message = "Error";
  param $domain;
```


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```
    <hello> $message _ ":: " _ . _ " (" _ $domain _ ")";
}
```

The XSLT equivalent is:

```
<xsl:template match="configuration">
  <xsl:apply-templates select="system/host-name">
    <xsl:with-param name="message" select="'Invalid host-name'"/>
    <xsl:with-param name="domain" select="$domain"/>
  </xsl:apply-templates>
</xsl:template>

<xsl:template match="host-name">
  <xsl:param name="message" select="'Error'"/>
  <xsl:param name="domain"/>
  <hello>
    <xsl:value-of select="concat($message, ':: ', ., ' (', $domain, ')')"/>
  </hello>
</xsl:template>
```

Related Documentation

- SLAX Templates Overview on page 71
- param on page 119
- template on page 120
- with on page 123

SLAX Variables Overview

In SLAX, you declare variables using the **var** statement. In the declaration, the variable name is prefixed with the dollar sign ($), unlike the XSLT declaration, where the dollar sign does not prefix the value of the **name** attribute of the **<xsl:variable>** element. Once you declare a variable, you can reference it within an XPath expression using the variable name prefixed with a dollar sign ($).

Variables are immutable; you can set the value of a variable only when you declare the variable, after which point, the value is fixed. You initialize a variable by following the variable name with an equal sign (=) and an expression. The following example declares and initializes the variable **location**. The **location** variable is then used to initialize the **message** variable.

```
var $location = $dot/@location;
var $message = "We are in " _ $location _ " now.";
```

The XSLT equivalent is:

```
<xsl:variable name="location" select="$dot/@location"/>
<xsl:variable name="message" select="concat('We are in ', $location, ' now.')"/>
```

You can define both local and global variables. Variables are global if they are defined outside of any template. Otherwise, they are local. The value of a global variable is accessible anywhere in the style sheet. The scope of a local variable is limited to the template or code block in which it is defined.

SLAX variables can store any values that you can calculate or statically define. This includes data structures, XML hierarchies, and combinations of text and parameters. For

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example, you could assign the XML output of an operational mode command to a variable and then access the hierarchy within the variable.

Variables are immutable. As such, you can never change the value of a variable after it is defined in the declaration. Although you cannot directly update the value of a variable, you can mimic the effect by recursively calling a function and passing in the value of the variable as a parameter. For example:

```
var $count = 1;
match / {
  call update-count($myparam = $count);
}
template update-count($myparam) {
  expr $count _ ", " $myparam _"\n";
  if ($myparam != 4) {
    call update-count($myparam = $myparam + 1)
  }
}
```

Executing the op script in the CLI produces the following output in the log file. Although the **count** variable must remain fixed, **myparam** is updated with each call to the template.

```
1, 1
1, 2
1, 3
1, 4
1, 5
```

Related Documentation

- XSLT Variables Overview on page 57
- SLAX Parameters Overview on page 74
- **var on page 122**

SLAX Statements Overview

This section lists some commonly used SLAX statements, with brief examples and XSLT equivalents.

- for-each Statement on page 79
- if, else if, and else Statements on page 79
- match Statement on page 80
- ns Statement on page 81
- version Statement on page 81

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for-each Statement

The SLAX **for-each** statement functions like the **<xsl:for-each>** element. The statement consists of the **for-each** keyword, a parentheses-delimited expression, and a curly braces-delimited block. The **for-each** statement tells the processor to gather together a set of nodes and process them one by one. The nodes are selected by the specified XPath expression. Each of the nodes is then processed according to the instructions held in the **for-each** code block.

```
for-each (xpath-expression) {
  ...
}
```

Code inside the **for-each** instruction is evaluated recursively for each node that matches the XPath expression. That is, the current context is moved to each node selected by the **for-each** clause, and processing is relative to that current context.

In the following example, the **inventory** variable stores the inventory hierarchy. The **for-each** statement recursively processes each **chassis-sub-module** node that is a child of **chassis-module** that is a child of the **chassis** node. For each **chassis-sub-module** element that contains a **part-number** with a value equal to the specified part number, a **message** element is created that includes the name of the chassis module and the name and description of the chassis sub module.

```
for-each ($inventory/chassis/chassis-module/
          chassis-sub-module[part-number == '750-000610']) {
  <message> "Down rev PIC in " _ ../name _ ", " _ name _ ": " _ description;
}
```

The XSLT equivalent is:

```
<xsl:for-each select="$inventory/chassis/chassis-module/
           chassis-sub-module[part-number = '750-000610']">
  <message>
    <xsl:value-of select="concat('Down rev PIC in ', ../name, ', ', name, ': ',
         description)"/>
  </message>
</xsl:for-each>
```

if, else if, and else Statements

SLAX supports **if**, **else if**, and **else** statements. The **if** statement is a conditional construct that causes instructions to be processed if the specified XPath expression evaluates to true. The **if** construct may have one or more associated **else if** clauses, each of which tests an XPath expression. If the expression in the **if** statement evaluates to false, the processor checks each **else if** expression. If a statement evaluates to true, the script executes the instructions in the associated block and ignores all subsequent **else if** and **else** statements. The optional **else** clause is the default code that is executed in the event that all associated **if** and **else-if** expressions evaluate to false. If all of the **if** and **else if** statement evaluate to false, and the **else** statement is not present, no action is taken.

The expressions that appear in parentheses are extended XPath expressions, which support the double equal sign (**==**) in place of XPath's single equal sign (**=**).

```
if (expression) {
  /* If block Statement */
```

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```
}
else if (expression) {
   /* else if block statement */
}
else {
  /* else block statement */
}
```

During script processing, an **if** statement that does not have an associated **else if** or **else** statement is transformed into an **<xsl:if>** element. If either the **else if** or **else** clauses are present, the **if** statement and associated **else if** and **else** blocks are transformed into an **<xsl:choose>** element.

```
if (starts-with(name, "fe-")) {
  if (mtu < 1500) {
    /* Select Fast Ethernet interfaces with low MTUs */
  }
}
else {
  if (mtu > 8096) {
    /* Select non-Fast Ethernet interfaces with high MTUs */
  }
}
```

The XSLT equivalent is:

```
<xsl:choose>
  <xsl:when test="starts-with(name, 'fe-')">
    <xsl:if test="mtu &lt; 1500">
      <!-- Select Fast Ethernet interfaces with low MTUs -->
    </xsl:if>
  </xsl:when>
  <xsl:otherwise>
    <xsl:if test="mtu &gt; 8096">
      <!-- Select non-Fast Ethernet interfaces with high MTUs -->
    </xsl:if>
  </xsl:otherwise>
</xsl:choose>
```

match Statement

You specify basic match templates using the **match** statement, followed by an expression specifying when the template should be allowed and a block of statements enclosed in a set of braces.

```
match configuration {
   <xnm:error> {
    <message> "...";
  }
}
```

The XSLT equivalent is:

```
<xsl:template match="configuration">
  <xnm:error>
    <message> ...</message>
  </xnm:error>
</xsl:template>
```

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For more information about constructing match templates, see "SLAX Templates Overview" on page 71.

ns Statement

You specify namespace definitions using the SLAX **ns** statement. This consists of the **ns** keyword, a prefix string, an equal sign, and a namespace Uniform Resource Identifier (URI). To define the default namespace, use only the **ns** keyword and a namespace URI.

```
ns junos = "http://www.juniper.net/junos/";
```

The **ns** statement can appear after the **version** statement at the beginning of the style sheet or at the beginning of any block.

```
ns a = "http://example.com/1";
ns "http://example.com/global";
ns b = "http://example.com/2";
match / {
  ns c = "http://example.com/3";
  <top> {
    ns a = "http://example.com/4";
    apply-templates commit-script-input/configuration;
  }
}
```

When it appears at the beginning of the style sheet, the **ns** statement can include either the **exclude** or **extension** keyword. The keyword instructs the parser to add the namespace prefix to the **exclude-result-prefixes** or **extension-element-prefixes** attribute.

```
ns exclude foo = "http://example.com/foo";
ns extension jcs = "http://xml.juniper.net/jcs";
```

The XSLT equivalent is:

```
<xsl:stylesheet xmlns:foo="http://example.com/foo"
  xmlns:jcs="http://xml.juniper.net/jcs"
  exclude-result-prefixes="foo"
  extension-element-prefixes="jcs">
  <!-- ... -->
</xsl:stylesheet>
```

version Statement

All SLAX style sheets must begin with a **version** statement, which specifies the version number for the SLAX language. The current version is **1.0**. SLAX version 1.0 uses XML version 1.0 and XSLT version 1.1.

```
version 1.0;
```

The XSLT equivalent is:

```
<xsl:stylesheet version="1.0">
```

Related Documentation

- else on page 113
- for-each on page 115
- if on page 116
- match on page 117

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- version on page 122

XSLT Elements Without SLAX Equivalents

Some XSLT elements are not directly translated into SLAX statements. Some examples of XSLT elements for which there are no SLAX equivalents are **<xsl:fallback>**, **<xsl:output>**, and **<xsl:sort>**.

You can encode these elements directly as normal SLAX elements in the XSLT namespace. For example, you can include the **<xsl:output>** and **<xsl:sort>** elements in a SLAX script, as shown here:

```
<xsl:output method="xml" indent="yes" media-type="image/svg">;
match * {
  for-each (configuration/interfaces/unit) {
    <xsl:sort order="ascending">;
  }
}
```

When you include XSLT namespace elements in a SLAX script, do not include closing tags. For empty tags, do not include a forward slash (/) after the tag name. The examples shown in this section demonstrate the correct syntax.

The following XSLT snippet contains a combination of elements, some of which have SLAX counterparts and some of which do not:

```
<xsl:loop select="title">
  <xsl:fallback>
    <xsl:for-each select="title">
      <xsl:value-of select="."/>
    </xsl:for-each>
  </xsl:fallback>
</xsl:loop>
```

The SLAX conversion uses the XSLT namespace for XSLT elements that do not have SLAX counterparts:

```
<xsl:loop select = "title"> {
  <xsl:fallback> {
    for-each (title) {
      expr .;
    }
  }
}
```

SLAX Operators

SLAX provides a variety of operators, which add great versatility to the SLAX scripting language. Table 12 on page 83 summarizes the available operators and provides an example and an explanation of each.

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Table 12: SLAX Operators

Name	Operator	Example / Explanation
Addition	+	var $example = 1 + 1; Assigns the value of 1 + 1 to the **$example** variable.
Subtraction, Negation	-	var $example = 1 - 1; Assigns the value of 1 - 1 to the **$example** variable; when used as an unary operator, it changes the sign of a number from positive to negative or from negative to positive.
Multiplication	*	<output>5 * 10; Results in the value 50 being written to the console.
Division	div	<output>$bit-count div 8; Divides the bits by eight, returning the byte count, and displays the result on the console (requires that **$bit-count** has been initialized).
Modulo	mod	<output>10 mod 3; Returns the division remainder of two numbers. In this example, the expression writes 1 to the console.
Equals	==	$mtu == 1500 If $mtu is 1500 then the expression resolves to true, otherwise it returns false (requires that **$mtu** has been initialized).
Does not equal	!=	$mtu != 1500 If **$mtu** equals 1500 then the result is false, otherwise it returns true (requires that **$mtu** has been initialized)
Less than	<	$hop-count < 15 Returns true if the value to the left of the operator is less than the value to the right, otherwise it returns false. In this example, if $hop-count is less than 15, the expression returns true (requires that **$hop-count** has been initialized).
Less than or equal to	<=	$hop-count <= 14 Returns true if the value to the left of the operator is either less than the value to the right or equal to it, otherwise it returns false. In this example, if **$hop-count** is 14 or less, the expression returns true (requires that **$hop-count** has been initialized).
Greater than	>	$hop-count > 0 Returns true if the value to the left of the operator is greater than the value to the right, otherwise it returns false. In this example, if **$hop-count** is greater than zero, the expression returns true (requires that **$hop-count** has been initialized).

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Table 12: SLAX Operators *(continued)*

Name	Operator	Example / Explanation
Greater than or equal to	>=	$hop-count >= 1 Returns true if the value to the left of the operator is either greater than the value to the right or equal to it, otherwise it returns false. In this example, if **$hop-count** is one or greater, the expression returns true (requires that **$hop-count** has been initialized).
Parentheses	( )	var $result = ($byte-count * 8) + 150; Used to create complex expressions. Parentheses function the same way as in a mathematical expression, with the expression within the parentheses evaluated first. Parentheses can be nested; the innermost set of parentheses is evaluated first, then the next set, and so on.
And	&&	$byte-count > 500000 && $byte-count < 1000000 Evaluates two expressions and returns one boolean result. If either of the two expressions evaluates to false, then the combined expression evaluates to false.
Or	||	$mtu-size != 1500 || $mtu-size > 2000 Evaluates two expressions and returns one boolean result. If either of the two expressions evaluates to true, then the combined expression evaluates to true.
String concatenation	_ (under-score)	var $combined-string = $host-name _ " is located at " _ $location; Concatenates multiple strings (note that strings cannot be combined using the + operator in SLAX). In the example, if **$host-name** is "r1" and **$location** is "HQ" then the value of **$combined-string** is "r1 is located at HQ".
Node-Set Union	|	var $all-interface-nodes = $fe-interface-nodes | $ge-interface-nodes; Creates a union of two node-sets. All the nodes from one set combine with the nodes in the second set. This is useful when a script needs to perform a similar operation over XML nodes that are pulled from multiple sources.
Result Tree Fragment to Node-Set Conversion	:=	var $new-node-set := $rtf-variable; A result tree fragment contains an unparsed XML data structure. It is not possible to retrieve any of the embedded XML information from this data type. The **:=** operator converts a variable from a result tree fragment into a node-set. The script can then tell Junos OS to search the node-set for the appropriate information and extract it. Only Junos OS Release 9.2 and beyond support this operator.

Related Documentation

- SLAX Elements and Element Attributes Overview on page 69
- SLAX Overview on page 63
- SLAX Statements Overview on page 78

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- SLAX Syntax Rules Overview on page 67
- SLAX Variables Overview on page 77

Configuration

- Storing and Enabling Scripts on page 85
- Configuring a Remote Source for Scripts on page 88
- Configuring the Session Protocol for Scripts on page 98
- SLAX Statements on page 111
- Standard XPath and XSLT Functions Used in Automation Scripts on page 124
- Standard XSLT Elements and Attributes Used in Automation Scripts on page 129

Storing and Enabling Scripts

- Storing and Enabling Scripts on page 85
- Storing Scripts in Flash Memory on page 86
- Storing Scripts and Script Functionality in the Script Library on page 87

Storing and Enabling Scripts

To use a script on a switch, router, or security device, you must copy the script to the device and enable it in the configuration.

1. Create the script.
2. Copy the script to the appropriate directory on the device for that script type. Only users who belong to the Junos OS **super-user** login class can access and edit files in the script directories on a device running Junos OS.

   By default, scripts are stored in and executed from the **/var/db/scripts** directory on the device's hard drive under the subdirectory appropriate to the script type. EX Series switches use the default directory **/config/db/scripts**. You can also store scripts on the flash drive under the **/config/scripts** directory.

   commit script—Copy the script to the **/var/db/scripts/commit** directory on the hard drive or the **/config/scripts/commit** directory on the flash drive.

   op script—Copy the script to the **/var/db/scripts/op** directory on the hard drive or the **/config/scripts/op** directory on the flash drive.

   event script—Copy the script to the **/var/db/scripts/event** directory on the hard drive or the **/config/scripts/event** directory on the flash drive.

NOTE: If the device has dual Routing Engines and you want to enable the script to execute on both Routing Engines, you must copy it to the appropriate directory on both Routing Engines. The commit synchronize command does not automatically copy scripts between Routing Engines.

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3. Enable the script by including the **file *filename*** statement at the appropriate hierarchy level for that script type.

   commit script—Include the **file *filename*** statement at the **[edit system scripts commit]** hierarchy level. For instructions, see "Controlling Execution of Commit Scripts During Commit Operations" on page 174.

   op script—Include the **file *filename*** statement at the **[edit system scripts op]** hierarchy level. For instructions, see "Enabling an Op Script and Defining a Script Alias" on page 344.

   event script—Include the **file *filename*** statement at the **[edit event-options event-script]** hierarchy level. For instructions, see "Enabling an Event Script" on page 471.

4. If you store scripts in and load them from flash memory, include the **load-scripts-from-flash** statement at the **[edit system scripts]** hierarchy level. For detailed information about storing scripts in flash memory, see "Storing Scripts in Flash Memory" on page 86.

   ```
   [edit]
   user@host# set system scripts load-scripts-from-flash
   ```

5. Issue the **commit** command.

   ```
   [edit]
   user@host# commit
   ```

Newly enabled commit scripts do not execute during the commit operation, but execute automatically during each subsequent commit operation. After the commit operation completes, an op script can be executed on the device. See "Executing an Op Script" on page 345. After the commit operation completes, the event script is loaded into memory and ready for automatic execution in response to system log events. For more information, see "Executing Event Scripts in an Event Policy" on page 450.

Related Documentation

- Storing Scripts in Flash Memory on page 86
- Controlling Execution of Commit Scripts During Commit Operations on page 174

Storing Scripts in Flash Memory

By default, scripts are stored in and executed from the **/var/db/scripts/** directory on the device's hard drive under the subdirectory appropriate to the script type.

NOTE: EX Series switches use the default directory **/config/db/scripts/**.

To store scripts in and load them from flash memory instead, include the **load-scripts-from-flash** statement at the **[edit system scripts]** hierarchy level:

```
[edit]
user@host# set system scripts load-scripts-from-flash
```

When you add the **load-scripts-from-flash** statement in the configuration, all commit, event, operation, and script library scripts are loaded from the **/config/scripts/** directory

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on the flash drive under the subdirectory appropriate to the script type. You must manually move scripts from the hard drive to the flash drive. They are not moved automatically. Similarly, if you delete the **load-scripts-from-flash** statement from the configuration, you must manually copy the scripts from the flash drive to the hard drive to ensure that the current versions of the scripts are executed. Changing the scripts' physical location has no effect on their operation.

The **/var/run/scripts/** directory always links to the directory from which the scripts are loaded. If you do not set the **load-scripts-from-flash** statement in the configuration, **/var/run/scripts/** points to the **/var/db/scripts/** directory on the device's hard drive. If you set the **load-scripts-from-flash** statement in the configuration, **/var/run/scripts/** points to the **/config/scripts/** directory in flash memory.

To view the scripts currently on the device, list the contents of **/var/run/scripts/*type*/**, where *type* is the subdirectory appropriate to the script type. In the following example, the **load-scripts-from-flash** statement is not configured. In this case, **/var/run/scripts/commit/** points to the**/var/db/scripts/commit/** directory on the hard drive. Listing the files for **/var/run/scripts/commit/** is identical to listing the files in the **/var/db/scripts/commit/** directory.

```
user@host>file list /var/run/scripts/commit

/var/run/scripts/commit:
commit-changes-load-replace.slax
commit-protect.slax

user@host> file list /var/db/scripts/commit

/var/db/scripts/commit:
commit-changes-load-replace.slax
commit-protect.slax

user@host> file list /config/scripts/commit

/config/scripts/commit:
```

Storing Scripts and Script Functionality in the Script Library

Starting with Junos OS Release 11.1, Junos OS provides a dedicated directory for script libraries, where users can store scripts or script functionality that then can be imported into any commit, event, or op script. Upon installation, Junos OS creates the **/var/db/scripts/lib/** directory with permissions identical to the **commit/**, **event/**, and **op/** directories at the same hierarchy level.

NOTE: On EX Series switches, Junos OS creates the **/config/db/scripts/lib/** directory.

Junos OS will not overwrite or erase any files in an existing **lib/** directory upon installation or upgrade.

If you configure the **load-scripts-from-flash** option at the **[edit system scripts]** hierarchy level, Junos OS creates the **/config/scripts/lib/** directory. When you add or remove the

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load-scripts-from-flash statement in the configuration, you must manually move scripts and script libraries from the hard drive to the flash drive, or vice versa, as appropriate. They are not moved automatically.

To import a script from the script library, include the **<xsl:import>** tag in the style sheet declaration of an XSLT script or include the **import** statement in a SLAX script and specify the file location as shown in the following sample code, which imports the **/var/db/scripts/lib/test.xsl** file:

XSLT Syntax

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0">
  <xsl:import href="../lib/test.xsl"/>
  ...
</xsl: stylesheet>
```

SLAX Syntax

```
version 1.0;
import "../lib/test.xsl";
```

Related Documentation

- Storing Scripts in Flash Memory on page 86

Configuring a Remote Source for Scripts

- Overview of Updating Scripts from a Remote Source on page 88
- Using a Master Source Location for a Script on page 89
- Using an Alternate Source Location for a Script on page 94

Overview of Updating Scripts from a Remote Source

You can update the scripts on a device running Junos OS by retrieving a copy of them from a remote machine (which can be another device running Junos OS or a regular networked computer). This eases file management, because it enables you to update a script in a single location and have devices update their copies from that location. Each device continues to use its locally stored scripts, only updating a script when you issue the appropriate configuration mode command.

For each script, you can define a remote location that houses the master copy of the script, by specifying its URL with the **source** statement at the hierarchy level where you configured the script. When you then issue the **set refresh** configuration mode command for a script, the device running Junos OS updates its local copy by retrieving the remote master copy from that URL.

You can also store a copy of a particular script at a remote location other than the master source. This is convenient when, for example, the master source cannot be accessed due to network issues or other problems. When you issue the **set refresh-from** command for the script, you specify the URL for the remote script as an option to the command.

You can use the **set refresh** and **set refresh-from** commands to update either an individual commit script or all enabled commit scripts on the device. When you issue the **set refresh** or **set refresh-from** command, the switch, router, or security device immediately attempts to connect to the appropriate remote source for each script. If successful, the device

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updates the local script with the remote source. If a problem occurs, a set of error messages is returned.

Issuing the **set refresh** or **set refresh-from** command does not add the **refresh** and **refresh-from** statements to the configuration. In other words, the **set** command behaves differently for these statements than for others, It behaves like an operational mode command by executing an operation, instead of adding a statement to the configuration.

If a device has dual Routing Engines and you want the script to be updated on both Routing Engines, you must include the **refresh** or **refresh-from** statements in the configuration of both Routing Engines. The **commit synchronize** command does not cause the **refresh** or **refresh-from** statement to update scripts on both Routing Engines.

The **refresh** and **refresh-from** statements are mutually exclusive.

CAUTION: For commit scripts, we recommend that you do not automate the update function by including the **refresh** statement as a commit script change element. Even though this might seem like a good way to ensure that the most current commit script is always used, we recommend against it for the following reasons:

- Automated update means that the network must be operational for the commit operation to succeed. If the network goes down after you make a configuration error, you cannot recover quickly.
- If multiple commit scripts need to be updated during each commit operation, the network response time can slow down.
- Automated update is always the last action performed during a commit operation. Consequently, the updated commit script executes only during the next commit operation. This is because commit scripts are applied to the candidate configuration before the software copies any persistent changes generated by the scripts to the candidate configuration. In contrast, if you perform the update operation manually, the updated commit script takes effect as expected, that is, immediately after you commit the **refresh** statement in the configuration.
- If you automate the update operation, the **refresh-from** statement has no effect, because the **refresh-from** URL conflicts with and is overridden by the **source** statement URL. For information about the **refresh-from** statement, see "Using an Alternate Source Location for a Script" on page 94.

Related Documentation

- Using a Master Source Location for a Script on page 89
- Using an Alternate Source Location for a Script on page 94

Using a Master Source Location for a Script

- Configuring and Refreshing from the Master Source for a Script on page 90
- Example: Configuring and Refreshing from the Master Source for a Script on page 92

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Configuring and Refreshing from the Master Source for a Script

You can store a master copy of each script in a central repository. This eases file management because you can make changes to the master script in one place and then update the copy on each device where the script is currently enabled. This section discusses the following concepts:

- Configuring the Master Source for a Script on page 90
- Updating a Script from the Master Source on page 90

Configuring the Master Source for a Script

To specify the location of the master source for a script, include the **source** statement at the hierarchy level where the script is configured. Including the **source** statement in the configuration does not affect the local copy of the script until you issue the **set refresh** command. At that point, the master copy is retrieved from the specified URL and overwrites the local copy.

The hierarchy location for the **source** statement depends on the script type and filename.

commit script—Include the **source** statement at the **[edit system scripts commit file *filename*]** hierarchy level.

```
[edit system scripts commit file filename]
user@R1# set source url
```

op script—Include the **source** statement at the **[edit system scripts op file *filename*]** hierarchy level.

```
[edit system scripts op file filename]
user@R1# set source url
```

event script—Include the **source** statement at the **[edit event-options event-script file *filename*]** hierarchy level.

```
[edit event-options event-script file filename]
user@R1# set source url
```

Where

- ***filename***—Name of the script.
- ***url***—URL of the script's master source file. Specify the source as a Hypertext Transfer Protocol (HTTP) URL, FTP URL, or secure copy (scp)-style remote file specification.

Updating a Script from the Master Source

If you configure a master source for one or more scripts on a device, you can refresh the scripts on that device by issuing the **set refresh** configuration mode command. You can update a single script or all scripts of a given script type that have a master source location configured.

When you issue the **set refresh** command, the switch, router, or security device immediately attempts to connect to the machine that houses the master source for the script file and retrieve a copy of the file. The master copy overwrites the local script stored in the scripts directory on the device. If a master source is not defined for a script, that script is not

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updated and a warning is issued. For commit scripts, the updated commit script is executed when you next issue the **commit** command.

The update operation occurs as soon as you issue the **set refresh** command. The **refresh** statement is not added to the configuration. Thus the **set refresh** command behaves like an operational mode command, instead of adding a statement to the configuration.

If the device has dual Routing Engines and you want to update a script on both Routing Engines, you must issue the **set refresh** command on each Routing Engine separately. The **commit synchronize** command does not cause the **refresh** statement to update scripts on both Routing Engines.

To update a single script from its master source, issue the **set refresh** command at the hierarchy level where the script is configured. The **source** statement specifying the master source location must already be configured.

commit script—Issue the **set refresh** command at the **[edit system scripts commit file *filename*]** hierarchy level.

```
[edit system scripts commit file filename]
user@R1# set refresh
```

op script—Issue the **set refresh** command at the **[edit system scripts op file *filename*]** hierarchy level.

```
[edit system scripts op file filename]
user@R1# set refresh
```

event script—Issue the **set refresh** command at the **[edit event-options event-script file *filename*]** hierarchy level.

```
[edit event-options event-script file filename]
user@R1# set refresh
```

Where ***filename*** is the name of the script.

To update all enabled scripts of a given script type from their master source files, issue the **set refresh** command at the hierarchy level for that script type.

commit scripts—Issue the **set refresh** command at the **[edit system scripts commit]** hierarchy level:

```
[edit system scripts commit]
user@R1# set refresh
```

op scripts—Issue the **set refresh** command at the **[edit system scripts op]** hierarchy level:

```
[edit system scripts op]
user@R1# set refresh
```

event scripts—Issue the **set refresh** command at the **[edit event-options event-script]** hierarchy level:

```
[edit event-options event-script]
user@R1# set refresh
```

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Example: Configuring and Refreshing from the Master Source for a Script

The following example configures a master source file for an op script on a device running Junos OS. The remote source is defined as an HTTP URL. The example uses the master source to update the local copy of the script on the device.

- Requirements on page 92
- Overview on page 92
- Configuration on page 92
- Verification on page 93

Requirements

- Routing, switching, or security device running Junos OS.

Overview

You can store a master copy of each script in a central repository. You can make changes to the master script in one place and then update the local copy of the script on devices where the script is enabled.

This example enables the op script **iso.xsl** on a device running Junos OS and then configures a master source location for the script. The remote source for the **iso.xsl** file is the HTTP URL http://my.example.com/pub/scripts/iso.xsl.

Once you configure the master source location, you refresh the local script by issuing the **set refresh** configuration mode command at the hierarchy level where you configured the script. In this example, you would issue the **set refresh** command at the **[edit system scripts op file iso.xsl]** hierarchy level.

Configuration

Step-by-Step Procedure

To download, enable, and configure the master source location for the script:

1. Copy the script to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, configure the **file** statement to enable the **iso.xsl** script.

   ```
   [edit system scripts op]
   user@R1# set file iso.xsl
   ```

3. To configure the master source for the **iso.xsl** file, include the **source** statement and source location at the **[edit system scripts op file iso.xsl]** hierarchy level.

   ```
   [edit system scripts op file iso.xsl]
   user@R1# set source http://my.example.com/pub/scripts/iso.xsl
   ```

4. Issue the **commit and-quit** command to commit the configuration and exit to operational mode.

   ```
   [edit]
   user@R1# commit and-quit
   ```

Results

```
system {
  scripts {
```


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```
    op {
      file iso.xsl {
        source http://my.example.com/pub/scripts/iso.xsl;
      }
    }
  }
}
```

Verifying the Script

Purpose Verify that the script is on the device and enabled in the configuration.

Action Issue the **file list** operational mode command to view the files in the specified directory. The **detail** option provides additional information such as permissions, file size, and modified date.

```
user@R1> file list /var/db/scripts/op detail

/var/db/scripts/op:
total 128
-rw-r--r--  1 root  admin  13897 Feb 10  2011 iso.xsl
...
```

Issue the **show configuration system scripts op** operational mode command to list the op scripts currently enabled on the device.

```
user@R1> show configuration system scripts op
file iso.xsl
```

Refreshing the Script from the Master Source

Step-by-Step Procedure To refresh the local copy of the script from the master source file:

- In configuration mode, issue the **set refresh** command at the **[edit system scripts op file iso.xsl]** hierarchy level.

  ```
  [edit system scripts op file iso.xsl]
  user@R1# set refresh
  ```

Verification

Verifying the Updated Script

Purpose After refreshing the script, verify that the local copy is updated.

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Action Issue the **file list** operational mode command with the **detail** option to view the files in the specified directory. Verify that the modified date reflects the refreshed version.

```
user@R1> file list /var/db/scripts/op detail

/var/db/scripts/op:
total 128
-rw-r--r--  1 root  admin  14128 May 26  2011 iso.xsl
...
```

Related Documentation

- Using an Alternate Source Location for a Script on page 94
- refresh (Commit Scripts) on page 315
- refresh (Op Scripts) on page 399
- refresh (Event Scripts) on page 526

Using an Alternate Source Location for a Script

- Refreshing a Script from an Alternate Location on page 94
- Example: Refreshing a Script from an Alternate Source on page 95

Refreshing a Script from an Alternate Location

In addition to updating a script from the master source defined by the **source** statement at the **[edit event-options event-script file *filename*]** hierarchy level, you also can update a script from an alternate location. This is convenient when, for example, the master source cannot be accessed due to network issues or other problems.

When you issue the **set refresh-from** command, the switch, router, or security device immediately attempts to connect to the machine that houses the alternate source for the script file and retrieve a copy of the file. The copy overwrites the local script stored in the scripts directory on the device. If a copy of the source is not available, that script is not updated and a warning is issued. For commit scripts, the updated commit script is executed when you next issue the **commit** command.

The update operation occurs as soon as you issue the **set refresh-from** command. The **refresh-from** statement is not added to the configuration. Thus the **set refresh-from** command behaves like an operational mode command, instead of adding a statement to the configuration.

If a device has dual Routing Engines and you want the script to be updated on both Routing Engines, you must issue the **set refresh-from** command on each Routing Engine separately. The **commit synchronize** command does not cause the **refresh-from** statement to update scripts on both Routing Engines.

When you issue the **set refresh-from** command, Junos OS creates a folder in the **/var/tmp** directory. This folder is used for file transfer. After the transfer and refresh operations are complete, Junos OS deletes the temporary folder.

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To update a single script from the alternate source, issue the **set refresh-from** command at the hierarchy level where the script is configured, and specify the location of the remote file.

commit script—Issue the **set refresh-from** command at the **[edit system scripts commit file *filename*]** hierarchy level.

```
[edit system scripts commit file filename]
user@R1# set refresh-from url
```

op script—Issue the **set refresh-from** command at the **[edit system scripts op file *filename*]** hierarchy level.

```
[edit system scripts op file filename]
user@R1# set refresh-from url
```

event script—Issue the **set refresh-from** command at the **[edit event-options event-script file *filename*]** hierarchy level.

```
[edit event-options event-script file filename]
user@R1# set refresh-from url
```

To update all enabled scripts of a given script type from an alternate source, issue the **set refresh-from** command at the hierarchy level for that script type, and specify the location of the remote directory that houses the scripts.

commit script—Issue the **set refresh-from** command at the **[edit system scripts commit]** hierarchy level.

```
[edit system scripts commit]
user@R1# set refresh-from url
```

op script—Issue the **set refresh-from** command at the **[edit system scripts op]** hierarchy level.

```
[edit system scripts op]
user@R1# set refresh-from url
```

event script—Issue the **set refresh-from** command at the **[edit event-options event-script]** hierarchy level.

```
[edit event-options event-script]
user@R1# set refresh-from url
```

Where

url—URL of the remote script or directory. Specify the source as a Hypertext Transfer Protocol (HTTP) URL, FTP URL, or secure copy (scp)-style remote file specification.

Example: Refreshing a Script from an Alternate Source

The following example uses an alternate source location to update the local copy of the script on a device running Junos OS. The remote source is defined as an HTTP URL.

- Requirements on page 96
- Overview on page 96

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- Configuration on page 96
- Verification on page 97

Requirements

- Routing, switching, or security device running Junos OS.

Overview

You can update a script from a location other than that of the master source. This is convenient when, for example, the master source cannot be accessed due to network issues or other problems. You can refresh a single script or all scripts of a given type from the alternate location.

This example enables the op script **iso.xsl** on a device running Junos OS and then refreshes the script from a location other than the master source location. The remote source for the **iso.xsl** file is the HTTP URL http://my.example.com/pub/scripts2/iso.xsl.

You refresh the local script by issuing the **set refresh-from** configuration mode command at the hierarchy level where you configured the script. In this example, you would issue the **set refresh-from** command at the **[edit system scripts op file iso.xsl]** hierarchy level.

Configuration

Step-by-Step Procedure

To download and enable the script:

1. Copy the script to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, configure the **file** statement to enable the **iso.xsl** script.

   ```
   [edit system scripts op]
   user@R1# set file iso.xsl
   ```

3. Issue the **commit and-quit** command to commit the configuration and exit to operational mode.

   ```
   [edit]
   user@R1# commit and-quit
   ```

Results

```
system {
   scripts {
      op {
         file iso.xsl;
      }
   }
}
```

Verifying the Script

Purpose Verify that the script is on the device and enabled in the configuration.

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Action Issue the **file list** operational mode command to view the files in the specified directory. The **detail** option provides additional information such as permissions, file size, and modified date.

```
user@R1> file list /var/db/scripts/op detail

/var/db/scripts/op:
total 128
-rw-r--r--  1 root  admin  13897 Feb 10  2011 iso.xsl
...
```

Issue the **show configuration system scripts op** operational mode command to list the op scripts currently enabled on the device.

```
user@R1> show configuration system scripts op
file iso.xsl
```

Refreshing the Script from the Alternate Location

Step-by-Step Procedure To refresh the local copy of the script from the alternate location:

1. In configuration mode, issue the **set refresh-from** command at the **[edit system scripts op file iso.xsl]** hierarchy level.

   ```
   [edit system scripts op file iso.xsl]
   user@R1# set refresh-from http://my.example.com/pub/scripts2/iso.xsl
   ```

Verification

Verifying the Updated Script

Purpose After refreshing the script, verify that the local copy is updated.

Action Issue the **file list** operational mode command with the **detail** option to view the files in the specified directory. Verify that the modified date reflects the refreshed version.

```
user@R1> file list /var/db/scripts/op detail

/var/db/scripts/op:
total 128
-rw-r--r--  1 root  admin  14128 May 26  2011 iso.xsl
...
```

Related Documentation

- Using a Master Source Location for a Script on page 89
- refresh-from (Commit Scripts) on page 316
- refresh-from (Op Scripts) on page 400
- refresh-from (Event Scripts) on page 526

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Configuring the Session Protocol for Scripts

- Specifying the Session Protocol for Connections Using Junos Automation Scripts on page 98

Specifying the Session Protocol for Connections Using Junos Automation Scripts

- Session Protocol in Junos Automation Scripts Overview on page 98
- Example: Specifying the Session Protocol for a Connection Using an Automation Script on page 100

Session Protocol in Junos Automation Scripts Overview

The Junos XML management protocol is a Juniper Networks proprietary protocol used to request information from and configure devices running Junos OS. The NETCONF XML management protocol is a standard used to request and change configuration information on a routing, switching, or security device. The NETCONF protocol is defined in RFC 4741, *NETCONF Configuration Protocol*, which is available at http://www.ietf.org/rfc/rfc4741.txt .

Starting with Junos OS Release 11.4, the **jcs:open()** function includes the option to create a session either with the Junos XML protocol server on devices running Junos OS or with the NETCONF server on devices where NETCONF service over SSH is enabled. Previously, the function supported only sessions with the Junos XML protocol server on devices running Junos OS. The additional support for NETCONF sessions permits automation scripts to configure and manage devices in a multi-vendor environment.

The **jcs:open()** function supports the following session protocol types:

- **junoscript**—Session with the Junos XML protocol server on a routing, switching, or security device running Junos OS. This session type supports the operations defined in the Junos XML protocol and the Junos XML API, which are used to configure devices running Junos OS or to request information about the device configuration or operation. This is the default session type.
- **netconf**—Session with the NETCONF XML protocol server on a routing, switching, or security device over an SSHv2 connection. The device to which the connection is made must be enabled for NETCONF service over SSH. NETCONF over SSH is described in RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, which is available at http://www.ietf.org/rfc/rfc4742.txt .
- **junos-netconf**—Proprietary session with the NETCONF XML protocol server over an SSHv2 connection on a routing, switching, or security device running Junos OS.

The NETCONF server on a device running Junos OS has the additional capabilities defined in **http://xml.juniper.net/netconf/junos/1.0** . The NETCONF server on these devices supports NETCONF XML protocol operations, most Junos XML protocol operations, and the tag elements defined in the Junos XML API. For **netconf** and **junos-netconf** sessions with devices running Junos OS, you should use only native NETCONF XML protocol operations and the extensions available in the Junos XML protocol.

The syntax for the **jcs:open()** function when specifying a session protocol is:

SLAX Syntax

```
var $connection = jcs:open(remote-hostname, session-options);
```


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XSLT Syntax <xsl:variable name="connection" select="jcs:open(*remote-hostname*,*session-options*)"/>

The *session-options* parameter is an XML node-set that specifies the session type and connection parameters. The session type is one of three values: **junoscript**, **netconf**, or **junos-netconf**. If you do not specify a session type, the default is **junoscript**, which opens a session with the Junos XML protocol server only on devices running Junos OS. The format of the node-set is:

```
var $session-options := {
      <method> ("junoscript" | "netconf" | "junos-netconf");
      <username> "username";
      <passphrase> "passphrase";
      <password> "passphrase";
      <port> "port-number";
    }
```

If you do not specify a username and it is required for the connection, the script uses the local name of the user executing the script. The **<passphrase>** and **<password>** elements serve the same purpose. If you do not specify a passphrase or password element and it is required for authentication, you should be prompted for one during script execution by the device to which you are connecting.

Optionally, you can specify the server port number for **netconf** and **junos-netconf** sessions. The default NETCONF server port number is 830. If you do not specify a port number for a **netconf** or **junos-netconf** session, **jcs:open()** connects to the NETCONF server using port 830. However, if you specify a port number, **jcs:open()** connects to the given port instead. Specifying a port number has no impact on **junoscript** sessions, which are always established over SSH port 22.

To verify the protocol for a specific connection, call the **jcs:get-protocol(*connection*)** extension function and pass the connection handle as the argument. The function returns “junoscript”, “netconf”, or “junos-netconf”, depending on the session type.

During session establishment with a NETCONF server, the client application and NETCONF server each emit a **<hello>** tag element to specify which operations, or *capabilities,* they support from among those defined in the NETCONF specification or published as proprietary extensions. In **netconf** and **junos-netconf** sessions, you can retrieve the session capabilities of the NETCONF server by calling the **jcs:get-hello(*connection*)** extension function.

For example, the NETCONF server on a typical device running Junos OS might return the following capabilities:

```
<hello>
  <capabilities>
     <capability>urn:ietf:params:xml:ns:netconf:base:1.0</capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:candidate:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:validate:1.0
     </capability>
```

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```
      <capability>
        urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file
      </capability>
      <capability>http://xml.juniper.net/netconf/junos/1.0</capability>
      <capability>http://xml.juniper.net/dmi/system/1.0</capability>
    </capabilities>
    <session-id>20826</session-id>
</hello>
```

Example: Specifying the Session Protocol for a Connection Using an Automation Script

The following example demonstrates how to specify the session protocol within a Junos automation script when creating a connection with a remote device. Specifically, the example op script establishes a NETCONF session with a remote device running Junos OS, retrieves and prints the NETCONF server capabilities, and then updates and commits the configuration on that device.

- Requirements on page 100
- Overview and Script on page 100
- Configuration on page 105
- Verification on page 106
- Troubleshooting on page 108

Requirements

- Routing, switching, or security device running Junos OS Release 11.4 or later.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview and Script

Starting with Junos OS Release 11.4, the **jcs:open()** function includes the option to create a session either with the Junos XML protocol server on devices running Junos OS or with the NETCONF server on devices where NETCONF service over SSH is enabled. In the following example, the script creates a connection and establishes a NETCONF session with a remote device running Junos OS. If the connection and session are successfully established, the script updates the configuration on the remote device to add the **ftp** statement to the **[edit system services]** hierarchy level. The script also retrieves and prints the session protocol and the capabilities of the NETCONF server.

The script takes one argument, **remote-host**, which is the IP address or hostname of the remote device. The **arguments** variable is declared at the global level of the script so that the argument name and description are visible in the command-line interface (CLI) when a user requires context-sensitive help.

The variable **netconf** is a node-set that specifies the session protocol and the connection parameters for the remote device. The value of the **<method>** element is set to “netconf” to establish a session with the NETCONF server over an SSHv2 connection. The **<username>** element specifies the username for the connection. If you do not specify a username and it is required for the connection, the script uses the local name of the user executing the script. In this example, the passphrase and port are not specified. If a

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passphrase is required for authentication, the remote device should prompt for one during script execution. The script establishes the session using the default NETCONF port 830.

If the connection and establishment of the NETCONF session are successful, the script executes remote procedure calls (RPCs). The RPCs contain the tag elements **<lock>**, **<edit-config>**, **<commit>**, and **<unlock>**, which are NETCONF operations to lock, edit, commit, and unlock the candidate configuration. The script stores the RPC for each task in a separate variable. The results for each RPC are also stored separately and parsed for errors. The script only executes each subsequent step if the previous step is successful. For example, if the script cannot lock the configuration, it does not execute the RPCs to edit, commit, or unlock the configuration.

The variable **rpc-edit-config** contains the tag element **<edit-config>**, which is a NETCONF operation to modify a configuration. The child element, **<config>**, includes the modified portion of the configuration that is merged with the candidate configuration on the device. If errors are encountered, the script calls the **copy-of** statement to copy the result tree fragment variable to the results tree so that the error message prints to the CLI during script execution.

SLAX Syntax

```
version 1.0;

ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
ns ext = "http://xmlsoft.org/XSLT/namespace";

var $arguments = {
   <argument> {
      <name> "remote-host";
     <description> "device hostname or IP address to which to connect";
   }
}
param $remote-host;

match / {

  <op-script-results> {

    var $netconf := {
      <method> "netconf";
      <username> "bsmith";
    }

    var $rpc-lock-config = {
      <lock> {
        <target> {
          <candidate>;
        }
      }
    }

    var $rpc-unlock-config = {
      <unlock> {
```

```
    <target> {
      <candidate>;
    }
  }
}

var $rpc-commit = {
  <commit>;
}

var $rpc-edit-config = {
  <edit-config> {
    <target> {
      <candidate>;
    }
    <default-operation> "merge";
    <config> {
      <configuration> {
        <system> {
          <services> {
            <ftp>;
          }
        }
      }
    }
  }
}

if ($remote-host = '') {
  <xnm:error> {
    <message> "missing mandatory argument 'remote-host'";
  }
}
else {

  var $connection = jcs:open($remote-host, $netconf);
  if ($connection) {

    /* request protocol and capabilities */
    var $protocol = jcs:get-protocol($connection);
    var $capabilities = jcs:get-hello($connection);

    <output> "\nSession protocol: " _ $protocol _ "\n";
    copy-of $capabilities;

    /* execute rpcs to lock, edit, commit, and unlock config */
    var $lock-reply = jcs:execute($connection, $rpc-lock-config);
    if ($lock-reply/..//rpc-error) {
      copy-of $lock-reply;
    }
    else {
      var $edit-config-reply = jcs:execute($connection, $rpc-edit-config);
      if ($edit-config-reply/..//rpc-error) {
        <output>"Configuration error: "_ $edit-config-reply/..//error-message/.
              _ "\nConfiguration not committed.\n" ;
        copy-of $edit-config-reply;
```


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```
        }
        else {
          var $commit-reply = jcs:execute($connection, $rpc-commit);
          if ($commit-reply/..//rpc-error) {
            <output>"Commit error or warning: " _ $commit-reply/..//error-message/.;
            copy-of $commit-reply;
          }
        }
        var $unlock-reply = jcs:execute($connection, $rpc-unlock-config);
      }

      expr jcs:close($connection);
    }
    else {
      <output>"\nNo connection - exiting script";
    }

  }
 }
}
```

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns:junos="http://xml.juniper.net/junos/*/junos"
xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0"
xmlns:ext="http://xmlsoft.org/XSLT/namespace" version="1.0">

 <xsl:variable name="arguments">
  <argument>
   <name>remote-host</name>
   <description>device hostname or IP address to which to connect</description>
  </argument>
 </xsl:variable>

 <xsl:param name="remote-host"/>

 <xsl:template match="/">
  <op-script-results>
   <xsl:variable name="netconf-temp-1">
    <method>netconf</method>
    <username>bsmith</username>
   </xsl:variable>
   <xsl:variable xmlns:ext="http://xmlsoft.org/XSLT/namespace"
    name="netconf" select="ext:node-set($netconf-temp-1)"/>

   <xsl:variable name="rpc-lock-config">
    <lock>
     <target>
      <candidate/>
     </target>
    </lock>
   </xsl:variable>

   <xsl:variable name="rpc-unlock-config">
    <unlock>
```

```
  <target>
   <candidate/>
  </target>
 </unlock>
</xsl:variable>

<xsl:variable name="rpc-commit">
 <commit/>
</xsl:variable>

<xsl:variable name="rpc-edit-config">
 <edit-config>
  <target>
   <candidate/>
  </target>
  <default-operation>merge</default-operation>
  <config>
   <configuration>
    <system>
     <services>
      <ftp/>
     </services>
    </system>
   </configuration>
  </config>
 </edit-config>
</xsl:variable>

<xsl:choose>
 <xsl:when test="$remote-host = ''">
  <xnm:error>
   <message>missing mandatory argument 'remote-host'</message>
  </xnm:error>
 </xsl:when>
 <xsl:otherwise>
  <xsl:variable name="connection" select="jcs:open($remote-host, $netconf)"/>

  <xsl:choose>
   <xsl:when test="$connection">

    <!-- request protocol and capabilities -->
    <xsl:variable name="protocol" select="jcs:get-protocol($connection)"/>
    <xsl:variable name="capabilities" select="jcs:get-hello($connection)"/>
    <output>
     <xsl:value-of select="concat('&#10;Session protocol: ', $protocol, '&#10;')"/>
    </output>
    <xsl:copy-of select="$capabilities"/>

    <!-- execute rpcs -->
    <xsl:variable name="lock-reply"
     select="jcs:execute($connection, $rpc-lock-config)"/>
    <xsl:choose>
     <xsl:when test="$lock-reply/..//rpc-error">
      <xsl:copy-of select="$lock-reply"/>
     </xsl:when>
     <xsl:otherwise>
```


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```
<xsl:variable name="edit-config-reply"
 select="jcs:execute($connection, $rpc-edit-config)"/>
<xsl:choose>
 <xsl:when test="$edit-config-reply/..//rpc-error">
  <output>
   <xsl:value-of select="concat('Configuration error: ',
    $edit-config-reply/..//error-message/.,
    '&#10;Configuration not committed.&#10;')"/>
  </output>
  <xsl:copy-of select="$edit-config-reply"/>
 </xsl:when>
 <xsl:otherwise>
  <xsl:variable name="commit-reply"
   select="jcs:execute($connection, $rpc-commit)"/>
  <xsl:if test="$commit-reply/..//rpc-error">
   <output>
    <xsl:value-of select="concat('Commit error or warning: ',
     $commit-reply/..//error-message/.)"/>
   </output>
   <xsl:copy-of select="$commit-reply"/>
  </xsl:if>
 </xsl:otherwise>
</xsl:choose>
<xsl:variable name="unlock-reply" select="jcs:execute($connection,
 $rpc-unlock-config)"/>
</xsl:otherwise>
</xsl:choose>

 <xsl:value-of select="jcs:close($connection)"/>
</xsl:when>
<xsl:otherwise>
 <output>No connection - exiting script</output>
</xsl:otherwise>
</xsl:choose>
</xsl:otherwise>
</xsl:choose>
</op-script-results>
</xsl:template>
</xsl:stylesheet>
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **netconf-session.xsl** or **netconf-session.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.

2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **netconf-session.xsl** or **netconf-session.slax** as appropriate.

   ```
   [edit system scripts op]
   bsmith@local-host# set file netconf-session.(slax | xsl)
   ```

3. Issue the **commit and-quit** command.

   ```
   [edit]
   ```

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```
bsmith@local-host# commit and-quit
```

4. Execute the op script on the local device by issuing the **op netconf-session** operational mode command and include any necessary arguments.

   In this example, the user, bsmith, is connecting to the remote device, fivestar. The remote device has dual routing engines, so the **commit** operation returns a warning that the **commit synchronize** command should be used to commit the new candidate configuration to both routing engines.

```
bsmith@local-host> op netconf-session remote-host fivestar
bsmith@fivestar's password:
Session protocol: netconf
Commit error or warning:
graceful-switchover is enabled, commit synchronize should be used
```

Verification

Confirm that the device is working properly.

- Verifying Op Script Execution on page 106
- Verifying the Configuration Changes on page 108

Verifying Op Script Execution

Purpose Verify that the script behaves as expected.

Action Review the script output in the CLI and in the op script log file. Take particular note of any errors that occurred during execution. The default op script log file is **/var/log/op-script.log**. If the log file is significantly lengthy, limit the display by appending the **| last** *number-of-lines* option to the **show log** command and specify the number of lines to print to the CLI. The output within the **<op-script-results>** element is relevant to the script execution.

```
bsmith@local-host> show log op-script.log | last 100
...output omitted for brevity...
<op-script-results xmlns:junos="http://xml.juniper.net/junos/*/junos"
xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm" xml
ns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0"
xmlns:ext="http://xmlsoft.org/XSLT/namespace">
<output>
Session protocol: netconf
</output>
<hello>
  <capabilities>
   <capability>urn:ietf:params:xml:ns:netconf:base:1.0</capability>
   <capability>urn:ietf:params:xml:ns:netconf:capability:candidate:1.0
   </capability>
   <capability>urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0
   </capability>
   <capability>urn:ietf:params:xml:ns:netconf:capability:validate:1.0</capability>

   <capability>
      urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file
   </capability>
   <capability>http://xml.juniper.net/netconf/junos/1.0</capability>
   <capability>http://xml.juniper.net/dmi/system/1.0</capability>
  </capabilities>
```

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```
  <session-id>29087</session-id>
</hello>
  <output>Commit error or warning:
graceful-switchover is enabled, commit synchronize should be used
</output>
  <rpc-error>
<error-severity>warning</error-severity>
<error-message>
graceful-switchover is enabled, commit synchronize should be used
</error-message>
</rpc-error>
  <ok/>
</op-script-results>
```

You can also obtain more descriptive script output on a device running Junos OS by including the **| display xml** option when you execute an op script.

```
bsmith@local-host> op netconf-session remote-host fivestar | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/11.4D0/junos">
  <output>
      Session protocol: netconf
  </output>
  <hello>
   <capabilities>
     <capability>
       urn:ietf:params:xml:ns:netconf:base:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:candidate:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:validate:1.0
     </capability>
     <capability>
       urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file
     </capability>
     <capability>
       http://xml.juniper.net/netconf/junos/1.0
     </capability>
     <capability>
       http://xml.juniper.net/dmi/system/1.0
     </capability>
   </capabilities>
   <session-id>
       29087
   </session-id>
  </hello>
  <output>
      Commit error or warning:
      graceful-switchover is enabled, commit synchronize should be used
  </output>
  <rpc-error>
      <error-severity>
          warning
      </error-severity>
      <error-message>
          graceful-switchover is enabled, commit synchronize should be used
      </error-message>
```

```
  </rpc-error>
  <ok/>
</op-script-results>
<cli>
  <banner></banner>
</cli>
</rpc-reply>
```

Meaning This example creates a NETCONF session on a remote device running Junos OS. The capabilities of the NETCONF server include both standard NETCONF operations and Juniper Networks proprietary extensions, which are defined in **http://xml.juniper.net/netconf/junos/1.0** and **http://xml.juniper.net/dmi/system/1.0** . The RPC results for the **commit** operation include one warning, but the commit operation is still successful.

Verifying the Configuration Changes

Purpose Verify that the commit was successful by viewing the configuration change and the commit log on the remote device.

Action On the remote device, execute the **show configuration system services** operational mode command to view the **[edit system services]** hierarchy level of the configuration. If the script is successful, the configuration includes the **ftp** statement.

```
bsmith@fivestar> show configuration system services
ftp;
netconf {
    ssh;
}
```

Additionally, you can review the commit log. On the remote device, execute the **show system commit** operational mode command to view the commit log. In this example, the log confirms that bsmith committed the candidate configuration in a NETCONF session at the given date and time.

```
bsmith@fivestar> show system commit
0   2011-07-11 12:04:01 PDT by bsmith via netconf
1   2011-07-08 15:16:33 PDT by root via cli
```

Troubleshooting

- Troubleshooting Connection Errors on page 108
- Troubleshooting Configuration Lock Errors on page 110
- Troubleshooting Configuration Syntax Errors on page 110

Troubleshooting Connection Errors

Problem The script generates the following error message:

```
hello packet:1:(0) Document is empty
hello packet:1:(0) Start tag expected, '<' not found
error: netconf: could not read hello
error: did not receive hello packet from server
error: Error in creating the session with "fivestar" server
No connection - exiting script
```

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Potential causes for the connection error include:

- The device or interface to which you are connecting is down or unavailable.
- The script argument for the IP address or DNS name of the remote device is incorrect.
- The connection timeout value was exceeded before establishing the connection.
- The user authentication for the remote device is not valid or is entered incorrectly.
- You are trying to establish a NETCONF session, and NETCONF over SSH is not enabled on the device where the NETCONF server resides, or it is enabled on a different port.

Solution Ensure that the remote device is up and running and that the user has access to the device. Also verify that you supplied the correct argument for the IP address or DNS name of the remote device when executing the script.

For NETCONF sessions, ensure that you have enabled NETCONF over SSH on the device where the NETCONF server resides. Since the example program does not specify a specific port number for the NETCONF session, the session is established on the default NETCONF-over-SSH port, 830. To verify whether NETCONF over SSH is enabled on the default port for a device running Junos OS, enter the following operational mode command on the remote device:

```
bsmith@fivestar> show configuration system services

netconf {
    ssh;
}
```

If the **netconf** configuration hierarchy is absent on the remote device, issue the following statements in configuration mode to enable NETCONF over SSH on the default port:

```
[edit]
bsmith@fivestar# set system services netconf ssh
bsmith@fivestar# commit
```

If the **netconf** configuration hierarchy specifies a port other than the default port, include the port number in the XML node-set that you pass to the **jcs:open( )** function. For example, the following device is configured for NETCONF over SSH on port 12345:

```
bsmith@fivestar> show configuration system services
netconf {
    ssh {
       port 12345;
    }
}
```

To create a NETCONF session on the alternate port, include the new port number in the XML node-set.

```
var $netconf := {
  <method> "netconf";
  <username> "bsmith";
  <port> "12345";
}
```

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```
var $connection = jcs:open($remote-host, $netconf);
...
```

Troubleshooting Configuration Lock Errors

Problem The script generates one of the following error messages:

```
configuration database locked by:
  root terminal p0 (pid 24113) on since 2011-07-11 11:48:06 PDT, idle 00:07:59

Users currently editing the configuration:
  root terminal p1 (pid 24279) on since 2011-07-11 12:28:30 PDT
      {master}[edit]

configuration database modified
```

Solution Another user currently has a lock on the candidate configuration or has modified the candidate configuration but has not yet committed the configuration. Wait until the lock is released, and then execute the program.

Troubleshooting Configuration Syntax Errors

Problem The following error message prints to the CLI:

```
Configuration error: syntax error
Configuration not committed.
```

Examine the result tree for additional information. In this case, the result tree shows the following error message:

```
<rpc-error>
   <error-severity>
      error
   </error-severity>
   <error-info>
      <bad-element>
         ftp2
      </bad-element>
   </error-info>
   <error-message>
      syntax error
   </error-message>
</rpc-error>
```

Solution The **<bad-element>** tag element indicates that the configuration statement is not valid. Correct the configuration hierarchy and run the script. In this example error, the user entered the tag **<ftp2>** instead of **<ftp>**. Since that is not an acceptable element in the configuration, the NETCONF server returns an error.

Related Documentation

- Session Protocol in Junos Automation Scripts Overview on page 98
- *Junos XML Management Protocol Developer Guide*
- jcs:get-hello( ) Function on page 16
- jcs:get-protocol( ) Function on page 17

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- jcs:open( ) Function on page 19

SLAX Statements

- apply-templates on page 111
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- param on page 119
- priority on page 120
- template on page 120
- var on page 122
- version on page 122
- with on page 123

apply-templates

Syntax

```
apply-templates expression;
```

Description Apply one or more templates, according to the value of the node-set expression. If a node-set expression is not specified, the script recursively processes all child nodes of the current node. If a node-set expression is specified, the processor only applies templates to the child elements that match the node-set expression. The **template** statement dictates which elements are transformed according to which template. The templates that are applied are passed the parameters specified by the **with** statement within the **apply-templates** statement block.

Attributes *expression*—(Optional) Selects the nodes to which the processor applies templates. By default, the processor applies templates to the child nodes of the current node.

SLAX Example

```
match configuration {
  apply-templates system/host-name;
}
```

XSLT Equivalent

```
<xsl:template match="configuration">
  <xsl:apply-templates select="system/host-name"/>
</xsl:template>
```

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215 and "Example: Preventing Import of the Full Routing Table" on page 300.

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Related Documentation

- SLAX Templates Overview on page 71
- call on page 112
- match on page 117
- mode on page 118
- priority on page 120
- template on page 120
- with on page 123

call

Syntax

```
call template-name (parameter-name = value) {
  /* code */
}
```

Description

Call a named template. You can pass parameters into the template by including a comma-separated list of parameters, with the parameter name and an optional equal sign (=) and value expression. If a value is not specified, the current value of the parameter is passed to the template.

You can declare additional parameters inside the code block using the **with** statement.

Attributes

template-name—Specifies the name of the template to call.

SLAX Example

```
match configuration {
  var $name-servers = name-servers/name;
  call temp();
  call temp($name-servers, $size = count($name-servers));
  call temp() {
    with $name-servers;
    with $size = count($name-servers);
  }

  template temp($name-servers, $size = 0) {
    <output> "template called with size " _ $size;
  }
}
```

XSLT Equivalent

```
<xsl:template match="configuration">
  <xsl:variable name="name-servers" select="name-servers/name"/>
  <xsl:call-template name="temp"/>
  <xsl:call-template name="temp">
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
  <xsl:call-template name="temp">
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
</xsl:template>
```


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```
<xsl:template name="temp">
  <xsl:param name="name-servers"/>
  <xsl:param name="size" select="0"/>
  <output>
    <xsl:value-of select="concat('template called with size ', $size)"/>
  </output>
</xsl:template>
```

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Templates Overview on page 71
- apply-templates on page 111
- match on page 117
- mode on page 118
- priority on page 120
- template on page 120
- with on page 123

else

Syntax

```
if (expression) {
    /* code */
}
else {
  /* code */
}
```

Description Include a default set of instructions that are processed if the preceding **if** and **else if** statements evaluate to FALSE.

SLAX Example

```
if (starts-with(name, "fe-")) {
  if (mtu < 1500) {
    /* Select the Fast Ethernet interfaces with low MTUs */
  }
}
else {
  if (mtu > 8096) {
    /* Select the non-Fast Ethernet interfaces with high MTUs */
  }
}
```

XSLT Equivalent

```
<xsl:choose>
  <xsl:when select="starts-with(name, 'fe-')">
    <xsl:if test="mtu &lt; 1500">
      <!-- Select with Fast Ethernet interfaces with low MTUs -->
    </xsl:if>
```

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```
  </xsl:when>
  <xsl:otherwise>
    <xsl:if test="mtu &gt; 8096">
      <!-- Select the non-Fast Ethernet interfaces with high MTUs -->
    </xsl:if>
  </xsl:otherwise>
</xsl:choose>
```

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242 and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Statements Overview on page 78
- else if on page 114
- for-each on page 115
- if on page 116

else if

Syntax

```
if (expression) {
    /* code */
}
else if (expression) {
    /* code */
}
```

Description Include instructions that are processed if the expression defined in the preceding **if** statement evaluates to FALSE and the expression defined in the **else if** statement evaluates to TRUE. Multiple **else if** statements can be included, but the processor only executes the instructions contained in the first **else if** statement whose expression evaluates to TRUE. All subsequent **else if** statements are ignored.

SLAX Example

```
var $description2 = {
  if (description) {
    expr description;
  }
  else if (../description) {
    expr ../description;
  }
  else {
    expr "no description found";
  }
}
```

XSLT Equivalent

```
<xsl:variable name="description2">
  <xsl:choose>
    <xsl:when test="description">
      <xsl:value-of select="description"/>
    </xsl:when>
    <xsl:when test="../description">
      <xsl:value-of select="../description"/>
```


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```
    </xsl:when>
    <xsl:otherwise>unknown</xsl:otherwise>
  </xsl:choose>
</xsl:variable>
```

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242 and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Statements Overview on page 78
- else on page 113
- for-each on page 115
- if on page 116

for-each

Syntax

```
for-each (expression) {
  /* code */
}
```

Description Include a looping mechanism that repeats script processing for each XML element in the specified node-set. The element nodes are selected by the value of the XPath expression. Each of the nodes is then processed according to the instructions contained in the **for-each** code block.

The statement consists of the **for-each** keyword, the parentheses-delimited XPath expression, and a curly braces-delimited block. The SLAX **for-each** statement functions like the **<xsl:for-each>** element.

Attributes ***expression***—Specifies an XPath expression that selects the nodes to be processed.

SLAX Example

```
for-each ($inventory/chassis/chassis-module/
      chassis-sub-module[part-number == '750-000610']) {
  <message> "Down rev PIC in " _ ../name _ ", " _ name _ ": " _ description;
}
```

XSLT Equivalent

```
<xsl:for-each select="$inventory/chassis/chassis-module/
      chassis-sub-module[part-number == '750-000610']">
  <message>
    <xsl:value-of select="concat('Down rev PIC in ', ../name, ', ', name, ': ',
        description)"/>
  </message>
</xsl:for-each>
```

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Adding T1 Interfaces to a RIP Group" on page 220, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Configuring Dual Routing Engines" on page 242.

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Related Documentation

- SLAX Statements Overview on page 78
- XPath Overview on page 50
- else on page 113
- else if on page 114
- if on page 116
- xsl:for-each on page 133

if

Syntax

```
if (expression) {
  /* code */
}
else if (expression) {
    /* code */
}
else {
  /* code */
}
```

Description

Include a conditional construct that causes instructions to be processed if the Boolean expression evaluates to TRUE.

Optionally, you can include multiple **else if** statements following an **if** statement to perform additional conditional tests if the expression in the **if** statement evaluates to FALSE. Multiple **else if** statements can be included, but the processor only executes the instructions contained in the first **else if** statement whose expression evaluates to TRUE; all subsequent **else if** statements are ignored. The optional **else** statement includes a default set of instructions that are processed if the expressions defined in all associated **if** and **else if** statements evaluate to FALSE.

Attributes

expression—Specifies the expression to evaluate.

SLAX Example

```
var $description2 = {
  if (description) {
    expr description;
  }
  else if (../description) {
    expr ../description;
  }
  else {
    expr "no description found";
  }
}
```

XSLT Equivalent

```
<xsl:variable name="description2">
  <xsl:choose>
    <xsl:when test="description">
      <xsl:value-of select="description"/>
    </xsl:when>
```


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```
    <xsl:when test="../description">
      <xsl:value-of select="../description"/>
    </xsl:when>
    <xsl:otherwise>unknown</xsl:otherwise>
  </xsl:choose>
</xsl:variable>
```

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242, "Example: Preventing Import of the Full Routing Table" on page 300, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Statements Overview on page 78
- else on page 113
- else if on page 114
- for-each on page 115

match

Syntax

```
match expression {
statements;
}
```

Description Declare a template that contains rules to apply when a specified node is matched. The **match** statement associates the template with an XML element. The **match** statement can also be used to define a template for a whole branch of the XML document For example, **match /** matches the root element of the document.

Attributes *expression*—XPath expression specifying the nodes to which to apply the template.

SLAX Example

```
match host-name {
  <hello> .;
}
```

XSLT Equivalent

```
<xsl:template match="host-name">
  <hello>
    <xsl:value-of select="."/>
  </hello>
</xsl:template>
```

Usage Examples "Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Configuring Dual Routing Engines" on page 242, and "Example: Preventing Import of the Full Routing Table" on page 300.

Related Documentation

- apply-templates on page 111
- call on page 112
- mode on page 118

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- priority on page 120
- template on page 120
- with on page 123

mode

Syntax mode *qualified-name*;

Description Indicate the mode in which a template needs to be applied for the template to be used. If templates are applied in the specified mode, the **match** statement is used to determine whether the template can be used with the particular node. If more than one template matches a node in the specified mode, the priority statement determines which template is used. The highest priority wins. If no priority is specified explicitly, the priority of a template is determined by the **match** statement.

This statement is comparable to the **mode** attribute of the **<xsl:template>** element. You can include this statement inside a SLAX **match** or **apply-templates** statement.

SLAX Example

```
match * {
  mode "one";
  <one> .;
}

match * {
  mode "two";
  <two> string-length(.);
}

match / {
  apply-templates version {
    mode "one";
  }
  apply-templates version {
    mode "two";
  }
}
```

XSLT Equivalent

```
<xsl:template match="*" mode="one">
  <one>
    <xsl:value-of select="."/>
  </one>
</xsl:template>

<xsl:template match="*" mode="two">
  <two>
    <xsl:value-of select="string-length(.)"/>
  </two>
</xsl:template>

<xsl:template match="/">
  <xsl:apply-templates select="version" mode="one"/>
  <xsl:apply-templates select="version" mode="two"/>
```

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```
</xsl:template>
```

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215.

Related Documentation

- apply-templates on page 111
- call on page 112
- match on page 117
- priority on page 120
- template on page 120
- with on page 123
- xsl:template on page 138

param

Syntax

```
param $name=value;
```

Description Declare a parameter for a template or for the style sheet as a whole. Template parameters declared with the **param** statement must be placed inside the template code block. A global parameter, the scope of which is the entire style sheet, must be declared at the top level of the style sheet. You can include an initial value by following the parameter name with an equal sign (**=**) and a value expression. A parameter whose value is set by Junos OS at script initialization must be defined as a global parameter.

In SLAX, parameter and variable names are declared and accessed using the dollar sign (**$**). This is unlike the **name** attribute of **<xsl:variable>** and **<xsl:parameter>** elements, which do not include the dollar sign in the declaration.

Attributes $*name*—Defines the name of the parameter.

value—Defines the default value for the parameter, which is used if the person or client application that executes the script does not explicitly provide a value.

SLAX Example

```
param $vrf;
param $dot = .;
```

XSLT Equivalent

```
<xsl:param name="vrf"/>
<xsl:param name="dot" select="."/>
```

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Limiting the Number of ATM Virtual Circuits" on page 268, and "Example: Preventing Import of the Full Routing Table" on page 300.

Related Documentation

- SLAX Parameters Overview on page 74
- SLAX Templates Overview on page 71

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- template on page 120
- var on page 122
- with on page 123

priority

Syntax

```
priority number;
```

Description If more than one template matches a node in the specified mode, this statement determines which template is used. The highest priority wins. If no priority is specified explicitly, the priority of a template is determined by the **match** statement.

This statement is comparable to the **priority** attribute of the **<xsl:template>** element. You can include this statement inside a SLAX **match** statement.

SLAX Example

```
match * {
  priority 10;
  <output> .;
}
```

XSLT Equivalent

```
<xsl:template match="*" priority="10">
  <output>
    <xsl:value-of select="."/>
  </output>
</xsl:template>
```

Usage Examples None of the examples in this manual use this statement.

Related Documentation

- apply-templates on page 111
- call on page 112
- match on page 117
- mode on page 118
- template on page 120
- with on page 123
- xsl:template on page 138

template

Syntax

```
template qualified-name (parameter-name = value) {
  /* code */
}
```

Description Declare a named template. You can include a comma-separated list of parameter declarations, with the parameter name and an optional equal sign (=) and value

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expression. You can declare additional parameters inside the code block using the **param** statement. You can invoke the template using the **call** statement.

SLAX Example

```
match configuration {
  var $name-servers = name-servers/name;
  call temp();
  call temp($name-servers, $size = count($name-servers));
  call temp() {
    with $name-servers;
    with $size = count($name-servers);
  }

  template temp($name-servers, $size = 0) {
    <output> "template called with size " _ $size;
  }
}
```

XSLT Equivalent

```
<xsl:template match="configuration">
  <xsl:variable name="name-servers" select="name-servers/name"/>
  <xsl:call-template name="temp"/>
  <xsl:call-template name="temp">
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
  <xsl:call-template name="temp">
    <xsl:with-param name="name-servers" select="$name-servers"/>
    <xsl:with-param name="size" select="count($name-servers)"/>
  </xsl:call-template>
</xsl:template>

<xsl:template name="temp">
  <xsl:param name="name-servers"/>
  <xsl:param name="size" select="0"/>
  <output>
    <xsl:value-of select="concat('template called with size ', $size)"/>
  </output>
</xsl:template>
```

Usage Examples

See "Example: Adding a Final then accept Term to a Firewall" on page 215 and "Example: Adding T1 Interfaces to a RIP Group" on page 220.

Related Documentation

- SLAX Parameters Overview on page 74
- SLAX Templates Overview on page 71
- apply-templates on page 111
- call on page 112
- match on page 117
- mode on page 118
- priority on page 120
- with on page 123

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var

Syntax

```
var $name=value;
```

Description Declare a local or global variable. A variable is global if it is defined outside of any template. Otherwise, it is local. The value of a global variable is accessible anywhere in the style sheet. The scope of a local variable is limited to the template or code block in which it is defined. You initialize a variable by following the variable name with an equal sign (=) and an expression.

Attributes *$name*—Specifies the name of the variable. After declaration, the variable can be referred to within expressions using this name, including the $ character.

value—Defines the default value for the variable, which is used if the person or client application that executes the script does not explicitly provide a value.

SLAX Example

```
var $vrf;
var $location = $dot/@location;
var $message = "We are in "_ $location _" now.";
```

XSLT Equivalent

```
<xsl:variable name="vrf"/>
<xsl:variable name="location" select="$dot/location"/>
<xsl:variable name="message" select="concat('We are in ', $location, now.')"/>
```

Usage Examples See "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Limiting the Number of ATM Virtual Circuits" on page 268, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Variables Overview on page 77
- param on page 119

version

Syntax

```
version 1.0;
```

Description Specify the version of SLAX that is being used. All SLAX style sheets must begin with a **version** statement.

Version 1.0 uses XML version 1.0 and XSLT version 1.1.

In addition, the **xsl** namespace is implicitly defined as follows:

```
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
```

Attributes *version-number*—Specifies the version of SLAX. Junos OS supports SLAX version 1.0.

SLAX Example

```
version 1.0;
```


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XSLT Equivalent

```
<xsl:stylesheet version="1.0">
```

Usage Examples

"Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Assigning a Classifier" on page 223, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Changing the Configuration Using an Op Script" on page 349, and "Example: Restarting an FPC Using an Op Script" on page 385.

Related Documentation

- Required Boilerplate for Commit Scripts on page 166
- Required Boilerplate for Event Scripts on page 464
- Required Boilerplate for Op Scripts on page 335
- SLAX Syntax Rules Overview on page 67

with

Syntax

```
with $name = value;
```

Description

Specify a parameter to pass into a template. You can use this statement when you apply templates with the **apply-templates** statement or invoke templates with the **call** statement.

Optionally, you can specify a value for the parameter by including an equal sign (=) and a value expression. If no value is specified, the current value of the parameter is passed to the template.

Attributes

$name—Name of the variable or parameter for which the value is being passed.

value—Value of the parameter being passed to the template.

SLAX Example

```
match configuration {
  var $domain = domain-name;
  apply-templates system/host-name {
    with $message = "Invalid host-name";
    with $domain;
  }
}

match host-name {
  param $message = "Error";
  param $domain;
  <hello> $message _ ":: " _ . _ " (" _ $domain _ ")";
}
```

XSLT Equivalent

```
<xsl:template match="configuration">
  <xsl:apply-templates select="system/host-name">
    <xsl:with-param name="message" select="'Invalid host-name'"/>
    <xsl:with-param name="domain" select="$domain"/>
  </xsl:apply-templates>
</xsl:template>

<xsl:template match="host-name">
```

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```
    <xsl:param name="message" select="'Error'"/>
    <xsl:param name="domain"/>
    <hello>
      <xsl:value-of select="concat($message, ':: ', ., ' (', $domain, ')')"/>
    </hello>
  </xsl:template>
```

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242, "Example: Preventing Import of the Full Routing Table" on page 300, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- SLAX Parameters Overview on page 74
- SLAX Templates Overview on page 71
- apply-templates on page 111
- call on page 112
- match on page 117
- mode on page 118
- priority on page 120
- template on page 120

Standard XPath and XSLT Functions Used in Automation Scripts

- concat() on page 124
- contains() on page 125
- count() on page 125
- last() on page 125
- name() on page 126
- not() on page 126
- position() on page 127
- starts-with() on page 127
- string-length() on page 127
- substring-after() on page 128
- substring-before() on page 128

concat()

Syntax *string* concat(*string*, *string*+)

Description Return the concatenation of the arguments.

Usage Examples See "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Controlling IS-IS and MPLS Interfaces" on page 251, "Example: Adding T1 Interfaces to a RIP Group"

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on page 220, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Configuring Dual Routing Engines" on page 242.

Related Documentation

- contains() on page 125
- starts-with() on page 127
- string-length() on page 127
- substring-after() on page 128
- substring-before() on page 128

contains()

Syntax

boolean contains(*string*, *string*)

Description

Return TRUE if the first string argument contains the second string argument, otherwise return FALSE.

Usage Examples

See "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- concat() on page 124
- starts-with() on page 127
- string-length() on page 127
- substring-after() on page 128
- substring-before() on page 128

count()

Syntax

number count(*node-set*)

Description

Return the number of nodes in the argument node-set.

Usage Examples

See "Example: Limiting the Number of E1 Interfaces" on page 272.

Related Documentation

- last() on page 125
- name() on page 126
- not() on page 126
- position() on page 127

last()

Syntax

number last()

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Description Return the index of the last node in the list that is currently being evaluated, which is equal to the number of items in the processed node list.

Usage Examples See "Example: Limiting the Number of E1 Interfaces" on page 272.

Related Documentation
- count( ) on page 125
- name( ) on page 126
- not( ) on page 126
- position( ) on page 127

name( )

Syntax *string* name(*<node-set>*)

Description Return the full name of the first node in the node set, including the prefix for its namespace declared in the source document. If no argument is passed, the function returns the full name of the context node.

Usage Examples See jcs:emit-change Template.

Related Documentation
- count( ) on page 125
- last( ) on page 125
- not( ) on page 126
- position( ) on page 127

not( )

Syntax *boolean* not(*boolean*)

Description Return TRUE if the argument is FALSE, and FALSE if the argument is TRUE.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Controlling IS-IS and MPLS Interfaces" on page 251, "Example: Configuring a Default Encapsulation Type" on page 238, "Example: Controlling LDP Configuration" on page 255, "Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Configuring Administrative Groups for LSPs" on page 234, "Example: Configuring Dual Routing Engines" on page 242, and "Example: Preventing Import of the Full Routing Table" on page 300.

Related Documentation
- count( ) on page 125
- last( ) on page 125
- name( ) on page 126

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- position() on page 127

position()

Syntax *number* position()

Description Return the position of the context node among the list of nodes that are currently being evaluated.

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215 and "Example: Prepending a Global Policy" on page 295.

Related Documentation
- count() on page 125
- last() on page 125
- name() on page 126
- not() on page 126

starts-with()

Syntax *boolean* starts-with(*string*, *string*)

Description Return TRUE if the first string argument starts with the second string argument, otherwise return FALSE.

Usage Examples See "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Limiting the Number of ATM Virtual Circuits" on page 268, "Example: Adding T1 Interfaces to a RIP Group" on page 220, "Example: Configuring a Default Encapsulation Type" on page 238, and "Example: Configuring Dual Routing Engines" on page 242.

Related Documentation
- concat() on page 124
- contains() on page 125
- string-length() on page 127
- substring-after() on page 128
- string-length() on page 127
- substring-after() on page 128
- substring-before() on page 128

string-length()

Syntax *number* string-length(<*string*>)

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Description Return the number of characters in the string. If the argument is omitted, it returns the string value of the context node.

Usage Examples See "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- concat( ) on page 124
- contains( ) on page 125
- starts-with( ) on page 127
- substring-after( ) on page 128
- substring-before( ) on page 128

substring-after( )

Syntax *string* substring-after(*string*, *string*)

Description Return the portion of the first string argument that follows the occurrence of the second argument substring within the first. If the second string is not contained in the first string, or if the second string is empty, the function returns an empty string.

Usage Examples See "Example: Limiting the Number of E1 Interfaces" on page 272 and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- concat( ) on page 124
- contains( ) on page 125
- starts-with( ) on page 127
- string-length( ) on page 127
- substring-before( ) on page 128

substring-before( )

Syntax *string* substring-before(*string*, *string*)

Description Return the portion of the first string argument that precedes the occurrence of the second argument substring within the first. If the second string is not contained in the first string, or if the second string is empty, the function returns an empty string.

Usage Examples See "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- concat( ) on page 124
- contains( ) on page 125
- starts-with( ) on page 127

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- string-length( ) on page 127
- substring-after( ) on page 128

Standard XSLT Elements and Attributes Used in Automation Scripts

- xsl:apply-templates on page 130
- xsl:call-template on page 130
- xsl:choose on page 131
- xsl:comment on page 132
- xsl:copy-of on page 132
- xsl:element on page 133
- xsl:for-each on page 133
- xsl:if on page 134
- xsl:import on page 134
- xsl:otherwise on page 135
- xsl:param on page 136
- xsl:stylesheet on page 137
- xsl:template on page 138
- xsl:text on page 139
- xsl:value-of on page 139
- xsl:variable on page 140
- xsl:when on page 141
- xsl:with-param on page 141

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xsl:apply-templates

Syntax

```
<xsl:apply-templates select="node-set-expression">
  <xsl:with-param name="qualified-name" select="expression">
    ...
  </xsl:with-param>
</xsl:apply-templates>
```

Description Apply one or more templates, according to the value of the **select** attribute. If the **select** attribute is not included, the script recursively processes all child nodes of the current node. If the **select** attribute is present, the processor only applies templates to the child elements that match the expression of the **select** attribute, which must evaluate to a node-set. The **<xsl:template>** instruction dictates which elements are transformed according to which template. The templates that are applied are passed the parameters specified by the **<xsl:with-param>** elements within the **<xsl:apply-templates>** instruction.

Attributes **select**—(Optional) Selects the nodes to which the processor applies templates. By default, the processor applies templates to the child nodes of the current node.

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215 and "Example: Preventing Import of the Full Routing Table" on page 300.

Related Documentation

- XSLT Templates Overview on page 52
- xsl:call-template on page 130
- xsl:param on page 136
- xsl:template on page 138
- xsl:variable on page 140
- xsl:with-param on page 141

xsl:call-template

Syntax

```
<xsl:call-template name="qualified-name">
  <xsl:with-param name="qualified-name" select="expression">
    ...
  </xsl:with-param>
</xsl:call-template>
```

Description Call a named template. The **<xsl:with-param>** elements within the **<xsl:call-template>** instruction define the parameters that are passed to the template.

Attributes **name**—Specifies the name of the template to call.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

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Related Documentation

- XSLT Templates Overview on page 52
- xsl:apply-templates on page 130
- xsl:param on page 136
- xsl:template on page 138
- xsl:variable on page 140
- xsl:with-param on page 141

xsl:choose

Syntax

```
<xsl:choose>
  <xsl:when test="boolean-expression">
  ...
  </xsl:when>
  <xsl:otherwise>
  ...
  </xsl:otherwise>
</xsl:call-template>
```

Description

Evaluate multiple conditional tests, and execute instructions for the first test that evaluates to TRUE or execute an optional default set of instructions if all tests evaluate to FALSE. The **<xsl:choose>** instruction contains one or more **<xsl:when>** elements, each of which tests a Boolean expression. If the test evaluates to TRUE, the XSLT processor executes the instructions in the **<xsl:when>** element, and ignores all subsequent **<xsl:when>** elements. The XSLT processor processes only the instructions contained in the first **<xsl:when>** element whose **test** attribute evaluates to TRUE. If none of the **<xsl:when>** elements' **test** attributes evaluate to TRUE, the content of the optional **<xsl:otherwise>** element, if one is present, is processed.

Usage Examples

See "Example: Configuring Dual Routing Engines" on page 242, "Example: Preventing Import of the Full Routing Table" on page 300, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- XSLT Programming Instructions Overview on page 59
- xsl:for-each on page 133
- xsl:if on page 134
- xsl:otherwise on page 135
- xsl:when on page 141

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xsl:comment

Syntax

```
<xsl:comment>
  ...
</xsl:comment>
```

Description Generate a comment node within the final document. The content within the **<xsl:comment>** element determines the value of the comment. The content must not contain two hyphens next to each other (**- -**); this sequence is not allowed in comments.

XSLT files can contain ordinary comments delimited by **<!--** and **-->** such as **<!-- ... Insert your comment here ... -->**, but these are ignored by the processor. To generate a comment within the final document, use an **<xsl:comment>** element.

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215.

Related Documentation

- xsl:import on page 134
- xsl:stylesheet on page 137

xsl:copy-of

Syntax

```
<xsl:copy-of select="expression"/>
```

Description Create a copy of what is selected by the expression defined in the **select** attribute. Namespace nodes, child nodes, and attributes of the current node are automatically copied as well.

Attributes **select**—Specifies an expression to select the nodes to be copied.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306.

Related Documentation

- xsl:element on page 133
- xsl:text on page 139
- xsl:value-of on page 139

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xsl:element

Syntax

```
<xsl:element name="expression"/>
```

Description Create an element node in the output document.

Attributes **name**—Specifies the name of the element to be created. The value of the **name** attribute can be set to an expression that is extracted from the input XML document and evaluated at run time. To do this, enclose an XML element in curly brackets (**{ }**), as in **<xsl:element name="{$isis-level-1}"**.

Usage Examples See "Example: Creating a Complex Configuration Based on a Simple Interface Configuration" on page 259.

Related Documentation

- xsl:copy-of on page 132
- xsl:text on page 139
- xsl:value-of on page 139

xsl:for-each

Syntax

```
<xsl:for-each select="node-set-expression">
  ...
</xsl:for-each>
```

Description Include a looping mechanism that repeats XSL processing for each XML element in the specified node set. The element nodes are selected by the XPath expression defined by the **select** attribute. Each of the nodes is then processed according to the instructions contained in the **<xsl:for-each>** element.

Attributes **select**—Specifies an XPath expression that selects the nodes to be processed.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Adding T1 Interfaces to a RIP Group" on page 220, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Configuring Dual Routing Engines" on page 242.

Related Documentation

- XSLT Programming Instructions Overview on page 59
- XPath Overview on page 50
- xsl:choose on page 131
- xsl:if on page 134
- xsl:otherwise on page 135
- xsl:when on page 141

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xsl:if

Syntax

```
<xsl:if test="expression">
  ...
</xsl:if>
```

Description Include a conditional construct that causes instructions to be processed if the expression held in the **test** attribute evaluates to TRUE.

Attributes **test**—Specifies the expression to evaluate.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Adding T1 Interfaces to a RIP Group" on page 220, and "Example: Configuring Dual Routing Engines" on page 242.

Related Documentation

- XSLT Programming Instructions Overview on page 59
- xsl:choose on page 131
- xsl:for-each on page 133
- xsl:otherwise on page 135
- xsl:when on page 141

xsl:import

Syntax

```
<xsl:import href="../import/junos.xsl"/>
```

Description Import rules from an external style sheet. Provides access to all the declarations and templates within the imported style sheet, and allows you to override them with your own if needed. Any **<xsl:import>** elements must be the first elements within the style sheet, the first children of the **<xsl:stylesheet>** document element. The path can be any URI. The **../import/junos.xsl** path shown in the syntax is standard for all commit scripts, op scripts, and event scripts.

Imported rules are overwritten by any subsequent matching rules within the importing style sheet. If more than one style sheet is imported, the style sheets imported last override each previous import where the rules match.

Attributes **href**—Specifies the location of the imported style sheet.

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Configuring a Default Encapsulation Type" on page 238, "Example: Configuring Dual Routing Engines" on page 242, "Example: Controlling IS-IS and MPLS Interfaces" on page 251, "Example: Prepending a Global Policy" on page 295, and "Example: Preventing Import of the Full Routing Table" on page 300.

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Related Documentation

- Junos Script Automation: Named Templates in the jcs Namespace Overview on page 28
- Global Parameters and Variables in the junos.xsl File on page 39
- Required Boilerplate for Commit Scripts on page 166
- Required Boilerplate for Event Scripts on page 464
- Required Boilerplate for Op Scripts on page 335
- **xsl:stylesheet on page 137**

xsl:otherwise

Syntax

```
<xsl:otherwise>
  ...
</xsl:otherwise>
```

Description Within an **<xsl:choose>** instruction, include a default set of instructions that are processed if none of the expressions defined in the **test** attributes of the **<xsl:when>** elements evaluate to TRUE.

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242 and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- XSLT Programming Instructions Overview on page 59
- **xsl:choose on page 131**
- **xsl:for-each on page 133**
- **xsl:if on page 134**
- **xsl:when on page 141**

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xsl:param

Syntax

```
<xsl:param name="qualified-name" select="expression">
  ...
</xsl:param>
```

Description Declare a parameter for a template or for the style sheet as a whole. A template parameter must be declared within the template element. A global parameter, the scope of which is the entire style sheet, must be declared at the top level of the style sheet.

Attributes **name**—Defines the name of the parameter.

select—(Optional) XPath expression defining the default value for the parameter, which is used if the person or client application that executes the script does not explicitly provide a value. The **select** attribute or the content of the **<xsl:param>** element can define the default value. Do not specify both a **select** attribute and content; we recommend using the **select** attribute so as not to create a result tree fragment.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Limiting the Number of ATM Virtual Circuits" on page 268, and "Example: Preventing Import of the Full Routing Table" on page 300.

Related Documentation

- XSLT Parameters Overview on page 54
- XSLT Templates Overview on page 52
- **xsl:apply-templates on page 130**
- **xsl:call-template on page 130**
- **xsl:template on page 138**
- **xsl:variable on page 140**
- **xsl:with-param on page 141**

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xsl:stylesheet

Syntax

```
<xsl:stylesheet version="1.0" xmlns:ext="URI">
  <xsl:import href="../import/junos.xsl"/>
  ...
</xsl:stylesheet>
```

Description

Include the document element for the style sheet. This element defines the root element of the style sheet, which contains all the top-level elements such as global variable and parameter declarations, import elements, and templates. Optionally, namespace mappings, which include an extension prefix and Uniform Resource Identifier (URI), can be included as attributes in the opening **<xsl:stylesheet>** tag.

Any **<xsl:import>** elements must be the first elements within the style sheet, the first children of the **<xsl:stylesheet>** document element. The path can be any Uniform Resource Identifier (URI). The **../import/junos.xsl** path shown in the syntax is standard for all commit scripts, op scripts, and event scripts.

Attributes

version—Specifies the version of XSLT that is being used. Junos OS supports XSLT version 1.0.

xmlns:*ext*="*URI*—(Optional) Maps a namespace prefix to the URI for extension elements.

Usage Examples

See "Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Configuring Administrative Groups for LSPs" on page 234, "Example: Configuring a Default Encapsulation Type" on page 238, and "Example: Customizing Output of the show interfaces terse Command Using an Op Script" on page 354.

Related Documentation

- Required Boilerplate for Commit Scripts on page 166
- Required Boilerplate for Event Scripts on page 464
- Required Boilerplate for Op Scripts on page 335
- XSLT Namespace on page 50
- xsl:import on page 134

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xsl:template

Syntax

```
<xsl:template match="pattern" mode="qualified-name" name="qualified-name
priority="integer">
  <xsl:param name="qualified-name" select="expression">
    ...
  </xsl:param>
  ...
</xsl:stylesheet>
```

Description Declare a template that contains rules to apply when a specified node is matched. The **match** attribute associates the template with an XML element. The **match** attribute can also be used to define a template for a whole branch of an XML document. For example, **match="/"** matches the root element of the document. Although the **match** and **name** attributes are optional, one of the two attributes must be included in the template definition.

When templates are applied to a node set using the **<xsl:apply-templates>** instruction, they might be applied in a particular mode; the **mode** attribute in the **<xsl:template>** instruction indicates the mode in which a template needs to be applied for the template to be used. If templates are applied in the specified mode, the **match** attribute is used to determine whether the template can be used with the particular node. If more than one template matches a node in the specified mode, the priority attribute determines which template is used. The highest priority wins. If no priority is specified explicitly, the priority of a template is determined by the **match** attribute.

You can pass template parameters using the **<xsl:with-param>** element. To receive a parameter, the template must contain an **<xsl:param>** element that declares a parameter of that name. These parameters are listed before the body of the template, which is used to process the node and create a result.

Attributes **match**—(Optional) XPath expression specifying the nodes to which to apply the template. If this attribute is omitted, the **name** attribute must be included.

mode—(Optional) Indicate the mode in which a template needs to be applied for the template to be used.

name—(Optional) Specify a name for the template. Named templates can be explicitly called with the **<xsl:call-template>** element. If the **name** attribute is omitted, the **match** attribute must be included.

priority—(Optional) Specify a numeric priority for the template.

Usage Examples See "Example: Adding a Final then accept Term to a Firewall" on page 215, "Example: Adding T1 Interfaces to a RIP Group" on page 220, "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227, "Example: Requiring and Restricting Configuration Statements" on page 306, and "Example: Customizing Output of the show interfaces terse Command Using an Op Script" on page 354.

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Related Documentation

- XSLT Templates Overview on page 52
- XSLT Parameters Overview on page 54
- **xsl:apply-templates on page 130**
- **xsl:call-template on page 130**
- **xsl:param on page 136**
- **xsl:variable on page 140**
- **xsl:with-param on page 141**

xsl:text

Syntax

```
<xsl:text>
  ...
</xsl:text>
```

Description Insert literal text in the output.

Usage Examples See "Example: Requiring and Restricting Configuration Statements" on page 306, "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Controlling IS-IS and MPLS Interfaces" on page 251, and "Example: Adding a Final then accept Term to a Firewall" on page 215.

xsl:value-of

Syntax

```
<xsl:value-of select="expression"/>
```

Description Extract the value of an XML element and insert it into the output. The **select** attribute specifies the XPath expression that is evaluated. In the XPath expression, use @ to access attributes of elements. Use " **.** " to access the contents of the element itself. If the result is a node set, the **<xsl:value-of>** instruction adds the string value of the first node in that node set; none of the structure of the node is preserved. To preserve the structure of the node, you must use the **<xsl:copy-of>** instruction instead.

Attributes **select**—XPath expression specifying the node or attribute to evaluate.

Usage Examples See "Example: Imposing a Minimum MTU Setting" on page 266, "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Controlling IS-IS and MPLS Interfaces" on page 251, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- **xsl:copy-of on page 132**

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xsl:variable

Syntax

```
<xsl:variable name="qualified-name" select="expression">
  ...
</xsl:variable>
```

Description Declare a local or global variable. If the **<xsl:variable>** instruction appears at the top level of the style sheet as a child of the **<xsl:stylesheet>** document element, it is a global variable with a scope that includes the entire style sheet. Otherwise, it is a local variable with a scope of its following siblings and their descendants.

Attributes **name**—Specifies the name of the variable. After declaration, the variable can be referred to within XPath expressions using this name, prefixed with the **$** character.

select—(Optional) Determines the value of the variable. The value of the variable is determined either by the **select** attribute or by the contents of the **<xsl:variable>** element. Do not specify both a **select** attribute and some content; we recommend using the **select** attribute so as not to create a result tree fragment.

Usage Examples See "Example: Limiting the Number of E1 Interfaces" on page 272, "Example: Limiting the Number of ATM Virtual Circuits" on page 268, "Example: Configuring Administrative Groups for LSPs" on page 234, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- XSLT Variables Overview on page 57
- xsl:apply-templates on page 130
- xsl:call-template on page 130
- xsl:param on page 136
- xsl:template on page 138
- xsl:with-param on page 141

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xsl:when

Syntax

```
<xsl:when test="boolean-expression">
  ...
</xsl:when>
```

Description Within an **<xsl:choose>** instruction, specify a set of processing instructions that are executed when the expression specified in the **test** attribute evaluates to TRUE. The XSLT processor processes only the instructions contained in the first **<xsl:when>** element whose **test** attribute evaluates to TRUE. If none of the **<xsl:when>** elements' **test** attributes evaluate to TRUE, the content of the **<xsl:otherwise>** element, if there is one, is processed.

Attributes **test**—Specifies a Boolean expression.

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242, "Example: Preventing Import of the Full Routing Table" on page 300, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

Related Documentation

- XSLT Programming Instructions Overview on page 59
- xsl:choose on page 131
- xsl:for-each on page 133
- xsl:if on page 134
- xsl:otherwise on page 135

xsl:with-param

Syntax

```
<xsl:with-param name="qualified-name" select="expression">
  ...
</xsl:with-param>
```

Description Specify a parameter to pass into a template. This element can be used when applying templates with the **<xsl:apply-templates>** instruction or when calling templates with the **<xsl:call-template>** instruction.

Attributes **name**—Specifies the name of the parameter.

select—(Optional) XPath expression specifying the value of the parameter. The value of the parameter is determined either by the **select** attribute or by the contents of the **<xsl:with-param>** element. Do not specify both a **select** attribute and content. We recommend using the **select** attribute to set the parameter so as to prevent the parameter from being passed a result tree fragment as its value.

Usage Examples See "Example: Configuring Dual Routing Engines" on page 242, "Example: Preventing Import of the Full Routing Table" on page 300, and "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

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Related Documentation

- XSLT Templates Overview on page 52
- **xsl:apply-templates on page 130**
- **xsl:call-template on page 130**
- **xsl:param on page 136**
- **xsl:template on page 138**
- **xsl:variable on page 140**

Administration

- Operational Commands on page 142

Operational Commands

- request system scripts convert

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request system scripts convert

Syntax request system scripts convert (slax-to-xslt | xslt-to-slax) source *source/filename* destination *destination/<filename>* <partial> <version (1.0 | 1.1)>

Release Information Command introduced in Junos OS Release 8.2.
Command introduced in Junos OS Release 9.0 for EX Series switches.
partial and **version** options added in Junos OS Release 12.2.

Description Convert an Extensible Stylesheet Language Transformations (XSLT) script to Stylesheet Language, Alternative syntaX (SLAX), or convert a SLAX script to XSLT.

Options **destination** *destination/<filename>*—Specify a destination for the converted file.

Optionally, you can specify a filename for the converted file. If you do not specify a filename, the software assigns one automatically. The default destination filename is **SLAX-Conversion-Temp** or **slax-temp** depending on the Junos OS release, with a randomly generated, five-character, alpha-numeric extension. For example, the software converts a source file called **test.xsl** to **slax-temp.kWwQk**. The software converts a source file called **test1.slax** to **slax-temp.zN61h**.

partial—(Optional) Convert partial script input.

slax-to-xslt—Convert a SLAX script to XSLT.

source *source/filename*—Specify a source file that you want to convert.

version—(Optional) Specify the SLAX version listed in the version statement of the generated script for XSLT-to-SLAX conversions. Acceptable values are 1.0 and 1.1. The default is 1.1.

xslt-to-slax—Convert an XSLT script to SLAX.

Required Privilege Level maintenance

Related Documentation
- Converting Scripts Between SLAX and XSLT on page 65

List of Sample Output
request system scripts convert slax-to-xslt on page 143
request system scripts convert xslt-to-slax on page 144

Output Fields When you enter this command, you are provided feedback on the status of your request.

Sample Output

request system scripts convert slax-to-xslt

```
user@host> request system scripts convert slax-to-xslt source /var/db/scripts/op/script1.slax
destination /var/db/scripts/op
conversion complete
```

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request system scripts convert xslt-to-slax

```
user@host> request system scripts convert xslt-to-slax source /var/db/scripts/commit/script1.xsl
destination /var/db/scripts/commit
conversion complete
```


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CHAPTER 2

Configuration Automation Developer Guide

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Overview

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- Generating a Custom Warning, Error, or System Log Message on page 153
- Generating a Persistent or Transient Configuration Changes on page 154
- Creating Custom Configuration Syntax with Macros on page 158

Commit Scripts Overview

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- Advantages of Using Commit Scripts on page 146
- How Commit Scripts Work on page 148

Commit Script Overview

Junos OS commit scripts enforce custom configuration rules during the commit process. When a candidate configuration is committed, it is inspected by each active commit script. If a configuration violates your custom rules, the script can instruct Junos OS to take appropriate action. A commit script can perform the following actions:

- Generate and display custom warning messages to the user
- Generate and log custom system log (syslog) messages
- Change the configuration to conform to the custom business rules
- Generate a commit error and halt the commit operation

Commit scripts are based on the Junos XML management protocol and the Junos XML API. The Junos XML management protocol is an XML based RPC mechanism, and the

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Junos XML API is an XML representation of Junos configuration statements and operational mode commands.

Commit scripts can be written in either the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) scripting language. Commit scripts use the XML Path Language (XPath) to locate the configuration objects to be inspected and XSLT or SLAX constructs to specify the actions to perform on the configuration objects. The actions can change the configuration or generate messages about it. For more information about XSLT, see "XSLT Overview" on page 48. For more information about SLAX, see "SLAX Overview" on page 63.

Additionally, you can create *macros*, which allow you to create custom configuration syntax that simplifies the task of configuring a device running Junos OS. By itself, your custom syntax has no operational impact on the device. A corresponding commit script macro uses your custom syntax as input data for generating standard Junos OS configuration statements that execute your intended operational impact.

To view the device's current configuration in the Extensible Markup Language (XML), using the command-line interface's (CLI's) operational mode, issue the **show configuration | display xml** command. To view your configuration in commit-script-style XML, issue the **show configuration | display commit-scripts view** command. Commit-script-style XML view displays the configuration in the format that would be input to a commit script.

Related Documentation

- Junos XML Management Protocol and Junos XML API Overview on page 6
- SLAX Overview on page 63
- XSLT Overview on page 48

Advantages of Using Commit Scripts

Reducing human error in a network configuration can significantly improve network uptime. Commit scripts enable you to control operational practices and enforce operational policy, thereby decreasing the possibility of human error. Restricting device configurations in accordance with custom design rules can vastly improve network reliability.

Consider the following examples of actions you can perform with commit scripts:

- Basic sanity test—Ensure that the **[edit interfaces]** and **[edit protocols]** hierarchies have not been accidentally deleted.
- Consistency check—Ensure that every T1 interface configured at the **[edit interfaces]** hierarchy level is also configured at the **[edit protocols rip]** hierarchy level.
- Dual Routing Engine configuration test—Ensure that the **re0** and **re1** configuration groups are set up correctly. When you use configuration groups, the inherited values can be overridden in the target configuration. A commit script can determine if an individual target configuration element is blocking proper inheritance of the configuration group settings.
- Interface density—Ensure that a channelized interface does not have too many channels configured.

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- Link scaling—Ensure that SONET/SDH interfaces never have a maximum transmission unit (MTU) size less than 4 kilobytes (KB).
- Import policy check—Ensure that an interior gateway protocol (IGP) does not use an import policy that imports the full routing table.
- Cross-protocol checks—Ensure that all LDP-enabled interfaces are configured for an IGP, or ensure that all IGP-enabled interfaces are configured for LDP.
- IGP design check—Ensure that Level 1 IS-IS routers are never enabled.

When a candidate configuration does not adhere to your design rules, a commit script can instruct Junos OS to generate custom warnings, system log messages, or error messages that block the commit operation from succeeding. In addition, the commit script can change the configuration in accordance with your rules and then proceed with the commit operation.

Consider a network design that requires every interface on which the International Organization for Standardization (ISO) family of protocols is enabled to also have MPLS enabled. At commit time, a commit script inspects the configuration and issues an error if this requirement is not met. This error causes the commit operation to fail and forces the user to update the configuration to comply.

Instead of an error, the commit script can issue a warning about the configuration problem and then automatically correct it by changing the configuration to enable MPLS on all interfaces. A system log message can also be generated, indicating that corrective action was taken.

Another option is to define a macro that enables ISO protocols and MPLS when the macro is applied to an interface. Configuring this macro simplifies the configuration task while ensuring that both protocols are configured together.

Finally, you can have the commit script correct the configuration using a *transient change*. In our example, a transient change allows MPLS to always be enabled on ISO-enabled interfaces without having the configuration statements appear in the candidate configuration.

NOTE: Transient changes cause a change to be generated in the *checkout configuration* but not in the candidate configuration. The checkout configuration is the configuration database that is checked for standard Junos OS syntax just before a configuration becomes active. This means transient changes are not saved in the configuration if the associated commit script is deleted or deactivated. The **show configuration | display commit-scripts** command displays all the statements that are in the configuration, including statements that were generated by transient changes. For more information, see "Overview of Generating Persistent or Transient Configuration Changes" on page 154.

Related Documentation

- Commit Script Overview on page 145

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How Commit Scripts Work

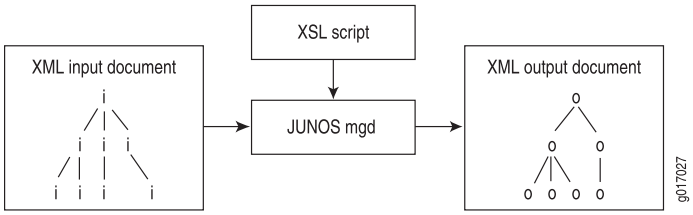
You enable commit scripts by listing the names of one or more commit script files at the **[edit system scripts commit]** hierarchy level. These scripts contain instructions that enforce custom configuration rules. Commit scripts are invoked during the commit process before the standard Junos OS validity checks are performed.

When you perform a commit operation, Junos OS executes each script in turn, passing the information in the candidate configuration to the scripts. The script inspects the configuration, performs the necessary tests and validations, and generates a set of instructions for performing certain actions. These actions include generating error, warning, and system log messages. If errors are generated, the commit operation fails and the candidate configuration remains unchanged. This is the same behavior that occurs with standard commit errors.

Commit scripts can also generate changes to the system configuration. Because the changes are loaded before the standard validation checks are performed, they are validated for correct syntax, just like statements already present in the configuration before the script is applied. If the syntax is correct, the configuration is activated and becomes the active, operational device configuration.

Figure 3 on page 148 shows the flow of commit script input and output.

Figure 3: Commit Script Input and Output



Commit scripts cannot make configuration changes to protected statements or within protected hierarchies. If a commit script attempts to modify or delete a protected statement or hierarchy, Junos OS issues a warning that the change cannot be made. Failure to modify a protected configuration element does not halt the commit script or the commit process.

The following sections discuss several important concepts related to the commit script input and output:

- Commit Script Input on page 148
- Commit Script Output on page 149
- Commit Scripts and the Junos OS Commit Model on page 150

Commit Script Input

The input for a commit script is the postinheritance candidate configuration in Junos XML API format. The term *postinheritance* means that all configuration group values have been inherited by their targets in the candidate configuration and the inactive portions

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of the configuration have been removed. For more information about configuration groups, see the *CLI User Guide*.

When you issue the **commit** command, Junos OS automatically generates the candidate configuration in XML format and reads it into the management (mgd) process, at which time the input is evaluated by any commit scripts.

To display the XML format of the postinheritance configuration, issue the **show | display commit-scripts view** command:

```
[edit]
user@host# show | display commit-scripts view
```

To display all configuration groups data, including script-generated changes to the groups, issue the **show groups | display commit-scripts** command:

```
[edit]
user@host# show groups | display commit-scripts
```

To save the commit script input to a file, add the **save** command to the command line:

```
[edit]
user@host# show | display commit-scripts view | save filename.xml
```

By default, the file is placed in your home directory on the switch, router, or security device.

Commit Script Output

To specify the desired commit script output—including warning, error, and system log messages, persistent changes, and transient changes—the script can contain tags that appear in any order, in any number. The tags for specifying output are as follows:

- **<xnm:warning>**—Generates a warning message
- **<xnm:error>**—Generates an error message.
- **<syslog><message>**—Generates a system log message.
- **<change>**—Generates a persistent change to the configuration.
- **<transient-change>**—Generates a transient change to the configuration.
- **<xsl:call-template name="jcs:emit-change">**
  <xsl:with-param name="content">—Generates a persistent change relative to the current context node as defined by an XPath expression.
- **<xsl:call-template name="jcs:emit-change">**
  <xsl:with-param name="tag" select="'transient-change'"/>
  <xsl:with-param name="content">—Generates a transient change relative to the current context node as defined by an XPath expression.
- **<xsl:call-template name="jcs:emit-change">**
  <xsl:with-param name="message">
  <xsl:text>—Generates a warning message in conjunction with a configuration change. You can use this set of tags to generate a notification that the configuration has been changed.

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Junos OS processes this output and performs the appropriate actions. Errors and warnings are passed back to the Junos OS CLI or to a Junos XML protocol client application. The presence of an error automatically causes the commit operation to fail. Persistent and transient changes are loaded into the appropriate configuration database.

To test the output of error, warning, and system log messages from commit scripts, issue the **commit check | display xml** command:

```
[edit]
user@host# commit check | display xml
```

To display a detailed trace of commit script processing, issue the **commit check | display detail** command:

```
[edit]
user@host# commit check | display detail
```

NOTE: System log messages do not appear in the trace output, so you cannot use the commit check operation to test script-generated system log messages. Furthermore, system log messages are written to the system log during a commit operation, but not during a commit check operation.

Related Documentation

- *Example: Protecting the Junos OS Configuration from Modification or Deletion*
- jcs:emit-change Template on page 31

Commit Scripts and the Junos OS Commit Model

Junos OS uses a commit model to update the device's configuration. This model allows you to make a series of changes to a candidate configuration without affecting the operation of the device. When the changes are complete, you can commit the configuration. The commit operation saves the candidate configuration changes into the current configuration.

When you commit a set of changes in the candidate configuration, two methods are used to forward these changes to the current configuration:

- Standard commit model—Used when no commit scripts are active on the device.
- Commit script model—Incorporates commit scripts into the commit model.

Standard Commit Model

In the standard commit model, the management (mgd) process validates the candidate configuration based on standard Junos validation rules. If the configuration file is valid, it becomes the current active configuration. Figure 4 on page 151 and the accompanying discussion explain how the standard commit model works:

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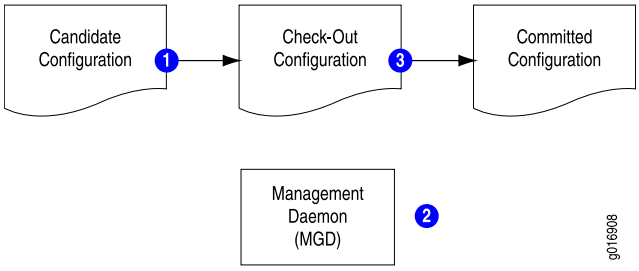
Figure 4: Standard Commit Model



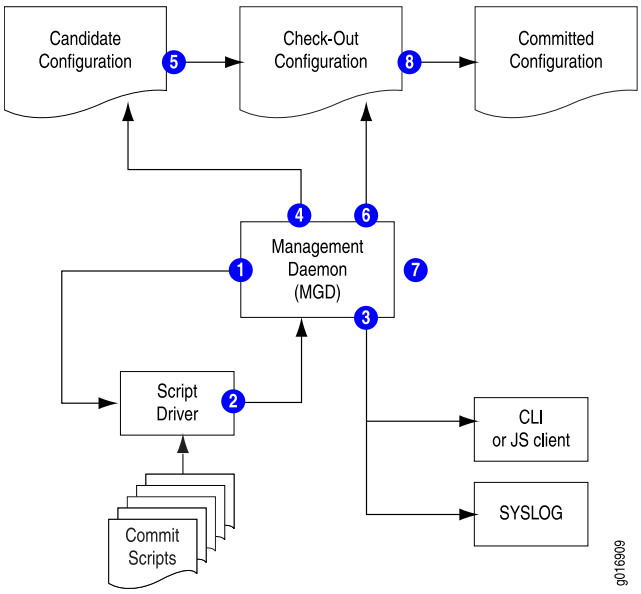
In the standard commit model, the software performs the following steps:

1. When the candidate configuration is committed, it is copied to become the checkout configuration.
2. The mgd process validates the checkout configuration.
3. If no error occurs, the checkout configuration is copied as the current active configuration.

Commit Model with Commit Scripts

When commit scripts are added to the standard commit model, the process becomes more complex. The mgd process first passes an XML-formatted checkout configuration to a script driver, which handles the verification of the checkout configuration by the commit scripts. When verification is complete, the script driver returns an XML *action file* to the mgd process. The mgd process follows the instructions in the action file to update the candidate and checkout configurations, issue messages to the CLI, and write information to the system log as required. After processing the action file, the mgd process performs the standard Junos OS validation. Figure 5 on page 151 and the accompanying discussion explain this process.

Figure 5: Commit Model with Commit Scripts Added



In the commit script model, Junos OS performs the following steps:

1. When the candidate configuration is committed, the mgd process sends the XML-formatted candidate configuration to the script driver.
2. Each enabled commit script is invoked against the candidate configuration, and each script can generate a set of actions for the mgd process to perform. The actions are collected in an XML action file.
3. The mgd process performs the following actions in response to **<error>**, **<warning>**, and **<syslog>** tag elements in the action file:
   - **<error>**—The mgd process halts the commit process (that is, the commit operation fails), returns an error message to the CLI or Junos XML protocol client, and takes no further action.
   - **<warning>**—The mgd process forwards the message to the CLI or the Junos XML protocol client.
   - **<syslog>**—The mgd process forwards the message to the system log process.
4. If the action file includes any **<change>** tag elements, the mgd process loads the requested changes into the candidate configuration.
5. The candidate configuration is copied to become the checkout configuration.
6. If the action file includes any **<transient-change>** tag elements, the mgd process loads the requested changes into the checkout configuration.
7. The mgd process validates the checkout configuration.
8. If there are no validation errors, the checkout configuration is copied to become the current active configuration.

NOTE: **Commit scripts cannot make configuration changes to protected statements or within protected hierarchies. If a commit script attempts to modify or delete a protected statement or hierarchy, Junos OS issues a warning that the change cannot be made. Failure to modify a protected configuration element does not halt the commit script or the commit process.**

Changes that are made to the candidate configuration during the commit operation are not evaluated by the custom rules during that commit operation. However, persistent changes are maintained in the candidate configuration and are evaluated by the custom rules during subsequent commit operations. For more information about how commit scripts change the candidate configuration, see "Avoiding Potential Conflicts When Using Multiple Commit Scripts" on page 165.

Transient changes are never evaluated by the custom rules in commit scripts, because they are made to the checkout configuration only after the commit scripts have evaluated the candidate configuration and the candidate is copied to become the checkout configuration. To remove a transient change from the configuration, remove, disable, or deactivate the commit script (as discussed in "Controlling Execution of Commit Scripts

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During Commit Operations" on page 174), or comment out the code that generates the transient change.

For more information about differences between persistent and transient changes, see "Overview of Generating Persistent or Transient Configuration Changes" on page 154.

Related Documentation

- Avoiding Potential Conflicts When Using Multiple Commit Scripts on page 165

Generating a Custom Warning, Error, or System Log Message

- Overview of Generating Custom Warning, Error, and System Log Messages on page 153

Overview of Generating Custom Warning, Error, and System Log Messages

You can use a commit script to specify configuration rules that you always want to enforce. If a rule is broken, the commit script can emit a warning, error, or system log message.

In the Junos OS command-line interface (CLI), warning messages are emitted during commit operations to alert you that the configuration is not complete or contains a syntax error. If a custom configuration rule is broken, a custom warning message notifies you about the problem. The commit script causes the warning message to be passed back to the Junos OS CLI or to a Junos XML protocol client application. Unlike error messages, warning messages do not cause the commit operation to fail, so they are used for configuration problems that do not affect network traffic. A warning is best used as a response to configuration settings that do not adhere to recommended practices. An example of this type of configuration setting might be assignment of the same user ID to different users.

Alternatively, you can generate a custom warning message for a serious configuration problem, and specify an automatic configuration change that rectifies the problem. For more information about the use of warning messages in conjunction with automatic configuration changes, see "Overview of Generating Persistent or Transient Configuration Changes" on page 154.

Unlike warning messages, a custom error message causes the commit operation to fail and notifies the user about the configuration problem. The commit script causes the error message to be passed back to the Junos OS CLI or to a Junos XML protocol client application. Because error messages cause the commit operation to fail, they are used for problems that affect network traffic. An error message is best used as a response to configuration settings that you want to disallow—for example, when required statements are omitted from the configuration.

Junos OS generates system log messages (also called syslog messages) to record events that occur on the device, including the following:

- Routine operations, such as creation of an OSPF protocol adjacency or a user login into the configuration database
- Failure and error conditions, such as failure to access a configuration file or unexpected closure of a connection to a child or peer process

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- Emergency or critical conditions, such as device power-down due to excessive temperature

Each system log message identifies the Junos OS process that generated the message and briefly describes the operation or error that occurred. The *Junos OS System Log Messages Reference* provides more detailed information about system log messages.

With commit scripts, you can cause custom system log messages to be generated in response to particular events that you define. For example, if a configuration rule is broken, a custom message can be generated to record this occurrence. If the commit script corrects the configuration, a custom message can indicate that corrective action was taken.

Related Documentation

- Example: Generating a Custom Error Message on page 186
- Example: Generating a Custom System Log Message on page 190
- Example: Generating a Custom Warning Message on page 183
- Generating a Custom Warning, Error, or System Log Message on page 178
- Tag Elements to Use When Generating Messages on page 181

Generating a Persistent or Transient Configuration Changes

- Overview of Generating Persistent or Transient Configuration Changes on page 154

Overview of Generating Persistent or Transient Configuration Changes

Junos OS commit scripts enforce custom configuration rules. When a candidate configuration includes statements that you have decided must not be included in your configuration, or when the candidate configuration omits statements that you have decided are required, commit scripts can automatically change the configuration and thereby correct the problem.

- Differences Between Persistent and Transient Changes on page 154
- Interaction of Configuration Changes and Configuration Groups on page 157
- Tag Elements and Templates for Generating Changes on page 158

Differences Between Persistent and Transient Changes

Configuration changes made by commit scripts can be *persistent* or *transient*.

A persistent change remains in the candidate configuration and affects routing operations until you explicitly delete it, even if you subsequently remove or disable the commit script that generated the change and reissue the **commit** command. In other words, removing the commit script does not cause a persistent change to be removed from the configuration.

A transient change, in contrast, is made in the *checkout configuration* but not in the candidate configuration. The checkout configuration is the configuration database that is inspected for standard Junos OS syntax just before it is copied to become the active configuration on the device. If you subsequently remove or disable the commit script

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that made the change and reissue the **commit** command, the change is no longer made to the checkout configuration and so does not affect the active configuration. In other words, removing the commit script effectively removes a transient change from the configuration.

A common use for transient changes is to eliminate the need to repeatedly configure and display well-known policies, thus allowing these policies to be enforced implicitly. For example, if MPLS must be enabled on every interface with an International Organization for Standardization (ISO) protocol enabled, the change can be transient, so that the repetitive or redundant configuration data need not be carried or displayed in the candidate configuration. Furthermore, transient changes allow you to write script instructions that apply the change only if a set of conditions is met.

Persistent and transient changes are loaded into the configuration in the same manner that the **load replace** configuration mode command loads an incoming configuration. When generating a persistent or transient change, adding the **replace="replace"** attribute to a configuration element produces the same behavior as a **replace:** tag in a **load replace** operation.

By default, Junos OS merges the incoming configuration and the candidate configuration. New statements and hierarchies are added, and conflicting statements are overridden. When generating a persistent or transient change, if you add the **replace="replace"** attribute to a configuration element, Junos OS replaces the existing configuration element with the incoming configuration element. If the **replace="replace"** attribute is added to a configuration element, but there is no existing element of the same name in the current configuration, the incoming configuration element is added into the configuration. Elements that do not have the **replace** attribute are merged into the configuration.

Persistent and transient changes are loaded before the standard Junos validation checks are performed. This means any configuration changes introduced by a commit script are validated for correct syntax. If the syntax is correct, the new configuration becomes the active, operational device configuration.

Protected elements in the configuration hierarchy cannot be modified or deleted by either a persistent or a transient change. If a commit script attempts to modify or delete a protected statement or hierarchy, Junos OS issues a warning that the change cannot be made, and proceeds with the commit.

Persistent and transient changes have several important differences, as described in Table 13 on page 155.

Table 13: Differences Between Persistent and Transient Changes

Persistent Changes	Transient Changes
A persistent change is represented in a commit script by the **<change>** tag.	A transient change is represented in a commit script by the **<transient-change>** tag.
Another way to represent a persistent change is with the **content** parameter inside a call to the **jcs:emit-change** template. The **jcs:emit-change** template is a helper template contained in the **junos.xsl** import file.	Another way to represent a transient change is to use the **content** parameter and the **tag transient** parameter inside a call to the **jcs:emit-change** template.

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Table 13: Differences Between Persistent and Transient Changes *(continued)*

Persistent Changes	Transient Changes
You can use persistent changes to perform any Junos XML protocol operation, such as activate, deactivate, delete, insert (reorder), comment (annotate), and replace sections of the configuration.	Like persistent changes, you can use transient changes to perform any Junos XML protocol operation. However, some Junos XML protocol operations do not make sense to use with transient changes, such as generating comments and inactive settings.
Persistent changes are always loaded during the commit process if no errors are generated by any commit scripts or by the standard Junos OS validity check.	For transient changes to be loaded, you must include the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level. If you enable a commit script that generates transient changes and you do not include the **allow-transients** statement in the configuration, the CLI generates an error message and the commit operation fails. Like persistent changes, transient changes must pass the standard Junos OS validity check. You cannot use a commit script to generate the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level. Rather, you must include this statement directly by using the CLI.
Persistent changes work like the **load replace** configuration mode command, and the change is added to the candidate configuration. When generating a persistent change, if you add the **replace="replace"** attribute to a configuration element, Junos OS replaces the existing element in the candidate configuration with the incoming configuration element. If there is no existing element of the same name in the candidate configuration, the incoming configuration element is added into the configuration. Elements that do not have the **replace** attribute are merged into the configuration.	Transient changes work like the **load replace** configuration mode command, and the change is added to the checkout configuration. When generating a transient change, if you add the **replace="replace"** attribute to a configuration element, Junos OS replaces the existing element in the checkout configuration with the incoming configuration element. If there is no existing element of the same name in the checkout configuration, the incoming configuration element is added into the configuration. Elements that do not have the **replace** attribute are merged into the configuration. Transient changes are not copied to the candidate configuration. For this reason, transient changes are not saved in the configuration if the associated commit script is deleted or deactivated.
After a persistent change is committed, the software treats it like a change you make by directly editing and committing the candidate configuration. After the persistent changes are copied to the candidate configuration, they are copied to the checkout configuration. If the changes pass the standard Junos OS validity checks, the changes are propagated to the switch, router, or security device components.	Each time a transient change is committed, the software updates the checkout configuration database. After the transient changes pass the standard Junos OS validity checks, the changes are propagated to the device components.

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Table 13: Differences Between Persistent and Transient Changes *(continued)*

Persistent Changes	Transient Changes
After committing a script that causes a persistent change to be generated, you can view the persistent change by issuing the **show** configuration mode command: user@host# **show** This command displays persistent changes only, not transient changes.	After committing a script that causes a transient change to be generated, you can view the transient change by issuing the **show | display commit-scripts** configuration mode command: user@host# **show | display commit-scripts** This command displays both persistent and transient changes.
Persistent changes must conform to your custom configuration design rules as dictated by commit scripts. This does not become apparent until after a second commit operation because persistent changes are not evaluated by commit script rules on the current commit operation. The subsequent commit operation fails if the persistent changes do not conform to the rules imposed by the commit scripts configured during the first commit operation.	Transient changes are never tested by and do not need to conform to your custom rules. This is caused by the order of operations in the Junos OS commit model, which is explained in detail in "Commit Scripts and the Junos OS Commit Model" on page 150.
A persistent change remains in the configuration even if you delete, disable, or deactivate the commit script instructions that generated the change.	If you delete, disable, or deactivate the commit script instructions that generate a transient change, the change is removed from the configuration after the next commit operation. In short, if the associated instructions or the entire commit script is removed, the transient change is also removed.
As with direct CLI configuration, you can remove a persistent change by rolling back to a previous configuration that did not include the change and issuing the **commit** command. However, if you do not disable or deactivate the associated commit script, and the problem that originally caused the change to be generated still exists, the change is automatically regenerated when you issue another **commit** command.	You cannot remove a transient change by rolling back to a previous configuration.
You can alter persistent changes directly by editing the configuration using the CLI.	You cannot directly alter or delete a transient change by using the Junos OS CLI, because the change is not in the candidate configuration. To alter the contents of a transient change, you must alter the statements in the commit script that generates the transient change.

Interaction of Configuration Changes and Configuration Groups

Any configuration change you can make by directly editing the configuration using the Junos OS command-line interface (CLI) can also be generated by a commit script as a persistent or transient change. This includes values specified at a specific hierarchy level or in configuration groups. As with direct CLI configuration, values specified in the *target* override values inherited from a configuration group. The target is the statement to which you apply a configuration group by including the **apply-groups** statement.

If you define persistent or transient changes as belonging to a configuration group, the configuration groups are applied in the order you specify in the **apply-groups** statements,

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which you can include at any hierarchy level except the top level. You can also disable inheritance of a configuration group by including the **apply-groups-except** statement at any hierarchy level except the top level.

CAUTION: Each commit script inspects the postinheritance view of the configuration. If a candidate configuration contains a configuration group, be careful when using a commit script to change the related target configuration, because doing so might alter the intended inheritance from the configuration group.

Also be careful when using a commit script to change a configuration group, because the configuration group might be generated by an application that performs a load replace operation on the group during each commit operation.

For more information about configuration groups, see the *CLI User Guide*.

Tag Elements and Templates for Generating Changes

To generate changes, you can use the **jcs:emit-change** template, which implicitly includes **<change>** and **<transient-change>** XML elements; or you can explicitly include **<change>** and **<transient-change>** XML elements. Using the **jcs:emit-change** template allows you to set the hierarchical context of the change once rather than multiple times.

The **<change>** and **<transient-change>** elements are similar to the **<load-configuration>** operation defined by the Junos XML management protocol. The possible contents of the **<change>** and **<transient-change>** elements are the same as the contents of the **<configuration>** tag element used in the Junos XML protocol operation **<load-configuration>**. For complete details about the **<load-configuration>** element, see the *Junos XML Management Protocol Developer Guide*.

Creating Custom Configuration Syntax with Macros

- Overview of Creating Custom Configuration Syntax with Macros on page 158
- How Macros Work on page 159

Overview of Creating Custom Configuration Syntax with Macros

Using commit script macros, you can create a custom configuration language based on simplified syntax that is relevant to your network design. This means you can use your own aliases for frequently used configuration statements.

Commit scripts generally impose restrictions on the Junos OS configuration and automatically correct configuration mistakes when they occur (as discussed in "Overview of Generating Persistent or Transient Configuration Changes" on page 154). However, macros are useful for an entirely different reason. Commit scripts that contain macros do not generally correct configuration mistakes, nor do they necessarily restrict configuration. Instead, they provide a way to simplify and speed configuration tasks, thereby preventing mistakes from occurring at all.

For a detailed example of how macros can save time and effort, see "Example: Automatically Configuring Logical Interfaces and IP Addresses" on page 227.

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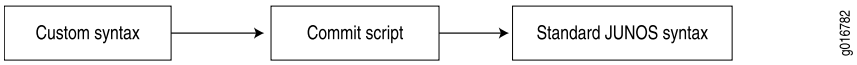
Related Documentation

- How Macros Work on page 159
- Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements on page 207
- Example: Creating Custom Configuration Syntax with Macros on page 208

How Macros Work

Your custom syntax serves as input to a commit script. The output of the commit script is standard Junos OS configuration syntax, as shown in Figure 6 on page 159. The standard Junos OS statements are added to the configuration to cause your intended operational changes.

Figure 6: Macro Input and Output



Macros use either permanent or transient change elements to expand your custom syntax into standard Junos OS configuration statements. If you use transient changes, the custom syntax appears in the candidate configuration, and the standard Junos OS syntax is copied to the checkout configuration only. If you use persistent changes, both the custom syntax and the standard Junos OS syntax appear in the candidate configuration.

This section discusses the following topics:

- Creating a Custom Syntax on page 159
- <data> Element on page 160
- Expanding the Custom Syntax on page 162
- Other Ways to Use Macros on page 164

Creating a Custom Syntax

Macros work by locating **apply-macro** statements that you include in the candidate configuration and using the values specified in the **apply-macro** statement as parameters to a set of instructions defined in a commit script. In effect, your custom configuration syntax serves a dual purpose. The syntax allows you to simplify your configuration tasks, and it provides to the script the data necessary to generate a complex configuration.

To enter custom syntax, you include the **apply-macro** statement at any hierarchy level and specify any data that you want inside the **apply-macro** statement:

```
apply-macro macro-name {
    parameter-name parameter-value;
}
```

You can include the **apply-macro** statement at any level of the configuration hierarchy. In this sense, the **apply-macro** statement is similar to the **apply-groups** statement. Each **apply-macro** statement must be uniquely named, relative to other **apply-macro** statements at the same hierarchy level.

An **apply-macro** statement can contain a set of parameters with optional values. The corresponding commit script can refer to the macro name, its parameters, or the

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parameters' values. When the script inspects the configuration and finds the data, the script performs the actions specified by a persistent or transient change element.

For example, given the following configuration stanza, you can write script instructions to generate a standard configuration based on the name of the parameter:

```
protocols {
  mpls {
    apply-macro blue-type-lsp {
      color blue;
    }
  }
}
```

The following **<xsl:for-each>** programming instruction finds **apply-macro** statements at the **[edit protocols mpls]** hierarchy level that contain a parameter named **color**:

```
<xsl:for-each select="protocols/mpls/apply-macro[data/name = 'color']">
```

The following instruction creates a variable named **color** and assigns to the variable the value of the **color** parameter, which in this case is **blue**:

```
<xsl:variable name="color" select="data[name = 'color']/value"/>
```

The following instruction adds the **admin-groups** statement to the configuration and assigns the value of the **$color** variable to the group name:

```
<transient-change>
  <protocols>
    <mpls>
      <admin-groups>
        <name>
          <xsl:value-of select="$color"/>
        </name>
      </admin-groups>
    </mpls>
  </protocols>
</transient-change>
```

The resulting configuration statements are as follows:

```
protocols {
  mpls {
    admin-groups {
      blue;
    }
  }
}
```

<data> Element

In the XML rendering of the custom syntax within an **apply-macro** statement, parameters and their values are contained in **<name>** and **<value>** elements, respectively. The **<name>** and **<value>** elements are sibling children of the **<data>** element. For example, the **apply-macro blue-type-lsp** statement contains six parameters, as follows:

```
[edit protocols mpls]
apply-macro blue-type-lsp {
  10.1.1.1;
```

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```
    10.2.2.2;
    10.3.3.3;
    10.4.4.4;
    color blue;
    group-value 0;
  }
```

The parameters and values are rendered in Junos XML tag elements as follows:

```
[edit protocols mpls]
user@host# show | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
  <configuration>
    <protocols>
      <mpls>
        <apply-macro>
          <name>blue-type-lsp</name>
          <data>
            <name>10.1.1.1</name>
          </data>
          <data>
            <name>10.2.2.2</name>
          </data>
          <data>
            <name>10.3.3.3</name>
          </data>
          <data>
            <name>10.4.4.4</name>
          </data>
          <data>
            <name>color</name>
            <value>blue</value>
          </data>
          <data>
            <name>group-value</name>
            <value>0</value>
          </data>
        </apply-macro>
      </mpls>
    </protocols>
  </configuration>
</rpc-reply>
```

When you write commit script macros, referring to the **<data>**, **<name>**, and **<value>** elements enables you to extract and manipulate the parameters contained in **apply-macro** statements. For example, in the following **select** attribute, the XPath expression extracts the text contained in the **<value>** element that is a child of a **<data>** element that also contains a **<name>** child element with the text **color**. The variable declaration assigns the text of the **<value>** element to a variable named **$color**.

```
<xsl:variable name="color" select="data[name = 'color']/value"/>
```

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Expanding the Custom Syntax

In the corresponding commit script, you include one or more XSLT or SLAX programming instructions that inspect the configuration for the **apply-macro** statement at a specified hierarchy level. Optionally, you can use the **data/name** expression to select a parameter in the **apply-macro** statement:

```
<xsl:for-each select="xpath-expression/apply-macro[data/name = 'parameter-name']">
```

For example, the following XSLT programming instruction selects every **apply-macro** statement that contains the **color** parameter and that appears at the **[edit protocols mpls]** hierarchy level:

```
<xsl:for-each select="protocols/mpls/apply-macro[data/name = 'color']">
```

The SLAX equivalent is:

```
for-each (protocols/mpls/apply-macro[data/name = 'color'])
```

When expanding macros, a particularly useful programming instruction is the **<xsl:value-of>** instruction. This instruction selects a parameter value and uses it to build option values for Junos OS statements. For example, the following instruction concatenates the value of the **$color** variable, the text **-lsp-**, and the current context node (represented by " **.**") to build a name for an LSP.

```
<label-switched-path>
  <name>
    <xsl:value-of select="concat($color, '-lsp-', .)"/>
  </name>
</label-switched-path>
```

SLAX uses the underscore (_) to concatenate values:

```
<label-switched-path> {
  <name> $color _ '-lsp-' _ .;
```

When the script includes instructions to find the necessary data, you can provide content for a transient change that uses the data to construct a standard Junos OS configuration.

The following transient change creates an administration group and adds the **label-switched-path** statement to the configuration. The label-switched path is assigned a name that concatenates the value of the **$color** variable, the text **-lsp-**, and the currently selected IP address represented by the period ("**.**"). The transient change also adds the **to** statement and assigns the currently selected IP address. Finally, the transient change adds the **admin-group include-any** statement and assigns the value of the **$color** variable.

```
<transient-change>
  <protocols>
    <mpls>
      <admin-groups>
        <name><xsl:value-of select="$color"/></name>
        <group-value><xsl:value-of select="$group-value"/></group-value>
      </admin-groups>
      <xsl:for-each select="data[not(value)]/name">
        <label-switched-path>
          <name><xsl:value-of select="concat($color, '-lsp-', .)"/></name>
          <to><xsl:value-of select="."/></to>
          <admin-group>
```

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```
            <include-any><xsl:value-of select="$color"/></include-any>
          </admin-group>
        </label-switched-path>
      </xsl:for-each>
    </mpls>
  </protocols>
</transient-change>
```

The SLAX equivalent is:

```
<transient-change> {
  <protocols> {
    <mpls> {
      <admin-groups> {
        <name> $color;
        <group-value> $group-value;
      }
      for-each (data[not(value)]/name) {
        <label-switched-path> {
          <name> $color _ '-lsp-' _ .;
          <to> .;
          <admin-group> {
            <include-any> $color;
          }
        }
      }
    }
  }
}
```

NOTE: The example shown here is partial. For a full example, see "Example: Creating Custom Configuration Syntax with Macros" on page 208.

After committing the configuration, the script runs, and the resulting full configuration looks like this:

```
[edit]
protocols {
  mpls {
    label-switched-path blue-lsp-10.1.1.1 {
      to 10.1.1.1;
      admin-group include-any blue;
    }
    label-switched-path blue-lsp-10.2.2.2 {
      to 10.2.2.2;
      admin-group include-any blue;
    }
    label-switched-path blue-lsp-10.3.3.3 {
      to 10.3.3.3;
      admin-group include-any blue;
    }
    label-switched-path blue-lsp-10.4.4.4 {
      to 10.4.4.4;
      admin-group include-any blue;
    }
```

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```
    }
}
```

The previous example demonstrates how you can use a simplified custom syntax to configure label-switched paths (LSPs). If your network design requires a large number of LSPs to be configured, using a commit script macro can save time, ensure consistency, and prevent configuration errors.

Other Ways to Use Macros

The example discussed in "Creating a Custom Syntax" on page 159 shows a macro that uses transient changes to create the intended operational impact. Alternatively, you can create a commit script that uses persistent changes to add the standard Junos OS statements to the candidate configuration and delete your custom syntax entirely. This way, a network operator who might be unfamiliar with your custom syntax can view the configuration file and see the full configuration rendered as standard Junos OS statements. Still, because the commit script macro remains in effect, you can quickly and easily create a complex configuration using your custom syntax.

In addition to the type of application discussed in "Creating a Custom Syntax" on page 159, you can also use macros to prevent a commit script from performing a task. For example, a basic commit script that automatically adds MPLS configuration to interfaces can make an exception for interfaces you explicitly tag as not requiring MPLS, by testing for the presence of an **apply-macro** statement named **no-mpls**. For an example of this use of macros, see "Example: Controlling LDP Configuration" on page 255.

You can use the **apply-macro** statement as a place to store external data. The commit script does not inspect the **apply-macro** statement, so the **apply-macro** statement has no operational impact on the device, but the data can be carried in the configuration file to be used by external applications.

Related Documentation

- Overview of Creating Custom Configuration Syntax with Macros on page 158
- Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements on page 207
- Example: Creating Custom Configuration Syntax with Macros on page 208

Configuration

- Creating and Executing Commit Scripts on page 165
- Generating a Custom Warning, Error, or System Log Message on page 178
- Generating a Persistent or Transient Configuration Changes on page 192
- Creating Custom Configuration Syntax with Macros on page 207
- Commit Script Examples on page 215
- Configuration Statements on page 309
- Junos XML and XSLT Tag Elements Used in Commit Scripts on page 320

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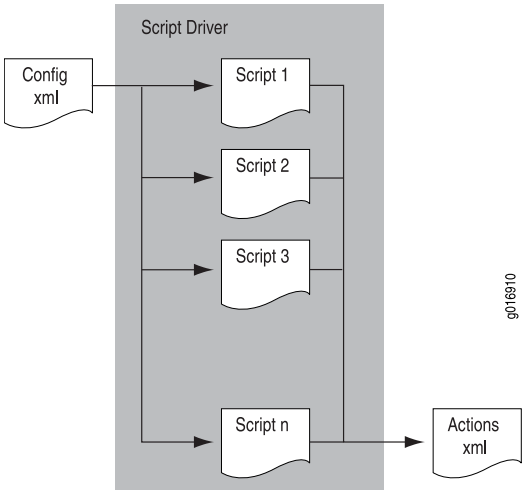
Creating and Executing Commit Scripts

- Avoiding Potential Conflicts When Using Multiple Commit Scripts on page 165
- Required Boilerplate for Commit Scripts on page 166
- XML Syntax for Common Commit Script Tasks on page 168
- Design Considerations for Commit Scripts on page 169
- Line-by-Line Explanation of Sample Commit Scripts on page 170
- Controlling Execution of Commit Scripts During Commit Operations on page 174
- Configuring Checksum Hashes for a Commit Script on page 177
- Executing Large Commit Scripts on page 178

Avoiding Potential Conflicts When Using Multiple Commit Scripts

When you use multiple commit scripts, each script evaluates the original candidate configuration file. Changes made by one script are not evaluated by the other scripts. This means that conflicts between scripts might not be resolved when the scripts are first applied to the configuration. The commit scripts are executed in the order they are listed at the **[edit system scripts commit]** hierarchy level, as illustrated in Figure 7 on page 165.

Figure 7: Configuration Evaluation by Multiple Commit Scripts



As an example of a conflict between commit scripts, suppose that commit script **A.xsl** is created to ensure that the device uses the domain name server with IP address **192.168.0.255**. Later, the DNS server's address is changed to **192.168.255.255** and a second script, **B.xsl**, is added to check that the device uses the DNS server with that address. However, script **A.xsl** is not removed or disabled.

Because each commit script evaluates the original candidate configuration, the final result of executing both scripts **A.xsl** and **B.xsl** depends on which DNS server address is configured in the original candidate configuration. If the now outdated address of **192.168.0.255** is configured, script **B.xsl** changes it to **192.168.255.255**. However, if the

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correct address of **192.168.255.255** is configured, script **A.xsl** changes it to the incorrect value **192.168.0.255**.

As another example of a potential conflict between commit scripts, suppose that a commit script protects a hierarchy using the **protect** attribute. If a second commit script attempts to modify or delete the hierarchy or the statements within the hierarchy, Junos OS issues a warning during the commit process and prevents the configuration change.

Exercise care to ensure that you do not introduce conflicts between scripts like those described in the examples. As a method of checking for conflicts with persistent changes, you can issue two separate **commit** commands.

Related Documentation

- How Commit Scripts Work on page 148

Required Boilerplate for Commit Scripts

When you write commit scripts, you use Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) tools provided with Junos OS. These tools include basic boilerplate that you must include in all commit scripts, optional extension functions that accomplish scripting tasks more easily, and named templates that make commit scripts easier to read and write, which you import from a file called **junos.xsl**. For more information about the extension functions and templates, see "Understanding Extension Functions in the jcs Namespace" on page 8 and "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28.

Commit scripts are based on Junos XML and Junos XML protocol tag elements. Like all XML elements, angle brackets enclose the name of a Junos XML or Junos XML protocol tag element in its opening and closing tags. This is an XML convention, and the brackets are a required part of the complete tag element name. They are not to be confused with the angle brackets used in the documentation to indicate optional parts of Junos OS CLI command strings.

You must include either XSLT or SLAX boilerplate as the starting point for all commit scripts that you create. The XSLT boilerplate follows:

XSLT Boilerplate for Commit Scripts

```
1  <?xml version="1.0" standalone="yes"?>
2  <xsl:stylesheet version="1.0"
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
7     <xsl:import href="../import/junos.xsl"/>

8     <xsl:template match="configuration">
        <!-- ... Insert your code here ... -->
9     </xsl:template>
10 </xsl:stylesheet>
```

Line 1 is the Extensible Markup Language (XML) processing instruction (PI). This PI specifies that the code is written in XML using version 1.0. The XML PI, if present, must be the first noncomment token in the script file.

```
1  <?xml version="1.0"?>
```


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Lines 2 through 6 set the style sheet element and the associated namespaces. Line 2 sets the style sheet version as 1.0. Lines 3 through 6 list all the namespace mappings commonly used in commit scripts. Not all of these prefixes are used in this example, but it is not an error to list namespace mappings that are not referenced. Listing all namespace mappings prevents errors if the mappings are used in later versions of the script.

```
2  <xsl:stylesheet version="1.0"
3    xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4    xmlns:junos="http://xml.juniper.net/junos/*/junos"
5    xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6    xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
```

Line 7 is an XSLT import statement. It loads the templates and variables from the file referenced as **../import/junos.xsl**, which ships as part of Junos OS. The **junos.xsl** file contains a set of named templates you can call in your scripts. These named templates are discussed in "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28 and "Junos Named Templates in the jcs Namespace Summary" on page 30.

```
7    <xsl:import href="../import/junos.xsl"/>
```

Line 8 defines a template that matches the **<configuration>** element, which is the node selected by the **<xsl:template match="/">** template, contained in the **junos.xsl** import file. The **<xsl:template match="configuration">** element allows you to exclude the **/configuration/** root element from all XML Path Language (XPath) expressions in the script and begin XPath expressions with the top Junos OS hierarchy level. For more information, see "XPath Overview" on page 50.

```
8    <xsl:template match="configuration">
```

Add your code between Lines 8 and 9.

Line 9 closes the template.

```
9    </xsl:template>
```

Line 10 closes the style sheet and the commit script.

```
10  </xsl:stylesheet>
```

SLAX Boilerplate for Commit Scripts

The corresponding SLAX boilerplate is as follows:

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  /*
  * Insert your code here
  */
}
```

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XML Syntax for Common Commit Script Tasks

A commit script can perform common configuration tasks by adding the appropriate attribute to a specific XML tag. Table 14 on page 168 summarizes the tasks and the syntax for each task.

Table 14: XML Syntax for Common Commit Script Tasks

Action	Syntax	Example
Add a data element	normal XML	<address> <name>192.168.1.1</name> </address>
Remove the inactive tag from a statement	active="active"	<address active="active"> <name>192.168.1.1/30</name> </address>
Delete a data element	delete="delete"	<address delete="delete"> <name>192.168.1.1/30</name> </address>
Add the inactive tag to a statement	inactive="inactive"	<address inactive="inactive"> <name>192.168.1.1/30</name> </address>
Insert a new ordered data element	insert="(before | after)" name="*reference-value*"	<address insert="before" name="192.168.1.5/30"> <name>192.168.1.1/30</name> </address>
Add the protect tag to a statement or node to prevent configuration changes to that element	protect="protect"	<address protect="protect""> <name>192.168.1.1/30</name> </address>
Rename a statement	rename="rename" name="*new-name*"	<address rename="rename" name="192.168.1.1/30"> <name>192.168.1.5/30</name> </address>
Replace a node or statement in the hierarchy	replace="replace"	<system> <services replace="replace"> [...] </services> </system>
Unprotect a statement or node in the hierarchy	unprotect="unprotect"	<address unprotect="unprotect"> <name>192.168.1.1/30</name> </address>

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Table 14: XML Syntax for Common Commit Script Tasks *(continued)*

Action	Syntax	Example
Annotate a configuration statement with a comment	<junos:comment>	<system> <junos:comment> /* added by *username* */ </junos:comment> <services> [...] </services> </system>

Design Considerations for Commit Scripts

After you have an understanding of XSLT and some experience looking at Junos OS configuration data in XML, creating commit scripts is fairly straightforward. This section provides some advice and common patterns for developing commit scripts.

XSLT is an interpreted language, making performance an important consideration. For best performance, minimize node traversals and testing performed on each node. When possible, use the **select** attribute on a recursive **<xsl:apply-templates>** invocation to limit the portion of the document hierarchy being visited.

For example, the following **select** attribute limits the nodes to be evaluated by specifying SONET/SDH interfaces that have the **inet** (IPv4) protocol family enabled:

```
<xsl:apply-templates select="interfaces/interface[starts-with(name, 'so-') and
unit/family/inet]"/>
```

The following example contains two **<xsl:apply-templates>** instructions that limit the scope of the script to the **import** statements configured at the **[edit protocols ospf]** and **[edit protocols isis]** hierarchy levels:

```
<xsl:template match="configuration">
  <xsl:apply-templates select="protocols/ospf/import"/>
  <xsl:apply-templates select="protocols/isis/import"/>
  <!-- ... body of template ... -->
</xsl:template>
```

In an interpreted language, doing anything more than once can affect performance. If the script needs to reference a node or node set repeatedly, make a variable that holds the node set, and then make multiple references to the variable. For example, the following variable declaration creates a variable called **mpls** that resolves to the **[edit protocols mpls]** hierarchy level. This allows the script to traverse the **/protocols/** hierarchy searching for the **mpls/** node only once.

```
<xsl:variable name="mpls" select="/protocols/mpls"/>
<xsl:choose>
  <xsl:when test="$mpls/path-mtu/allow-fragmentation">
    <!-- ... -->
  </xsl:when>
  <xsl:when test="$mpls/hop-limit &gt; 40">
    <!-- ... -->
  </xsl:when>
</xsl:choose>
```

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Variables are also important when using **<xsl:for-each>** instructions, because the current context node examines each node selected by the **<xsl:for-each>** instruction. For example, the following script uses multiple variables to store and refer to values as the **<xsl:for-each>** instruction evaluates the E1 interfaces that are configured on all channelized STM1 (**cstm1-**) interfaces:

```
<xsl:param name="limit" select="16"/>
<xsl:template match="configuration">
  <xsl:variable name="interfaces" select="interfaces"/>
  <xsl:for-each select="$interfaces/interface[starts-with(name, 'cstm1-')]">
    <xsl:variable name="triple" select="substring-after(name, 'cstm1-')"/>
    <xsl:variable name="e1name" select="concat('e1-', $triple)"/>
    <xsl:variable name="count"
          select="count($interfaces/interface[starts-with(name, $e1name)])"/>
    <xsl:if test="$count > $limit">
      <xnm:error>
        <edit-path>[edit interfaces]</edit-path>
        <statement><xsl:value-of select="name"/></statement>
        <message>
          <xsl:text>E1 interface limit exceeded on CSTM1 IQ PIC. </xsl:text>
          <xsl:value-of select="$count"/>
          <xsl:text> E1 interfaces are configured, but only </xsl:text>
          <xsl:value-of select="$limit"/>
          <xsl:text> are allowed.</xsl:text>
        </message>
      </xnm:error>
    </xsl:if>
  </xsl:for-each>
</xsl:template>
```

If you channelize a **cstm1-0/1/0** interface into 17 **E1** interfaces, the script causes the following error message to appear when you issue the **commit** command. (For more information about this example, see "Example: Limiting the Number of E1 Interfaces" on page 272.)

```
[edit]

user@host# commit
[edit interfaces]
    'cstm1-0/1/0'
    E1 interface limit exceeded on CSTM1 IQ PIC.
    17 E1 interfaces are configured, but only 16 are allowed.
error: 1 error reported by commit scripts
error: commit script failure
```

Line-by-Line Explanation of Sample Commit Scripts

- Applying a Change to SONET/SDH Interfaces on page 171
- Applying a Change to ISO-Enabled Interfaces on page 172

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Applying a Change to SONET/SDH Interfaces

The following commit script applies a transient change to each interface whose name begins with **so-**, setting the encapsulation to **ppp**. For information about transient changes, see "Overview of Generating Persistent or Transient Configuration Changes" on page 154. For a SLAX version of this example, see "Example: Generating a Transient Change" on page 202.

```
 1  <?xml version="1.0"?>
 2  <xsl:stylesheet version="1.0"
 3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
 4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
 5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
 6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
 7     <xsl:import href="../import/junos.xsl"/>

 8     <xsl:template match="configuration">
 9       <xsl:for-each select="interfaces/interface[starts-with(name, 'so-') \
          and unit/family/inet]">
10         <transient-change>
11           <interfaces>
12             <interface>
13               <name><xsl:value-of select="name"/></name>
14               <encapsulation>ppp</encapsulation>
15             </interface>
16           </interfaces>
17         </transient-change>
18       </xsl:for-each>
19     </xsl:template>
20   </xsl:stylesheet>
```

Lines 1 through 8 are boilerplate as described in "Required Boilerplate for Commit Scripts" on page 166 and are omitted here for brevity.

Line 9 is an **<xsl:for-each>** programming instruction that examines each interface node whose names starts with **so-** and that has **family inet** enabled on any logical unit. (It appears here on two lines only for brevity.)

```
 9       <xsl:for-each select="interfaces/interface[starts-with(name, 'so-') \
          and unit/family/inet]">
```

Line 10 is the open tag for a transient change. The possible contents of the **<transient-change>** element are the same as the contents of the **<configuration>** tag element in the Junos XML protocol operation **<load-configuration>**.

```
10         <transient-change>
```

Lines 11 through 16 represent the content of the transient change. The encapsulation is set to **ppp**.

```
11           <interfaces>
12             <interface>
13               <name><xsl:value-of select="name"/></name>
14               <encapsulation>ppp</encapsulation>
15             </interface>
16           </interfaces>
```

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Lines 17 through 19 close all open tags in this template.

```
17          </transient-change>
18        </xsl:for-each>
19      </xsl:template>
```

Line 20 closes the style sheet and the commit script.

```
20  </xsl:stylesheet>
```

Applying a Change to ISO-Enabled Interfaces

The following sample script ensures that interfaces that are enabled for an International Organization for Standardization (ISO) protocol also have MPLS enabled and are included at the **[edit protocols mpls interface]** hierarchy level. For a SLAX version of this example, see "Example: Controlling IS-IS and MPLS Interfaces" on page 251.

```
1  <?xml version="1.0"?>
2  <xsl:stylesheet version="1.0"
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
7     <xsl:import href="../import/junos.xsl"/>

8       <xsl:template match="configuration">
9         <xsl:variable name="mpls" select="protocols/mpls"/>
10        <xsl:for-each select="interfaces/interface/unit[family/iso]">
11        <xsl:variable name="ifname" select="concat(../name, '.', name)"/>
12        <xsl:if test="not(family/mpls)">
13          <xsl:call-template name="jcs:emit-change">
14            <xsl:with-param name="message">
15              <xsl:text>
16                Adding 'family mpls' to ISO-enabled interface
17              </xsl:text>
18            </xsl:with-param>
19            <xsl:with-param name="content">
20              <family>
21                <mpls/>
22              </family>
23            </xsl:with-param>
24          </xsl:call-template>
25        </xsl:if>
26        <xsl:if test="$mpls and not($mpls/interface[name = $ifname])">
27          <xsl:call-template name="jcs:emit-change">
28            <xsl:with-param name="message">
29              <xsl:text>Adding ISO-enabled interface </xsl:text>
30              <xsl:value-of select="$ifname"/>
31              <xsl:text> to [protocols mpls]</xsl:text>
32            </xsl:with-param>
33            <xsl:with-param name="dot" select="$mpls"/>
34            <xsl:with-param name="content">
35              <interface>
36                <name>
37                  <xsl:value-of select="$ifname"/>
38                </name>
39              </interface>
```


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```
40              </xsl:with-param>
41            </xsl:call-template>
42          </xsl:if>
43        </xsl:for-each>
44      </xsl:template>
45  </xsl:stylesheet>
```

Lines 1 through 8 are boilerplate as described in "Required Boilerplate for Commit Scripts" on page 166 and are omitted here for brevity.

Line 9 saves a reference to the **[edit protocols mpls]** hierarchy level so that it can be referenced in the following **for-each** loop.

```
9           <xsl:variable name="mpls" select="protocols/mpls"/>
```

Line 10 examines each interface unit (logical interface) on which ISO is enabled. The **select** stops at the **unit**, but the predicate limits the selection to only those units that contain an **<iso>** element nested under a **<family>** element.

```
10          <xsl:for-each select="interfaces/interface/unit[family/iso]">
```

Line 11 builds the interface name in a variable. First, the **name** attribute of the variable declaration is set to **ifname**. In Junos OS, an interface name is the concatenation of the device name, a period, and the unit number. At this point in the script, the context node is the unit number, because Line 10 changes the context to interfaces/interface/unit. The **../name** refers to the **<name>** element of the parent node of the context node, which is the device name (***type-fpc/pic/port***). The "**name**" token in the XPath expression refers to the **<name>** element of the context node, which is the unit number (***unit-number***). After the concatenation is performed, the XPath expression in Line 11 resolves to ***type-fpc/pic/port.unit-number***. As the **<xsl:for-each>** instruction in Line 10 traverses the hierarchy and locates ISO-enabled interfaces, the interface names are recursively stored in the **ifname** variable.

```
11          <xsl:variable name="ifname" select="concat(../name, '.', name)"/>
```

Line 12 evaluates as true for each ISO-enabled interface that does not have MPLS enabled.

```
12          <xsl:if test="not(family/mpls)">
```

Line 13 calls the **jcs:emit-change** template, which is a helper or convenience template in the **junos.xsl** file. This template is discussed in jcs:emit-change Template.

```
13            <xsl:call-template name="jcs:emit-change">
```

Lines 14 through 18 use the **message** parameter from the **jcs:emit-change** template. The message parameter is a shortcut you can use instead of explicitly including the **<warning>**, **<edit-path>**, and **<statement>** elements.

```
14              <xsl:with-param name="message">
15                <xsl:text>
16                  Adding 'family mpls' to ISO-enabled interface
17                </xsl:text>
18              </xsl:with-param>
```

Lines 19 through 23 use the **content** parameter from the **jcs:emit-change** template. The **content** parameter specifies the change to make, relative to the current context node.

```
19              <xsl:with-param name="content">
20                <family>
21                  <mpls/>
```

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```
22              </family>
23            </xsl:with-param>
```

Lines 24 and 25 close the tags opened in Lines 13 and 12, respectively.

```
24            </xsl:call-template>
25          </xsl:if>
```

Line 26 tests whether MPLS is already enabled and if this interface is not configured at the **[edit protocols mpls interface]** hierarchy level.

```
26          <xsl:if test="$mpls and not($mpls/interface[name = $ifname])">
```

Lines 27 through 41 contain another invocation of the **jcs:emit-change** template. In this invocation, the interface is added at the **[edit protocols mpls interface]** hierarchy level.

```
27              <xsl:call-template name="jcs:emit-change">
28                <xsl:with-param name="message">
29                  <xsl:text>Adding ISO-enabled interface </xsl:text>
30                  <xsl:value-of select="$ifname"/>
31                 <xsl:text> to [edit protocols mpls]</xsl:text>
32                </xsl:with-param>
33                <xsl:with-param name="dot" select="$mpls"/>
34                <xsl:with-param name="content">
35                  <interface>
36                  <name>
37                    <xsl:value-of select="$ifname"/>
38                  </name>
39                </interface>
40              </xsl:with-param>
41            </xsl:call-template>
```

Lines 42 through 45 close all open elements.

```
42          </xsl:if>
43        </xsl:for-each>
44      </xsl:template>
45  </xsl:stylesheet>
```

Related Documentation

- Example: Generating a Transient Change on page 202

Controlling Execution of Commit Scripts During Commit Operations

Commit scripts are stored on a device's hard drive in the **/var/db/scripts/commit** directory or on the flash drive in the **/config/scripts/commit** directory. Only users in the Junos OS superuser login class can access and edit files in these directories. For information about setting the storage location for scripts, see "Storing and Enabling Scripts" on page 85 and "Storing Scripts in Flash Memory" on page 86. A commit script is not actually executed during commit operations unless its filename is included at the **[edit system scripts commit file]** hierarchy level. To prevent execution of a commit script, delete the commit script's filename at that hierarchy level.

By default, the commit operation fails unless all scripts included at the **[edit system scripts commit file]** hierarchy level actually exist in the commit script directory. To enable the commit operation to succeed even if a script is missing, include the **optional** statement at the **[edit system scripts commit file *filename*]** hierarchy level. For example, you might

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want to mark a script as optional if you anticipate the need to quickly remove it from operation by deleting it from the commit script directory, but do not want to remove the commit script filename at the **[edit system scripts commit file]** hierarchy level. To enable use of the script again later, you simply replace the file in the commit script directory.

CAUTION: When you include the optional statement at the **[edit system scripts commit file *filename*]** hierarchy level, no error message is generated during the commit operation if the file does not exist. As a result, you might not be aware that a script is not executed as you expect.

You can also deactivate and reactivate commit scripts by issuing the **deactivate** and **activate** configuration mode commands. When a commit script is deactivated, the script is marked as inactive in the configuration and does not execute during the commit operation. When a commit script is reactivated, the script is again executed during the commit operation.

To determine which commit scripts are currently enabled on the device, use the **show** command to display the files included at the **[edit system scripts commit]** hierarchy level. To ensure that the enabled files are on the device, list the contents of the **/var/run/scripts/commit/** directory using the **file list /var/run/scripts/commit** operational mode command.

The filename of a commit script written in SLAX must include the **.slax** extension for the script to be executed. No filename extension is required for commit scripts written in XSLT, but we strongly recommend that you append the **.xsl** extension.

See the following sections:

- Enabling Commit Scripts to Execute During Commit Operations on page 175
- Preventing Commit Scripts from Executing During Commit Operations on page 176
- Deactivating Commit Scripts on page 176
- Activating Commit Scripts on page 177

Enabling Commit Scripts to Execute During Commit Operations

To configure a commit script to execute during a commit operation, follow these steps:

1. Ensure that the commit script is located in the correct directory: the **/var/db/scripts/commit** directory on the hard drive or the **/config/scripts/commit** directory on the flash drive. For more information about script storage location, see "Storing Scripts in Flash Memory" on page 86.
2. Enable the commit script by including the **file *filename*** statement at the **[edit system scripts commit]** hierarchy level. Only users who belong to the Junos OS **super-user** login class can enable commit scripts.

   ```
   [edit system scripts commit]
   user@host# set file filename <optional>
   ```

   - ***filename***—Name of the commit script.

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- **optional**—Enable the commit operation to succeed when the script file does not exist in the script directory. If this statement is omitted, the commit operation fails if the script does not exist.

3. Commit the configuration:

```
[edit]
user@host# commit
```

The commit script does not execute during this commit operation, but executes automatically during each subsequent commit operation.

Preventing Commit Scripts from Executing During Commit Operations

To prevent a commit script from executing during a commit operation, follow these steps:

1. Delete the commit script filename at the **[edit system scripts commit]** hierarchy level:

```
[edit system scripts commit]
user@host# delete file filename
```

   filename—Name of the commit script.

2. Remove the commit script from the commit script directory. Although removing the commit script from the commit script directory is not necessary, it is always a good policy to delete unused files from the system.

3. Commit your changes:

```
[edit]
user@host# commit
```

Deactivating Commit Scripts

To deactivate a commit script, follow these steps:

1. Issue the **deactivate** command:

```
[edit]
user@host# deactivate system scripts commit file filename
```

2. Commit your changes:

```
[edit]
user@host# commit
```

A deactivated commit script is marked as **inactive:** and ignored during a commit operation.

In this example, the script **mycommit.slax** is deactivated:

```
[edit]
user@host# deactivate system scripts commit file mycommit.slax
[edit]
user@host# show system scripts commit
inactive: file mycommit.slax
```


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Activating Commit Scripts

To activate an inactive commit script, follow these steps:

1. Issue the **activate** command:

   ```
   [edit]
   user@host# activate system scripts commit file filename
   ```

2. Commit your changes:

   ```
   [edit]
   user@host# commit
   ```

The commit script does not execute during this commit operation, but executes automatically during each subsequent commit operation.

Configuring Checksum Hashes for a Commit Script

You can configure one or more checksum hashes that can be used to verify the integrity of a commit script before the script runs on the switch, router, or security device.

To configure a checksum hash:

1. Create the script.
2. Place the script in the **/var/db/scripts/commit** directory on the device.
3. Run the script through one or more hash functions to calculate hash values.

   Junos OS supports MD5, SHA-1, and SHA-256 hash functions.

   ```
   user@host> file checksum md5 /var/db/scripts/commit/script1.slax
     MD5 (/var/db/scripts/commit/script1.slax) = 3af7884eb56e2d4489c2e49b26a39a97
   user@host> file checksum sha1 /var/db/scripts/commit/script1.slax
     SHA1 (/var/db/scripts/commit/script1.slax) =
     00dc690fb08fb049577d012486c9a6dad34212c0
   user@host> file checksum sha-256 /var/db/scripts/commit/script1.slax
     SHA256 (/var/db/scripts/commit/script1.slax) =
     150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
   ```

4. Configure the script.

   ```
   [edit system scripts commit]
   user@host# set file script1.slax checksum md5 3af7884eb56e2d4489c2e49b26a39a97
   [edit system scripts commit]
   user@host# set file script1.slax checksum
     sha-1 00dc690fb08fb049577d012486c9a6dad34212c0
   [edit system scripts commit]
   user@host# set file script1.slax checksum
     sha-256 150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
   ```

   During the execution of the script, Junos OS recalculates the checksum value using the configured hash and verifies that the calculated value matches the configured value. If the values differ, the execution of the script fails. When you configure multiple checksum values with different hash algorithms, all the configured values must match the calculated values; otherwise, the script execution fails. The commit operation also fails.

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Related Documentation

- Configuring Checksum Hashes for an Event Script on page 473
- Configuring Checksum Hashes for an Op Script on page 345
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*

Executing Large Commit Scripts

When you use large commit scripts, the standard commit model can have trouble reading these scripts. When this occurs, you can include the **direct-access** statement at the **[edit system scripts commit]** hierarchy level. When the **direct-access** statement is included, the script driver retrieves the candidate configuration directly from the configuration database. Once the candidate configuration is retrieved, the script driver processes this configuration file against the commit scripts and returns any generated actions to the management (mgd) process.

Directly accessing the configuration data and processing non-XML converted data are processor-intensive compared to the standard commit model. You should only use this feature to handle large files, because system performance is affected.

To set the script driver to directly access the candidate configuration, include the **direct-access** statement at the **[edit system scripts commit]** hierarchy level.

```
[edit system scripts commit]
direct-access;
```

Generating a Custom Warning, Error, or System Log Message

- Generating a Custom Warning, Error, or System Log Message on page 178
- Tag Elements to Use When Generating Messages on page 181
- Example: Generating a Custom Warning Message on page 183
- Example: Generating a Custom Error Message on page 186
- Example: Generating a Custom System Log Message on page 190

Generating a Custom Warning, Error, or System Log Message

To generate a custom warning, error, or system log message, follow these steps:

1. At the start of the script, include the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) boilerplate from "Required Boilerplate for Commit Scripts" on page 166. It is reproduced here for convenience:

   XSLT Boilerplate

   ```
   <?xml version="1.0" standalone="yes"?>
   <xsl:stylesheet version="1.0"
     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
     xmlns:junos="http://xml.juniper.net/junos/*/junos"
     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
   ```


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```
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <!-- ... insert your code here ... -->
  </xsl:template>
</xsl:stylesheet>
```

SLAX Boilerplate

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  /*
   * insert your code here
  */
}
```

2. At the position indicated by the comment "***Insert your code here***," include one or more XSLT programming instructions or their SLAX equivalents. Commonly used XSLT constructs include the following:

   - **<xsl:choose> <xsl:when> <xsl:otherwise>**—Conditional construct that causes different instructions to be processed in different circumstances. The **<xsl:choose>** instruction contains one or more **<xsl:when>** elements, each of which tests an XPath expression. If the test evaluates as true, the XSLT processor executes the instructions in the **<xsl:when>** element. The XSLT processor processes only the instructions contained in the first **<xsl:when>** element whose **test** attribute evaluates as true. If none of the **<xsl:when>** elements' **test** attributes evaluate as true, the content of the **<xsl:otherwise>** element, if there is one, is processed.
   - **<xsl:for-each select="*xpath-expression*">**—Programming instruction that tells the XSLT processor to gather together a set of nodes and process them one by one. The nodes are selected by the Extensible Markup Language (XML) Path Language (XPath) expression in the **select** attribute. Each of the nodes is then processed according to the instructions contained in the **<xsl:for-each>** instruction. Code inside an **<xsl:for-each>** instruction is evaluated recursively for each node that matches the XPath expression. The context is moved to the node during each pass.
   - **<xsl:if test="*xpath-expression*">**—Conditional construct that causes instructions to be processed if the XPath expression in the **test** attribute evaluates to **true**.

     For example, the following programming instruction evaluates as true when the **source-route** statement is not included at the **[edit chassis]** hierarchy level:

     ```
     <xsl:if test="not(chassis/source-route)">
     ```

     In SLAX, the **if** construct looks like this:

     ```
     if (not(chassis/source-route))
     ```

   For more information about how to use programming instructions, including examples and pseudocode, see "XSLT Programming Instructions Overview" on page 59. For

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information about writing scripts in SLAX instead of XSLT, see "SLAX Overview" on page 63.

3. Include a **<xnm:warning>**, **<xnm:error>**, or **<syslog>** element with a **<message>** child element that specifies the content of the message.

   For warning and error messages, you can include several other child elements, such as the **jcs:edit-path** and **jcs:statement** templates, which cause the warning or error message to include the relevant configuration hierarchy and statement information, as shown in the following examples.

   This **<xnm:warning>** element:

   ```
   <xnm:warning>
     <xsl:call-template name="jcs:edit-path">
       <xsl:with-param name="dot" select="chassis"/>
     </xsl:call-template>
     <message>IP source-route processing is not enabled.</message>
   </xnm:warning>
   ```

   emits this output when you issue the **commit** command:

   ```
   [edit]
   user@host# commit
   [edit chassis]
       warning: IP source-route processing is not enabled.
   commit complete
   ```

   This **<xnm:error>** element:

   ```
   <xnm:error>
     <xsl:call-template name="jcs:edit-path"/>
     <xsl:call-template name="jcs:statement"/>
     <message>Missing a description for this T1 interface.</message>
   </xnm:error>
   ```

   emits this output when you issue the **commit** command:

   ```
   [edit]
   user@host# commit
   [edit interfaces interface t1-0/0/0]
       'interface t1-0/0/0;'
       Missing a description for this T1 interface.
   error: 1 error reported by commit scripts
   error: commit script failure
   ```

   NOTE: If you are including a warning message in conjunction with a script-generated configuration change, you can generate the warning by including the message parameter with the jcs:emit-change template. The message parameter causes the jcs:emit-change template to call the <xnm:warning> template, which sends a warning notification to the CLI. (For more information, see "Overview of Generating Persistent or Transient Configuration Changes" on page 154.)

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For system log messages, the only supported child element is **<message>**:

```
<syslog>
  <message>syslog-string</message>
</syslog>
```

For a description of all the XSLT tags and attributes you can include, see "Tag Elements to Use When Generating Messages" on page 181.

For SLAX versions of these constructs, see "Example: Generating a Custom Warning Message" on page 183, "Example: Generating a Custom Error Message" on page 186, and "Example: Generating a Custom System Log Message" on page 190.

4. Save the script with a meaningful name.
5. Copy the script to either the **/var/db/scripts/commit** directory on the hard drive or the **/config/scripts/commit** directory on the flash drive. For information about setting the storage location for commit scripts, see "Storing Scripts in Flash Memory" on page 86.

   If the device has dual Routing Engines and you want the script to take effect on both of them, you must copy the script to the **/var/db/scripts/commit** or the **/config/scripts/commit** directory on both Routing Engines. The **commit synchronize** command does not copy scripts between Routing Engines.
6. Enable the script by including the **file** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   file filename;
   ```

   where ***filename*** is the name of the script.

Related Documentation

- Example: Generating a Custom Error Message on page 186
- Example: Generating a Custom System Log Message on page 190
- Example: Generating a Custom Warning Message on page 183

Tag Elements to Use When Generating Messages

Table 15 on page 181 summarizes the tag elements that you can include in a custom warning, error, or system log message. For examples, see "Example: Generating a Custom Warning Message" on page 183, "Example: Generating a Custom Error Message" on page 186, and "Example: Generating a Custom System Log Message" on page 190.

Table 15: Tags and Attributes for Creating Custom Warning, Error, and System Log Messages

Data Item, XML Element, or Attribute	Required or Supported	Description
Container Tags and Attributes		
<syslog>	Required for system log messages	Indicates that a system log message is going to be recorded.

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Table 15: Tags and Attributes for Creating Custom Warning, Error, and System Log Messages *(continued)*

Data Item, XML Element, or Attribute	Required or Supported	Description
<xnm:error>	Required for error messages	Indicates that the server has encountered a problem while processing the client application's request.
<xnm:warning>	Required for warning messages	Indicates that the server has encountered a problem while processing the client application's request.
xmlns ***url***	Supported in warning and error messages	Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.
xmlns:xnm ***url***	Required for warning and error messages. The **xmlns:xnm** element is included in the script boilerplate, which sets the namespace globally.	Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.
Content Tags		
<column>	Supported in warning and error messages only	Identifies the element that caused the error by specifying its position as the number of characters after the first character in the line specified by the **<line-number>** tag element in the configuration file that was being loaded (which is named in the **<filename>** tag element). We recommend combining the **<column>** tag with the **<line-number>** and **<filename>** tags.
<database-status-information>	Supported in error messages only	Provides information about the users currently editing the configuration.
<edit-path>	Supported in warning and error messages only	Specifies the level in the configuration hierarchy where the problem occurred, using the CLI configuration mode banner. We recommend combining the **<edit-path>** tag with the **<statement>** tag.
<filename>	Supported in warning and error messages only	Names the configuration file that was being loaded.
<line-number>	Supported in warning and error messages only	Specifies the line number where the error occurred in the configuration file that was being loaded, which is named by the **<filename>** tag element. We recommend combining the **<line-number>** tag with the **<column>** and **<filename>** tags.
<message>	Required in warning, error, and system log messages	Describes the warning, error, or system log message in a natural-language text string.
<parse/>	Supported in error messages only	Indicates that there was a syntactic error in the request submitted by the client application.

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Table 15: Tags and Attributes for Creating Custom Warning, Error, and System Log Messages *(continued)*

Data Item, XML Element, or Attribute	Required or Supported	Description
<reason>	Supported in warning and error messages only	Describes the reason for the warning or error message.
<re-name>	Supported in warning and error messages only	Names the Routing Engine on which the process named by the **<source-daemon>** tag element is running.
<source-daemon>	Supported in warning and error messages only	Names the Junos OS module that was processing the request in which the warning or error message occurred.
<statement>	Supported in warning and error messages only	Specifies the configuration statement in effect when the problem occurred. We recommend combining the **<statement>** tag with the **<edit-path>** tag.
<token>	Supported in warning and error messages only	Names the element in the request that caused the warning or error message.
<xsl:call-template name="jcs:edit-path">	Supported in warning and error messages only	Emits an **<edit-path>** element, which specifies the CLI configuration mode edit path in effect when the warning or error was generated. If the problem is not at the current position in the XML hierarchy, you can alter the edit path by passing the **dot** parameter. For example, **<xsl:param name="dot" select="system/ports/console"/>** changes the edit path to **[edit system ports console]**.
<xsl:call-template name="jcs:statement">	Supported in warning and error messages only	Emits a **<statement>** element, which describes the configuration statement in effect when the warning or error was generated. If the problem is not at the current position in the XML hierarchy, you can alter the statement by passing the **dot** parameter. For example, **<xsl:with-param name="dot" select="system/ports/console/type"/>** changes the statement to **type**.

Example: Generating a Custom Warning Message

This example commit script generates a custom warning message when a specific statement is not included in the device configuration. The commit process is not affected by warnings.

- Requirements on page 183
- Overview and Commit Script on page 184
- Configuration on page 185
- Verification on page 185

Requirements

This example uses a device running Junos OS.

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Overview and Commit Script

Using a commit script, write a custom warning message that appears when the **source-route** statement is not included at the **[edit chassis]** hierarchy level. (This example is the complete script for the sample **<xnm:warning>** element used in "Generating a Custom Warning, Error, or System Log Message" on page 178.)

The script is shown in both XSLT and SLAX syntax.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:if test="not(chassis/source-route)">
      <xnm:warning>
        <xsl:call-template name="jcs:edit-path">
          <xsl:with-param name="dot" select="chassis"/>
        </xsl:call-template>
        <message>IP source-route processing is not enabled.</message>
      </xnm:warning>
    </xsl:if>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  if (not(chassis/source-route)) {
    <xnm:warning> {
      call jcs:edit-path($dot = chassis);
      <message> "IP source-route processing is not enabled.";
    }
  }
}
```


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Configuration

Step-by-Step Procedure

Download, enable, and test the script. To test that a commit script generates a warning message correctly, make sure that the candidate configuration contains the condition that elicits the warning. For this example, ensure that the **source-route** statement is not included at the **[edit chassis]** hierarchy level.

To test the example in this topic, perform the following steps:

1. Copy the XSLT or SLAX script into a text file, name the file **source-route.xsl** or **source-route.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts commit]** hierarchy level and **source-route.xsl** or **source-route.slax** as appropriate.

   ```
   [edit]
   user@host# set system scripts commit file source-route.xsl
   ```

3. If the **source-route** statement is included at the **[edit chassis]** hierarchy level, issue the **delete chassis source-route** configuration mode command:

   ```
   [edit]
   user@host# delete chassis source-route
   ```

4. Issue the **commit and-quit** command.

   ```
   [edit]
   user@host# commit and-quit
   ```

Verification

Verifying Script Execution

Purpose

Verify the warning message generated by the commit script.

Action

Review the output of the **commit** command. The commit script generates a warning message when the **source-route** statement is not included at the **[edit chassis]** hierarchy level of the configuration. The warning does not affect the commit process.

```
[edit]
user@host# commit
[edit chassis]
  warning: IP source-route processing is not enabled.
commit complete
```

To display the XML-formatted version of the warning message, issue the **commit check | display xml** command:

```
[edit]

user@host# commit check | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
    <commit-results>
        <routing-engine junos:style="normal">
            <name>re0</name>
            <xnm:warning>
                <edit-path>
```

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```
                    [edit chassis]
                </edit-path>
                <message>
                    IP source-route processing is not enabled.
                </message>
            </xnm:warning>
            <commit-check-success/>
        </routing-engine>
    </commit-results>
</rpc-reply>
```

To display a detailed trace of commit script processing, issue the **commit check | display detail** command:

```
[edit]

user@host# commit check | display detail
2009-06-15 14:40:29 PDT: reading commit script configuration
2009-06-15 14:40:29 PDT: testing commit script configuration
2009-06-15 14:40:29 PDT: opening commit script
'/var/db/scripts/commit/source-route-warning.xsl'
2009-06-15 14:40:29 PDT: reading commit script 'source-route-warning.xsl'
2009-06-15 14:40:29 PDT: running commit script 'source-route-warning.xsl'
2009-06-15 14:40:29 PDT: processing commit script 'source-route-warning.xsl'
[edit chassis]
    warning: IP source-route processing is not enabled.
2009-06-15 14:40:29 PDT: no errors from source-route-warning.xsl
2009-06-15 14:40:29 PDT: saving commit script changes
2009-06-15 14:40:29 PDT: summary: changes 0, transients 0 (allowed), syslog 0
2009-06-15 14:40:29 PDT: no commit script changes
2009-06-15 14:40:29 PDT: exporting juniper.conf
2009-06-15 14:40:29 PDT: expanding groups
2009-06-15 14:40:29 PDT: finished expanding groups
2009-06-15 14:40:29 PDT: setup foreign files
2009-06-15 14:40:29 PDT: propagating foreign files
2009-06-15 14:40:30 PDT: complete foreign files
2009-06-15 14:40:30 PDT: daemons checking new configuration
configuration check succeeds
```

Related Documentation

- Example: Generating a Custom Error Message on page 186
- Example: Generating a Custom System Log Message on page 190
- Generating a Custom Warning, Error, or System Log Message on page 178

Example: Generating a Custom Error Message

This example commit script generates a custom error message when a specific statement is not included in the device configuration, thereby halting the commit operation.

- Requirements on page 187
- Overview and Commit Script on page 187
- Configuration on page 188
- Verification on page 188

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Requirements

This example uses a device running Junos OS.

Overview and Commit Script

Using a commit script, write a custom error message that appears when the **description** statement is not included at the **[edit interfaces t1-*fpc/pic/port*]** hierarchy level:

The script is shown in both XSLT and SLAX syntax.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="interface" select="interfaces/interface"/>
    <xsl:for-each select="$interface[starts-with(name, 't1-')]">
      <xsl:variable name="ifname" select="."/>
      <xsl:if test="not(description)">
        <xnm:error>
          <xsl:call-template name="jcs:edit-path"/>
          <xsl:call-template name="jcs:statement"/>
          <message>Missing a description for this T1 interface.</message>
        </xnm:error>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $interface = interfaces/interface;
  for-each ($interface[starts-with(name, 't1-')]) {
    var $ifname = .;
    if (not(description)) {
      <xnm:error> {
        call jcs:edit-path();
        call jcs:statement();
        <message> "Missing a description for this T1 interface.";
      }
    }
  }
}
```

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Configuration

Step-by-Step Procedure

Download, enable, and test the script: To test that a commit script generates an error message correctly, make sure that the candidate configuration contains the condition that elicits the error. For this example, ensure that the configuration for a T1 interface does not include the **description** statement.

To test the example in this topic, perform the following steps:

1. Copy the XSLT or SLAX script into a text file, name the file **description.xsl** or **description.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts commit]** hierarchy level and **description.xsl** or **description.slax** as appropriate.

   ```
   [edit]
   user@host# set system scripts commit file description.xsl
   ```

3. If the configuration for every T1 interface includes the **description** statement, issue the following configuration mode commands:

   ```
   [edit]
   user@host# edit interfaces t1-0/0/1
   [edit interfaces t1-0/0/1]
   user@host# delete description
   ```

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```

Verification

Verifying Script Execution

Purpose

Verify the error message generated by the commit script.

Action

Review the output of the **commit** command. The commit script generates an error message for each T1 interface that does not include a **description** statement. Any error causes the commit process to fail.

```
[edit]
user@host# commit
[edit interfaces interface t1-0/0/1]
  'description'
    Missing a description for this T1 interface.
[edit interfaces interface t1-0/0/2]
  'description'
    Missing a description for this T1 interface.
error: 2 errors reported by commit scripts
error: commit script failure
```

To display the XML-formatted version of the error message, issue the **commit check | display xml** command:

```
[edit interfaces t1-0/0/1]
```


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```
user@host# commit check | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
    <commit-results>
        <routing-engine junos:style="normal">
            <name>re0</name>
            <xnm:error>
                <edit-path>
                    [edit interfaces interface t1-0/0/1]
                </edit-path>
                <statement>
                    description
                </statement>
                <message>
                    Missing a description for this T1 interface.
                </message>
            </xnm:error>
            <xnm:error>
                <edit-path>
                    [edit interfaces interface t1-0/0/2]
                </edit-path>
                <statement>
                    description
                </statement>
                <message>
                    Missing a description for this T1 interface.
                </message>
            </xnm:error>
            <xnm:error xmlns="http://xml.juniper.net/xnm/1.1/xnm"
                               xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
                <message>
                    2 errors reported by commit scripts
                </message>
            </xnm:error>
            <xnm:error xmlns="http://xml.juniper.net/xnm/1.1/xnm"
          xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
                <message>
                    commit script failure
                </message>
            </xnm:error>
        </routing-engine>
    </commit-results>
    <cli>
        <banner>[edit interfaces]</banner>
    </cli>
</rpc-reply>
```

To display a detailed trace of commit script processing, issue the **commit check | display detail** command:

```
[edit interfaces t1-0/0/1]

user@host# commit check | display detail
2009-06-15 15:56:09 PDT: reading commit script configuration
2009-06-15 15:56:09 PDT: testing commit script configuration
2009-06-15 15:56:09 PDT: opening commit script '/var/db/scripts/commit/error.xsl'
2009-06-15 15:56:09 PDT: reading commit script 'error.xsl'
2009-06-15 15:56:09 PDT: running commit script 'error.xsl'
2009-06-15 15:56:09 PDT: processing commit script 'error.xsl'
[edit interfaces interface t1-0/0/1]
    'description'
        Missing a description for this T1 interface.
```

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```
[edit interfaces interface t1-0/0/2]
    'description'
        Missing a description for this T1 interface.
2009-06-15 15:56:09 PDT: 2 errors from script 'error.xsl'
error: 2 errors reported by commit scripts
error: commit script failure
```

Related Documentation

- Example: Generating a Custom System Log Message on page 190
- Example: Generating a Custom Warning Message on page 183
- Generating a Custom Warning, Error, or System Log Message on page 178

Example: Generating a Custom System Log Message

This example commit script generates a custom system log message when a specific statement is not included in the device configuration.

- Requirements on page 190
- Overview and Commit Script on page 190
- Configuration on page 191
- Verification on page 192

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

Using a commit script, write a custom system log message that appears when the **read-write** statement is not included at the **[edit snmp community *community-name* authorization]** hierarchy level.

The script is shown in both XSLT and SLAX syntax.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="snmp/community">
      <xsl:if test="not(authorization/read-write)">
        <syslog>
          <message>SNMP community does not have read-write access.
          </message>
        </syslog>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```


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SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (snmp/community) {
    if (not(authorization/read-write)) {
      <syslog> {
        <message> "SNMP community does not have read-write access.";
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

Download, enable, and test the script. To test that a commit script generates a system log message correctly, make sure that the candidate configuration contains the condition that elicits the system log message. For this example, ensure that the **read-write** statement is not included at the **[edit snmp community *community-name* authorization]** hierarchy level.

To test the example in this topic, perform the following steps:

1. Copy the XSLT or SLAX script into a text file, name the file **read-write.xsl** or **read-write.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. In configuration mode, include the **file** statement at the **[edit system scripts commit]** hierarchy level and **read-write.xsl** or **read-write.slax** as appropriate.

   ```
   [edit]
   user@host# set system scripts commit file read-write.xsl
   ```

3. If the **read-write** statement is included at the **[edit snmp community *community-name* authorization]** hierarchy level, issue the following configuration mode command:

   ```
   [edit]
   user@host# delete snmp community community-name authorization read-write
   ```

4. Issue the following command to verify that system logging is configured to write to a file (a commonly used file name is **messages**):

   ```
   [edit]
   user@host# show system syslog
   ```

   For information about system log configuration, see the *Junos OS System Log Messages Reference*.

5. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```

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Verification

Verifying Script Execution

Purpose Verify the system log message generated by the commit script.

Action System log messages are generated during a commit operation but not during a commit check operation. This means you cannot use the **commit check | display xml** or **commit check | display detail** configuration mode commands to verify the output of system log messages. When the commit operation completes, inspect the system log file. The default directory for log files is **/var/log/**. View the log file by issuing the **show log** *filename* operational mode command. For example, if messages are logged to the **messages** file, issue the following command:

```
user@host> show log messages
```

System log entries generated by commit scripts have the following format:

```
timestamp host-name cscript: message
```

Since the **read-write** statement was not included at the **[edit snmp community** *community-name* **authorization]** hierarchy level, the commit script should generate the "SNMP community does not have read-write access" message in the system log file.

```
Jun 3 14:34:37 host-name cscript: SNMP community does not have read-write access
```

Related Documentation

- Example: Generating a Custom Error Message on page 186
- Example: Generating a Custom Warning Message on page 183
- Generating a Custom Warning, Error, or System Log Message on page 178

Generating a Persistent or Transient Configuration Changes

- Generating a Persistent or Transient Change on page 192
- Removing a Persistent or Transient Change on page 197
- Tag Elements to Use When Generating Persistent and Transient Changes on page 198
- Example: Generating a Persistent Change on page 199
- Example: Generating a Transient Change on page 202

Generating a Persistent or Transient Change

To generate a persistent or transient change, follow these steps:

1. At the start of the script, include the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) boilerplate from "Required Boilerplate for Commit Scripts" on page 166. It is reproduced here for convenience:

   XSLT Boilerplate

   ```
   <?xml version="1.0" standalone="yes"?>
   <xsl:stylesheet version="1.0"
     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
   ```


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```
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <!-- ... Insert your code here ... -->
  </xsl:template>
</xsl:stylesheet>
```

SLAX Boilerplate

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  /*
  * Insert your code here
  */
}
```

2. At the position indicated by the comment "***Insert your code here***," include one or more XSLT programming instructions or their SLAX equivalents. Commonly used XSLT constructs include the following.

   - **<xsl:choose> <xsl:when> <xsl:otherwise>**—Conditional construct that causes different instructions to be processed in different circumstances. The **<xsl:choose>** instruction contains one or more **<xsl:when>** elements, each of which tests an XPath expression. If the test evaluates as true, the XSLT processor executes the instructions in the **<xsl:when>** element. The XSLT processor processes only the instructions contained in the first **<xsl:when>** element whose **test** attribute evaluates as true. If none of the **<xsl:when>** elements' **test** attributes evaluate as true, the content of the **<xsl:otherwise>** element, if there is one, is processed.
   - **<xsl:for-each select="*xpath-expression*">**—Programming instruction that tells the XSLT processor to gather together a set of nodes and process them one by one. The nodes are selected by the Extensible Markup Language (XML) Path Language (XPath) expression in the **select** attribute. Each of the nodes is then processed according to the instructions contained in the **<xsl:for-each>** instruction. Code inside an **<xsl:for-each>** instruction is evaluated recursively for each node that matches the XPath expression. The context is moved to the node during each pass.
   - **<xsl:if test="*xpath-expression*">**—Conditional construct that causes instructions to be processed if the XPath expression in the **test** attribute evaluates to **true**.

   For example, the following XSLT programming instructions select each SONET/SDH interface that does not have the MPLS protocol family enabled:

```
<xsl:for-each select="interfaces/interface[starts-with(name, 'so-')]/unit">
  <xsl:if test="not(family/mpls)">
```

In SLAX, the **for-each** and **if** constructs look like this:

```
for-each (interfaces/interface[starts-with(name, 'so-')]/unit) {
  if (not(family/mpls)) {
```

For more information about how to use programming instructions, including examples and pseudocode, see "XSLT Programming Instructions Overview" on page 59. For information about writing scripts in SLAX instead of XSLT, see "SLAX Overview" on page 63.

3. Include instructions for changing the configuration. There are two ways to generate a persistent change and two ways to generate a transient change. To generate a persistent change, you can either reference the **jcs:emit-change** template or include a **<change>** element. To generate a transient change, you can either reference the **jcs:emit-change** template and pass in the **tag** parameter with **'transient-change'** selected or include a **<transient-change>** element.

   The **jcs:emit-change** template allows for more efficient, less error-prone scripting because you can define the content of the change without specifying the complete XML hierarchy for the affected statement. Instead, the XML hierarchy is defined in the XPath expression contained in the script's programming instruction.

   Consider the following examples. Both of the persistent change examples have the same result, even though they place the **unit** statement in different locations in the **<xsl:for-each>** and **<xsl:if>** programming instructions. In both cases, the script searches for SONET/SDH interfaces that do not have the MPLS protocol family enabled, adds the **family mpls** statement at the **[edit interfaces so-*fpc/pic/port* unit *logical-unit-number*]** hierarchy level, and emits a warning message stating that the configuration has been changed. Likewise, both of the transient change examples have the same result. They both set Point-to-Point Protocol (PPP) encapsulation on all SONET/SDH interface that have IP version 4 (IPv4) enabled.

   Persistent Change Generated with the jcs:emit-change Template

   In this example, the content of the persistent change (contained in the **content** parameter) is specified without including the complete XML hierarchy. Instead, the XPath expression in the **<xsl:for-each>** programming instruction sets the context for the change.

   The message parameter is also included. This parameter causes the **jcs:emit-change** template to call the **<xnm:warning>** template, which sends a warning notification to the CLI. The message parameter automatically includes the current hierarchy information in the warning message. (For more information about the parameters available with the **jcs:emit-change** template, see jcs:emit-change Template.)

```
<xsl:for-each select="interfaces/interface[starts-with(name, 'so-')]/unit">
  <xsl:if test="not(family/mpls)">
    <xsl:call-template name="jcs:emit-change">
      <xsl:with-param name="content">
          <family>
            <mpls/>
          </family>
      </xsl:with-param>
      <xsl:with-param name="message">
        <xsl:text>Adding 'family mpls' to SONET interface.</xsl:text>
```

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```
        </xsl:with-param>
      </xsl:call-template>
    </xsl:if>
  </xsl:for-each>
```

Persistent Change Generated with the <change> Element

In this example, the complete XML hierarchy leading to the affected statement must be included as child elements of the **<change>** element.

This example includes the current hierarchy information in the warning message by referencing the **jcs:edit-path** and **jcs:statement** templates. For more information about warning messages, see "Overview of Generating Custom Warning, Error, and System Log Messages" on page 153.

```
<xsl:for-each select="interfaces/interface[starts-with(name, 'so-')]">
  <xsl:if test="not(unit/family/mpls)">
    <change>
      <interfaces>
        <interface>
          <name><xsl:value-of select="name"/></name>
          <unit>
            <name><xsl:value-of select="unit/name"/></name>
            <family>
              <mpls/>
            </family>
          </unit>
        </interface>
      </interfaces>
    </change>
    <xnm:warning>
      <xsl:call-template name="jcs:edit-path"/>
      <xsl:call-template name="jcs:statement">
        <xsl:with-param name="dot" select="unit/name"/>
      </xsl:call-template>
      <message>Adding 'family mpls' to SONET interface.</message>
    </xnm:warning>
  </xsl:if>
</xsl:for-each>
```

Transient Change Generated with the jcs:emit-change Template

In this example, the content of the transient change (contained in the **content** parameter) is specified without including the complete XML hierarchy. Instead, the XPath expression in the **<xsl:for-each>** programming instruction sets the context of the change. The **and** operator in the XPath expression means both operands are **true** when converted to Booleans; the second operand is not evaluated if the first operand is **false**.

The tag parameter is included with '**transient-change**' selected. Without the **tag** parameter, the **jcs:emit-change** template generates a persistent change by default. (For more information about the parameters available with the **jcs:emit-change** template, see jcs:emit-change Template.)

```
<xsl:for-each select="interfaces/interface[starts-with(name, 'so-') \
            and unit/family/inet]">
  <xsl:call-template name="jcs:emit-change">
```

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```
      <xsl:with-param name="tag" select="'transient-change'"/>
      <xsl:with-param name="content">
        <encapsulation>ppp</encapsulation>
      </xsl:with-param>
    </xsl:call-template>
  </xsl:for-each>
```

Transient Change Generated with the <transient-change> Element

In this example, the complete XML hierarchy leading to the affected statement must be included as child elements of the **<transient-change>** element.

```
<xsl:for-each select="interfaces/interface[starts-with(name, 'so-')\
            and unit/family/inet]">
  <transient-change>
    <interfaces>
      <interface>
        <name><xsl:value-of select="name"/></name>
        <encapsulation>ppp</encapsulation>
      </interface>
    </interfaces>
  </transient-change>
</xsl:for-each>
```

4. Save the script with a meaningful name.
5. Copy the script to either the **/var/db/scripts/commit** directory on the device hard drive or the **/config/scripts/commit** directory on the flash drive. For information about setting the storage location for commit scripts, see "Storing Scripts in Flash Memory" on page 86.

   If the device has dual Routing Engines and you want the script to take effect on both of them, you must copy the script to the **/var/db/scripts/commit** or the **/config/scripts/commit** directory on both Routing Engines. The **commit synchronize** command does not copy scripts between Routing Engines.
6. Enable the script by including the **file** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   file filename;
   ```

   where ***filename*** is the name you assigned in Step 4.
7. If the script makes transient changes, include the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   allow-transients;
   ```

If all the commit scripts run without errors, any transient changes are loaded into the checkout configuration, but not to the candidate configuration. Any persistent changes are loaded into the candidate configuration. The commit process then continues by validating the configuration and propagating changes to the affected processes on the device.

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To display the configuration with both persistent and transient changes applied, issue the **show | display commit-scripts** configuration mode command:

```
[edit]
user@host# show | display commit-scripts
```

To display the configuration with only persistent changes applied, issue the **show | display commit-scripts no-transients** configuration mode command:

```
[edit]
user@host# show | display commit-scripts no-transients
```

Persistent and transient changes are loaded into the configuration in the same manner that the **load replace** configuration mode command loads an incoming configuration. When generating a persistent or transient change, adding the **replace="replace"** attribute to a configuration element produces the same behavior as a **replace:** tag in a **load replace** operation. Both persistent and transient changes are loaded into the configuration with the **load replace** behavior, but persistent changes are loaded into the candidate configuration and transient changes are loaded into the checkout configuration.

Removing a Persistent or Transient Change

After a commit script changes the configuration, you can remove the change and return the configuration to its previous state.

For persistent changes only, you can undo the configuration change by issuing the **delete**, **deactivate**, or **rollback** configuration mode command and committing the configuration. For both persistent and transient changes, you must remove, delete, or deactivate the associated commit script, or else the commit script regenerates the change during a subsequent commit operation.

Deleting the **file *filename*** statement from the configuration effectively "unconfigures" the functionality associated with the corresponding commit script. Deactivating the statement adds the **inactive:** tag to the statement, effectively commenting out the statement from the configuration. Statements marked as inactive do not take effect when you issue the **commit** command.

To reverse the effect of a commit script and prevent the script from running again, perform the following steps:

1. For persistent changes only, delete or deactivate the statement that was added by the commit script:

   ```
   [edit]
   user@host# delete (statement | identifier)
   - OR –
   user@host# deactivate (statement | identifier)
   ```

   Alternatively, you can roll back the configuration to a candidate that does not contain the statement.

   ```
   [edit]
   user@host# rollback number
   ```

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2. Either delete or deactivate the commit script, or remove or comment out the section of code that generates the unwanted change. To delete or deactivate the script, issue one of the following commands.

   ```
   [edit]
   user@host# delete system scripts commit file filename
   - OR –
   user@host# deactivate system scripts commit file filename
   ```

3. Issue the **commit** command:

   ```
   [edit]
   user@host# commit
   ```

4. If you are deleting the reference to the script from the configuration, you can also remove the file from commit scripts storage directory (either **/var/db/scripts/commit** on the hard drive or **/config/scripts/commit** on the flash drive; for information about setting the storage location for commit scripts, see "Storing Scripts in Flash Memory" on page 86.) To do this, exit configuration mode and issue the **file delete** operational mode command:

   ```
   [edit]
   user@host# exit

   user@host> file delete /var/db/scripts/commit/filename
   - OR –
   user@host> file delete /config/scripts/commit/filename
   ```

Tag Elements to Use When Generating Persistent and Transient Changes

Table 16 on page 198 describes the data that you can include in the **<change>** tag element in a commit script. To see how data values are supplied within a script, see *Examples: Generating Persistent and Transient Changes*.

Table 16: Tags and Attributes for Creating Configuration Changes

Data Item, XML Element, or Attribute	Description
Container Tags	
<change>	Request that the Junos XML protocol server load configuration data into the candidate configuration.
<transient-change>	Request that the Junos XML protocol server load configuration data into the configuration.
Content Tags	
<jcs:emit-change>	This is a template in the file **junos.xsl**. This template converts the contents of the **<xsl:with-param>** element into a **<change>** request.
<xsl:with-param name="content">	You use the **content** parameter with the **jcs:emit-change** template. It allows you to include the content of the change, relative to **dot**.

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Table 16: Tags and Attributes for Creating Configuration Changes *(continued)*

Data Item, XML Element, or Attribute	Description
<xsl:with-param name="tag" select="'transient-change'"/>	Convert the contents of the **content** parameter into a **<transient-change>** request. You use the **tag** parameter with the **jcs:emit-change** template. By default, the **jcs:emit-change** template converts the contents of the **content** parameter into a **<change>** (persistent change) request.

Example: Generating a Persistent Change

If you do not explicitly configure the MPLS protocol family on an interface, the interface is not enabled for MPLS applications. This example generates a persistent change that adds the **family mpls** statement in the configuration of SONET/SDH interfaces when the statement is not already included in the configuration.

- Requirements on page 199
- Overview and Commit Script on page 199
- Configuration on page 200
- Verification on page 202

Requirements

This example uses a device running Junos OS with one or more SONET/SDH interfaces.

Overview and Commit Script

The commit script in this example finds all SONET/SDH interfaces that have a logical interface configured but that do not have the **family mpls** statement configured. For these interfaces, the script adds the **family mpls** statement to the interface configuration as a persistent change at the **[edit interfaces** ***interface-name*** **unit** ***logical-unit-number*** hierarchy level.

The persistent change is generated by the **jcs:emit-change** template, which is a helper template contained in the **junos.xsl** import file. The **tag** parameter of the **jcs:emit-change** template is omitted, which directs the script to emit the change as a persistent change. The **content** parameter of the **jcs:emit-change** template includes the configuration statements to be added as a persistent change. The **message** parameter of the **jcs:emit-change** template includes the warning message to be displayed in the CLI, notifying you that the configuration has been changed.

The script is shown in both XSLT and SLAX syntax.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
```

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```
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 'so-')]/unit">
      <xsl:if test="not(family/mpls)">
        <xsl:call-template name="jcs:emit-change">
          <xsl:with-param name="message">
            <xsl:text>Adding 'family mpls' to SONET/SDH interface.</xsl:text>
          </xsl:with-param>
          <xsl:with-param name="content">
              <family>
                <mpls/>
              </family>
          </xsl:with-param>
        </xsl:call-template>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/interface[starts-with(name, 'so-')]/unit) {
    if (not(family/mpls)) {
      call jcs:emit-change() {
        with $message = {
          expr "Adding 'family mpls' to SONET/SDH interface.";
        }
        with $content = {
          <family> {
            <mpls>;
          }
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

Download, enable, and test the script.

1. Copy the XSLT or SLAX script into a text file, name the file **mpls.xsl** or **mpls.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. In configuration mode, include the **file** statement at the **[edit system scripts commit]** hierarchy level and **mpls.xsl** or **mpls.slax** as appropriate.

   ```
   [edit]
   ```


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```
user@host# set system scripts commit file mpls.xsl
```

3. To test that the commit script generates the persistent change correctly, make sure that the configuration contains the condition that elicits the change. To test this script, ensure that the **family mpls** statement is not included at the **[edit interfaces so-*fpc/pic/port* unit *logical-unit-number*]** hierarchy level for at least one SONET/SDH interface.

   If the **family mpls** statement is included at the **[edit interfaces so-*fpc/pic/port* unit *logical-unit-number*]** hierarchy level, issue the following configuration mode command to delete the statement:

   ```
   [edit]
   user@host# delete interfaces so-fpc/pic/port unit logical-unit-number family mpls
   ```

4. The **commit check** command verifies the syntax of the configuration prior to a commit, but it does not commit the changes. The commit script in this example produces a message for each change it makes. Use the **commit check** command to preview these messages to determine whether the script will update the configuration with the **family mpls** statement for the appropriate interfaces.

   Issue the **commit check | display xml** command to display the XML-formatted version of the message. The sample output indicates that the script will add the **family mpls** statement to the so-2/3/4 interface configuration during the commit operation.

   ```
   [edit]

   user@host# commit check | display xml
   <rpc-reply xmlns:junos="http://xml.juniper.net/junos/11.2R1/junos">
       <commit-results>
           <routing-engine junos:style="normal">
               <name>re0</name>
               <xnm:warning xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
                   <edit-path>
                       [edit interfaces interface so-2/3/4 unit 0]
                   </edit-path>
                   <message>
                       Adding 'family mpls' to SONET/SDH interface.
                   </message>
               </xnm:warning>
               <commit-check-success/>
           </routing-engine>
       </commit-results>
   </rpc-reply>
   ```

5. To display a detailed trace of commit script processing, issue the **commit check | display detail** command. In the sample output, there is one persistent change that will be loaded into the configuration during the commit operation.

   ```
   [edit]

   user@host# commit check | display detail
   2011-06-17 14:17:35 PDT: reading commit script configuration
   2011-06-17 14:17:35 PDT: testing commit script configuration
   2011-06-17 14:17:35 PDT: opening commit script
   '/var/db/scripts/commit/mpls.xsl'
   2011-06-17 14:17:35 PDT: reading commit script 'mpls.xsl'
   2011-06-17 14:17:35 PDT: running commit script 'mpls.xsl'
   2011-06-17 14:17:35 PDT: processing commit script 'mpls.xsl'
   2011-06-17 14:17:35 PDT: no errors from mpls.xsl
   ```

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```
2011-06-17 14:17:35 PDT: saving commit script changes for script mpls.xsl
2011-06-17 14:17:35 PDT: summary of script mpls.xsl: changes 1, transients
0, syslog 0
2011-06-17 14:17:35 PDT: start loading commit script changes
2011-06-17 14:17:35 PDT: loading commit script changes into real db
2011-06-17 14:17:35 PDT: finished commit script changes into real db
2011-06-17 14:17:35 PDT: no transient commit script changes
2011-06-17 14:17:35 PDT: finished loading commit script changes
2011-06-17 14:17:35 PDT: copying juniper.db to juniper.data+
2011-06-17 14:17:35 PDT: finished copying juniper.db to juniper.data+
...
configuration check succeeds
```

6. After verifying that the script produces the correct changes, issue the **commit** command to start the commit operation and execute the script.

   user@host# **commit**

Verification

Verifying the Configuration

Purpose Verify that the correct changes are integrated into the configuration.

Action After executing the commit operation, view the configuration by issuing the **show interfaces** configuration mode command. If the MPLS protocol family is not enabled on one or more SONET/SDH interfaces before the script runs, the output is similar to the following:

```
[edit]
user@host# show interfaces
... other configured interface types ...
so-2/3/4 {
    unit 0 {
        family mpls; # Added by persistent change
    }
}
... other configured interface types ...
```

Related Documentation

- Example: Generating a Transient Change on page 202
- Generating a Persistent or Transient Change on page 192
- Overview of Generating Persistent or Transient Configuration Changes on page 154
- Removing a Persistent or Transient Change on page 197
- jcs:emit-change Template on page 31

Example: Generating a Transient Change

This example uses a commit script to set PPP encapsulation on all SONET/SDH interfaces with the IPv4 protocol family enabled. The changes are added as transient changes.

- Requirements on page 203
- Overview and Commit Script on page 203

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- Configuration on page 204
- Verification on page 205
- Troubleshooting on page 206

Requirements

This example uses a device running Junos OS with one or more SONET/SDH interfaces.

Overview and Commit Script

The commit script in this example finds all SONET/SDH interfaces with the IPv4 protocol family enabled in the configuration and adds the **encapsulation ppp** statement to the interface configuration. The transient change is generated by the **jcs:emit-change** template, which is a helper template contained in the **junos.xsl** import file. The **tag** parameter of the **jcs:emit-change** template has the value **transient-change**, which directs the script to emit the change as a transient change rather than a persistent change. The **content** parameter of the **jcs:emit-change** template includes the configuration statements to be added as a transient change.

The script is shown in both XSLT and SLAX syntax.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 'so-')
          and unit/family/inet]">
      <xsl:call-template name="jcs:emit-change">
        <xsl:with-param name="tag" select="'transient-change'"/>
        <xsl:with-param name="content">
          <encapsulation>ppp</encapsulation>
        </xsl:with-param>
      </xsl:call-template>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/interface[starts-with(name, 'so-') and unit/family/inet]) {
    call jcs:emit-change($tag = 'transient-change') {
      with $content = {
        <encapsulation> "ppp";
      }
    }
```

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```
    }
  }
```

Configuration

Step-by-Step Procedure

Download, enable, and test the script.

1. Copy the XSLT or SLAX script into a text file, name the file **encap-ppp.xsl** or **encap-ppp.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. In configuration mode, include the **file** statement at the **[edit system scripts commit]** hierarchy level and **encap-ppp.xsl** or **encap-ppp.slax** as appropriate.

   ```
   [edit]
   user@host# set system scripts commit file encap-ppp.xsl
   ```

3. Include the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level. This enables commit scripts to load transient changes into the checkout configuration.

   ```
   [edit]
   user@host# set system scripts commit allow-transients
   ```

4. To test that the commit script generates the transient change correctly, make sure that the configuration contains the condition that elicits the change. Ensure that the **encapsulation ppp** statement is not included at the **[edit interfaces so-*fpc/pic/port*]** hierarchy level for at least one SONET/SDH interface.

   If the **encapsulation ppp** statement is included at the **[edit interfaces so-*fpc/pic/port*]** hierarchy level, issue the following configuration mode command to delete the statement:

   ```
   [edit]
   user@host# delete interfaces so-fpc/pic/port encapsulation ppp
   ```

5. The **commit check** command verifies the syntax of the configuration prior to a commit, but it does not commit the changes. Issue the **commit check** command to preview a trace of commit script processing to verify that the script will add the transient change to the checkout configuration.

   Issue the **commit check | display detail** command to display a detailed trace of commit script processing. In the sample output, there are two transient changes that are loaded into the checkout configuration.

   ```
   [edit]

   user@host# commit check | display detail
   2011-06-15 12:07:30 PDT: reading commit script configuration
   2011-06-15 12:07:30 PDT: testing commit script configuration
   2011-06-15 12:07:30 PDT: opening commit script
   '/var/db/scripts/commit/encap-ppp.xsl'
   2011-06-15 12:07:30 PDT: reading commit script 'encap-ppp.xsl'
   2011-06-15 12:07:30 PDT: running commit script 'encap-ppp.xsl'
   2011-06-15 12:07:30 PDT: processing commit script 'encap-ppp.xsl'
   2011-06-15 12:07:30 PDT: no errors from encap-ppp.xsl
   2011-06-15 12:07:30 PDT: saving commit script changes for script encap-ppp.xsl
   2011-06-15 12:07:30 PDT: summary of script encap-ppp.xsl: changes 0,
   transients 2 (allowed), syslog 0
   ```


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```
2011-06-15 12:07:30 PDT: start loading commit script changes
2011-06-15 12:07:30 PDT: no commit script changes
2011-06-15 12:07:30 PDT: updating transient changes into transient tree
2011-06-15 12:07:30 PDT: finished loading commit script changes
2011-06-15 12:07:30 PDT: copying juniper.db to juniper.data+
2011-06-15 12:07:30 PDT: finished copying juniper.db to juniper.data+
2011-06-15 12:07:30 PDT: exporting juniper.conf
2011-06-15 12:07:30 PDT: merging transient changes
...
configuration check succeeds
```

6. After verifying that the script produces the correct changes, issue the **commit** command to start the commit operation and execute the script.

   user@host# **commit**

Verification

Verifying the Configuration

Purpose Verify that the correct changes are integrated into the checkout configuration. If there are one or more SONET/SDH interfaces with the IPv4 protocol family enabled, you should see the **encapsulation ppp** statement added as a transient change to the interface hierarchy.

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Action To view the configuration with transient changes, issue the **show interfaces | display commit-scripts** configuration mode command. The **show interfaces | display commit-scripts** command displays all the statements that are in the configuration, including statements that are generated by transient changes. If there are one or more SONET/SDH interfaces with the IPv4 protocol family enabled, the output is similar to the following:

```
[edit]

user@host# show interfaces | display commit-scripts
... other configured interface types ...
so-1/2/3 {
    mtu 576;
    encapsulation ppp; /* Added by transient change. */
    unit 0 {
        family inet {
            address 10.0.0.3/32;
        }
    }
}
so-1/2/4 {
    encapsulation ppp; /* Added by transient change. */
    unit 0 {
        family inet {
            address 10.0.0.4/32;
        }
    }
}
so-2/3/4 {
   encapsulation cisco-hdlc; # Not affected by this script, because IPv4 protocol
                             # family is not configured on this interface.
    unit 0 {
        family mpls;
    }
}
... other configured interface types ...
```

Troubleshooting

Troubleshooting Commit Errors

Problem The CLI generates an invalid transient change error, and the commit fails.

```
user@host# commit check
error: invalid transient change generated by commit script: encap-ppp.xsl
warning: 1 transient change was generated without [system scripts commit
allow-transients]
error: 1 error reported by commit scripts
error: commit script failure
```

Solution You must configure the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level to enable commit scripts to load transient changes into the checkout configuration.

Issue the following configuration mode command to allow transient changes:

```
[edit]
user@host# set system scripts commit allow-transients
```

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Related Documentation

- Example: Generating a Persistent Change on page 199
- Generating a Persistent or Transient Change on page 192
- Overview of Generating Persistent or Transient Configuration Changes on page 154
- Removing a Persistent or Transient Change on page 197
- jcs:emit-change Template on page 31

Creating Custom Configuration Syntax with Macros

- Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements on page 207
- Example: Creating Custom Configuration Syntax with Macros on page 208

Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements

By itself, the custom syntax in an **apply-macro** statement has no operational impact on the device. To give meaning to your syntax, there must be a corresponding commit script that uses the syntax as data for generating related standard Junos OS statements. To write such a script, follow these steps:

1. At the start of the script, include the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) boilerplate from "Required Boilerplate for Commit Scripts" on page 166. It is reproduced here for convenience:

   XSLT Boilerplate

   ```
   <?xml version="1.0" standalone="yes"?>
   <xsl:stylesheet version="1.0"
     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
     xmlns:junos="http://xml.juniper.net/junos/*/junos"
     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
     <xsl:import href="../import/junos.xsl"/>

     <xsl:template match="configuration">
       <!-- ... Insert your code here ... -->
     </xsl:template>
   </xsl:stylesheet>
   ```

   SLAX Boilerplate

   ```
   version 1.0;
   ns junos = "http://xml.juniper.net/junos/*/junos";
   ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
   ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
   import "../import/junos.xsl";

   match configuration {
     /*
     * Insert your code here
     */
   ```

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```
}
```

2. At the position indicated by the comment "***Insert your code here***," include XSLT programming instructions (or their SLAX equivalents) that inspect the configuration for the **apply-macro** statement at a specified hierarchy level and change the configuration to include standard Junos OS CLI syntax.

   For an example that uses both types of instructions and includes a line-by-line analysis of the XSLT syntax, see "Example: Creating Custom Configuration Syntax with Macros" on page 208.

3. Save the script with a meaningful name.

4. Copy the script to either the **/var/db/scripts/commit** directory on the hard drive or the **/config/scripts/commit** directory on the flash drive. For information about setting the storage location for commit scripts, see "Storing Scripts in Flash Memory" on page 86.

   If the device has dual Routing Engines and you want the script to take effect on both of them, you must copy the script to the **/var/db/scripts/commit** or the **/config/scripts/commit** directory on both Routing Engines. The **commit synchronize** command does not copy scripts between Routing Engines.

5. Enable the script by including the **file** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   file filename;
   ```

   where ***filename*** is the name of the script.

6. If the script makes transient changes, include the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   allow-transients;
   ```

If all the commit scripts run without errors, any transient changes are loaded into the checkout configuration, but not to the candidate configuration. Any persistent changes are loaded into the candidate configuration. The commit process then continues by validating the configuration and propagating changes to the affected processes on the device running Junos OS.

Related Documentation

- Overview of Creating Custom Configuration Syntax with Macros on page 158
- How Macros Work on page 159
- Example: Creating Custom Configuration Syntax with Macros on page 208

Example: Creating Custom Configuration Syntax with Macros

This commit script example shows how to create custom configuration syntax using macros.

- Requirements on page 209
- Overview and Commit Script on page 209

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- Configuration on page 213
- Verification on page 214

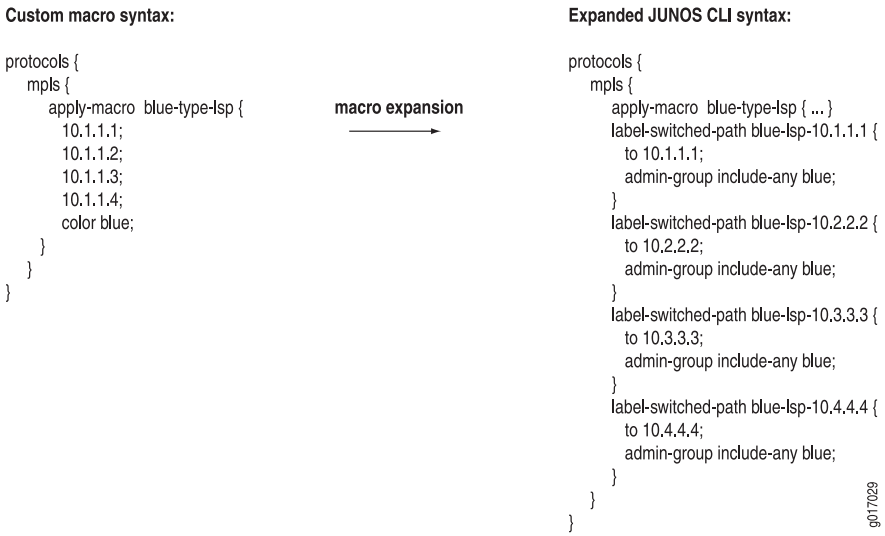
Requirements

This example uses a device running Junos OS.

Overview and Commit Script

Figure 8 on page 209 shows a macro that uses custom syntax and the corresponding expansion to standard Junos OS command-line interface (CLI) syntax.

Figure 8: Sample Macro and Corresponding Junos OS CLI Expansion



In this example, the Junos OS management (mgd) process inspects the configuration, looking for **apply-macro** statements. For each **apply-macro** statement with the **color** parameter included at the **[edit protocols mpls]** hierarchy level, the script generates a transient change, using the data provided within the **apply-macro** statement to expand the macro into a standard Junos OS administrative group for LSPs.

For this example to work, an **apply-macro** statement must be included at the **[edit protocols mpls]** hierarchy level with a set of addresses, a **color**, and a **group-value** parameter. The commit script converts each address to an LSP configuration, and the script converts the **color** parameter into an administrative group.

Following are the commit script instructions that expand the macro in Figure 8 on page 209 and a line-by-line explanation of the script:

XSLT Syntax

```
1  <?xml version="1.0" standalone="yes"?>
2  <xsl:stylesheet version="1.0"
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
7     <xsl:import href="../import/junos.xsl"/>

8     <xsl:template match="configuration">
```

```
 9      <xsl:variable name="mpls" select="protocols/mpls"/>
10      <xsl:for-each select="$mpls/apply-macro[data/name = 'color']">
11       <xsl:variable name="color" select="data[name = 'color']/value"/>
12        <xsl:for-each select="$mpls/apply-macro[data/name = 'group-value']">
13          <xsl:variable name="group-value" select="data[name = \
                'group-value']/value"/>
14          <transient-change>
15            <protocols>
16              <mpls>
17                <admin-groups>
18                  <name>
19                    <xsl:value-of select="$color"/>
20                  </name>
21                  <group-value>
22                    <xsl:value-of select="$group-value"/>
23                  </group-value>
24                </admin-groups>
25                <xsl:for-each select="data[not(value)]/name">
26                  <label-switched-path>
27                    <name>
28                      <xsl:value-of select="concat($color, '-lsp-', .)"/>
29                    </name>
30                    <to><xsl:value-of select="."/></to>
31                   <admin-group>
32                      <include-any>
33                        <xsl:value-of select="$color"/>
34                      </include-any>
35                    </admin-group>
36                  </label-switched-path>
37                </xsl:for-each>
38              </mpls>
39            </protocols>
40          </transient-change>
41        </xsl:for-each>
42      </xsl:for-each>
43    </xsl:template>
44  </xsl:stylesheet>
```

Lines 1 through 8 (and Lines 43 and 44) are the boilerplate that you include in every commit script. For brevity, Lines 1 through 8 are omitted here.

Line 9 assigns the **[edit protocols mpls]** hierarchy level to a variable called **$mpls**.

```
9    <xsl:variable name="mpls" select="protocols/mpls"/>
```

Line 10 selects every **apply-macro** statement at the **[edit protocols mpls]** hierarchy level that contains the **color** parameter. The sample configuration in Figure 8 on page 209 contains only one **apply-macro** statement. Therefore, this **<xsl:for-each>** programming instruction takes effect only once.

```
10    <xsl:for-each select="$mpls/apply-macro[data/name = 'color']">
```

Line 11 assigns the value of the **color** parameter, in this case **blue**, to a variable called **$color**.

```
11    <xsl:variable name="color" select="data[name = 'color']/value"/>
```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Line 12 selects every **apply-macro** statement at the **[edit protocols mpls]** hierarchy level that contains the **color** parameter. The sample configuration in Figure 8 on page 209 contains only one **apply-macro** statement. Therefore, this **<xsl:for-each>** programming instruction takes effect only once.

```
12    <xsl:for-each select="$mpls/apply-macro[data/name = 'color']">
```

Line 13 assigns the value of the **group-value** parameter, in this case **0**, to a variable called **$group-value**.

```
13      <xsl:variable name="group-value" select="data[name = 'group-value']/value"/>
```

Lines 14 through 16 generate a transient change at the **[edit protocols mpls]** hierarchy level.

```
14      <transient-change>
15        <protocols>
16          <mpls>
```

Lines 17 through 24 add the **admin-groups** statement to the configuration and assign the value of the **$color** variable to the group name and the value of the **$group-value** variable to the group value.

```
17            <admin-groups>
18              <name>
19                <xsl:value-of select="$color"/>
20              </name>
21              <group-value>
22                <<xsl:value-of select="$group-value"/>
23              </group-value>
24            </admin-groups>
```

The resulting configuration statements are as follows:

```
admin-groups {
  blue 0;
}
```

Line 25 selects the name of every parameter that does not already have a value assigned to it, which in this case are the four IP addresses. This **<xsl:for-each>** programming instruction uses recursion through the macro and selects each IP address in turn. The **color** and **group-value** parameters each already have a value assigned (**blue** and **0**, respectively), so this line does not apply to them.

```
25            <xsl:for-each select="data[not(value)]/name">
```

Line 26 adds the **label-switched-path** statement in the configuration.

```
26              <label-switched-path>
```

Lines 27 through 29 assign the **label-switched-path** a name that concatenates the value of the **$color** variable, the text **-lsp-**, and the current IP address currently selected by Line 25 (represented by the " **.**").

```
27              <name>
28                <xsl:value-of select="concat($color, '-lsp-', .)"/>
29              </name>
```

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Line 30 adds the **to** statement to the configuration and sets its value to the IP address currently selected by Line 25.

```
30                  <to><xsl:value-of select="."/></to>
```

Lines 31 through 35 add the **admin-group include-any** statement to the configuration and sets its value to the value of the **$color** variable.

```
31                 <admin-group>
32                       <include-any>
33                          <xsl:value-of select="$color"/>
34                       </include-any>
35                     </admin-group>
```

The resulting configuration statements (for one pass) are as follows:

```
label-switched-path blue-lsp-10.1.1.1 {
  to 10.1.1.1;
  admin-group include-any blue;
}
```

Lines 36 through 42 are closing tags.

```
36                    </label-switched-path>
37                  </xsl:for-each>
38                </mpls>
39              </protocols>
40            </transient-change>
41         </xsl:for-each>
42       </xsl:for-each>
```

Lines 43 and 44 are closing tags for Lines 8 and 2, respectively.

```
43    </xsl:template>
44  </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $mpls = protocols/mpls;
  for-each ($mpls/apply-macro[data/name = 'color']) {
    var $color = data[name = 'color']/value;
    for-each ($mpls/apply-macro[data/name = 'group-value']) {
      var $group-value = data[name='group-value']/value;
      <transient-change> {
        <protocols> {
          <mpls> {
            <admin-groups> {
              <name> $color;
              <group-value> $group-value;
            }
            for-each (data[not(value)]/name) {
              <label-switched-path> {
                <name> $color _ '-lsp-' _ .;
                <to> .;
```


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```
                    <admin-group> {
                      <include-any> $color;
                    }
                  }
                }
              }
            }
          }
        }
      }
    }
```

For more information about this example, see "Example: Configuring Administrative Groups for LSPs" on page 234.

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **lsp-admin.xsl** or **lsp-admin.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard. If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **lsp-admin.slax**.

```
system {
  scripts {
    commit {
      allow-transients;
      file lsp-admin.xsl;
    }
  }
}
protocols {
  mpls {
    apply-macro blue-type-lsp {
      10.1.1.1;
      10.2.2.2;
      10.3.3.3;
      10.4.4.4;
      color blue;
      group-value 0;
    }
  }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

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a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying Script Execution

Purpose Verify that the script behaves as expected.

Action To display the configuration statements created by the script, issue the **show protocols mpls | display commit-scripts** command:

```
[edit]
user@host# show protocols mpls | display commit-scripts
apply-macro blue-type-lsp {
   10.1.1.1;
   10.2.2.2;
   10.3.3.3;
   10.4.4.4;
   color blue;
   group-value 0;
}
admin-groups {
   blue 0;
}
label-switched-path blue-lsp-10.1.1.1 {
   to 10.1.1.1;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.2.2.2 {
   to 10.2.2.2;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.3.3.3 {
   to 10.3.3.3;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.4.4.4 {
   to 10.4.4.4;
   admin-group include-any blue;
}
```

Related Documentation

- Overview of Creating Custom Configuration Syntax with Macros on page 158
- How Macros Work on page 159
- Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements on page 207

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Commit Script Examples

- Example: Adding a Final then accept Term to a Firewall on page 215
- Example: Adding T1 Interfaces to a RIP Group on page 220
- Example: Assigning a Classifier on page 223
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- Example: Configuring Administrative Groups for LSPs on page 234
- Example: Configuring a Default Encapsulation Type on page 238
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- Example: Requiring Internal Clocking on T1 Interfaces on page 303
- Example: Requiring and Restricting Configuration Statements on page 306

Example: Adding a Final then accept Term to a Firewall

This commit script example adds a **then accept** statement to any firewall filter that does not already end with an explicit **then accept** statement.

- Requirements on page 215
- Overview and Commit Script on page 215
- Configuration on page 217
- Verification on page 219

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

Each firewall filter in Junos OS has an implicit discard action at the end of the filter, which is equivalent to the following explicit filter term:

```
term implicit-rule {
    then discard;
}
```

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As a result, if a packet matches none of the terms in the filter, it is discarded. In some cases, you might want to override the default by adding a last term to accept all packets that do not match a firewall filter's series of match conditions. In this example, the commit script adds a final **then accept** statement to any firewall filter that does not already end with an explicit **then accept** statement.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:apply-templates select="firewall/filter | firewall/family/inet
            | firewall/family/inet6" mode="filter"/>
  </xsl:template>
  <xsl:template match="filter" mode="filter">
    <xsl:param name="last" select="term[position() = last()]"/>
    <xsl:comment>
      <xsl:text>Found </xsl:text>
      <xsl:value-of select="name"/>
      <xsl:text>; last </xsl:text>
      <xsl:value-of select="$last/name"/>
    </xsl:comment>
    <xsl:if test="$last and ($last/from or $last/to or not($last/then/accept))">
      <xnm:warning>
        <xsl:call-template name="jcs:edit-path"/>
        <message>
          <xsl:text>filter is missing final 'then accept' rule</xsl:text>
        </message>
      </xnm:warning>
      <xsl:call-template name="jcs:emit-change">
        <xsl:with-param name="content">
          <term>
            <name>very-last</name>
            <junos:comment>
              <xsl:text>This term was added by a commit script</xsl:text>
            </junos:comment>
            <then>
              <accept/>
            </then>
          </term>
        </xsl:with-param>
      </xsl:call-template>
    </xsl:if>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
```


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```
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  apply-templates firewall/filter | firewall/family/inet | firewall/family/inet6 {
    mode "filter";
  }
}
match filter {
  mode "filter";
  param $last = term[position() = last()];
  <xsl:comment> {
    expr "Found ";
    expr name;
    expr "; last ";
    expr $last/name;
  }
  if ($last and ($last/from or $last/to or not($last/then/accept))) {
    <xnm:warning> {
      call jcs:edit-path();
      <message> "filter is missing final 'then accept' rule";
    }
    call jcs:emit-change() {
      with $content = {
        <term> {
          <name> "very-last";
          <junos:comment> "This term was added by a commit script";
          <then> {
            <accept>;
          }
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **add-accept.xsl** or **add-accept.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **add-accept.slax**.

```
system {
  scripts {
    commit {
      file add-accept.xsl;
    }
  }
```

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```
}
firewall {
    policer sgt-friday {
        if-exceeding {
            bandwidth-percent 10;
            burst-size-limit 250k;
        }
        then discard;
    }
    family inet {
        filter test {
            term one {
                from {
                    interface t1-0/0/0;
                }
                then {
                    count ten-network;
                    discard;
                }
            }
            term two {
                from {
                    forwarding-class assured-forwarding;
                }
                then discard;
            }
        }
    }
}
interfaces {
    t1-0/0/0 {
        unit 0 {
            family inet {
                policer output sgt-friday;
                filter input test;
            }
        }
    }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```


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Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The script requires that all firewall filters end with an explicit **then accept** statement. The sample configuration stanzas include the **test** filter with two terms but do not include an explicit **then accept** statement. When you issue the **commit** command, the script adds the missing **then accept** statement and commits the configuration. When you issue the **commit** command, the following output appears:

```
[edit]
user@host# commit
[edit firewall family inet filter test]
  warning: filter is missing final 'then accept' rule
commit complete
```

In configuration mode, issue the **show firewall** command to review the modified configuration. The following output appears:

```
[edit]
user@host# show firewall
policer sgt-friday {
  if-exceeding {
    bandwidth-percent 10;
    burst-size-limit 250k;
    }
  then discard;
}
family inet {
  filter test {
    term one {
      from {
        interface t1-0/0/0;
      }
      then {
        count ten-network;
        discard;
      }
    }
    term two {
      from {
        forwarding-class assured-forwarding;
      }
      then {
        discard;
      }
    }
    term very-last {
      then accept; /* This term was added by a commit script */
    }
  }
}
```

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Example: Adding T1 Interfaces to a RIP Group

This example shows how to use commit scripts to decrease the amount of manual configuration, specifically how to add every T1 interface configured at the **[edit interfaces]** hierarchy level to the **[edit protocols rip group test]** hierarchy level.

- Requirements on page 220
- Overview and Commit Script on page 220
- Configuration on page 221
- Verification on page 223

Requirements

This example uses a device running Junos OS with T1 interfaces.

Overview and Commit Script

If you want to enable RIP on an interface, you must make changes at both the **[edit interfaces]** and **[edit protocols rip]** hierarchy levels. This example shows how to use commit scripts to add every T1 interface configured at the **[edit interfaces]** hierarchy level to the **[edit protocols rip group test]** hierarchy level. This example includes no error, warning, or system log messages. The changes to the configuration are made silently.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="all-t1"
                  select="interfaces/interface[starts-with(name, 't1-')]"/>
    <xsl:if test="$all-t1">
      <change>
        <protocols>
          <rip>
            <group>
              <name>test</name>
              <xsl:for-each select="$all-t1">
                <xsl:variable name="ifname" select="concat(name, '.0')"/>
                <neighbor>
                  <name><xsl:value-of select="$ifname"/></name>
                </neighbor>
              </xsl:for-each>
            </group>
          </rip>
        </protocols>
      </change>
    </xsl:if>
  </xsl:template>
```


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```
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $all-t1 = interfaces/interface[starts-with(name, 't1-')];
  if ($all-t1) {
    <change> {
      <protocols> {
        <rip> {
          <group> {
            <name> "test";
            for-each ($all-t1) {
              var $ifname = name _ '.0';
              <neighbor> {
                <name> $ifname;
              }
            }
          }
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **rip-t1.xsl** or **rip-t1.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **rip-t1.slax**.

```
system {
  scripts {
    commit {
      file rip-t1.xsl;
    }
  }
}
interfaces {
  t1-0/0/0 {
    unit 0 {
      family iso;
    }
  }
  t1-0/0/1 {
```

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```
    unit 0 {
      family iso;
    }
  }
  t1-0/0/2 {
    unit 0 {
      family iso;
    }
  }
  t1-0/0/3 {
    unit 0 {
      family iso;
    }
  }
  t1-0/1/0 {
    unit 0 {
      family iso;
    }
  }
  t1-0/1/1 {
    unit 0 {
      family iso;
    }
  }
  t1-0/1/2 {
    unit 0 {
      family iso;
    }
  }
  t1-0/1/3 {
    unit 0 {
      family iso;
    }
  }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```


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Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Issue the **show protocols rip group test** command. All T1 interfaces should now appear under the **[edit protocols rip group test]** hierarchy level.

```
[edit]
user@host# show protocols rip group test
neighbor t1-0/0/0.0;
neighbor t1-0/0/1.0;
neighbor t1-0/0/2.0;
neighbor t1-0/0/3.0;
neighbor t1-0/1/0.0;
neighbor t1-0/1/1.0;
neighbor t1-0/1/2.0;
neighbor t1-0/1/3.0;
```

Example: Assigning a Classifier

For each interface configured with the IPv4 protocol family, this commit script automatically assigns a specified classifier, which associates incoming packets with a forwarding class and loss priority as well as assigns packets to an output queue.

- Requirements on page 223
- Overview and Commit Script on page 223
- Configuration on page 225
- Verification on page 226

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

In the Junos OS class of service (CoS), classifiers allow you to associate incoming packets with a forwarding class and loss priority and, based on the associated forwarding class, assign packets to output queues. After you configure a classifier, you must assign it to an input interface.

For each interface configured with the IPv4 protocol family, this script automatically assigns a specified classifier called **fc-q3**. The **fc-q3** classifier must be configured at the **[edit class-of-service]** hierarchy level.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
```

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```
<xsl:import href="../import/junos.xsl"/>

<xsl:template match="configuration">
  <xsl:variable name="cos-all" select="class-of-service"/>
  <xsl:for-each
        select="interfaces/interface[contains(name, '/')]/unit[family/inet]">
    <xsl:variable name="ifname" select="../name"/>
    <xsl:variable name="unit" select="name"/>
    <xsl:variable name="cos"
        select="$cos-all/interfaces[name = $ifname]"/>
    <xsl:if test="not($cos/unit[name = $unit])">
      <xsl:call-template name="jcs:emit-change">
        <xsl:with-param name="message">
          <xsl:text>Adding CoS forwarding class for </xsl:text>
          <xsl:value-of select="concat($ifname, '.', $unit)"/>
        </xsl:with-param>
        <xsl:with-param name="dot" select="$cos-all"/>
        <xsl:with-param name="content">
          <interfaces>
            <name><xsl:value-of select="$ifname"/></name>
            <unit>
              <name><xsl:value-of select="$unit"/></name>
              <forwarding-class>fc-q3</forwarding-class>
            </unit>
          </interfaces>
        </xsl:with-param>
      </xsl:call-template>
    </xsl:if>
  </xsl:for-each>
</xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $cos-all = class-of-service;
  for-each (interfaces/interface[contains(name, '/')]/unit[family/inet]) {
    var $ifname = ../name;
    var $unit = name;
    var $cos = $cos-all/interfaces[name = $ifname];
    if (not($cos/unit[name = $unit])) {
      call jcs:emit-change($dot = $cos-all) {
        with $message = {
          expr "Adding CoS forwarding class for ";
          expr $ifname _ '.' _ $unit;
        }
        with $content = {
          <interfaces> {
            <name> $ifname;
            <unit> {
              <name> $unit;
              <forwarding-class> "fc-q3";
```


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```
            }
          }
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **classifier.xsl** or **classifier.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **classifier.slax**.

```
system {
  scripts {
    commit {
      file classifier.xsl;
    }
  }
}
interfaces {
  fe-0/0/0 {
    unit 0 {
      family inet {
        address 10.168.16.2/24;
      }
    }
  }
}
class-of-service {
  forwarding-classes {
    queue 3 fc-q3;
  }
  classifiers {
    inet-precedence fc-q3 {
      forwarding-class fc-q3 {
        loss-priority low code-points 010;
      }
    }
  }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
```

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... Paste the contents of the clipboard here ...

a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. In the test configuration stanzas, the **fe-0/0/0.0** interface is configured with the **family inet** statement. Because the interface is configured with the IPv4 protocol family, the script automatically assigns the **fc-q3** classifier to the interface, which is indicated in the **commit** command output.

```
[edit]
user@host# commit
[edit interfaces interface fe-0/0/0 unit 0]
 warning: Adding CoS forwarding class for fe-0/0/0.0
commit complete
```

View the configuration to verify that the script-generated changes are present. Issue the **show class-of-service** configuration mode command. The output shows that the **fe-0/0/0.0** interface has been assigned the **fc-q3** classifier:

```
[edit]
user@host# show class-of-service
classifiers {
  inet-precedence fc-q3 {
    forwarding-class fc-q3 {
      loss-priority low code-points 010;
    }
  }
}
forwarding-classes {
  queue 3 fc-q3;
}
interfaces {
  fe-0/0/0 {
    unit 0 {
      forwarding-class fc-q3;  # Added by commit script
    }
  }
}
```

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Example: Automatically Configuring Logical Interfaces and IP Addresses

Every interface you configure requires at least one logical unit and one IP address. Asynchronous Transfer Mode (ATM) interfaces also require a virtual circuit identifier (VCI) for each logical interface. If you need to configure multiple logical units on an interface, you can use a commit script and macro to complete the task quickly and with no errors.

- Requirements on page 227
- Overview and Commit Script on page 227
- Configuration on page 232
- Verification on page 233

Requirements

This example uses a device running Junos OS with physical ATM interfaces.

Overview and Commit Script

The following commit script expands an **apply-macro** statement that provides the name of a physical ATM interface and a set of parameters that specify how to configure a number of logical units on the interface. The units and VCI numbers are numbered sequentially from the **$unit** variable to the **$max** variable and are given IP addresses starting at the **$address** variable. To loop through the logical units, Extensible Stylesheet Language Transformations (XSLT) uses recursion, which is implemented in the **<emit-interface>** template. Calculation of the next address is performed in the **<next-address>** template.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/apply-macro">
      <xsl:variable name="device" select="name"/>
      <xsl:variable name="address" select="data[name='address']/value"/>
      <xsl:variable name="max" select="data[name='max']/value"/>
      <xsl:variable name="unit" select="data[name='unit']/value"/>
      <xsl:variable name="real-max">
        <xsl:choose>
          <xsl:when test="string-length($max) &gt; 0">
            <xsl:value-of select="$max"/>
          </xsl:when>
          <xsl:otherwise>0</xsl:otherwise>
        </xsl:choose>
      </xsl:variable>
      <xsl:variable name="real-unit">
        <xsl:choose>
```

```
            <xsl:when test="string-length($unit) &gt; 0">
              <xsl:value-of select="$unit"/>
            </xsl:when>
            <xsl:when test="contains($device, '.')">
              <xsl:value-of select="substring-after($device, '.')"/>
            </xsl:when>
            <xsl:otherwise>0</xsl:otherwise>
          </xsl:choose>
        </xsl:variable>
        <xsl:variable name="real-device">
          <xsl:choose>
            <xsl:when test="contains($device, '.')">
              <xsl:value-of select="substring-before($device, '.')"/>
            </xsl:when>
            <xsl:otherwise><xsl:value-of select="$device"/></xsl:otherwise>
          </xsl:choose>
        </xsl:variable>
        <transient-change>
          <interfaces>
            <interface>
              <name><xsl:value-of select="$real-device"/></name>
              <xsl:call-template name="emit-interface">
                <xsl:with-param name="address" select="$address"/>
                <xsl:with-param name="unit" select="$real-unit"/>
                <xsl:with-param name="max" select="$real-max"/>
              </xsl:call-template>
            </interface>
          </interfaces>
        </transient-change>
      </xsl:for-each>
    </xsl:template>
    <xsl:template name="emit-interface">
      <xsl:param name="max"/>
      <xsl:param name="unit"/>
      <xsl:param name="address"/>
      <unit>
        <name><xsl:value-of select="$unit"/></name>
        <vci><xsl:value-of select="$unit"/></vci>
        <family>
          <inet>
            <address><xsl:value-of select="$address"/></address>
          </inet>
        </family>
      </unit>
      <xsl:if test="$max &gt; $unit">
        <xsl:call-template name="emit-interface">
          <xsl:with-param name="address">
            <xsl:call-template name="next-address">
              <xsl:with-param name="address" select="$address"/>
            </xsl:call-template>
          </xsl:with-param>
          <xsl:with-param name="unit" select="$unit + 1"/>
          <xsl:with-param name="max" select="$max"/>
        </xsl:call-template>
      </xsl:if>
    </xsl:template>
```


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```
<xsl:template name="next-address">
  <xsl:param name="address"/>
  <xsl:variable name="arg-prefix" select="substring-after($address, '/')"/>
  <xsl:variable name="arg-addr" select="substring-before($address, '/')"/>
  <xsl:variable name="addr">
    <xsl:choose>
      <xsl:when test="string-length($arg-addr) &gt; 0">
        <xsl:value-of select="$arg-addr"/>
      </xsl:when>
      <xsl:otherwise>
        <xsl:value-of select="$address"/>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:variable>
  <xsl:variable name="prefix">
    <xsl:choose>
      <xsl:when test="string-length($arg-prefix) &gt; 0">
        <xsl:value-of select="$arg-prefix"/>
      </xsl:when>
      <xsl:otherwise>32</xsl:otherwise>
    </xsl:choose>
  </xsl:variable>
  <xsl:variable name="a1" select="substring-before($addr, '.')"/>
  <xsl:variable name="a234" select="substring-after($addr, '.')"/>
  <xsl:variable name="a2" select="substring-before($a234, '.')"/>
  <xsl:variable name="a34" select="substring-after($a234, '.')"/>
  <xsl:variable name="a3" select="substring-before($a34, '.')"/>
  <xsl:variable name="a4" select="substring-after($a34, '.')"/>
  <xsl:variable name="r3">
    <xsl:choose>
      <xsl:when test="$a4 &lt; 255">
        <xsl:value-of select="$a3"/>
      </xsl:when>
      <xsl:otherwise>
        <xsl:value-of select="$a3 + 1"/>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:variable>
  <xsl:variable name="r4">
    <xsl:choose>
      <xsl:when test="$a4 &lt; 255">
        <xsl:value-of select="$a4 + 1"/>
      </xsl:when>
      <xsl:otherwise>
        <xsl:value-of select="0"/>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:variable>
  <xsl:value-of select="$a1"/>
  <xsl:text>.</xsl:text>
  <xsl:value-of select="$a2"/>
  <xsl:text>.</xsl:text>
  <xsl:value-of select="$r3"/>
  <xsl:text>.</xsl:text>
  <xsl:value-of select="$r4"/>
  <xsl:text>/</xsl:text>
```

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```
    <xsl:value-of select="$prefix"/>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/apply-macro) {
    var $device = name;
    var $address = data[name='address']/value;
    var $max = data[name='max']/value;
    var $unit = data[name='unit']/value;
    var $real-max = {
      if (string-length($max) > 0) {
        expr $max;
      } else {
        expr "0";
      }
    }
    var $real-unit = {
      if (string-length($unit) > 0) {
        expr $unit;
      } else if (contains($device, '.')) {
        expr substring-after($device, '.');
      } else {
        expr "0";
      }
    }
    var $real-device = {
      if (contains($device, '.')) {
        expr substring-before($device, '.');
      } else {
        expr $device;
      }
    }
    <transient-change> {
      <interfaces> {
        <interface> {
          <name> $real-device;
          call emit-interface($address, $unit = $real-unit, $max = $real-max);
        }
      }
    }
  }
}
emit-interface ($max, $unit, $address) {
  <unit> {
    <name> $unit;
    <vci> $unit;
    <family> {
      <inet> {
        <address> $address;
```


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```
        }
      }
    }
    if ($max > $unit) {
      call emit-interface($unit = $unit + 1, $max) {
        with $address = {
          call next-address($address);
        }
      }
    }
  }
  next-address ($address) {
    var $arg-prefix = substring-after($address, '/');
    var $arg-addr = substring-before($address, '/');
    var $addr = {
      if (string-length($arg-addr) > 0) {
        expr $arg-addr;
      } else {
        expr $address;
      }
    }
    var $prefix = {
      if (string-length($arg-prefix) > 0) {
        expr $arg-prefix;
      } else {
        expr "32";
      }
    }
    var $a1 = substring-before($addr, '.');
    var $a234 = substring-after($addr, '.');
    var $a2 = substring-before($a234, '.');
    var $a34 = substring-after($a234, '.');
    var $a3 = substring-before($a34, '.');
    var $a4 = substring-after($a34, '.');
    var $r3 = {
      if ($a4 < 255) {
        expr $a3;
      } else {
        expr $a3 + 1;
      }
    }
    var $r4 = {
      if ($a4 < 255) {
        expr $a4 + 1;
      } else {
        expr 0;
      }
    }
    expr $a1;
    expr ".";
    expr $a2;
    expr ".";
    expr $r3;
    expr ".";
    expr $r4;
    expr "/";
```

```
    expr $prefix;
}
```

Configuration

Step-by-Step Procedure

To download, enable, and run the script:

1. Copy the XSLT or SLAX script into a text file, name the file **atm-logical.xsl** or **atm-logical.slax** as appropriate, and download it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **atm-logical.slax**.

   ```
   system {
     scripts {
       commit {
         allow-transients;
         file atm-logical.xsl;
       }
     }
   }
   interfaces {
     apply-macro at-1/2/3 {
       address 10.12.13.14/20;
       max 200;
       unit 32;
     }
     at-1/2/3 {
       atm-options {
         pic-type atm2;
         vpi 0;
       }
     }
   }
   ```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```


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Verification

Verifying the Configuration

Purpose Verify that the correct changes are integrated into the configuration.

Action Before you commit the configuration, you can verify that the commit script will produce the correct results by issuing the **show interfaces at-1/2/3 | display commit-scripts** configuration mode command. After you commit the configuration, you can review the active configuration by issuing the **show configuration interfaces at-1/2/3** operational mode command. The following output appears:

```
atm-options {
    pic-type atm2;
    vpi 0;
}
unit 32 {
    vci 32;
    family inet {
        address 10.12.13.14/20;
    }
}
unit 33 {
    vci 33;
    family inet {
        address 10.12.13.15/20;
    }
}
unit 34 {
    vci 34;
    family inet {
        address 10.12.13.16/20;
    }
}
unit 35 {
    vci 35;
    family inet {
        address 10.12.13.17/20;
    }
}
... Logical units 36 through 199 are omitted for brevity ...
unit 200 {
    vci 200 ;
    family inet {
        address 10.12.13.182/20;
    }
}
```

Meaning The **| display commit-scripts** option displays the configuration data after all commit scripts have been applied. The output includes both persistent and transient changes. If the appropriate **unit** and **vci** are configured on each ATM interface, the commit script executes successfully during a commit operation. After you commit the configuration, you can review the active configuration by issuing the **show configuration interfaces at-1/2/3** operational mode command.

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Example: Configuring Administrative Groups for LSPs

Administrative groups, also known as link coloring or resource classes, are manually assigned attributes that describe the color of links. Links with the same color conceptually belong to the same class. You can use administrative groups to implement a variety of policy-based label-switched path (LSP) setups.

This commit script example searches for **apply-macro** statements with the **color** parameter included at the **[edit protocols mpls]** hierarchy level. For each **apply-macro** statement, the script uses the data provided to generate a transient change and expand the macro into a standard Junos OS administrative group for LSPs.

- Requirements on page 234
- Overview and Commit Script on page 234
- Configuration on page 236
- Verification on page 237

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

In this example, the Junos OS management process (mgd) inspects the configuration, looking for **apply-macro** statements. For each **apply-macro** statement with the **color** parameter included at the **[edit protocols mpls]** hierarchy level, the script generates a transient change, using the data provided within the **apply-macro** statement to expand the macro into a standard Junos OS administrative group for LSPs.

For this example to work, an **apply-macro** statement must be included at the **[edit protocols mpls]** hierarchy level with a set of addresses, a **color** parameter, and a **group-value** parameter. The commit script converts each address to an LSP configuration and converts the **color** parameter into an administrative group.

For a line-by-line explanation of this script, see "Example: Creating Custom Configuration Syntax with Macros" on page 208.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="mpls" select="protocols/mpls"/>
    <xsl:for-each select="$mpls/apply-macro[data/name = 'color']">
      <xsl:variable name="color" select="data[name = 'color']/value"/>
      <xsl:for-each select="$mpls/apply-macro[data/name = 'group-value']">
        <xsl:variable name="group-value" select="data[name =
```


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```
                'group-value']/value"/>
            <transient-change>
              <protocols>
                <mpls>
                  <admin-groups>
                    <name>
                      <xsl:value-of select="$color"/>
                    </name>
                    <group-value>
                      <xsl:value-of select="$group-value"/>
                    </group-value>
                  </admin-groups>
                  <xsl:for-each select="data[not(value)]/name">
                    <label-switched-path>
                      <name>
                        <xsl:value-of select="concat($color, '-lsp-', .)"/>
                      </name>
                      <to><xsl:value-of select="."/></to>
                      <admin-group>
                        <include-any>
                          <xsl:value-of select="$color"/>
                        </include-any>
                      </admin-group>
                    </label-switched-path>
                  </xsl:for-each>
                </mpls>
              </protocols>
            </transient-change>
          </xsl:for-each>
        </xsl:for-each>
      </xsl:template>
    </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $mpls = protocols/mpls;
  for-each ($mpls/apply-macro[data/name = 'color']) {
    var $color = data[name = 'color']/value;
    for-each ($mpls/apply-macro[data/name = 'group-value']) {
      var $group-value = data[name = 'group-value']/value;
      <transient-change> {
        <protocols> {
          <mpls> {
            <admin-groups> {
              <name> $color;
              <group-value> $group-value;
            }
            for-each (data[not(value)]/name) {
              <label-switched-path> {
                <name> $color _ '-lsp-' _ .;
                <to> .;
```

```
                    <admin-group> {
                      <include-any> $color;
                    }
                  }
                }
              }
            }
          }
        }
      }
    }
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **lsp-admin.xsl** or **lsp-admin.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **lsp-admin.slax**.

   ```
   system {
     scripts {
       commit {
         allow-transients;
         file lsp-admin.xsl;
       }
     }
   }
   protocols {
     mpls {
       apply-macro blue-type-lsp {
         10.1.1.1;
         10.2.2.2;
         10.3.3.3;
         10.4.4.4;
         color blue;
         group-value 0;
       }
     }
   }
   ```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

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b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Issue the **show protocols mpls | display commit-scripts** configuration mode command and review the output. Adding the **| display commit-scripts** option allows you to see the configuration statements that are generated by transient changes.

With Script-Generated Changes When you issue the **show protocols mpls | display commit-scripts** configuration mode command, the following output appears:

```
[edit]
user@host# show protocols mpls | display commit-scripts
apply-macro blue-type-lsp {
   10.1.1.1;
   10.2.2.2;
   10.3.3.3;
   10.4.4.4;
   color blue;
   group-value 0;
}
admin-groups {
   blue 0;
}
label-switched-path blue-lsp-10.1.1.1 {
   to 10.1.1.1;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.2.2.2 {
   to 10.2.2.2;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.3.3.3 {
   to 10.3.3.3;
   admin-group include-any blue;
}
label-switched-path blue-lsp-10.4.4.4 {
   to 10.4.4.4;
   admin-group include-any blue;
}
```

Without Script-Generated Changes The output of the **show protocols mpls | display commit-scripts no-transients** configuration mode command excludes the **label-switched-path** statements:

```
[edit]
user@host# show protocols mpls | display commit-scripts no-transients
```

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```
apply-macro blue-type-lsp {
   10.1.1.1;
   10.2.2.2;
   10.3.3.3;
   10.4.4.4;
   color blue;
   group-value 0;
}
```

When you issue the **show protocols mpls** command without the piped **display commit-scripts no-transients** command, you see the same output because this script does not generate any persistent changes:

```
[edit]
user@host# show protocols mpls
apply-macro blue-type-lsp {
   10.1.1.1;
   10.2.2.2;
   10.3.3.3;
   10.4.4.4;
   color blue;
   group-value 0;
}
```

Example: Configuring a Default Encapsulation Type

This commit script example configures default Cisco HDLC encapsulation on SONET/SDH interfaces not configured as aggregate interfaces.

- Requirements on page 238
- Overview and Commit Script on page 238
- Configuration on page 239
- Verification on page 240

Requirements

This example uses a device running Junos OS with SONET/SDH interfaces.

Overview and Commit Script

Point-to-Point Protocol (PPP) encapsulation is the default encapsulation type for physical interfaces. You do not need to configure encapsulation for any physical interfaces that support PPP encapsulation. If you do not configure encapsulation, PPP is used by default. For physical interfaces that do not support PPP encapsulation, you must configure an encapsulation to use for packets transmitted on the interface.

This example configures default Cisco HDLC encapsulation on SONET/SDH interfaces not configured as aggregate interfaces. The **$tag** variable is passed to the **jcs:emit-change** template as **transient-change**, so this change is not copied to the candidate configuration.

Simply including configuration groups in the configuration does not enable you to test whether the **aggregate** statement is included for an interface at the **[edit interfaces *interface-name* sonet-options]** hierarchy level. A commit script can perform this test and

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set the encapsulation only on nonaggregated interfaces. The script written to perform this test has the following syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 'so-')
                and not(sonet-options/aggregate)]">
      <xsl:call-template name="jcs:emit-change">
        <xsl:with-param name="tag" select="'transient-change'"/>
        <xsl:with-param name="content">
          <encapsulation>cisco-hdlc</encapsulation>
        </xsl:with-param>
      </xsl:call-template>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/interface[starts-with(name, 'so-') and
          not(sonet-options/aggregate)]) {
    call jcs:emit-change($tag = 'transient-change') {
      with $content = {
        <encapsulation> "cisco-hdlc";
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **so-encap.xsl** or **so-encap.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **so-encap.slax**.

   ```
   system {
   ```

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```
    scripts {
      commit {
        allow-transients;
        file so-encap.xsl;
      }
    }
  }
  interfaces {
    so-1/2/2 {
      sonet-options {
        aggregate as0;
      }
    }
    so-1/2/3 {
      unit 0 {
        family inet {
          address 10.0.0.3/32;
        }
      }
    }
    so-1/2/4 {
      unit 0 {
        family inet {
          address 10.0.0.4/32;
        }
      }
    }
  }
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action When you issue the **commit** command, the commit script tests for SONET/SDH interfaces that are not configured as aggregate interfaces and sets the default encapsulation type on the nonaggregated interfaces to Cisco HDLC encapsulation. This is implemented as

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a **transient-change**. Even though the transient changes are in effect, they are not, by default, displayed in the normal output of the **show interfaces** command.

```
[edit]
user@host# show interfaces
so-1/2/2 {
    sonet-options {
        aggregate as0;
    }
}
so-1/2/3 {
    unit 0 {
        family inet {
            address 10.0.0.3/32;
        }
    }
}
so-1/2/4 {
    unit 0 {
        family inet {
            address 10.0.0.4/32;
        }
    }
}
```

To view the configuration with the transient changes, issue the **show interfaces | display commit-scripts** command:

```
[edit]
user@host# show interfaces | display commit-scripts
so-1/2/2 {
    sonet-options {  # The presence of these statements prevents the
        aggregate as0;  # transient change from affecting this interface.
    }
}
so-1/2/3 {
    encapsulation cisco-hdlc;  # Added by transient change.
    unit 0 {
        family inet {
            address 10.0.0.3/32;
        }
    }
}
so-1/2/4 {
    encapsulation cisco-hdlc;  # Added by transient change.
    unit 0 {
        family inet {
            address 10.0.0.4/32;
        }
    }
}
```

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Example: Configuring Dual Routing Engines

If your device has redundant (also called *dual*) Routing Engines, your Junos OS configuration can be complex. This example shows how you can use commit scripts to simplify and control the configuration of dual Routing Engine platforms.

- Requirements on page 242
- Overview and Commit Script on page 242
- Configuration on page 245
- Verification on page 246

Requirements

This example uses a device running Junos OS with dual Routing Engines.

Overview and Commit Script

Junos OS supports two special configuration groups: **re0** and **re1**. When these groups are applied using the **apply-groups [re0 re1]** statement, they take effect if the Routing Engine name matches the group name. Statements included at the **[edit groups re0]** hierarchy level are inherited only on the Routing Engine named RE0, and statements included at the **[edit groups re1]** hierarchy level are inherited only on the Routing Engine named RE1.

This example includes two commit scripts. The first script, **dual-re.xsl**, generates a warning if the **system host-name** statement, any IP version 4 (IPv4) interface address, or the **fxp0** interface configuration is configured in the target configuration instead of in a configuration group.

The second script, **dual-re2.xsl**, first checks whether the hostname configuration is configured and then checks whether it is configured in a configuration group. The **otherwise** construct generates an error message if the hostname is not configured at all. The first **when** construct allows the script to do nothing if the hostname is already configured in a configuration group. The second **when** construct takes effect when the hostname is configured in the target configuration. In this case, the script generates a transient change that places the hostname configuration into the **re0** and **re1** configuration groups, copies the configured hostname into those groups, concatenates each group hostname with **-RE0** and **-RE1**, and deactivates the hostname in the target configuration so the configuration group hostnames can be inherited.

The example scripts are shown in both XSLT and SLAX syntax:

XSLT Syntax: dual-re.xsl Script

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="system/host-name |
                interfaces/interface/unit/family/inet/address |
                interfaces/interface[name = 'fxp0']">
```


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```
      <xsl:if test="not(@junos:group) or not(starts-with(@junos:group, 're'))">
        <xnm:warning>
          <xsl:call-template name="jcs:edit-path">
            <xsl:with-param name="dot" select=".."/>
          </xsl:call-template>
          <xsl:call-template name="jcs:statement"/>
          <message>
            <xsl:text>statement should not be in target</xsl:text>
            <xsl:text> configuration on dual RE system</xsl:text>
          </message>
        </xnm:warning>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

XSLT Syntax: dual-re2.xsl Script

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="hn" select="system/host-name"/>
    <xsl:choose>
      <xsl:when test="$hn/@junos:group"/>
      <xsl:when test="$hn">
        <transient-change>
          <groups>
            <name>re0</name>
            <system>
              <host-name>
                <xsl:value-of select="concat($hn, '-RE0')"/>
              </host-name>
            </system>
          </groups>
          <groups>
            <name>re1</name>
            <system>
              <host-name>
                <xsl:value-of select="concat($hn, '-RE1')"/>
              </host-name>
            </system>
          </groups>
          <system>
            <host-name inactive="inactive"/>
          </system>
        </transient-change>
      </xsl:when>
      <xsl:otherwise>
        <xnm:error>
          <message>Missing [system host-name]</message>
        </xnm:error>
      </xsl:otherwise>
```

```
    </xsl:choose>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax: dual-re.xsl Script

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (system/host-name | interfaces/interface/unit/family/inet/address |
                interfaces/interface[name = 'fxp0']) {
    if (not(@junos:group) or not(starts-with(@junos:group, 're'))) {
      <xnm:warning> {
        call jcs:edit-path($dot = ..);
        call jcs:statement();
        <message> {
          expr "statement should not be in target";
          expr " configuration on dual RE system";
        }
      }
    }
  }
}
```

SLAX Syntax: dual-re2.xsl Script

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $hn = system/host-name;
  if ($hn/@junos:group) {
  }
  else if ($hn) {
    <transient-change> {
      <groups> {
        <name> "re0";
        <system> {
          <host-name> $hn _ '-RE0';
        }
      }
      <groups> {
        <name> "re1";
        <system> {
          <host-name> $hn _ '-RE1';
        }
      }
      <system> {
        <host-name inactive="inactive">;
      }
    }
    else {
```


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```
        <xnm:error> {
          <message> "Missing [system host-name]";
        }
      }
    }
  }
```

Configuration

Step-by-Step Procedure

To download, enable, and run the scripts:

1. Copy the XSLT or SLAX scripts into two text files, name the files **dual-re.xsl** and **dual-re2.xsl** or **dual-re.slax** and **dual-re2.slax** as appropriate, and copy them to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filenames at the **[edit system scripts commit file]** hierarchy level to **dual-re.slax** and **dual-re2.slax**.

```
groups {
  re0 {
    interfaces {
      fxp0 {
        unit 0 {
          family inet {
            address 10.0.0.1/24;
          }
        }
      }
    }
  }
}
apply-groups re0;
system {
  host-name router1;
  scripts {
    commit {
      file dual-re.xsl;
      file dual-re2.xsl;
    }
  }
}
interfaces {
  fe-0/0/0 {
    unit 0 {
      family inet {
        address 192.168.220.1/30;
      }
    }
  }
}
```

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3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Commit Script Changes

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. After the commit operation completes, the device hostname is changed to **router1-RE0**.

```
[edit]
user@host# commit
[edit system]
  'host-name router1;'
  warning: statement should not be in target configuration on dual RE system
[edit interfaces interface fe-0/0/0 unit 0 family inet]
  'address 192.168.220.1/30;'
  warning: statement should not be in target configuration on dual RE system
commit complete
```

Example: Configuring an Interior Gateway Protocol on an Interface

This commit script example uses a macro to automatically include an interface at the **[edit protocols]** hierarchy level and to configure the proper interior gateway protocol (IGP) on the interface.

- Requirements on page 246
- Overview and Commit Script on page 247
- Configuration on page 249
- Verification on page 250

Requirements

This example uses a device running Junos OS.

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Overview and Commit Script

When you add a new interface to an OSPF or IS-IS domain, you must configure the interface at multiple hierarchy levels, including **[edit interfaces]** and **[edit protocols]**. This example uses a commit script and macro to automatically include the interface at the **[edit protocols]** hierarchy level and to configure the proper IGP on the interface, either OSPF or IS-IS, depending on the content of an **apply-macro** statement that you include in the interface configuration. This macro allows you to perform more configuration tasks at a single hierarchy level.

In this example, the Junos OS management (mgd) process inspects the configuration, looking for **apply-macro** statements. For each **apply-macro ifclass** statement included at the **[edit interfaces** *interface-name* **unit** *logical-unit-number***]** hierarchy level, the script tests whether the **role** parameter is defined as **cpe**. If so, the script checks the **igp** parameter.

If the **igp** parameter is defined as **isis**, the script includes the relevant interface name at the **[edit protocols isis interface]** hierarchy level.

If the **igp** parameter is defined as **ospf**, the script includes the relevant interface name at the **[edit protocols ospf area** *address* **interface]** hierarchy level. For OSPF, the script references the **area** parameter to determine the correct subnet address of the area.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each
            select="interfaces/interface/unit/apply-macro[name = 'ifclass']">
      <xsl:variable name="role" select="data[name='role']/value"/>
      <xsl:variable name="igp" select="data[name='igp']/value"/>
      <xsl:variable name="ifname">
        <xsl:value-of select="../../name"/>
        <xsl:text>.</xsl:text>
        <xsl:value-of select="../name"/>
      </xsl:variable>
      <xsl:choose>
        <xsl:when test="$role = 'cpe'">
          <change>
            <xsl:choose>
              <xsl:when test="$igp = 'isis'">
                <protocols>
                  <isis>
                    <interface>
                      <name><xsl:value-of select="$ifname"/></name>
                    </interface>
                  </isis>
```

```
            </protocols>
          </xsl:when>
          <xsl:when test="$igp = 'ospf'">
            <protocols>
              <ospf>
                <area>
                  <name>
                    <xsl:value-of select="data[name='area']/value"/>
                  </name>
                  <interface>
                    <name><xsl:value-of select="$ifname"/></name>
                  </interface>
                </area>
              </ospf>
            </protocols>
          </xsl:when>
        </xsl:choose>
      </change>
    </xsl:when>
  </xsl:choose>
 </xsl:for-each>
</xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/interface/unit/apply-macro[name = 'ifclass']) {
    var $role = data[name='role']/value;
    var $igp = data[name='igp']/value;
    var $ifname = {
      expr ../../name;
      expr ".";
      expr ../name;
    }
    if ($role = 'cpe') {
      <change> {
        if ($igp = 'isis') {
          <protocols> {
            <isis> {
              <interface> {
                <name> $ifname;
              }
            }
          }
        }
        else if ($igp = 'ospf') {
          <protocols> {
            <ospf> {
              <area> {
                <name> data[name='area']/value;
                <interface> {
```


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```
                    <name> $ifname;
                  }
                }
              }
            }
          }
        }
      }
    }
  }
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **if-class.xsl** or **if-class.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **if-class.slax**.

   ```
   system {
     scripts {
       commit {
         file if-class.xsl;
       }
     }
   }
   interfaces {
     so-1/2/3 {
       unit 0 {
         apply-macro ifclass {
           area 10.4.0.0;
           igp ospf;
           role cpe;
         }
       }
     }
     t3-0/0/0 {
       unit 0 {
         apply-macro ifclass {
           igp isis;
           role cpe;
         }
       }
     }
   }
   ```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ```

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... Paste the contents of the clipboard here ...

a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action View the configuration to verify that the manual changes and the script-generated changes are present.

When you issue the **show interfaces** configuration mode command, the changes added by the sample configuration stanzas should be present in the configuration.

```
[edit]
user@host# show interfaces
t3-0/0/0 {
  unit 0 {
    apply-macro ifclass {
      igp isis;
      role cpe;
    }
  }
}
so-1/2/3 {
  unit 0 {
    apply-macro ifclass {
      area 10.4.0.0;
      igp ospf;
      role cpe;
    }
  }
}
```

When you issue the **show protocols** configuration mode command, the script-generated changes should be present in the configuration.

```
[edit]
user@host# show protocols
isis {
  interface t3-0/0/0.0;
}
ospf {
  area 10.4.0.0 {
    interface so-1/2/3.0;
  }
```

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```
}
```

Example: Controlling IS-IS and MPLS Interfaces

This example shows how to use commit scripts to decrease the amount of manual configuration.

- Requirements on page 251
- Overview and Commit Script on page 251
- Configuration on page 253
- Verification on page 254

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

If you want to enable MPLS on an interface, you must make changes at both the **[edit interfaces]** and **[edit protocols mpls]** hierarchy levels. This example shows how to use commit scripts to decrease the amount of manual configuration.

This example performs two related tasks. If an interface has **[family iso]** configured but not **[family mpls]**, a configuration change is made (using the **jcs:emit-change** template) to enable MPLS. MPLS is not valid on loopback interfaces (**lo*X***), so this script ignores loopback interfaces. Secondly, if the interface is not configured at the **[edit protocols mpls]** hierarchy level, a change is made to add the interface. Both changes are accompanied by appropriate warning messages.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="mpls" select="protocols/mpls"/>
    <xsl:for-each select="interfaces/interface[not(starts-with(name,'lo'))]
                          /unit[family/iso]">
      <xsl:variable name="ifname" select="concat(../name, '.', name)"/>
      <xsl:if test="not(family/mpls)">
        <xsl:call-template name="jcs:emit-change">
          <xsl:with-param name="message">
            <xsl:text>Adding 'family mpls' to ISO-enabled interface</xsl:text>
          </xsl:with-param>
          <xsl:with-param name="content">
            <family>
              <mpls/>
            </family>
          </xsl:with-param>
```

```
        </xsl:call-template>
      </xsl:if>
      <xsl:if test="$mpls and not($mpls/interface[name = $ifname])">
        <xsl:call-template name="jcs:emit-change">
          <xsl:with-param name="message">
            <xsl:text>Adding ISO-enabled interface </xsl:text>
            <xsl:value-of select="$ifname"/>
            <xsl:text> to [protocols mpls]</xsl:text>
          </xsl:with-param>
          <xsl:with-param name="dot" select="$mpls"/>
          <xsl:with-param name="content">
            <interface>
              <name>
                <xsl:value-of select="$ifname"/>
              </name>
            </interface>
          </xsl:with-param>
        </xsl:call-template>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $mpls = protocols/mpls;
  for-each (interfaces/interface[not(starts-with(name, "lo"))]/unit[family/iso]) {
    var $ifname = ../name _ '.' _ name;
    if (not(family/mpls)) {
      call jcs:emit-change() {
        with $message = {
          expr "Adding 'family mpls' to ISO-enabled interface";
        }
        with $content = {
          <family> {
            <mpls>;
          }
        }
      }
    }
    if ($mpls and not($mpls/interface[name = $ifname])) {
      call jcs:emit-change($dot = $mpls) {
        with $message = {
          expr "Adding ISO-enabled interface ";
          expr $ifname;
          expr " to [protocols mpls]";
        }
        with $content = {
          <interface> {
            <name> $ifname;
          }
```


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```
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **iso.xsl** or **iso.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **iso.slax**.

```
system {
  scripts {
    commit {
      file iso.xsl;
    }
  }
}
interfaces {
  lo0 {
    unit 0 {
      family iso;
    }
  }
  so-1/2/3 {
    unit 0 {
      family iso;
    }
  }
  so-1/3/2 {
    unit 0 {
      family iso;
    }
  }
}
protocols {
  mpls {
    enable;
  }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

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a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command.

```
[edit]
user@host# commit
[edit interfaces interface so-1/2/3 unit 0]
  warning: Adding 'family mpls' to ISO-enabled interface
[edit interfaces interface so-1/2/3 unit 0]
  warning: Adding ISO-enabled interface so-1/2/3.0 to [protocols mpls]
[edit interfaces interface so-1/3/2 unit 0]
  warning: Adding 'family mpls' to ISO-enabled interface
[edit interfaces interface so-1/3/2 unit 0]
  warning: Adding ISO-enabled interface so-1/3/2.0 to [protocols mpls]
commit complete
```

Issue the **show interfaces** command. Confirm that the loopback interface is not altered and that the SONET/SDH interfaces are altered.

```
[edit]
user@host# show interfaces
so-1/2/3 {
  unit 0 {
    family iso;
    family mpls;
  }
}
so-1/3/2 {
  unit 0 {
    family iso;
    family mpls;
  }
}
lo0 {
  unit 0 {
    family iso;
  }
}
```


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Example: Controlling LDP Configuration

This commit script example generates a warning on LDP-enabled devices for any interfaces that are configured at either the **[edit protocols ospf]** or **[edit protocols isis]** hierarchy level but are not configured at the **[edit protocols ldp]** hierarchy level. A second test ensures that all LDP-enabled interfaces are configured for an interior gateway protocol (IGP). The example also provides instructions for excluding a particular interface from the commit script LDP test.

- Requirements on page 255
- Overview and Commit Script on page 255
- Configuration on page 257
- Verification on page 258

Requirements

This example uses a router running Junos OS.

Overview and Commit Script

If you want to enable LDP on an interface, you must configure the interface at both the **[edit protocols *routing-protocol-name*]** and **[edit protocols ldp]** hierarchy levels. This example shows how to use commit scripts to ensure that the interface is configured at both levels.

This example tests for interfaces that are configured at either the **[edit protocols ospf]** or **[edit protocols isis]** hierarchy level but not at the **[edit protocols ldp]** hierarchy level. If LDP is not enabled on the device, there is no problem. Otherwise, a warning is generated with the message that the interface does not have LDP enabled.

In case you want some interfaces to be exempt from the LDP test, this script allows you to tag those interfaces as not requiring LDP by including the **apply-macro no-ldp** statement at the **[edit protocols isis interface *interface-name*]** or **[edit protocols ospf area *area-id* interface *interface-name*]** hierarchy level. For example:

```
[edit]
protocols {
   isis {
      interface so-0/1/2.0 {
         apply-macro no-ldp;
      }
   }
}
```

If the **apply-macro no-ldp** statement is included, the warning is not generated.

A second test ensures that all LDP-enabled interfaces are configured for an interior gateway protocol (IGP). As for LDP, you can exempt some interfaces from the test by including the **apply-macro no-igp** statement at the **[edit protocols ldp interface *interface-name*]** hierarchy level. If that statement is not included and no IGP is configured, a warning is generated.

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The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="ldp" select="protocols/ldp"/>
    <xsl:variable name="isis" select="protocols/isis"/>
    <xsl:variable name="ospf" select="protocols/ospf"/>
    <xsl:if test="$ldp">
      <xsl:for-each select="$isis/interface/name |
                            $ospf/area/interface/name">
        <xsl:variable name="ifname" select="."/>
        <xsl:if test="not(../apply-macro[name = 'no-ldp'])
                            and not($ldp/interface[name = $ifname])">
          <xnm:warning>
            <xsl:call-template name="jcs:edit-path"/>
            <xsl:call-template name="jcs:statement"/>
            <message>ldp not enabled for this interface</message>
          </xnm:warning>
        </xsl:if>
      </xsl:for-each>
      <xsl:for-each select="protocols/ldp/interface/name">
        <xsl:variable name="ifname" select="."/>
        <xsl:if test="not(apply-macro[name = 'no-igp'])
                            and not($isis/interface[name = $ifname])
                            and not($ospf/area/interface[name = $ifname])">
          <xnm:warning>
            <xsl:call-template name="jcs:edit-path"/>
            <xsl:call-template name="jcs:statement"/>
            <message>
              <xsl:text>ldp-enabled interface does not have </xsl:text>
              <xsl:text>an IGP configured</xsl:text>
            </message>
          </xnm:warning>
        </xsl:if>
      </xsl:for-each>
    </xsl:if>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

apply-macro no-ldp;
match configuration {
  var $ldp = protocols/ldp;
  var $isis = protocols/isis;
```


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```
var $ospf = protocols/ospf;
if ($ldp) {
  for-each ($isis/interface/name | $ospf/area/interface/name) {
    var $ifname = .;
    if (not(../apply-macro[name = 'no-ldp']) and not($ldp/interface[name =
          $ifname])) {
      <xnm:warning> {
        call jcs:edit-path();
        call jcs:statement();
        <message> "ldp not enabled for this interface";
      }
    }
  }
  for-each (protocols/ldp/interface/name) {
    var $ifname = .;
    if (not(apply-macro[name = 'no-igp']) and not($isis/interface[name =
          $ifname]) and not($ospf/area/interface[name = $ifname])) {
      <xnm:warning> {
        call jcs:edit-path();
        call jcs:statement();
        <message> {
          expr "ldp-enabled interface does not have ";
          expr "an IGP configured";
        }
      }
    }
  }
 }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **ldp.xsl** or **ldp.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **ldp.slax**.

```
system {
  scripts {
    commit {
      file ldp.xsl;
    }
  }
}
protocols {
  isis {
    interface so-1/2/2.0 {
      apply-macro no-ldp;
    }
    interface so-1/2/3.0;
```

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```
    }
    ospf {
      area 10.4.0.0 {
        interface ge-3/2/1.0;
        interface ge-2/2/1.0;
      }
    }
    ldp {
      interface ge-1/2/1.0;
      interface ge-2/2/1.0;
    }
  }
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```

Verification

Verifying the Script Execution

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration stanzas enable LDP on the device and configure the **so-1/2/2** and **so-1/2/3** interfaces at the **[edit protocols isis]** hierarchy level and the **ge-3/2/1** and **ge-2/2/1** interfaces at the **[edit protocols ospf]** hierarchy level.

Because **ge-2/2/1** is also configured at the **[edit protocols ldp]** hierarchy level, the script does not issue a warning message for this interface during the commit operation. The configuration includes the **apply-macro no-ldp** statement under the **so-1/2/2** interface, so the script does not test this interface or issue a warning message for it, even though it is not configured at the **[edit protocols ldp]** hierarchy.

Neither **so-1/2/3** nor **ge-3/2/1** is configured at the **[edit protocols ldp]** hierarchy level as required by the commit script, so a warning is issued for both interfaces. The **ge-1/2/1** interface is configured at the **[edit protocols ldp]** hierarchy. However, it is not configured for an IGP, so the commit script also issues a warning for the **ge-1/2/1** interface.

```
[edit]
user@host# commit
[edit protocols ospf area 10.4.0.0 interface so-1/2/3.0]
```

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```
    'interface so-1/2/3.0;'
        warning: LDP not enabled for this interface
[edit protocols ospf area 10.4.0.0 interface ge-3/2/1.0]
    'interface ge-3/2/1.0;'
        warning: LDP not enabled for this interface
[edit protocols ldp interface ge-1/2/1.0]
    'interface ge-1/2/1.0;'
        warning: LDP-enabled interface does not have an IGP configured
commit complete
```

Example: Creating a Complex Configuration Based on a Simple Interface Configuration

This commit script example uses a macro to automatically expand a simple interface configuration.

- Requirements on page 259
- Overview and Commit Script on page 259
- Configuration on page 264
- Verification on page 265

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

This example uses a commit script and macro to automatically expand a simple interface configuration by generating a transient change that assigns a default encapsulation type, configures multiple routing protocols on the interface, and applies multiple configuration groups. The Junos OS management (mgd) process inspects the configuration, looking for **apply-macro params** statements included at the **[edit interfaces *interface-name*]** hierarchy level.

When the script finds an **apply-macro params** statement, it performs the following actions:

- Applies the **interface-details** configuration group to the interface.
- Includes the value of the **description** parameter at the **[edit interfaces *interface-name* description]** hierarchy level.
- Includes the value of the **encapsulation** parameter at the **[edit interfaces *interface-name* encapsulation]** hierarchy level. If the **encapsulation** parameter is not included in the **apply-macro params** statement, the script sets the encapsulation to **cisco-hdlc** as the default.
- Sets the logical unit number to **0** and tests whether the **inet-address** parameter is included in the **apply-macro params** statement. If it is, the script includes the value of the **inet-address** parameter at the **[edit interfaces *interface-name* unit 0 family inet address]** hierarchy level.
- Includes the interface name at the **[edit protocols rsvp interface]** hierarchy level.
- Includes the **level 1 enable** and **metric** statements at the **[edit protocols isis interface *interface-name*]** hierarchy level.

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- Includes the **level 2 enable** and **metric** statements at the **[edit protocols isis interface *interface-name*]** hierarchy level.
- Tests whether the **isis-level-1** or **isis-level-1-metric** parameter is included in the **apply-macro params** statement. If one or both of these parameters are included, the script includes the **level 1** statement at the **[edit protocols isis interface *interface-name*]** hierarchy level. If the **isis-level-1** parameter is included, the script also includes the value of the **isis-level-1** parameter (**enable** or **disable**) at the **[edit protocols isis interface *interface-name* level 1]** hierarchy level. If the **isis-level-1-metric** parameter is included, the script also includes the value of the **isis-level-1-metric** parameter at the **[edit protocols isis interface *interface-name* level 1 metric]** hierarchy level.
- Tests whether the **isis-level-2** or **isis-level-2-metric** parameter is included in the **apply-macro params** statement. If one or both of these parameters are included, the script includes the **level 2** statement at the **[edit protocols isis interface *interface-name*]** hierarchy level. If the **isis-level-2** parameter is included, the script also includes the value of the **isis-level-2** parameter (**enable** or **disable**) at the **[edit protocols isis interface *interface-name* level 2]** hierarchy level. If the **isis-level-2-metric** parameter is included, the script also includes the value of the **isis-level-2-metric** parameter at the **[edit protocols isis interface *interface-name* level 2 metric]** hierarchy level.
- Includes the interface name at the **[edit protocols ldp interface]** hierarchy level.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:variable name="top" select="."/>
    <xsl:for-each select="interfaces/interface/apply-macro[name = 'params']">
      <xsl:variable name="description"
          select="data[name = 'description']/value"/>
      <xsl:variable name="inet-address"
          select="data[name = 'inet-address']/value"/>
      <xsl:variable name="encapsulation"
          select="data[name = 'encapsulation']/value"/>
      <xsl:variable name="isis-level-1"
          select="data[name = 'isis-level-1']/value"/>
      <xsl:variable name="isis-level-1-metric"
          select="data[name = 'isis-level-1-metric']/value"/>
      <xsl:variable name="isis-level-2"
          select="data[name = 'isis-level-2']/value"/>
      <xsl:variable name="isis-level-2-metric"
          select="data[name = 'isis-level-2-metric']/value"/>
      <xsl:variable name="ifname" select="concat(../name, '.0')"/>
      <transient-change>
        <interfaces>
          <interface>
            <name><xsl:value-of select="../name"/></name>
```


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```
      <apply-groups>
        <name>interface-details</name>
      </apply-groups>
      <xsl:if test="$description">
        <description>
          <xsl:value-of select="$description"/>
        </description>
      </xsl:if>
      <encapsulation>
        <xsl:choose>
          <xsl:when test="string-length($encapsulation) &gt; 0">
            <xsl:value-of select="$encapsulation"/>
          </xsl:when>
          <xsl:otherwise>cisco-hdlc</xsl:otherwise>
        </xsl:choose>
      </encapsulation>
      <unit>
        <name>0</name>
        <xsl:if test="string-length($inet-address) &gt; 0">
          <family>
            <inet>
              <address>
                <xsl:value-of select="$inet-address"/>
              </address>
            </inet>
          </family>
        </xsl:if>
      </unit>
    </interface>
  </interfaces>
  <protocols>
    <rsvp>
      <interface>
        <name><xsl:value-of select="$ifname"/></name>
      </interface>
    </rsvp>
    <isis>
      <interface>
        <name><xsl:value-of select="$ifname"/></name>
        <xsl:if test="$isis-level-1 or $isis-level-1-metric">
          <level>
            <name>1</name>
            <xsl:if test="$isis-level-1">
              <xsl:element name="{$isis-level-1}"/>
            </xsl:if>
            <xsl:if test="$isis-level-1-metric">
              <metric>
                <xsl:value-of select="$isis-level-1-metric"/>
              </metric>
            </xsl:if>
          </level>
        </xsl:if>
        <xsl:if test="$isis-level-2 or $isis-level-2-metric">
          <level>
            <name>2</name>
            <xsl:if test="$isis-level-2">
```

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```
                        <xsl:element name="{$isis-level-2}"/>
                      </xsl:if>
                      <xsl:if test="$isis-level-2-metric">
                        <metric>
                          <xsl:value-of select="$isis-level-2-metric"/>
                        </metric>
                      </xsl:if>
                    </level>
                  </xsl:if>
                </interface>
              </isis>
              <ldp>
                <interface>
                  <name><xsl:value-of select="$ifname"/></name>
                </interface>
              </ldp>
            </protocols>
          </transient-change>
        </xsl:for-each>
      </xsl:template>
    </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  var $top = .;
  for-each (interfaces/interface/apply-macro[name = 'params']) {
    var $description = data[name = 'description']/value;
    var $inet-address = data[name = 'inet-address']/value;
    var $encapsulation = data[name = 'encapsulation']/value;
    var $isis-level-1 = data[name = 'isis-level-1']/value;
    var $isis-level-1-metric = data[name = 'isis-level-1-metric']/value;
    var $isis-level-2 = data[name = 'isis-level-2']/value;
    var $isis-level-2-metric = data[name = 'isis-level-2-metric']/value;
    var $ifname = ../name _ '.0';
    <transient-change> {
      <interfaces> {
        <interface> {
          <name> ../name;
          <apply-groups> {
            <name> "interface-details";
          }
          if ($description) {
            <description> $description;
          }
          <encapsulation> {
            if (string-length($encapsulation) > 0) {
              expr $encapsulation;
            } else {
              expr "cisco-hdlc";
            }
          }
```


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```
            <unit> {
              <name> "0";
              if (string-length($inet-address) > 0) {
                <family> {
                  <inet> {
                    <address> $inet-address;
                  }
                }
              }
            }
          }
          <protocols> {
            <rsvp> {
              <interface> {
                <name> $ifname;
              }
            }
            <isis> {
              <interface> {
                <name> $ifname;
                if ($isis-level-1 or $isis-level-1-metric) {
                  <level> {
                    <name> "1";
                    if ($isis-level-1) {
                      <xsl:element name="{$isis-level-1}">;
                    }
                    if ($isis-level-1-metric) {
                      <metric> $isis-level-1-metric;
                    }
                  }
                }
                if ($isis-level-2 or $isis-level-2-metric) {
                  <level> {
                    <name> "2";
                    if ($isis-level-2) {
                      <xsl:element name="{$isis-level-2}">;
                    }
                    if ($isis-level-2-metric) {
                      <metric> $isis-level-2-metric;
                    }
                  }
                }
              }
            }
            <ldp> {
              <interface> {
                <name> $ifname;
              }
            }
          }
        }
      }
    }
  }
}
```

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Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **if-params.xsl** or **if-params.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **if-params.slax**.

```
system {
    scripts {
        commit {
            allow-transients;
            file if-params.xsl;
        }
    }
}
groups {
    interface-details {
        interfaces {
            <so-*/*/*> {
                clocking internal;
            }
        }
    }
}
interfaces {
    so-1/2/3 {
        apply-macro params {
            description "Link to Hoverville";
            encapsulation ppp;
            inet-address 10.1.2.3/28;
            isis-level-1 enable;
            isis-level-1-metric 50;
            isis-level-2-metric 85;
        }
    }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

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c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action Issue the **show interfaces | display commit-scripts | display inheritance** configuration mode command. The **| display commit-scripts** option displays all the statements that are in the configuration, including statements that are generated by transient changes. The **| display inheritance** option displays inherited configuration data and information about the source group from which the configuration has been inherited. This option also shows interface ranges configuration data in expanded format and information about the source interface-range from which the configuration has been expanded. You should see the following output:

```
[edit]
user@host# show interfaces | display commit-scripts | display inheritance
so-1/2/3 {
    apply-macro params {
        clocking internal;
        description "Link to Hoverville";
        encapsulation ppp;
        inet-address 10.1.2.3/28;
        isis-level-1 enable;
        isis-level-1-metric 50;
        isis-level-2-metric 85;
    }
    description "Link to Hoverville";
    ##
    ## 'internal' was inherited from group 'interface-details'
    ##
    clocking internal;
    encapsulation ppp;
    unit 0 {
        family inet {
            address 10.1.2.3/28;
        }
    }
}
```

Issue the **show protocols | display commit-scripts** configuration mode command. You should see the following output:

```
[edit]
user@host# show protocols | display commit-scripts
rsvp {
    interface so-1/2/3.0;
}
isis {
    interface so-1/2/3.0 {
```

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```
        level 1 {
          enable;
          metric 50;
        }
        level 2 metric 85;
      }
    }
    ldp {
      interface so-1/2/3.0;
    }
```

Example: Imposing a Minimum MTU Setting

The maximum transmission unit (MTU) is the greatest amount of data or packet size (in bytes) that can be transferred in one physical frame on a network. In this example, a commit script tests the MTU of SONET/SDH interfaces. If the MTU is less than a specified minimum value, the commit script reports the error and causes the commit operation to fail.

- Requirements on page 266
- Overview and Commit Script on page 266
- Configuration on page 267
- Verification on page 268

Requirements

This example uses a device running Junos OS with SONET/SDH interfaces.

Overview and Commit Script

This example tests the MTU of SONET/SDH interfaces, reports when the MTU is less than the value of the **$min-mtu** parameter, here set to 2048, and causes the commit operation to fail. The **for** loop selects all SONET/SDH interfaces that start with **so-** and that have an MTU statement that is defined and less than the value of **$min-mtu**. For the selected interfaces, the script generates an error, which includes the location of the interface in the configuration hierarchy and the MTU configured for that interface.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:param name="min-mtu" select="2048"/>
  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 'so-')
                  and mtu and mtu &lt; $min-mtu]">
      <xnm:error>
        <xsl:call-template name="jcs:edit-path"/>
        <xsl:call-template name="jcs:statement">
```


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```
            <xsl:with-param name="dot" select="mtu"/>
          </xsl:call-template>
          <message>
            <xsl:text>SONET interfaces must have a minimum MTU of </xsl:text>
            <xsl:value-of select="$min-mtu"/>
            <xsl:text>.</xsl:text>
          </message>
        </xnm:error>
      </xsl:for-each>
    </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

param $min-mtu = 2048;
match configuration {
  for-each (interfaces/interface[starts-with(name, 'so-') and mtu and
            mtu < $min-mtu]) {
    <xnm:error> {
      call jcs:edit-path();
      call jcs:statement($dot = mtu);
      <message> {
        expr "SONET interfaces must have a minimum MTU of ";
        expr $min-mtu;
        expr ".";
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **so-mtu.xsl** or **so-mtu.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.
2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **so-mtu.slax**.

```
system {
  scripts {
    commit {
      file so-mtu.xsl;
    }
  }
}
interfaces {
  so-1/2/2 {
```

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```
        mtu 2048;
    }
    so-1/2/3 {
        mtu 576;
    }
}
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Commit Script Output

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration stanzas configure two SONET/SDH interfaces **so-1/2/2** and **so-1/2/3**. The **so-1/2/3** interface is configured with an MTU of 576, so the script generates an error message, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit interfaces interface so-1/2/3]
  'mtu 576;'
    SONET interfaces must have a minimum MTU of 2048.
error: 1 error reported by commit scripts
error: commit script failure
```

Example: Limiting the Number of ATM Virtual Circuits

This commit script example limits the number of Asynchronous Transfer Mode (ATM) virtual circuits (VCs) configured on an ATM interface.

- Requirements on page 269
- Overview and Commit Script on page 269
- Configuration on page 270
- Verification on page 272

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Requirements

This example uses a device running Junos OS with an ATM interface.

Overview and Commit Script

For each ATM interface, the set of corresponding VCs is selected. The number of those VCs, as determined by the built-in Extensible Stylesheet Language Transformations (XSLT) **count()** function, cannot exceed the limit set by the global variable **$limit**. If there are more ATM VCs than **$limit**, a commit error is generated, and the commit operation fails.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:param name="limit" select="10"/>
  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 'at-')]">
      <xsl:variable name="count" select="count(unit)"/>
      <xsl:if test="$count &gt; $limit">
        <xnm:error>
          <edit-path>[edit interfaces]</edit-path>
          <statement><xsl:value-of select="name"/></statement>
          <message>
            <xsl:text>ATM VC limit exceeded; </xsl:text>
            <xsl:value-of select="$count"/>
            <xsl:text> are configured but only </xsl:text>
            <xsl:value-of select="$limit"/>
            <xsl:text> are allowed.</xsl:text>
          </message>
        </xnm:error>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

param $limit = 10;
match configuration {
  for-each (interfaces/interface[starts-with(name, 'at-')]) {
    var $count = count(unit);
    if ($count > $limit) {
      <xnm:error> {
        <edit-path> "[edit interfaces]";
```

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```
        <statement> name;
        <message> {
          expr "ATM VC limit exceeded; ";
          expr $count;
          expr " are configured but only ";
          expr $limit;
          expr " are allowed.";
        }
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **atm-vc-limit.xsl** or **atm-vc-limit.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **atm-vc-limit.slax**.

```
system {
  scripts {
    commit {
      file atm-vc-limit.xsl;
    }
  }
}
interfaces {
  at-1/2/3 {
    unit 15 {
      family inet {
        address 10.12.13.15/20;
      }
    }
    unit 16 {
      family inet {
        address 10.12.13.16/20;
      }
    }
    unit 17 {
      family inet {
        address 10.12.13.17/20;
      }
    }
    unit 18 {
      family inet {
        address 10.12.13.18/20;
      }
    }
```


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```
        unit 19 {
          family inet {
            address 10.12.13.19/20;
          }
        }
        unit 20 {
          family inet {
            address 10.12.13.20/20;
          }
        }
        unit 21 {
          family inet {
            address 10.12.13.21/20;
          }
        }
        unit 22 {
          family inet {
            address 10.12.13.22/20;
          }
        }
        unit 23 {
          family inet {
            address 10.12.13.23/20;
          }
        }
        unit 24 {
          family inet {
            address 10.12.13.24/20;
          }
        }
        unit 25 {
          family inet {
            address 10.12.13.25/20;
          }
        }
        unit 26 {
          family inet {
            address 10.12.13.26/20;
          }
        }
      }
    }
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

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4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Commit Script Output

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration stanzas configure 12 virtual circuits on the ATM interface **atm-1/2/3**. Because the commit script only allows 10 ATM VCs to be configured on any ATM interface, the script generates an error, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit interfaces]
  'at-1/2/3'
  ATM VC limit exceeded; 12 are configured but only 10 are allowed.
error: 1 error reported by commit scripts
error: commit script failure
```

Example: Limiting the Number of E1 Interfaces

This commit script example limits the number of E1 interfaces configured on a Channelized STM1 Intelligent Queuing (IQ) PIC to avoid contention issues with per-unit-schedulers.

- Requirements on page 272
- Overview and Commit Script on page 272
- Configuration on page 274
- Verification on page 281

Requirements

This example uses a device running Junos OS with a Channelized STM1 Intelligent Queuing (IQ) PIC.

Overview and Commit Script

The following script ensures that there are no more than 16 E1 interfaces configured on a channelized STM1 IQ interface. For each channelized STM1 interface (**cstm1-**), the set of corresponding E1 interfaces is selected. The number of those interfaces, as determined by the built-in Extensible Stylesheet Language Transformations (XSLT) **count()** function, cannot exceed the limit set by the global parameter **$limit**. If there are more E1 interfaces than **$limit**, a commit error is generated, and the commit operation fails.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
```


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```
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:param name="limit" select="16"/>
  <xsl:template match="configuration">
    <xsl:variable name="interfaces" select="interfaces"/>
    <xsl:for-each select="$interfaces/interface[starts-with(name, 'cstm1-')]">
      <xsl:variable name="triple" select="substring-after(name, 'cstm1-')"/>
      <xsl:variable name="e1name" select="concat('e1-', $triple)"/>
      <xsl:variable name="count"
         select="count($interfaces/interface[starts-with(name, $e1name)])"/>
      <xsl:if test="$count > $limit">
        <xnm:error>
          <edit-path>[edit interfaces]</edit-path>
          <statement><xsl:value-of select="name"/></statement>
          <message>
            <xsl:text>E1 interface limit exceeded on CSTM1 IQ PIC. </xsl:text>
            <xsl:value-of select="$count"/>
            <xsl:text> E1 interfaces are configured, but only </xsl:text>
            <xsl:value-of select="$limit"/>
            <xsl:text> are allowed.</xsl:text>
          </message>
        </xnm:error>
      </xsl:if>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

param $limit = 16;
match configuration {
  var $interfaces = interfaces;
  for-each ($interfaces/interface[starts-with(name, 'cstm1-')]) {
    var $triple = substring-after(name, 'cstm1-');
    var $e1name = 'e1-' _ $triple;
    var $count = count($interfaces/interface[starts-with(name, $e1name)]);
    if ($count > $limit) {
      <xnm:error> {
        <edit-path> "[edit interfaces]";
        <statement> name;
        <message> {
          expr "E1 interface limit exceeded on CSTM1 IQ PIC. ";
          expr $count;
          expr " E1 interfaces are configured, but only ";
          expr $limit;
          expr " are allowed.";
        }
      }
    }
  }
}
```

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Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **e1-limit.xsl** or **e1-limit.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **e1-limit.slax**.

```
system {
    scripts {
        commit {
            file e1-limit.xsl;
        }
    }
}
interfaces {
    cau4-0/1/0 {
        partition 1 interface-type ce1;
        partition 2-18 interface-type e1;
    }
    cstm1-0/1/0 {
        no-partition interface-type cau4;
    }
    ce1-0/1/0:1 {
        clocking internal;
        e1-options {
            framing g704;
        }
        partition 1 timeslots 1-4 interface-type ds;
    }
    ds-0/1/0:1:1 {
        no-keepalives;
        dce;
        encapsulation frame-relay;
        lmi {
            lmi-type ansi;
        }
        unit 100 {
            point-to-point;
            dlci 100;
            family inet {
                address 10.0.0.0/31;
            }
        }
    }
    e1-0/1/0:2 {
        no-keepalives;
        per-unit-scheduler;
        dce;
        clocking internal;
        encapsulation frame-relay;
```


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```
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.2/31;
      }
    }
  }
  e1-0/1/0:3 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.4/31;
      }
    }
  }
  e1-0/1/0:4 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.6/31;
      }
    }
  }
  e1-0/1/0:5 {
    no-keepalives;
```

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```
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.8/31;
      }
    }
  }
  e1-0/1/0:6 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.10/31;
      }
    }
  }
  e1-0/1/0:7 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.12/31;
      }
```


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```
    }
  }
  e1-0/1/0:8 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.14/31;
      }
    }
  }
  e1-0/1/0:9 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.16/31;
      }
    }
  }
  e1-0/1/0:10 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
```

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```
        dlci 100;
        family inet {
          address 10.0.0.18/31;
        }
      }
    }
    e1-0/1/0:11 {
      no-keepalives;
      per-unit-scheduler;
      dce;
      clocking internal;
      encapsulation frame-relay;
      e1-options {
        framing g704;
      }
      lmi {
        lmi-type ansi;
      }
      unit 100 {
        point-to-point;
        dlci 100;
        family inet {
          address 10.0.0.20/31;
        }
      }
    }
    e1-0/1/0:12 {
      no-keepalives;
      per-unit-scheduler;
      dce;
      clocking internal;
      encapsulation frame-relay;
      e1-options {
        framing g704;
      }
      lmi {
        lmi-type ansi;
      }
      unit 100 {
        point-to-point;
        dlci 100;
        family inet {
          address 10.0.0.22/31;
        }
      }
    }
    e1-0/1/0:13 {
      no-keepalives;
      per-unit-scheduler;
      dce;
      clocking internal;
      encapsulation frame-relay;
      e1-options {
        framing g704;
      }
      lmi {
```


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```
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.24/31;
      }
    }
  }
  e1-0/1/0:14 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.26/31;
      }
    }
  }
  e1-0/1/0:15 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.28/31;
      }
    }
  }
  e1-0/1/0:16 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
```

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```
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.30/31;
      }
    }
  }
  e1-0/1/0:17 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.32/31;
      }
    }
  }
  e1-0/1/0:18 {
    no-keepalives;
    per-unit-scheduler;
    dce;
    clocking internal;
    encapsulation frame-relay;
    e1-options {
      framing g704;
    }
    lmi {
      lmi-type ansi;
    }
    unit 100 {
      point-to-point;
      dlci 100;
      family inet {
        address 10.0.0.34/31;
      }
    }
  }
}
```


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3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Commit Script Execution

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration stanzas channelize a **cstm1-0/1/0** interface into 17 **E1** interfaces, so the script generates an error, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit interfaces]
  'cstm1-0/1/0'
  E1 interface limit exceeded on CSTM1 IQ PIC.
  17 E1 interfaces are configured, but only 16 are allowed.
error: 1 error reported by commit scripts
error: commit script failure
```

Example: Loading a Base Configuration

This commit script example sets up a sample base configuration on a device running Junos OS.

- Requirements on page 281
- Overview and Commit Script on page 282
- Configuration on page 294
- Verification on page 295

Requirements

This example uses a device running Junos OS.

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Overview and Commit Script

This script is a macro that sets up a device running Junos OS with a sample base configuration. With minimal manual user input, the script automatically configures:

- A device hostname
- Authentication services
- A superuser login
- System log settings
- Some SNMP settings
- System services, such as FTP and Telnet
- Static routes and a policy to redistribute the static routes
- Configuration groups **re0** and **re1**
- An address for the management Ethernet interface (**fxp0**)
- The loopback interface (**lo0**) with the device ID as the loopback address

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

<xsl:variable name="macro-name" select="'config-system.xsl'"/>
<xsl:template match="configuration">
  <xsl:variable name="rid" select="routing-options/router-id"/>
  <xsl:for-each select="apply-macro[name = 'config-system']">
    <xsl:variable name="hostname" select="data[name =
            'host-name']/value"/>
    <xsl:variable name="fxp0-addr" select="data[name =
            'mgmt-address']/value"/>
    <xsl:variable name="backup-router" select="data[name =
            'backup-router']/value"/>
    <xsl:variable name="bkup-rtr">
      <xsl:choose>
        <xsl:when test="$backup-router">
          <xsl:value-of select="$backup-router"/>
        </xsl:when>
        <xsl:otherwise>
          <xsl:variable name="fxp01" select="substring-before($fxp0-addr,
              '.')"/>
          <xsl:variable name="fxp02"
              select="substring-before(substring-after($fxp0-addr, '.'), '.')"/>
          <xsl:variable name="fxp03"
              select="substring-before(substring-after(substring-after(
                  $fxp0-addr, '.'), '.'), '.')"/>
```


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```
        <xsl:variable name="plen" select="substring-after($fxp0-addr, '/')"/>
        <xsl:choose>
          <xsl:when test="$plen = 22">
            <xsl:value-of select="concat($fxp01, '.', $fxp02, '.', $fxp03 div
                    4 * 4 + 3, '.254')"/>
          </xsl:when>
          <xsl:when test="$plen = 24">
            <xsl:value-of select="concat($fxp01, '.', $fxp02, '.', $fxp03,
                    '.254')"/>
          </xsl:when>
        </xsl:choose>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:variable>
  <xsl:choose>
    <xsl:when test="not($rid) or not($hostname) or not($fxp0-addr)">
      <xnm:error>
        <message>
          Must set router ID, host-name and mgmt-address to use this script.
        </message>
      </xnm:error>
    </xsl:when>
    <xsl:otherwise>
      <transient-change>
        <system>
        <!-- Set the following -->
          <domain-name>your-domain.net</domain-name>
          <domain-search>domain.net</domain-search>
          <backup-router>
            <address><xsl:value-of select="$bkup-rtr"/></address>
          </backup-router>
          <time-zone>America/Los_Angeles</time-zone>
          <authentication-order>radius</authentication-order>
          <authentication-order>password</authentication-order>
          <root-authentication>
            <encrypted-password>
              $1$Q3CG88jZ$.qhPUZaHdaIMWF2CvxKTe0
            </encrypted-password>
          </root-authentication>
          <name-server>
            <name>192.168.5.68</name>
          </name-server>
          <name-server>
            <name>172.17.28.100</name>
          </name-server>
          <radius-server>
            <name>192.168.170.241</name>
            <secret>
              $9$4xoDk5T3n/AHkmTQFCA0BIclKWL7sgaRh-bs4GU
            </secret>
          </radius-server>
          <radius-server>
            <name>192.168.4.240</name>
            <secret>
              $9$TQ/t1IcSrKAt0IRheK8X7VYgaZDm5zNdiqmTn6
            </secret>
```

```
</radius-server>
<login>
  <class>
    <permissions>all</permissions>
  </class>
  <user>
    <name>johnny</name>
    <uid>928</uid>
    <class>superuser</class>
    <authentication>
      <encrypted-password>
        $1$kPU..$w.4FGRAGanJ8U4Yq6sbj7.
      </encrypted-password>
    </authentication>
  </user>
</login>
<services>
  <finger/>
  <ftp/>
  <ssh/>
  <telnet/>
  <xnm-clear-text/>
</services>
<syslog>
  <user>
    <name>*</name>
    <contents>
      <name>any</name>
      <emergency/>
    </contents>
  </user>
  <host>
    <name>host1</name>
    <contents>
      <name>any</name>
      <notice/>
    </contents>
    <contents>
      <name>interactive-commands</name>
      <any/>
    </contents>
  </host>
  <file>
    <name>messages</name>
    <contents>
      <name>any</name>
      <notice/>
    </contents>
    <contents>
      <name>any</name>
      <warning/>
    </contents>
    <contents>
      <name>authorization</name>
      <info/>
    </contents>
```


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```
      <archive>
        <world-readable/>
      </archive>
    </file>
    <file>
      <name>security</name>
      <contents>
        <name>interactive-commands</name>
        <any/>
      </contents>
      <archive>
        <world-readable/>
      </archive>
    </file>
  </syslog>
  <processes>
    <routing>
      <undocumented><enable/></undocumented>
    </routing>
    <snmp>
      <undocumented><enable/></undocumented>
    </snmp>
    <ntp>
      <undocumented><enable/></undocumented>
    </ntp>
    <inet-process>
      <undocumented><enable/></undocumented>
    </inet-process>
    <mib-process>
      <undocumented><enable/></undocumented>
    </mib-process>
    <undocumented><management><enable/>
    </undocumented></management>
    <watchdog>
      <enable/>
      </watchdog>
    </processes>
    <ntp>
      <boot-server>domain.net</boot-server>
      <server>
        <name>domainr.net</name>
      </server>
    </ntp>
  </system>
  <snmp>
    <location>Software lab</location>
    <contact>Michael Landon</contact>
    <interface>fxp0.0</interface>
    <community>
      <name>public</name>
      <authorization>read-only</authorization>
      <clients>
        <name>0.0.0.0/0</name>
        <restrict/>
      </clients>
      <clients>
```

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```
            <name>192.168.1.252/32</name>
          </clients>
          <clients>
            <name>10.197.169.222/32</name>
          </clients>
          <clients>
            <name>10.197.169.188/32</name>
          </clients>
          <clients>
            <name>10.197.169.193/32</name>
          </clients>
          <clients>
            <name>192.168.65.46/32</name>
          </clients>
          <clients>
            <name>10.209.152.0/23</name>
          </clients>
        </community>
        <community>
          <name>private</name>
          <authorization>read-write</authorization>
          <clients>
            <name>0.0.0.0/0</name>
            <restrict/>
          </clients>
          <clients>
            <name>10.197.169.188/32</name>
          </clients>
        </community>
      </snmp>
      <routing-options>
        <static>
          <junos:comment>/* safety precaution */</junos:comment>
          <route>
            <name>0.0.0.0/0</name>
            <discard/>
            <retain/>
            <no-readvertise/>
          </route>
          <junos:comment>/* corporate net */</junos:comment>
          <route>
            <name>172.16.0.0/12</name>
            <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
            <retain/>
            <no-readvertise/>
          </route>
          <junos:comment>/* lab nets */</junos:comment>
          <route>
            <name>192.168.0.0/16</name>
            <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
            <retain/>
            <no-readvertise/>
          </route>
          <junos:comment>/* reflector */</junos:comment>
          <route>
            <name>10.17.136.192/32</name>
```


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```
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
      <junos:comment>/* another lab1*/</junos:comment>
      <route>
        <name>10.10.0.0/16</name>
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
      <junos:comment>/* ssh servers */</junos:comment>
      <route>
        <name>10.17.136.0/24</name>
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
      <junos:comment>/* Workstations */</junos:comment>
      <route>
        <name>10.150.0.0/16</name>
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
      <junos:comment>/* Hosts */</junos:comment>
      <route>
        <name>10.157.64.0/19</name>
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
      <junos:comment>/* Build Servers */</junos:comment>
      <route>
        <name>10.10.0.0/16</name>
        <next-hop><xsl:value-of select="$bkup-rtr"/></next-hop>
        <retain/>
        <no-readvertise/>
      </route>
    </static>
  </routing-options>
  <policy-options>
    <policy-statement>
      <name>redist</name>
      <from>
        <protocol>static</protocol>
      </from>
      <then>
        <accept/>
      </then>
    </policy-statement>
  </policy-options>
  <apply-groups>re0</apply-groups>
  <apply-groups>re1</apply-groups>
  <groups>
    <name>re0</name>
```

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```
                    <system>
                      <host-name>
                        <xsl:value-of select="$hostname"/></host-name>
                    </system>
                    <interfaces>
                      <interface>
                        <name>fxp0</name>
                        <unit>
                          <name>0</name>
                          <family>
                            <inet>
                              <address>
                                <name>
                                  <xsl:value-of select="$fxp0-addr"/>
                                </name>
                              </address>
                            </inet>
                          </family>
                        </unit>
                      </interface>
                    </interfaces>
                  </groups>
                  <groups>
                    <name>re1</name>
                  </groups>
                  <interfaces>
                    <interface>
                      <name>lo0</name>
                      <unit>
                        <name>0</name>
                        <family>
                          <inet>
                            <address>
                              <name><xsl:value-of select="$rid"/></name>
                            </address>
                          </inet>
                        </family>
                      </unit>
                    </interface>
                  </interfaces>
                </xsl:transient-change>
              </xsl:otherwise>
            </xsl:choose>
          </xsl:for-each>
        </xsl:template>
      </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $macro-name = 'config-system.xsl';
match configuration {
  var $rid = routing-options/router-id;
```


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```
for-each (apply-macro[name = 'config-system']) {
  var $hostname = data[name = 'host-name']/value;
  var $fxp0-addr = data[name = 'mgmt-address']/value;
  var $backup-router = data[name = 'backup-router']/value;
  var $bkup-rtr = {
    if ($backup-router) {
      expr $backup-router;
    }
    else {
      var $fxp01 = substring-before($fxp0-addr,                    '.');
      var $fxp02 = substring-before(substring-after($fxp0-addr, '.'), '.');
      var $fxp03 = substring-before(substring-after(substring-after(
                   $fxp0- addr, '.'), '.'), '.');
      var $plen = substring-after($fxp0-addr, '/');
      if ($plen = 22) {
        expr $fxp01 _ '.' _ $fxp02 _ '.' _ $fxp03 div 4 * 4 + 3 _ '.254';
      }
      else if ($plen = 24) {
        expr $fxp01 _ '.' _ $fxp02 _ '.' _ $fxp03 _ '.254';
      }
    }
  }
  if (not($rid) or not($hostname) or not($fxp0-addr)) {
    <xnm:error> {
      <message> "Must set router ID, host-name, and mgmt-address to use
                this script.";
    }
  }
  else {
    <transient-change> {
      <system> {
        /* Set the following */
        <domain-name> "your-domain.net";
        <domain-search> "domain.net";
        <backup-router> {
          <address> $bkup-rtr;
        }
        <time-zone> "America/Los_Angeles";
        <authentication-order> "radius";
        <authentication-order> "password";
        <root-authentication> {
          <encrypted-password>
                "$1$Q3CG88jZ$.qhPUZaHdaIMWF2CvxKTe0";
        }
        <name-server> {
          <name> "192.168.5.68";
        }
        <name-server> {
          <name> "172.17.28.100";
        }
        <radius-server> {
          <name> "192.168.170.241";
          <secret> "$9$4xoDk5T3n/AHkmTQFCA0BIclKWL7sgaRh-bs4GU";
        }
        <radius-server> {
          <name> "192.168.4.240";
```

```
    <secret> "$9$TQ/t1IcSrKAt0IRheK8X7VYgaZDm5zNdiqmTn6";
  }
  <login> {
    <class> {
      <permissions> "all";
    }
    <user> {
      <name> "johnny";
      <uid> "928";
      <class> "superuser";
      <authentication> {
        <encrypted-password>"$1$kPU..$w.4FGRAGanJ8U4Yq6sbj7.";
    }
  }
}
<services> {
  <finger>;
  <ftp>;
  <ssh>;
  <telnet>;
  <xnm-clear-text>;
}
<syslog> {
  <user> {
    <name> "*";
    <contents> {
      <name> "any";
      <emergency>;
    }
  }
  <host> {
    <name> "host1";
    <contents> {
      <name> "any";
      <notice>;
    }
    <contents> {
      <name> "interactive-commands";
      <any>;
    }
  }
  <file> {
    <name> "messages";
    <contents> {
      <name> "any";
      <notice>;
    }
    <contents> {
      <name> "any";
      <warning>;
    }
    <contents> {
      <name> "authorization";
      <info>;
    }
    <archive> {
```


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```
      <world-readable>;
    }
  }
  <file> {
    <name> "security";
    <contents> {
      <name> "interactive-commands";
      <any>;
    }
    <archive> {
      <world-readable>;
    }
  }
}
<processes> {
  <routing> {
    <undocumented><enable>;
  }
  <snmp> {
    <undocumented><enable>;
  }
  <ntp> {
    <undocumented><enable>;
  }
  <inet-process> {
    <undocumented> <enable>;
  }
  <mib-process> {
    <undocumented> <enable>;
  }
  <undocumented><management> {
    <enable>;
  }
  <watchdog> {
    <enable>;
  }
  <ntp> {
    <boot-server> "domain.net";
    <server> {
      <name> "domainr.net";
    }
  }
}
<snmp> {
  <location> "Software lab";
  <contact> "Michael Landon";
  <interface> "fxp0.0";
  <community> {
    <name> "public";
    <authorization> "read-only";
    <clients> {
      <name> "0.0.0.0/0";
      <restrict>;
    }
    <clients> {
      <name> "192.168.1.252/32";
```

```
    }
    <clients> {
      <name> "10.197.169.222/32";
    }
    <clients> {
      <name> "10.197.169.188/32";
    }
    <clients> {
      <name> "10.197.169.193/32";
    }
    <clients> {
      <name> "192.168.65.46/32";
    }
    <clients> {
      <name> "10.209.152.0/23";
    }
  }
  <community> {
    <name> "private";
    <authorization> "read-write";
    <clients> {
      <name> "0.0.0.0/0";
      <restrict>;
    }
    <clients> {
      <name> "10.197.169.188/32";
    }
  }
}
<routing-options> {
  <static> {
    <junos:comment> "/* safety precaution */";
    <route> {
      <name> "0.0.0.0/0";
      <discard>;
      <retain>;
      <no-readvertise>;
    }
    <junos:comment> "/* corporate net */";
    <route> {
      <name> "172.16.0.0/12";
      <next-hop> $bkup-rtr;
      <retain>;
      <no-readvertise>;
    }
    <junos:comment> "/* lab nets */";
    <route> {
      <name> "192.168.0.0/16";
      <next-hop> $bkup-rtr;
      <retain>;
      <no-readvertise>;
    }
    <junos:comment> "/* reflector */";
    <route> {
      <name> "10.17.136.192/32";
      <next-hop> $bkup-rtr;
```


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```
        <retain>;
        <no-readvertise>;
      }
      <junos:comment> "/* another lab1*/";
      <route> {
        <name> "10.10.0.0/16";
        <next-hop> $bkup-rtr;
        <retain>;
        <no-readvertise>;
      }
      <junos:comment> "/* ssh servers */";
      <route> {
        <name> "10.17.136.0/24";
        <next-hop> $bkup-rtr;
        <retain>;
        <no-readvertise>;
      }
      <junos:comment> "/* Workstations */";
      <route> {
        <name> "10.150.0.0/16";
        <next-hop> $bkup-rtr;
        <retain>;
        <no-readvertise>;
      }
      <junos:comment> "/* Hosts */";
      <route> {
        <name> "10.157.64.0/19";
        <next-hop> $bkup-rtr;
        <retain>;
        <no-readvertise>;
      }
      <junos:comment> "/* Build Servers */";
      <route> {
        <name> "10.10.0.0/16";
        <next-hop> $bkup-rtr;
        <retain>;
        <no-readvertise>;
      }
    }
  }
  <policy-options> {
    <policy-statement> {
      <name> "redist";
      <from> {
        <protocol> "static";
      }
      <then> {
        <accept>;
      }
    }
  }
  <apply-groups> "re0";
  <apply-groups> "re1";
  <groups> {
    <name> "re0";
    <system> {
```

```
            <host-name> $hostname;
          }
          <interfaces> {
            <interface> {
              <name> "fxp0";
              <unit> {
                <name> "0";
                <family> {
                  <inet> {
                    <address> {
                      <name> $fxp0-addr;
                    }
                  }
                }
              }
            }
          }
          <groups> {
            <name> "re1";
          }
          <interfaces> {
            <interface> {
              <name> "lo0";
              <unit> {
                <name> "0";
                <family> {
                  <inet> {
                    <address> {
                      <name> $rid;
                    }
                  }
                }
              }
            }
          }
        }
      }
    }
  }
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **config-system.xsl** or **config-system.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **config-system.slax**.

```
system {
```


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```
    scripts {
      commit {
        allow-transients;
        file config-system.xsl;
      }
    }
}
apply-macro config-system {
    host-name test;
    mgmt-address 10.0.0.1/32;
    backup-router 10.0.0.2;
}
```

The **host-name** and **mgmt-address** statements are mandatory. The **backup-router** statement is optional. You can substitute a hostname, a management Ethernet (**fxp0**) IP address, and a backup router IP address that are appropriate for your device.

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action After committing the configuration, issue the **show | display commit-scripts** configuration mode command to view the device base configuration.

```
user@host# show | display commit-scripts
...
```

Example: Prepending a Global Policy

This commit script example ensures that a BGP global import policy is applied to all your BGP imports before any other import policies are applied.

- Requirements on page 296
- Overview and Commit Script on page 296

- Configuration on page 298
- Verification on page 299

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

For most configuration objects, the order in which the object or its children is created is not significant, because the Junos OS configuration management software stores and displays configuration objects in predetermined positions in the configuration hierarchy. However, some configuration objects—such as routing policies and firewall filters—consist of elements that must be processed and analyzed sequentially in order to produce the intended routing behavior.

This example commit script ensures that a BGP global import policy is applied to all your BGP imports before any other import policies are applied.

This example automatically prepends the **bgp_global_import** policy in front of any other BGP import policies. If the **bgp_global_import** policy statement is not included in the configuration, an error message is generated, and the commit operation fails.

Otherwise, the commit script uses the **insert="before"** Junos XML protocol attribute and the **position()** XSLT function to control the position of the global BGP policy in relation to any other applied policies. The **insert="before"** attribute inserts the **bgp_global_import** policy in front of the first preexisting BGP import policy.

If there is no preexisting default BGP import policy, the global policy is included in the configuration.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:if  test="not(policy-options/policy-statement[name='bgp_global_import'])">
      <xnm:error>
        <message>Policy error: Policy bgp_global_import required</message>
      </xnm:error>
    </xsl:if>
    <xsl:for-each select="protocols/bgp | protocols/bgp/group |
                          protocols/bgp/group/neighbor">
      <xsl:variable name="first" select="import[position() = 1]"/>
      <xsl:if test="$first">
        <xsl:call-template name="jcs:emit-change">
          <xsl:with-param name="tag" select="'transient-change'"/>
          <xsl:with-param name="content">
            <import insert="before"
```


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```
                    name="{$first}">bgp_global_import</import>
              </xsl:with-param>
            </xsl:call-template>
          </xsl:if>
        </xsl:for-each>
        <xsl:for-each select="protocols/bgp">
          <xsl:if test="not(import)">
            <xsl:call-template name="jcs:emit-change">
              <xsl:with-param name="tag" select="'transient-change'"/>
              <xsl:with-param name="content">
                <import>bgp_global_import</import>
              </xsl:with-param>
            </xsl:call-template>
          </xsl:if>
        </xsl:for-each>
      </xsl:template>
    </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  if (not(policy-options/policy-statement[name='bgp_global_import'])) {
    <xnm:error> {
      <message> "Policy error: Policy bgp_global_import required";
    }
  }
  for-each (protocols/bgp | protocols/bgp/group |
            protocols/bgp/group/neighbor) {
    var $first = import[position() = 1];
    if ($first) {
      call jcs:emit-change($tag = 'transient-change') {
        with $content = {
          <import insert="before" name="{$first}"> "bgp_global_import";
        }
      }
    }
  }
  for-each (protocols/bgp) {
    if (not(import)) {
      call jcs:emit-change($tag = 'transient-change') {
        with $content = {
          <import> "bgp_global_import";
        }
      }
    }
  }
}
```

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Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **bgp-global-import.xsl** or **bgp-global-import.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **bgp-global-import.slax**.

```
system {
    scripts {
        commit {
            allow-transients;
            file bgp-global-import.xsl;
        }
    }
}
interfaces {
    fe-0/0/0 {
        unit 0 {
            family inet {
                address 192.168.16.2/24;
            }
            family inet6 {
                address 2002:18a5:e996:beef::2/64;
            }
        }
    }
}
routing-options {
    autonomous-system 65400;
}
protocols {
    bgp {
        group fish {
            neighbor 192.168.16.4 {
                import [ blue green ];
                peer-as 65401;
            }
            neighbor 192.168.16.6 {
                peer-as 65402;
            }
        }
    }
}
policy-options {
    policy-statement blue {
        from protocol bgp;
        then accept;
    }
    policy-statement green {
```


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```
        then accept;
      }
      policy-statement bgp_global_import {
        then accept;
      }
    }
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

```
[edit]
user@host# load merge terminal
[Type ^D at a new line to end input]
... Paste the contents of the clipboard here ...
```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying the Configuration

Purpose Verify that the script behaves as expected.

Action When you issue the **show protocols** configuration mode command, the **bgp_global_import** import policy is not displayed, because it is added as a transient change.

```
[edit]
user@host# show protocols
bgp {
  group fish {
    neighbor 192.168.16.4 {
      import [ blue green ];
      peer-as 65401;
    }
    neighbor 192.168.16.6 {
      peer-as 65402;
    }
  }
}
```

The commit script adds the **import bgp_global_import** statement at the **[edit protocols bgp]** hierarchy level and prepends the **bgp_global_import** policy to the **192.168.16.4** neighbor policy chain. Issue the **show protocols | display commit-scripts** to view all configuration statements including transient changes.

```
[edit]
user@host# show protocols | display commit-scripts
bgp {
  import bgp_global_import;
```

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```
    group fish {
      neighbor 192.168.16.4 {
        import [ bgp_global_import blue green ];
        peer-as 65401;
      }
      neighbor 192.168.16.6 {
        peer-as 65402;
      }
    }
  }
```

After you add a policy to the **192.168.16.6** neighbor, which previously had no policies applied, the **bgp_global_import** policy is prepended. Issue the **show protocols | display commit-scripts** command to view all configuration statements including transient changes.

```
[edit]
user@host# set protocols bgp group fish neighbor 192.168.16.6 import green

[edit]
user@host# show protocols | display commit-scripts
bgp {
  import bgp_global_import;
  group fish {
    neighbor 192.168.16.4 {
      import [ bgp_global_import blue green ];
      peer-as 65401;
    }
    neighbor 192.168.16.6 {
      import [ bgp_global_import green ];
      peer-as 65402;
    }
  }
}
```

Example: Preventing Import of the Full Routing Table

In the Junos OS routing policy, if you configure a policy with no match conditions and a terminating action of **then accept**, and then apply the policy to a routing protocol, the protocol imports the entire routing table. This example shows how to use a commit script to prevent this scenario.

- Requirements on page 300
- Overview and Commit Script on page 300
- Configuration on page 302
- Verification on page 303

Requirements

This example uses a device running Junos OS.

Overview and Commit Script

This example inspects the **import** statements configured at the **[edit protocols ospf]** and **[edit protocols isis]** hierarchy levels to determine if any of the named policies contain a

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then accept term with no match conditions. The script protects against importing the full routing table into these interior gateway protocols (IGPs).

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:param name="po"
         select="commit-script-input/configuration/policy-options"/>
  <xsl:template match="configuration">
    <xsl:apply-templates select="protocols/ospf/import"/>
    <xsl:apply-templates select="protocols/isis/import"/>
  </xsl:template>
  <xsl:template match="import">
    <xsl:param name="test" select="."/>
    <xsl:for-each select="$po/policy-statement[name=$test]">
      <xsl:choose>
        <xsl:when test="then/accept and not(to) and not(from)">
          <xnm:error>
            <xsl:call-template name="jcs:edit-path">
              <xsl:with-param name="dot" select="$test"/>
            </xsl:call-template>
            <xsl:call-template name="jcs:statement">
              <xsl:with-param name="dot" select="$test"/>
            </xsl:call-template>
            <message>policy contains bare 'then accept'</message>
          </xnm:error>
        </xsl:when>
      </xsl:choose>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

param $po = commit-script-input/configuration/policy-options;
match configuration {
  apply-templates protocols/ospf/import;
  apply-templates protocols/isis/import;
}
match import {
  param $test = .;
  for-each ($po/policy-statement[name=$test]) {
    if (then/accept and not(to) and not(from)) {
      <xnm:error> {
        call jcs:edit-path($dot = $test);
```

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```
            call jcs:statement($dot = $test);
            <message> "policy contains bare 'then accept'";
          }
        }
      }
    }
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **import.xsl** or **import.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **import.slax**.

   ```
   system {
     scripts {
       commit {
         file import.xsl;
       }
     }
   }
   protocols {
     ospf {
       import bad-news;
     }
   }
   policy-options {
     policy-statement bad-news {
       then accept;
     }
   }
   ```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```


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Verification

Verifying the Commit Script Execution

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration configures an **import** statement at the **[edit protocols ospf]** hierarchy level. Because the policy contains a **then accept** term with no match conditions, the script generates an error, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit protocols ospf]
  'import bad-news;'
  policy contains bare 'then accept'
error: 1 error reported by commit scripts
error: commit script failure
```

Example: Requiring Internal Clocking on T1 Interfaces

This example shows how to use a commit script to require that T1 interfaces be configured with internal clocking.

- Requirements on page 303
- Overview and Commit Script on page 303
- Configuration on page 304
- Verification on page 305

Requirements

This example uses a device running Junos OS with T1 interfaces.

Overview and Commit Script

This commit script ensures that T1 interfaces are explicitly configured to use internal clocking. If the **clocking** statement is not included in the configuration, or if the **clocking external** statement is included, an error message is generated, and the configuration is not committed.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:for-each select="interfaces/interface[starts-with(name, 't1-')]">
      <xsl:variable name="clock-source">
        <xsl:value-of select="clocking"/>
      </xsl:variable>
```

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```
        <xsl:if test="not($clock-source = 'internal')">
        <!-- or xsl:if test="$clock-source != 'internal'" -->
          <xnm:error>
            <xsl:call-template name="jcs:edit-path"/>
            <xsl:call-template name="jcs:statement">
              <xsl:with-param name="dot" select="clocking"/>
            </xsl:call-template>
            <message>
              This T1 interface should have internal clocking.
            </message>
          </xnm:error>
        </xsl:if>
      </xsl:for-each>
    </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  for-each (interfaces/interface[starts-with(name, 't1-')]) {
    var $clock-source = {
      expr clocking;
    }
    if (not($clock-source = 'internal')) {
      <xnm:error> {
        call jcs:edit-path();
        call jcs:statement($dot = clocking);
        <message> "This T1 interface should have internal clocking.";
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **clocking-error.xsl** or **clocking-error.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **clocking-error.slax**.

```
system {
  scripts {
    commit {
      file clocking-error.xsl;
    }
```


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```
    }
  }
  interfaces {
    t1-0/0/0 {
      clocking external;
    }
    t1-0/0/1 {
      unit 0;
    }
  }
```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

   b. Press Enter.

   c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

   ```
   user@host# commit
   ```

Verification

Verifying Commit Script Execution

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The sample configuration stanzas configure two T1 interfaces **t1-0/0/0** and **t1-0/0/1**. Interface **t1-0/0/0** is configured with the **clocking external** statement, and interface **t1-0/0/1** does not include any **clocking** statement. The script generates an error, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit interfaces interface t1-0/0/0]
  'clocking external;'
  This T1 interface should have internal clocking.
[edit interfaces interface t1-0/0/1]
  ';'
  This T1 interface should have internal clocking.
error: 2 errors reported by commit scripts
error: commit script failure
```

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Example: Requiring and Restricting Configuration Statements

Junos OS commit scripts enforce custom configuration rules. When a candidate configuration is committed, it is inspected by each active commit script. This example uses a commit script to specify required and prohibited configuration statements.

- Requirements on page 306
- Overview and Commit Script on page 306
- Configuration on page 308
- Verification on page 309

Requirements

This example uses a device running Junos OS that has the Ethernet management interface **fxp0**.

Overview and Commit Script

This example shows how to use a commit script to specify required and prohibited configuration statements. The following commit script ensures that the Ethernet management interface (**fxp0**) is configured and detects when the interface is improperly disabled. The script also detects when the **bgp** statement is not included at the **[edit protocols]** hierarchy level. In all cases, the script generates an error message, and the commit operation fails.

The example script is shown in both XSLT and SLAX syntax:

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <xsl:call-template name="error-if-missing">
      <xsl:with-param name="must"
            select="interfaces/interface[name='fxp0']/
            unit[name='0']/family/inet/address"/>
      <xsl:with-param name="statement"
            select="'interfaces fxp0 unit 0 family inet address'"/>
    </xsl:call-template>
    <xsl:call-template name="error-if-present">
      <xsl:with-param name="must"
            select="interfaces/interface[name='fxp0']/disable
            | interfaces/interface[name='fxp0']/
            unit[name='0']/disable"/>
      <xsl:with-param name="message">
        <xsl:text>The fxp0 interface is disabled.</xsl:text>
      </xsl:with-param>
    </xsl:call-template>
    <xsl:call-template name="error-if-missing">
      <xsl:with-param name="must" select="protocols/bgp"/>
```


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```
      <xsl:with-param name="statement" select="'protocols bgp'"/>
    </xsl:call-template>
  </xsl:template>
  <xsl:template name="error-if-missing">
    <xsl:param name="must"/>
    <xsl:param name="statement" select="'unknown'"/>
    <xsl:param name="message"
            select="'missing mandatory configuration statement'"/>
    <xsl:if test="not($must)">
      <xnm:error>
        <edit-path><xsl:copy-of select="$statement"/></edit-path>
        <message><xsl:copy-of select="$message"/></message>
      </xnm:error>
    </xsl:if>
  </xsl:template>
  <xsl:template name="error-if-present">
    <xsl:param name="must" select="1"/> <!-- give error if param missing -->
    <xsl:param name="message" select="'invalid configuration statement'"/>
    <xsl:for-each select="$must">
      <xnm:error>
        <xsl:call-template name="jcs:edit-path"/>
        <xsl:call-template name="jcs:statement"/>
        <message><xsl:copy-of select="$message"/></message>
      </xnm:error>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match configuration {
  call error-if-missing($must =
        interfaces/interface[name='fxp0']/unit[name='0']/family/inet/address,
        $statement = 'interfaces fxp0 unit 0 family inet address');
  call error-if-present($must = interfaces/interface[name='fxp0']/disable |
        interfaces/interface[name='fxp0']/unit[name='0']/disable) {
    with $message = {
      expr "The fxp0 interface is disabled.";
    }
  }
  call error-if-missing($must = protocols/bgp, $statement = 'protocols bgp');
}
error-if-missing ($must, $statement = 'unknown', $message =
        'missing mandatory configuration statement') {
  if (not($must)) {
    <xnm:error> {
      <edit-path> {
        copy-of $statement;
      }
      <message> {
        copy-of $message;
      }
```

```
    }
  }
}
error-if-present ($must = 1, $message = 'invalid configuration statement') {
  for-each ($must) {
    <xnm:error> {
      call jcs:edit-path();
      call jcs:statement();
      <message> {
        copy-of $message;
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **no-nukes.xsl** or **no-nukes.slax** as appropriate, and copy it to the **/var/db/scripts/commit/** directory on the device.

2. Select the following test configuration stanzas, and press Ctrl+c to copy them to the clipboard.

   If you are using the SLAX version of the script, change the filename at the **[edit system scripts commit file]** hierarchy level to **no-nukes.slax**.

   ```
   system {
     scripts {
       commit {
         file no-nukes.xsl;
       }
     }
   }
   interfaces {
     fxp0 {
       disable;
       unit 0 {
         family inet {
           address 10.0.0.1/24;
         }
       }
     }
   }
   ```

3. In configuration mode, issue the **load merge terminal** command to merge the stanzas into your device configuration.

   ```
   [edit]
   user@host# load merge terminal
   [Type ^D at a new line to end input]
   ... Paste the contents of the clipboard here ...
   ```

   a. At the prompt, paste the contents of the clipboard by using the mouse and the paste icon.

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b. Press Enter.

c. Press Ctrl+d.

4. Issue the **commit** command to commit the configuration.

```
user@host# commit
```

Verification

Verifying Commit Script Execution

Purpose Verify that the script behaves as expected.

Action Review the output of the **commit** command. The script requires that the Ethernet management interface (**fxp0**) is configured and enabled and that the **bgp** statement is included at the **[edit protocols]** hierarchy level. The sample configuration stanzas include the **fxp0** interface but disable it. In addition, the **bgp** statement is not configured at the **[edit protocols]** hierarchy level. When you run the script, it generates an error, and the commit operation fails. The following output appears after issuing a **commit** command:

```
[edit]
user@host# commit
[edit interfaces interface fxp0 disable]
  'disable;'
  The fxp0 interface is disabled.
protocols bgp
  missing mandatory configuration statement
error: 2 errors reported by commit scripts
error: commit script failure
```

Configuration Statements

- allow-transients on page 310
- apply-macro on page 311
- checksum on page 312
- commit on page 313
- direct-access on page 314
- file (Commit Scripts) on page 314
- optional on page 315
- refresh (Commit Scripts) on page 315
- refresh-from (Commit Scripts) on page 316
- scripts on page 317
- source (Commit Scripts) on page 318
- traceoptions (Commit and Op Scripts) on page 319

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allow-transients

Syntax allow-transients;

Hierarchy Level [edit system scripts commit]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, enable transient configuration changes to be committed.

Default Transient changes are disabled by default. If you do not include the **allow-transients** statement, and an enabled script generates transient changes, the command-line interface (CLI) generates an error message and the commit operation fails.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Generating a Persistent or Transient Change on page 192
- Creating a Macro to Read the Custom Syntax and Generate Related Configuration Statements on page 207

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apply-macro

Syntax

```
apply-macro apply-macro-name {
    parameter-name parameter-value;
}
```

Hierarchy Level All hierarchy levels

Release Information Statement introduced in Junos OS Release 7.4.

Description With commit script macros, use custom syntax in your configuration.

Macros work by locating **apply-macro** statements that you include in the candidate configuration and using the values specified in the **apply-macro** statement as parameters to a set of instructions (the macro) defined in a commit script. The commit script alters your configuration from one that contains custom syntax into a full configuration containing standard Junos OS statements.

In effect, your custom configuration syntax serves a dual purpose. The syntax allows you to simplify your configuration tasks, and it provides data (or *hooks*) that are used by a commit script macros.

You can include the **apply-macro** statement at any level of the configuration hierarchy. You can include multiple **apply-macro** statements at each level of the configuration hierarchy; however, each must have a unique name.

Options ***apply-macro-name***—Name of the **apply-macro** statement.

parameter-name—One or more parameters. Parameters can be any text you want to include in your configuration.

parameter-value—A value that corresponds to the parameter name. Parameter values can be any text you want to include in your configuration.

Required Privilege Level configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

Related Documentation

- Overview of Creating Custom Configuration Syntax with Macros on page 158

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checksum

Syntax checksum (md5 | sha-256 | sha1) *hash*;

Hierarchy Level [edit event-options event-script file *filename*],
[edit system scripts commit file *filename*],
[edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 9.5.
Statement introduced in Junos OS Release 11.1 for the QFX Series.
Statement introduced in Junos OS Release 14.1X53-D20 for the OCX Series.

Description For Junos OS commit scripts and op scripts, specify the MD5, SHA-1, or SHA-256 checksum hash. When it executes a local event, commit, or op script, Junos OS verifies the authenticity of the script by using the configured checksum hash.

Options **md5 *hash***—MD5 checksum of this script.

sha-256 *hash*—SHA-256 checksum of this script.

sha1 *hash*—SHA-1 checksum of this script.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring Checksum Hashes for a Commit Script on page 177
- Configuring Checksum Hashes for an Event Script on page 473
- Configuring Checksum Hashes for an Op Script on page 345
- Executing an Op Script from a Remote Site on page 346
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*

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commit

Syntax

```
commit {
  allow-transients;
  direct-access;
  file filename {
    checksum (md5 | sha-256 | sha1) hash;
    optional;
    refresh;
    refresh-from url;
    source url;
  }
  refresh;
  refresh-from url;
  traceoptions {
    file <filename> <files number> <size size> <world-readable | no-world-readable>;
    flag flag;
    no-remote-trace;
  }
}
```

Hierarchy Level [edit system scripts]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, configure the commit-time scripting mechanism.

Options The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Storing and Enabling Scripts on page 85

direct-access

Syntax direct-access;

Hierarchy Level [edit system scripts commit]

Release Information Statement introduced in Junos OS Release 9.1.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description Specify that commit scripts read input configurations directly from the database when inspecting these scripts for errors.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Executing Large Commit Scripts on page 178

file (Commit Scripts)

Syntax
```
file filename {
  checksum (md5 | sha-256 | sha1) hash;
  optional;
  refresh;
  refresh-from url;
  source url;
}
```

Hierarchy Level [edit system scripts commit]

Release Information Statement introduced in Junos OS Release 7.4.

Description For Junos OS commit scripts, enable a commit script that is located in the **/var/db/scripts/commit** directory.

Options *filename*—Name of an Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) file containing a commit script.

The remaining statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Controlling Execution of Commit Scripts During Commit Operations on page 174

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optional

Syntax optional;

Hierarchy Level [edit system scripts commit file *filename*]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, allow a commit operation to succeed even if the script specified in the **file** statement is missing from the **/var/db/scripts/commit** directory on the device.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Controlling Execution of Commit Scripts During Commit Operations on page 174

refresh (Commit Scripts)

Syntax refresh;

Hierarchy Level [edit system scripts commit],
[edit system scripts commit file *filename*]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, overwrite the local copy of all enabled commit scripts or a single enabled script located in the **/var/db/scripts/commit** directory with the copy located at the source URL, as specified in the **source** statement at the same hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using a Master Source Location for a Script on page 89
- refresh-from (Commit Scripts) on page 316
- source (Commit Scripts) on page 318

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refresh-from (Commit Scripts)

Syntax refresh-from *url*;

Hierarchy Level [edit system scripts commit],
[edit system scripts commit file *filename*]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, overwrite the local copy of all enabled commit scripts or a single enabled script located in the **/var/db/scripts/commit** directory with the copy located at a URL other than the URL specified in the **source** statement.

Options *url*—The source specified as a Hypertext Transfer Protocol (HTTP) URL, FTP URL, or secure copy (scp)-style remote file specification.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using an Alternate Source Location for a Script on page 94
- refresh (Commit Scripts) on page 315
- source (Commit Scripts) on page 318

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scripts

Syntax

```
scripts {
  commit {
    allow-transients;
    direct-access;
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      optional;
      refresh;
      refresh-from url;
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  op {
    file filename {
      arguments {
        argument-name {
          description descriptive-text;
        }
      }
      checksum (md5 | sha-256 | sha1) hash;
      command filename-alias;
      description descriptive-text;
      refresh;
      refresh-from url;
      source url;
    }
    no-allow-url
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
}
```

Hierarchy Level [edit system]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit or op scripts, configure scripting mechanisms.

Options The statements are explained separately.

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Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Storing and Enabling Scripts on page 85

source (Commit Scripts)

Syntax source *url*;

Hierarchy Level [edit system scripts commit file *filename*]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit scripts, specify the location of the source file for an enabled script located in the **/var/db/scripts/commit** directory. When you include the **refresh** statement at the same hierarchy level and commit the configuration, the local copy is overwritten by the version stored at the specified URL.

Options ***url***—The source specified as an HTTP URL, FTP URL, or scp-style remote file specification.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using a Master Source Location for a Script on page 89
- Overview of Updating Scripts from a Remote Source on page 88
- **refresh (Commit Scripts) on page 315**
- **refresh-from (Commit Scripts) on page 316**

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traceoptions (Commit and Op Scripts)

Syntax

```
traceoptions {
  file <filename> <files number> <size size> <world-readable | no-world-readable>;
  flag flag;
  no-remote-trace;
}
```

Hierarchy Level

[edit system scripts commit],
[edit system scripts op],
[edit system scripts op]

Release Information

Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description

Define tracing operations for commit or op scripts.

Default

If you do not include this statement, no script-specific tracing operations are performed.

Options

file *filename*—Name of the file to receive the output of the tracing operation. All files are placed in the directory **/var/log**. By default, commit script process tracing output is placed in the file **cscript.log**, op script process tracing is placed in the file **op-script.log**, and SNMP script tracing is placed in the file **snmp.log**. If you include the **file** statement, you must specify a filename. To retain the default, you can specify **cscript.log**, **op-script.log**, or **snmp.log** as the filename.

Default: Commit scripts: /var/log/cscript.log, Op scripts: /var/log/op-script.log, SNMP scripts: /var/log/snmp.log.

files *number*—(Optional) Maximum number of trace files. When a trace file named ***trace-file*** reaches its maximum size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the **size** option and a filename.

Range: 2 through 1000

Default: 10 files

flag *flag*—Tracing operation to perform. To specify more than one tracing operation, include multiple **flag** statements. You can include the following flags:

- **all**—Log all operations
- **events**—Log important events
- **input**—Log script input data
- **offline**—Generate data for offline development
- **output**—Log script output data

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- **rpc**—Log script RPCs
- **xslt**—Log the XSLT library

no-world-readable—Restrict file access to owner. This is the default.

size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named ***trace-file*** reaches this size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you also must specify a maximum number of trace files with the **files** option and a filename.

Syntax: ***x*k** to specify KB, ***x*m** to specify MB, or ***x*g** to specify GB

Range: 10 KB through 1 GB

Default: 128 KB

world-readable—Enable unrestricted file access.

Required Privilege Level
maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Tracing Commit Script Processing on page 326
- Tracing Op Script Processing on page 404

Junos XML and XSLT Tag Elements Used in Commit Scripts

<change> (XSLT)

Usage

```
<change>
  <!-- tag elements representing configuration statements to load -->
</change>
```

Release Information
Statement introduced in Junos OS Release 7.4.

Description
Request that the Junos XML protocol server load configuration data into the candidate configuration by enclosing the configuration data within an opening **<change>** tag and closing **</change>** tag. Inside the **<change>** element, include the configuration data as Junos XML tag elements.

Usage Guidelines
See "Overview of Generating Persistent or Transient Configuration Changes" on page 154 and "Overview of Creating Custom Configuration Syntax with Macros" on page 158.

Related Documentation
- <transient-change> (XSLT) on page 321

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<syslog> (Junos XML)

Usage

```
<syslog="namespace-URL" xmlns:xnm="namespace-URL">
  <message>syslog-message </message>
</syslog>
```

Release Information Statement introduced in Junos OS Release 7.4.

Description Record events that occur on a device running Junos OS.

Attributes **xmlns**—Names the Extensible Markup Language (XML) namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<message>**—Specifies the content of the system log message in a natural-language text string.

Usage Guidelines See "Generating a Custom Warning, Error, or System Log Message" on page 178.

<transient-change> (XSLT)

Usage

```
<transient-change>
  <!-- tag elements representing configuration statements to load -->
</transient-change>
```

Release Information Statement introduced in Junos OS Release 7.4.

Description Request that the Junos XML protocol server load configuration data into the checkout configuration by enclosing the configuration data within an opening **<transient-change>** and closing **</transient-change>** tag. Inside the **<transient-change>** element, include the configuration data as Junos XML tag elements.

Usage Guidelines See "Overview of Generating Persistent or Transient Configuration Changes" on page 154 and "Overview of Creating Custom Configuration Syntax with Macros" on page 158.

Related Documentation

- <change> (XSLT) on page 320

xnm:error (Junos XML)

Usage

```
<xnm:error xmlns="namespace-URL" xmlns:xnm="namespace-URL">
  <parse/>
  <source-daemon>module-name</source-daemon>
  <filename>filename</filename>
  <line-number>line-number</line-number>
  <column>column-number</column>
  <token>input-token-id</token>
```

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```
    <edit-path>edit-path-name</edit-path>
    <statement>statement-string</statement>
    <message>error-string</message>
    <re-name>re-name-string</re-name>
    <database-status-information>user</database-status-information>
    <reason>reason-string</reason>
  </xnm:error>
```

Release Information Statement introduced in Junos OS Release 7.4.

Description Indicate that the commit script has detected an error in the configuration and has caused the commit operation to fail. The child tag elements described in the Contents section detail the nature of the error.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—Identifies the element that caused the error by specifying its position as the number of characters after the first character in the line specified by the **<line-number>** tag element in the configuration file that was being loaded (which is named in the **<filename>** tag element).

<database-status-information>—Provides information about the users currently editing the configuration.

<edit-path>—Specifies the command-line interface (CLI) configuration mode edit path in effect when the error occurred (provided only during loading of a configuration file).

<filename>—Names the configuration file that was being loaded.

<line-number>—Specifies the line number where the error occurred in the configuration file that was being loaded, which is named by the **<filename>** tag element.

<message>—Describes the error in a natural-language text string.

<parse/>—Indicates that there was a syntactic error in the request submitted by the client application.

<re-name>—Names the Routing Engine on which the <source-daemon> is running.

<reason>—Describes the reason for the error.

<source-daemon>—Names the Junos OS module that was processing the request in which the error occurred.

<statement>—Specifies the configuration statement in effect when the problem occurred.

<token>—Names the element in the request that caused the error.

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Usage Guidelines See "Generating a Custom Warning, Error, or System Log Message" on page 178.

Related Documentation

- xnm:warning (Junos XML) on page 323

xnm:warning (Junos XML)

Usage

```
<xnm:warning xmlns="namespace-URL" xmlns:xnm="namespace-URL">
  <source-daemon>module-name</source-daemon>
  <filename>filename</filename>
  <line-number>line-number</line-number>
  <column>column-number</column>
  <token>input-token-id</token>
  <edit-path>edit-path-name</edit-path>
  <statement>statement-name</statement>
  <message>error-string</message>
  <reason>reason-string</reason>
</xnm:warning>
```

Release Information Statement introduced in Junos OS Release 7.4.

Description Indicate that the commit script has encountered a problem with the configuration. The child tag elements described in the Contents section detail the nature of the warning.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—Identifies the element that caused the warning by specifying its position as the number of characters after the first character in the line specified by the **<line-number>** tag element in the configuration file that was being loaded (which is named in the **<filename>** tag element).

<edit-path>—Specifies the CLI configuration mode edit path in effect when the problem occurred (provided only during loading of a configuration file).

<filename>—Names the configuration file that was being loaded.

<line-number>—Specifies the line number where the problem occurred in the configuration file that was being loaded, which is named by the **<filename>** tag element.

<message>—Describes the warning in a natural-language text string.

<reason>—Describes the reason for the warning.

<source-daemon>—Names the Junos OS module that was processing the request in which the problem occurred.

<statement>—Names the configuration statement in effect when the problem occurred.

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<token>—Names which element in the request caused the warning.

Usage Guidelines See "Generating a Custom Warning, Error, or System Log Message" on page 178

Related Documentation

- xnm:error (Junos XML) on page 321.

Administration

- Configuration and Operations Configuration Statements on page 324

Configuration and Operations Configuration Statements

- Any Hierarchy Level on page 324
- [edit system scripts] Hierarchy Level on page 324

Any Hierarchy Level

The following statement can be added at any level of the configuration:

```
apply-macro apply-macro-name {
  parameter-name parameter-value;
}
```

[edit system scripts] Hierarchy Level

The following statements can be configured at the **[edit system]** hierarchy level. This is not a comprehensive list of statements available at the **[edit system]** hierarchy level.

```
[edit system]
scripts {
  commit {
    allow-transients;
    direct-access;
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      optional;
      refresh;
      refresh-from url;
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  op {
    file filename {
      arguments {
        argument-name {
          description descriptive-text;
```


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```
        }
      }
      checksum (md5 | sha-256 | sha1) hash;
      command filename-alias;
      description descriptive-text;
      refresh;
      refresh-from url;
      source url;
    }
    no-allow-url
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
}
```

Troubleshooting

- Troubleshooting Commit Scripts on page 325

Troubleshooting Commit Scripts

- Displaying Commit Script Output on page 325
- Tracing Commit Script Processing on page 326
- Troubleshooting Commit Scripts on page 330

Displaying Commit Script Output

Table 17 on page 325 summarizes the Junos OS command-line interface (CLI) commands you can use to monitor and troubleshoot commit scripts. For more information about the **cscript.log** file, see "Tracing Commit Script Processing" on page 326.

Table 17: Commit Script Configuration and Operational Mode Commands

Task	Command
Configuration Mode Commands	
Display errors and warnings generated by commit scripts.	**commit** or **commit check**
Display detailed information.	**commit | display detail**
Display the underlying Extensible Markup Language (XML) data.	**commit | display xml**
Display the postinheritance contents of the configuration database. This view includes transient changes, but does not include changes made in configuration groups.	**show | display commit-scripts**

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Table 17: Commit Script Configuration and Operational Mode Commands *(continued)*

Task	Command
Display the postinheritance contents of the configuration database. This view excludes transient changes.	**show | display commit-scripts no-transients**
Display the postinheritance configuration in XML format. Viewing the configuration in XML format can be helpful when you are writing XML Path Language (XPath) expressions and configuration element tags.	**show | display commit-scripts view**
Display the postinheritance configuration in XML format, but exclude transient changes.	**show |** **display commit-scripts view |** **display commit-scripts no-transients**
Display all configuration groups data, including script-generated changes to the groups.	**show groups | display commit-scripts**
Display a particular configuration group, including script-generated changes to the group.	**show groups *group-name* | display commit-scripts**
Operational Mode Commands	
Display logging data associated with all commit script processing.	**show log cscript.log**
Display processing for only the most recent commit operation.	**show log cscript.log | last**
Display processing for script errors.	**show log cscript.log | match error**
Display processing for a particular script.	**show log cscript.log | match *filename***

Related Documentation

- Tracing Commit Script Processing on page 326

Tracing Commit Script Processing

Commit script tracing operations track all commit script operations and record them in a log file. The logged error descriptions provide detailed information to help you solve problems faster.

The default operation of commit script tracing is to log important events in a file called **cscript.log** located in the **/var/log** directory on the device. When the file **cscript.log** reaches 128 kilobytes (KB), it is renamed with a number 0 through 9 (in ascending order) appended

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to the end of the file and then compressed. For example, the log file is saved as **cscript.log.0.gz**, then **cscript.log.1.gz** until there are 10 trace files. Then the oldest trace file (**cscript.log.9.gz**) is overwritten. (For more information about how log files are created, see the *Junos OS System Log Messages Reference*.)

This section discusses the following topics:

- Minimum Configuration for Tracing for Commit Script Operations on page 327
- Configuring Tracing of Commit Scripts on page 328

Minimum Configuration for Tracing for Commit Script Operations

If no commit script trace options are configured, the simplest way to view the trace output of a commit script is to configure the **output** trace flag and issue the **show log cscript.log | last** command. To do this, perform the following steps:

1. If you have not done so already, enable a commit script by including the **file** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   user@host# set file filename
   ```

2. Enable trace options by including the **traceoptions flag output** statement at the **[edit system scripts commit]** hierarchy level:

   ```
   [edit system scripts commit]
   user@host# set traceoptions flag output
   ```

3. Issue the **commit** command:

   ```
   [edit]
   user@host# commit
   ```

4. Display the resulting trace messages recorded in the file **/var/log/cscript.log**. At the end of the log is the output generated by the commit script you enabled in Step 1. To display the end of the log, issue the **show log cscript.log | last** operational mode command:

   ```
   [edit]
   user@host# run show log cscript.log | last
   ```

Table 18 on page 327 summarizes useful filtering commands that display selected portions of the **cscript.log** file.

Table 18: Commit Script Tracing Operational Mode Commands

Task	Command
Display logging data associated with all script processing.	**show log cscript.log**
Display script processing for only the most recent commit operation.	**show log cscript.log | last**
Display processing for script errors.	**show log cscript.log | match error**

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Table 18: Commit Script Tracing Operational Mode Commands *(continued)*

Task	Command
Display script processing for a particular script.	**show log cscript.log | match** *filename*

Example: Minimum Configuration for Enabling Traceoptions for Commit Scripts

Display the trace output for the commit script file **source-route.xsl**:

```
[edit]
system {
  scripts {
    commit {
      file source-route.xsl;
      traceoptions flag output;
    }
  }
}
```

```
[edit]
user@host# commit
[edit]
user@host# run show log cscript.log | last
Jun 20 10:21:24 summary: changes 0, transients 0 (allowed), syslog 0
Jun 20 10:24:15 commit script processing begins
Jun 20 10:24:15 reading commit script configuration
Jun 20 10:24:15 testing commit script configuration
Jun 20 10:24:15 opening commit script '/var/db/scripts/commit/source-route.xsl'
Jun 20 10:24:15 script file '/var/db/scripts/commit/source-route.xsl': size=699;
 md5 = d947972b429d17ce97fe987d94add6fd
Jun 20 10:24:15 reading commit script 'source-route.xsl'
Jun 20 10:24:15 running commit script 'source-route.xsl'
Jun 20 10:24:15 processing commit script 'source-route.xsl'
Jun 20 10:24:15 results of 'source-route.xsl'
Jun 20 10:24:15 begin dump
<commit-script-output xmlns:junos="http://xml.juniper.net/junos/*/junos"
xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
    <xnm:warning>
        <edit-path>[edit chassis]</edit-path>
        <message>IP source-route processing is not enabled.</message>
    </xnm:warning>
</commit-script-output>Jun 20 10:24:15 end dump
Jun 20 10:24:15 no errors from source-route.xsl
Jun 20 10:24:15 saving commit script changes
Jun 20 10:24:15 summary: changes 0, transients 0 (allowed), syslog 0
```

Configuring Tracing of Commit Scripts

You cannot change the directory (**/var/log**) to which trace files are written. However, you can customize other trace file settings by including the following statements at the **[edit system scripts commit traceoptions]** hierarchy level:

```
[edit system scripts commit traceoptions]
file <filename> <files number> <size size> <world-readable | no-world-readable>;
```


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```
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
no-remote-trace;
```

These statements are described in the following sections:

- Configuring the Commit Script Log Filename on page 329
- Configuring the Number and Size of Commit Script Log Files on page 329
- Configuring Access to Commit Script Log Files on page 330
- Configuring the Commit Script Trace Operations on page 330

Configuring the Commit Script Log Filename

By default, the name of the file that records trace output is **cscript.log**. You can specify a different name by including the **file** statement at the **[edit system scripts commit traceoptions]** hierarchy level:

```
[edit system scripts commit traceoptions]
file filename;
```

Configuring the Number and Size of Commit Script Log Files

By default, when the trace file reaches 128 KB in size, it is renamed and compressed to ***filename*.0.gz**, then ***filename*.1.gz**, and so on, until there are 10 trace files. Then the oldest trace file (***filename*.9.gz**) is overwritten.

You can configure the limits on the number and size of trace files by including the following statements at the **[edit system scripts commit traceoptions file <*filename*>]** hierarchy level:

```
[edit system scripts commit traceoptions file <filename>]
files number size size;
```

For example, set the maximum file size to 640 KB and the maximum number of files to 20. When the file that receives the output of the tracing operation (***filename***) reaches 640 KB, it is renamed and compressed to ***filename*.0.gz**, and a new file called ***filename*** is created. When ***filename*** reaches 640 KB, ***filename*.0.gz** is renamed ***filename*.1.gz** and ***filename*** is renamed and compressed to ***filename*.0.gz**. This process repeats until there are 20 trace files. Then the oldest file (***filename*.19.gz**) is overwritten.

The number of files can range from 2 through 1000 files. The file size can range from 10 KB through 1 gigabyte (GB).

NOTE:

If you set either a maximum file size or a maximum number of trace files, you also must specify the other parameter and a filename.

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Configuring Access to Commit Script Log Files

By default, access to the commit script log file is restricted to the owner. You can manually configure access by including the **world-readable** or **no-world-readable** statement at the **[edit system scripts commit traceoptions file <*filename*>]** hierarchy level.

```
[edit system scripts commit traceoptions file <filename>]
(world-readable | no-world-readable);
```

The **no-world-readable** statement restricts commit script log access to the owner. The **world-readable** statement enables unrestricted access to the commit script log file.

Configuring the Commit Script Trace Operations

By default, only important events are logged. You can configure the trace operations to be logged by including the following statements at the **[edit system scripts commit traceoptions]** hierarchy level:

```
[edit system scripts commit traceoptions]
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
```

Table 19 on page 330 describes the meaning of the commit script tracing flags.

Table 19: Commit Script Tracing Flags

Flag	Description	Default Setting
all	Trace all operations.	Off
events	Trace important events.	On
input	Trace commit script input data.	Off
offline	Generate data for offline development.	Off
output	Trace commit script output data.	Off
rpc	Trace commit script RPCs.	Off
xslt	Trace the Extensible Stylesheet Language Transformations (XSLT) library.	Off

Troubleshooting Commit Scripts

After you enable a commit script and issue a **commit** command, the commit script takes effect immediately.

Table 20 on page 331 describes some common problems that might occur.

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Table 20: Troubleshooting Commit Scripts

Problem	Solution
The output of the **commit check | display detail** command does not reference the expected commit scripts.	Make sure you have enabled all the scripts by including the **file** statement for each one at the **[edit system scripts commit]** hierarchy level.
The output contains the error message: error: could not open commit script: /var/db/scripts/commit/*filename*: No such file or directory	Make sure the file ***filename*** is in the **/var/db/scripts/commit/** directory on your switch, router, or security device.
The following error and warning messages appear: error: invalid transient change generated by commit script: *filename* warning: 1 transient change was generated without [system scripts commit allow-transients]	One of your commit scripts contains instructions to generate a transient change, but you have not enabled transient changes. To rectify this problem, take one of the following actions: • Remove the code that generates a transient change from the indicated script. • Remove the script. • Include the **allow-transients** statement at the **[edit system scripts commit]** hierarchy level.
An expected action does not occur. For example, a warning message does not appear even though the configuration contains the problem that is supposed to evoke the warning message.	1. Make sure you have enabled the script. Scripts are ignored if they are not enabled. To enable a script, include the **file *filename*** statement at the **[edit system scripts commit]** hierarchy level. 2. Make sure you have included the required boilerplate in your script. For more information, see "Required Boilerplate for Commit Scripts" on page 166. 3. Make sure that the Extensible Markup Language Path (XPath) expressions in the script contain valid Junos OS command-line interface (CLI) statements expressed as Junos XML protocol tag elements. You can verify the XML hierarchy by checking the *Junos XML API Configuration Developer Reference* or by issuing the **show configuration | display xml** operational mode command. 4. Make sure that the programming instructions in the script are referencing the correct context node. If you nest one instruction inside another, the outer instruction changes the context node, so the inner instruction must be relative to the outer. In the following example, the **<xsl:for-each>** instruction contains an XPath expression, which changes the context node. So the nested **<xsl:if>** instruction uses an XPath expression that is relative to the **interfaces/interface[starts-with(name, 't1-')]** XPath expression. <xsl:for-each select="interfaces/interface[starts-with(name, 't1-')]"> <xsl:if test="not(description)">

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CHAPTER 3

Operations Automation Developer Guide

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- Configuration on page 334
- Troubleshooting on page 404

Overview

- Op Scripts Overview on page 333

Op Scripts Overview

- Op Script Overview on page 333
- How Op Scripts Work on page 334

Op Script Overview

Junos OS operation (op) scripts automate network and device management and troubleshooting. Op scripts can perform any function available through the remote procedure calls (RPCs) supported by either the Junos XML management protocol or the Junos Extensible Markup Language (XML) API. Op scripts can be executed manually in the CLI or upon user login, or they can be called from another script. They are executed by the Junos OS management (mgd) process.

Op scripts enable you to do the following things:

- Create custom operational mode commands
- Execute a series of operational mode commands
- Customize the output of operational mode commands
- Shorten troubleshooting time by gathering operational information and iteratively narrowing down the cause of a network problem
- Perform controlled configuration changes
- Monitor the overall status of a device by creating a general operation script that periodically checks network warning parameters, such as high CPU usage.

Op scripts are based on the Junos XML management protocol, and the Junos XML API, which are discussed in "Junos XML Management Protocol and Junos XML API Overview"

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on page 6. Op scripts can be written in either the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) scripting language. Op scripts use XPath to locate the operational objects to be inspected and XSLT constructs to specify the actions to perform on the located operational objects. The actions can change the output or execute additional commands based on the output.

Related Documentation

- SLAX Overview on page 63
- XPath Overview on page 50
- XSLT Overview on page 48

How Op Scripts Work

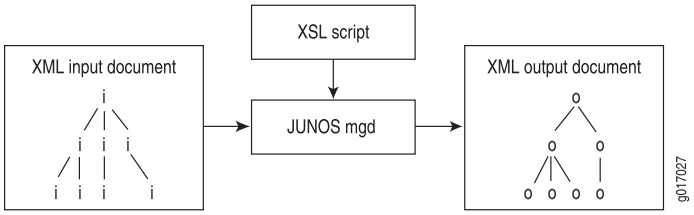
Op scripts execute Junos OS operational commands and inspect the resulting output. After inspection, op scripts can automatically correct errors within the device running Junos OS based on this output.

You add op scripts to device operations by listing the filenames of one or more op script files within the **[edit system scripts op]** hierarchy level. These files must be added to the appropriate op script file directory. For more information about op script file directories, see "Storing Scripts in Flash Memory" on page 86. Once added to the device, op scripts are invoked from the command line, using the **op *filename*** command.

You can use op scripts to generate changes to the device configuration by including the **<load-configuration>** tag element. Because the changes are loaded before the standard validation checks are performed, they are validated for correct syntax, just like statements already present in the configuration before the script is applied. If the syntax is correct, the configuration is activated and becomes the active, operational device configuration.

Figure 9 on page 334 shows a high-level view of the flow of op script input and output.

Figure 9: Op Script Input and Output



Configuration

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- Configuration Statements on page 392

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Creating and Executing Op Scripts

- Required Boilerplate for Op Scripts on page 335
- Mapping Operational Mode Commands and Output Fields to Junos XML Notation on page 337
- Using RPCs and Operational Mode Commands in Op Scripts on page 337
- Declaring Arguments in Op Scripts on page 341
- Configuring Help Text for Op Scripts on page 343
- Enabling an Op Script and Defining a Script Alias on page 344
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- Executing an Op Script from a Remote Site on page 346
- Disabling an Op Script on page 347

Required Boilerplate for Op Scripts

When you write operation (op) scripts, you use Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) tools provided with Junos OS. These tools include basic boilerplate that you must include in all op scripts, optional extension functions that accomplish scripting tasks more easily, and named templates that make scripts easier to read and write, which you import from a file called **junos.xsl**. For more information about the extension functions and templates, see "Understanding Extension Functions in the jcs Namespace" on page 8 and "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28.

Op scripts are based on Junos XML and Junos XML protocol tag elements. Like all XML elements, angle brackets enclose the name of a Junos XML or Junos XML protocol tag element in its opening and closing tags. This is an XML convention, and the brackets are a required part of the complete tag element name. They are not to be confused with the angle brackets used in the documentation to indicate optional parts of Junos OS CLI command strings.

You must include either XSLT or SLAX boilerplate as the starting point for all op scripts that you create. The XSLT boilerplate follows:

XSLT Boilerplate for Op Scripts

```
1  <?xml version="1.0" standalone="yes"?>
2  <xsl:stylesheet version="1.0"
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
7     <xsl:import href="../import/junos.xsl"/>

8     <xsl:template match="/">
9        <op-script-results>
         <!-- ... insert your code here ... -->
10       </op-script-results>
11    </xsl:template>
      <!-- ... insert additional template definitions here ... -->
```

```
12  </xsl:stylesheet>
```

Line 1 is the Extensible Markup Language (XML) processing instruction (PI), which marks this file as XML and specifies the version of XML as 1.0. The XML PI, if present, must be the first non-comment token in the script file.

```
1  <?xml version="1.0"?>
```

Line 2 opens the style sheet and specifies the XSLT version as 1.0.

```
2  <xsl:stylesheet version="1.0"
```

Lines 3 through 6 list all the namespace mappings commonly used in operation scripts. Not all of these prefixes are used in this example, but it is not an error to list namespace mappings that are not referenced. Listing all namespace mappings prevents errors if the mappings are used in later versions of the script.

```
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
```

Line 7 is an XSLT import statement. It loads the templates and variables from the file referenced as **../import/junos.xsl**, which ships as part of Junos OS (in the file **/usr/libdata/cscript/import/junos.xsl**). The **junos.xsl** file contains a set of named templates you can call in your scripts. These named templates are discussed in "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28 and "Junos Named Templates in the jcs Namespace Summary" on page 30.

```
7     <xsl:import href="../import/junos.xsl"/>
```

Line 8 defines a template that matches the **</>** element. The **<xsl:template match="/">** element is the root element and represents the top level of the XML hierarchy. All XML Path Language (XPath) expressions in the script must start at the top level. This allows the script to access all possible Junos XML and Junos XML protocol remote procedure calls (RPCs). For more information, see "XPath Overview" on page 50.

```
8     <xsl:template match="/">
```

After the **<xsl:template match="/">** tag element, the **<op-script-results>** and **</op-script-results>** container tags must be the top-level child tags, as shown in Lines 9 and 10.

```
9        <op-script-results>
         <!-- ... insert your code here ... -->
10       </op-script-results>
```

Line 11 closes the template.

```
11    </xsl:template>
```

Between Line 11 and Line 12, you can define additional XSLT templates that are called from within the **<xsl:template match="/">** template.

Line 12 closes the style sheet and the op script.

```
12  </xsl:stylesheet>
```

SLAX Boilerplate for Op Scripts

The corresponding SLAX boilerplate is as follows:

```
version 1.0;
```


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```
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

match / {
  <op-script-results> {
    /*
      * Insert your code here
    */
  }
}
```

Mapping Operational Mode Commands and Output Fields to Junos XML Notation

In op scripts, you use tag elements from the Junos XML API to represent operational mode commands and output fields. For the Junos XML equivalent of commands and output fields, consult the *Junos XML API Operational Developer Reference*.

You can also display the Junos XML tag elements for operational mode command output by directing the output from the command to the **| display xml** command:

```
user@host> command-string | display xml
```

For example:

```
user@host> show interfaces terse | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
    <interface-information
xmlns="http://xml.juniper.net/junos/10.0RI0/junos-interface" junos:style="terse">
        <physical-interface>
            <name>dsc</name>
            <admin-status>up</admin-status>
            <oper-status>up</oper-status>
        </physical-interface>
        <physical-interface>
            <name>fxp0</name>
            <admin-status>up</admin-status>
            <oper-status>up</oper-status>
            <logical-interface>
                <name>fxp0.0</name>
                <admin-status>up</admin-status>
                <oper-status>up</oper-status>
                ...
```

Related Documentation

- Configuring Help Text for Op Scripts on page 343
- Declaring Arguments in Op Scripts on page 341
- Using RPCs and Operational Mode Commands in Op Scripts on page 337

Using RPCs and Operational Mode Commands in Op Scripts

Most Junos OS operational mode commands have XML equivalents. These XML commands can be executed remotely using the remote procedure call (RPC) protocol.

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All operational mode commands that have XML equivalents are listed in the *Junos XML API Operational Developer Reference*.

Use of RPC and operational mode commands in op scripts is discussed in more detail in the following sections:

- Using RPCs in Op Scripts on page 338
- Displaying the RPC Tags for a Command on page 339
- Using Operational Mode Commands in Op Scripts on page 339

Using RPCs in Op Scripts

To use an RPC in an op script, include the RPC in a variable declaration. You then invoke the RPC with the **jcs:invoke()** or **jcs:execute()** extension function and include the RPC variable as an argument. The **jcs:invoke()** function executes the RPC on the local device. You can use the **jcs:execute()** function with a connection handle to execute the RPC on a remote device.

The following snippet, which invokes an RPC on the local device, is expanded and fully described in "Example: Customizing Output of the show interfaces terse Command Using an Op Script" on page 354.

XSLT Syntax

```
<xsl:variable name="rpc">
  <get-interface-information/> # Junos RPC for the show interfaces command
</xsl:variable>
<xsl:variable name="out" select="jcs:invoke($rpc)"/>
...
```

SLAX Syntax

```
var $rpc = <get-interface-information>;
var $out = jcs:invoke($rpc);
```

To execute an RPC on a remote device, an SSH session must be established. In order for the script to establish the connection, you must either configure the SSH host key information for the remote device on the local device where the script will be executed, or the SSH host key information for the remote device must exist in the known hosts file of the user executing the script. For each remote device where an RPC is executed, configure the SSH host key information with one of the following methods:

- To configure SSH known hosts on the local device, include the **host** statement, and specify hostname and host key options for the remote device at the **[edit security ssh-known-hosts]** hierarchy level of the configuration.
- To manually retrieve SSH host key information, issue the **set security ssh-known-hosts fetch-from-server *hostname*** configuration mode command to instruct Junos OS to connect to the remote device and add the key.

```
user@host# set security ssh-known-hosts fetch-from-server router2
The authenticity of host 'router2 (10.10.10.1)' can't be established.
RSA key fingerprint is 30:18:99:7a:3c:ed:40:04:0f:fd:c1:57:7e:6b:f3:90.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'router2,10.10.10.1' (RSA) to the list of known
hosts.
```


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- To manually import SSH host key information from a file, use the **set security ssh-known-hosts load-key-file *filename*** configuration mode command and specify the known-hosts file.

  ```
  user@host# set security ssh-known-hosts load-key-file /var/tmp/known_hosts
  Import SSH host keys from trusted source /var/tmp/known_hosts ? [yes,no] (no)
  yes
  ```

- Alternatively, the user executing the script can log in to the local device, SSH to the remote device, and then manually accept the host key, which is added to that user's known hosts file. In the following example, root is logged in to **router1**. In order to execute a remote RPC on **router2**, root adds the host key of **router2** by issuing the **ssh router2** operational mode command and manually accepting the key.

  ```
  root@router1> ssh router2
  The authenticity of host 'router2 (10.10.10.1)' can't be established.
  RSA key fingerprint is 30:18:99:7a:3c:ed:40:04:0f:fd:c1:57:7e:6b:f3:90.
  Are you sure you want to continue connecting (yes/no)? yes
  Warning: Permanently added 'router2,10.10.10.1' (RSA) to the list of known
  hosts.
  ```

Displaying the RPC Tags for a Command

To display the remote procedure call (RPC) XML tags for an operational mode command, enter **display xml rpc** after the pipe symbol (|).

The following example displays the RPC tags for the **show route** command:

```
user@host> show route | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.1I0/junos">
    <rpc>
        <get-route-information>
        </get-route-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

Using Operational Mode Commands in Op Scripts

Some operational mode commands do not have XML equivalents. If a command is not listed in the *Junos XML API Operational Developer Reference*, the command does not have an XML equivalent.

Another way to determine whether a command has an XML equivalent is to issue the command followed by the **| display xml** command:

```
user@host> operational-mode-command | display xml
```

If the output includes only tag elements like **<output>**, **<cli>**, and **<banner>**, the command might not have an XML equivalent. In the following example, the output indicates that the **show host** command has no XML equivalent:

```
user@host> show host hostname | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
    <output>
       ...
```

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```
    </output>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

NOTE: For some commands that have an XML equivalent, the output of the piped **| display xml** command does not include tag elements other than **<output>**, **<cli>**, and **<banner>** only because the relevant feature is not configured. For example, the **show services cos statistics forwarding-class** command has an XML equivalent that returns output in the **<service-cos-forwarding-class-statistics>** response tag, but if the configuration does not include include any statements at the **[edit class-of-service]** hierarchy level then there is no actual data for the **show services cos statistics forwarding-class | display xml** command to display. The output is something like this:

```
user@host> show services cos statistics forwarding-class | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/8.3I0/junos">
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

For this reason, the information in the *Junos XML API Operational Developer Reference* is normally more reliable.

An op script can include commands that have no XML equivalent. Use the **<command>**, **<xsl:value-of>**, and **<output>** elements in the script, as shown in the following code snippet. This snippet is expanded and fully described in "Example: Displaying DNS Hostname Information Using an Op Script" on page 365.

```
<xsl:variable name="query">
  <command>
    <xsl:value-of select="concat('show host ', $hostname)"/>
  </command>
</xsl:variable>
<xsl:variable name="result" select="jcs:invoke($query)"/>
<xsl:variable name="host" select="$result"/>
<output>
  <xsl:value-of select="concat('Name: ', $host)"/>
</output>
...
```

Related Documentation

- Configuring Help Text for Op Scripts on page 343
- Declaring Arguments in Op Scripts on page 341
- Mapping Operational Mode Commands and Output Fields to Junos XML Notation on page 337

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Declaring Arguments in Op Scripts

There are two ways to declare arguments to an op script: by including XSLT or SLAX instructions in the script or by including statements in the Junos configuration. *Script-generated* and *configuration-generated* arguments have the same operational impact.

To declare arguments within a script, declare a global variable named **arguments**, containing **<argument>** tag elements. Within each **<argument>** tag element, include the required **<name>** tag element and the optional **<description>** tag element:

XSLT Syntax

```
<xsl:variable name="arguments">
  <argument>
    <name>name</name>
    <description>name</description>
  </argument>
</xsl:variable>
```

SLAX Syntax

```
var $arguments = {
  <argument> {
    <name> "name";
    <description> "descriptive-text";
  }
}
```

To declare arguments in the configuration, include the **arguments** statement in the **[edit system scripts op file *filename*]** hierarchy level.

```
[edit system scripts op file filename]
arguments {
  argument-name {
    description descriptive-text;
  }
}
```

If you include the optional **<description>** tag element or the **description** statement, the text of the description appears in the command-line interface (CLI) as a help-text string to describe the purpose of the argument, as discussed in "Configuring Help Text for Op Scripts" on page 343.

In the operation script, you must include a corresponding parameter declaration for each argument. The parameter name must match the name of the argument:

```
<xsl:param name="name"/>
```

The SLAX equivalent is:

```
param $name;
```

You can create a hidden argument by including the **<xsl:param name="*name*"/>** instruction without listing the argument in the **arguments** variable or in the configuration.

After you declare an argument, you can use command completion to list available arguments:

```
user@host> op filename ?
```

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```
Possible completions:
  argument-name        description
  argument-name        description
```

For each argument you include on the command-line, you must specify a corresponding value. To do this, include an ***argument-name*** and an ***argument-value*** when you execute the script with the **op *filename*** command:

user@host> **op *filename argument-name argument-value***

NOTE: If you specify an argument that the script does not recognize, the script ignores the argument.

If you configure arguments by including the **arguments** statement in the configuration, any arguments that you declare directly in the script are still available, but are not listed among the **Possible completions** when you issue the **op *filename* ?** command.

If you declare all arguments in the script (and none in the configuration), then the arguments do appear in the **Possible completions** list. This is because the management (mgd) process populates the **Possible completions** list by first checking the configuration for arguments. The mgd process looks in the script for arguments only if no arguments are found in the configuration. Thus, if arguments are declared in the configuration, the arguments declared in the script become hidden in the CLI.

Example: Declaring Arguments

Declare two arguments named **interface** and **protocol**. Execute the script, specifying the **ge-0/2/0.0** interface and the **inet** protocol as values for the arguments. For either method, you must declare corresponding script parameters:

```
<xsl:param name="interface"/>
<xsl:param name="protocol"/>
```

Declaring Arguments in the Op Script (script1)

```
<xsl:variable name="arguments">
  <argument>
    <name>interface</name>
    <description>Name of interface to display</description>
  </argument>
  <argument>
    <name>protocol</name>
    <description>Protocol to display (inet, inet6)</description>
  </argument>
</xsl:variable>
```

Declaring Arguments in the Configuration

```
[edit system scripts op]
file script1 {
  arguments {
    interface {
      description "Name of interface to display";
    }
    protocol {
      description "Protocol to display (inet, inet6)";
```


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```
    }
  }
}
```

Executing the Script

```
user@host> op script1 interface ge-0/2/0.0 protocol inet
```

Related Documentation

- Example: Importing Files Using an Op Script on page 380
- Configuring Help Text for Op Scripts on page 343
- Mapping Operational Mode Commands and Output Fields to Junos XML Notation on page 337
- Using RPCs and Operational Mode Commands in Op Scripts on page 337

Configuring Help Text for Op Scripts

You can provide help text to describe an op script and its arguments when the **?** is used to list possible completions in the CLI. Include the **description** statement:

description *descriptive-text*;

You can include this statement at the following hierarchy levels:

- **[edit system** scripts op file *filename***]**
- **[edit system** scripts op file *filename* arguments *argument-name***]**

The following examples show the configuration and the resulting output.

Examples: Configuring Help Text for Op Scripts

Configure help text for a script and display the resulting output:

```
[edit system scripts op]
user@host# set file interface.xsl description "Test the interface"
user@host# commit
...
[edit system scripts op]
user@host# set file ?
Possible completions:
  <name>          Local filename of the script file
  interface.xsl   Test the interface
```

Configure help text for a script's arguments and display the resulting output:

```
[edit system scripts op file interface.xsl arguments]
user@host# set t1 description "Search for T1 interfaces"
user@host# set t3 description "Search for T3 interfaces"
user@host# commit
...
[edit system scripts op file interface.xsl arguments]
user@host# set ?
Possible completions:
  <name>          Name of the argument
  t1              Search for T1 interfaces
  t3              Search for T3 interfaces
```

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Related Documentation

- Declaring Arguments in Op Scripts on page 341
- Mapping Operational Mode Commands and Output Fields to Junos XML Notation on page 337
- Using RPCs and Operational Mode Commands in Op Scripts on page 337

Enabling an Op Script and Defining a Script Alias

Operation (op) scripts are stored on a device's hard drive in the **/var/db/scripts/op** directory or on the flash drive in the **/config/scripts/op** directory. Only users in the Junos OS **super-user** login class can access and edit files in these directories. For information about setting the storage location for scripts, see "Storing Scripts in Flash Memory" on page 86.

NOTE: If the device has dual Routing Engines and you want to enable an op script to execute on both Routing Engines, you must copy the script to the **/var/db/scripts/op** or **/config/scripts/op** directory on both Routing Engines. The **commit synchronize** command does not automatically copy scripts between Routing Engines.

You must enable an op script before it can be executed. Include the **file *filename*** statement at the **[edit system scripts op]** hierarchy level, specifying the name of an XSLT or SLAX file containing an op script. Only users who belong to the Junos **super-user** login class can enable op scripts.

```
[edit system scripts op]
file filename;
```

The filename of an op script written in SLAX must include the **.slax** extension for the script to be enabled and executed. No particular filename extension is required for op scripts written in XSLT, but we strongly recommend that you append the **.xsl** extension. Whether or not you choose to include the **.xsl** extension on the file, the filename that you add at the **[edit system scripts op]** hierarchy level must exactly match the filename of the script in the directory. For example, if the XSLT script filename is **script1.xsl**, then you must include **script1.xsl** in the configuration hierarchy to enable the script; likewise, if the XSLT script filename is **script1**, then you must include **script1** in the configuration hierarchy.

To determine which op scripts are currently enabled on the device, use the **show** command to display the files included at the **[edit system scripts op]** hierarchy level. To ensure that the enabled files are on the device, list the contents of the **/var/run/scripts/op/** directory using the **file list /var/run/scripts/op** operational mode command.

Optionally, you can define an alias for an op script and then specify either the filename or the alias when you execute the script. To define the alias, include the **command** statement at the **[edit system scripts op file *filename*]** hierarchy level:

```
[edit system scripts op]
file filename {
  command filename-alias;
}
```


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Executing an Op Script

Unlike commit scripts, operation (op) scripts do not execute during a commit operation. When you issue the **commit** command, op scripts configured at the **[edit system scripts op]** hierarchy level are placed into system memory and enabled for execution. After the commit operation completes, you can execute an op script from the CLI by issuing the **op** operational mode command. You also can configure the device to execute an op script automatically when a member of a specified Junos OS login class logs in to the CLI.

Executing an Op Script by Issuing the op Command

To execute an op script from the CLI, issue the **op** operational mode command, specifying a URL, the script filename, or the alias defined by the **command** statement at the **[edit system scripts op file *filename*]** hierarchy level.

```
user@host> op (filename-or-alias | url url)
```

Executing an Op Script at Login

You can configure an op script to execute automatically when any user belonging to a designated Junos OS login class logs in to the CLI. To associate an op script with a login class, include the **login-script *script-filename*** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login]
class class-name {
   login-script script-filename;
}
```

The following example configures the **super-user-login.slax** op script to execute when any user who belongs to the **super-user** class logs in to the CLI (provided that the script has been enabled as discussed in "Enabling an Op Script and Defining a Script Alias" on page 344).

```
[edit system login]
class super-user {
   login-script super-user-login.slax;
}
```

Configuring Checksum Hashes for an Op Script

You can configure one or more checksum hashes that can be used to verify the integrity of an op script before the script runs on the switch, router, or security device.

To configure a checksum hash:

1. Create the script.
2. Place the script in the **/var/db/scripts/op** directory on the device.
3. Run the script through one or more hash functions to calculate hash values.

   Junos OS supports MD5, SHA-1, and SHA-256 hash functions.

   ```
   user@host> file checksum md5 /var/db/scripts/commit/script1.slax
     MD5 (/var/db/scripts/op/script1.slax) = 3af7884eb56e2d4489c2e49b26a39a97
   user@host> file checksum sha1 /var/db/scripts/commit/script1.slax
   ```

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```
    SHA1 (/var/db/scripts/op/script1.slax) =
    00dc690fb08fb049577d012486c9a6dad34212c0
user@host> file checksum sha-256 /var/db/scripts/commit/script1.slax
    SHA256 (/var/db/scripts/op/script1.slax) =
    150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
```

4. Configure the script with one or more hash values.

```
[edit system scripts op]
user@host# set file script1.slax checksum md5 3af7884eb56e2d4489c2e49b26a39a97
[edit system scripts op]
user@host# set file script1.slax checksum
    sha-1 00dc690fb08fb049577d012486c9a6dad34212c0
[edit system scripts op]
user@host# set file script1.slax checksum
    sha-256 150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
```

   During the execution of the script, Junos OS recalculates the checksum value using the configured hash and verifies that the calculated value matches the configured value. If the values differ, the execution of the script fails. When you configure multiple checksum values with different hash algorithms, all the configured values must match the calculated values; otherwise, the script execution fails.

NOTE: If the op script is stored remotely, do not include the checksum statement in the configuration. You can verify the script's integrity before it runs by specifying the hash value on the command line when you run the op command with the <url> option and the <key> option.

Related Documentation

- Configuring Checksum Hashes for a Commit Script on page 177
- Configuring Checksum Hashes for an Event Script on page 473
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*
- *op* command in the *System Basics and Services Command Reference*

Executing an Op Script from a Remote Site

As an alternative to storing operation (op) scripts locally on the device, you can store op scripts at a remote site. This allows you to execute the scripts by specifying a URL on the command line.

To execute an op script from a remote site:

1. Create the script.
2. (Optional) Store the script temporarily in the **/var/tmp** directory on the device, and run the script through one or more hash functions to calculate hash values.

   Junos OS supports MD5, SHA-1, and SHA-256 hash functions.

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```
user@host> file checksum md5 /var/tmp/script1.slax
  MD5 (/var/tmp/script1.slax) = 3af7884eb56e2d4489c2e49b26a39a97
user@host> file checksum sha1 /var/tmp/script1.slax
  SHA1 (/var/tmp/script1.slax) = 00dc690fb08fb049577d012486c9a6dad34212c0
user@host> file checksum sha-256 /var/tmp/script1.slax
  SHA256 (/var/tmp/script1.slax) =
  150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
```

3. Place the script on the remote server.
4. Provide the script URL and the optional hash values to the administrators who will execute the script.
5. Execute the script by running the **op** command and specifying the URL that points to the remote file.

   ```
   user@host> op url https://www.juniper.net/scripts/2009-04-01.01.slax
     key md5 3af7884eb56e2d4489c2e49b26a39a97
   ```

   This example shows how to include the <key> option and the MD5 checksum information.

NOTE: If the op script is stored locally, do not include the hash key on the command line. Instead, configure the hash value by including the **checksum** statement at the **[edit system scripts op file *filename*]** hierarchy level. During the execution of the script, Junos OS recalculates the checksum value using the configured hash and verifies that the calculated value matches the configured value.

To prevent the execution of op scripts from remote sites, configure the **no-allow-url** statement at the **[edit system scripts op]** hierarchy level.

```
user@host# set system scripts op no-allow-url
```

When you configure the **no-allow-url** statement, issuing the **op url *url*** operational mode command generates an error.

Related Documentation

- Configuring Checksum Hashes for an Op Script on page 345
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*
- no-allow-url on page 399
- *op* command in the *System Basics and Services Command Reference*

Disabling an Op Script

You can disable an op script by deleting or deactivating the **file *filename*** statement at the **[edit system scripts op]** hierarchy in the configuration. To determine which op scripts are active on the device, issue the **show configuration system scripts op** operational mode command. The command output lists the enabled op scripts.

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To delete an op script from the configuration, perform the following steps:

1. From configuration mode in the CLI, enter the following command:

   ```
   [edit]
   user@host# delete system scripts op file filename
   ```

2. Commit the configuration:

   ```
   user@host# commit
   ```

The **file** statement is removed from the configuration for the specified op script, and the **op** operational mode command no longer lists the op script filename as a valid completion.

To deactivate an op script in the configuration, perform the following steps:

1. From configuration mode in the CLI, enter the following command:

   ```
   [edit]
   user@host# deactivate system scripts op file filename
   ```

2. Commit the configuration:

   ```
   user@host# commit
   ```

The filename of the deactivated script remains in the configuration, but it is flagged with **inactive**. For example:

```
[edit system scripts op]
user@host# show

inactive: file script1.xsl;
file script2.xsl;
file script3.xsl;
```

NOTE: You can reactivate an op script using the **activate system scripts op file** *filename* command.

Alternatively, you can delete the script from the **/var/db/scripts/op** directory on a device's hard drive or from the **/config/scripts/op** directory on the flash drive. Only users in the Junos OS **super-user** login class can access and edit files in these directories. If you delete a script, you should also remove the **file** statement at the **[edit system scripts op]** hierarchy level in the configuration. If you delete an op script, but the **file** statement remains in the configuration, the CLI lists this script as a valid completion for the **op** command, but Junos OS issues an invalid filename error when the script is executed.

If you deactivate or delete the **file** statement for an op script in the configuration, you must enable the script again in order to execute it.

Related Documentation

- Enabling an Op Script and Defining a Script Alias on page 344

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Op Script Examples

- Example: Changing the Configuration Using an Op Script on page 349
- Example: Customizing Output of the show interfaces terse Command Using an Op Script on page 354
- Example: Displaying DNS Hostname Information Using an Op Script on page 365
- Example: Exporting Files Using an Op Script on page 368
- Example: Finding LSPs to Multiple Destinations Using an Op Script on page 376
- Example: Importing Files Using an Op Script on page 380
- Example: Restarting an FPC Using an Op Script on page 385
- Example: Searching Files Using an Op Script on page 388

Example: Changing the Configuration Using an Op Script

This example explains how to make structured changes to the Junos OS configuration using an op script.

- Requirements on page 349
- Overview and Op Script on page 349
- Device Configuration on page 352
- Verification on page 352

Requirements

This example uses a device running Junos OS.

Overview and Op Script

Op scripts can be used to make structured changes to the Junos OS configuration using the **jcs:load-configuration** template, which is included in the import file **junos.xsl**. Experienced users, who are familiar with Junos OS, can write scripts that prompt for the relevant configuration information and modify the configuration accordingly. This allows users who have less experience with Junos OS to safely modify the configuration using the script.

When called, the **jcs:load-configuration** template performs the following actions:

1. Locks the configuration database
2. Loads the configuration changes
3. Commits the configuration
4. Unlocks the configuration database

The **jcs:load-configuration** template makes changes to the configuration in **configure exclusive** mode. In this mode, Junos OS locks the candidate *global* configuration for as long as the script accesses the shared database and makes changes to the configuration without interference from other users.

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If another user is currently editing the configuration in **configure exclusive** mode or if the database is already locked when the template is called, the call fails. In addition, if there are existing, uncommitted changes to the configuration when the template is called, the commit fails. If the template call is successful but the commit fails, Junos OS discards the uncommitted changes and rolls back the configuration.

You provide arguments to the **jcs:load-configuration** template to specify how to integrate the changes into the existing configuration, how to customize the commit operation, what changes to make to the configuration, and which connection handle to use. The XSLT and SLAX syntax for the template call is:

```
<xsl:call-template name="jcs:load-configuration">
  <xsl:with-param name="action" select="(merge | override | replace)"/>
  <xsl:with-param name="commit-options" select="node-set"/>
  <xsl:with-param name="configuration" select="configuration-data"/>
  <xsl:with-param name="connection" select="connection-handle"/>
</xsl:call-template>
```

```
call jcs:load-configuration($action="(merge | override | replace)",
 $commit-options=node-set, $configuration=configuration-data,
 $connection=connection-handle);
```

The following sample SLAX script demonstrates how to use the **jcs:load-configuration** template to disable an interface on a device running Junos OS. All of the values required for the **jcs:load-configuration** template are defined as variables, which are then passed into the template as arguments.

In this example, the **$usage** variable is initialized with a general description of the function of the script. When the script is run, the usage description is output to the CLI using a call to the **jcs:output()** function. This allows the user to verify that he is using the script for the correct purpose.

The script calls the **jcs:get-input()** function and prompts the user to enter the name of the interface that should be disabled. The interface name is stored in the **$interface** variable. The configuration data that includes the changes to the configuration are stored in the variable **$config-changes**. This is the value used for the **$configuration** parameter of the **jcs:load-configuration** template. This variable includes the Junos XML API tags for the configuration statements that are to be modified. The variable **$interface**, which is supplied by the user, designates the name of the interface to disable.

The **$load-action** variable is initialized to **merge**, which merges the configuration changes in the **$disable** variable with the candidate configuration. This is the equivalent of the CLI configuration mode command **load merge**. Other load options include **replace** and **override**.

The **$options** variable uses the **:=** operator to create a node-set, which is passed to the template as the value of the **$commit-options** parameter. This example includes the **log** tag to add the description of the commit to the commit log file for future reference.

The call to the **jcs:open()** function opens a connection with the Junos OS management process (mgd) and returns a connection handle that is stored in the **$conn_handle** variable. All of the defined variables are passed as arguments to the **jcs:load-configuration** template at the time that it is called.

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SLAX Syntax

```
version 1.0;

ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
ns ext = "http://xmlsoft.org/XSLT/namespace";

import "../import/junos.xsl";

match / {
<op-script-results> {

  var $usage = "This script disables the interface specified by the user." _
               "The script modifies the candidate configuration to disable " _
               "the interface and commits the configuration to activate it.";
  var $temp = jcs:output($usage);

  var $interface = jcs:get-input("Enter interface to disable: ");

  var $config-changes = {
    <configuration> {
      <interfaces> {
        <interface> {
          <name> $interface;
          <disable>;
        }
      }
    }
  }

  var $load-action = "merge";

  var $options := {
    <commit-options> {
      <log> "disabling interface " _ $interface;
    }
  }

  var $conn_handle = jcs:open();

  var $results := {
   call jcs:load-configuration( $action=$load-action, $commit-options=$options,
         $configuration=$config-changes, $connection=$conn_handle);
  }

  $close-results = jcs:close($conn_handle);
}
}
```

The **:=** operator copies the results of the **jcs:load-configuration** template call to a temporary variable and runs the **node-set** function on that variable. The resulting node-set is then stored in the **$results** variable. The **:=** operator ensures that the **$results** variable is a node-set rather than a result tree fragment so that the script can access the contents. The **jcs:close()** function closes the connection.

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By default, the **jcs:load-configuration** template does not output messages to the CLI. To quickly view any issues with the commit, you should add code to the script to output any error or warning messages that are generated as a result of the **jcs:load-configuration** template call:

```
if ($results//xnm:error) {
  for-each ($results//xnm:error) {
    <output> message;
  }
}
if ($results//xnm:warning) {
  for-each ($results//xnm:warning) {
    <output> message;
  }
}
```

Device Configuration

To download, enable, and test the script:

1. Copy the script into a text file, name the file **config-change.slax**, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **config-change.slax**.

   ```
   [edit system scripts op]
   user@host# set file config-change.slax
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Before running the script, issue the **show interfaces** *interface-name* operational mode command and record the current state of the interface that will be disabled by the script.
5. Execute the op script by issuing the **op config-change** operational mode command.

   ```
   user@host> op config-change
   This script disables the interface specified by the user. The script modifies
    the candidate configuration to disable the interface and commits the
   configuration to activate it.
   Enter interface to disable: so-0/0/0
   ```

Verification

- Verifying the Commit on page 352
- Verifying the Configuration Changes on page 353

Verifying the Commit

Purpose Verify that the commit succeeded.

Action You should include code in your script that parses the node-set returned by the **jcs:load-configuration** template for any errors or warnings. This allows you to more easily

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determine whether the commit succeeded. If there are no warning or error messages, you can verify the success of the commit in several ways.

- Check the commit log to verify that the commit was successful. If you included the **log** option in the **$commit-options** parameter, the message should be visible in the commit log along with the commit information.

```
user@host> show system commit
0   2010-09-22 17:08:17 PDT by user via junoscript
    disabling interface so-0/0/0
```

- Check the syslog message file to verify that the commit operation was logged. In this case, you also see an **SNMP_TRAP_LINK_DOWN** message for the disabled interface **so-0/0/0**. Depending on your configuration settings for traceoptions, this message might or might not appear in your log file.

```
user@host> show log messages | last
Sep 22 17:08:13  host file[7319]: UI_COMMIT: User 'user' requested 'commit'
operation (comment: disabling interface so-0/0/0)
Sep 22 17:08:16  host xntpd[1386]: ntpd exiting on signal 1
Sep 22 17:08:16  host xntpd[1386]: ntpd 4.2.0-a Fri Jun 25 13:48:13 UTC 2010
(1)
Sep 22 17:08:16  host mib2d[1434]: SNMP_TRAP_LINK_DOWN: ifIndex 526,
ifAdminStatus down(2), ifOperStatus down(2), ifName so-0/0/0
```

Verifying the Configuration Changes

Purpose Verify that the correct changes are integrated into the configuration.

Action

- Display the configuration and verify that the changes are visible for the specified interface:

```
user@host> show configuration interfaces so-0/0/0
disable;
```

- For this example, you also can issue the **show interfaces** ***interface-name*** operational mode command to check that the interface was disabled. In this case, the output captured *before* the interface was disabled shows that the interface is **Enabled**:

```
user@host> show interfaces so-0/0/0
Physical interface: so-0/0/0, Enabled, Physical link is Up
  Interface index: 128, SNMP ifIndex: 526
  Link-level type: PPP, MTU: 4474, Clocking: Internal, SONET mode, Speed: OC3,
 Loopback: None, FCS: 16,
  Payload scrambler: Enabled
  Device flags   : Present Running
  Interface flags: Point-To-Point SNMP-Traps Internal: 0x4000
  Link flags     : Keepalives
  CoS queues     : 4 supported, 4 maximum usable queues
  Last flapped   : 2010-09-14 10:33:25 PDT (1w1d 06:27 ago)
  Input rate     : 0 bps (0 pps)
  Output rate    : 0 bps (0 pps)
  SONET alarms   : None
  SONET defects  : None
```

The output captured *after* running the script to disable the interface shows that the interface is now **Administratively down**:

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```
user@host> show interfaces so-0/0/0
Physical interface: so-0/0/0, Administratively down, Physical link is Up
  Interface index: 128, SNMP ifIndex: 526
  Link-level type: PPP, MTU: 4474, Clocking: Internal, SONET mode, Speed: OC3,
 Loopback: None, FCS: 16,
  Payload scrambler: Enabled
  Device flags   : Present Running
  Interface flags: Down Point-To-Point SNMP-Traps Internal: 0x4000
  Link flags     : Keepalives
  CoS queues     : 4 supported, 4 maximum usable queues
  Last flapped   : 2010-09-14 10:33:25 PDT (1w1d 06:40 ago)
  Input rate     : 0 bps (0 pps)
  Output rate    : 0 bps (0 pps)
  SONET alarms   : None
  SONET defects  : None
```

Related Documentation

- Storing and Enabling Scripts on page 85
- jcs:close() Function on page 12
- jcs:get-input() Function on page 17
- jcs:load-configuration Template on page 35
- jcs:open() Function on page 19
- jcs:output() Function on page 21

Example: Customizing Output of the show interfaces terse Command Using an Op Script

This example uses an op script to customize the output of the **show interfaces terse** command. A line-by-line explanation of the XSLT script is provided.

- Requirements on page 354
- Overview and Op Script on page 354
- Configuration on page 363
- Verification on page 363

Requirements

This example uses a device running Junos OS.

Overview and Op Script

By default, the layout of the **show interfaces terse** command looks like this:

```
user@host> show interfaces terse
Interface               Admin Link Proto    Local                 Remote
dsc                     up    up
fxp0                    up    up
fxp0.0                  up    up   inet     192.168.71.246/21
fxp1                    up    up
fxp1.0                  up    up   inet     10.0.0.4/8
                                   inet6    fe80::200:ff:fe00:4/64
                                            fec0::10:0:0:4/64
                                   tnp      4
gre                     up    up
```


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```
ipip                    up    up
lo0                     up    up
lo0.0                   up    up   inet     127.0.0.1           --> 0/0
lo0.16385               up    up   inet
                                   inet6    fe80::2a0:a5ff:fe12:2f04
lsi                     up    up
mtun                    up    up
pimd                    up    up
pime                    up    up
tap                     up    up
```

In Junos XML, the output fields are represented as follows:

```
user@host> show interfaces terse | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
  <interface-information xmlns="http://xml.juniper.net/junos/10.0R1/junos-interface"
 junos:style="terse">
    <physical-interface>
      <name>dsc</name>
      <admin-status>up</admin-status>
      <oper-status>up</oper-status>
      </physical-interface>
      <physical-interface>
        <name>fxp0</name>
        <admin-status>up</admin-status>
        <oper-status>up</oper-status>
        <logical-interface>
          <name>fxp0.0</name>
          <admin-status>up</admin-status>
          <oper-status>up</oper-status>
          ... Remainder of output omitted for brevity ...
```

XSLT Syntax The following script customizes the output of the **show interfaces terse** command. A line-by-line explanation of the script is provided.

```
 1  <?xml version="1.0" standalone="yes"?>
 2   <xsl:stylesheet version="1.0"
 3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
 4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
 5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
 6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
 7     <xsl:import href="../import/junos.xsl"/>

 8     <xsl:variable name="arguments">
 9       <argument>
10         <name>interface</name>
11         <description>Name of interface to display</description>
12       </argument>
13       <argument>
14         <name>protocol</name>
15         <description>Protocol to display (inet, inet6)</description>
16       </argument>
17     </xsl:variable>
18     <xsl:param name="interface"/>
19     <xsl:param name="protocol"/>
20      <xsl:template match="/">
21       <op-script-results>
```

```
22        <xsl:variable name="rpc">
23          <get-interface-information>
24            <terse/>
25            <xsl:if test="$interface">
26              <interface-name>
27                <xsl:value-of select="$interface"/>
28              </interface-name>
29            </xsl:if>
30          </get-interface-information>
31        </xsl:variable>
32        <xsl:variable name="out" select="jcs:invoke($rpc)"/>
33        <interface-information junos:style="terse">
34          <xsl:choose>
35            <xsl:when test="$protocol='inet' or $protocol='inet6'
                    or $protocol='mpls' or $protocol='tnp'">
36              <xsl:for-each select="$out/physical-interface/
        logical-interface[address-family/address-family-name = $protocol]">
37                <xsl:call-template name="intf"/>
38              </xsl:for-each>
39            </xsl:when>
40            <xsl:when test="$protocol">
41              <xnm:error>
42                <message>
43                  <xsl:text>invalid protocol: </xsl:text>
44                  <xsl:value-of select="$protocol"/>
45                </message>
46              </xnm:error>
47            </xsl:when>
48            <xsl:otherwise>
49              <xsl:for-each select="$out/physical-interface/logical-interface">
50                <xsl:call-template name="intf"/>
51              </xsl:for-each>
52            </xsl:otherwise>
53          </xsl:choose>
54        </interface-information>
55      </op-script-results>
56    </xsl:template>
57    <xsl:template name="intf">
58      <xsl:variable name="status">
59        <xsl:choose>
60          <xsl:when test="admin-status='up' and oper-status='up'">
61            <xsl:text> </xsl:text>
62          </xsl:when>
63          <xsl:when test="admin-status='down'">
64            <xsl:text>offline</xsl:text>
65          </xsl:when>
66          <xsl:when test="oper-status='down' and ../admin-status='down'">
67            <xsl:text>p-offline</xsl:text>
68          </xsl:when>
69          <xsl:when test="oper-status='down' and ../oper-status='down'">
70            <xsl:text>p-down</xsl:text>
71          </xsl:when>
72          <xsl:when test="oper-status='down'">
73            <xsl:text>down</xsl:text>
74          </xsl:when>
75          <xsl:otherwise>
```


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```
76              <xsl:value-of select="concat(oper-status, '/', admin-status)"/>
77            </xsl:otherwise>
78          </xsl:choose>
79        </xsl:variable>
80        <xsl:variable name="desc">
81          <xsl:choose>
82            <xsl:when test="description">
83              <xsl:value-of select="description"/>
84            </xsl:when>
85            <xsl:when test="../description">
86              <xsl:value-of select="../description"/>
87            </xsl:when>
88          </xsl:choose>
89        </xsl:variable>
90        <logical-interface>
91          <name><xsl:value-of select="name"/></name>
92          <xsl:if test="string-length($desc)">
93            <admin-status><xsl:value-of select="$desc"/></admin-status>
94          </xsl:if>
95          <admin-status><xsl:value-of select="$status"/></admin-status>
96          <xsl:choose>
97            <xsl:when test="$protocol">
98              <xsl:copy-of
                select="address-family[address-family-name = $protocol]"/>
99            </xsl:when>
100           <xsl:otherwise>
101             <xsl:copy-of select="address-family"/>
102           </xsl:otherwise>
103         </xsl:choose>
104       </logical-interface>
105     </xsl:template>
106   </xsl:stylesheet>
```

Line-by-Line Explanation

Lines 1 through 7, Line 20, and Lines 105 and 106 are the boilerplate that you include in every op script. For more information, see "Required Boilerplate for Op Scripts" on page 335.

```
1   <?xml version="1.0" standalone="yes"?>
2   <xsl:stylesheet version="1.0"
3     xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4     xmlns:junos="http://xml.juniper.net/junos/*/junos"
5     xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6     xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
7     <xsl:import href="../import/junos.xsl"/>
      ...
20      <xsl:template match="/">
        ...
105     </xsl:template>
106   </xsl:stylesheet>
```

Lines 8 through 17 declare a variable called **arguments**, containing two arguments to the script: **interface** and **protocol**. This variable declaration causes **interface** and **protocol** to appear in the command-line interface (CLI) as available arguments to the script.

```
8     <xsl:variable name="arguments">
9       <argument>
10        <name>interface</name>
```

```
11          <description>Name of interface to display</description>
12        </argument>
13        <argument>
14          <name>protocol</name>
15          <description>Protocol to display (inet, inet6)</description>
16        </argument>
17      </xsl:variable>
```

Lines 18 and 19 declare two parameters to the script, corresponding to the arguments created in Lines 8 through 17. The parameter names must exactly match the argument names.

```
18      <xsl:param name="interface"/>
19      <xsl:param name="protocol"/>
```

Lines 20 through 31 declare a variable named **rpc**. The **show interfaces terse** command is assigned to the **rpc** variable. If you include the **interface** argument when you execute the script, the value of the argument (the interface name) is passed into the script.

```
20      <xsl:template match="/">
21        <op-script-results>
22          <xsl:variable name="rpc">
23            <get-interface-information>
24              <terse/>
25              <xsl:if test="$interface">
26                <interface-name>
27                  <xsl:value-of select="$interface"/>
28                </interface-name>
29              </xsl:if>
30            </get-interface-information>
31          </xsl:variable>
```

Line 32 declares a variable named **out** and applies to it the execution of the **rpc** variable (**show interfaces terse** command).

```
32          <xsl:variable name="out" select="jcs:invoke($rpc)"/>
```

Line 33 specifies that the output level of the **show interfaces** command being modified is **terse** (as opposed to **extensive**, **detail**, and so on).

```
33          <interface-information junos:style="terse">
```

Lines 34 through 39 specify that if you include the **protocol** argument when you execute the script and if the protocol value that you specify is **inet**, **inet6**, **mpls**, or **tnp**, the **intf** template is applied to each instance of that protocol type in the output.

```
34            <xsl:choose>
35              <xsl:when test="$protocol='inet' or $protocol='inet6'
                or $protocol='mpls' or $protocol='tnp'">
36                <xsl:for-each select="$out/physical-interface/
          logical-interface[address-family/address-family-name = $protocol]">
37                  <xsl:call-template name="intf"/>
38                </xsl:for-each>
39              </xsl:when>
```


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Lines 40 through 47 specify that if you include the **protocol** argument when you execute the script and if the protocol value that you specify is something other than **inet**, **inet6**, **mpls**, or **tnp**, an error message is generated.

```
40              <xsl:when test="$protocol">
41                <xnm:error>
42                  <message>
43                    <xsl:text>invalid protocol: </xsl:text>
44                    <xsl:value-of select="$protocol"/>
45                  </message>
46                </xnm:error>
47              </xsl:when>
```

Lines 48 through 52 specify that if you do not include the **protocol** argument when you execute the script, the **intf** template is applied to each logical interface in the output.

```
48              <xsl:otherwise>
49                <xsl:for-each select="$out/physical-interface/logical-interface">
50                  <xsl:call-template name="intf"/>
51                </xsl:for-each>
52              </xsl:otherwise>
```

Lines 53 through 56 are closing tags.

```
53            </xsl:choose>
54          </interface-information>
55        </op-script-results>
56      </xsl:template>
```

Line 57 opens the **intf** template. This template customizes the output of the **show interfaces terse** command.

```
57      <xsl:template name="intf">
```

Line 58 declares a variable called **status**, the purpose of which is to specify how the interface status is reported. Lines 59 through 78 contain a **<xsl:choose>** instruction that populates the **status** variable by considering all the possible states. As always in XSLT, the first **<xsl:when>** instruction that evaluates as TRUE is executed, and the remainder are ignored. Each **<xsl:when>** instruction is explained separately.

```
58        <xsl:variable name="status">
59          <xsl:choose>
```

Lines 60 through 62 specify that if **admin-status** is **up** and **oper-status** is **up**, no output is generated. In this case, the **status** variable remains empty.

```
60              <xsl:when test="admin-status='up' and oper-status='up'">
61                <xsl:text> </xsl:text>
62              </xsl:when>
```

Lines 63 through 65 specify that if **admin-status** is **down**, the **status** variable contains the text **offline**.

```
63              <xsl:when test="admin-status='down'">
64                <xsl:text>offline</xsl:text>
65              </xsl:when>
```

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Lines 66 through 68 specify that if **oper-status** is **down** and the physical interface **admin-status** is **down**, the **status** variable contains the text **p-offline**. (**../** selects the physical interface.)

```
66          <xsl:when test="oper-status='down' and ../admin-status='down'">
67            <xsl:text>p-offline</xsl:text>
68          </xsl:when>
```

Lines 69 through 71 specify that if **oper-status** is **down** and the physical interface **oper-status** is **down**, the **status** variable contains the text **p-down**. (**../** selects the physical interface.)

```
69          <xsl:when test="oper-status='down' and ../oper-status='down'">
70            <xsl:text>p-down</xsl:text>
71          </xsl:when>
```

Lines 72 through 74 specify that if **oper-status** is **down**, the **status** variable contains the text **down**.

```
72          <xsl:when test="oper-status='down'">
73            <xsl:text>down</xsl:text>
74          </xsl:when>
```

Lines 75 through 77 specify that if none of the test cases are true, the **status** variable contains **oper-status** and **admin-status** concatenated with a slash as a separator.

```
75          <xsl:otherwise>
76            <xsl:value-of select="concat(oper-status, '/', admin-status)"/>
77          </xsl:otherwise>
```

Lines 78 and 79 are closing tags.

```
78        </xsl:choose>
79      </xsl:variable>
```

Lines 80 through 89 define a variable called **desc**. An **<xsl:choose>** instruction populates the variable by selecting the most specific interface description available. If a logical interface description is included in the configuration, it is used to populate the **desc** variable. If not, the physical interface description is used. If no physical interface description is included in the configuration, the variable remains empty. As always in XSLT, the first **<xsl:when>** instruction that evaluates as TRUE is executed, and the remainder are ignored.

```
80      <xsl:variable name="desc">
81        <xsl:choose>
82          <xsl:when test="description">
83            <xsl:value-of select="description"/>
84          </xsl:when>
85          <xsl:when test="../description">
86            <xsl:value-of select="../description"/>
87          </xsl:when>
88        </xsl:choose>
89      </xsl:variable>
```

The remainder of the script specifies how the operational mode output is displayed.

Lines 90 and 91 specify that the logical interface name is displayed first in the output.

```
90      <logical-interface>
91        <name><xsl:value-of select="name"/></name>
```

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Lines 92 through 94 test whether the **desc** variable has a nonzero number of characters. If the number of characters is more than zero, the interface description is displayed in the standard location of the **admin-status** field. (In standard output, the **admin-status** field is displayed on the second line.)

```
92          <xsl:if test="string-length($desc)">
93            <admin-status><xsl:value-of select="$desc"/></admin-status>
94          </xsl:if>
```

Line 95 specifies that the interface status as defined in the **status** variable is displayed next.

```
95          <admin-status><xsl:value-of select="$status"/></admin-status>
```

Lines 96 through 103 specify that if you include the **protocol** argument when you execute the script, only interfaces with that protocol configured are displayed. If you do not include the **protocol** argument, all interfaces are displayed.

```
96          <xsl:choose>
97            <xsl:when test="$protocol">
98              <xsl:copy-of
                select="address-family[address-family-name = $protocol]"/>
99            </xsl:when>
100           <xsl:otherwise>
101             <xsl:copy-of select="address-family"/>
102           </xsl:otherwise>
103         </xsl:choose>
```

Lines 104 through 106 are closing tags.

```
104       </logical-interface>
105     </xsl:template>
106   </xsl:stylesheet>
```

SLAX Syntax The SLAX version of the script is as follows:

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "interface";
    <description> "Name of interface to display";
  }
  <argument> {
    <name> "protocol";
    <description> "Protocol to display (inet, inet6)";
  }
}
param $interface;
param $protocol;
match / {
  <op-script-results> {
    var $rpc = {
      <get-interface-information> {
```

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```
            <terse>;
            if ($interface) {
              <interface-name> $interface;
            }
          }
        }
        var $out = jcs:invoke($rpc);
        <interface-information junos:style="terse"> {
          if ($protocol='inet' or $protocol='inet6' or $protocol='mpls' or
                    $protocol='tnp') {
            for-each ($out/physical-interface/
                logical-interface[address-family/address-family-name = $protocol]) {
              call intf();
            }
          } else if ($protocol) {
            <xnm:error> {
              <message> {
                expr "invalid protocol: ";
                expr $protocol;
              }
            }
          } else {
            for-each ($out/physical-interface/logical-interface) {
              call intf();
            }
          }
        }
      }
    }
    intf () {
      var $status = {
        if (admin-status='up' and oper-status='up') {
        } else if (admin-status='down') {
          expr "offline";
        } else if (oper-status='down' and ../admin-status='down') {
          expr "p-offline";
        } else if (oper-status='down' and ../oper-status='down') {
          expr "p-down";
        } else if (oper-status='down') {
          expr "down";
        } else {
          expr oper-status _ '/' _ admin-status;
        }
      }
      var $desc = {
        if (description) {
          expr description;
        } else if (../description) {
          expr ../description;
        }
      }
      <logical-interface> {
        <name> name;
        if (string-length($desc)) {
          <admin-status> $desc;
        }
```


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```
    <admin-status> $status;
    if ($protocol) {
      copy-of address-family[address-family-name = $protocol];
    } else {
      copy-of address-family;
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **interface.xsl** or **interface.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **interface.xsl** or **interface.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file interface.(slax | xsl)
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op interface** operational mode command.

Verification

Verifying the Commit Script Output

Purpose Verify that the script behaves as expected.

Action Issue the **show interfaces terse** and **op interface** operational commands and compare the output. The **show interfaces terse** command displays the standard output. The **op interface** command displays the customized output.

```
user@host> show interfaces terse
Interface               Admin Link Proto    Local                 Remote
dsc                     up    up
fxp0                    up    up
fxp0.0                  up    up   inet     192.168.71.246/21
fxp1                    up    up
fxp1.0                  up    up   inet     10.0.0.4/8
                                   inet6    fe80::200:ff:fe00:4/64
                                            fec0::10:0:0:4/64
                                   tnp      4
gre                     up    up
ipip                    up    up
lo0                     up    up
lo0.0                   up    up   inet     127.0.0.1           --> 0/0
lo0.16385               up    up   inet
                                   inet6    fe80::2a0:a5ff:fe12:2f04
lsi                     up    up
mtun                    up    up
pimd                    up    up
pime                    up    up
tap                     up    up


user@host> op interface
Interface               Admin Link Proto    Local                 Remote
fxp0.0                  This is the Ethernet Management interface.
                                   inet     192.168.71.246/21
fxp1.0                             inet     10.0.0.4/8
                                   inet6    fe80::200:ff:fe00:4/64
                                            fec0::10:0:0:4/64
                                   tnp      4
lo0.0                              inet     127.0.0.1           --> 0/0
lo0.16385                          inet
                                   inet6    fe80::2a0:a5ff:fe12:2f04-->
```

Issue the **op interface** operational command for different hierarchy levels and review the output. For example:

```
user@host> op interface interface fxp0
Interface               Admin Link Proto    Local                 Remote
fxp0.0                  This is the Ethernet Management interface.
                                   inet     192.168.71.246/21


user@host> op interface protocol inet
Interface               Admin Link Proto    Local                 Remote
fxp0.0                  This is the Ethernet Management interface.
                                   inet     192.168.71.246/21
fxp1.0                             inet     10.0.0.4/8
lo0.0                              inet     127.0.0.1           --> 0/0
lo0.16385                          inet
```

Related Documentation

- Using RPCs and Operational Mode Commands in Op Scripts on page 337

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Example: Displaying DNS Hostname Information Using an Op Script

This example uses an op script to display Domain Name System (DNS) information for a device in your network.

- Requirements on page 365
- Overview and Op Script on page 365
- Configuration on page 367
- Verification on page 368

Requirements

This example uses a device running Junos OS.

Overview and Op Script

This script displays DNS information for a device in your network. The script offers a slight improvement over the **show host *hostname*** command because you do not need to enter a hostname or IP address to view DNS information for the device you are currently using.

There is no Junos Extensible Markup Language (XML) equivalent for the **show host *hostname*** command. Therefore, this script uses the **show host *hostname*** command directly rather than using a remote procedure call (RPC).

The script is provided in two distinct versions, one using the **<xsl:choose>** element and the other using the **jcs:first-of()** function. Both versions accept the same argument and produce the same output. Each version is shown in both XSLT and SLAX syntax.

XSLT Syntax Using the <xsl:choose> Element

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:variable name="arguments">
    <argument>
      <name>dns</name>
      <description>Name or IP address of a host</description>
    </argument>
  </xsl:variable>
  <xsl:param name="dns"/>
  <xsl:template match="/">
    <op-script-results>
      <xsl:variable name="query">
        <xsl:choose>
          <xsl:when test="$dns">
            <command>
              <xsl:value-of select="concat('show host ', $dns)"/>
            </command>
          </xsl:when>
          <xsl:when test="$hostname">
            <command>
```

```
            <xsl:value-of select="concat('show host ', $hostname)"/>
          </command>
        </xsl:when>
      </xsl:choose>
    </xsl:variable>
    <xsl:variable name="result" select="jcs:invoke($query)"/>
    <xsl:variable name="host" select="$result"/>
    <output>
      <xsl:value-of select="concat('Name: ', $host)"/>
    </output>
  </op-script-results>
 </xsl:template>
</xsl:stylesheet>
```

XSLT Syntax Using the jcs:first-of() Function

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
 xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
 xmlns:junos="http://xml.juniper.net/junos/*/junos"
 xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
 xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
 <xsl:import href="../import/junos.xsl"/>

 <xsl:variable name="arguments">
   <argument>
     <name>dns</name>
     <description>Name or IP address of a host</description>
   </argument>
 </xsl:variable>
 <xsl:param name="dns"/>
 <xsl:template match="/">
   <op-script-results>
     <xsl:variable name="target" select="jcs:first-of($dns, $hostname)"/>
     <xsl:variable name="query">
       <command>
         <xsl:value-of select="concat('show host ', $target)"/>
       </command>
     </xsl:variable>
     <xsl:variable name="result" select="jcs:invoke($query)"/>
     <xsl:variable name="host" select="$result"/>
     <output>
       <xsl:value-of select="concat('Name: ', $host)"/>
     </output>
   </op-script-results>
 </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax Using the <xsl:choose> Element

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "dns";
```


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```
    <description> "Name or IP address of a host";
  }
}
param $dns;
match / {
  <op-script-results> {
    var $query = {
      if ($dns) {
        <command> 'show host ' _ $dns;
      } else if ($hostname) {
        <command> 'show host ' _ $hostname;
      }
    }
    var $result = jcs:invoke($query);
    var $host = $result;
    <output> 'Name: ' _ $host;
  }
}
```

SLAX Syntax Using the jcs:first-of() Function

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "dns";
    <description> "Name or IP address of a host";
  }
}
param $dns;
match / {
  <op-script-results> {
    var $target = jcs:first-of($dns, $hostname);
    var $query = {
      <command> 'show host ' _ $target;
    }
    var $result = jcs:invoke($query);
    var $host = $result;
    <output> 'Name: ' _ $host;
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **hostname.xsl** or **hostname.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **hostname.xsl** or **hostname.slax** as appropriate.

```
[edit system scripts op]
```

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```
user@host# set file hostname.(slax | xsl)
```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

```
[edit]
user@host# commit and-quit
```

4. Execute the op script by issuing the **op hostname <dns (*hostname* | *address*)>** operational mode command.

Verification

Verifying the Commit Script Execution

Purpose Verify that the script behaves as expected.

Action When you issue the **op hostname** operational mode command without the **dns** option, DNS information is displayed for the local device:

```
user@host1> op hostname
Name:
host1 has address 10.168.71.246
```

When you issue the **op hostname dns *hostname*** command, DNS information is displayed for the specified device:

```
user@host1> op hostname dns router1
Name:
router1 has address 10.168.71.249
```

When you issue the **op hostname dns *address*** command, DNS information is displayed for the specified address:

```
user@host1> op hostname dns 10.168.71.249
Name:
249.71.168.10.IN-ADDR.ARPA domain name pointer router1
```

Example: Exporting Files Using an Op Script

The op script in this example uses the Junos XML protocol **file-put** operation to write to a file on a remote server and on the local device.

- Requirements on page 368
- Overview and Op Script on page 369
- Configuration on page 373
- Verification on page 373

Requirements

This example uses a device running Junos OS.

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Overview and Op Script

The Junos XML protocol **file-put** operation creates a file and writes the specified contents to that file. The basic syntax for using the **file-put** command is as follows:

```
<rpc>
  <file-put>
    <delete-if-exist />
    <encoding>value</encoding>
    <filename>value</filename>
    <permission>value</permission>
    <file-contents>file</file-contents>
  </file-put>
</rpc>
```

The following tag elements are used with the **file-put** command. These tags can be placed in any order with the exception of **file-contents**. The **file-contents** tag element must be the last tag in list.

- **delete-if-exist**—(Optional) If included, any existing file is overwritten. If the tag is omitted, an error is returned if an existing file is encountered.
- **encoding**—(Mandatory) Specifies the type of encoding used. You can use **ASCII** or **base64** encoding.
- **filename**—(Mandatory) Within this tag, you include the full or relative path and filename of the file to create. When you use a relative path, the specified path is relative to the user's home directory. If the specified directory does not exist, the system returns a "directory does not exist" error.
- **permission**—(Optional) Sets the file's UNIX permission on the remote server. For example, to apply read/write access for the user, and read access to others, you would set the permission value to 0644. For a full explanation of UNIX permissions, see the **chmod** command.
- **file-contents**—(Mandatory) The **ASCII** or **base64** encoded file contents to export. This must be the last tag in the list.

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XSLT Syntax

The following sample script executes a Junos XML API request and exports the results to a file on a remote device and a file on the local device. The script takes three arguments: the IP address or hostname of the remote device, the filename, and the file encoding. The **arguments** variable is declared at the global level of the script so that the argument names and descriptions are visible in the command-line interface (CLI).

The script invokes the Junos XML API **<get-software-information>** request on the local device and stores the result in the **$result** variable. The script declares the **$fileput** variable, which contains the remote procedure call (RPC) for the **file-put** operation. The command-line arguments define the values for the **filename** and **encoding** tag elements. If the mandatory argument **myhost** is missing, the script issues an error and halts execution. Otherwise, the script prompts for the username and password that will be used to connect to the remote device.

If connection to the remote device is successful, the script executes the RPC within the context of the connection handle. The output of the **file-put** operation, which is the result of the **jcs:execute()** function, is stored in the **out** variable. If the operation encounters an error, the script prints the error to the CLI. If the **file-put** operation is successful, the contents specified by the **file-contents** tag element are exported to the specified file on the remote device. The connection to the remote host is then closed. The script also exports the contents to an identical file on the local device.

The sample script includes the optional tag elements **permission** and **delete-if-exist** for the **file-put** operation. By including the **delete-if-exist** tag, the script overwrites any existing file of the same name on the remote and local hosts. In this example, the **permission** tag is set to **0644**.

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet
   xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
   xmlns:junos="http://xml.juniper.net/junos/*/junos"
   xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
   xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0" version="1.0">
 <xsl:import href="../import/junos.xsl"/>

 <xsl:variable name="arguments">
  <argument>
   <name>myhost</name>
   <description>IP address or hostname of the remote host</description>
  </argument>
  <argument>
   <name>filename</name>
   <description>name of destination file</description>
  </argument>
  <argument>
   <name>encoding</name>
   <description>ascii or base64</description>
  </argument>
 </xsl:variable>

 <xsl:param name="myhost"/>
 <xsl:param name="filename"/>
 <xsl:param name="encoding"/>

 <xsl:template match="/">
  <op-script-results>
```


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```
<xsl:variable name="rpc">
 <get-software-information/>
</xsl:variable>
<xsl:variable name="result" select="jcs:invoke($rpc)"/>

<xsl:variable name="fileput">
 <file-put>
  <filename>
   <xsl:value-of select="$filename"/>
  </filename>
  <encoding>
   <xsl:value-of select="$encoding"/>
  </encoding>
  <permission>0644</permission>
  <delete-if-exist/>
  <file-contents>
   <xsl:value-of select="$result"/>
  </file-contents>
 </file-put>
</xsl:variable>

<xsl:choose>
 <xsl:when test="$myhost = ''">
  <xnm:error>
   <message>missing mandatory argument 'myhost'</message>
  </xnm:error>
 </xsl:when>
 <xsl:otherwise>
  <xsl:variable name="username" select="jcs:get-input('Enter username: ')"/>
  <xsl:variable name="pw" select="jcs:get-secret('Enter password: ')"/>
  <xsl:variable name="connect" select="jcs:open($myhost, $username, $pw)"/>
  <xsl:choose>
   <xsl:when test="$connect">
    <output>Connected to host.  Exporting file... </output>
    <xsl:variable name="out" select="jcs:execute($connect, $fileput)"/>
    <xsl:choose>
     <xsl:when test="$out//xnm:error">
      <xsl:copy-of select="($out//xnm:error)"/>
     </xsl:when>
     <xsl:otherwise>
      <output>
       <xsl:value-of select="$out"/>
      </output>
     </xsl:otherwise>
    </xsl:choose>
    <xsl:value-of select="jcs:close($connect)"/>
   </xsl:when>
   <xsl:otherwise>
    <output>No connection to host.</output>
   </xsl:otherwise>
  </xsl:choose>
 </xsl:otherwise>
</xsl:choose>

<xsl:variable name="local-out" select="jcs:invoke($fileput)"/>
```

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```
    <output>
     <xsl:value-of select="concat('Saving file on local host\n', $local-out)"/>
    </output>
   </op-script-results>
 </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
   <argument> {
      <name> "myhost";
      <description> "IP address or hostname of the remote host";
   }
   <argument> {
      <name> "filename";
      <description> "name of destination file";
   }
   <argument> {
      <name> "encoding";
      <description> "ascii or base64";
   }
}

param $myhost;
param $filename;
param $encoding;

match / {
   <op-script-results> {

      var $rpc = <get-software-information>;
      var $result = jcs:invoke($rpc);

      var $fileput = {
         <file-put> {
            <filename>$filename;
            <encoding>$encoding;
            <permission>'0644';
            <delete-if-exist>;
            <file-contents>$result;
         }
      }

      if ($myhost = '') {
         <xnm:error> {
            <message> "missing mandatory argument 'myhost'";
         }
      }
      else {
         var $username = jcs:get-input("Enter username: ");
         var $pw = jcs:get-secret("Enter password: ");
```


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```
        var $connect = jcs:open($myhost, $username, $pw);

        if ($connect) {
          <output> "Connected to host.  Exporting file... \n";
          var $out = jcs:execute($connect, $fileput);
          if ($out//xnm:error) {
            copy-of ($out//xnm:error);
          }
          else {
            <output> $out;
          }
          expr jcs:close($connect);

        }
        else {
          <output> "No connection to host.";
        }

      }
      var $local-out = jcs:invoke($fileput);
      <output> "Saving file on local host\n" _ $local-out;
    }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **export.xsl** or **export.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **export.xsl** or **export.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file export.(slax | xsl)
   ```

3. Issue the **commit and-quit** command.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op export** operational mode command and include any necessary arguments.

Verification

- Verifying the Op Script Arguments on page 373
- Verifying Op Script Execution on page 374

Verifying the Op Script Arguments

Purpose Verify that the argument names and descriptions show up in the CLI.

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Action Issue the **op exort ?** operational mode command. The CLI lists the possible completions for the script arguments based on the definitions within the global **arguments** variable in the script.

```
user@host> op export ?
Possible completions:
  <[Enter]>            Execute this command
  <name>               Argument name
  detail               Display detailed output
  encoding             ascii or base64
  filename             name of destination file
  myhost               IP address or hostname of the remote host
  |                    Pipe through a command
```

Verifying Op Script Execution

Purpose Verify that the script behaves as expected.

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Action Issue the **op export myhost *host* encoding *encoding* filename *file*** operational mode command, and include the appropriate username and password when prompted. If script execution is successful, the result of the **<get-software-information>** RPC request is written to the file on the remote device and also on the local device. For example:

```
root@host> op export myhost router1 encoding ascii filename /var/log/host-version.txt
Enter username: root
Enter password:
Connected to host.  Exporting file...

/var/log/host-version.txt
Saving file on local host

/var/log/host-version.txt
```

If you fail to supply the IP address or hostname of the remote device in the command-line arguments, the script issues an error and halts execution.

```
root@host> op export
error: missing mandatory argument 'myhost'
```

If you omit the **delete-if-exist** child tag of the **file-put** operation, and the specified file already exists, the script reports an error.

```
root@host> op export myhost router1 encoding ascii filename /var/log/host-version.txt
Enter username: root
Enter password:
Connected to host.  Exporting file...

Destination file exists
Saving file on local host

Destination file exists
```

If you execute the script and include a directory path that does not exist on either the remote or the local host, the script reports an error.

```
root@host> op export myhost router1 encoding ascii filename /var/test/host-version.txt
Enter username: root
Enter password:
Connected to host.  Exporting file...

Destination directory does not exist: /var/test
Saving file on local host

Destination directory does not exist: /var/test
```

Related Documentation

- Declaring Arguments in Op Scripts on page 341
- Example: Importing Files Using an Op Script on page 380

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Example: Finding LSPs to Multiple Destinations Using an Op Script

This example uses an op script to check for label-switched paths (LSPs) to multiple destinations.

- Requirements on page 376
- Overview and Op Script on page 376
- Configuration on page 379
- Verification on page 379

Requirements

This example uses a device running Junos OS.

Overview and Op Script

The following example script, which is shown in both XSLT and SLAX, checks for LSPs to multiple destinations. The script takes one mandatory command-line argument, the address specifying the LSP endpoint. The address argument can include an optional prefix length. If no address is specified, the script generates an error message and halts execution.

The **$get-configuration** variable stores the remote procedure call (RPC) to retrieve the **[edit protocols mpls]** hierarchy level of the device's committed configuration. This configuration is stored in the **$config** variable. The **$get-route-information** variable stores the RPC equivalent of the **show route** *address* **terse** operational mode command, where the value of the **destination** tag specifies *address*. The script sets this value to the address specified by the user on the command line. The script invokes the **$get-route-information** RPC and stores the output in the **$rpc-out** variable. If **$rpc-out** does not contain any errors, the script examines all host route entries present at the **route-table/rt/rt-destination** node.

For each host route entry, if an LSP to the destination is configured in the active configuration, the script generates a "Found" message with the destination address and corresponding LSP name in the output. If an LSP to the destination is not configured, the output generates a "Missing" message containing the destination address and hostname.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0" version="1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:variable name="arguments">
    <argument>
      <name>address</name>
      <description>LSP endpoint</description>
    </argument>
  </xsl:variable>
  <xsl:param name="address"/>
  <xsl:template match="/">
```


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```
<op-script-output>
  <xsl:choose>
    <xsl:when test="$address = ''">
      <xnm:error>
        <message>missing mandatory argument 'address'</message>
      </xnm:error>
    </xsl:when>
    <xsl:otherwise>
      <xsl:variable name="get-configuration">
        <get-configuration database="committed">
          <configuration>
            <protocols>
              <mpls/>
            </protocols>
          </configuration>
        </get-configuration>
      </xsl:variable>
      <xsl:variable name="config"
            select="jcs:invoke($get-configuration)"/>
      <xsl:variable name="mpls" select="$config/protocols/mpls"/>
      <xsl:variable name="get-route-information">
        <get-route-information>
          <terse/>
          <destination>
            <xsl:value-of select="$address"/>
          </destination>
        </get-route-information>
      </xsl:variable>
      <xsl:variable name="rpc-out"
              select="jcs:invoke($get-route-information)"/>
      <xsl:choose>
        <xsl:when test="$rpc-out//xnm:error">
          <xsl:copy-of select="$rpc-out//xnm:error"/>
        </xsl:when>
        <xsl:otherwise>
          <xsl:for-each select="$rpc-out/route-table/rt/rt-destination">
            <xsl:choose>
              <xsl:when test="contains(.,'/32')">
                <xsl:variable name="dest"
                     select="substring-before(.,'/')"/>
                <xsl:variable name="lsp"
                    select="$mpls/label-switched-path[to = $dest]"/>
                <xsl:choose>
                  <xsl:when test="$lsp">
                    <output>
                     <xsl:value-of select="concat('Found: ', $dest,
                                ' (',$lsp/to, ') --&gt; ', $lsp/name)"/>
                    </output>
                  </xsl:when>
                  <xsl:otherwise>
                    <xsl:variable name="name"
                                  select="jcs:hostname($dest)"/>
                    <output>
                      <xsl:value-of select="concat('Name: ', $name)"/>
                    </output>
                    <output>
```

```
                                    <xsl:value-of select="concat('Missing: ', $dest)"/>
                                  </output>
                                </xsl:otherwise>
                              </xsl:choose>
                            </xsl:when>
                            <xsl:otherwise>
                              <output>
                                <xsl:value-of select="concat('Not a host route: ', .)"/>
                              </output>
                            </xsl:otherwise>
                          </xsl:choose>
                        </xsl:for-each>
                      </xsl:otherwise>
                    </xsl:choose>
                  </xsl:otherwise>
                </xsl:choose>
              </op-script-output>
            </xsl:template>
          </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";

import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "address";
    <description> "LSP endpoint";
  }
}
param $address;
match / {
  <op-script-output> {
    if ($address = '') {
      <xnm:error> {
        <message> "missing mandatory argument 'address'";
      }
    } else {
      var $get-configuration = {
        <get-configuration database="committed"> {
          <configuration> {
            <protocols> {
              <mpls>;
            }
          }
        }
      }
      var $config = jcs:invoke($get-configuration);
      var $mpls = $config/protocols/mpls;
      var $get-route-information = {
        <get-route-information> {
          <terse>;
          <destination> $address;
```


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```
    }
  }
  var $rpc-out = jcs:invoke($get-route-information);
  if ($rpc-out//xnm:error) {
    copy-of $rpc-out//xnm:error;
  } else {
    for-each ($rpc-out/route-table/rt/rt-destination) {
      if (contains(.,'/32')) {
        var $dest = substring-before(.,'/');
        var $lsp = $mpls/label-switched-path[to = $dest];
        if ($lsp) {
          <output> 'Found: ' _ $dest _ ' (' _ $lsp/to _ ') --> ' _
              $lsp/name;
        } else {
          var $name = jcs:hostname($dest);
          <output> 'Name: ' _ $name;
          <output> 'Missing: ' _ $dest;
        }
      } else {
        <output> 'Not a host route: ' _ .;
      }
    }
  }
 }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **lsp.xsl** or **lsp.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **lsp.xsl** or **lsp.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file lsp.(slax | xsl)
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op lsp address** *address* operational mode command.

Verification

Verifying Script Execution

Purpose Verify that the script behaves as expected.

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Action Issue the **op lsp address *address*** operational mode command to execute the script. The output varies depending on the configuration.

```
user@R4> op lsp address 10.168.215.0/24
Found: 192.168.215.1 (192.168.215.1) --> R4>R1
Found: 192.168.215.2 (192.168.215.2) --> R4>R2
Name: R3
Missing: 10.168.215.3
Name: R5
Missing: 10.168.215.4
Name: R6
Missing: 10.168.215.5
```

Example: Importing Files Using an Op Script

The op script in this example uses the Junos XML protocol **file-get** operation to read the contents of a file from a remote server.

- Requirements on page 380
- Overview and Op Script on page 380
- Configuration on page 384
- Verification on page 384

Requirements

This example uses a device running Junos OS.

Overview and Op Script

The Junos XML protocol **file-get** operation reads the contents of a file. The basic syntax for using the **file-get** command is as follows:

```
<rpc>
  <file-get>
    <filename>value</filename>
    <encoding>value</encoding>
  </file-get>
</rpc>
```

The following tag elements are used with the **file-get** command.

- **encoding**—(Mandatory) Specifies the type of encoding used. You can use **ASCII**, **base64**, or **raw** encoding.
- **filename**—(Mandatory) Within this tag, you include the full or relative path and filename of the file to import. When you use a relative path, the specified path is relative to the **/var/tmp/** directory if the **file-get** operation is executed locally. If the operation is executed remotely within the context of a connection handle, the path is relative to the user's home directory.

NOTE: When you use ASCII encoding, the file-get operation converts any control characters in the imported file to the Unicode character 'SECTION SIGN' (U+00A7).

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XSLT Syntax

The following sample script connects to a remote device and reads the contents of the specified file. The script takes three arguments: the IP address or hostname of the remote device, the filename, and the file encoding. The **arguments** variable is declared at the global level of the script so that the argument names and descriptions are visible in the command-line interface (CLI).

The script declares the **$fileget** variable, which contains the remote procedure call (RPC) for the **file-get** operation. The command-line arguments define the values for the **filename** and **encoding** tag elements. If the mandatory argument **myhost** is missing, the script issues an error and halts execution. Otherwise, the script prompts for the username and password that will be used to connect to the remote device.

If connection to the remote device is successful, the script executes the RPC within the context of the connection handle. The output of the **file-get** operation, which is the result of the **jcs:execute( )** function, is stored in the **out** variable. If the operation encounters an error, the script prints the error to the CLI. If the **file-get** operation is successful, the contents of the file are stored in the **out** variable, which is printed to the CLI. The connection to the remote host is then closed.

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet
   xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
   xmlns:junos="http://xml.juniper.net/junos/*/junos"
   xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
   xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0" version="1.0">
  <xsl:import href="../import/junos.xsl"/>

 <xsl:variable name="arguments">
   <argument>
      <name>myhost</name>
      <description>IP address or hostname of the remote host</description>
   </argument>
   <argument>
      <name>filename</name>
      <description>name of file</description>
   </argument>
   <argument>
      <name>encoding</name>
      <description>ascii, base64, or raw</description>
   </argument>
 </xsl:variable>

 <xsl:param name="myhost"/>
 <xsl:param name="filename"/>
 <xsl:param name="encoding"/>

 <xsl:template match="/">
   <op-script-results>
      <xsl:variable name="fileget">
         <file-get>
            <filename>
               <xsl:value-of select="$filename"/>
            </filename>
            <encoding>
               <xsl:value-of select="$encoding"/>
            </encoding>
```

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```
        </file-get>
      </xsl:variable>
      <xsl:choose>
        <xsl:when test="$myhost = ''">
          <xnm:error>
            <message>missing mandatory argument 'myhost'</message>
          </xnm:error>
        </xsl:when>
        <xsl:otherwise>
          <xsl:variable name="username" select="jcs:get-input('Enter username: ')"/>

          <xsl:variable name="pw" select="jcs:get-secret('Enter password: ')"/>
         <xsl:variable name="connect" select="jcs:open($myhost, $username, $pw)"/>

          <xsl:choose>
            <xsl:when test="$connect">
              <output>Connected to host.  Reading file...
              </output>
              <xsl:variable name="out" select="jcs:execute($connect, $fileget)"/>
              <xsl:choose>
                <xsl:when test="$out//xnm:error">
                  <xsl:copy-of select="$out//xnm:error"/>
                </xsl:when>
                <xsl:otherwise>
                  <output>
                    <xsl:value-of select="concat('File contents: ', $out)"/>
                  </output>
                </xsl:otherwise>
              </xsl:choose>
              <xsl:value-of select="jcs:close($connect)"/>
            </xsl:when>
            <xsl:otherwise>
              <output>No connection to host.</output>
            </xsl:otherwise>
          </xsl:choose>
        </xsl:otherwise>
      </xsl:choose>
    </op-script-results>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "myhost";
    <description> "IP address or hostname of the remote host";
  }
  <argument> {
    <name> "filename";
    <description> "name of file";
  }
```


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```
    <argument> {
      <name> "encoding";
      <description> "ascii, base64, or raw";
    }
}

param $myhost;
param $filename;
param $encoding;

match / {
    <op-script-results> {
      var $fileget = {
        <file-get> {
          <filename>$filename;
          <encoding>$encoding;
        }
      }

      if ($myhost = '') {
        <xnm:error> {
          <message> "missing mandatory argument 'myhost'";
        }
      }
      else {
        var $username = jcs:get-input("Enter username: ");
        var $pw = jcs:get-secret("Enter password: ");
        var $connect = jcs:open($myhost, $username, $pw);

        if ($connect) {
          <output> "Connected to host.  Reading file... \n";
          var $out = jcs:execute($connect, $fileget);
          if ($out//xnm:error) {
            copy-of $out//xnm:error;
          }
          else {
            <output> "File contents: " _ $out;
          }
          expr jcs:close($connect);
        }
        else {
          <output> "No connection to host.";
        }
      }
    }
}
```

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Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **import.xsl** or **import.slax** as appropriate, and copy it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **import.xsl** or **import.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file import.(slax | xsl)
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op import** operational mode command and include any necessary arguments.

Verification

Verifying the Script Arguments

Purpose Verify that the argument names and descriptions show up in the CLI.

Action Issue the **op import ?** operational mode command. The CLI lists the possible completions for the script arguments based on the definitions within the global **arguments** variable in the script.

```
user@host> op import ?
Possible completions:
  <[Enter]>            Execute this command
  <name>               Argument name
  detail               Display detailed output
  encoding             ascii, base64, or raw
  filename             name of file
  myhost               IP address or hostname of the remote host
  |                    Pipe through a command
```

Verifying Op Script Execution

Purpose Verify that the script behaves as expected.

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Action Issue the **op import myhost *host* encoding *encoding* filename *file*** operational mode command, and include the appropriate username and password when prompted. If script execution is successful, the contents of the requested file are displayed. For example:

```
root@host> op import myhost router1 encoding ascii filename /var/db/scripts/op/test.slax
Enter username: root
Enter password:
Connected to host.  Reading file...
File contents:

version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";
...
```

If you fail to supply the IP address or hostname of the remote device in the command-line arguments, the script issues an error and halts execution.

```
root@host> op import
error: missing mandatory argument 'myhost'
```

Also, if the specified path or file does not exist, the script issues an error.

```
root@host> op import myhost router1 encoding ascii filename /var/db/scripts/op/test1.slax
Enter username: root
Enter password:
Connected to host.  Reading file...
File contents:

Failed to open file (/var/db/scripts/op/test1.slax): No such file or directory
```

Related Documentation

- Declaring Arguments in Op Scripts on page 341
- Example: Exporting Files Using an Op Script on page 368

Example: Restarting an FPC Using an Op Script

This example uses an op script to restart a Flexible PIC Concentrator (FPC).

- Requirements on page 385
- Overview and Op Script on page 385
- Configuration on page 387
- Verification on page 387

Requirements

This example uses a device running Junos OS that contains a Flexible PIC Concentrator (FPC) or equivalent component.

Overview and Op Script

The following script, which is shown in both XSLT and SLAX formats, restarts an FPC given the slot number in which the FPC resides. The user provides the slot number in the

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command-line interface (CLI) when the script is invoked. The script stores the slot number as the value of the parameter **slot** and constructs the **request chassis fpc** command string to include the slot number of the FPC to restart. There is no Junos Extensible Markup Language (XML) equivalent for the **request chassis** commands. Therefore, this script invokes the **request chassis fpc** command directly rather that using a remote procedure call (RPC).

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:variable name="arguments">
    <argument>
      <name>slot</name>
      <description>Slot number of the FPC</description>
    </argument>
  </xsl:variable>
  <xsl:param name="slot"/>
  <xsl:template match="/">
    <op-script-results>
      <xsl:variable name="restart">
        <command>
          <xsl:value-of select="concat('request chassis fpc slot ', $slot,'
                                                                restart')"/>
        </command>
      </xsl:variable>
      <xsl:variable name="result" select="jcs:invoke($restart)"/>
      <output>
        <xsl:text>Restarting the FPC in slot </xsl:text>
        <xsl:value-of select="$slot"/>
        <xsl:text>. </xsl:text>
        <xsl:text>To verify, issue the "show chassis fpc" command.</xsl:text>
      </output>
    </op-script-results>
  </xsl:template>
</xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "slot";
    <description> "Slot number of the FPC";
  }
}
param $slot;
match / {
```


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```
<op-script-results> {
  var $restart = {
    <command> 'request chassis fpc slot ' _ $slot _ ' restart';
  }
  var $result = jcs:invoke($restart);
  <output> {
    expr "Restarting the FPC in slot ";
    expr $slot;
    expr ". ";
    expr "To verify, issue the \"show chassis fpc\" command.";
  }
 }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and test the script:

1. Copy the XSLT or SLAX script into a text file, name the file **restart-fpc.xsl** or **restart-fpc.slax** as appropriate, and download it to the **/var/db/scripts/op/** directory on the device.

   Only users who belong to the Junos OS **super-user** login class can access and edit files in this directory.

2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **restart-fpc.xsl** or **restart-fpc.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file restart-fpc.(slax | xsl)
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op restart-fpc slot** ***slot-number*** operational mode command.

Verification

Verifying Op Script Execution

Purpose Verify that the FPC has been restarted and is currently online.

Action Execute the op script by issuing the **op** ***filename*** operational mode command. Supply the **slot** number of the FPC as an argument.

```
user@host> op restart-fpc slot 0
```

When you execute the script, you should see output similar to the following:

```
Restarting the FPC in slot 0. To verify, issue the "show chassis fpc" command.
```

Issue the **show chassis fpc detail** ***fpc-slot*** operational mode command.

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```
user@host> show chassis fpc detail 0

Slot 0 information:
  State                                   Online
  Temperature                          36 degrees C / 96 degrees F
  Total CPU DRAM                     1024 MB
  Total RLDRAM                        256 MB
  Total DDR DRAM                     4096 MB
  Start time:                             2009-08-11 21:20:30 PDT
  Uptime:                                 0 hours, 1 minutes, 50 seconds
  Max Power Consumption               335 Watts
```

Meaning The **show chassis fpc detail** command output displays the state, start time, uptime, and characteristics for the FPC. Verify that the FPC was restarted by checking the start time and uptime of the FPC. Verify the status of the restarted FPC by checking the state. If the status is **Present**, the FPC is coming up but is not yet online. If the status is **Online**, the FPC is online and running.

Example: Searching Files Using an Op Script

This sample script searches a file on a device running Junos OS for lines matching a given regular expression. The example uses the **jcs:grep** template in an op script.

- Requirements on page 388
- Overview and Op Script on page 388
- Configuration on page 391
- Verification on page 391

Requirements

This example uses a device running Junos OS.

Overview and Op Script

The **jcs:grep** template searches an ASCII file for lines matching a regular expression. The template resides in the **junos.xsl** import file, which is included with the standard Junos OS installation available on all switches, routers, and security devices running Junos OS. To use the **jcs:grep** template in a script, you must import the **junos.xsl** file into the script and map the **jcs** prefix to the namespace identified by the URI http://xml.juniper.net/junos/commit-scripts/1.0 .

In this example, all values required for the **jcs:grep** template are defined as global parameters. The values for the parameters are passed into the script as command-line arguments. The following script defines two parameters, **$filename** and **$pattern**, which store the values of the input file path and the regular expression. If you omit either argument when you execute the script, the script generates an error and halts execution. Otherwise, the script calls the **jcs:grep** template and passes in the supplied arguments.

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If the regular expression contains a syntax error, the **jcs:grep** template generates an **error: regex error** message for each line in the file. If the regular expression syntax is valid, the template parses the input file. For each match, the template adds a **<match>** element, which contains **<input>** and **<output>** child tags, to the result tree. The template writes the matching string to the **<output>** child element and writes the corresponding matching line to the **<input>** child element:

```
<match> {
  <input>
  <output>
}
```

In the SLAX script, the **:=** operator copies the results of the **jcs:grep** template call to a temporary variable and runs the **node-set** function on that variable. The **:=** operator ensures that the **results** variable is a node-set rather than a result tree fragment so that the script can access the contents. The XSLT script explicitly calls out the equivalent steps. The script then loops through all resulting input elements and prints each match.

XSLT Syntax

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0" version="1.0">
 <xsl:import href="../import/junos.xsl"/>

  <xsl:variable name="arguments">
    <argument>
      <name>filename</name>
      <description>name of file in which to search for the specified pattern
      </description>
    </argument>
    <argument>
      <name>pattern</name>
      <description>regular expression</description>
    </argument>
  </xsl:variable>

  <xsl:param name="filename"/>
  <xsl:param name="pattern"/>

  <xsl:template match="/">

    <op-script-results>
      <xsl:choose>
        <xsl:when test="$filename = ''">
          <xnm:error>
            <message>missing mandatory argument 'filename'</message>
          </xnm:error>
        </xsl:when>
        <xsl:when test="$pattern = '';">
          <xnm:error>
            <message>missing mandatory argument 'pattern'</message>
          </xnm:error>
        </xsl:when>
        <xsl:otherwise>
          <xsl:variable name="results-temp">
```

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```
                    <xsl:call-template name="jcs:grep">
                      <xsl:with-param name="filename" select="$filename"/>
                      <xsl:with-param name="pattern" select="$pattern"/>
                    </xsl:call-template>
                  </xsl:variable>
                  <xsl:variable xmlns:ext="http://xmlsoft.org/XSLT/namespace"
                    name="results" select="ext:node-set($results-temp)"/>
                  <output>
                    <xsl:value-of select="concat('Search for ', $pattern, ' in ', $filename)"/>
                  </output>
                  <xsl:for-each select="$results//input">
                    <output>
                      <xsl:value-of select="."/>
                    </output>
                  </xsl:for-each>
                </xsl:otherwise>
              </xsl:choose>
            </op-script-results>

          </xsl:template>
        </xsl:stylesheet>
```

SLAX Syntax

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";

import "../import/junos.xsl";

var $arguments = {
  <argument> {
    <name> "filename";
    <description> "name of file in which to search for the specified pattern";
  }
  <argument> {
    <name> "pattern";
    <description> "regular expression";
  }
}

param $filename;
param $pattern;

match / {
  <op-script-results> {

    if ($filename = '') {
      <xnm:error> {
        <message> "missing mandatory argument 'filename'";
      }
    }
    else if ($pattern = '') {
      <xnm:error> {
        <message> "missing mandatory argument 'pattern'";
      }
    }
```


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```
    else {
      var $results := { call jcs:grep($filename, $pattern); }

      <output> "Search for " _ $pattern _ " in " _ $filename;
      for-each ($results//input) {
        <output> .;
      }
    }
  }
}
```

Configuration

Step-by-Step Procedure

To download, enable, and run the script:

1. Copy the XSLT or SLAX script into a text file, name the file **grep.xsl** or **grep.slax** as appropriate, and download it to the **/var/db/scripts/op/** directory on the device.
2. In configuration mode, include the **file** statement at the **[edit system scripts op]** hierarchy level and **grep.xsl** or **grep.slax** as appropriate.

   ```
   [edit system scripts op]
   user@host# set file grep.(slax | xsl)
   ```

3. Issue the **commit and-quit** command to commit the configuration and to return to operational mode.

   ```
   [edit]
   user@host# commit and-quit
   ```

4. Execute the op script by issuing the **op grep filename** *filename* **pattern** *pattern* operational mode command.

Verification

Verifying the Script Arguments

Purpose

Verify that the argument names and descriptions appear in the command-line interface (CLI) help.

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Action Issue the **op grep ?** operational mode command. The CLI lists the possible completions for the script arguments based on the definitions within the global variable **arguments** in the script.

```
user@host> op grep
Possible completions:
  <[Enter]>            Execute this command
  <name>               Argument name
  detail               Display detailed output
  filename             name of file in which to search for the specified pattern

  pattern              regular expression
  |                    Pipe through a command
```

Verifying Op Script Execution

Purpose Verify that the script behaves as expected.

Action If you issue the **op grep** command, but you fail to supply either the filename or the regex pattern, the script issues an error message and halts execution. For example:

```
user@host> op grep filename /var/log/messages
error: missing mandatory argument 'pattern'
```

```
user@host> op grep pattern SNMP_TRAP_LINK_DOWN
error: missing mandatory argument 'filename'
```

When you issue the **op grep filename *filename* pattern *pattern*** command, the script lists all lines from the input file that match the regular expression.

```
user@host> op grep filename /var/log/messages pattern SNMP_TRAP_LINK_DOWN
Search for SNMP_TRAP_LINK_DOWN in /var/log/messages
Feb 24 09:04:00  host mib2d[1325]: SNMP_TRAP_LINK_DOWN: ifIndex 543, ifAdminStatus
 down(2), ifOperStatus down(2), ifName
lt-0/1/0.9
Feb 24 09:04:00  host mib2d[1325]: SNMP_TRAP_LINK_DOWN: ifIndex 542, ifAdminStatus
 down(2), ifOperStatus down(2), ifName
lt-0/1/0.10
```

Related Documentation

- SLAX Templates Overview on page 71
- jcs:grep Template on page 35
- jcs:regex() Function on page 24

Configuration Statements

- [edit system scripts] Hierarchy Level on page 393
- Any Hierarchy Level on page 394
- arguments on page 394
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- description on page 396
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- refresh (Op Scripts) on page 399
- refresh-from (Op Scripts) on page 400
- scripts on page 401
- source (Op Scripts) on page 402
- traceoptions (Commit and Op Scripts) on page 403

[edit system scripts] Hierarchy Level

The following statements can be configured at the **[edit system]** hierarchy level. This is not a comprehensive list of statements available at the **[edit system]** hierarchy level.

```
[edit system]
scripts {
  commit {
    allow-transients;
    direct-access;
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      optional;
      refresh;
      refresh-from url;
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  op {
    file filename {
      arguments {
        argument-name {
          description descriptive-text;
        }
      }
      checksum (md5 | sha-256 | sha1) hash;
      command filename-alias;
      description descriptive-text;
      refresh;
      refresh-from url;
      source url;
    }
    no-allow-url
    refresh;
    refresh-from url;
```

```
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
}
```

Any Hierarchy Level

The following statement can be added at any level of the configuration:

```
apply-macro apply-macro-name {
  parameter-name parameter-value;
}
```

arguments

Syntax

```
arguments {
  argument-name {
    description descriptive-text;
  }
}
```

Hierarchy Level [edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, configure command-line arguments to the script.

Options ***argument-name***—The name of a command-line argument to an op script.

The remaining statement is explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Declaring Arguments in Op Scripts on page 341

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checksum

Syntax checksum (md5 | sha-256 | sha1) *hash*;

Hierarchy Level [edit event-options event-script file *filename*],
[edit system scripts commit file *filename*],
[edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 9.5.
Statement introduced in Junos OS Release 11.1 for the QFX Series.
Statement introduced in Junos OS Release 14.1X53-D20 for the OCX Series.

Description For Junos OS commit scripts and op scripts, specify the MD5, SHA-1, or SHA-256 checksum hash. When it executes a local event, commit, or op script, Junos OS verifies the authenticity of the script by using the configured checksum hash.

Options **md5 *hash***—MD5 checksum of this script.

sha-256 *hash*—SHA-256 checksum of this script.

sha1 *hash*—SHA-1 checksum of this script.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring Checksum Hashes for a Commit Script on page 177
- Configuring Checksum Hashes for an Event Script on page 473
- Configuring Checksum Hashes for an Op Script on page 345
- Executing an Op Script from a Remote Site on page 346
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*

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command

Syntax command *filename-alias*;

Hierarchy Level [edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, configure a filename alias for the script file. This allows you to run the script by referencing either the script filename or the filename alias.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Enabling an Op Script and Defining a Script Alias on page 344

description

Syntax description *descriptive-text*;

Hierarchy Level [edit system scripts op file *filename*]
[edit system scripts op file *filename* arguments *argument-name*]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, provide a help-text string that appears in the command-line interface (CLI).

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Configuring Help Text for Op Scripts on page 343
- Declaring Arguments in Op Scripts on page 341
- file (Op Scripts) on page 397

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file (Op Scripts)

Syntax

```
file filename {
  arguments {
    argument-name {
      description descriptive-text;
    }
  }
  checksum (md5 | sha-256 | sha1) hash;
  command filename-alias;
  description descriptive-text;
  refresh;
  refresh-from url;
  source url;
}
```

Hierarchy Level [edit system scripts op]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, enable an op script that is located in the **/var/db/scripts/op** directory.

Options ***filename***—The name of an Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) file containing an op script.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Enabling an Op Script and Defining a Script Alias on page 344

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op

Syntax

```
op {
  file filename {
    arguments {
      argument-name {
        description descriptive-text;
      }
    }
    checksum (md5 | sha-256 | sha1) hash;
    command filename-alias;
    description descriptive-text;
    refresh;
    refresh-from url;
    source url;
  }
  no-allow-url
  refresh;
  refresh-from url;
  traceoptions {
    file <filename> <files number> <size size> <world-readable | no-world-readable>;
    flag flag;
    no-remote-trace;
  }
}
```

Hierarchy Level [edit system scripts]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, configure an operation scripting mechanism.

Options The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Storing and Enabling Scripts on page 85

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no-allow-url

Syntax no-allow-url;

Hierarchy Level [edit system scripts op]

Release Information Statement introduced in Junos OS Release 10.0.

Description For Junos OS op scripts, prohibit the remote execution of scripts. When you include this configuration statement, the **op url** operational mode command generates an error and does not permit you to execute the op script from a remote site.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- file (Op Scripts) on page 397
- Executing an Op Script from a Remote Site on page 346

refresh (Op Scripts)

Syntax refresh;

Hierarchy Level [edit system scripts op],
[edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, overwrite the local copy of all enabled op scripts or a single enabled script located in the **/var/db/scripts/op** directory with the copy located at the source URL, specified in the **source** statement at the same hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using a Master Source Location for a Script on page 89
- refresh-from (Op Scripts) on page 400
- source (Op Scripts) on page 402

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refresh-from (Op Scripts)

Syntax refresh-from *url*;

Hierarchy Level [edit system scripts op],
[edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 7.6.

Description For Junos OS op scripts, overwrite the local copy of all enabled op scripts or a single enabled script located in the **/var/db/scripts/op** directory with the copy located at a URL other than the URL specified in the **source** statement.

Options *url*—Source specified as a Hypertext Transfer Protocol (HTTP) URL, FTP URL, or secure copy (scp)-style remote file specification.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using an Alternate Source Location for a Script on page 94
- refresh (Op Scripts) on page 399
- source (Op Scripts) on page 402

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scripts

Syntax

```
scripts {
  commit {
    allow-transients;
    direct-access;
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      optional;
      refresh;
      refresh-from url;
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  op {
    file filename {
      arguments {
        argument-name {
          description descriptive-text;
        }
      }
      checksum (md5 | sha-256 | sha1) hash;
      command filename-alias;
      description descriptive-text;
      refresh;
      refresh-from url;
      source url;
    }
    no-allow-url
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
}
```

Hierarchy Level [edit system]

Release Information Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description For Junos OS commit or op scripts, configure scripting mechanisms.

Options The statements are explained separately.

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Required Privilege Level
maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Storing and Enabling Scripts on page 85

source (Op Scripts)

Syntax
source *url*;

Hierarchy Level
[edit system scripts op file *filename*]

Release Information
Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 11.1 for the QFX Series.

Description
For Junos OS op scripts, specify the location of the source file for an enabled script located in the **/var/db/scripts/op** directory. When you include the **refresh** statement at the same hierarchy level, the local copy is overwritten by the version stored at the specified URL.

Options
url—Master source file for an op script specified as an HTTP URL, FTP URL, or scp-style remote file specification.

Required Privilege Level
maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using a Master Source Location for a Script on page 89
- refresh (Op Scripts) on page 399
- refresh-from (Op Scripts) on page 400

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traceoptions (Commit and Op Scripts)

Syntax

```
traceoptions {
  file <filename> <files number> <size size> <world-readable | no-world-readable>;
  flag flag;
  no-remote-trace;
}
```

Hierarchy Level

[edit system scripts commit],
[edit system scripts op],
[edit system scripts op]

Release Information

Statement introduced in Junos OS Release 7.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description

Define tracing operations for commit or op scripts.

Default

If you do not include this statement, no script-specific tracing operations are performed.

Options

file *filename*—Name of the file to receive the output of the tracing operation. All files are placed in the directory **/var/log**. By default, commit script process tracing output is placed in the file **cscript.log**, op script process tracing is placed in the file **op-script.log**, and SNMP script tracing is placed in the file **snmp.log**. If you include the **file** statement, you must specify a filename. To retain the default, you can specify **cscript.log**, **op-script.log**, or **snmp.log** as the filename.

Default: Commit scripts: /var/log/cscript.log, Op scripts: /var/log/op-script.log, SNMP scripts: /var/log/snmp.log.

files *number*—(Optional) Maximum number of trace files. When a trace file named ***trace-file*** reaches its maximum size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the **size** option and a filename.

Range: 2 through 1000

Default: 10 files

flag *flag*—Tracing operation to perform. To specify more than one tracing operation, include multiple **flag** statements. You can include the following flags:

- **all**—Log all operations
- **events**—Log important events
- **input**—Log script input data
- **offline**—Generate data for offline development
- **output**—Log script output data

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- **rpc**—Log script RPCs
- **xslt**—Log the XSLT library

no-world-readable—Restrict file access to owner. This is the default.

size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named ***trace-file*** reaches this size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you also must specify a maximum number of trace files with the **files** option and a filename.

Syntax: ***x*k** to specify KB, ***x*m** to specify MB, or ***x*g** to specify GB

Range: 10 KB through 1 GB

Default: 128 KB

world-readable—Enable unrestricted file access.

Required Privilege Level

maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Tracing Commit Script Processing on page 326
- Tracing Op Script Processing on page 404

Troubleshooting

- Troubleshooting Op Scripts on page 404

Troubleshooting Op Scripts

- Tracing Op Script Processing on page 404

Tracing Op Script Processing

Op script tracing operations track all op script operations and record them in a log file. The logged error descriptions provide detailed information to help you solve problems faster.

The default operation of op script tracing is to log important events in a file called **op-script.log** located in the **/var/log** directory. When the file **op-script.log** reaches 128 kilobytes (KB), it is renamed with a number 0 through 9 (in ascending order) appended to the end of the file and then compressed. The resulting files are **op-script.log.0.gz**, then **op-script.log.1.gz**, until there are 10 trace files. Then the oldest trace file (**op-script.log.9.gz**) is overwritten. (For more information about how log files are created, see the *Junos OS System Log Messages Reference*.)

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This section discusses the following topics:

- Minimum Configuration for Enabling Traceoptions for Op Scripts on page 405
- Configuring Tracing of Op Scripts on page 406

Minimum Configuration for Enabling Traceoptions for Op Scripts

If no op script trace options are configured, the simplest way to view the trace output of an op script is to configure the **output** trace flag and issue the **show log op-script.log | last** command. To do this, perform the following steps:

1. If you have not done so already, enable an op script by including the **file** statement at the **[edit system scripts op]** hierarchy level:

   ```
   [edit system scripts op]
   user@host# set file filename
   ```

2. Enable trace options by including the **traceoptions flag output** statement at the **[edit system scripts op]** hierarchy level:

   ```
   [edit system scripts op]
   user@host# set traceoptions flag output
   ```

3. Issue the **commit** command:

   ```
   [edit]
   user@host# commit
   ```

4. Display the resulting trace messages recorded in the file **/var/log/op-script.log** file. At the end of the log is the output generated by the op script you enabled in Step 1. To display the end of the log, issue the **show log op-script.log | last** operational mode command:

   ```
   [edit]
   user@host# run show log op-script.log | last
   ```

Table 21 on page 405 summarizes useful filtering commands that display selected portions of the **op-script.log** file.

Table 21: Op Script Tracing Operational Mode Commands

Task	Command
Display logging data associated with all op script processing.	**show log op-script.log**
Display processing for only the most recent operation.	**show log op-script.log | last**
Display processing for script errors.	**show log op-script.log | match error**
Display processing for a particular script.	**show log op-script.log | match *filename***

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Example: Minimum Configuration for Enabling Traceoptions for Op Scripts

Display the trace output of the op script file **source-route.xsl**:

```
[edit]
system {
  scripts {
    op {
      file source-route.xsl;
      traceoptions flag output;
    }
  }
}
```

```
[edit]
user@host# commit
[edit]
user@host# run show log op-script.log | last
```

Configuring Tracing of Op Scripts

You cannot change the directory (**/var/log**) to which trace files are written. However, you can customize other trace file settings by including the following statements at the **[edit system scripts op traceoptions]** hierarchy level:

```
[edit system scripts op traceoptions]
file <filename> <files number> <size size> <world-readable | no-world-readable>;
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
no-remote-trace;
```

These statements are described in the following sections:

- Configuring the Op Script Log Filename on page 406
- Configuring the Number and Size of Op Script Log Files on page 406
- Configuring Access to Op Script Log Files on page 407
- Configuring the Op Script Trace Operations on page 407

Configuring the Op Script Log Filename

By default, the name of the file that records trace output is **op-script.log**. You can specify a different name by including the **file** statement at the **[edit system scripts op traceoptions]** hierarchy level:

```
[edit system scripts op traceoptions]
file filename;
```

Configuring the Number and Size of Op Script Log Files

By default, when the trace file reaches 128 KB in size, it is renamed and compressed to ***filename*.0.gz**, then ***filename*.1.gz**, and so on, until there are 10 trace files. Then the oldest trace file (***filename*.9.gz**) is overwritten.

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You can configure the limits on the number and size of trace files by including the following statements at the **[edit system** scripts **op traceoptions file <*filename*>]** hierarchy level:

```
[edit system scripts op traceoptions file <filename>]
files number size size;
```

For example, set the maximum file size to 640 KB and the maximum number of files to 20. When the file that receives the output of the tracing operation (***filename***) reaches 640 KB, it is renamed and compressed to ***filename*.0.gz**, and a new file called ***filename*** is created. When ***filename*** reaches 640 KB, ***filename*.0.gz** is renamed ***filename*.1.gz** and ***filename*** is renamed and compressed to ***filename*.0.gz**. This process repeats until there are 20 trace files. Then the oldest file (***filename*.19.gz**) is overwritten.

The number of files can range from 2 through 1000 files. The file size can range from 10 KB through 1 gigabyte (GB).

NOTE:

If you set either a maximum file size or a maximum number of trace files, you also must specify the other parameter and a filename.

Configuring Access to Op Script Log Files

By default, access to the op script log file is restricted to the owner. You can manually configure access by including the **world-readable** or **no-world-readable** statement at the **[edit system scripts op traceoptions file <*filename*>]** hierarchy level.

```
[edit system scripts op traceoptions file <filename>]
(world-readable | no-world-readable);
```

The **no-world-readable** statement restricts op script log access to the owner. The **world-readable** statement enables unrestricted access to the op script log file.

Configuring the Op Script Trace Operations

By default, only important events are logged. You can configure the trace operations to be logged by including the following statements at the **[edit system scripts op traceoptions]** hierarchy level:

```
[edit system scripts op traceoptions]
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
```

Table 22 on page 407 describes the meaning of the op script tracing flags.

Table 22: Op Script Tracing Flags

Flag	Description	Default Setting
all	Trace all operations.	Off

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Table 22: Op Script Tracing Flags *(continued)*

Flag	Description	Default Setting
events	Trace important events.	On
input	Trace op script input data.	Off
offline	Generate data for offline development.	Off
output	Trace op script output data.	Off
rpc	Trace op script RPCs.	Off
xslt	Trace the Extensible Stylesheet Language Transformations (XSLT) library.	Off

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CHAPTER 4

Event Automation and Event Policy Developer Guide

- Overview on page 409
- Configuration on page 413
- Administration on page 530
- Troubleshooting on page 532

Overview

- Event Policy Overview on page 409
- Event Scripts Overview on page 412

Event Policy Overview

- Event Notifications and Policies Overview on page 409
- How Event Policies Work on page 410

Event Notifications and Policies Overview

To diagnose a fault or error condition on a device, you need relevant information about the state of the platform. You can derive state information from *event notifications*. Event notifications are system log messages and SNMP traps. A Junos OS process called the *event process* (eventd) receives event notifications—henceforth simply called *events*—from other Junos OS processes.

Timely diagnosis and intervention can correct error conditions and keep the device in operation. After the eventd process receives events, *event policies* instruct the eventd process to select specific events, correlate the events, and perform a set of actions. These actions can either help you diagnose a fault or take corrective action. For example, the eventd process can upload device files to a given destination and issue operational mode commands.

Events can originate as SNMP traps or system log messages. The event process receives event messages from other Junos OS processes, such as the routing protocol process (rpd) and the management process (mgd). Depending on the custom event policy you configure, eventd listens for specific events and in response to these events might create

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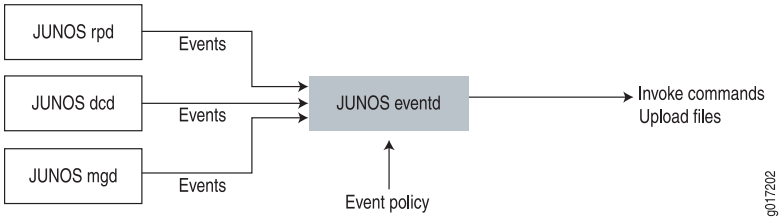
a log file, invoke a Junos command, or invoke an event script. When an event script is invoked, event details are passed to the event script in the form of XML inputs.

Figure 10 on page 410 shows how the event process (eventd) interacts with other Junos OS processes.

Figure 10: Interaction of eventd Process with Other Junos OS Processes



How Event Policies Work

An event policy is an if-then-else construct. It defines actions to be executed by the event process (eventd) on receipt of an event. You can configure multiple policies to be processed for an event. The policies are executed in the order in which they appear in the configuration. For each policy, you can configure multiple actions. The actions are also executed in the order in which they appear in the configuration.

To view a list of the events that can be referenced in an event policy, issue the **help syslog ?** command:

```
user@host> help syslog ?
Possible completions:
  <syslog-tag>         System log tag
  ACCT_ACCOUNTING_FERROR  Error occurred during file processing
  ACCT_ACCOUNTING_FOPEN_ERROR  Open operation failed on file
  ...
```

You can filter the output of a search by using the pipe (**|**) symbol. The following example lists the filters that can be used with the pipe symbol:

```
user@host> help syslog | ?
Possible completions:
  count                Count occurrences
  display              Show additional kinds of information
  except               Show only text that does not match a pattern
  find                 Search for first occurrence of pattern
  hold                 Hold text without exiting the --More-- prompt
  last                 Display end of output only
  match                Show only text that matches a pattern
  no-more              Don't paginate output
  request              Make system-level requests
  resolve              Resolve IP addresses
  save                 Save output text to file
  trim                 Trim specified number of columns from start of line
```

For more information about using the pipe symbol, see the *CLI User Guide*.

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You can also list multiple events as you configure the event policy. To view a partial list of the events that can be referenced in an event policy, issue the **set event-options policy *policy-name* events ?** configuration mode command:

```
[edit]
user@host# set event-options policy policy-name events ?
Possible completions:
 <event>
 [              Open a set of values
 acct_accounting_ferror
 acct_accounting_fopen_error
 ...
```

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. For information about referencing these system log messages in your event policies, see "Using Nonstandard System Log Messages to Trigger Event Policies" on page 419.

In addition, you can reference internally generated events, which are discussed in "Generating Internal Events to Trigger Event Policies" on page 419.

In response to events, the eventd process can correlate two or more events based on a policy, and execute the following actions:

- Ignore the event—Do not generate a system log message for this event and do not process any further policy instructions for this event.
- Upload a file—Upload a file to a specified destination. You can specify a transfer delay, so that, on receipt of an event, the upload of the file begins after the configured transfer delay. For example, to upload a core file, a transfer delay can ensure that the core file has been completely generated before the upload begins.
- Execute Junos OS operational mode commands—Execute commands on receipt of an event. The XML or text output of these commands is stored in a file, which is then uploaded to a specified URL. You can include variables in the command that allow data from the triggering event to be automatically included in the command syntax.
- Execute Junos OS configuration mode commands—Execute commands to modify the configuration on receipt of an event. Starting with Junos OS Release 12.1, you can configure an event policy to modify the configuration using Junos OS configuration mode commands and then commit the updated configuration.
- Execute Junos OS event scripts—Execute event scripts on receipt of an event. Event scripts are Extensible Stylesheet Transformation (XSLT) or Stylesheet Language Alternative Syntax (SLAX) scripts that you write to perform any function available through Junos XML or Junos XML protocol remote procedure calls (RPCs). Additionally, you can pass to an event script a set of arguments that you define. A script can build and run an operational mode command, receive the command output, inspect the output, and determine the next appropriate action. This process can be repeated until the source of the problem is determined. The output of the scripts is stored in a file, which is then uploaded to a specified URL. You can include variables in the arguments

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to the scripts that allow data from the triggering event to be incorporated into the script.

- Raise an SNMP trap.

Event Scripts Overview

- Event Scripts Overview on page 412

Event Scripts Overview

- Event Script Programming Overview on page 412
- How Event Scripts Work on page 412

Event Script Programming Overview

Junos OS event scripts are triggered automatically by defined event policies in response to a system event and can instruct Junos OS to take immediate action. Event scripts automate network and device management and troubleshooting. Event scripts can perform functions available through the remote procedure calls (RPCs) supported by either Junos XML management protocol or the Junos Extensible Markup Language (XML) API. Event scripts are executed by the event process (eventd).

Event scripts allow you to do the following:

- Automatically diagnose and fix problems in the network
- Monitor the overall status of a device.
- Run automatically as part of an event policy that detects periodic error conditions
- Change the configuration in response to a problem

Event scripts are based on the Junos XML management protocol and the Junos XML API, which are discussed in "Junos XML Management Protocol and Junos XML API Overview" on page 6. Event scripts can be written in either the Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) scripting language. Event scripts use XPath to locate the operational objects to be inspected and XSLT constructs to specify the actions to perform on the located operational objects. The actions can change the output or execute additional commands based on the output. For more information about XPath and XSLT, see "XPath Overview" on page 50.

How Event Scripts Work

Event scripts initiate operational commands when triggered by an event policy. When an event policy is triggered, this policy forwards event details to the event script. You enable event scripts by listing the names of one or more event script files within the **[edit event-options event-script]** hierarchy level. These scripts contain instructions that execute operational mode commands and inspect the output automatically. Event scripts are invoked within an event policy. For information about event policies, see "Event Notifications and Policies Overview" on page 409 and "Executing Event Scripts in an Event Policy" on page 450.

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You can use event scripts to generate changes to the device configuration by including the **<load-configuration>** tag element. Because the changes are loaded before the standard validation checks are performed, they are validated for correct syntax, just like statements already present in the configuration before the script is applied. If the syntax is correct, the configuration is activated and becomes the active, operational device configuration.

Related Documentation

- XSLT Overview on page 48
- SLAX Overview on page 63

Configuration

- Triggering an Event Policy on page 413
- Configuring Event Policy File Archiving on page 420
- Configuring Event Policy Actions on page 433
- Configuring Event Policy Privileges on page 463
- Creating and Executing Event Scripts on page 464
- Examples on page 474
- Summary of Event Policy Configuration Statements on page 485
- Summary of Event Script Configuration Statements on page 522

Triggering an Event Policy

- Using Correlated Events to Trigger an Event Policy on page 413
- Representing the Correlating Event in an Event Policy on page 416
- Triggering an Event Policy Based on Event Count on page 417
- Using Regular Expressions to Refine the Set of Events That Trigger a Policy on page 417
- Generating Internal Events to Trigger Event Policies on page 419
- Using Nonstandard System Log Messages to Trigger Event Policies on page 419

Using Correlated Events to Trigger an Event Policy

You can configure a policy that correlates two or more events. If the correlated events occur as specified, they cause particular actions to be taken. For example, you might want to issue certain operational mode commands when a **UI_CONFIGURATION_ERROR** event is generated within five minutes (300 seconds) after a **UI_COMMIT_PROGRESS** event. As another example, you might want to upload a particular file if a **DCD_INTERFACE_DOWN** event is generated two times within a 60-second interval.

To configure a policy that correlates events, include the following statements at the **[edit event-options]** hierarchy level:

```
[edit event-options]
policy policy-name {
  events [ events ];
  within seconds {
    events [ events ];
```

```
    not events [ events ];
    trigger (on | after | until) event-count;
  }
  attributes-match {
    event1.attribute-name equals event2.attribute-name;
    event.attribute-name matches regular-expression;
    event1.attribute-name starts-with event2.attribute-name;
  }
  then {
    ...
  }
}
```

In the **events** statement, you can list multiple events. To view a list of the events that can be referenced in an event policy, issue the **set event-options policy *policy-name* events ?** configuration mode command:

```
user@host# set event-options policy policy-name events ?
Possible completions:
 <event>
 [              Open a set of values
 acct_accounting_ferror
 acct_accounting_fopen_error
 ...
```

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. For information about referencing these system log messages in your event policies, see "Using Nonstandard System Log Messages to Trigger Event Policies" on page 419.

In addition, you can reference internally generated events, which are discussed in "Generating Internal Events to Trigger Event Policies" on page 419.

The actions configured in the **then** statement are executed only if certain conditions are met, which you specify in the **within** and **attributes-match** statements.

You can configure a policy that is executed only if a specified event occurs within a specified time interval after another event. You do this by including the **within *seconds* events** statement. The policy is executed only if one or more of the events in the first **events** statement occur within a configured number of seconds after one or more of the events in the **within *seconds* events** statement. The number of seconds can be from 60 through 604,800. The **not** statement causes the policy to be executed only if the events do not occur within the configured time interval.

For example, the following policy is executed if ***event3***, ***event4***, or ***event5*** occurs within 60 seconds after ***event1*** or ***event2*** occurs:

```
[edit event-options]
policy 1 {
  events [ event3 event4 event5 ];
  within 60 events [ event1 event2 ];
  then {
    ...
  }
}
```


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The **attributes-match** statement correlates two events as follows:

- ***event1.attribute-name*** **equals** ***event2.attribute-name***—Execute the policy only if the specified attribute of ***event1*** equals the specified attribute of ***event2***.
- ***event.attribute-name*** **matches** ***regular-expression***—Execute the policy only if the specified attribute of ***event*** matches a regular expression. For more information, see "Using Regular Expressions to Refine the Set of Events That Trigger a Policy" on page 417.
- ***event1.attribute-name*** **starts-with** ***event2.attribute-name***—Execute the policy only if the specified attribute of ***event1*** starts with the specified attribute of ***event2***.

If the **attributes-match** statement includes the **equals** or **starts-with** options, or if it includes a **matches** option that includes a clause for an event that is not specified at the **[edit event-options policy** ***policy-name*** **events]** hierarchy level, you must include one or more **within** statements in the same policy configuration.

Starting with Junos OS Release 11.1, you can use event policy variables within the **attributes-match** statement to differentiate between a trigger event attribute and a correlated event attribute. The double dollar sign (**$$**) notation represents the event that is triggering a policy, and **{$$.*attribute-name*}** resolves to the value of the attribute of the triggering event. Triggering events are those that you configure at the **[edit event-options policy** ***policy-name*** **events]** hierarchy level. For correlating events, the single dollar sign with the event name (**$*event***) notation represents the most recent event that matches the event name, and **{$*event.attribute-name*}** resolves to the value of the attribute of the correlated event.

In the following example, the policy will execute the actions under the **then** statement if four or more commits are performed within a 5-minute period, and the username of one or more of the correlated events is the same as the username of the trigger event.

```
policy multiple-commits {
  events ui_commit;
  attributes-match {
    {$$.user-name} equals {$ui_commit.user-name};
  }
  within 300 {
    trigger after 3;
    events ui_commit;
  }
  then ...
}
```

To view a list of all event attributes that you can reference, issue the **help syslog** ***event*** operational mode command. The output of this command shows the event attributes in angle brackets (<>). The following output shows that three attributes can be referenced for the **ACCT_ACCOUNTING_SMALL_FILE_SIZE** event: **filename**, **file-size**, and **record-size**.

```
user@host> help syslog ACCT_ACCOUNTING_SMALL_FILE_SIZE
Name:            ACCT_ACCOUNTING_SMALL_FILE_SIZE
Message:        File <filename> size (<file-size>) is smaller than record size
(<record-size>)
```

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You can filter the output of a search by using the pipe (|) symbol. The following example lists the filters that can be used with the pipe symbol:

```
user@host> help syslog | ?
Possible completions:
  count                Count occurrences
  display              Show additional kinds of information
  except               Show only text that does not match a pattern
  find                 Search for first occurrence of pattern
  hold                 Hold text without exiting the --More-- prompt
  last                 Display end of output only
  match                Show only text that matches a pattern
  no-more              Don't paginate output
  request              Make system-level requests
  resolve              Resolve IP addresses
  save                 Save output text to file
  trim                 Trim specified number of columns from start of line
```

For more information about using the pipe symbol, see the *CLI User Guide*.

Another way to view the attributes you can reference is by issuing the **set attributes-match *event*?** command at the **[edit event-options policy *policy-name*]** hierarchy level, as shown in the following example:

```
[edit event-options policy p1]
user@host# set attributes-match acct_accounting_small_file_size?
Possible completions:
  <from-event-attribute>  First attribute to compare
  acct_accounting_small_file_size.filename
  acct_accounting_small_file_size.filesize
  acct_accounting_small_file_size.record-size
```

NOTE: In this set command, there is no space between the event name and the question mark (?).

Related Documentation

- Representing the Correlating Event in an Event Policy on page 416
- Triggering an Event Policy Based on Event Count on page 417
- Using Regular Expressions to Refine the Set of Events That Trigger a Policy on page 417
- attributes-match on page 489
- policy on page 506
- not on page 503
- then on page 513
- within on page 520

Representing the Correlating Event in an Event Policy

As described in "Configuring an Event Policy to Execute Operational Mode Commands" on page 433, the double dollar sign ($$) notation represents the event that is triggering a

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policy. Triggering events are those that you configure at the **[edit event-options policy *policy-name* events]** hierarchy level.

As described in "Using Correlated Events to Trigger an Event Policy" on page 413, you can configure a policy that is executed only if a specified event occurs within a specified time interval after another event. You do this by including the **within *seconds* events** statement at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name ]
events [ events ];
within seconds events [ events ];
```

The policy is executed only if one or more of the events at the **[edit event-options policy *policy-name* events]** hierarchy level occur within a configured number of seconds after one or more of the events in the **within *seconds* events** statement.

For correlating events, the single dollar sign with the event name (**$*event***) notation represents the most recent event that matches the event name. The dollar sign with the asterisk (**$***) notation represents the most recent event that matches any of the correlating events.

For a configuration example, see "Example: Representing the Correlating Event in an Event Policy" on page 481.

Triggering an Event Policy Based on Event Count

You can configure an event policy to be triggered if an event or set of events occurs a specified number of times within a specified time period.

To do this, include the optional **trigger** statement at the **[edit event-options policy *policy-name* within *seconds*]** hierarchy level:

```
[edit event-options policy policy-name within seconds]
trigger (after | on | until) event-count;
```

The software counts the number of times the triggering event occurs. A triggering event can be any event configured at the **[edit event-options policy *policy-name* events]** hierarchy level. You can configure the following options:

- **after *event-count***—The policy is executed when the number of matching events received equals ***event-count*** plus one.
- **on *event-count***—The policy is executed when the number of matching events received equals ***event-count***.
- **until *event-count***—The policy is executed each time a matching event is received and stops being executed when the number of matching events received equals ***event-count***.

For a configuration example, see "Example: Triggering a Policy Based on Event Count" on page 483.

Using Regular Expressions to Refine the Set of Events That Trigger a Policy

You can use regular expression matching to specify more exactly which events cause a policy to be executed.

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To specify the text string that must appear in an event attribute for the policy to be executed, include the **matches** statement at the **[edit event-options policy *policy-name* attributes-match]** hierarchy level, and specify the regular expression which the event attribute must match:

```
[edit event-options policy policy-name attributes-match]
event.attribute-name matches regular-expression;
```

When you specify the regular expression, use the notation defined in POSIX Standard 1003.2 for extended (modern) UNIX regular expressions. Explaining regular expression syntax is beyond the scope of this document. Table 23 on page 418 specifies which character or characters are matched by some of the regular expression operators that you can use in the **matches** statement. In the descriptions, the term *term* refers to either a single alphanumeric character or a set of characters enclosed in square brackets, parentheses, or braces.

NOTE: **The matches statement is not case-sensitive.**

Table 23: Regular Expression Operators for the matches Statement

Operator	Matches
. (period)	One instance of any character except the space.
* (asterisk)	Zero or more instances of the immediately preceding term.
+ (plus sign)	One or more instances of the immediately preceding term.
? (question mark)	Zero or one instance of the immediately preceding term.
| (pipe)	One of the terms that appear on either side of the pipe operator.
! (exclamation point)	Any string except the one specified by the expression, when the exclamation point appears at the start of the expression. Use of the exclamation point is specific to Junos OS.
^ (caret)	The start of a line, when the caret appears outside square brackets. One instance of any character that does not follow it within square brackets, when the caret is the first character inside square brackets.
$ (dollar sign)	The end of a line.
[ ] (paired square brackets)	One instance of one of the enclosed alphanumeric characters. To indicate a range of characters, use a hyphen (-) to separate the beginning and ending characters of the range. For example, **[a-z0-9]** matches any letter or number.
( ) (paired parentheses)	One instance of the evaluated value of the enclosed term. Parentheses are used to indicate the order of evaluation in the regular expression.

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For a configuration example, see "Example: Controlling Event Policy Using a Regular Expression" on page 477.

Generating Internal Events to Trigger Event Policies

Internal events are events that you create to trigger a policy to be executed. They are not generated by Junos OS processes, and they do not have any associated system log messages. You can generate an internal event based on a time interval or the time of day.

To generate an event, include the following statements at the **[edit event-options]** hierarchy level:

```
[edit event-options]
generate-event event-name {
  time-interval seconds;
  time-of-day hh:mm:ss;
}
```

In the **time-interval** statement, configure a frequency, in seconds, with which to repeatedly generate an event. The time interval can range from 60 through 2,592,000 seconds.

In the **time-of-day** statement, configure a time of day for the event to occur. Use the format ***hh*:*mm*:*ss***.

NOTE: If you modify the system time by issuing the **set date** operational mode command, we recommend that you also issue the **commit full** or the **restart event-process** command. Otherwise, an internal event based on the time of day might not be generated at the configured time.

For example, if you configure an internal event to be generated at 15:55:00, and then you modify the system time from 15:47:17 to 15:53:00, the event is generated when the system time is approximately 16:00 instead of at the configured time, 15:55:00. You can correct this problem by issuing the **commit full** or the **restart event-process** command.

You can configure up to 10 internal events. If you attempt to commit a configuration with more than 10 internal events, Junos OS generates an error, and the commit fails.

For configuration examples, see "Example: Generating an Internal Event" on page 478.

Using Nonstandard System Log Messages to Trigger Event Policies

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. These system log messages have an event ID and a **message** attribute. Event IDs are based on the origin of the message, as shown in Table 24 on page 420.

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Table 24: Event ID by System Log Message Origin

Event IDs	Origin
SYSTEM	Messages from Junos daemons and utilities
KERNEL	Messages from the Junos kernel
PIC	Messages from physical interface cards (PICs)
PFE	Messages from the Packet Forwarding Engine
LCC	On a TX Matrix router, messages from a line-card chassis (LCC)
SCC	On a TX Matrix router, messages from a switch-card chassis (SCC)

To base your event policy on the event types shown in Table 24 on page 420, include the **events *event-id*** statement and the **attributes-match** statement with the ***event-id*.message matches "*message*"** attribute at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
events event-id;
attributes-match {
  event-id.message matches "message";
}
```

For a configuration example, see "Example: Using Nonstandard System Log Messages to Trigger an Event Policy" on page 485.

Configuring Event Policy File Archiving

- Event Policy File Archiving Overview on page 420
- Example: Defining Destinations for File Archiving by Event Policies on page 421
- Example: Configuring an Event Policy to Upload Files on page 424
- Configuring the Delay Before Files Are Uploaded by an Event Policy on page 431
- Configuring an Event Policy to Retry the File Upload Action on page 432

Event Policy File Archiving Overview

Various types of files are useful in diagnosing events. When an event policy action generates output files, you can archive the files for later analysis. Similarly, you might want to archive system files, including system log files, core files, and configuration files, from the time an event occurs.

When an event occurs, you can upload relevant files to a specified location for analysis. To archive files from an event policy, configure one or more *destinations* specifying the archive sites to which the files are uploaded. You then reference the configured destinations within event policies.

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A transfer delay allows you to specify the number of seconds the event process (eventd) waits before beginning to upload a file or multiple files. A transfer delay helps ensure that a large file, such as a core file, is completely generated before the upload begins.

You can associate transfer delays with a destination and with an event policy action. If you associate a transfer delay with a destination, the transfer delay applies to all file upload actions that use that destination. You can also assign a transfer delay to a single event policy action. For example, you might have multiple event policy actions that use the same destination, and for some of these event policy actions, you want a transfer delay, and for other event policy actions you want no transfer delay. If you configure a transfer delay for a destination, and you also configure a transfer delay for the event policy action, the resulting transfer delay is the sum of the two delays.

Transient network problems can cause a file upload operation to fail. By default, if the file upload operation fails for any reason, the event policy does not retry the upload operation. However, you can configure an event policy to retry the file upload operation a specified number of times if the initial upload fails. You can also configure the time interval between each retry attempt.

Related Documentation

- Example: Defining Destinations for File Archiving by Event Policies on page 421
- Example: Configuring an Event Policy to Upload Files on page 424
- Configuring the Delay Before Files Are Uploaded by an Event Policy on page 431
- Configuring an Event Policy to Retry the File Upload Action on page 432

Example: Defining Destinations for File Archiving by Event Policies

This example configures an archive site for event policies. Event policy actions that reference the configured destination upload specified files to that site.

- Requirements on page 421
- Overview on page 422
- Configuration on page 423
- Verification on page 424

Requirements

This example uses a device running Junos OS. No additional configuration beyond device initialization is required before configuring this example.

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Overview

When an event policy action generates output files, you can archive the files for later analysis. Similarly, you might want to archive system files, including system log files, core files, and configuration files, from the time an event occurs.

When an event occurs, you can upload relevant files to a specified location for analysis. To archive files from an event policy, configure one or more *destinations* specifying the archive sites to which the files are uploaded. You then reference the configured destinations within event policies.

To define a destination archive site, include the **destinations** statement at the **[edit event-options]** hierarchy level.

```
[edit event-options]
destinations {
  destination-name {
    archive-sites {
      url <password password>;
    }
    transfer-delay seconds;
  }
}
```

The *destination-name* is a user-defined identifier, which is referenced by event policies. You can define multiple destinations with different archive sites.

For each destination, configure one or more archive site URIs, which are the actual sites to which the files are uploaded. If you specify multiple archive site URIs for a given destination, the device attempts to transfer to the first archive site in the list, moving to the next site in the list only if the transfer fails. Optionally, you can specify a plain-text password for login into an archive site.

Specify the archive site URI as a file URI, an active or passive FTP URI, or a Secure Copy (SCP) URI. Local device directories are also supported (for example, **/var/tmp**). When you specify the archive site URI, do not add a forward slash (/) to the end of the URI.

file:<//host>/path

ftp://username@host:<port>url-path

pasvftp://username@host:<port>url-path

scp://username@host:<port>url-path

<path>/<filename>

The format for the destination filename is ***device-name_filename_YYYYMMDD_HHMMSS***.

The **transfer-delay** statement allows you to specify the number of seconds the event process (eventd) waits before beginning to upload a file or multiple files to that destination. A transfer delay allows you to ensure that a large file, such as a core file, is completely generated before the upload begins. For more information, see "Configuring the Delay Before Files Are Uploaded by an Event Policy" on page 431.

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This example configures a new archive destination named mgmt-archives, which can be referenced in event policies for file archiving. The example configures two archive sites for this destination. The first site is the Secure Copy URI "scp://username@example.com/test" for which a password is configured. The second site is a directory on the local device. The device attempts to transfer to the first archive site in the list, moving to the next site only if the transfer to the first site fails. The example configures a transfer delay of five seconds for all files uploaded to the mgmt-archives archive site.

Configuration

CLI Quick Configuration

To quickly configure this example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, copy and paste the commands into the CLI at the **[edit]** hierarchy level, and then enter **commit** from configuration mode.

```
set event-options destinations mgmt-archives archive-sites
  "scp://username@example.com/test" password PaSsWoRd
set event-options destinations mgmt-archives archive-sites /var/log
set event-options destinations mgmt-archives transfer-delay 5
```

Step-by-Step Procedure

Configure a new archive destination named mgmt-archives that can be referenced by event-policies.

1. Configure the identifier and associated archive sites for each destination. The device transfers to the first archive site in the list, moving to the next site only if the transfer to the first site fails.

   ```
   [edit event-options destinations]
   user@host# set mgmt-archives archive-sites scp://username@example.com/test
   user@host# set mgmt-archives archive-sites /var/log
   ```

2. If authentication is required to access any of the archive sites, configure the required plain-text password for that site.

   ```
   [edit event-options destinations]
   user@host# set mgmt-archives archive-sites scp://username@example.com/test
     password PaSsWoRd
   ```

3. (Optional) Configure the transfer delay associated with each destination. The mgmt-archives destination has a transfer delay of five seconds.

   ```
   [edit event-options destinations]
   user@host# set mgmt-archives transfer-delay 5
   ```

4. Commit the configuration.

   ```
   user@host# commit
   ```

5. You can reference configured destinations in an event policy. For information about referencing destinations in event policies, see "Example: Configuring an Event Policy to Upload Files" on page 424 and "Configuring an Event Policy to Execute Operational Mode Commands" on page 433.

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Verification

Verifying the Configuration

Purpose Issue the **show configuration event-options** operational mode command to review the resulting configuration.

Action

```
user@host> show configuration event-options
destinations {
    mgmt-archives {
        transfer-delay 5;
        archive-sites {
            "scp://username@example.com/test" password
                "$9$z3GRF9tu0IcrKO1bYoGq.0O1IEy"; ## SECRET-DATA
            /var/log;
        }
    }
}
```

Meaning In the sample output, the mgmt-archives destination has two archive sites and a transfer delay of five seconds. You can now reference this destination in event policies. When you reference the mgmt-archives destination in an event policy, specified files are uploaded to the first archive site after a five second delay. If the transfer to the first archive fails, the device attempts to upload the files to the **/var/log** archive site. For more information about referencing destinations in event policies, see "Example: Configuring an Event Policy to Upload Files" on page 424.

Note that although the plain-text password is visible when you configure it, the configuration displays the encrypted password.

Related Documentation

- Example: Configuring an Event Policy to Upload Files on page 424
- Configuring the Delay Before Files Are Uploaded by an Event Policy on page 431
- Configuring an Event Policy to Retry the File Upload Action on page 432
- **destinations on page 495**

Example: Configuring an Event Policy to Upload Files

This example configures event policy actions that upload relevant files to a specified location for analysis.

- Requirements on page 425
- Overview on page 425
- Configuration on page 427
- Verification on page 430

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Requirements

Before you begin:

- Configure the destinations that you will reference in the event policy. See "Example: Defining Destinations for File Archiving by Event Policies" on page 421.
- Configure the general event policy and triggering events.

Overview

When an event policy action generates output files, you can archive the files for later analysis. Similarly, you might want to archive system files, including system log files, core files, and configuration files, from the time an event occurs. You can configure an event policy to upload existing system files or to upload the output files generated from an invoked event-script or command at the time an event occurs. This section outlines the configuration hierarchies for uploading each of these file types using an event policy.

When you configure an event policy to upload files, you reference configured destinations within the event policy. Specify a destination name that is configured at the **[edit event-options destinations]** hierarchy level. For more information, see "Example: Defining Destinations for File Archiving by Event Policies" on page 421.

To upload system files to a configured archive site, configure the **upload** statement at the **[edit event-options policy *policy-name* then]** hierarchy level. If the configured events occur, the eventd process executes the upload action.

```
[edit event-options policy policy-name then]
upload filename (filename | committed) destination destination-name {
    retry-count number retry-interval seconds;
    transfer-delay seconds;
    user-name username;
}
```

The **upload filename committed destination *destination-name*** statement uploads the committed configuration file.

If desired, you can include multiple **upload** statements, one for each type of file to be archived. In the **filename** statement, specify a file or multiple files to be uploaded. You can specify multiple files with one **filename** configuration statement (sometimes called *filename globbing*). For example, to upload all files that are located in the **/var/log** directory and that start with the **messages** string, include the following statement:

```
upload filename /var/log/messages* destination destination-name;
```

When an event policy executes commands in response to an event, you can write the command output to a file. To configure an event policy to upload the generated output file to a configured archive site, include the following statements at the **[edit event-options policy *policy-name* then]** hierarchy level:

```
[edit event-options policy policy-name then]
execute-commands {
    destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
    }
```

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```
    output-filename filename;
}
```

When an event policy executes an event script in response to an event, you can write the script output to a file. To configure an event policy to upload the generated output file to a configured archive site, include the following statements at the **[edit event-options policy *policy-name* then]** hierarchy level:

```
[edit event-options policy policy-name then]
event-script filename {
    destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
    }
    output-filename filename;
}
```

The **transfer-delay** statement listed in each hierarchy defines the time interval that the system waits before uploading the files specified by that event policy action. If you have also configured a transfer delay for the destination at the **[edit event-options destinations *destination-name*]** hierarchy level, the total transfer delay is the sum of the two delays. For more detailed information about transfer delays, see "Configuring the Delay Before Files Are Uploaded by an Event Policy" on page 431.

If the first upload attempt fails, **retry-count** specifies the number of additional times the system attempts to upload the file. The **retry-interval** specifies the time interval that the system waits between upload attempts. For more information, see "Configuring an Event Policy to Retry the File Upload Action" on page 432.

When an event policy uploads files, the files are named and time-stamped in the following format to ensure unique filenames:

device-name_filename_YYYYMMDD_HHMMSS

If a policy uploads multiple files within a 1-second period, the software gives each file a unique number as well, as follows:

device-name_filename_YYYYMMDD_HHMMSS_number

The number can be from 001 through 999. For example, if you have an event policy action with output filename **rpd-messages** on **device1**, and this event policy is executed three times in 1 second, the files are named as follows:

- **device1_rpd-messages_20070623_132333**
- **device1_rpd-messages_20070623_132333_001**
- **device1_rpd-messages_20070623_132333_002**

In this example, **policy1** consists of the following statements, where *e1* is the triggering event. The example then configures the event policy to upload a log file and the committed configuration file as well as the output files generated from the **execute-commands** and **event-script** actions.

```
[edit event-options policy policy1]
events e1;
then {
```


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```
    execute-commands {
      commands {
        "show interfaces brief ge-*";
      }
    }
    event-script event-script1;
  }
```

Configuration

- Uploading System Files on page 427
- Uploading Command Output Files on page 428
- Uploading Event Script Output Files on page 429
- Results on page 430

CLI Quick Configuration

To quickly configure this example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, copy and paste the commands into the CLI at the **[edit]** hierarchy level, and then enter **commit** from configuration mode.

```
set event-options policy policy1 then upload filename /var/log/messages destination
  mgmt-archives transfer-delay 4
set event-options policy policy1 then upload filename /var/log/messages destination
  mgmt-archives retry-count 5 retry-interval 4
set event-options policy policy1 then upload filename /var/log/messages destination
  mgmt-archives user-name admin
set event-options policy policy1 then upload filename /var/log/messages destination
  mgmt-server
set event-options policy policy1 then upload filename committed destination
  mgmt-archives
set event-options policy policy1 then execute-commands output-filename ge-interfaces
set event-options policy policy1 then execute-commands destination mgmt-archives
  transfer-delay 5
set event-options policy policy1 then execute-commands destination mgmt-archives
  retry-count 5 retry-interval 4
set event-options policy policy1 then event-script event-script1 output-filename
  policy1-script-output
set event-options policy policy1 then event-script event-script1 destination mgmt-archives
  transfer-delay 5
set event-options policy policy1 then event-script event-script1 destination mgmt-archives
  retry-count 5 retry-interval 4
```

Uploading System Files

Step-by-Step Procedure

Configure the event policy **policy1** to upload the system file **/var/log/messages** to the archive sites mgmt-archives and mgmt-server. Additionally, upload the committed configuration to the archive site mgmt-archives. The destination archive sites should already be configured at the **[edit event-options destinations]** hierarchy level

1. Configure the **upload** statement at the **[edit event-options policy policy1 then]** hierarchy level. Include the file to archive and the destination archive site.

   ```
   [edit event-options policy policy1 then]
   bsmith@R1# set upload filename /var/log/messages destination mgmt-archives
   bsmith@R1# set upload filename /var/log/messages destination mgmt-server
   ```

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2. To upload the committed configuration file, specify the filename value as **committed**.

```
[edit event-options policy policy1 then]
bsmith@R1# set upload filename committed destination mgmt-archives
```

3. (Optional) Configure the transfer delay associated with each file and destination. The following configuration mode command sets the transfer delay for the **/var/log/messages** file to 4 seconds when uploaded to the mgmt-archives destination. If you have also configured a transfer delay for the destination, the total delay is the sum of the two delays.

```
[edit event-options policy policy1 then]
bsmith@R1# set upload filename /var/log/messages destination mgmt-archives
  transfer-delay 4
```

4. (Optional) Configure the retry count and retry interval associated with a file and destination. In this example, if the **/var/log/messages** file fails to upload to the mgmt-archives site, the system attempts the upload up to 5 more times and waits 4 seconds in between each attempt.

```
[edit event-options policy policy1 then]
bsmith@R1#set upload filename /var/log/messages destination mgmt-archives
  retry-count 5 retry-interval 4
```

5. (Optional) Configure the username associated with a file and destination. The system uploads the file using the privileges of the specified user.

```
[edit event-options policy policy1 then]
bsmith@R1#set upload filename /var/log/messages destination mgmt-archives
  user-name admin
```

6. Commit the configuration.

```
[edit event-options policy policy1 then]
bsmith@R1# commit
```

Uploading Command Output Files

Step-by-Step Procedure

Configure the event policy **policy1** to write command output to a file and upload the generated file to the destination mgmt-archives, which is already configured at the **[edit event-options destinations]** hierarchy level.

1. When the event policy invokes the **execute-commands** action, the command output can be written to a file. Configure the filename of the generated output file.

```
[edit event-options policy policy1 then]
bsmith@R1# set execute-commands output-filename ge-interfaces
```

2. Configure the **destination** statement to upload the generated file to the desired archive site.

```
[edit event-options policy policy1 then]
bsmith@R1# set execute-commands destination mgmt-archives
```

3. (Optional) Configure the transfer delay for each destination. The following command sets the transfer delay for files uploaded to the mgmt-archives destination to 5 seconds.

```
[edit event-options policy policy1 then]
```


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```
bsmith@R1# set execute-commands destination mgmt-archives transfer-delay 5
```

4. (Optional) Configure the retry count and retry interval associated with each destination. In this example, if the output file fails to upload to the mgmt-archives site, the system attempts the upload up to 5 more times and waits 4 seconds in between each attempt.

```
[edit event-options policy policy1 then]
bsmith@R1#set execute-commands destination mgmt-archives retry-count 5
  retry-interval 4
```

5. Commit the configuration.

```
[edit event-options policy policy1 then]
bsmith@R1# commit
```

Uploading Event Script Output Files

Step-by-Step Procedure

Configure the event policy **policy1** to write event-script output to a file and upload the generated file to the destination mgmt-archives, which is already configured at the **[edit event-options destinations]** hierarchy level. In this example, the event policy invokes an event script named **event-script1**.

1. When the event policy invokes an event script, the script output can be written to a file. Configure the filename of the generated output file.

```
[edit event-options policy policy1 then]
bsmith@R1# set event-script event-script1 output-filename policy1-script-output
```

2. Configure the **destination** statement to upload the generated file to the desired archive site.

```
[edit event-options policy policy1 then]
bsmith@R1# set event-script event-script1 destination mgmt-archives
```

3. (Optional) Configure the transfer delay for each destination. The following command sets the transfer delay for files uploaded to the mgmt-archives destination to 5 seconds.

```
[edit event-options policy policy1 then]
bsmith@R1# set event-script event-script1 destination mgmt-archives
  transfer-delay 5
```

4. (Optional) Configure the retry count and retry interval associated with each destination. In this example, if the output file fails to upload to the mgmt-archives site, the system attempts the upload up to 5 more times and waits 4 seconds in between each attempt.

```
[edit event-options policy policy1 then]
bsmith@R1#set event-script event-script1 destination mgmt-archives retry-count 5
  retry-interval 4
```

5. Commit the configuration.

```
[edit event-options policy policy1 then]
bsmith@R1# commit
```

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Results

```
[edit event-options policy policy1 then]
upload filename /var/log/messages destination mgmt-archives {
    user-name admin;
    transfer-delay 4;
    retry-count 5 retry-interval 4;
}
upload filename /var/log/messages destination mgmt-server
upload filename committed destination mgmt-archives;
execute-commands {
    commands {
        "show interfaces brief ge-*";
    }
    output-filename ge-interfaces;
    destination mgmt-archives {
        transfer-delay 5;
        retry-count 5 retry-interval 4;
    }
}
event-script event-script1 {
    output-filename policy1-script-output;
    destination mgmt-archives {
        transfer-delay 5;
        retry-count 5 retry-interval 4;
    }
}
```

Verification

Verifying the Upload

Purpose When the configured event triggers the event policy, the system uploads the generated output files and the specified system files to the URL defined in the mgmt-archives destination. On the destination server, verify that all files have been uploaded.

Action On the destination server, verify that all uploaded files are present.

```
% ls
R1_ge-interfaces_20111209_213452
R1_juniper.conf.gz_20111209_213409
R1_messages_20111209_212941
R1_policy1-script-output_20111209_212619
```

Meaning Note that the filename format for each file includes the device name, the filename, and the date and time stamp.

If all of the uploaded files are present, the event policy and upload actions are working correctly. If none of the files are uploaded, verify that the destination is configured and that the archive site URL and any required password is entered correctly. For information about configuring destinations, see "Example: Defining Destinations for File Archiving by Event Policies" on page 421. If a portion of the files are missing, configure a longer transfer delay and increase the retry count and retry interval for those files.

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Related Documentation

- Example: Defining Destinations for File Archiving by Event Policies on page 421
- Configuring the Delay Before Files Are Uploaded by an Event Policy on page 431
- Configuring an Event Policy to Retry the File Upload Action on page 432

Configuring the Delay Before Files Are Uploaded by an Event Policy

A transfer delay allows you to specify the number of seconds the event process (eventd) waits before beginning to upload a file or multiple files. A transfer delay allows you to ensure that a large file, such as a core file, is completely generated before the upload begins.

As described in "Example: Defining Destinations for File Archiving by Event Policies" on page 421, you can associate a transfer delay with a destination. If you associate a transfer delay with a destination, the transfer delay applies to all file upload actions that use the destination.

In the following example, the ***some-dest*** destination is common for both event policies, **policy1** and **policy2**. A transfer delay of 2 seconds is associated with the **some-dest** destination and applies to uploading the output files to the destination for both event policies.

```
[edit event-options]
policy policy1 {
   events e1;
   then {
   execute-commands {
      commands {
         "show version";
      }
      output-filename command-output.txt;
      destination some-dest;
   }
}
policy policy2 {
   events e2;
   then {
      event-script bar.xsl {
         output-filename event-script-output.txt;
         destination some-dest;
      }
   }
}
destinations {
   some-dest {
      transfer-delay 2;
      archive-sites {
         "scp://robot@my.big.com/foo/moo" password "password";
         "scp://robot@my.little.com/foo/moo" password "password";
      }
   }
}
```

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Suppose you have multiple event policy actions that use the same destination. For some of these event policy actions, you want a transfer delay, and for other event policy actions you want no transfer delay. To assign a transfer delay to a single event policy action, include the optional **transfer-delay** statement for each action:

```
transfer-delay seconds;
```

You can include this statement at the following hierarchy levels:

- **[edit** event-options policy *policy-name* then event-script *filename* destination *destination-name*]
- **[edit** event-options policy *policy-name* then execute-commands destination *destination-name*]
- **[edit** event-options policy *policy-name* then upload **filename (***filename* **| committed) destination** *destination-name*]

If you configure a transfer delay at the **[edit event-options destinations** *destination-name*] hierarchy level, and you also configure a transfer delay for the event policy action, the resulting transfer delay is the sum of the two:

```
Total transfer-delay =
transfer-delay (destination) + transfer-delay (event-policy-action)
```

For a configuration example, see "Example: Assigning a Transfer Delay to an Event Policy Action" on page 474.

Configuring an Event Policy to Retry the File Upload Action

Transient network problems can cause a file upload operation to fail. When this happens, you might want to retry the file upload operation. By default, if the file upload operation fails for any reason, the event policy does not retry the upload operation.

To configure the policy to retry a file upload operation, include the optional **retry-count** and **retry-interval** statements:

```
retry-count number retry-interval seconds;
```

You can include these statements at the following hierarchy levels:

- **[edit** event-options policy *policy-name* then event-script *filename* destination *destination-name*]
- **[edit** event-options policy *policy-name* then execute-commands destination *destination-name*]
- **[edit** event-options policy *policy-name* then upload **filename (***filename* **| committed) destination** *destination-name*]

The **retry-count** statement sets the number of times the policy retries the upload operation if the upload fails. The default value for the **retry-count** statement is 0 and the maximum is 10.

If you include the **retry-count** statement, you can also include the **retry-interval** statement, which sets the time interval (in seconds) between each retry.

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For a configuration example, see "Example: Retrying the File Upload Action" on page 482.

Configuring Event Policy Actions

- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Configuring an Event Policy to Change the Configuration on page 436
- Executing Event Scripts in an Event Policy on page 450
- Configuring Event Policies to Ignore an Event on page 455
- Changing the User Privilege Level for an Event Policy Action on page 456
- Configuring Event Policies to Raise SNMP Traps on page 457
- Configuring the System Log Priority of the Triggering Event in an Event Policy on page 457

Configuring an Event Policy to Execute Operational Mode Commands

Operational mode commands request that the device running Junos OS perform an operation or provide diagnostic output. They allow you to view statistics and information about a device's current operating status. They also allow you to take corrective actions, such as restarting software processes, taking a PIC offline and back online, switching to redundant interfaces, and adjusting Label Switching Protocol (LSP) bandwidth. For more information about operational mode commands, see CLI Explorer.

You can configure a policy that causes operational mode commands to be issued and the output of those commands to be uploaded to a specified location for analysis.

To configure such a policy, include the following statements at the **[edit event-options]** hierarchy level:

```
[edit event-options]
policy policy-name {
  events [ events ];
  then {
    execute-commands {
      commands {
        "command";
      }
      output-filename filename;
      output-format (text | xml);
      destination destination-name;
    }
  }
}
```

In the **events** statement, you can list multiple events. If one or more of the listed events occurs, the operational mode commands are issued. To view a list of the events that can be referenced in an event policy, issue the **set event-options policy *policy-name* events ?** configuration mode command:

```
[edit]
user@host# set event-options policy policy-name events ?
Possible completions:
 <event>
 [               Open a set of values
 acct_accounting_ferror
```

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```
acct_accounting_fopen_error
...
```

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. For information about referencing these system log messages in your event policies, see "Using Nonstandard System Log Messages to Trigger Event Policies" on page 419.

In addition, you can reference internally generated events, which are discussed in "Generating Internal Events to Trigger Event Policies" on page 419.

In the **commands** statement, you can issue multiple operational mode commands upon receipt of a specific event. Enclose each command in quotation marks (**" "**). The eventd process issues the commands in the order in which they appear in the configuration. For example, in the following configuration, the execution of **policy1** causes the **show interfaces** command to be issued first, followed by the **show chassis alarms** command:

```
[edit event-options policy policy1 then execute-commands]
user@host# show
commands {
  "show interfaces";
  "show chassis alarms";
}
```

You can include variables in the command to allow data from the triggering event to be automatically included in the command syntax. The eventd process replaces each variable with values contained in the event that triggers the policy. You can use command variables of the following forms:

- **{$$.*attribute-name*}**—The double dollar sign (**$$**) notation represents the event that is triggering a policy. When combined with an attribute name, the variable is replaced by the value of the attribute name in the triggering event. For example, **{$$.interface-name}** stands for the value of the **interface-name** attribute in the triggering event.
- **{$*event*.*attribute-name*}**—The **{$*event*.*attribute-name*}** notation represents the most recent event that matches the specified event. The variable is replaced by the value of the attribute name of the most recent event that matches ***event***. For example, when a policy issues the **show interfaces {$COSD_CHAS_SCHED_MAP_INVALID.interface-name}** command, the **{$COSD_CHAS_SCHED_MAP_INVALID.interface-name}** variable is substituted by the **interface-name** attribute of the most recent **COSD_CHAS_SCHED_MAP_INVALID** event cached by the event process.

For a given event, you can view a list of event attributes that you can reference in an operational mode command by issuing the **help syslog *event-name*** command:

```
user@host> help syslog event-name
```

For example, in the following command output, text in angle brackets (**< >**) shows that **classifier-type** is an attribute of the **cosd_unknown_classifier** event:

```
user@host> help syslog cosd_unknown_classifier
Name:          COSD_UNKNOWN_CLASSIFIER
```


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```
Message:       rtsock classifier type <classifier-type> is invalid
...
```

You can filter the output of a search by using the pipe (**|**) symbol. The following example lists the filters that can be used with the pipe symbol:

```
user@host# help syslog | ?
Possible completions:
  count                Count occurrences
  display              Show additional kinds of information
  except               Show only text that does not match a pattern
  find                 Search for first occurrence of pattern
  hold                 Hold text without exiting the --More-- prompt
  last                 Display end of output only
  match                Show only text that matches a pattern
  no-more              Don't paginate output
  request              Make system-level requests
  resolve              Resolve IP addresses
  save                 Save output text to file
  trim                 Trim specified number of columns from start of line
```

For more information about using the pipe symbol, see the *CLI User Guide*.

Another way to view a list of event attributes is to issue the **set attributes-match *event*?** configuration mode command at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
user@host# set attributes-match event ?
```

For example, in the following command output, the ***event.attribute*** list shows that **classifier-type** is an attribute of the **cosd_unknown_classifier** event:

```
[edit event-options policy policy-name]
user@host# set attributes-match cosd_unknown_classifier?
Possible completions:
 <from-event-attribute>  First attribute to compare
 cosd_unknown_classifier.classifier-type
```

NOTE: In this set command, there is no space between the event name and the question mark (**?**).

To view a list of all event attributes that you can reference, issue the **set attributes-match ?** configuration mode command at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
user@host# set attributes-match ?
Possible completions:
 <from-event-attribute>  First attribute to compare
 acct_accounting_ferror
 acct_accounting_fopen_error
 ...
```

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In the **output-filename** statement, assign the name of the file to which to write command output for the specified commands. The filename format is ***hostname_filename_YYYYMMDD_HHMMSS_index-number***.

For each uploaded file, a hostname and timestamp ensure that the uploaded files have unique filenames. If a policy is triggered multiple times in a 1-second period, an index number is added to ensure the filenames are unique. The index number range is 001 through 999.

For example, on a device named **r1**, if you configure the output filename to be **ifl-events**, and this event policy is triggered three times in 1 second, the files are named:

- **r1_ifl-events_20060623_132333**
- **r1_ifl-events_20060623_132333_001**
- **r1_ifl-events_20060623_132333_002**

By default, the command output format is Junos Extensible Markup Language (XML). To change this, include the **output-format text** statement. This causes the command output to be in formatted ASCII text.

In the **destination** statement, include the destination name that you configured at the **[edit event-options destinations]** hierarchy level. For more information, see "Example: Defining Destinations for File Archiving by Event Policies" on page 421.

For a configuration example, see "Example: Correlating Events Based on Receipt of Other Events Within a Specified Time Interval" on page 478.

Configuring an Event Policy to Change the Configuration

- Configuring an Event Policy to Change the Configuration Overview on page 436
- Example: Changing the Configuration Using an Event Policy on page 437
- Example: Changing the Interface Configuration in Response to an Event on page 443

Configuring an Event Policy to Change the Configuration Overview

An event policy performs actions in response to specific events. You can configure custom event policies in the Junos OS configuration that listen for a specific event or correlated events and then execute an action, which might include creating a log file, invoking Junos OS commands, or executing an event script.

At times, it might be necessary to modify the configuration in response to a particular event. Prior to Junos OS Release 12.1, an event policy invoked an event script to execute configuration changes. Starting with Junos OS Release 12.1, you can configure an event policy to modify the configuration using Junos OS configuration mode commands and then commit the updated configuration. For example, for an SNMP_TRAP_LINK_DOWN or SNMP_TRAP_LINK_UP event for a given interface, the event policy action might modify the configuration of a static route to adjust its metric or modify its next hop.

You configure event policy actions at the **[edit event-options policy *policy-name* then]** hierarchy level. To modify the configuration through an event policy, configure the **change-configuration** statement and specify the configuration mode commands that

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are executed upon receipt of the configured event or events. Enclose each command in quotation marks (**" "**), and specify the complete statement path to the element, identifier, or value as you do in configuration mode when issuing commands at the **[edit]** hierarchy level.

The event process (eventd) executes the configuration commands in the order in which they appear in the event policy configuration. The commands update the candidate configuration, which is then committed, provided that no commit errors occur.

You can configure the **commit-options** child statement to customize the event policy commit operation. You can commit the changes on a single Routing Engine or configure the **synchronize** option to synchronize the commit on both Routing Engines. The Routing Engine on which you execute this command copies and loads its candidate configuration to the other Routing Engine. Both Routing Engines perform a syntax check on the candidate configuration file. If no errors are found, the configuration is activated and becomes the current operational configuration on both Routing Engines. By default, the **synchronize** option does not work if the responding Routing Engine has uncommitted configuration changes. However, you can enforce commit synchronization on the Routing Engines and ignore any warnings by configuring the **force** option.

Additionally, if you are testing or troubleshooting an event policy, you can configure the **check** commit option to verify the candidate configuration syntax without committing the changes. On dual control plane systems, when the **check synchronize** statement is configured, the candidate configuration on one control plane is copied to the other control plane, and the system verifies that both candidate configurations are syntactically correct. The **check** statement and the other **commit-options** statements are mutually exclusive.

The change configuration action might fail while acquiring a lock on the configuration. Configure the **retry** statement to have the system attempt the change configuration event policy action a specified number of times if the first attempt fails. Configure the **user-name** statement to execute the configuration changes and commit under the privileges of a specific user. If you do not specify a username, the action is executed as user **root**.

Example: Changing the Configuration Using an Event Policy

It might be necessary to modify the configuration in response to a particular event. Starting with Junos OS Release 12.1, you can configure an event policy to make and commit configuration changes when the event policy is triggered by one or more specific events.

This example simulates an SNMP_TRAP_LINK_DOWN event for a specific interface. Upon receipt of the event, the event policy modifies the configuration of a static route to use a new next-hop IP address through a different exit interface.

- Requirements on page 438
- Overview on page 438
- Configuration on page 438
- Verification on page 441
- Troubleshooting on page 443

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Requirements

- Routing, switching, or security device running Junos OS Release 12.1 or later.

Overview

You can configure an event policy action to modify the configuration when the policy is triggered by a single event or correlated events. Suppose you have a static route to the 10.1.10.0/24 network with a next-hop IP address of 10.1.2.1 through the exit interface ge-0/3/1. At some point, this interface goes down, triggering an SNMP_TRAP_LINK_DOWN event.

This example creates an event policy named update-on-snmp-trap-link-down. The event policy is configured so that the eventd process listens for an SNMP_TRAP_LINK_DOWN event associated with the interface ge-0/3/1.0. If the interface goes down, the event policy executes a change configuration action. Commands are executed in the order in which they appear in the event policy. The event policy configuration commands remove the static route through the ge-0/3/1 exit interface and create a new static route to the same target network with a next-hop IP address of 10.1.3.1 through the exit interface ge-0/2/1.

The event policy change configuration commit operation is executed under the username bsmith with a commit comment specifying that the change was made through the associated event policy. The retry count is set to 5 and the retry interval is set to 4 seconds. If the initial attempt to issue the configuration change fails, the system attempts the configuration change 5 additional times and waits 4 seconds between each attempt.

Although not presented here, you might have a second, similar event policy that executes a change configuration action to update the static route when the interface comes back up. In that case the policy would trigger on the SNMP_TRAP_LINK_UP event for the same interface.

Configuration

CLI Quick Configuration

To quickly configure this example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, copy and paste the commands into the CLI at the **[edit]** hierarchy level, and then enter **commit** from configuration mode.

```
set event-options policy update-on-snmp-trap-link-down events snmp_trap_link_down
set event-options policy update-on-snmp-trap-link-down attributes-match
    snmp_trap_link_down.interface-name matches ge-0/3/1.0
set event-options policy update-on-snmp-trap-link-down then change-configuration
    retry count 5
set event-options policy update-on-snmp-trap-link-down then change-configuration
    retry interval 4
set event-options policy update-on-snmp-trap-link-down then change-configuration
    commands "delete routing-options static route 10.1.10.0/24 next-hop"
set event-options policy update-on-snmp-trap-link-down then change-configuration
    commands "set routing-options static route 10.1.10.0/24 next-hop 10.1.3.1"
set event-options policy update-on-snmp-trap-link-down then change-configuration
    user-name bsmith
```


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```
set event-options policy update-on-snmp-trap-link-down then change-configuration
    commit-options log "updating configuration from event policy
    update-on-snmp-trap-link-down"
set routing-options static route 10.1.10.0/24 next-hop 10.1.2.1
set system syslog file syslog-event-daemon-warning daemon warning
```

Configuring the Event Policy

Step-by-Step Procedure

1. Create and name the event policy.

   ```
   [edit]
   bsmith@R1# edit event-options policy update-on-snmp-trap-link-down
   ```

2. Configure the **events** statement so that the event policy triggers on the SNMP_TRAP_LINK_DOWN event.

   Set the **attributes-match** statement so that the policy triggers only if the SNMP_TRAP_LINK_DOWN event occurs for the ge-0/3/1.0 interface.

   ```
   [edit event-options policy update-on-snmp-trap-link-down]
   bsmith@R1# set events snmp_trap_link_down
   bsmith@R1# set attributes-match snmp_trap_link_down.interface-name matches
     ge-0/3/1.0
   ```

3. Specify the configuration mode commands that are executed if the ge-0/3/1 interface goes down.

   Configure each command on a single line, enclose the command string in quotes, and specify the complete statement path.

   ```
   [edit event-options policy update-on-snmp-trap-link-down then
     change-configuration]
   bsmith@R1# set commands "delete routing-options static route 10.1.10.0/24
     next-hop"
   bsmith@R1# set commands "set routing-options static route 10.1.10.0/24 next-hop
     10.1.3.1"
   ```

4. Configure the commit options.

   Configure the **log** option with a comment describing the configuration changes. The comment is added to the commit logs after a successful commit operation is made through the associated event policy.

   ```
   [edit event-options policy update-on-snmp-trap-link-down then
     change-configuration]
   bsmith@R1# set commit-options log "updating configuration from event policy
     update-on-snmp-trap-link-down"
   ```

   If you have dual Routing Engines, configure the **synchronize** option to commit the configuration on both Routing Engines. Include the **force** option to force the commit on the other Routing Engine, ignoring any warnings. This example does not configure the **synchronize** and **force** options.

5. (Optional) Configure the retry count and retry interval.

   In this example, **count** is set to 5 and the **interval** is 4 seconds.

   ```
   [edit event-options policy update-on-snmp-trap-link-down then
     change-configuration]
   ```

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```
bsmith@R1# set retry count 5 interval 4
```

6. (Optional) Configure the username under whose privileges the configuration changes and commit are made.

   If you do not specify a username, the action is executed as user **root**.

   ```
   [edit event-options policy update-on-snmp-trap-link-down then
     change-configuration]
   bsmith@R1# set user-name bsmith
   ```

7. Configure a new log file at the **[edit system syslog]** hierarchy level to record syslog events of facility **daemon** and severity **warning**.

   This captures the SNMP_TRAP_LINK_DOWN events.

   ```
   [edit system syslog]
   bsmith@R1# set file syslog-event-daemon-warning daemon warning
   ```

8. To test this example, configure a static route to the 10.1.10.0/24 network with a next hop IP address of 10.1.2.1.

   ```
   [edit]
   bsmith@R1# set routing-options static route 10.1.10.0/24 next-hop 10.1.2.1
   ```

9. Review the **[edit routing-options static]** hierarchy level of the configuration before disabling the ge-0/3/1 interface, and note the next hop IP address.

   ```
   bsmith@R1> show configuration routing-options static
   ...
   route 10.1.10.0/24 next-hop 10.1.2.1;
   ...
   ```

10. Commit the configuration.

    ```
    bsmith@R1# commit
    ```

11. To manually test the event policy, take the ge-0/3/1 interface temporarily offline to generate the SNMP_TRAP_LINK_DOWN event.

    ```
    [edit]
    bsmith@R1# set interfaces ge-0/3/1 disable
    bsmith@R1# commit
    ```

Results

```
[edit]
event-options {
  policy update-on-snmp-trap-link-down {
    events snmp_trap_link_down;
    attributes-match {
      snmp_trap_link_down.interface-name matches ge-0/3/1.0;
    }
    then {
      change-configuration {
        retry count 5 interval 4;
        commands {
          "delete routing-options static route 10.1.10.0/24 next-hop";
          "set routing-options static route 10.1.10.0/24 next-hop 10.1.3.1";
        }
```


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```
            user-name bsmith;
            commit-options {
              log "updating configuration from event policy update-on-snmp-trap-link-down";
            }
          }
        }
      }
    }
    routing-options {
      static {
        route 10.1.10.0/24 next-hop 10.1.2.1;
      }
    }
    system {
      syslog {
        file syslog-event-daemon-warning {
          daemon warning;
        }
      }
    }
```

Verification

Confirm that the configuration is working properly.

- Verifying the Status of the Interface on page 441
- Verifying the Commit on page 441
- Verifying the Configuration Changes on page 442

Verifying the Status of the Interface

Purpose Verify that the ge-0/3/1 interface is down and that it triggered the SNMP_TRAP_LINK_DOWN event.

Action Issue the **show interfaces ge-0/3/1** operational mode command. The command output shows that the interface is administratively offline.

```
bsmith@R1> show interfaces ge-0/3/1
Physical interface: ge-0/3/1, Administratively down, Physical link is Down
<output omitted>
```

Review the contents of the system log file configured in Step 7. The output shows that the ge-0/3/1.0 interface went down and generated an SNMP_TRAP_LINK_DOWN event.

```
bsmith@R1> show log syslog-event-daemon-warning
Oct 10 18:00:57  R1 mib2d[1371]: SNMP_TRAP_LINK_DOWN: ifIndex 531, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
```

Verifying the Commit

Purpose Verify that the event policy commit operation was successful by reviewing the commit log and the messages log file.

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Action Issue the **show system commit** operational mode command to view the commit log. In this example, the log confirms that the configuration was committed through the event policy under the privileges of user bsmith at the given date and time.

```
bsmith@R1> show system commit
0   2011-10-10 18:01:03 PDT by bsmith via junoscript
    updating configuration from event policy update-on-snmp-trap-link-down
1   2011-09-02 14:16:44 PDT by admin via netconf
2   2011-07-08 14:33:46 PDT by root via other
```

Review the **messages** log file. Upon receipt of the SNMP_TRAP_LINK_DOWN event, Junos OS executed the configured event policy action to modify and commit the configuration. The commit operation occurred under the privileges of user bsmith.

```
bsmith@R1> show log messages | last 20
...
Oct 10 18:00:57  R1 mib2d[1371]: SNMP_TRAP_LINK_DOWN: ifIndex 531, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
Oct 10 18:00:59  R1 file[17575]: UI_COMMIT: User 'bsmith' requested 'commit'
operation (comment: updating configuration from event policy
update-on-snmp-trap-link-down)
Oct 10 18:01:03  R1 eventd: EVENTD_CONFIG_CHANGE_SUCCESS: Configuration change
successful: while executing policy update-on-snmp-trap-link-down with user bsmith
 privileges
```

NOTE: If you configure a different log file, review the file specific to your configuration.

Meaning The output from the **show system commit** operational mode command and the **messages** log file verify that the commit operation, which was made through the event policy under the privileges of the user bsmith, was successful. The **show system commit** output and **messages** log file reference the commit comment specified in the **log** statement at the **[edit event-options policy update-on-snmp-trap-link-down then change-configuration commit-options]** hierarchy level.

Verifying the Configuration Changes

Purpose Verify the configuration changes by reviewing the **[edit routing-options static]** hierarchy level of the configuration after disabling the ge-0/3/1 interface.

Action Issue the following operational mode command:

```
bsmith@R1> show configuration routing-options static
...
route 10.1.10.0/24 next-hop 10.1.3.1;
...
```

Meaning The configured next hop has been modified by the event policy to the new IP address 10.1.3.1, which has its route through the exit interface ge-0/2/1.

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Troubleshooting

- Troubleshooting Commit Errors on page 443

Troubleshooting Commit Errors

Problem The triggered event policy does not make the specified configuration changes, and the logs verify that the commit was unsuccessful.

```
bsmith@R1> show log messages | last 20
...
Oct 10 17:48:59  R1 mib2d[1371]: SNMP_TRAP_LINK_DOWN: ifIndex 531, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
Oct 10 17:49:01  R1 file[17142]: UI_LOAD_EVENT: User 'bsmith' is performing a
'rollback'
Oct 10 17:49:01  R1 eventd: EVENTD_CONFIG_CHANGE_FAILED: Configuration change
failed: rpc to management daemon failed while executing policy
update-on-snmp-trap-link-down with user bsmith privileges
```

A failed commit might occur if the configuration is locked or if the configuration mode commands have the incorrect syntax or order.

Solution Check the configuration mode commands at the **[edit event-options policy update-on-snmp-trap-link-down then change-configuration commands]** hierarchy level, and verify that the syntax and the order of execution are correct.

Additionally, increase the retry count and interval options so that if the configuration is locked, the event policy attempts the configuration changes a specified number of times after the first failed instance.

Example: Changing the Interface Configuration in Response to an Event

It might be necessary to modify the configuration in response to a particular event. Starting with Junos OS Release 12.1, you can configure an event policy to make and commit configuration changes when the event policy is triggered by one or more specific events.

This example uses a real-time performance monitoring (RPM) probe to generate PING_TEST_FAILED events for a given interface. Upon receipt of the first instance of two PING_TEST_FAILED events within a 5-minute period from the configured RPM probe, the event policy executes a change configuration event policy action that modifies the configuration to administratively disable the specified interface. This type of action might be necessary if you have an unstable, flapping interface that is consistently affecting network performance.

NOTE: You need to set threshold on the RPM probe to generate the PING_TEST_FAILED event.

- Requirements on page 444
- Overview on page 444

- Configuration on page 444
- Verification on page 448

Requirements

- Routing, switching, or security device running Junos OS Release 12.1 or later.

Overview

This example creates an event policy named disable-on-ping-failure. The event policy is configured so that the eventd process listens for PING_TEST_FAILED events generated by a specific RPM probe and associated with the ge-0/3/1 interface. If two PING_TEST_FAILED events occur for a given interface within a 5-minute interval, the event policy executes a change configuration action. The event policy configuration commands administratively disable the interface.

To test the event policy, the example configures an RPM probe that pings the IP address associated with the ge-0/3/1 interface every 5 seconds. In this example, the ge-0/3/1.0 inteface is configured with the IPv4 address 10.1.4.1/26. If the ping fails, the RPM probe generates a PING_TEST_FAILED event. Because multiple RPM tests could be running simultaneously, the event policy matches the **owner-name** and **test-name** attributes of the received PING_TEST_FAILED events to the RPM probe owner name and test name. When the RPM probe generates two PING_TEST_FAILED events, it triggers the event policy, which disables the interface.

This event policy also demonstrates how to restrict the execution of the same configuration change multiple times because of occurrences of the same event or correlated events. In this example, the **trigger on 3** statement specifies that only on the third occurrence of two correlated PING_TEST_FAILED events is the configuration change triggered. The PING_TEST_FAILED events must occur within a 1-minute interval to trigger the event policy. The **trigger until 4** statement specifies that on the fourth occurrence of the of two correlated PING_TEST_FAILED events, the configuration change might stop.

NOTE: If only **trigger on 3** is set, the commit operation might go into a loop. The combination of **trigger on 3** and **trigger on 4** is required to implement the configuration change successfully.

Configuration

Configuring the RPM Probe

CLI Quick Configuration

To quickly configure this section of the example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, copy and paste the commands into the CLI at the **[edit]** hierarchy level, and then enter **command** from the configuration mode.

```
set services rpm probe icmp-ping-probe test ping-probe-test
set services rpm probe-type icmp-ping test-interval 60 target address 10.1.4.1
set system syslog file syslog-event-daemon-info daemon info
```


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Step-by-Step Procedure

To configure the RPM probe, which creates the PING_TEST_FAILED events for this example:

1. Create an RPM probe named ping-probe-test at the **[edit services rpm]** hierarchy level to ping the ge-0/3/1 interface.

   ```
   [edit services rpm]
   bsmith@R1# set probe icmp-ping-probe test ping-probe-test
   ```

2. Configure the RPM probe to send ICMP echo requests to the ge-0/3/1 interface at IP address 10.1.4.1, and set **test-interval** to 60 to issue the test every 60 seconds.

   ```
   [edit services rpm probe icmp-ping-probe test ping-probe-test]
   bsmith@R1# set probe-type icmp-ping test-interval 60 target address 10.1.4.1
   ```

3. Configure the RPM probe threshold to three successive losses so that the PING_TEST_FAILED event is triggered.

   ```
   [edit services rpm probe icmp-ping-probe test ping-probe-test]
   bsmith@R1# set thresholds successive-loss 3
   ```

4. Configure a new log file at the **[edit system syslog]** hierarchy level to record syslog events of facility **daemon** and severity **info**.

   This captures the events sent during the probe tests.

   ```
   [edit system syslog]
   bsmith@R1# set file syslog-event-daemon-info daemon info
   ```

5. Commit the configuration.

   ```
   bsmith@R1# commit
   ```

Results

```
[edit]
services {
  rpm {
    probe icmp-ping-probe {
      test ping-probe-test {
        probe-type icmp-ping;
        target address 10.1.4.1;
        test-interval 60;
      }
    }
  }
}
system {
  syslog {
    file syslog-event-daemon-info {
      daemon info;
    }
  }
}
```

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Configuring the Event Policy

CLI Quick Configuration

To quickly configure this section of the example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, copy and paste the commands into the CLI at the **[edit]** hierarchy level, and then enter **commit** from configuration mode.

```
set event-options policy disable-on-ping-failure events ping_test_failed
set event-options policy disable-on-ping-failure within 60 trigger on
set event-options policy disable-on-ping-failure within 60 trigger 3
set event-options policy disable-on-ping-failure within 65 trigger until
set event-options policy disable-on-ping-failure within 60 trigger 4
set event-options policy disable-on-ping-failure attributes-match
  ping_test_failed.test-owner matches icmp-ping-probe
set event-options policy disable-on-ping-failure attributes-match
  ping_test_failed.test-name matches ping-probe-test
set event-options policy disable-on-ping-failure then change-configuration retry count
  5
set event-options policy disable-on-ping-failure then change-configuration retry interval
  4
set event-options policy disable-on-ping-failure then change-configuration commands
  "set interfaces ge-0/3/1 disable"
set event-options policy disable-on-ping-failure then change-configuration user-name
  bsmith
set event-options policy disable-on-ping-failure then change-configuration
  commit-options log "updating configuration from event policy disable-on-ping-failure"
```

Step-by-Step Procedure

1. Create and name the event-policy.

   ```
   [edit]
   bsmith@R1# edit event-options policy disable-on-ping-failure
   ```

2. Configure the event policy to match on the PING_TEST_FAILED event if it occurs twice within 1 minute.

   ```
   [edit]
   bsmith@R1# set events ping_test_failed
   ```

3. The **trigger on 3** statement specifies that only the third set of correlated PING_TEST_FAILED events triggers this policy.

   ```
   [edit]
   bsmith@R1# set within 60 trigger on 3
   ```

4. The **trigger until 4** statement specifies that on the fourth set of correlated PING_TEST_FAILED events, the policy is no longer triggered.

   ```
   [edit]
   bsmith@R1# set within 65 trigger until 4
   ```

5. Set the **attributes-match** statement so that the policy is triggered only by the PING_TEST_FAILED events generated by the associated RPM probe.

   ```
   [edit]
   bsmith@R1# set attributes-match ping_test_failed.test-owner matches
     icmp-ping-probe
   bsmith@R1# set attributes-match ping_test_failed.test-name matches
     ping-probe-test
   ```


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6. Specify the configuration mode commands that are executed if the event policy is triggered.

   Configure each command on a single line, enclose the command string in quotes, and specify the complete statement path.

   ```
   [edit event-options policy disable-on-ping-failure then change-configuration]
   bsmith@R1# set commands "set interfaces ge-0/3/1 disable"
   ```

7. Configure the retry count and retry interval (Optional).

   In this example, **count** is set to 5, and the **interval** is 4 seconds.

   ```
   [edit event-options policy disable-on-ping-failure then change-configuration]
   bsmith@R1# set retry count 5 interval 4
   ```

8. Commit the configuration.

9. Configure the **log** option with a comment describing the configuration changes. The comment is added to the commit logs after a successful commit operation is made through the associated event policy.

   ```
   [edit event-options policy disable-on-ping-failure then change-configuration]
   bsmith@R1# set commit-options log "updating configuration from event policy
     disable-on-ping-failure"
   ```

10. (Optional) This example does not configure the **synchronize** and **force** options. If you have dual Routing Engines, configure the **synchronize** option to commit the configuration on both Routing Engines. Include the **force** option to force the commit on the other Routing Engine, ignoring any warnings.

11. (Optional) Configure the username under whose privileges the configuration changes and commit are made.

    If you do not specify a username, the action is executed as user **root**.

    ```
    [edit event-options policy disable-on-ping-failure then change-configuration]
    bsmith@R1# set user-name bsmith
    ```

12. Review the output of the **show interfaces ge-0/3/1** operational mode command before the configuration change takes place.

    NOTE: The interface should be enabled.

    ```
    bsmith@R1> show interfaces ge-0/3/1
    Physical interface: ge-0/3/1, Enabled, Physical link is Up
      Interface index: 142, SNMP ifIndex: 531
    ...
    ```

13. Commit the configuration.

    ```
    bsmith@R1# commit
    ```

Results

```
[edit event-options]
```

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```
policy disable-on-ping-failure {
  events ping_test_failed;
  within 60{
    trigger on 3;
    }
    within 65{
    trigger on 4;
  }
  attributes-match {
    ping_test_failed.test-owner matches icmp-ping-probe;
    ping_test_failed.test-name matches ping-probe-test;
  }
  then {
    change-configuration {
      retry count 5 interval 4;
      commands {
        "set interfaces ge-0/3/1 disable";
      }
      user-name bsmith;
      commit-options log "updating configuration from event policy
        disable-on-ping-failure";
    }
  }
}
```

Verification

Confirm that the configuration is working properly.

- Verifying the Events on page 448
- Verifying the Commit on page 449
- Verifying the Configuration Changes on page 450
- Verifying the Status of the Interface on page 450

Verifying the Events

Purpose To manually test the event policy, take the ge-0/3/1 interface offline until two PING_TEST_FAILED events are generated.

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Action Review the configured syslog file. Verify that when the RPM probe ping tests fail, the probe generates a PING_TEST_FAILED event.

```
bsmith@R1> show log syslog-event-daemon-info
Oct  7 15:48:54  R1 rmopd[1345]: PING_TEST_COMPLETED: pingCtlOwnerIndex =
icmp-ping-probe, pingCtlTestName = ping-probe-test
Oct  7 15:49:54  R1 rmopd[1345]: PING_TEST_COMPLETED: pingCtlOwnerIndex =
icmp-ping-probe, pingCtlTestName = ping-probe-test
...
Oct  7 15:52:54  R1 rmopd[1345]: RMOPD_ICMP_SENDMSG_FAILURE: sendmsg(ICMP): No
route to host
Oct  7 15:52:54  R1 rmopd[1345]: PING_PROBE_FAILED: pingCtlOwnerIndex =
icmp-ping-probe, pingCtlTestName = ping-probe-test
Oct  7 15:52:54  R1 rmopd[1345]: PING_TEST_FAILED: pingCtlOwnerIndex =
icmp-ping-probe, pingCtlTestName = ping-probe-test
Oct  7 15:52:57  R1 rmopd[1345]: PING_TEST_FAILED: pingCtlOwnerIndex =
icmp-ping-probe, pingCtlTestName = ping-probe-test
```

Verifying the Commit

Purpose Verify that the event policy commit operation was successful by reviewing the commit log and the messages log file.

Action Issue the **show system commit** operational mode command to view the commit log. In this example, the log confirms that the configuration was committed through the event policy under the privileges of user bsmith at the given date and time.

```
bsmith@R1> show system commit
0   2011-10-07 15:52:58 PDT by bsmith via junoscript
    updating configuration from event policy disable-on-ping-failure
1   2011-09-02 14:16:44 PDT by admin via netconf
2   2011-07-08 14:33:46 PDT by root via other
```

Review the messages log file. Upon receipt of the PING_TEST_FAILED event, Junos OS executed the configured event policy action to modify and commit the configuration. The commit operation occurred under the privileges of user bsmith.

```
bsmith@R1> show log messages | last 20
Oct  7 15:52:54  R1 rmopd[1345]: RMOPD_ICMP_SENDMSG_FAILURE: sendmsg(ICMP): No
route to host
Oct  7 15:52:55  R1 file[9972]: UI_COMMIT: User 'bsmith' requested 'commit'
operation (comment: updating configuration from event policy
disable-on-ping-failure)
Oct  7 15:52:59  R1 eventd: EVENTD_CONFIG_CHANGE_SUCCESS: Configuration change
successful: while executing policy disable-on-ping-failure with user bsmith
privileges
```

Meaning The output from the **show system commit** operational mode command and the **messages** log file verify that the commit operation, which was made through the event policy under the privileges of the user bsmith, was successful. The **show system commit** output and **messages** log file reference the commit comment specified in the **log** statement at the **[edit event-options policy disable-on-ping-failure then change-configuration commit-options]** hierarchy level.

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Verifying the Configuration Changes

Purpose Verify the configuration changes by reviewing the **[edit interfaces ge-0/3/1]** hierarchy level of the configuration.

Action

```
bsmith@R1> show configuration interfaces ge-0/3/1
disable;
unit 0 {
  family inet {
    address 10.1.4.1/26;
  }
}
```

Meaning The ge-0/3/1 configuration hierarchy was modified through the event policy to add the **disable** statement.

Verifying the Status of the Interface

Purpose Review the output of the **show interfaces ge-0/3/1** operational mode command after the configuration change takes place.

Action Issue the **show interfaces ge-0/3/1** operational mode command. After the event policy configuration change action disables the interface, the output changes from "Enabled" to "Administratively down".

```
bsmith@R1> show interfaces ge-0/3/1
Physical interface: ge-0/3/1, Administratively down, Physical link is Down
  Interface index: 142, SNMP ifIndex: 531
```

Related Documentation

- change-configuration on page 490
- commands (Event Policy Change Configuration) on page 491
- commit-options on page 493
- retry on page 509
- user-name on page 522

Executing Event Scripts in an Event Policy

Event scripts are Extensible Stylesheet Transformation (XSLT) or Stylesheet Language Alternative Syntax (SLAX) scripts that you write and that are run when triggered by an event policy. Event scripts can perform any function available through Junos XML or Junos XML protocol remote procedure calls (RPCs). Additionally, you can pass to an event script a set of arguments that you define.

A script can change the device configuration, build and run an operational mode command, receive the command output, inspect the output, and determine the next appropriate action. This process can be repeated until the source of the problem is determined. The script can then report the source of the problem to you on the CLI.

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You can configure an event policy that causes event scripts to be run and the output of those scripts to be uploaded to a specified location for analysis.

You can configure an event policy that executes event scripts and uploads the output of those scripts to a specified location for analysis. To configure such a policy, include the following statements at the **[edit event-options]** hierarchy level:

```
[edit event-options]
policy policy-name {
  events [ events ];
  then {
    event-script filename {
      arguments {
        argument-name argument-value;
      }
      output-filename filename;
      output-format (text | xml);
      destination destination-name;
    }
  }
}
```

In the **events** statement, you can list multiple events. If one or more of the listed events occurs, the event script is executed. To view a list of the events that can be referenced in an event policy, issue the **set event-options policy *policy-name* events ?** configuration mode command:

```
[edit]
user@host# set event-options policy policy-name events ?
Possible completions:
 <event>
 [               Open a set of values
 acct_accounting_ferror
 acct_accounting_fopen_error
 ...
```

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. For information about referencing these system log messages in your event policies, see "Using Nonstandard System Log Messages to Trigger Event Policies" on page 419.

In addition, you can reference internally generated events, which are discussed in "Generating Internal Events to Trigger Event Policies" on page 419.

In the **event-script** statement, you can specify a script to be executed on receipt of an event. The eventd process runs the scripts in the order in which they appear in the configuration. The scripts that you reference in the **event-script** statement must be located in the **/var/db/scripts/event** directory on the device's hard drive or the **/config/scripts/event/** directory on the flash drive. Furthermore, the event scripts must be enabled at the **[edit event-options event-script file]** hierarchy level. For more information, see "Storing and Enabling Scripts" on page 85.

You can include arguments to the script as name/value pairs. You can include variables in the argument values to allow data from the triggering event to be automatically included

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in the argument. The eventd process replaces each variable with values contained in the event that triggers the policy. You can use variables of the following forms:

- **{$$.*attribute-name*}**—The double dollar sign (**$$**) notation represents the event that is triggering a policy. When combined with an attribute name, the variable is replaced by the value of the attribute name in the triggering event. For example, **{$$.interface-name}** stands for the value of the **interface-name** attribute in the triggering event.
- **{$*event*.*attribute-name*}**—The **{$*event*.*attribute-name*}** notation represents the most recent event that matches the specified event. The variable is replaced by the value of the attribute name of the most recent event that matches ***event***. For example, when you include an argument called **interface** and define the value as **{$COSD_CHAS_SCHED_MAP_INVALID.interface-name},** the **{$COSD_CHAS_SCHED_MAP_INVALID.interface-name}** variable is replaced by the **interface-name** attribute of the most recent **COSD_CHAS_SCHED_MAP_INVALID** event cached by the eventd process.

For a given event, you can view a list of event attributes that you can reference by issuing the **help syslog *event*** command:

```
user@host> help syslog event-name
```

For example, in the following command output, text in angle brackets (**< >**) shows attributes of the **COSD_CHASSIS_SCHEDULER_MAP_INVALID** event:

```
user@host> help syslog COSD_CHASSIS_SCHEDULER_MAP_INVALID
Name:        COSD_CHASSIS_SCHEDULER_MAP_INVALID
Message:     Chassis scheduler map incorrectly applied to interface
<interface-name>: <error-message>
...
```

You can filter the output of a search by using the pipe (**|**) symbol. The following example lists the filters that can be used with the pipe symbol:

```
user@host> help syslog | ?
Possible completions:
 count               Count occurrences
 display             Show additional kinds of information
 except              Show only text that does not match a pattern
 find                Search for first occurrence of pattern
 hold                Hold text without exiting the --More-- prompt
 last                Display end of output only
 match               Show only text that matches a pattern
 no-more             Don't paginate output
 request             Make system-level requests
 resolve             Resolve IP addresses
 save                Save output text to file
 trim                Trim specified number of columns from start of line
```

For more information about using the pipe symbol, see the *CLI User Guide*.

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Another way to view a list of event attributes is to issue the **set attributes-match *event* ?** configuration mode command at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
user@host# set attributes-match event ?
```

For example, in the following command output, the ***event.attribute*** list shows that **error-message** and **interface-name** are attributes of the **cosd_chassis_scheduler_map_invalid** event:

```
[edit event-options policy p1]
user@host# set attributes-match cosd_chassis_scheduler_map_invalid?
Possible completions:
  <from-event-attribute>  First attribute to compare
  cosd_chassis_scheduler_map_invalid.error-message
  cosd_chassis_scheduler_map_invalid.interface-name
```

In this **set** command, there is no space between the event name and the question mark (**?**).

To view a list of all event attributes that you can reference, issue the **set attributes-match ?** configuration mode command at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
user@host# set attributes-match ?
Possible completions:
  <from-event-attribute>  First attribute to compare
  acct_accounting_ferror
  acct_accounting_fopen_error
  ...
```

When the eventd process executes the event scripts, it uploads the file with the script output to the location specified in the **destination** statement. In the **destination** statement, include a destination name that is configured at the **[edit event-options destinations]** hierarchy level. For more information, see "Example: Defining Destinations for File Archiving by Event Policies" on page 421.

In the **output-filename** statement, define a unique string that will be included in the filename. Each uploaded file also includes the hostname and timestamp in the filename to ensure that the each filename is unique. If a policy is triggered multiple times in a 1-second period, an index number is added to ensure the filenames are still unique. The index number range is 001 through 999. The output filename format is:

hostname_YYYYMMDD_HHMMSS_filename_index-number

By default, the command output format is text. To change this, include the **output-format xml** statement.

In the optional **output-filename** statement, assign the name of the file to which to write script output for the specified script.

The filename format is ***hostname_filename_YYYYMMDD_HHMMSS_index-number***.

For each uploaded file, a hostname and timestamp are automatically added to the filename to ensure that the uploaded files have unique filenames. If a policy is triggered

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multiple times in a 1-second period, an index number is added to ensure the filenames are unique. The index number range is 001 through 999.

For example, on a device named **r1**, if you configure the output filename to be **ifl-events**, and this event policy is triggered three times in 1 second, the files are named:

- **r1_ifl-events_20060623_132333**
- **r1_ifl-events_20060623_132333_001**
- **r1_ifl-events_20060623_132333_002**

In the optional **destination** statement, include the destination name that you configured at the **[edit event-options destinations]** hierarchy level. For more information, see "Example: Defining Destinations for File Archiving by Event Policies" on page 421.

For the **output-filename** and **destination** statements, there are four configuration scenarios:

- You can omit the **output-filename** and **destination** statements. This option makes sense when the event script has no output. For example, the event script might execute only **request** commands, which have no output.
- You can include the **destination** and **output-filename** statements. If you include the **output-filename** statement in the configuration, you must also include the **destination** statement in the configuration. In this case, the script output is redirected to the output file and the file is sent to the destination specified in the configuration.
- You can include the **destination** statement in the configuration. You can omit the **output-filename** statement in the configuration and specify an output filename in the event script instead. The script output is sent to the destination specified in the configuration. If you do not include the **destination** statement in the configuration, the script output is not uploaded.

  In this scenario, the event policy extracts the filename from the event script. The event script writes the output filename as **STDOUT**. The XML syntax to use in the event script is:

  ```
  <output>
    <event-script-output-filename>filename</event-script-output-filename>
  </output>
  ```

  The **<event-script-output-filename>** element must be the first child tag within the **<output>** parent tag.

  On a device named **device2**, configure an event script action with a destination **host**, and omit the **output-filename** statement. Define the destination **host** as ftp://user@device1//tmp.

  In the **script1.xsl** event script, write the following output to **STDOUT**:

  ```
  <event-script-output-filename>/var/cmd.txt</event-script-output-filename>
  ```

  Configure the **policy1** event policy as follows:

  ```
  [edit event-options]
  policy policy1 {
    then {
  ```

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```
        event-script script1.xsl {
            destination host;
        }
    }
}
destinations {
    host {
        archive-sites {
            "ftp://user@device1//tmp" password "$9$xkJNbYg4ZDH.oJ.fQnpuSyl";  ##
                SECRET-DATA***
        }
    }
}
```

In this example, the **/var/cmd.txt** file resides on device **device2**. The event policy uses the File Transfer Protocol (FTP) to upload this file to the **/tmp** directory on device **device1**.

The event policy reads the output filename **/var/cmd.txt** from **STDOUT**. Then the event policy uploads the **/var/cmd.txt** file to the configured destination, which is the **/tmp** directory on device **device1**. The event policy renames the **/var/cmd.txt** file as **device2_cmd.txt_*YYYYMMDD_HHMMSS_range***.

- You can include the **output-filename** and **destination** statements. If you include the **output-filename** statement in the configuration, you must also include the **destination** statement in the configuration. In this case, the script output is redirected to the output filename specified in the configuration and is sent to the destination specified in the configuration.
- You can include the **output-filename** and **destination** statements, and also specify an output filename directly within the event script. If you do this, the output filename specified in the configuration overrides the output filename specified in the event script.

Configuring Event Policies to Ignore an Event

You can modify a policy to cause particular events to be ignored or to cause all events to be ignored during a particular time interval, to allow for maintenance for example. To configure such a policy, include the following statements at the **[edit event-options]** hierarchy level:

```
[edit event-options]
policy policy-name {
    events [ events ];
    then {
        ignore;
    }
}
```

In the **events** statement, you can list multiple events. To view a list of the events that can be referenced in an event policy, issue the **set event-options policy *policy-name* events ?** configuration mode command:

```
[edit]
user@host# set event-options policy policy-name events ?
Possible completions:
  <event>
```

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```
[            Open a set of values
acct_accounting_ferror
acct_accounting_fopen_error
...
```

Some of the system log messages that you can reference in an event policy are not listed in the output of the **set event-options policy *policy-name* events ?** command. For information about referencing these system log messages in your event policies, see "Using Nonstandard System Log Messages to Trigger Event Policies" on page 419.

In addition, you can reference internally generated events, which are discussed in "Generating Internal Events to Trigger Event Policies" on page 419.

If one or more of the listed events occur, a system log message for the event is not generated, and no further policies associated with this event are processed. If you include the **ignore** statement in a policy configuration, you cannot configure any other actions in the policy.

Changing the User Privilege Level for an Event Policy Action

Only superusers can configure event policies. Event policy actions—such as executing event scripts, uploading files, and executing operational mode commands—are by default executed by user **root**, because the event process (eventd) runs with **root** privileges.

In some cases, you might want an event policy action to be executed with restricted privileges. For example, suppose you configure an event policy that executes a script if an interface goes down. The script includes remote procedure calls (RPCs) to change the device configuration if certain conditions are present. If you do not want the script to change the configuration, you can execute the script with a restricted user profile. When the script is executed with a user profile that disallows configuration changes, the RPCs to change the configuration fail.

You can associate a user with each action in an event policy. If a user is not associated with an event policy action, then the action is executed as user **root** by default.

To specify the user under whose privileges an action is executed, include the **user-name** statement:

```
user-name username;
```

You can include this statement at the following hierarchy levels:

- **[edit** event-options policy ***policy-name*** then event-script ***filename*****]**
- **[edit** event-options policy ***policy-name*** then execute-commands**]**
- **[edit** event-options policy ***policy-name*** then upload **filename (*filename* | committed) destination *destination-name*]**

NOTE: The username that you specify must be configured at the **[edit system login]** hierarchy level. For more information, see the *Administration Guide for Security Devices*.

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For a configuration example, see "Example: Associating an Optional User with an Event Policy Action" on page 476.

Configuring Event Policies to Raise SNMP Traps

SNMP *traps* enable an agent to notify a network management system (NMS) of significant events by way of an unsolicited SNMP message. You can configure an event policy action that raises traps for events based on system log messages. This enables notification of an SNMP trap-based application when an important system log message occurs. You can convert any system log message (for which there are no corresponding traps) into a trap. This is valuable if you use NMS traps rather than system log messages to monitor your network.

To configure a policy that raises a trap on receipt of an event, include the following statements at the **[edit event-options policy *policy-name*]** hierarchy level:

```
[edit event-options policy policy-name]
events [ events ];
then {
  raise-trap;
}
```

The MIB (**jnx-syslog.mib**) supports this policy action. For more information, see SNMP MIBs and Traps Reference.

For a configuration example, see "Example: Raising an SNMP Trap in Response to an Event" on page 481.

Configuring the System Log Priority of the Triggering Event in an Event Policy

- Understanding the Event System Log Priority in an Event Policy on page 457
- Example: Configuring the Event System Log Priority in an Event Policy on page 458

Understanding the Event System Log Priority in an Event Policy

Starting with Junos OS Release 12.1, you can configure an event policy to override the default system log priority of a triggering event so that the system logs the event with a different facility type, severity level, or both. To override the priority of the triggering event, configure the **priority-override** statement at the **[edit event-options policy *policy-name* then]** hierarchy level. To override the facility type with which the triggering event is logged, include the **facility** statement and the new facility type. To override the severity level with which the triggering event is logged, include the **severity** statement and the new severity level.

Junos OS processes generate system log messages, or event notifications, to record the events that occur on a routing, switching, or security platform. Each system log message identifies the Junos OS process that generated the message and describes the operation or error that occurred. The Junos OS event process (eventd) receives the event notifications, and configured event policies instruct the eventd process to perform a set of actions upon receipt of specific events or correlated events.

Each system log message belongs to a facility, which groups messages that either are generated by the same source (such as a software process) or concern a similar condition or activity (such as authentication attempts). Each message is also preassigned a severity

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level, which indicates how seriously the triggering event affects the functions of the routing, switching, or security platform. A message's facility and severity level are together referred to as its priority. For more information about facility and severity levels, see *Junos OS System Logging Facilities and Message Severity Levels*.

When you configure logging on a device for a specific facility and destination, you also specify a severity level. Messages from that facility that are rated at the configured severity level or higher are logged. To log related events with different severity levels in the same log file, you must filter events using the lowest severity level of any of the events from that facility to be logged. This can result in unwieldy log files that are difficult and time-consuming to parse.

For example, Junos OS logs the protocol UP and DOWN events with different severity levels. Both the SNMP_TRAP_LINK_DOWN and SNMP_TRAP_LINK_UP events have a facility of 'daemon', but the SNMP_TRAP_LINK_DOWN event has a severity level of 'warning', and the SNMP_TRAP_LINK_UP event has a severity level of 'info'. Normally, when you configure a system log file, you must filter events to that file using the lower severity level of 'info' in order to log both of the events.

The event policy **priority-override** statement enables you to customize the priority of the triggering event so that it is logged using a different facility type and severity level. Suppose you configure a system log file to filter events of facility 'daemon' and severity 'notice', and you have event policies that trigger on the RPD_ISIS_ADJDOWN and RPD_ISIS_ADJUP events. When the system generates an RPD_ISIS_ADJDOWN message reporting that the IS-IS adjacency with a neighboring router was terminated, this message is logged. However, if the system subsequently generates an RPD_ISIS_ADJUP event notification reporting that the IS-IS adjacency has been restored, by default, the message is not logged, because it has a lower severity level of 'info'. In the event policy that triggers on the RPD_ISIS_ADJUP event, you can configure the associated priority so that the triggering RPD_ISIS_ADJUP event is logged with a severity level of 'notice' and is captured in the configured log file.

NOTE: Event policies are executed in the order in which they appear in the configuration. When you configure multiple event policies to override the priority of the same event, the event is logged based on the priority set by the last executed event policy to change it.

Example: Configuring the Event System Log Priority in an Event Policy

It is necessary to log events when monitoring, managing, and troubleshooting routing, switching, and security devices. Starting with Junos OS Release 12.1, you can configure an event policy to override the priority of its triggering event so that it is logged based on a different facility type and severity level. This enables the event to be logged even if the system filters events to the destination log file using a different facility type or a higher severity level.

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This example simulates an SNMP_TRAP_LINK_UP event for a specific interface. Upon receipt of the event, the event policy overrides the severity level of the event so that it is captured in the configured log file.

- Requirements on page 459
- Overview on page 459
- Configuration on page 459
- Verification on page 462

Requirements

- Routing, switching, or security device running Junos OS Release 12.1 or later.
- Interface is configured and active. This example uses the ge-0/3/1.0 interface.

Overview

This example configures two log files to capture events of facility 'daemon'. One log file is configured to filter for events of severity 'warning' or higher, and the second log file is configured to filter for events of severity 'info' or higher.

The configured event policy triggers on the SNMP_TRAP_LINK_UP event for interface ge-0/3/1.0. The example generates an SNMP_TRAP_LINK_DOWN event followed by an SNMP_TRAP_LINK_UP event for the ge-0/3/1.0 interface. The SNMP_TRAP_LINK_DOWN event, which has a severity level of 'warning' is captured in both configured log files. Upon receipt of the SNMP_TRAP_LINK_UP event, the event policy overrides the severity level of the event to 'warning' so that it is also captured in the log file that filters for events of severity 'warning'. By default, if the event policy does not override the severity level of this event, it is only captured in the log file that filters for the severity level 'info'.

Configuration

- Configuring the Log Files on page 460
- Verifying the Default System Log Priority of the Events on page 460
- Configuring the Event Policy on page 461

CLI Quick Configuration

To quickly configure this example, copy the following commands, paste them in a text file, remove any line breaks, change any details necessary to match your network configuration, and then copy and paste the commands into the CLI at the **[edit]** hierarchy level:

```
set system syslog file syslog-event-daemon-info daemon info
set system syslog file syslog-event-daemon-warning daemon warning
set event-options policy log-on-snmp-trap-link-up events snmp_trap_link_up
set event-options policy log-on-snmp-trap-link-up attributes-match
   snmp_trap_link_down.interface-name matches ge-0/3/1.0
set event-options policy log-on-snmp-trap-link-up then priority-override severity warning
```

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Configuring the Log Files

Step-by-Step Procedure

1. Configure two log files at the **[edit system syslog]** hierarchy level to record events of facility **daemon**.

   Configure one log to record events of severity 'info' or higher and one log file to record events of severity 'warning' or higher.

   ```
   [edit system syslog]
   bsmith@R1# set file syslog-event-daemon-info daemon info
   bsmith@R1# set file syslog-event-daemon-warning daemon warning
   ```

2. Commit the configuration.

   ```
   bsmith@R1# commit
   ```

3. To manually test the logging of the events, take the ge-0/3/1.0 logical interface temporarily offline, and then bring it back up.

   This generates an SNMP_TRAP_LINK_DOWN event followed by an SNMP_TRAP_LINK_UP event.

   ```
   [edit]
   bsmith@R1# set interfaces ge-0/3/1 unit 0 disable
   bsmith@R1# commit
   bsmith@R1# delete interfaces ge-0/3/1 unit 0 disable
   bsmith@R1# commit
   ```

Results

```
[edit]
system {
   syslog {
      file syslog-event-daemon-info {
         daemon info;
      }
      file syslog-event-daemon-warning {
         daemon warning;
      }
   }
}
```

Verifying the Default System Log Priority of the Events

Purpose Verify that the system generated the SNMP_TRAP_LINK_DOWN and SNMP_TRAP_LINK_UP events for the ge-0/3/1.0 interface, and note where each event is logged.

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Action Review the contents of the **syslog-event-daemon-info** file configured in Step 1 of the previous procedure. The output shows that the ge-0/3/1.0 interface was brought down and back up and generated an SNMP_TRAP_LINK_DOWN event followed by an SNMP_TRAP_LINK_UP event.

```
bsmith@R1> show log syslog-event-daemon-info
Oct 24 13:22:17  R1 mib2d[1394]: SNMP_TRAP_LINK_DOWN: ifIndex 539, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
...
Oct 24 13:22:29  R1 mib2d[1394]: SNMP_TRAP_LINK_UP: ifIndex 539, ifAdminStatus
up(1), ifOperStatus up(1), ifName ge-0/3/1.0
```

Review the contents of the **syslog-event-daemon-warning** file configured in Step 1 of the previous procedure. Because the severity level of the SNMP_TRAP_LINK_UP event is 'info', it does not appear in a log file that is configured to only record events of severity 'warning' or higher. By default, this system log file captures the SNMP_TRAP_LINK_DOWN events, but does not capture the SNMP_TRAP_LINK_UP events.

```
bsmith@R1> show log syslog-event-daemon-warning
Oct 24 13:22:17  R1 mib2d[1394]: SNMP_TRAP_LINK_DOWN: ifIndex 539, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
```

Meaning Because the SNMP_TRAP_LINK_UP event has a default severity of 'info', it is not forwarded to log files that are configured to capture events of higher severity.

Configuring the Event Policy

Step-by-Step Procedure

1. Create and name the event-policy.

   ```
   [edit]
   bsmith@R1# edit event-options policy log-on-snmp-trap-link-up
   ```

2. Configure the **events** statement.

   For this example, the event policy triggers on the SNMP_TRAP_LINK_UP event. Set the **attributes-match** statement so that the policy triggers only if the SNMP_TRAP_LINK_UP event occurs for the ge-0/3/1.0 interface.

   ```
   [edit event-options policy log-on-snmp-trap-link-up]
   bsmith@R1# set events snmp_trap_link_up
   bsmith@R1# set attributes-match snmp_trap_link_down.interface-name matches
     ge-0/3/1.0
   ```

3. Configure the **priority-override** event policy action, and include the **severity** statement with a value of **warning**.

   ```
   [edit event-options policy log-on-snmp-trap-link-up]
   bsmith@R1# set then priority-override severity warning
   ```

4. Commit the configuration.

   ```
   bsmith@R1# commit
   ```

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5. To manually test the event policy, take the ge-0/3/1.0 logical interface temporarily offline, and then bring it back up. This generates an SNMP_TRAP_LINK_DOWN event followed by an SNMP_TRAP_LINK_UP event.

```
[edit]
bsmith@R1# set interfaces ge-0/3/1 unit 0 disable
bsmith@R1# commit
bsmith@R1# delete interfaces ge-0/3/1 unit 0 disable
bsmith@R1# commit
```

Results

```
[edit]
event-options {
  policy log-on-snmp-trap-link-up {
    events snmp_trap_link_up;
    attributes-match {
      snmp_trap_link_up.interface-name matches ge-0/3/1.0;
    }
    then {
      priority-override {
        severity warning;
      }
    }
  }
}
```

Verification

Confirm that the configuration is working properly.

Verifying the Configured System Log Priority of the Events

Purpose Verify that the system generated the SNMP_TRAP_LINK_DOWN and SNMP_TRAP_LINK_UP events for the ge-0/3/1.0 interface, and note where each event is logged.

Action Review the contents of the **syslog-event-daemon-warning** file. Because the event policy overrides the severity level of the SNMP_TRAP_LINK_UP event, it now appears in the log file that is configured to only record events of severity 'warning' or higher. By default, this system log file captures the SNMP_TRAP_LINK_DOWN events, but does not capture the SNMP_TRAP_LINK_UP events.

```
bsmith@R1> show log syslog-event-daemon-warning
Oct 24 13:29:48  R1 mib2d[1394]: SNMP_TRAP_LINK_DOWN: ifIndex 539, ifAdminStatus
 down(2), ifOperStatus down(2), ifName ge-0/3/1.0
Oct 24 13:30:02  R1 mib2d[1394]: SNMP_TRAP_LINK_UP: ifIndex 539, ifAdminStatus
up(1), ifOperStatus up(1), ifName ge-0/3/1.0
```

Meaning Although the SNMP_TRAP_LINK_UP event has a severity of 'info', configuring the **priority-override** statement with a severity of 'warning' causes the event to be forwarded to the system logs with the configured severity level. The event can be captured in logs that filter for a different facility type and a higher severity level.

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Related Documentation

- *Junos OS System Logging Facilities and Message Severity Levels*
- *Specifying the Facility and Severity of Messages to Include in the Log*
- facility on page 501
- priority-override on page 508
- severity on page 511

Configuring Event Policy Privileges

- Changing the User Privilege Level for an Event Policy Action on page 463

Changing the User Privilege Level for an Event Policy Action

Only superusers can configure event policies. Event policy actions—such as executing event scripts, uploading files, and executing operational mode commands—are by default executed by user **root**, because the event process (eventd) runs with **root** privileges.

In some cases, you might want an event policy action to be executed with restricted privileges. For example, suppose you configure an event policy that executes a script if an interface goes down. The script includes remote procedure calls (RPCs) to change the device configuration if certain conditions are present. If you do not want the script to change the configuration, you can execute the script with a restricted user profile. When the script is executed with a user profile that disallows configuration changes, the RPCs to change the configuration fail.

You can associate a user with each action in an event policy. If a user is not associated with an event policy action, then the action is executed as user **root** by default.

To specify the user under whose privileges an action is executed, include the **user-name** statement:

```
user-name username;
```

You can include this statement at the following hierarchy levels:

- **[edit** event-options policy ***policy-name*** then event-script ***filename*****]**
- **[edit** event-options policy ***policy-name*** then execute-commands**]**
- **[edit** event-options policy ***policy-name*** then upload **filename (*filename* | committed) destination *destination-name*]**

NOTE: The username that you specify must be configured at the **[edit system login]** hierarchy level. For more information, see the *Administration Guide for Security Devices*.

For a configuration example, see "Example: Associating an Optional User with an Event Policy Action" on page 476.

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Creating and Executing Event Scripts

- Required Boilerplate for Event Scripts on page 464
- Capturing and Using Event Details and Remote Execution Details in Event Scripts on page 466
- Mapping Operational Mode Commands and Output Fields to Junos XML Notation on page 467
- Using RPCs and Operational Mode Commands in Event Scripts on page 468
- Enabling an Event Script on page 471
- Executing an Event Script on page 472
- Replacing an Event Script on page 472
- Configuring Checksum Hashes for an Event Script on page 473

Required Boilerplate for Event Scripts

When you write event scripts, you use Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) tools provided with Junos OS. These tools include basic boilerplate that you must include in all event scripts, optional extension functions that accomplish scripting tasks more easily, and named templates that make scripts easier to read and write, which you import from a file called **junos.xsl**. For more information about the extension functions and templates, see "Understanding Extension Functions in the jcs Namespace" on page 8 and "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28.

Event scripts are based on Junos XML and Junos XML protocol tag elements. Like all XML elements, angle brackets enclose the name of a Junos XML or Junos XML protocol tag element in its opening and closing tags. This is an XML convention, and the brackets are a required part of the complete tag element name. They are not to be confused with the angle brackets used in the documentation to indicate optional parts of Junos OS CLI command strings.

You must include either XSLT or SLAX boilerplate as the starting point for all event scripts that you create. The XSLT boilerplate follows:

XSLT Boilerplate for Event Scripts

```
<?xml version="1.0" standalone="yes"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:junos="http://xml.juniper.net/junos/*/junos"
  xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
  xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
  <xsl:import href="../import/junos.xsl"/>

  <xsl:template match="configuration">
    <event-script-results>
      <!-- ... Insert your code here ... -->
    </event-script-results>
  </xsl:template>
 <!-- ... insert additional template definitions here ... -->
</xsl:stylesheet>
```


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Line 1 is the Extensible Markup Language (XML) processing instruction (PI). This PI specifies that the code is written in XML using version 1.0. The XML PI, if present, must be the first noncomment token in the script file.

```
1  <?xml version="1.0"?>
```

Line 2 opens the style sheet and specifies the XSLT version as 1.0.

```
2  <xsl:stylesheet version="1.0"
```

Lines 3 through 6 list all the namespace mappings commonly used in event scripts. Not all of these prefixes are used in this example, but it is not an error to list namespace mappings that are not referenced. Listing all namespace mappings prevents errors if the mappings are used in later versions of the script.

```
3    xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4    xmlns:junos="http://xml.juniper.net/junos/*/junos"
5    xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"
6    xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
```

Line 7 is an XSLT import statement. It loads the templates and variables from the file referenced as **../import/junos.xsl**, which ships as part of Junos OS (in the file **/usr/libdata/cscript/import/junos.xsl**). The **junos.xsl** file contains a set of named templates you can call in your scripts. These named templates are discussed in "Junos Script Automation: Named Templates in the jcs Namespace Overview" on page 28 and "Junos Named Templates in the jcs Namespace Summary" on page 30.

```
7    <xsl:import href="../import/junos.xsl"/>
```

Line 8 defines a template that matches the **</>** element. The **<xsl:template match="/">** element is the root element and represents the top level of the XML hierarchy. All XML Path Language (XPath) expressions in the script must start at the top level. This allows the script to access all possible Junos XML and Junos XML protocol remote procedure calls (RPCs). For more information, see "XPath Overview" on page 50 and *xsl:template match="/" Template*.

```
8    <xsl:template match="/">
```

After the **<xsl:template match="/">** tag element, the **<event-script-results>** and **</event-script-results>** container tags must be the top-level child tags, as shown in Lines 9 and 10.

```
9      <event-script-results>
       <!-- ... insert your code here ... -->
10     </event-script-results>
```

Line 11 closes the template.

```
11   </xsl:template>
```

Between Line 11 and Line 12, you can define additional XSLT templates that are called from within the **<xsl:template match="/">** template.

Line 12 closes the style sheet and the event script.

```
12  </xsl:stylesheet>
```

SLAX Boilerplate for Event Scripts

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
```

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```
import "../import/junos.xsl";

match / {
  <event-script-results> {
    /*
    * Insert your code here
    */
  }
}
```

Capturing and Using Event Details and Remote Execution Details in Event Scripts

When an event script is triggered by an event policy, the initiating event policy forwards a set of event details to the triggered event script. These event details can be captured, evaluated, and sent to log files as required. In addition, any configured remote execution details are also forwarded to the event script. The remote execution details allow the event script to invoke remote procedure calls as detailed in "Using RPCs and Operational Mode Commands in Event Scripts" on page 468.

Two types of event details are returned: triggered events and received events. *Triggered events* record the details of the event that triggered the policy. *Received events* record the details of events that happened before the triggering event. Event details and remote execution details are forwarded to the event script as XML in the following format:

```
<event-script-input>
  <junos-context>
    ...
  </junos-context>
  <trigger-event>
    <id>event-id</id>
    <type>event-type</type>
    <generation-time>timestamp</generation-time>
    <process>
      <name>process-name</name>
      <pid>pid</pid>
    </process>
    <hostname>hostname</hostname>
    <facility>facility-string</facility>
    <severity>severity-string</severity>
    <attribute-list>
      <attribute>
        <name>attribute-name</name>
        <value>attribute-value</value>
      </attribute>
    </attribute-list>
  </trigger-event>
  <received-events>
    <received-event>
      <id>event-id</id>
      <type>event-type</type>
      <generation-time>timestamp</generation-time>
      <process>
        <name>process-name</name>
        <pid>pid</pid>
      </process>
```


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```
        <hostname>hostname</hostname>
        <facility>facility-string</facility>
        <severity>severity-string</severity>
        <attribute-list>
          <attribute>
            <name>attribute-name</name>
            <<value>attribute-value</value>
          </attribute>
        </attribute-list>
      </received-event>
    </received-events>
    <remote-execution-details>
      <remote-execution-detail>
        <remote-hostname>hostname</remote-hostname>
        <username>username</username>
        <passphrase>passphrase</passphrase>
      </remote-execution-detail>
    </remote-execution-details>
  </event-script-input>
```

For information about the **<junos-context>** element, see "Global Parameters and Variables in the junos.xsl File" on page 39.

For information about one method for using event details, see "Example: Limiting Event Script Output Based on a Specific Event Type" on page 480.

Mapping Operational Mode Commands and Output Fields to Junos XML Notation

In event scripts, you use tag elements from the Junos XML API to represent operational mode commands and output fields. For the Junos XML equivalent of commands and output fields, consult the *Junos XML API Operational Developer Reference*.

You can also display Junos XML by directing the output from the **show** command to the **| display xml** command:

```
user@host> operational-mode-command | display xml
```

For example:

```
user@host> show interfaces terse | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
    <interface-information
xmlns="http://xml.juniper.net/junos/10.0RI0/junos-interface" junos:style="terse">
        <physical-interface>
            <name>dsc</name>
            <admin-status>up</admin-status>
            <oper-status>up</oper-status>
        </physical-interface>
        <physical-interface>
            <name>fxp0</name>
            <admin-status>up</admin-status>
            <oper-status>up</oper-status>
            <logical-interface>
                <name>fxp0.0</name>
                <admin-status>up</admin-status>
                <oper-status>up</oper-status>
                ...
```

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Using RPCs and Operational Mode Commands in Event Scripts

Most Junos operational mode commands have XML equivalents. These XML commands can be executed remotely using the *remote procedure call* (RPC) protocol. All operational mode commands that have XML equivalents are listed in the *Junos XML API Operational Developer Reference*.

RPC and operational mode command use in event scripts is discussed in more detail in the following sections:

- Using RPCs in Event Scripts on page 468
- Displaying the RPC Tags for a Command on page 470
- Using Operational Mode Commands in Event Scripts on page 470

Using RPCs in Event Scripts

You can invoke remote procedure calls (RPCs) in event scripts. For each event script that invokes RPCs, you must include the **remote-execution** statement at the **[edit event-options event-script file *filename*]** hierarchy level. For each remote device where an RPC is executed, you must configure the SSH host key information for the that device on the local device where the event script is executed.

For each remote device where an RPC is executed, specify the device hostname and the corresponding username and passphrase at the **remote-execution** level of the configuration hierarchy.

```
[edit event-options event-script file filename]
remote-execution {
  remote-hostname {
    username username;
    passphrase passphrase;
  }
}
```

The remote hostnames and their corresponding username and passphrase, in addition to the event details, are passed as input to the event script when it is triggered by an event policy. For more information about the details that are forwarded to the event script, see "Capturing and Using Event Details and Remote Execution Details in Event Scripts" on page 466. A connection handle to the remote host is generated with the **jcs:open()** function using ***remote-hostname***, ***username***, and ***passphrase*** as arguments; for more information about this function, see **jcs:open() Function**. The following code obtains a connection handle for each remote host included in the configuration:

XSLT Syntax

```
<xsl:for-each select="event-script-input/remote-execution-details">
  <xsl:variable name="d" select="remote-execution-detail"/>
  <xsl:variable name="connection"
      select="jcs:open($d/remote-hostname,$d/username,$d/passphrase)"/>
  ...
</xsl:for-each>
```

SLAX Syntax

```
for-each (event-script-input/remote-execution-details) {
  var $d = remote-execution-detail;
  var $connection = jcs:open($d/remote-hostname,$d/username,$d/passphrase);
```


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```
  ...
}
```

To execute an RPC on a remote device, an SSH session must be established. In order for the script to establish the connection, you must either configure the SSH host key information for the remote device on the local device where the script will be executed, or the SSH host key information for the remote device must exist in the known hosts file of the user executing the script. For each remote device where the RPC is executed, configure the SSH host key information with one of the following methods:

- To configure SSH known hosts on the local device, include the **host** statement, and specify hostname and host key options for the remote device at the **[edit security ssh-known-hosts]** hierarchy level of the configuration.
- To manually retrieve SSH host key information, issue the **set security ssh-known-hosts fetch-from-server *hostname*** configuration mode command to instruct Junos OS to connect to the remote device and add the key.

  ```
  user@host# set security ssh-known-hosts fetch-from-server router2
  The authenticity of host 'router2 (10.10.10.1)' can't be established.
  RSA key fingerprint is 30:18:99:7a:3c:ed:40:04:0f:fd:c1:57:7e:6b:f3:90.
  Are you sure you want to continue connecting (yes/no)? yes
  Warning: Permanently added 'router2,10.10.10.1' (RSA) to the list of known
  hosts.
  ```

- To manually import SSH host key information from a file, use the **set security ssh-known-hosts load-key-file *filename*** configuration mode command and specify the known-hosts file.

  ```
  user@host# set security ssh-known-hosts load-key-file /var/tmp/known_hosts
  Import SSH host keys from trusted source /var/tmp/known_hosts ? [yes,no] (no)
  yes
  ```

- Alternatively, the user executing the script can log in to the local device, SSH to the remote device, and then manually accept the host key, which is added to that user's known hosts file. In the following example, root is logged in to **router1**. In order to execute a remote RPC on **router2**, root adds the host key of **router2** by issuing the **ssh router2** operational mode command and manually accepting the key.

  ```
  root@router1> ssh router2
  The authenticity of host 'router2 (10.10.10.1)' can't be established.
  RSA key fingerprint is 30:18:99:7a:3c:ed:40:04:0f:fd:c1:57:7e:6b:f3:90.
  Are you sure you want to continue connecting (yes/no)? yes
  Warning: Permanently added 'router2,10.10.10.1' (RSA) to the list of known
  hosts.
  ```

After configuring the required SSH host key and obtaining a connection handle to the remote device, the event script can execute RPCs with the **jcs:execute()** extension function on that remote device. This function is described in jcs:execute() Function. To use an RPC in the event script, include the RPC in a variable declaration and execute it with the **jcs:execute()** function; the connection handle and RPC variable declaration are provided as arguments to the **jcs:execute()** function.

XSLT Syntax

```
<xsl:variable name="rpc">
  <get-interface-information/> # Junos RPC for the show interfaces command
</xsl:variable>
<xsl:variable name="out" select="jcs:execute($connection, $rpc)"/>
```

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SLAX Syntax

```
var $rpc = <get-interface-information>;
var $out = jcs:execute($connection, $rpc);
```

where **$connection** is the connection handle to the remote host. Any number of RPCs can be executed within the context of this connection handle until it is closed with the **jcs:close()** function.

Displaying the RPC Tags for a Command

To display the remote procedure call (RPC) XML tags for an operational mode command, enter **display xml rpc** after the pipe symbol (|).

The following example displays the RPC tags for the **show route** command:

```
user@host> show route | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.1I0/junos">
    <rpc>
        <get-route-information>
        </get-route-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

Using Operational Mode Commands in Event Scripts

Some operational mode commands do not have XML equivalents. If a command is not listed in the *Junos XML API Operational Developer Reference*, it does not have an XML equivalent.

Another way to determine whether a command has an XML equivalent is to issue the command followed by the **| display xml** command:

```
user@host> operational-mode-command | display xml
```

If the output includes only tag elements like **<output>**, **<cli>**, and **<banner>**, the command might not have an XML equivalent. In the following example, the output indicates that the **show host** command has no XML equivalent:

```
user@host> show host hostname | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.0R1/junos">
   <output>
       ...
    </output>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```


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NOTE: For some commands that have an XML equivalent, the output of the piped **| display xml** command does not include tag elements other than **<output>**, **<cli>**, and **<banner>** only because the relevant feature is not configured. For example, the **show services cos statistics forwarding-class** command has an XML equivalent that returns output in the **<service-cos-forwarding-class-statistics>** response tag, but if the configuration does not include include any statements at the **[edit class-of-service]** hierarchy level then there is no actual data for the **show services cos statistics forwarding-class | display xml** command to display. The output is something like this:

```
user@host> show services cos statistics forwarding-class | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/8.3I0/junos">
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

For this reason, the information in the *Junos XML API Operational Developer Reference* is normally more reliable.

An event script can include commands that have no XML equivalent. Use the **<command>**, **<xsl:value-of>**, and **<output>** elements in the script, as shown in the following code snippet. This snippet is expanded and fully described in "Example: Displaying DNS Hostname Information Using an Op Script" on page 365.

```
<xsl:variable name="query">
  <command>
    <xsl:value-of select="concat('show host ', $hostname)"/>
  </command>
</xsl:variable>
<xsl:variable name="result" select="jcs:invoke($query)"/>
<xsl:variable name="host" select="$result"/>
<output>
  <xsl:value-of select="concat('Name: ', $host)"/>
</output>
...
```

Enabling an Event Script

Event scripts are stored on a device's hard drive in the **/var/db/scripts/event** directory or on the flash drive in the **/config/scripts/event** directory. Only users in the Junos OS **super-user** login class can access and edit files in these directories. For information about setting the storage location for scripts, see "Storing Scripts in Flash Memory" on page 86.

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NOTE: If the device has dual Routing Engines and you want to enable an event script to execute on both Routing Engines, you must copy the script to the **/var/db/scripts/event** or **/config/scripts/event** directory on both Routing Engines. The **commit synchronize** command does not automatically copy scripts between Routing Engines.

You must enable an event op script before it can be executed. Include the **file *filename*** statement at the **[edit event-options events-script]** hierarchy level, specifying the name of an Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) file containing an event script. Only users who belong to the Junos **super-user** login class can enable event scripts.

```
[edit event-options event-script]
file filename;
```

The filename of an event script written in SLAX must include the **.slax** extension for the script to be enabled and executed. No particular filename extension is required for event scripts written in XSLT, but we strongly recommend that you append the **.xsl** extension.

To determine which event scripts are currently enabled on the device, use the **show** command to display the files included at the **[edit event-options event-script]** hierarchy level. To ensure that the enabled files are on the device, list the contents of the **/var/run/scripts/event/** directory using the **file list /var/run/scripts/event** operational mode command.

Executing an Event Script

When you issue the **commit** command, event scripts enabled at the **[edit event-options event-script]** hierarchy level are placed into system memory and enabled for execution. After the commit operation completes, an event script is executed in response to an event notification within an event policy. For more information, see "Executing Event Scripts in an Event Policy" on page 450.

Replacing an Event Script

You can update or replace an existing event script without changing the device's configuration or disrupting operations. Follow these steps:

1. Edit or write the new event script.
2. Copy the script to the **/var/db/scripts/event** directory on the hard drive or the **/config/scripts/event** directory on the flash drive; for information about setting the storage location for scripts, see "Storing Scripts in Flash Memory" on page 86. Only users who belong to the Junos **super-user** login class can alter files in these directories.

   NOTE: If the device has dual Routing Engines, remember to copy the script to the **/var/db/scripts/event** or **/config/scripts/event** directory on both Routing Engines. The **commit synchronize** command does not automatically copy scripts between Routing Engines.

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3. Issue the **request system scripts event-scripts reload** operational mode command.

```
user@host> request system scripts event-scripts reload
```

All event scripts are reloaded into the eventd process' memory.

Configuring Checksum Hashes for an Event Script

You can configure one or more checksum hashes that can be used to verify the integrity of an event script before the script runs on the switch, router, or security device.

To configure a checksum hash:

1. Create the script.
2. Place the script in the **/var/db/scripts/even** directory on the device.
3. Run the script through one or more hash functions to calculate hash values.

   Junos OS supports MD5, SHA-1, and SHA-256 hash functions.

```
user@host> file checksum md5 /var/db/scripts/commit/script1.slax
  MD5 (/var/db/scripts/event/script1.slax) = 3af7884eb56e2d4489c2e49b26a39a97
user@host> file checksum sha1 /var/db/scripts/commit/script1.slax
  SHA1 (/var/db/scripts/event/script1.slax) =
  00dc690fb08fb049577d012486c9a6dad34212c0
user@host> file checksum sha-256 /var/db/scripts/commit/script1.slax
  SHA256 (/var/db/scripts/event/script1.slax) =
  150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
```

4. Configure the script.

```
[edit event-options event-script]
user@host# set file script1.slax checksum
  md5 3af7884eb56e2d4489c2e49b26a39a97
[edit event-options event-script]
user@host# set file script1.slax checksum
  sha-1 00dc690fb08fb049577d012486c9a6dad34212c0
[edit event-options event-script]
user@host# set file script1.slax checksum
  sha-256 150bf53383769f3bfedd41fe73320777f208d4fda81230cb27b8738
```

   During the execution of the script, Junos OS recalculates the checksum value using the configured hash and verifies that the calculated value matches the configured value. If the values differ, the execution of the script fails. When you configure multiple checksum values with different hash algorithms, all the configured values must match the calculated values; otherwise, the script execution fails and the event policy fails.

Related Documentation

- Configuring Checksum Hashes for a Commit Script on page 177
- Configuring Checksum Hashes for an Op Script on page 345
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*

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Example: Assigning a Transfer Delay to an Event Policy Action

This section discusses three examples.

Example 1 Configure two event policies, **policy1** and **policy2**. The **policy1** event policy has a 5-second transfer-delay when uploading the **process.core** file to the **some-dest** destination. The **policy2** event policy has no transfer delay when uploading the **process.core** file to the same destination.

```
[edit event-options]
policy policy1 {
  events e1;
  then {
    upload filename process.core destination some-dest {
      transfer-delay 5;
    }
  }
}
policy policy2 {
  events e2;
  then {
    upload filename process.core destination some-dest;
  }
}
destinations {
  some-dest {
    archive-sites {
      "scp://robot@my.little.com/foo/moo" password "password";
      "scp://robot@my.big.com/foo/moo" password "password";
    }
  }
```


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```
}
```

Example 2 The **policy1** event policy has a 7-second (5 seconds + 2 seconds) transfer delay when uploading the **process.core** file to the destination. The **policy2** event policy has a 2-second transfer delay when uploading the **process.core** file to the destination.

```
[edit event-options]
policy policy1 {
  events e1;
  then {
    upload filename process.core destination some-dest {
      transfer-delay 5;
    }
  }
}
policy policy2 {
  events e2;
  then {
    upload filename process.core destination some-dest;
  }
}
destinations {
  some-dest {
    transfer-delay 2;
    archive-sites {
      "scp://robot@my.little.com/foo/moo" password "password";
      "scp://robot@my.big.com/foo/moo" password "password";
    }
  }
}
```

Example 3 The **policy1** event-policy is executed with **user1** privileges and uploads the **process.core** file after a transfer delay of 7 seconds (5 seconds + 2 seconds). The **policy2** event policy is executed with **root** privileges and uploads the **process.core** file after a transfer delay of 6 seconds (4 seconds + 2 seconds).

```
[edit event-options]
policy policy1 {
  events e1;
  then {
    upload filename process.core destination some-dest {
      transfer-delay 5;
      user-name user1;
    }
  }
}
policy policy2 {
  events e2;
  then {
    upload filename process.core destination some-dest {
      transfer-delay 4;
    }
  }
}
destinations {
  some-dest {
```

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```
        transfer-delay 2;
        archive-sites {
            "scp://robot@my.little.com/foo/moo" password "password";
            "scp://robot@my.big.com/foo/moo" password "password";
        }
    }
}
```

Example: Associating an Optional User with an Event Policy Action

Configure two event policies, **policy1** and **policy2**.

In **policy1**, associate user **user1** with the **execute-commands** action. The **execute-commands** action is executed with **user1** privileges.

In **policy2**, do not explicitly associate a user with the **event-script** action. The **event-script** action is executed with **root** privileges.

```
[edit system]
login {
    user user1 {
        class operator;
    }
}
[edit event-options]
policy p1 {
    events e1;
    then {
        execute-commands {
            commands {
                "show version";
            }
            user-name user1;
            output-filename command-output.txt;
            destination some-dest;
        }
    }
}
policy p2 {
    events e2;
    then {
        event-script script.xsl {
            output-filename event-script-output.txt;
            destination some-dest;
        }
    }
}
```


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Example: Controlling Event Policy Using a Regular Expression

The following policy is executed only if the **interface-name** attribute in both traps (**SNMP_TRAP_LINK_DOWN** and **SNMP_TRAP_LINK_UP**) match each other and the **interface-name** attribute in the **SNMP_TRAP_LINK_DOWN** trap starts with letter *t*. This means the policy is executed only for T1 (**t1-**) and T3 (**t3-**) interfaces. The policy is not executed when the **eventd** process receives traps from other interfaces.

NOTE: In system log files, the message tags appear in all uppercase letters. In the command-line interface (CLI), the message tags appear in all lowercase letters.

```
[edit event-options]
policy pol6 {
   events snmp_trap_link_down;
   within 120 events snmp_trap_link_up;
   attributes-match {
      snmp_trap_link_up.interface-name equals snmp_trap_link_down.interface-name;
      snmp_trap_link_down.interface-name matches "^t";
   }
   then {
      execute-commands {
         commands {
            "show interfaces {$$.interface-name}";
            "show configuration interfaces {$$.interface-name}";
         }
         output-filename config.txt;
         destination bsd2;
         output-format text;
      }
   }
}
```

Example: Correlating Events Based on Event Attributes

In the following policy, the two events are correlated only if two of their parameter values match. Matching on attributes of both events ensures that the two events are related. In this case, the interface addresses must match and the physical interface (ifd) names must match.

The **RPD_KRT_IFDCHANGE** error occurs when the routing protocol process (rpd) sends a request to the kernel to change the state of an interface and the request fails. The **RPD_RDISC_NOMULTI** error occurs when an interface is configured for router discovery but the interface does not support IP multicast operations as required.

In this example, **RPD_RDISC_NOMULTI.interface-name** might be **so-0/0/0.0**, and **RPD_KRT_IFDCHANGE.ifd-index** might be **so-0/0/0**.

```
[edit event-options]
policy 1 {
   events rpd_rdisc_nomulti;
   within 500 events rpd_krt_ifdchange;
   attributes-match {
```

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```
        rpd_rdisc_nomulti.interface-address equals rpd_krt_ifdchange.address;
        rpd_rdisc_nomulti.interface-name starts-with rpd_krt_ifdchange.ifd-index;
    }
    then {
        ... actions ...
    }
}
```

Example: Correlating Events Based on Receipt of Other Events Within a Specified Time Interval

In the following policy, a set of commands is issued and the output is logged and saved to a given location. The policy is executed if ***event3***, ***event4***, or ***event5*** occurs within 60 seconds after ***event1*** or ***event2*** occurs. The pseudocode for the policy is as follows:

```
if this event is (event3 or event4 or event5)
    and
    (event1 or event2 has been received within the last 60 seconds)
then {
    run a set of commands;
    log the output of these commands to a location;
}
```

Specify two archive sites in the configuration. The device attempts to transfer to the first archive site in the list, moving to the next site only if the transfer fails.

```
[edit event-options]
policy 1 {
    events [ event3 event4 event5 ];
    within 60 events [ event1 event2 ];
    then {
        execute-commands {
            commands {
                "command";
            }
            output-filename my_cmd_out;
            destination policy-1-command-dest;
        }
    }
}
destinations {
    policy-1-command-dest {
        archive-sites {
            scp://robot@my.big.com/a/b;
            scp://robot@my.little.com/a/b;
        }
    }
}
```

Example: Generating an Internal Event

The following two examples generate an internal event. In the first example, the configuration generates an internal event every hour. In the second example, the configuration generates an event every night at midnight.

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In the following example, the internal event called **EVERY-ONE-HOUR** is generated every hour (3600 seconds). If 3601 seconds pass and the event has not been generated, certain actions are taken.

```
[edit event-options]
generate-event every-one-hour time-interval 3600;
policy check-heartbeat {
   events every-one-hour;
   within 3601 not events every-one-hour;
   then {
      ... actions ...
   }
}
```

In the following example, the internal event called **IT-IS-MIDNIGHT** is generated at 12:00 AM every night (00:00:00). When the eventd process receives the **IT-IS-MIDNIGHT** event, certain actions are taken.

```
[edit event-options]
generate-event it-is-midnight time-of-day 00:00:00;
policy midnight-chores {
   events it-is-midnight;
   then {
      ... actions ...
   }
}
```

Example: Ignoring Events Based on Receipt of Other Events

In the following policy, if any of ***event1***, ***event2***, or ***event3*** has occurred, and either ***event4*** or ***event5*** has occurred within the last 600 seconds, and ***event6*** has not occurred within the last 800 seconds, then the event that triggered the policy (***event1***, ***event2***, or ***event3***) is ignored, meaning system log messages are not created.

```
[edit event-options]
policy 1 {
   events [ event1 event2 event3 ];
   within 600 events [ event4 event5 ];
   within 800 not events event6;
   then {
      ignore;
   }
}
```

Sometimes events are generated repeatedly within a short period of time. In this case, it is redundant to execute a policy multiple times, once for each instance of the event. Event dampening allows you to slow down the execution of policies by ignoring instances of an event that occur within a specified time after another instance of the same event.

In the following example, an action is taken only if the eventd process has not received another instance of the event within the past 60 seconds. If an instance of the event has been received within the last 5 seconds, the policy is not executed and a system log message for the event is not created again.

```
[edit event-options]
policy dampen-policy {
   events event1;
   within 60 events event1;
```

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```
    then {
      ignore;
    }
  }
  policy policy {
    events event1;
    then {
      ... actions ...
    }
  }
```

Example: Limiting Event Script Output Based on a Specific Event Type

In situations where an event policy is triggered by multiple event types, you can limit the number of events that trigger the event script. For example, the following event policy triggers the **event-details.slax** event script whenever a **ui_login_event** or **ui_logout_event** occurs.

```
event-options {
  policy event-detail {
    events [ ui_login_event ui_logout_event ];
    then {
      event-script event-details.slax {
        output-filename systemlog;
        destination /tmp;
      }
    }
  }
}
```

The **event-details.slax** event script writes a log file only when the **ui_login_event** event occurs.

```
version 1.0;
ns junos = "http://xml.juniper.net/junos/*/junos";
ns xnm = "http://xml.juniper.net/xnm/1.1/xnm";
ns jcs = "http://xml.juniper.net/junos/commit-scripts/1.0";
ns ext = "http://xmlsoft.org/XSLT/namespace";

var $event-definition = {
  <event-options> {
    <policy> {
      <namex> "event-detail";
      <eventsx> "ui_login_event";
      <thenx> {
        <event-scriptx> {
          <namex> "event_detail.slax";
          <output-filenamex> "foo";
          <destinationx> {
            <namex> "foo";
          }
        }
      }
    }
  }
}
```


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```
match / {
  <event-script-resultsx> {
    <event-triggered-this-policyx> {
      expr event-script-input/trigger-event/id;
    }
    <type-of-eventx> {
      expr event-script-input/trigger-event/type;
    }
    <process-namex> {
      expr event-script-input/trigger-event/attribute-list/attribute/name;
    }
  }
}
```

Example: Raising an SNMP Trap in Response to an Event

Raise a trap and execute an associated event script in response to an event:

```
[edit event-options]
policy p1 {
  events ui_mgd_terminate;
  then {
    raise-trap;
    event-script bgp.xsl {
      arguments {
        destination {$ui_mgd_terminate.destination};
        code 2;
      }
      output-filename bgp-out;
      destination bsd3;
    }
  }
}
```

Example: Representing the Correlating Event in an Event Policy

```
[edit event-options]
policy p1 {
  events [ e1 e2 e3 ];
  within 60 events [ e4 e5 e6 ];
  then {
    execute-commands {
      commands {
        "show interfaces {$$.interface-name}";
        "show interfaces {$e4.interface-name}";
        "show interfaces {$*.interface-name}";
      }
      output-filename command-output.txt;
      destination some-dest;
    }
  }
}
```

In the **show interfaces {$$.interface-name}** command, the value of the **interface-name** attribute of event **e1**, **e2**, or **e3** is substituted for the **{$$.interface-name}** variable.

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In the **show interfaces {$e4.interface-name}** command, the value of the **interface-name** attribute of the most recent **e4** event is substituted for the **{$e4.interface-name}** variable.

In the **show interfaces {$*.interface-name}** command, the value of the **interface-name** attribute of the most recent **e4**, **e5**, or **e6** event is substituted for the **{$*.interface-name}** variable. If one of **e4**, **e5**, or **e6** occurs within 60 seconds of **e1**, **e2**, or **e3**, the value of the **interface-name** attribute for that correlating event (**e4**, **e5**, or **e6**) is substituted for the **{$*.interface-name}** variable. If the correlating event does not have an **interface-name** attribute, the software does not execute the **show interfaces {$*.interface-name}** command.

If both **e4** and **e5** occur within 60 seconds of **e1**, then the value of the **interface-name** attribute for **e4** is substituted for the **{$*.interface-name}** variable. This is because the event process (eventd) searches for correlating events in sequential order as configured in the **within** statement. In this case, the order is **e4** > **e5** > **e6**.

Example: Retrying the File Upload Action

This section discusses two examples.

Example 1 Configure a policy that retries the file upload operation two times with a time interval of 5 seconds between retries:

```
event-options {
  policy p1 {
    events e1;
    then {
      execute-commands {
        commands {
          command1;
        }
        output-filename command-output.txt;
        destination some-dest {
          retry-count 2 retry-interval 5;
        }
      }
    }
  }
}
```

Example 2 Configure a transfer delay of 10 seconds and retry the file upload operation two times with a time interval of 5 seconds between retries:

```
event-options {
  policy p2 {
    events e1;
    then {
      execute-commands {
        commands {
          command1;
        }
        output-filename command-output.txt;
        destination some-dest {
          retry-count 2 retry-interval 5;
          transfer-delay 10;
```


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```
        }
      }
    }
  }
}
```

The transfer delay is in operation for the first upload attempt only. The policy uploads the **command-output.txt** file after a 10-second transfer delay. If the event process (eventd) detects failure of the upload operation, eventd retries the upload operation after 5 seconds. The failure detection time can be in the range from 60 to 90 seconds, depending on the transmission protocol, such as FTP.

The following sequence describes the file upload operation with two failed retransmissions:

1. Policy triggers upload operation.
2. Transmission delay of 10 seconds.
3. Policy tries to upload the output file.
4. Policy detects transmission failure.
5. Retry interval of 5 seconds.
6. Policy tries to upload the output file.
7. Policy detects transmission failure.
8. Retry interval of 5 seconds.
9. Policy tries to upload the output file.
10. Policy detects transmission failure.
11. Policy declares the failure of the file upload operation.

Example: Triggering a Policy Based on Event Count

This section discusses two examples.

NOTE: The RADIUS_LOGIN_FAIL, TELNET_LOGIN_FAIL, and SSH_LOGIN_FAIL events are not actual Junos OS events. They are illustrative for these examples.

Example 1 Configure an event policy called **login**. The **login** policy is executed if five login failure events (**RADIUS_LOGIN_FAIL**, **TELNET_LOGIN_FAIL**, or **SSH_LOGIN_FAIL**) are generated within 120 seconds. Take action by executing the **login-fail.xsl** event script, which disables the user account.

```
[edit event-options]
policy login {
  events [ RADIUS_LOGIN_FAIL TELNET_LOGIN_FAIL SSH_LOGIN_FAIL ];
  within 120 {
    trigger after 4;
  }
```

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```
    then {
      event-script login-fail.xsl {
        destination some-dest;
      }
    }
  }
```

Table 25 on page 484 shows how events add to the count.

Table 25: Event Count Triggers Policy

Event Number	Event	Time	Count	Order
1	RADIUS_LOGIN_FAIL	00:00:00	1	[1]
2	TELNET_LOGIN_FAIL	00:00:20	2	[1 2]
3	RADIUS_LOGIN_FAIL	00:02:05	2	[2 3]
4	SSH_LOGIN_FAIL	00:02:40	2	[3 4]
5	TELNET_LOGIN_FAIL	00:02:55	3	[3 4 5]
6	TELNET_LOGIN_FAIL	00:03:01	4	[3 4 5 6]
7	RADIUS_LOGIN_FAIL	00:03:55	5	[3 4 5 6 7]

The columns in Table 25 on page 484 mean the following:

- Event number—Event sequence number.
- Event—Policy login events received by the event process (eventd).
- Time—Time (in ***hh:mm:ss*** format) when eventd receives the event.
- Count—The number of events received by eventd within the last 120 seconds.
- Order—Order of events as received by eventd within the last 120 seconds.

At time 00:03:55, the value of count is more than 4; therefore, the **login** policy executes the **login-fail.xsl** script.

Example 2 Configure an event policy called **login**. The **login** policy is executed if five login failure events (**RADIUS_LOGIN_FAIL**, **TELNET_LOGIN_FAIL**, or **SSH_LOGIN_FAIL**) are generated within 120 seconds from username **roger**. Take action by executing the **login-fail.xsl** event script, which disables the **roger** user account.

```
[edit event-options]
policy p2 {
  events [ RADIUS_LOGIN_FAIL TELNET_LOGIN_FAIL SSH_LOGIN_FAIL ];
  within 120 {
    trigger after 4;
  }
  attributes-match {
    RADIUS_LOGIN_FAIL.username matches roger;
    TELNET_LOGIN_FAIL.username matches roger;
```


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```
    }
    then {
      event-script login-fail.xsl {
        destination some-dest;
      }
    }
  }
```

Example: Using Nonstandard System Log Messages to Trigger an Event Policy

Reference a **KERNEL** system log message in an event policy. The **raise-trap** action in the **then** statement is executed only if a **KERNEL** event containing a message that matches "exited on signal 11" occurs.

```
[edit event-options]
policy kernel-policy {
  events KERNEL;
  attributes-match {
    KERNEL.message matches "exited on signal 11";
  }
  then {
    raise-trap;
  }
}
```

Summary of Event Policy Configuration Statements

- archive-sites on page 487
- arguments on page 488
- attributes-match on page 489
- change-configuration on page 490
- commands (Event Policy Change Configuration) on page 491
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- commit-options on page 493
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- execute-commands on page 501
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- generate-event on page 502
- ignore on page 502
- matches on page 503

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- not on page 503
- output-filename on page 504
- output-format on page 505
- policy on page 506
- priority-override on page 508
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- retry-count on page 510
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- starts-with on page 512
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- transfer-delay on page 518
- trigger on page 519
- within on page 520
- upload on page 521
- user-name on page 522

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archive-sites

Syntax

```
archive-sites {
  url <password password>;
}
```

Hierarchy Level [edit event-options destinations *destination-name*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Specify an archive site to which files are transferred. If you specify more than one archive site, the device attempts to transfer to the first archive site in the list, moving to the next site only if the transfer fails.

Options ***url***—The archive destination specified as a file URI, an active or passive FTP URI, or a Secure Copy (SCP) URI. Local device directories are also supported (for example, **/var/tmp/**).

file:<//host>/path

ftp://username@host:<port>url-path

pasvftp://username@host:<port>url-path

scp://username@host:<port>url-path

<path>/<filename>

password *password*—A plain-text password required for login into the archive site.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Example: Defining Destinations for File Archiving by Event Policies on page 421
- destinations on page 495

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arguments

Syntax

```
arguments {
  argument-name argument-value;
}
```

Hierarchy Level [edit event-options policy *policy-name* then event-script *filename*]

Release Information Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define command-line arguments for an event script that is invoked from an event policy.

Options ***argument-name***—Name of the argument.

argument-value—Value of the argument.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Executing Event Scripts in an Event Policy on page 450
- event-script on page 499
- policy on page 506

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attributes-match

Syntax

```
attributes-match {
  event1.attribute-name equals event2.attribute-name;
  event.attribute-name matches regular-expression;
  event1.attribute-name starts-with event2.attribute-name;
}
```

Hierarchy Level [edit event-options policy *policy-name*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Execute the policy only if the attributes of two events are correlated or if the attribute of one event matches a regular expression.

If the **attributes-match** statement includes the **equals** or **starts-with** options, or if it includes a **matches** option that includes a clause for an event that is not specified at the **[edit event-options policy *policy-name* events]** hierarchy level, you must include one or more **within** statements in the same policy configuration.

Starting with Junos OS Release 11.1, you can include event policy variables within the statement to differentiate between a trigger event attribute and a correlated event attribute. You can use variables of the following forms:

- **{$$.*attribute-name*}**—The double dollar sign ($$) notation represents the event that is triggering a policy. When combined with an attribute name, the variable is replaced by the value of the attribute of the triggering event.
- **{$*event.attribute-name*}**—The dollar sign with the event name ($*event*) notation represents the most recent event that matches the specified event. The variable is replaced by the value of the attribute of the most recent event that matches ***event***.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413
- Using Regular Expressions to Refine the Set of Events That Trigger a Policy on page 417
- equals on page 496
- matches on page 503
- starts-with on page 512
- within on page 520

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change-configuration

Syntax

```
change-configuration {
  commands {
    "command";
  }
  commit-options {
    check <synchronize>;
    force;
    log "comment-string";
    synchronize;
  }
  retry count number interval seconds;
  user-name username;
}
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 12.1.

Description When the associated event policy is invoked, update the candidate configuration using Junos OS configuration mode commands, and commit the changes.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Change the Configuration on page 436
- commands (Event Policy Change Configuration) on page 491
- commit-options on page 493
- retry on page 509
- user-name on page 522

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commands (Event Policy Change Configuration)

Syntax

```
commands {
  "command";
}
```

Hierarchy Level [edit event-options policy *policy-name* then change-configuration]

Release Information Statement introduced in Junos OS Release 12.1.

Description Specify the configuration mode commands to be issued on receipt of an event. Within an event policy, on receipt of the specified event or events, the event process (eventd) invokes the configured commands to update the candidate configuration, which is then committed, provided that no commit errors occur. The eventd process executes the configuration commands in the order in which they appear in the event policy configuration.

Options *command*—Configuration mode command to be executed. Enclose each command in quotation marks (**" "**), and specify the complete statement path to the element, identifier, or value as you do in configuration mode when issuing commands at the **[edit]** hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Change the Configuration on page 436
- change-configuration on page 490
- commit-options on page 493
- retry on page 509
- user-name on page 522

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commands (Event Policy Execute Commands)

Syntax

```
commands {
  "command";
}
```

Hierarchy Level [edit event-options policy *policy-name* then execute-commands]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Specify an operational mode command to be issued on receipt of an event.

Options ***command***—Command to be issued. Enclose each command in quotation marks (“ ”). The event process (eventd) issues the commands in the order in which they appear in the configuration.

You can include variables in commands. The eventd process replaces each variable with values contained in the event that triggers the policy. You can use command variables of the following forms:

- **{$$.*attribute-name*}**—The double dollar sign (**$$**) notation represents the event that is triggering a policy. When combined with an attribute name, the command variable is replaced by the value of the attribute name of the triggering event.
- **{$*event*.*attribute-name*}**—The dollar sign with the event name (**$*event***) notation represents the most recent event that matches the specified event. The variable is replaced by the value of the attribute name of the most recent event that matches ***event***.
- **{$*.*attribute-name*}**—The dollar sign with the asterisk (**$***) notation represents the most recent event that matches any of the correlating events. The variable is replaced by the value of the attribute name of the most recent event that matches any of the events specified in the policy configuration.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Representing the Correlating Event in an Event Policy on page 416

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commit-options

Syntax

```
commit-options {
  check <synchronize>;
  force;
  log "comment-string";
  synchronize;
}
```

Hierarchy Level [edit event-options policy *policy-name* then change-configuration]

Release Information Statement introduced in Junos OS Release 12.1.

Description Customize the commit options for configuration updates made through an event policy. The **check** statement and the other **commit-options** statements are mutually exclusive.

Options

check <synchronize>—Verify that the candidate configuration is syntactically correct, but do not commit the changes. On dual control plane systems, when the **check synchronize** statement is configured, the candidate configuration on one control plane is copied to the other control plane, and the system verifies that both candidate configurations are syntactically correct. The **check** statement and the other **commit-options** statements are mutually exclusive.

force—Force the commit on the other Routing Engine, ignoring any warnings. By default, the **synchronize** command does not work if the responding Routing Engine has uncommitted configuration changes. However, you can enforce commit synchronization on the Routing Engines by using the **force** option.

log "*comment-string*"—Include a comment describing changes to the committed configuration. Enclose the comment in quotation marks and include it on a single line. To view commit comments, issue the **show system commit** operational mode command.

synchronize—Synchronize the commit on both Routing Engines. The Routing Engine on which you execute this command copies and loads its candidate configuration to the other Routing Engine. Both Routing Engines perform a syntax check on the candidate configuration file. If no errors are found, the configuration is activated and becomes the current operational configuration on both Routing Engines.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Change the Configuration on page 436
- change-configuration on page 490
- commands (Event Policy Change Configuration) on page 491
- retry on page 509
- user-name on page 522

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destination

Syntax

```
destination destination-name {
    retry-count count retry-interval seconds;
    transfer-delay seconds;
}
```

Hierarchy Level

[edit event-options policy *policy-name* then event-script *filename*],
[edit event-options policy *policy-name* then execute-commands]

Release Information

Statement introduced in Junos OS Release 7.5.
Support extended to the **[edit event-options policy *policy-name* then event-script *filename*]** hierarchy level in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description

Assign a location to which to upload command or script output for the specified policy.

Options

destination-name—Name of a destination defined in the **destinations** statement at the **[edit event-options]** hierarchy level.

The remaining statements are explained separately.

Required Privilege Level

maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Executing Event Scripts in an Event Policy on page 450
- destinations on page 495

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destinations

Syntax

```
destinations {
  destination-name {
    archive-sites {
      url <password password>;
    }
    transfer-delay seconds;
  }
}
```

Hierarchy Level [edit event-options]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define one or more destinations, each with a unique name and other attributes. You can use the destination as a storage location for command output and for various files, such as system log files and core files.

Options ***destination-name***—Name of a destination.

The remaining statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Example: Defining Destinations for File Archiving by Event Policies on page 421

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equals

Syntax *event1.attribute-name* equals *event2.attribute-name*;

Hierarchy Level [edit event-options policy *policy-name* attributes-match]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Execute the policy only if the specified attribute of ***event1*** equals the specified attribute of ***event2***.

Options ***event1.attribute-name***—Attribute of one event.

event2.attribute-name—Attribute of another event.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413

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event-options

Syntax

```
event-options {
  destinations {
    destination-name {
      archive-sites {
        url <password password>;
      }
      transfer-delay seconds;
    }
  }
  event-script {
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      refresh;
      refresh-from url;
      remote-execution {
        remote-hostname {
          passphrase user-password;
          username user-login;
        }
      }
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  generate-event event-name {
    time-interval seconds;
    time-of-day hh:mm:ss;
  }
  policy policy-name {
    attributes-match {
      event1.attribute-name equals event2.attribute-name;
      event.attribute-name matches regular-expression;
      event1.attribute-name starts-with event2.attribute-name;
    }
    events [events];
    then {
      change-configuration {
        commands {
          "command";
        }
        commit-options {
          check <synchronize>;
          force;
          log "comment-string";
          synchronize;
        }
```

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```
        retry count number interval seconds;
        user-name username;
      }
      event-script filename {
        arguments {
          argument-name argument-value;
        }
        destination destination-name {
          retry-count number retry-interval seconds;
          transfer-delay seconds;
        }
        output-filename filename;
        output-format (text | xml);
        user-name name;
      }
      execute-commands {
        commands {
          "command";
        }
        destination destination-name {
          retry-count count retry-interval seconds;
          transfer-delay seconds;
        }
        output-filename filename;
        output-format (text | xml);
        user-name username;
      }
      ignore;
      priority-override {
        facility facility-type;
        severity severity-level;
      }
      raise-trap;
      upload filename (filename | committed) destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
        user-name username;
      }
    }
    within seconds {
      events [ events ];
      not events [ events ];
      trigger (after number | on number | until number);
    }
  }
  traceoptions {
    file filename <files number> <size size> <world-readable | no-world-readable>;
    flag flag;
  }
}
```

Hierarchy Level [edit]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

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Description Configure event policies.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

event-script

Syntax

```
event-script filename {
  arguments {
    argument-name argument-value;
  }
  destination destination-name {
    retry-count count retry-interval seconds;
    transfer-delay seconds;
  }
  output-filename filename;
  output-format (text | xml);
  user-name username;
}
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description On receipt of an event, specify operational mode commands to be issued, the format of the command output, and a name and destination for the output file.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Executing Event Scripts in an Event Policy on page 450

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events (Associating Events with a Policy)

Syntax events [*events*];

Hierarchy Level [edit event-options policy *policy-name*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Create a list of events that trigger this policy. If one or more of the listed events occurs, the policy is executed.

Options **[*events*]**—List of events. Events can be internally generated, or they can be generated by Junos OS processes.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using Correlated Events to Trigger an Event Policy on page 413
- Example: Correlating Events Based on Event Attributes on page 477

events (Correlating Events with Each Other)

Syntax events [*events*];

Hierarchy Level [edit event-options policy *policy-name* within *seconds*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Create a list of events that must occur within a specified time interval for the policy to be triggered.

Options **[*events*]**—List of events. Events can be internally generated, or they can be generated by Junos OS processes.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using Correlated Events to Trigger an Event Policy on page 413

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execute-commands

Syntax

```
execute-commands {
  commands {
    "command";
  }
  destination destination-name {
    retry-count count retry-interval seconds;
    transfer-delay seconds;
  }
  output-filename filename;
  output-format (text | xml);
  user-name username;
}
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description On receipt of an event, specify operational mode commands to be issued, the format of the command output, and a name and destination for the output file.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Execute Operational Mode Commands on page 433

facility

Syntax facility *facility-type*;

Hierarchy Level [edit event-options policy *policy-name* then priority-override]

Release Information Statement introduced in Junos OS Release 12.1.

Description Within an event policy, override the default facility type of the triggering event so that the event is logged based on the configured facility type.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring the System Log Priority of the Triggering Event in an Event Policy on page 457
- *Junos OS System Logging Facilities and Message Severity Levels*
- priority-override on page 508
- severity on page 511

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generate-event

Syntax

```
generate-event event-name {
  time-interval seconds;
  time-of-day hh:mm:ss;
}
```

Hierarchy Level [edit event-options]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Generate an internal event, based on a time interval or the time of day. You can configure up to 10 internal events.

Options ***event-name***—Name of an internally generated event.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Generating Internal Events to Trigger Event Policies on page 419
- time-interval on page 514
- time-of-day on page 515

ignore

Syntax

```
ignore;
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define a policy that ignores particular events. If one or more of the listed events occur, a system log message for the event is not generated, and no further policies associated with this event are processed. If you include the **ignore** statement in a policy configuration, you cannot configure any other actions in the policy.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring Event Policies to Ignore an Event on page 455

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matches

Syntax *event.attribute-name* matches *regular-expression*;

Hierarchy Level [edit event-options policy *policy-name* attributes-match]

Release Information Statement introduced in Junos OS Release 7.5.

Description Execute the policy only if the specified attribute of ***event*** matches a regular expression.

Options ***event.attribute-name***—Event attribute to compare to a regular expression.

regular-expression—Regular expression to compare.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413
- Using Regular Expressions to Refine the Set of Events That Trigger a Policy on page 417

not

Syntax not events [*events*];

Hierarchy Level [edit event-options policy *policy-name* within *seconds*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Create a list of events that must not occur within the specified time interval for the policy to be triggered.

Options **[*events*]**—List of events. Events can be internally generated, or they can be generated by Junos OS processes.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413

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output-filename

Syntax output-filename *filename*;

Hierarchy Level [edit event-options policy *policy-name* then event-script *filename*],
[edit event-options policy *policy-name* then execute-commands]

Release Information Statement introduced in Junos OS Release 7.5.
Support at the **[edit event-options policy *policy-name* then event-script *filename*]** hierarchy level introduced in Junos OS Release 7.6.

Description Assign a filename to which to write command or script output for the specified commands or script. For op scripts, this statement is optional.

Options ***filename***—Name of a file in which to write command or script output.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Executing Event Scripts in an Event Policy on page 450

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output-format

Syntax output-format (text | xml);

Hierarchy Level [edit event-options policy *policy-name* then event-script *filename*],
[edit event-options policy *policy-name* then execute-commands]

Release Information Statement introduced in Junos OS Release 7.5.
Support at the **[edit event-options policy *policy-name* then event-script *filename*]** hierarchy level introduced in Junos OS Release 8.3.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Specify the format (ASCII text or XML) for the output of the specified commands or script.

Options **text**—Formatted ASCII text.

xml—Junos Extensible Markup Language (XML) tags.

Default: **xml** at the **[edit event-options policy *policy-name* then execute-commands]** hierarchy level and **text** at the **[edit event-options policy *policy-name* then event-script *filename*]** hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Executing Event Scripts in an Event Policy on page 450

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policy

Syntax

```
policy policy-name {
  attributes-match {
    event1.attribute-name equals event2.attribute-name;
    event.attribute-name matches regular-expression;
    event1.attribute-name starts-with event2.attribute-name;
  }
  events [ events ];
  then {
    ... the then subhierarchy appears at the end of the [edit event-options policy policy-name]
      hierarchy level ...
  }
  within seconds {
    events [ events ];
    not events [ events ];
    trigger (on | after | until) event-count;
  }

  then {
    change-configuration {
      commands {
        "command";
      }
      commit-options {
        check <synchronize>;
        force;
        log "comment-string";
        synchronize;
      }
      retry count number interval seconds;
      user-name username;
    }
    event-script filename {
      arguments {
        argument-name argument-value;
      }
      destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
      }
      output-filename filename;
      output-format (text | xml);
      user-name username;
    }
    execute-commands {
      commands {
        "command";
      }
      destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
      }
      output-filename filename;
```


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```
        output-format (text | xml);
        user-name username;
      }
      ignore;
      priority-override {
        facility facility-type;
        severity severity-level;
      }
      raise-trap;
      upload filename (filename | committed) destination destination-name {
        retry-count count retry-interval seconds;
        transfer-delay seconds;
        user-name username;
      }
    }
}
```

Hierarchy Level [edit event-options]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define an event policy to be processed by the eventd process. If you configure a policy, the **events** and **then** statements are mandatory.

You can configure multiple policies to be processed for an event. The policies are executed in the order in which they appear in the configuration. If you configure more than one policy for an event, and if one of the policies is to ignore the event, no policies that follow the **ignore** statement are executed.

Default If you do not configure a policy for an event, the event is recorded in the system log.

Options *policy-name*—Name of an event policy.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

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priority-override

Syntax

```
priority-override {
  facility facility-type;
  severity severity-level;
}
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 12.1.

Description Within an event policy, override the default system log priority of the triggering event so that the system logs the event with a different facility type, severity level, or both. If you configure multiple event policies to override the priority of the same event, the event is logged based on the priority set by the last executed event policy to change it.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring the System Log Priority of the Triggering Event in an Event Policy on page 457
- *Junos OS System Logging Facilities and Message Severity Levels*
- facility on page 501
- severity on page 511

raise-trap

Syntax

```
raise-trap;
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 8.1.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define a policy that raises an SNMP trap in response to an event. If one or more of the listed events occur, the system log message for the event is converted into a trap. This enables an agent to notify a trap-based network management system (NMS) of significant events.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring Event Policies to Raise SNMP Traps on page 457

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retry

Syntax retry count *number* interval *seconds*;

Hierarchy Level [edit event-options policy *policy-name* then change-configuration]

Release Information Statement introduced in Junos OS Release 12.1.

Description Specify the number of times that Junos OS attempts the **change-configuration** event policy action if the initial attempt fails while acquiring a lock on the configuration database. If you include the **retry** statement, you must configure both the **count** and **interval** statements.

Default If you do not include the **retry** statement, and the **change-configuration** event policy action fails, the configuration changes specified in the event policy are not implemented or committed.

Options

count *number*—The number of attempts to retry the **change-configuration** event policy action upon failure of the initial attempt.

Range: 0 through 10

Default: 0

interval *seconds*—The time interval specified in seconds between retry attempts.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring an Event Policy to Change the Configuration on page 436
- change-configuration on page 490
- commands (Event Policy Change Configuration) on page 491
- commit-options on page 493
- user-name on page 522

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retry-count

Syntax retry-count *number* retry-interval *seconds*;

Hierarchy Level
[edit event-options policy *policy-name* then event-script *filename*
destination *destination-name*],
[edit event-options policy *policy-name* then execute-commands
destination *destination-name*],
[edit event-options policy *policy-name* then upload filename (*filename* | committed)
destination *destination-name*]

Release Information Statement introduced in Junos OS Release 8.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Configure an event policy to retry a file upload operation if the first attempt fails.

Default If you do not include this statement, the file upload operation is attempted one time only.

Options ***number***—Number of retries.

retry-interval *seconds*—Length of time to wait between retries.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Configuring an Event Policy to Retry the File Upload Action on page 432

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severity

Syntax severity *severity-level*;

Hierarchy Level [edit event-options policy *policy-name* then priority-override]

Release Information Statement introduced in Junos OS Release 12.1.

Description Within an event policy, override the preassigned severity level of a triggering event so that the event is logged based on the configured severity level. Table 26 on page 511 lists the possible severity levels.

Table 26: System Log Message Severity Levels

Severity Level	Description
emergency	System panic or other conditions that cause the routing platform to stop functioning
alert	Conditions that require immediate correction, such as a corrupted system database
critical	Critical conditions, such as hard drive errors
error	Error conditions that generally have less serious consequences than errors in the emergency, alert, and critical levels
warning	Conditions that warrant monitoring
notice	Conditions that are not errors but might warrant special handling
info	Events or non-error conditions of interest

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring the System Log Priority of the Triggering Event in an Event Policy on page 457
- *Junos OS System Logging Facilities and Message Severity Levels*
- facility on page 501
- priority-override on page 508

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starts-with

Syntax *event1.attribute-name* starts-with *event2.attribute-name*;

Hierarchy Level [edit event-options policy *policy-name* attributes-match *event1.attribute-name*]

Release Information Statement introduced in Junos OS Release 7.5.

Description Execute the policy only if the specified attribute of ***event1*** starts with the specified attribute of ***event2***.

Options ***event1.attribute-name***—Attribute of one event.

event2.attribute-name—Attribute of another event.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413

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then

Syntax

```
then {
  change-configuration {
    commands {
      "command";
    }
    commit-options {
      check <synchronize>;
      force;
      log "comment-string";
      synchronize;
    }
    retry count number interval seconds;
    user-name username;
  }
  event-script filename {
    arguments {
      argument-name argument-value;
    }
    destination destination-name {
      retry-count count retry-interval seconds;
      transfer-delay seconds;
    }
    output-filename filename;
    output-format (text | xml);
    user-name username;
  }
  execute-commands {
    commands {
      "command";
    }
    destination destination-name {
      retry-count count retry-interval seconds;
      transfer-delay seconds;
    }
    output-filename filename;
    output-format (text | xml);
    user-name username;
  }
  ignore;
  priority-override {
    facility facility-type;
    severity severity-level;
  }
  raise-trap;
  upload filename (filename | committed) destination destination-name {
    retry-count count retry-interval seconds;
    transfer-delay seconds;
    user-name username;
  }
}
```

Hierarchy Level [edit event-options policy *policy-name*]

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Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define actions to take if an event occurs. For each policy, you can configure multiple actions.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Example: Configuring an Event Policy to Upload Files on page 424
- Configuring an Event Policy to Execute Operational Mode Commands on page 433
- Executing Event Scripts in an Event Policy on page 450
- Configuring Event Policies to Ignore an Event on page 455
- Configuring Event Policies to Raise SNMP Traps on page 457

time-interval

Syntax time-interval *seconds*;

Hierarchy Level [edit event-options generate-event *event-name*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Configure a frequency at which to generate a particular event.

Options ***seconds***—Time interval between internally generated events.
Range: 60 through 2,592,000 seconds

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Generating Internal Events to Trigger Event Policies on page 419
- generate-event on page 502
- time-of-day on page 515

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time-of-day

Syntax time-of-day *hh*:*mm*:*ss*;

Hierarchy Level [edit event-options generate-event *event-name*]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Configure a time of day at which to generate a particular event.

Options ***hh*:*mm*:*ss***—Time of day at which to generate an event.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Generating Internal Events to Trigger Event Policies on page 419
- generate-event on page 502
- time-interval on page 514

traceoptions

Syntax

```
traceoptions {
  file <filename> <files number> <match regular-expression> <size size> <world-readable |
    no-world-readable>;
  flag flag;
  no-remote-trace;
}
```

Hierarchy Level [edit event-options]

Release Information Statement introduced in Junos OS Release 7.5.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define tracing operations for event policies.

Default If you do not include this statement, no event-policy-specific tracing operations are performed.

Options ***filename***—Name of the file to receive the output of the tracing operation. All files are placed in the directory **/var/log**. By default, commit script process tracing output is placed in the file **eventd**. If you include the **file** statement, you must specify a filename. To retain the default, you can specify **eventd** as the filename.

files ***number***—(Optional) Maximum number of trace files. When a trace file named ***trace-file*** reaches its maximum size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the **size** option and a filename.

Range: 2 through 1000

Default: 3 files

flag—Tracing operation to perform. To specify more than one tracing operation, include multiple **flag** statements. You can include the following flags:

- **all**—Log all operations
- **configuration**—Log reading of configuration at the **[edit event-options]** hierarchy level
- **events**—Log eventd processing
- **database**—Log events involving storage and retrieval in events database
- **server**—Log communication with processes that are generating events
- **timer-events**—Log internally generated events

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match *regular-expression*—(Optional) Refine the output to include lines that contain the regular expression.

no-world-readable—Restrict file access to owner. This is the default.

size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named ***trace-file*** reaches this size, it is renamed and compressed to ***trace-file*.0.gz**. When the ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you also must specify a maximum number of trace files with the **files** option and filename.

Syntax: ***x*k** to specify KB, ***x*m** to specify MB, or ***x*g** to specify GB

Range: 10 KB through 1 GB

Default: 128 KB

world-readable—(Optional) Enable unrestricted file access.

Required Privilege Level

maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Tracing Event Policy Processing on page 532

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transfer-delay

Syntax transfer-delay *seconds*;

Hierarchy Level
[edit event-options destinations *destination-name*],
[edit event-options policy *policy-name* then event-script *filename* destination *destination-name*],
[edit event-options policy *policy-name* then execute-commands destination *destination-name*],
[edit event-options policy *policy-name* then upload filename (*filename* | committed) destination *destination-name*]

Release Information
Statement introduced in Junos OS Release 7.5.
Support at the **[edit event-options policy *policy-name* then ...]** hierarchy levels introduced in Junos OS Release 8.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Configure a delay before transferring files. This allows the files to be completely generated before the upload starts. If you configure a transfer delay at the **[edit event-options destination *destination-name*]** hierarchy level and at one of the **[edit event-options policy *policy-name* then ...]** hierarchy levels, the resulting delay is the sum of the two delays.

Default If you do not include this statement, there is no transfer delay.

Options ***seconds***—Duration of the delay before files are uploaded.

Required Privilege Level
maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Example: Defining Destinations for File Archiving by Event Policies on page 421
- Configuring the Delay Before Files Are Uploaded by an Event Policy on page 431

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trigger

Syntax trigger (on | after | until) *event-count*;

Hierarchy Level [edit event-options policy *policy-name* within *seconds*]

Release Information Statement introduced in Junos OS Release 8.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Configure an event policy to be triggered if an event or set of events occurs ***event-count*** times within a specified time period.

Default If you do not include this statement, the policy is executed on receipt of the first configured event.

Options

after *event-count*—The policy is executed when the number of matching events received equals ***event-count*** + 1.

on *event-count*—The policy is executed when the number of matching events received equals ***event-count***.

until *event-count*—The policy is executed each time a matching event is received and stops being executed when the number of matching events received equals ***event-count***.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Triggering an Event Policy Based on Event Count on page 417

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within

Syntax

```
within seconds {
  events [ events ];
  not events [ events ];
  trigger (after | on | until) event-count;
}
```

Hierarchy Level [edit event-options policy *policy-name*]

Release Information Statement introduced in Junos OS Release 7.5.

Description Create a list of events that must (or must not) occur within a specified time interval for the policy to be triggered.

The statements are explained separately.

Options ***seconds***—Interval between events.

Range: 60 through 604,800 seconds

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using Correlated Events to Trigger an Event Policy on page 413

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upload

Syntax

```
upload filename  (filename | committed) destination destination-name {
  retry-count count retry-interval seconds;
  transfer-delay seconds;
  user-name username;
}
```

Hierarchy Level [edit event-options policy *policy-name* then]

Release Information Statement introduced in Junos OS Release 7.5.
committed option to **filename** statement introduced in Junos OS Release 8.1.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description On receipt of an event, upload the committed configuration file to a destination.

Options

destination *destination-name*—Name of the destination for the uploaded file. It must be defined in the **destinations** statement at the **[edit event-options]** hierarchy level.

filename (*filename* | committed)—Name of the file to upload. Specify either the word **committed** to upload the most recently committed configuration file, or the filename of another file.

The remaining statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- destinations on page 495
- Example: Configuring an Event Policy to Upload Files on page 424

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user-name

Syntax user-name *username*;

Hierarchy Level [edit event-options policy *policy-name* then change-configuration],
[edit event-options policy *policy-name* then event-script *filename*],
[edit event-options policy *policy-name* then execute-commands],
[edit event-options policy *policy-name* then upload filename (*filename* | committed) destination *destination-name*]

Release Information Statement introduced in Junos OS Release 8.4.
Statement introduced in Junos OS Release 9.0 for EX Series switches.
Support at the **[edit event-options policy *policy-name* then change-configuration]** hierarchy level introduced in Junos OS Release 12.1.

Description Associate a user with an action in an event policy. The event policy action is executed under the privileges of the associated user.

Default If you do not associate a user with an action, the action is executed as user **root**.

Options ***username***—A username that is configured at the **[edit system login]** hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Changing the User Privilege Level for an Event Policy Action on page 456

Summary of Event Script Configuration Statements

- checksum on page 523
- event-script on page 524
- file on page 525
- refresh (Event Scripts) on page 526
- refresh-from (Event Scripts) on page 526
- remote-execution on page 527
- source on page 528
- traceoptions (Event Scripts) on page 529

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checksum

Syntax checksum (md5 | sha-256 | sha1) *hash*;

Hierarchy Level [edit event-options event-script file *filename*],
[edit system scripts commit file *filename*],
[edit system scripts op file *filename*]

Release Information Statement introduced in Junos OS Release 9.5.
Statement introduced in Junos OS Release 11.1 for the QFX Series.
Statement introduced in Junos OS Release 14.1X53-D20 for the OCX Series.

Description For Junos OS commit scripts and op scripts, specify the MD5, SHA-1, or SHA-256 checksum hash. When it executes a local event, commit, or op script, Junos OS verifies the authenticity of the script by using the configured checksum hash.

Options **md5 *hash***—MD5 checksum of this script.

sha-256 *hash*—SHA-256 checksum of this script.

sha1 *hash*—SHA-1 checksum of this script.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Configuring Checksum Hashes for a Commit Script on page 177
- Configuring Checksum Hashes for an Event Script on page 473
- Configuring Checksum Hashes for an Op Script on page 345
- Executing an Op Script from a Remote Site on page 346
- *file checksum md5* command in the *System Basics and Services Command Reference*
- *file checksum sha-256* command in the *System Basics and Services Command Reference*
- *file checksum sha1* command in the *System Basics and Services Command Reference*

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event-script

Syntax

```
event-script {
  file filename {
    checksum (md5 | sha-256 | sha1) hash;
    refresh;
    refresh-from url;
    remote-execution {
      remote-hostname {
        passphrase user-password;
        username user-login;
      }
    }
    source url;
  }
  refresh;
  refresh-from url;
  traceoptions {
    file <filename> <files number> <size size> <world-readable | no-world-readable>;
    flag flag;
    no-remote-trace;
  }
}
```

Hierarchy Level [edit event-options]

Release Information Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description For Junos OS event scripts, configure scripting mechanisms.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Storing and Enabling Scripts on page 85

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file

Syntax

```
file filename {
  checksum (md5 | sha-256 | sha1) hash;
  refresh;
  refresh-from url;
  remote-execution {
    remote-hostname {
      passphrase user-password;
      username user-login;
    }
  }
  source url;
}
```

Hierarchy Level [edit event-options event-script]

Release Information Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description For Junos OS event scripts, enable an event script that is located in the **/var/db/scripts/event** directory.

Options *filename*—The name of an Extensible Stylesheet Language Transformations (XSLT) or Stylesheet Language Alternative Syntax (SLAX) file containing an event script.

The statements are explained separately.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Enabling an Event Script on page 471

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refresh (Event Scripts)

Syntax refresh;

Hierarchy Level [edit event-options event-script],
[edit event-options event-script file *filename*]

Release Information Statement introduced in Junos OS Release 9.6.
Statement introduced in Junos OS Release 9.6 for EX Series switches.

Description For Junos OS event scripts, overwrite the local copy of all enabled event scripts or a single enabled script located in the **/var/db/scripts/event** directory with the copy located at the source URL, specified in the **source** statement at the same hierarchy level.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using a Master Source Location for a Script on page 89
- refresh-from (Event Scripts) on page 526
- source on page 528

refresh-from (Event Scripts)

Syntax refresh-from *url*;

Hierarchy Level [edit event-options event-script],
[edit event-options event-script file *filename*]

Release Information Statement introduced in Junos OS Release 9.6.
Statement introduced in Junos OS Release 9.6 for EX Series switches.

Description For Junos OS event scripts, overwrite the local copy of all enabled event scripts or a single enabled script located in the **/var/db/scripts/event** directory with the copy located at a URL other than the URL specified in the **source** statement.

Options *url*—Source specified as a Hypertext Transfer Protocol (HTTP) URL, FTP URL, or secure copy (scp)-style remote file specification.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation
- Using an Alternate Source Location for a Script on page 94
- refresh (Event Scripts) on page 526
- source on page 528

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remote-execution

Syntax

```
remote-execution {
  remote-hostname {
    passphrase user-password;
    username user-login;
  }
}
```

Hierarchy Level [edit event-options event-script file *filename*]

Release Information Statement introduced in Junos OS Release 9.6.
Statement introduced in Junos OS Release 9.6 for EX Series switches.

Description For Junos OS event scripts, enable event scripts to invoke RPCs on a local or remote host.

Options

passphrase *user-password*—User's password for the remote host.

remote-hostname—Name of the remote host with which the event script will communicate.

username *username*—User's login name for the remote host.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Using RPCs and Operational Mode Commands in Event Scripts on page 468

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source

Syntax source *url*;

Hierarchy Level [edit event-options event-script file *filename*]

Release Information Statement introduced in Junos OS Release 9.6.
Statement introduced in Junos OS Release 9.6 for EX Series switches.

Description For Junos OS event scripts, specify the location of the source file for an enabled script located in the **/var/db/scripts/event** directory. When you include the **refresh** statement at the same hierarchy level, the local copy is overwritten by the version stored at the specified URL.

Options *url*—Master source file for an event script specified as an HTTP URL, FTP URL, or scp-style remote file specification.

Required Privilege Level maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- refresh (Event Scripts) on page 526
- refresh-from (Event Scripts) on page 526
- Using a Master Source Location for a Script on page 89

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traceoptions (Event Scripts)

Syntax

```
traceoptions {
  file <filename> <files number> <size size> <world-readable | no-world-readable>;
  flag flag;
  no-remote-trace;
}
```

Hierarchy Level [edit event-options event-script]

Release Information Statement introduced in Junos OS Release 7.6.
Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Define tracing operations for event scripts.

Default If you do not include this statement, no event script–specific tracing operations are performed.

Options ***filename***—Name of the file to receive the output of the tracing operation. All files are placed in the directory **/var/log**. By default, event script process tracing output is placed in the file **escript.log**. If you include the **file** statement, you must specify a filename. To retain the default, you can specify **escript.log** as the filename.

files ***number***—(Optional) Maximum number of trace files. When a trace file named ***trace-file*** reaches its maximum size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the **size** option and a filename.

Range: 2 through 1000

Default: 10 files

flag—Tracing operation to perform. To specify more than one tracing operation, include multiple **flag** statements. You can include the following flags:

- **all**—Log all operations
- **events**—Log important events
- **input**—Log event script input data
- **offline**—Generate data for offline development
- **output**—Log event script output data
- **rpc**—Log event script RPCs
- **xslt**—Log the XSLT library

no-world-readable—Restrict file access to owner. This is the default.

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size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named ***trace-file*** reaches this size, it is renamed and compressed to ***trace-file*.0.gz**. When ***trace-file*** again reaches its maximum size, ***trace-file*.0.gz** is renamed ***trace-file*.1.gz** and ***trace-file*** is renamed and compressed to ***trace-file*.0.gz**. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you also must specify a maximum number of trace files with the **files** option and a filename.

Syntax: ***x*k** to specify KB, ***x*m** to specify MB, or ***x*g** to specify GB

Range: 10 KB through 1 GB

Default: 128 KB

world-readable—Enable unrestricted file access.

Required Privilege Level

maintenance—To view this statement in the configuration.
maintenance-control—To add this statement to the configuration.

Related Documentation

- Tracing Event Script Processing on page 535

Administration

- Event Policy and Event Scripts Configuration Statements on page 530

Event Policy and Event Scripts Configuration Statements

- Any Hierarchy Level on page 530
- [edit event-options] Hierarchy Level on page 530

Any Hierarchy Level

The following statement can be added at any level of the configuration:

```
apply-macro apply-macro-name {
  parameter-name parameter-value;
}
```

[edit event-options] Hierarchy Level

The following statements can be included at the **[edit]** hierarchy level:

```
[edit]
event-options {
  destinations {
    destination-name {
      archive-sites {
        url <password password>;
      }
      transfer-delay seconds;
    }
  }
  event-script {
```


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```
    file filename {
      checksum (md5 | sha-256 | sha1) hash;
      refresh;
      refresh-from url;
      remote-execution {
        remote-hostname {
          passphrase user-password;
          username user-login;
        }
      }
      source url;
    }
    refresh;
    refresh-from url;
    traceoptions {
      file <filename> <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
      no-remote-trace;
    }
  }
  generate-event event-name {
    time-interval seconds;
    time-of-day hh:mm:ss;
  }
  policy policy-name {
    attributes-match {
      event1.attribute-name equals event2.attribute-name;
      event.attribute-name matches regular-expression;
      event1.attribute-name starts-with event2.attribute-name;
    }
    events [events];
    then {
      change-configuration {
        commands {
          "command";
        }
        commit-options {
          check <synchronize>;
          force;
          log "comment-string";
          synchronize;
        }
        retry count number interval seconds;
        user-name username;
      }
      event-script filename {
        arguments {
          argument-name argument-value;
        }
        destination destination-name {
          retry-count number retry-interval seconds;
          transfer-delay seconds;
        }
        output-filename filename;
        output-format (text | xml);
        user-name name;
```

```
        }
        execute-commands {
          commands {
            "command";
          }
          destination destination-name {
            retry-count count retry-interval seconds;
            transfer-delay seconds;
          }
          output-filename filename;
          output-format (text | xml);
          user-name username;
        }
        ignore;
        priority-override {
          facility facility-type;
          severity severity-level;
        }
        raise-trap;
        upload filename (filename | committed) destination destination-name {
          retry-count count retry-interval seconds;
          transfer-delay seconds;
          user-name username;
        }
      }
      within seconds {
        events [ events ];
        not events [ events ];
        trigger (after number | on number | until number);
      }
    }
    traceoptions {
      file filename <files number> <size size> <world-readable | no-world-readable>;
      flag flag;
    }
  }
```

Troubleshooting

- Troubleshooting Event Policy and Event Scripts on page 532

Troubleshooting Event Policy and Event Scripts

- Tracing Event Policy Processing on page 532
- Tracing Event Script Processing on page 535

Tracing Event Policy Processing

Event policy tracing operations track all event policy operations and record them in a log file. The logged error descriptions provide detailed information to help you solve problems faster.

By default, no events are traced. If you include the **traceoptions** statement at the **[edit event-options]** hierarchy level, the default tracing behavior is the following:

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- Important events are logged in a file called **eventd** located in the **/var/log** directory.
- When the file **eventd** reaches 128 kilobytes (KB), it is renamed and compressed to **eventd.0.gz**, then **eventd.1.gz**, and so on, until there are three trace files. Then the oldest trace file (**eventd.2.gz**) is overwritten. (For more information about how log files are created, see the *Junos OS System Log Messages Reference*.)
- Log files can be accessed only by the user who configures the tracing operation.

You cannot change the directory (**/var/log**) to which trace files are written. However, you can customize the other trace file settings by including the following statements at the **[edit event-options traceoptions]** hierarchy level:

```
[edit event-options traceoptions]
file <filename> <files number> <match regular-expression> <size size> <world-readable |
  no-world-readable>;
flag all;
flag configuration;
flag database;
flag events;
flag policy;
flag server;
flag syslog
flag timer-events;
no-remote-trace;
```

These statements are described in the following sections:

- Configuring the Event Policy Log Filename on page 533
- Configuring the Number and Size of Event Policy Log Files on page 533
- Configuring Access to the Log File on page 534
- Configuring a Regular Expression for Lines to Be Logged on page 534
- Configuring the Trace Operations on page 534

Configuring the Event Policy Log Filename

By default, the name of the file that records trace output is **eventd**. You can specify a different name by including the **file** statement at the **[edit event-options traceoptions]** hierarchy level:

```
[edit event-options traceoptions]
file filename;
```

Configuring the Number and Size of Event Policy Log Files

By default, when the trace file reaches 128 kilobytes (KB) in size, it is renamed ***filename*.0**, then ***filename*.1**, and so on, until there are three trace files. Then the oldest trace file (***filename*.2**) is overwritten.

You can configure the limits on the number and size of trace files by including the following statements at the **[edit event-options traceoptions file <*filename*>]** hierarchy level:

```
[edit event-options traceoptions file <filename>]
files number size size;
```

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For example, set the maximum file size to 2 MB and the maximum number of files to 20. When the file that receives the output of the tracing operation (***filename***) reaches 2 MB, ***filename*** is renamed and compressed to ***filename*.0.gz** and a new file called ***filename*** is created.

When ***filename*** reaches 2 MB, ***filename*.0.gz** is renamed ***filename*.1.gz** and ***filename*** is renamed and compressed to ***filename*.0.gz**. This process repeats until there are 20 trace files. Then the oldest file (***filename*.19.gz**) is overwritten.

The number of files can range from 2 through 1000 files. The file size can range from 10 KB through 1 gigabyte (GB).

Configuring Access to the Log File

By default, log files can be accessed only by the user who configures the tracing operation.

To specify that any user can read all log files, include the **world-readable** statement at the **[edit event-options traceoptions file <*filename*>]** hierarchy level:

```
[edit event-options traceoptions file <filename>]
world-readable;
```

To explicitly set the default behavior, include the **no-world-readable** statement at the **[edit event-options traceoptions file <*filename*>]** hierarchy level:

```
[edit event-options traceoptions file <filename>]
no-world-readable;
```

Configuring a Regular Expression for Lines to Be Logged

By default, the trace operation output includes all lines relevant to the logged events.

You can refine the output by including the **match** statement at the **[edit event-options traceoptions file <*filename*>]** hierarchy level and specifying a regular expression to be matched:

```
[edit event-options traceoptions file <filename>]
match regular-expression;
```

Configuring the Trace Operations

By default, only important events are logged. You can configure the trace operations to be logged by including the following statements at the **[edit event-options traceoptions]** hierarchy level:

```
[edit event-options traceoptions]
flag all;
flag configuration;
flag database;
flag events;
flag policy;
flag server;
flag syslog
flag timer-events;
```

Table 27 on page 535 describes the meaning of the event policy tracing flags.

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Table 27: Event Policy Tracing Flags

Flag	Description	Default Setting
all	Trace all operations.	Off
configuration	Log reading of configuration at the **[edit event-options]** hierarchy level.	Off
events	Trace important events.	Off
database	Log events involving storage and retrieval in events database.	Off
policy	Log policy processing.	Off
server	Log communication with processes that are generating events.	Off
syslogd	Log syslog-related traces.	Off
timer-events	Log internally generated events.	Off

To display the end of the log, issue the **show log eventd | last** operational mode command:

```
[edit]
user@host# run show log eventd | last
```

Related Documentation

- Configuring the System Log Priority of the Triggering Event in an Event Policy on page 457

Tracing Event Script Processing

Event script tracing operations track all event script operations and record them in a log file. The logged error descriptions provide detailed information to help you solve problems faster.

The default operation of event script tracing is to log important events in a file called **escript.log** located in the **/var/log** directory. When the file **escript.log** reaches 128 kilobytes (KB), it is renamed with a number 0 through 9 (in ascending order) appended to the end of the file and then compressed. The resulting files are **escript.log.0.gz**, then **escript.log.1.gz**, until there are 10 trace files. Then the oldest trace file (**escript.log.9.gz**) is overwritten. (For more information about how log files are created, see the *Junos OS System Log Messages Reference*.)

This section discusses the following topics:

- Minimum Configuration for Enabling Traceoptions for Event Scripts on page 536
- Configuring Tracing of Event Scripts on page 537

Minimum Configuration for Enabling Traceoptions for Event Scripts

If no event script trace options are configured, the simplest way to view the trace output of an event script is to configure the **output** trace flag and issue the **show log escript.log | last** command. To do this, perform the following steps:

1. If you have not done so already, enable an event script by including the **file** statement at the **[edit event-options event-script]** hierarchy level:

   ```
   [edit event-options event-script]
   user@host# set file filename
   ```

2. Enable trace options by including the **traceoptions flag output** statement at the **[edit event-options event-script]** hierarchy level:

   ```
   [edit event-options event-script]
   user@host# set traceoptions flag output
   ```

3. Issue the **commit** command:

   ```
   [edit]
   user@host# commit
   ```

4. Display the resulting trace messages recorded in the **/var/log/escript.log** file. At the end of the log is the output generated by the event script you enabled in Step 1 after a configured event policy is triggered and invokes the script. To display the end of the log, issue the **show log escript.log | last** operational mode command:

   ```
   [edit]
   user@host# run show log escript.log | last
   ```

Table 28 on page 536 summarizes useful filtering commands that display selected portions of the **escript.log** file.

Table 28: Event Script Tracing Operational Mode Commands

Task	Command
Display logging data associated with all event script processing.	**show log escript.log**
Display processing for only the most recent operation.	**show log escript.log | last**
Display processing for script errors.	**show log escript.log | match error**
Display processing for a particular script.	**show log escript.log | match *filename***

Example: Minimum Configuration for Enabling Traceoptions for Event Scripts

Display the trace output of the event script file **source-route.xsl**:

```
[edit]
event-options {
  event-script {
    file source-route.xsl;
```


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```
        traceoptions flag output;
    }
}

[edit]
user@host# commit
[edit]
user@host# run show log escript.log | last
```

Configuring Tracing of Event Scripts

You cannot change the directory (**/var/log**) to which trace files are written. However, you can customize other trace file settings by including the following statements at the **[edit event-options event-script traceoptions]** hierarchy level:

```
[edit event-options event-script traceoptions]
file <filename> <files number> <size size> <world-readable | no-world-readable>;
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
no-remote-trace;
```

These statements are described in the following sections:

- Configuring the Event Script Log Filename on page 537
- Configuring the Number and Size of Event Script Log Files on page 537
- Configuring Access to Event Script Log Files on page 538
- Configuring the Event Script Trace Operations on page 538

Configuring the Event Script Log Filename

By default, the name of the file that records trace output is **escript.log**. You can specify a different name by including the **file** statement at the **[edit event-options event-script traceoptions]** hierarchy level:

```
[edit event-options event-script traceoptions]
file filename;
```

Configuring the Number and Size of Event Script Log Files

By default, when the trace file reaches 128 KB in size, it is renamed and compressed to ***filename*.0.gz**, then ***filename*.1.gz**, and so on, until there are 10 trace files. Then the oldest trace file (***filename*.9.gz**) is overwritten.

You can configure the limits on the number and size of trace files by including the following statements at the **[edit event-options event-script traceoptions file <*filename*>]** hierarchy level:

```
[edit event-options event-script traceoptions file <filename>]
files number size size;
```

For example, set the maximum file size to 640 KB and the maximum number of files to 20. When the file that receives the output of the tracing operation (***filename***) reaches

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640 KB, it is renamed and compressed to ***filename*.0.gz**, and a new file called ***filename*** is created. When ***filename*** reaches 640 KB, ***filename*.0.gz** is renamed ***filename*.1.gz** and ***filename*** is renamed and compressed to ***filename*.0.gz**. This process repeats until there are 20 trace files. Then the oldest file (***filename*.19.gz**) is overwritten.

The number of files can range from 2 through 1000 files. The file size can range from 10 KB through 1 gigabyte (GB).

NOTE:

If you set either a maximum file size or a maximum number of trace files, you also must specify the other parameter and a filename.

Configuring Access to Event Script Log Files

By default, access to the event script log file is restricted to the owner. You can manually configure access by including the **world-readable** or **no-world-readable** statement at the **[edit event-options event-script traceoptions file <*filename*>]** hierarchy level.

```
[edit event-options event-script traceoptions file <filename>]
(world-readable | no-world-readable);
```

The **no-world-readable** statement restricts event script log access to the owner. The **world-readable** statement enables unrestricted access to the event script log file.

Configuring the Event Script Trace Operations

By default, only important events are logged. You can configure the trace operations to be logged by including the following statements at the **[edit event-options event-script traceoptions]** hierarchy level:

```
[edit event-options event-script traceoptions]
flag all;
flag events;
flag input;
flag offline;
flag output;
flag rpc;
flag xslt;
```

Table 29 on page 538 describes the meaning of the event script tracing flags.

Table 29: Event Script Tracing Flags

Flag	Description	Default Setting
all	Trace all operations.	Off
events	Trace important events.	On
input	Trace event script input data.	Off
offline	Generate data for offline development.	Off

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Table 29: Event Script Tracing Flags *(continued)*

Flag	Description	Default Setting
output	Trace event script output data.	Off
rpc	Trace event script RPCs.	Off
xslt	Trace the Extensible Stylesheet Language Transformations (XSLT) library.	Off

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PART 2

NETCONF XML Management Protocol Developer Guide

- Introduction to the NETCONF XML Management Protocol and Junos XML API on page 543
- Using NETCONF XML Management Protocol and Junos XML Tag Elements on page 551
- Controlling the NETCONF Session on page 565
- Requesting Information on page 597
- Changing Configuration Information on page 627
- Committing Configurations on page 651
- Summary of NETCONF Tag Elements on page 655
- Summary of Junos XML Protocol Tag Elements Supported in NETCONF Sessions on page 671
- Summary of Attributes in Junos XML Tags on page 695
- Writing NETCONF Perl Client Applications on page 701

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CHAPTER 5

Introduction to the NETCONF XML Management Protocol and Junos XML API

This chapter discusses the following:

- XML and Junos OS Overview on page 543
- NETCONF XML Management Protocol and Junos XML API Overview on page 545
- XML Overview on page 546
- Advantages of Using the NETCONF XML Managment Protocol and Junos XML API on page 547
- Overview of a NETCONF XML Management Protocol Session on page 548

XML and Junos OS Overview

Extensible Markup Language (XML) is a standard for representing and communicating information. It is a metalanguage for defining customized tags that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Junos OS natively supports XML for the operation and configuration of devices running Junos OS.

The Junos OS command-line interface (CLI) and the Junos OS infrastructure communicate using XML. When you issue an operational mode command in the CLI, the CLI converts the command into XML format for processing. After processing, Junos OS returns the output in the form of an XML document, which the CLI converts back into a readable format for display. Remote client applications also use XML-based data encoding for operational and configuration requests on devices running Junos OS.

The Junos XML API is an XML representation of Junos configuration statements and operational mode commands. It defines an XML equivalent for all statements in the Junos configuration hierarchy and many of the commands that you issue in CLI operational mode. Each operational mode command with a Junos XML counterpart maps to a request tag element and, if necessary, a response tag element.

You can view the XML-formatted output of any operational mode command by issuing the command in the CLI and adding the **| display xml** option. The following example shows the text-fomatted and XML-formatted output for the **show chassis alarms** operational mode command:

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```
user@host> show chassis alarms
No alarms currently active

user@host> show chassis alarms | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <alarm-information xmlns="http://xml.juniper.net/junos/10.4B1/junos-alarm">
        <alarm-summary>
            <no-active-alarms/>
        </alarm-summary>
    </alarm-information>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

You can view the Junos XML API representation of any operational mode command by issuing the command in the CLI and adding the **| display xml rpc** option. The following example shows the Junos XML API tag element for the **show chassis alarms** command.

```
user@host> show chassis alarms | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <rpc>
        <get-alarm-information>
        </get-alarm-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

As shown in the previous example, the **| display xml rpc** option displays the command's corresponding Junos XML API request tag element that is sent to Junos OS for processing whenever the command is issued. In contrast, the **| display xml** option displays the actual output of the processed command in XML format.

When you issue the **show chassis alarms** operational mode command, the CLI converts the command into its equivalent Junos XML API request tag **<get-alarm-information>** and sends the XML request to the Junos infrastructure for processing. Junos OS processes the request and returns the **<alarm-information>** response tag element to the CLI. The CLI then converts the XML output into the "No alarms currently active" message that is displayed to the user.

Junos automation scripts use XML to communicate with the host device. Junos OS provides XML-formatted input to a script. The script processes the input source tree and then returns XML-formatted output to Junos OS. The script type determines the XML input document that is sent to the script as well as the output document that is returned to Junos OS for processing. Commit script input consists of an XML representation of the post-inheritance candidate configuration file. Event scripts receive an XML document containing the description of the triggering event. All script input documents contain a common node set with information pertaining to the Junos OS environment.

Related Documentation

- *Junos XML API Configuration Developer Reference*
- *Junos XML API Operational Developer Reference*

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NETCONF XML Management Protocol and Junos XML API Overview

The NETCONF XML management protocol is an XML-based protocol that client applications use to request and change configuration information on routing, switching, and security devices. The NETCONF XML management protocol uses an Extensible Markup Language (XML)-based data encoding for the configuration data and remote procedure calls. The NETCONF protocol defines basic operations that are equivalent to configuration mode commands in the command-line interface (CLI). Applications use the protocol operations to display, edit, and commit configuration statements (among other operations), just as administrators use CLI configuration mode commands to perform those operations.

The Junos XML API is an XML representation of Junos OS configuration statements and operational mode commands. When the client application manages a device running Junos OS, Junos XML configuration tag elements are the content to which the NETCONF XML protocol operations apply. Junos XML operational tag elements are equivalent in function to operational mode commands in the CLI, which administrators use to retrieve status information for a routing platform running Junos OS.

The NETCONF XML management protocol is described in RFC 4741, *NETCONF Configuration Protocol*, which is available at http://www.ietf.org/rfc/rfc4741.txt .

Client applications request or change information on a switch, router, or security device by encoding the request with tag elements from the NETCONF XML management protocol and Junos XML API and then sending it to the NETCONF server on the device. On devices running Junos OS, the NETCONF server is integrated into Junos OS and does not appear as a separate entry in process listings. The NETCONF server directs the request to the appropriate software modules within the device, encodes the response in NETCONF and Junos XML API tag elements, and returns the result to the client application. For example, to request information about the status of a device's interfaces, a client application sends the **<get-interface-information>** tag element from the Junos XML API. The NETCONF server gathers the information from the interface process and returns it in the **<interface-information>** tag element.

You can use the NETCONF XML management protocol and Junos XML API to configure devices running Junos OS or to request information about the device configuration or operation. You can write client applications to interact with the NETCONF server, but you can also use the NETCONF XML management protocol to build custom end-user interfaces for configuration and information retrieval and display, such as a Web browser-based interface.

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XML Overview

XML is a language for defining a set of markers, called *tags*, that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Tags look much like Hypertext Markup Language (HTML) tags, but XML is actually a metalanguage used to define tags that best suit the kind of data being marked.

For more details about XML, see *A Technical Introduction to XML* at http://www.xml.com/pub/a/98/10/guide0.html and the additional reference material at the http://www.xml.com site. The official XML specification from the World Wide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0*, is available at http://www.w3.org/TR/REC-xml .

The following sections discuss Junos XML and NETCONF XML management protocol tag elements:

- Junos XML and NETCONF XML Management Protocol Tag Elements on page 546
- Document Type Definition on page 547

Junos XML and NETCONF XML Management Protocol Tag Elements

Items in an XML-compliant document or data set are always enclosed in paired opening and closing tags. XML is stricter in this respect than HTML, which sometimes uses only opening tags. The following examples show paired opening and closing tags enclosing a value:

```
<interface-state>enabled</interface-state>
<input-bytes>25378</input-bytes>
```

The term *tag element* refers to a three-part set: opening tag, contents, and closing tag. The content can be an alphanumeric character string as in the preceding examples, or can itself be a *container* tag element, which contains other tag elements. For simplicity, the term *tag* is often used interchangeably with *tag element* or *element*.

If a tag element is *empty*—has no contents—it can be represented either as paired opening and closing tags with nothing between them, or as a single tag with a forward slash after the tag name. For example, the notation **<snmp-trap-flag/>** is equivalent to **<snmp-trap-flag></snmp-trap-flag>**.

As the preceding examples show, angle brackets enclose the name of a Junos XML tag element or NETCONF tag element in its opening and closing tags. This is an XML convention, and the brackets are a required part of the complete tag element name. They are not to be confused with the angle brackets used in Juniper Networks documentation to indicate optional parts of CLI command strings.

NETCONF and Junos XML tag elements obey the XML convention that the tag element name indicates the kind of information enclosed by the tag element. For example, the name of the Junos XML **<interface-state>** tag element indicates that it contains a description of the current status of an interface on the routing platform, whereas the

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name of the **<input-bytes>** tag element indicates that its contents specify the number of bytes received.

When discussing tag elements in text, this documentation conventionally uses just the name of the opening tag to represent the complete tag element (opening tag, contents, and closing tag). For example, the documentation refers to the **<input-bytes>** tag to indicate the entire **<input-bytes>***number-of-bytes***</input-bytes>** tag element.

Document Type Definition

An XML-tagged document or data set is *structured*, because a set of rules specifies the ordering and interrelationships of the items in it. The rules define the contexts in which each tagged item can—and in some cases must—occur. A file called a *document type definition*, or *DTD*, lists every tag element that can appear in the document or data set, defines the parent-child relationships between the tags, and specifies other tag characteristics. The same DTD can apply to many XML documents or data sets.

Advantages of Using the NETCONF XML Managment Protocol and Junos XML API

The NETCONF XML management protocol and Junos XML API fully document all options for every supported Junos operational request and all elements in every Junos configuration statement. The tag names clearly indicate the function of an element in an operational request or configuration statement.

The combination of meaningful tag names and the structural rules in a DTD makes it easy to understand the content and structure of an XML-tagged data set or document. NETCONF and Junos XML tag elements make it straightforward for client applications that request information from a device to parse the output and find specific information.

The following example illustrates how the Junos XML API makes it easier to parse device output and extract the needed information. It compares formatted ASCII and XML-tagged versions of output from a device running Junos OS. The formatted ASCII follows:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, SNMP ifIndex: 3
```

The corresponding XML-tagged version is:

```
<interface>
  <name>fxp0</name>
  <admin-status>enabled</admin-status>
  <operational-status>up</operational-status>
  <index>4</index>
  <snmp-index>3</snmp-index>
</interface>
```

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When a client application needs to extract a specific value from formatted ASCII output, it must rely on the value's location, expressed either absolutely or with respect to labels or values in adjacent fields. Suppose that the client application wants to extract the interface index. It can use a regular-expression matching utility to locate specific strings, but one difficulty is that the number of digits in the interface index is not necessarily predictable. The client application cannot simply read a certain number of characters after the **Interface index:** label, but must instead extract everything between the label and the subsequent label, which is

```
, SNMP ifIndex
```

A problem arises if the format or ordering of output changes in a later version of Junos OS, for example, if a **Logical index** field is added following the interface index number:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, Logical index: 12, SNMP ifIndex: 3
```

An application that extracts the interface index number delimited by the **Interface index:** and **SNMP ifIndex** labels now obtains an incorrect result. The application must be updated manually to search for the following label instead:

```
, Logical index
```

In contrast, the structured nature of XML-tagged output enables a client application to retrieve the interface index by extracting everything within the opening **<index>** tag and closing **</index>** tag. The application does not have to rely on an element's position in the output string, so the NETCONF server can emit the child tag elements in any order within the **<interface>** tag element. Adding a new **<logical-index>** tag element in a future release does not affect an application's ability to locate the **<index>** tag element and extract its contents.

Tagged output is also easier to transform into different display formats. For instance, you might want to display different amounts of detail about a given device component at different times. When a device returns formatted ASCII output, you have to design and write special routines and data structures in your display program to extract and store the information needed for a given detail level. In contrast, the inherent structure of XML output is an ideal basis for a display program's own structures. It is also easy to use the same extraction routine for several levels of detail, simply ignoring the tag elements you do not need when creating a less detailed display.

Overview of a NETCONF XML Management Protocol Session

Communication between the NETCONF server and a client application is session based. The two parties explicitly establish a connection before exchanging data and close the connection when they are finished. Each request from the client application and each response from the NETCONF server constitutes a *well-formed* XML document, because the tag streams obey the structural rules defined in the NETCONF and Junos XML DTDs for the kind of information they encode. Client applications must produce a well-formed XML document for each request by emitting tag elements in the required order and only in the legal contexts.

The following list outlines the basic structure of a NETCONF session.

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1. The client application establishes a connection to the NETCONF server and opens the NETCONF session.
2. The NETCONF server and client application exchange initialization information, which is used to determine if they are using compatible versions of the Junos OS and the NETCONF XML management protocol.
3. The client application sends one or more requests to the NETCONF server and parses its responses.
4. The client application closes the NETCONF session and the connection to the NETCONF server.

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CHAPTER 6

Using NETCONF XML Management Protocol and Junos XML Tag Elements

This chapter describes the syntactic and notational conventions used by the NETCONF server and client applications, including the mappings between statements and commands in the Junos OS command-line interface (CLI) and the tag elements in the Junos Extensible Markup Language (XML) application programming interface (API).

For more information about the syntax of CLI commands and configuration statements, see the *CLI User Guide*. For information about specific configuration statements, see the Junos OS configuration guides. For information about specific operational mode commands, see the Junos OS command references.

This chapter discusses the following topics:

- XML and NETCONF XML Management Protocol Conventions Overview on page 551
- Mapping Commands to Junos XML Tag Elements on page 555
- Mapping Configuration Statements to Junos XML Tag Elements on page 556
- Using the Same Configuration Tag Elements in Requests and Responses on page 562

XML and NETCONF XML Management Protocol Conventions Overview

A client application must comply with XML and NETCONF XML management protocol conventions. Each request from the client application must be a *well-formed* XML document; that is, it must obey the structural rules defined in the NETCONF and Junos XML DTDs for the kind of information encoded in the request. The client application must emit tag elements in the required order and only in the legal contexts. Compliant applications are easier to maintain in the event of changes to Junos OS or the NETCONF XML management protocol.

Similarly, each response from the NETCONF server constitutes a well-formed XML document (the NETCONF server obeys XML and NETCONF conventions).

The following sections describe NETCONF XML management protocol conventions:

- Request and Response Tag Elements on page 552
- Child Tag Elements of a Request Tag Element on page 552
- Child Tag Elements of a Response Tag Element on page 553

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- Spaces, Newline Characters, and Other White Space on page 553
- XML Comments on page 554
- Predefined Entity References on page 554

Request and Response Tag Elements

A *request* tag element is one generated by a client application to request information about a device's current status or configuration, or to change the configuration. A request tag element corresponds to a CLI operational or configuration command. It can occur only within an **<rpc>** tag element. For information about the **<rpc>** tag element, see "Sending a Request to the NETCONF Server" on page 581.

A *response* tag element represents the NETCONF server's reply to a request tag element and occurs only within an **<rpc-reply>** tag element. For information about the **<rpc-reply>** tag element, see "Parsing the NETCONF Server Response" on page 584.

The following example represents an exchange in which a client application emits the **<get-interface-information>** request tag element with the **<extensive/>** flag and the NETCONF server returns the **<interface-information>** response tag element.

Client Application

```
<rpc>
   <get-interface-information>
      <extensive/>
   </get-interface-information>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
   <interface-information xmlns="URL">
      <!- - children of  <interface-information> - ->
   </interface-information>
</rpc-reply>
]]>]]>
```

T2100

NOTE: This example, like all others in this guide, shows each tag element on a separate line, in the tag streams emitted by both the client application and NETCONF server. In practice, a client application does not need to include newline characters between tag elements, because the server automatically discards such white space. For further discussion, see "Spaces, Newline Characters, and Other White Space" on page 553.

For information about the attributes in the opening **<rpc-reply>** tag, see "Parsing the NETCONF Server Response" on page 584. For information about the **xmlns** attribute in the opening **<interface-information>** tag, see "Requesting Operational Information" on page 598. For information about the **]]>]]>** character sequence, see "Generating Well-Formed XML Documents" on page 566.

Child Tag Elements of a Request Tag Element

Some request tag elements contain child tag elements. For configuration requests, each child tag element represents a configuration element (hierarchy level or configuration

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object). For operational requests, each child tag element represents one of the options you provide on the command line when issuing the equivalent CLI command.

Some requests have mandatory child tag elements. To make a request successfully, a client application must emit the mandatory tag elements within the request tag element's opening and closing tags. If any of the children are themselves container tag elements, the opening tag for each must occur before any of the tag elements it contains, and the closing tag must occur before the opening tag for another tag element at its hierarchy level.

In most cases, the client application can emit children that occur at the same level within a container tag element in any order. The important exception is a configuration element that has an *identifier tag element*, which distinguishes the configuration element from other elements of its type. The identifier tag element must be the first child tag element in the container tag element. Most frequently, the identifier tag element specifies the name of the configuration element and is called **<name>**. For more information, see "Mapping for Objects That Have an Identifier" on page 556.

Child Tag Elements of a Response Tag Element

The child tag elements of a response tag element represent the individual data items returned by the NETCONF server for a particular request. The children can be either individual tag elements (empty tags or tag element triples) or container tag elements that enclose their own child tag elements. For some container tag elements, the NETCONF server returns the children in alphabetical order. For other elements, the children appear in the order in which they were created in the configuration.

The set of child tag elements that can occur in a response or within a container tag element is subject to change in later releases of the Junos XML API. Client applications must not rely on the presence or absence of a particular tag element in the NETCONF server's output, nor on the ordering of child tag elements within a response tag element. For the most robust operation, include logic in the client application that handles the absence of expected tag elements or the presence of unexpected ones as gracefully as possible.

Spaces, Newline Characters, and Other White Space

As dictated by the XML specification, the NETCONF server ignores white space (spaces, tabs, newline characters, and other characters that represent white space) that occurs between tag elements in the tag stream generated by a client application. Client applications can, but do not need to, include white space between tag elements. However, they must not insert white space within an opening or closing tag. If they include white space in the contents of a tag element that they are submitting as a change to the candidate configuration, the NETCONF server preserves the white space in the configuration database.

In its responses, the NETCONF server includes white space between tag elements to enhance the readability of responses that are saved to a file: it uses newline characters to put each tag element on its own line, and spaces to indent child tag elements to the right compared to their parents. A client application can ignore or discard the white space, particularly if it does not store responses for later review by human users. However, it

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must not depend on the presence or absence of white space in any particular location when parsing the tag stream.

For more information about white space in XML documents, see the XML specification from the World Wide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0*, at http://www.w3.org/TR/REC-xml/ .

XML Comments

Client applications and the NETCONF server can insert XML comments at any point between tag elements in the tag stream they generate, but not within tag elements. Client applications must handle comments in output from the NETCONF server gracefully but must not depend on their content. Client applications also cannot use comments to convey information to the NETCONF server, because the server automatically discards any comments it receives.

XML comments are enclosed within the strings **<!--** and **-->**, and cannot contain the string **- -** (two hyphens). For more details about comments, see the XML specification at http://www.w3.org/TR/REC-xml/ .

The following is an example of an XML comment:

```
<!-- This is a comment. Please ignore it. -->
```

Predefined Entity References

By XML convention, there are two contexts in which certain characters cannot appear in their regular form:

- In the string that appears between opening and closing tags (the contents of the tag element)
- In the string value assigned to an attribute of an opening tag

When including a disallowed character in either context, client applications must substitute the equivalent *predefined entity reference*, which is a string of characters that represents the disallowed character. Because the NETCONF server uses the same predefined entity references in its response tag elements, the client application must be able to convert them to actual characters when processing response tag elements.

Table 30 on page 554 summarizes the mapping between disallowed characters and predefined entity references for strings that appear between the opening and closing tags of a tag element.

Table 30: Predefined Entity Reference Substitutions for Tag Content Values

Disallowed Character	Predefined Entity Reference
& (ampersand)	**&**
> (greater-than sign)	**>**

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Table 30: Predefined Entity Reference Substitutions for Tag Content Values *(continued)*

Disallowed Character	Predefined Entity Reference
< (less-than sign)	**<**

Table 31 on page 555 summarizes the mapping between disallowed characters and predefined entity references for attribute values.

Table 31: Predefined Entity Reference Substitutions for Attribute Values

Disallowed Character	Predefined Entity Reference
& (ampersand)	**&**
' (apostrophe)	**'**
> (greater-than sign)	**>**
< (less-than sign)	**<**
" (quotation mark)	**"**

As an example, suppose that the following string is the value contained by the **<condition>** tag element:

```
if (a<b && b>c) return "Peer's not responding"
```

The **<condition>** tag element looks like this (it appears on two lines for legibility only):

```
<condition>if (a&lt;b &amp;&amp; b&gt;c) return "Peer's not \
  responding"</condition>
```

Similarly, if the value for the **<example>** tag element's **heading** attribute is **Peer's "age" <> 40**, the opening tag looks like this:

```
<example heading="Peer&apos;s &quot;age&quot; &lt;&gt; 40">
```

Mapping Commands to Junos XML Tag Elements

The Junos XML API defines tag-element equivalents for many commands in CLI operational mode. For example, the **<get-interface-information>** tag element corresponds to the **show interfaces** command.

Information about the available command equivalents in the current release of Junos OS can be found in the *Junos XML API Operational Developer Reference*. For the mapping between commands and Junos XML tag elements, see the *Junos XML API Operational Developer Reference* "Mapping Between Operational Tag Elements, Perl Methods, and CLI Commands" chapter. For detailed information about a specific operation, see the

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Junos XML API Operational Developer Reference "Summary of Operational Request Tags" chapter.

The following sections describe the tag elements that map to command options:

- Mapping for Command Options with Variable Values on page 556
- Mapping for Fixed-Form Command Options on page 556

Mapping for Command Options with Variable Values

Many CLI commands have options that identify the object that the command affects or reports about, distinguishing the object from other objects of the same type. In some cases, the CLI does not precede the identifier with a fixed-form keyword, but XML convention requires that the Junos XML API define a tag element for every option. To learn the names for each identifier (and any other child tag elements) for an operational request tag element, consult the tag element's entry in the appropriate DTD or in the *Junos XML API Operational Developer Reference*.

The following example shows the Junos XML tag elements for two CLI operational commands that have variable-form options. In the **show interfaces** command, **t3-5/1/0:0** is the name of the interface. In the **show bgp neighbor** command, **10.168.1.222** is the IP address for the BGP peer of interest.

CLI Command	JUNOS XML Tags
show interfaces t3-5/1/0:0	<rpc> <get-interface-information> <interface-name>t3-5/1/0:0</interface-name> </get-interface-information> </rpc>
show bgp neighbor 10.168.1.122	<rpc> <get-bgp-neighbor-information> <neighbor-address>10.168.1.122</neighbor-address> </get-bgp-neighbor-information> </rpc>

T1500

Mapping for Fixed-Form Command Options

Some CLI commands include options that have a fixed form, such as the **brief** and **detail** strings, which specify the amount of detail to include in the output. The Junos XML API usually maps such an option to an empty tag whose name matches the option name.

The following example shows the Junos XML tag elements for the **show isis adjacency** command, which has a fixed-form option called **detail**.

CLI Command	**JUNOS XML Tags**
show isis adjacency detail	<rpc> <get-isis-adjacency-information> <detail/> </get-isis-adjacency-information> </rpc>

T1501

Mapping Configuration Statements to Junos XML Tag Elements

The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy. At the top levels of the configuration hierarchy, there is almost

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always a one-to-one mapping between tag elements and statements, and most tag names match the configuration statement name. At deeper levels of the hierarchy, the mapping is sometimes less direct, because some CLI notational conventions do not map directly to XML-compliant tagging syntax.

NOTE: For some configuration statements, the notation used when you type the statement at the CLI configuration-mode prompt differs from the notation used in a configuration file. The same Junos XML tag element maps to both notational styles.

The following sections describe the mapping between configuration statements and Junos XML tag elements:

- Mapping for Hierarchy Levels and Container Statements on page 557
- Mapping for Objects That Have an Identifier on page 558
- Mapping for Single-Value and Fixed-Form Leaf Statements on page 559
- Mapping for Leaf Statements with Multiple Values on page 560
- Mapping for Multiple Options on One or More Lines on page 560
- Mapping for Comments About Configuration Statements on page 561

Mapping for Hierarchy Levels and Container Statements

The **<configuration>** tag element is the top-level Junos XML container tag element for configuration statements. It corresponds to the **[edit]** hierarchy level in CLI configuration mode. Most statements at the next few levels of the configuration hierarchy are container statements. The Junos XML container tag element that corresponds to a container statement almost always has the same name as the statement.

The following example shows the Junos XML tag elements for two statements at the top level of the configuration hierarchy. Note that a closing brace in a CLI configuration statement corresponds to a closing Junos XML tag.

CLI Configuration Statements

```
system {
    login {
        ...child statements...
    }
}
protocols {
    ospf {
        ...child statements...
    }
}
```

JUNOS XML Tags

```
<configuration>
    <system>
        <login>
            <!- - tags for child statements - ->
        </login>
    </system>
    <protocols>
        <ospf>
            <!- - tags for child statements - ->
        </ospf>
    </protocols>
</configuration>
```

T1502

Mapping for Objects That Have an Identifier

At some hierarchy levels, the same kind of configuration object can occur multiple times. Each instance of the object has a unique identifier to distinguish it from the other instances. In the CLI notation, the parent statement for such an object consists of a keyword and identifier of the following form:

```
keyword identifier {
... configuration statements for individual characteristics ...
}
```

keyword is a fixed string that indicates the type of object being defined, and ***identifier*** is the unique name for this instance of the type. In the Junos XML API, the tag element corresponding to the keyword is a container tag element for child tag elements that represent the object's characteristics. The container tag element's name generally matches the **keyword** string.

The Junos XML API differs from the CLI in its treatment of the identifier. Because the Junos XML API does not allow container tag elements to contain both other tag elements and untagged character data such as an identifier name, the identifier must be enclosed in a tag element of its own. Most frequently, identifier tag elements for configuration objects are called **<name>**. Some objects have multiple identifiers, which usually have names other than **<name>**. To verify the name of each identifier tag element for a configuration object, consult the entry for the object in the *Junos XML API Configuration Developer Reference*.

NOTE: **Junos OS reserves the prefix junos- for the identifiers of configuration groups defined within the junos-defaults configuration group. User-defined identifiers cannot start with the string junos-.**

Identifier tag elements also constitute an exception to the general XML convention that tag elements at the same level of hierarchy can appear in any order; the identifier tag element always occurs first within the container tag element.

The configuration for most objects that have identifiers includes additional leaf statements, which represent other characteristics of the object. For example, each BGP group configured at the **[edit protocols bgp group]** hierarchy level has an associated name (the identifier) and can have leaf statements for other characteristics such as type, peer autonomous system (AS) number, and neighbor address. For information about the Junos XML mapping for leaf statements, see "Mapping for Single-Value and Fixed-Form Leaf Statements" on page 559, "Mapping for Leaf Statements with Multiple Values" on page 560, and "Mapping for Multiple Options on One or More Lines" on page 560.

The following example shows the Junos XML tag elements for configuration statements that define two BGP groups called **G1** and **G2**. Notice that the Junos XML **<name>** tag element that encloses the identifier of each group (and the identifier of the neighbor within a group) does not have a counterpart in the CLI statements. For complete information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

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CLI Configuration Statements

```
protocols {
   bgp {
      group G1 {

         type external;
         peer-as 56;
         neighbor 10.0.0.1;


      }
      group G2 {

         type external;
         peer-as 57;
         neighbor 10.0.10.1;


      }
   }
}
```

JUNOS XML Tags

```
<configuration>
   <protocols>
      <bgp>
         <group>
            <name>G1</name>
            <type>external</type>
            <peer-as>56</peer-as>
            <neighbor>
               <name>10.0.0.1</name>
            </neighbor>
         </group>
         <group>
            <name>G2</name>
            <type>external</type>
            <peer-as>57</peer-as>
            <neighbor>
               <name>10.0.10.1</name>
            </neighbor>
         </group>
      </bgp>
   </protocols>
</configuration>
```

T1503

Mapping for Single-Value and Fixed-Form Leaf Statements

A *leaf statement* is a CLI configuration statement that does not contain any other statements. Most leaf statements define a value for one characteristic of a configuration object and have the following form:

keyword *value*;

In general, the name of the Junos XML tag element corresponding to a leaf statement is the same as the **keyword** string. The string between the opening and closing Junos XML tags is the same as the ***value*** string.

The following example shows the Junos XML tag elements for two leaf statements that have a keyword and a value: the **message** statement at the **[edit system login]** hierarchy level and the **preference** statement at the **[edit protocols ospf]** hierarchy level.

CLI Configuration Statements

```
system {
   login {
      message "Authorized users only";
      ...other statements under login...
   }
}
protocols {
   ospf {
      preference 15;
      ...other statements under ospf...
   }
}
```

JUNOS XML Tags

```
<configuration>
   <system>
      <login>
         <message>Authorized users only</message>
         <!- - tags for other child statements - ->
      </login>
   </system>
   <protocols>
      <ospf>
         <preference>15</preference>
         <!- - tags for other child statements - ->
      </ospf>
   </protocols>
</configuration>
```

T1504

Some leaf statements consist of a fixed-form keyword only, without an associated variable-form value. The Junos XML API represents such statements with an empty tag. The following example shows the Junos XML tag elements for the **disable** statement at the **[edit forwarding-options sampling]** hierarchy level.

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CLI Configuration Statement	JUNOS XML Tags

forwarding-options {
  sampling {
  disable;
  …*other statements under* sampling …
  }
}
	<configuration>
	  <forwarding-options>
	  <sampling>
	  <disable/>
	  <!- - *tags for other child statements* - ->
	  </sampling>
	  </forwarding-options>
	</configuration>

T1505

Mapping for Leaf Statements with Multiple Values

Some Junos leaf statements accept multiple values, which can be either user-defined or drawn from a set of predefined values. CLI notation uses square brackets to enclose all values in a single statement, as in the following:

statement **[** *value1 value2 value3* …**]**;

The Junos XML API instead encloses each value in its own tag element. The following example shows the Junos XML tag elements for a CLI statement with multiple user-defined values. The **import** statement imports two routing policies defined elsewhere in the configuration. For complete information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

CLI Configuration Statements	JUNOS XML Tags

protocols {
  bgp {
  group 23 {
  import [policy1 policy2];
  }
  }
}
	<configuration>
	  <protocols>
	  <bgp>
	  <group>
	  <name>23</name>
	  <import>policy1</import>
	  <import>policy2</import>
	  </group>
	  </bgp>
	  </protocols>
	</configuration>

T1506

The following example shows the Junos XML tag elements for a CLI statement with multiple predefined values. The **permissions** statement grants three predefined permissions to members of the **user-accounts** login class.

CLI Configuration Statements	JUNOS XML Tags

system {
  login {
  class user-accounts {
  permissions [configure admin control];
  }
  }
}
	<configuration>
	  <system>
	  <login>
	  <class>
	  <name>user-accounts</name>
	  <permissions>configure</permissions>
	  <permissions>admin</permissions>
	  <permissions>control</permissions>
	  </class>
	  </login>
	  </system>
	</configuration>

T1507

Mapping for Multiple Options on One or More Lines

For some Junos configuration objects, the standard CLI syntax places multiple options on a single line, usually for greater legibility and conciseness. In most such cases, the first

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option identifies the object and does not have a keyword, but later options are paired keywords and values. The Junos XML API encloses each option in its own tag element. Because the first option has no keyword in the CLI statement, the Junos XML API assigns a name to its tag element.

The following example shows the Junos XML tag elements for a CLI configuration statement with multiple options on a single line. The Junos XML API defines a tag element for both options and assigns a name to the tag element for the first option (**10.0.0.1**), which has no CLI keyword.

CLI Configuration Statements

```
system {
   backup-router 10.0.01 destination 10.0.0.2;




}
```

JUNOS XML Tags

```
<configuration>
   <system>
      <backup-router>
         <address>10.0.0.1</address>
         <destination>10.0.0.2</destination>
      </backup-router>
   </system>
</configuration>
```

T1508

The syntax for some configuration objects includes more than one multioption line. Again, the Junos XML API defines a separate tag element for each option. The following example shows Junos XML tag elements for a **traceoptions** statement at the **[edit protocols isis]** hierarchy level. The statement has three child statements, each with multiple options.

CLI Configuration Statements

```
protocols {
   isis {
      traceoptions {
         file trace-file size 3m files 10 world-readable;




         flag route detail;




         flag state receive;




      }
   }
}
```

JUNOS XML Tags

```
<configuration>
   <protocols>
      <isis>
         <traceoptions>
            <file>
               <filename>trace-file</filename>
               <size>3m</size>
               <files>10</files>
               <world-readable/>
            </file>
            <flag>
               <name>route</name>
               <detail/>
            </flag>
            <flag>
               <name>state</name>
               <receive/>
            </flag>
         </traceoptions>
      </isis>
   </protocols>
</configuration>
```

T1509

Mapping for Comments About Configuration Statements

A Junos configuration can include comments that describe statements in the configuration. In CLI configuration mode, the **annotate** command specifies the comment to associate with a statement at the current hierarchy level. You can also use a text editor to insert comments directly into a configuration file. For more information, see the *CLI User Guide*.

The Junos XML API encloses comments about configuration statements in the **<junos:comment>** tag element. (These comments are different from the comments that are enclosed in the strings **<!--** and **-->** and are automatically discarded by the protocol server.)

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In the Junos XML API, the **<junos:comment>** tag element immediately precedes the tag element for the associated configuration statement. (If the tag element for the associated statement is omitted, the comment is not recorded in the configuration database.) The comment text string can include one of the two delimiters that indicate a comment in the configuration database: either the **#** character before the comment or the paired strings **/*** before the comment and ***/** after it. If the client application does not include the delimiter, the protocol server adds the appropriate one when it adds the comment to the configuration. The protocol server also preserves any white space included in the comment.

The following example shows the Junos XML tag elements that associate comments with two statements in a sample configuration statement. The first comment illustrates how including newline characters in the contents of the **<junos:comment>** tag element (**/* New backbone area */**) results in the comment appearing on its own line in the configuration file. There are no newline characters in the contents of the second **<junos:comment>** tag element, so in the configuration file the comment directly follows the associated statement on the same line.

CLI Configuration Statements

```
protocols {
   ospf {

      /* New backbone area */
      area 0.0.0.0 {

         interface so-0/0/0 { # From jnpr1 to jnpr2

            hello-interval 5;
         }
      }
   }
}
```

JUNOS XML Tags

```
<configuration>
   <protocols>
      <ospf>
         <junos:comment>
               /* New backbone area */
         </junos:comment>
         <area>
            <name>0.0.0.0</name>
            <junos:comment> # From jnpr1 to jnpr2</junos:comment>
            <interface>
               <name>so-0/0/0</name>
               <hello-interval>5</hello-interval>
            </interface>
         </area>
      </ospf>
   </protocols>
</configuration>
```

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Using the Same Configuration Tag Elements in Requests and Responses

The NETCONF server encloses its response to each configuration request in **<rpc-reply>** and **<configuration>** tag elements. Enclosing each configuration response within a **<configuration>** tag element contrasts with how the server encloses each different operational response in a tag element named for that type of response—for example, the **<chassis-inventory>** tag element for chassis information or the **<interface-information>** tag element for interface information.

The Junos XML tag elements within the **<configuration>** tag element represent configuration hierarchy levels, configuration objects, and object characteristics, always ordered from higher to deeper levels of the hierarchy. When a client application loads a configuration, it can emit the same tag elements in the same order as the NETCONF server uses when returning configuration information. This consistent representation makes handling configuration information more straightforward. For instance, the client application can request the current configuration, store the NETCONF server's response in a local memory buffer, make changes or apply transformations to the buffered data, and submit the altered configuration as a change to the candidate configuration. Because

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the altered configuration is based on the NETCONF server's response, it is certain to be syntactically correct. For more information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

Similarly, when a client application requests information about a configuration element (hierarchy level or configuration object), it uses the same tag elements that the NETCONF server will return in response. To represent the element, the client application sends a complete stream of tag elements from the top of the configuration hierarchy (represented by the **<configuration>** tag element) down to the requested element. The innermost tag element, which represents the level or object, is either empty or includes the identifier tag element only. The NETCONF server's response includes the same stream of parent tag elements, but the tag element for the requested configuration element contains all the tag elements that represent the element's characteristics or child levels. For more information, see "Requesting Configuration Information" on page 602.

The tag streams emitted by the NETCONF server and by a client application can differ in the use of white space, as described in "XML and NETCONF XML Management Protocol Conventions Overview" on page 551.

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CHAPTER 7

Controlling the NETCONF Session

This chapter explains how to start and terminate a session with the NETCONF server, and describes the Extensible Markup Language (XML) tag elements from the NETCONF XML management protocol that client applications and the NETCONF server use to coordinate information exchange during the session. It discusses the following topics:

- Client Application's Role in a NETCONF Session on page 565
- Establishing a NETCONF Session on page 566
- Exchanging Information with the NETCONF Server on page 581
- Locking and Unlocking the Candidate Configuration on page 588
- Terminating Another NETCONF Session on page 590
- Ending a NETCONF Session and Closing the Connection on page 591
- Displaying CLI Output as XML Tag Elements on page 591
- Displaying the RPC Tags for a Command on page 592
- Example of a NETCONF Session on page 593

Client Application's Role in a NETCONF Session

To create a session and communicate with the NETCONF server, a client application performs the following procedures, which are described in the indicated sections:

1. Establishes a connection to the NETCONF server on the routing platform, as described in "Connecting to the NETCONF Server" on page 577.
2. Opens a NETCONF session, as described in "Starting the NETCONF Session" on page 578.
3. (Optional) Locks the candidate configuration, as described in "Locking the Candidate Configuration" on page 588. Locking the configuration prevents other users or applications from changing it at the same time.
4. Requests operational or configuration information, or changes configuration information, as described in "Requesting Information" on page 597 and "Changing Configuration Information" on page 627.
5. (Optional) Verifies the syntactic correctness of a configuration before attempting to commit it, as described in "Verifying a Configuration Before Committing It" on page 651.

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6. Commits changes made to the configuration, as described in "Committing a Configuration" on page 652.
7. Unlocks the candidate configuration if it is locked, as described in "Unlocking the Candidate Configuration" on page 589.
8. Ends the NETCONF session and closes the connection to the device, as described in "Ending a NETCONF Session and Closing the Connection" on page 591.

Establishing a NETCONF Session

The NETCONF server communicates with client applications within the context of a NETCONF *session*. The server and client explicitly establish a connection and session before exchanging data and close the session and connection when they are finished.

The streams of NETCONF and Junos XML tag elements emitted by the NETCONF server and the client application must each constitute well-formed XML by obeying the structural rules defined in the document type definition (DTD) for the kind of information they are exchanging. The client application must emit tag elements in the required order and only in the allowed contexts.

Client applications access the NETCONF server using the SSH protocol and use the standard SSH authentication mechanism. After authentication, the NETCONF server uses the Junos login usernames and classes already configured on the device to determine whether a client application is authorized to make each request.

For information about establishing a connection and NETCONF session, see the following sections:

- Generating Well-Formed XML Documents on page 566
- Prerequisites for Establishing an SSH Connection on page 567
- Connecting to the NETCONF Server on page 577
- Starting the NETCONF Session on page 578

For an example of a complete NETCONF session, see "Example of a NETCONF Session" on page 593.

Generating Well-Formed XML Documents

Each set of NETCONF and Junos XML tag elements emitted by the NETCONF server and a client application within a **<hello>**, **<rpc>**, or **<rpc-reply>** tag element must constitute a well-formed XML document by obeying the structural rules defined in the document type definition (DTD) for the kind of information being sent. The client application must emit tag elements in the required order and only in the allowed contexts.

The NETCONF server and client applications must also comply with RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, available at http://www.ietf.org/rfc/rfc4742.txt . In particular, the server and applications must send the character sequence **]]>]]>** after each XML document. Because this sequence is not legal within an XML document, it unambiguously signals the end of a document. In practice, the client application sends the sequence after the closing **</hello>** tag and

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each closing **</rpc>** tag, and the NETCONF server sends it after the closing **</hello>** tag and each closing **</rpc-reply>** tag.

NOTE: In the following example (and in all examples in this document of tag elements emitted by a client application), bold font is used to highlight the part of the tag sequence that is discussed in the text.

```
<!-- generated by a client application -->
<hello | rpc>
  <!-- contents of top-level tag element  -->
</hello | /rpc>
]]>]]>

<!-- generated by the NETCONF server -->
<hello | rpc-reply attributes>
  <!-- contents of top-level tag element  -->
</hello | /rpc-reply>
]]>]]>
```

Prerequisites for Establishing an SSH Connection

You use the SSH protocol to establish connections between a *configuration management server* and a device running Junos OS. A configuration management server, as the name implies, is used to configure the device running Junos OS remotely. This server typically manages the configurations using Perl scripts.

There are two options available when establishing a connection between the configuration management server and a device running Junos OS: SSH and outbound SSH. With SSH, the configuration management server initiates an SSH session with the device running Junos OS. Outbound SSH is used when the configuration management server cannot initiate an SSH connection because of network restrictions (such as a firewall). In this situation, the device running Junos OS is configured to initiate, establish, and maintain an SSH connection with a predefined set of configuration management servers. For a complete discussion of outbound SSH, see “Configuring Outbound SSH Service” in the *Junos OS System Basics Configuration Guide*.

- Establishing an SSH Connection on page 567
- Establishing an Outbound SSH Connection on page 572

Establishing an SSH Connection

Before the configuration management server establishes an SSH connection with a device running Junos OS, you must satisfy the requirements discussed in the following sections.

- SSH Software Is Installed on the Configuration Management Server on page 568
- Client Application Can Log In on Devices Running Junos OS on page 568
- Junos Login Account Has Public/Private Key Pair or Password on page 569

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- Client Application Can Access the Keys or Password on page 570
- NETCONF Service over SSH Is Enabled on page 571

SSH Software Is Installed on the Configuration Management Server

The configuration management server handles the SSH connection between the configuration management server and the device running Junos OS. Therefore, the SSH software must be installed locally on the configuration management server. If the client application accessing the NETCONF server uses the NETCONF Perl module provided by Juniper Networks, no further action is necessary. As part of the installation procedure for the Perl module, you install a prerequisites package that includes the necessary SSH software. If the client application does not use the NETCONF Perl module, obtain the SSH software and install it on the configuration management server where the client application runs. For information about obtaining and installing SSH software, see http://www.ssh.com/ and http://www.openssh.com/ .

Client Application Can Log In on Devices Running Junos OS

When establishing a NETCONF session, the configuration management server must log in to the device running the Junos OS. Thus, each configuration management server needs a user account on each device where a NETCONF session will be established. The following instructions explain how to create a Junos OS login account on devices running the Junos OS. Alternatively, you can skip this section and enable authentication through RADIUS or TACACS+; for instructions, see the chapter about system authentication in the *Junos OS System Basics Configuration Guide*.

To determine whether a login account exists on a device running Junos OS, enter CLI configuration mode on the device and issue the following commands:

```
[edit]
user@host# edit system login
[edit system login]
user@host# show user account-name
```

If the appropriate account does not exist, perform the following steps to create one:

1. Include the **user** statement at the **[edit system login]** hierarchy level and specify a username. Also include the **class** statement at the **[edit system login user *username*]** hierarchy level, and specify a login class that has the permissions required for all actions to be performed by the application. Optionally, include the **full-name** and **uid** statements.

   ```
   [edit system login]
   user@host# set user user-name class class-name
   ```

   NOTE: For detailed information about creating user accounts, see the chapter about configuring user access in the *Junos OS System Basics Configuration Guide*.

2. Commit the configuration to activate the user account on the device. If you are going to make more changes to the configuration file, you can wait to commit the file until

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you have completed making all of the changes to the file. However, the user account is not activated on the device until you commit the configuration.

```
[edit system login]
user@host# commit
```

3. Repeat the preceding steps on each device where the client application will establish a NETCONF session.

Junos Login Account Has Public/Private Key Pair or Password

The configuration management server needs an SSH public/private key pair, a text-based password, or both before it can authenticate with the NETCONF server. A public/private key pair is sufficient if the account is used only to connect to the NETCONF server through SSH. If the account is also used to access the device in other ways (for login on the console, for example), it must have a text-based password. The password is also used (the SSH server prompts for it) if key-based authentication is configured but fails.

NOTE: You can skip this section if you have chosen to enable authentication through RADIUS or TACACS+, as described in the chapter about system authentication in the *Junos OS System Basics Configuration Guide*.

Follow the instructions in the appropriate section:

- Creating a Text-Based Password on page 569
- Creating a Public/Private Key Pair on page 570

Creating a Text-Based Password

To create a text-based password, perform the following steps:

1. Include either the **plain-text-password** or **encrypted-password** statement at the **[edit system login user *account-name* authentication]** hierarchy level. First, move to that hierarchy level:

   ```
   [edit system login]
   user@host# edit user account-name authentication
   ```

   To enter a password as text, issue the following command. You are prompted for the password, which is encrypted before being stored.

   ```
   [edit system login user account-name authentication]
   user@host# set plain-text-password
   New password: password
   Retype new password: password
   ```

   To store a password that you have previously created and hashed using Message Digest 5 (MD5) or Secure Hash Algorithm 1 (SHA-1), issue the following command:

   ```
   [edit system login user account-name authentication]
   user@host# set encrypted-password "password"
   ```

2. (Optional) Commit the configuration. Alternatively, you can wait until you have added the statements that satisfy all prerequisites (see "NETCONF Service over SSH Is Enabled" on page 571).

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```
[edit system login user account-name authentication]
user@host# commit
```

3. Repeat the preceding steps on each device running Junos OS where the client application establishes NETCONF sessions.

Creating a Public/Private Key Pair

To create an SSH public/private key pair, perform the following steps:

1. Issue the **ssh-keygen** command in the standard command shell (not the Junos OS CLI) on the configuration management server where the client application runs. By providing the appropriate arguments, you encode the public key with either RSA (supported by SSH versions 1 and 2) or the Digital Signature Algorithm (DSA, supported by SSH version 2). For more information, see the manual page for the **ssh-keygen** command. The Junos OS uses SSH version 2 by default, but also supports version 1.

   ```
   % ssh-keygen options
   ```

2. Associate the public key with the Junos login account by including the **load-key-file** statement at the **[edit system login user *account-name* authentication]** hierarchy level. The Junos OS copies the contents of the specified file onto the device running Junos OS.

   ```
   [edit system login user account-name authentication]
   user@host# set load-key-file URL
   ```

   URL is the path to the file that contains one or more public keys. The **ssh-keygen** command by default stores each public key in a file in the **.ssh** subdirectory of the user home directory; the filename depends on the encoding (DSA or RSA) and SSH version. For information about specifying URLs, see the *CLI User Guide*.

   Alternatively, you can include one or both of the **ssh-dsa** and **ssh-rsa** statements at the **[edit system login user *account-name* authentication]** hierarchy level. We recommend using the **load-key-file** statement, however, because it eliminates the need to type or cut-and-paste the public key on the command line. For more information about the **ssh-dsa** and **ssh-rsa** statements, see the *Junos OS System Basics Configuration Guide*.

3. (Optional) Commit the configuration. Alternatively, you can wait until you have added the statements that satisfy all prerequisites (see "NETCONF Service over SSH Is Enabled" on page 571).

   ```
   [edit system login user account-name authentication]
   user@host# commit
   ```

4. Repeat Step 2 and Step 3 on each device running Junos OS where the client application establishes NETCONF sessions.

Client Application Can Access the Keys or Password

The client application must be able to access the public/private keys or password you created in "Junos Login Account Has Public/Private Key Pair or Password" on page 569 and provide it when the NETCONF server prompts for it.

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There are several methods for enabling the application to access the key or password:

- If public/private keys are used, the **ssh-agent** program runs on the computer where the client application runs, and handles the private key.
- When a user starts the application, the application prompts the user for the password and stores it temporarily in a secure manner.
- The password is stored in encrypted form in a secure local-disk location or in a secured database.

NETCONF Service over SSH Is Enabled

RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, requires that the NETCONF server, by default, provide the client device with access to the NETCONF SSH subsystem when the SSH session is established over a dedicated IANA-assigned TCP port. Use of a dedicated port makes it easy to identify and filter NETCONF traffic. The IANA-assigned port for NETCONF-over-SSH sessions is 830.

You also can configure the server to allow access to the NETCONF SSH subsystem either over the default SSH port (22) or over a port number that is explicitly configured. An explicitly configured port accepts only NETCONF-over-SSH sessions and rejects regular SSH session requests. If SSH services are enabled on the server, the default SSH port (22) continues to accept NETCONF sessions even when an alternate NETCONF-over-SSH port is configured. For added security, you can configure event policies that utilize **UI_LOGIN_EVENT** information to effectively disable the default port or further restrict NETCONF server access on a port.

To enable NETCONF service over SSH on a device running the Junos OS, perform the following steps:

1. Include one of the following statements at the indicated configuration hierarchy level:
   - To enable access to the NETCONF SSH subsystem using the default IANA-assigned port (830) as specified by RFC 4742, include the **ssh** statement at the **[edit system services netconf]** hierarchy level:

     ```
     [edit system services]
     user@host# set netconf ssh
     ```

   - To enable access to the NETCONF SSH subsystem using a specified port number, configure the **port** statement with the desired port number at the [**edit system services netconf ssh**] hierarchy level.

     ```
     [edit system services]
     user@host# set netconf ssh port port-number
     ```

     The ***port-number*** can range from 1 through 65535. The configured port accepts only NETCONF-over-SSH sessions and rejects regular SSH session requests.

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NOTE: Although NETCONF-over-SSH can be configured on any port from 1 through 65535, you should avoid configuring access on a port that is normally assigned for another service. This practice avoids potential resource conflicts. If you configure NETCONF-over-SSH on a port assigned for another service, such as FTP, and that service is enabled, a commit check does not reveal a resource conflict or issue any warning message to that effect.

- To enable access to the NETCONF SSH subsystem using the default SSH port (22), include the **ssh** statement at the **[edit system services]** hierarchy level. This configuration enables SSH access to the device for all users and applications. The **ssh** statement can be included in the configuration in addition to the configuration statements listed previously.

  ```
  [edit system services]
  user@host# set ssh
  ```

2. Commit the configuration:

   ```
   [edit]
   user@host# commit
   ```

3. Repeat the preceding steps on each device running Junos OS where the client application will establish NETCONF sessions.

Establishing an Outbound SSH Connection

To enable a configuration management server to establish an outbound SSH connection to the NETCONF server, you must satisfy the requirements discussed in the following sections:

- Configuring the Device Running Junos OS for Outbound SSH on page 572
- Installing SSH Software on the Client on page 575
- Receiving and Managing the Outbound SSH Initiation Sequence on the Client on page 575
- Enabling NETCONF Service over SSH on page 576

Configuring the Device Running Junos OS for Outbound SSH

To configure the device running Junos OS for outbound SSH:

1. At the **[edit system services ssh]** hierarchy level, set the SSH **protocol-version** to v2:

   ```
   [edit system services ssh]
   user@host# set protocol-version v2
   ```

2. Generate or obtain a public/private key pair for the device running Junos OS. This key pair will be used to encrypt the data transferred across the SSH connection. For more information on generating key pairs, see the *Junos OS System Basics Configuration Guide*.

3. If the public key will be installed on the configuration management server manually, transfer the public key to the configuration management server.

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4. Add the following **outbound-ssh** statement at the **[edit system services]** hierarchy level:

```
[edit system services]
outbound-ssh {
  client client-id {
    device-id device-id;
    secret secret;
    keep-alive {
      retry number
      timeout number;
    }
    reconnect-strategy (sticky | in-order);
    services netconf;
    [ address ] {
      port destination-port;
      retry number;
      timeout number;
    }
  }
  traceoptions {
    file filename {
      files files;
      size size;
      match match;
      (world-readable | no-world-readable);
    }
    flag (all | configuration | connectivity );
    no-remote-trace;
  }
}
```

The attributes are as follows:

- **client** *client-id*—**outbound-ssh** configuration stanza on the device. Each **outbound-ssh** stanza represents a single outbound SSH connection. This attribute is not sent to the client.

  device-id *device-id*—Unique ID identifying the device running Junos OS to the configuration management server during the initiation process.

- **secret** *secret*—(Optional) Public SSH host key of the device. If this statement is added to the **outbound-ssh** configuration hierarchy, the device will pass its public key to the configuration management server during the initialization of the outbound SSH service. This is the recommended method of maintaining a current copy of the device's public key on the configuration management server.

- **keep-alive**—(Optional) Specify that keepalive messages be sent from the device running Junos OS to the configuration management server. To configure the keepalive message, you must set both the **timeout** and **retry** attributes.

  - **retry** *number*—Number of keepalive messages the device running Junos OS sends without receiving a response from the configuration management server before the current SSH connection is terminated. The default is three tries.

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- **timeout *seconds***—Amount of time, in seconds, that the server waits for data before sending a keepalive signal. The default is 15 seconds.

- **reconnect-strategy (sticky | in-order)**—(Optional) Method that the device running Junos OS uses to reestablish a disconnected outbound SSH connection. Two methods are available:
  - **sticky**—The device attempts to reconnect to the configuration management server to which it was last connected. If the connection is unavailable, the device attempts to establish a connection with the next configuration management server on the list and so forth until a connection is established.
  - **in-order**—The device attempts to reestablish an outbound SSH session based on the configuration management server address list. The device attempts to establish a session with the first server on the list. If this connection is not available, the device attempts to establish a session with the next server, and so on down the list until a connection is established.

  When reconnecting to a client, the device running Junos OS attempts to reconnect to the client based on the **retry** and **timeout** values for each client listed in the configuration management server list.
- **services netconf**—(Required) Specifies the services available for the session. Currently, NETCONF is the only service available.
- **address**—(Required) The host name or the IPv4 address of the configuration management server. You can list multiple clients by adding each client's IP address or host name along with the connection parameters listed below:
  - **port *destination-port***—Outbound SSH port for the client. The default is port 22.
  - **retry *number***– Number of times the device running Junos OS attempts to establish an outbound SSH connection before gving up. The default is three tries.
  - **timeout *seconds***—Amount of time, in seconds, that the device running Junos OS attempts to establish an outbound SSH connection before giving up. The default is 15 seconds.
- **file *filename***—(Optional) Filename of the log file used to record the trace options. By default it is the name of the traced process (for example **mib2d** or **snmpd**). Use this option to override the default value.
- **files *files***—(Optional) Maximum number of trace files generated. By default, the maximum number of trace files is 10. Use this option to override the default value.

  When a trace file reaches its maximum size, the system archives the file and starts a new file. The system archives trace files by appending a number to the filename in sequential order from 1 to the maximum value (specified by the default value or the options value set here). Once the maximum value is reached, the numbering sequence is restarted at 1, overwriting the older file.
- **size *size***—(Optional) The maximum size of the trace file in kilobytes (KB). Once the maximum file size is reached, the system will archive the file. The default value is 1 MB. Use this option to override the default value.

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- **match** *match*—(Optional) Add lines to the trace file that match the the regular expression specified. For example, if the match value is set to **=error**, the system will only record lines to the trace file that include the string **error**.
- **(world-readable | no-world-readable)**—(Optional) This option specifies whether the files are accessible by the originator of the trace operation only or by any user. By default, log files are only accessible by the user that started the trace operation (**no-world-readable**). Use this option to override the default value.
- **(all | configuration | connectivity)**—(Optional) Flag specifying the type of tracing operation to perform.
  - **all**—Log all events.
  - **configuration**—Log all events pertaining to the configuration of the device running Junos OS.
  - **connectivity**—Log all events pertaining to the establishment of a connection between the client server and the device running Junos OS.
- **no-remote-trace**—(Optional) Disables remote tracing.

5. Commit the configuration:

```
[edit]
user@host# commit
```

Installing SSH Software on the Client

Once the device establishes the SSH connection to the configuration management server, the configuration management server takes control of the SSH session. Therefore, the SSH client software must be installed locally on the configuration management server.

If the client application accessing the NETCONF server uses the NETCONF Perl module provided by Juniper Networks, no further action is necessary. As part of the installation procedure for the Perl module, you install a prerequisites package that includes the necessary SSH software. If the client application does not use theNETCONF Perl module, obtain the SSH client software and install it on the configuration management server where the application runs. For information about obtaining and installing SSH software, see http://www.ssh.com/ and http://www.openssh.com/ .

Receiving and Managing the Outbound SSH Initiation Sequence on the Client

When configured for outbound SSH, the device running Junos OS attempts to maintain a constant connection with a configuration management server. Whenever an outbound SSH session is not established, the device sends an outbound SSH initiation sequence to a configuration management server listed within the device's configuration management server list. Prior to establishing a connection with the device, each configuration management server must be set up to receive this initiation sequence, establish a TCP connection with the device, and transmit the device identity back to the device.

The initiation sequence takes one of two forms, depending on how you chose to handle the Junos server's public key.

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If the public key is installed manually on the configuration management server, the initiation sequence takes the following form:

```
MSG-ID: DEVICE-CONN-INFO\r\n
MSG-VER: V1\r\n
DEVICE-ID: <device-id>\r\n
```

If the public key is forwarded to the configuration management server by the device during the initialization sequence, the sequence takes the following form:

```
MSG-ID: DEVICE-CONN-INFO\r\n
MSG-VER: V1\r\n
DEVICE-ID: : <device-id>\r\n
HOST-KEY: <pub-host-key>\r\n
HMAC: <HMAC(pub-SSH-host-key,<secret>)>\r\n
```

Enabling NETCONF Service over SSH

RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, requires that the NETCONF server, by default, provide the client device with access to the NETCONF SSH subsystem when the SSH session is established over a dedicated IANA-assigned TCP port. Use of a dedicated port makes it easy to identify and filter NETCONF traffic. The IANA-assigned port for NETCONF-over-SSH sessions is 830.

You also can configure the server to allow access to the NETCONF SSH subsystem either over the default SSH port (22) or over a port number that is explicitly configured. An explicitly configured port accepts only NETCONF-over-SSH sessions and rejects regular SSH session requests. If SSH services are enabled on the server, the default SSH port (22) continues to accept NETCONF sessions even when an alternate NETCONF-over-SSH port is configured. For added security, you can configure event policies that utilize **UI_LOGIN_EVENT** information to effectively disable the default port or further restrict NETCONF server access on a port.

To enable NETCONF service over SSH on a device running the Junos OS, perform the following steps:

1. Include one of the following statements at the indicated hierarchy level:

   - To enable access to the NETCONF SSH subsystem using the default IANA-assigned port (830) as specified by RFC 4742, include the **ssh** statement at the **[edit system services netconf]** hierarchy level:

     ```
     [edit system services]
     user@host# set netconf ssh
     ```

   - To enable access to the NETCONF SSH subsystem using a specified port number, configure the **port** statement with the desired port number at the [**edit system services netconf ssh**] hierarchy level.

     ```
     [edit system services]
     user@host# set netconf ssh port port-number
     ```

     The ***port-number*** can range from 1 through 65535. The configured port accepts only NETCONF-over-SSH sessions and rejects regular SSH session requests.

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NOTE: Although NETCONF-over-SSH can be configured on any port from 1 through 65535, you should avoid configuring access on a port that is normally assigned for another service. This practice avoids potential resource conflicts. If you configure NETCONF-over-SSH on a port assigned for another service, such as FTP, and that service is enabled, a commit check does not reveal a resource conflict or issue any warning message to that effect.

- To enable access to the NETCONF SSH subsystem using the default SSH port (22), include the **ssh** statement at the **[edit system services]** hierarchy level. This configuration enables SSH access to the device for all users and applications. The **ssh** statement can be included in the configuration in addition to the configuration statements listed previously.

  ```
  [edit system services]
  user@host# set ssh
  ```

2. Commit the configuration:

   ```
   [edit]
   user@host# commit
   ```

3. Repeat the preceding steps on each device where the client application will establish a NETCONF session.

Connecting to the NETCONF Server

Before a client application can connect to the NETCONF server, you must satisfy the requirements described in "Prerequisites for Establishing an SSH Connection" on page 567.

When the prerequisites are satisfied, applications written in Perl use the NETCONF Perl module to connect to the NETCONF server. A client application that does not use the NETCONF Perl module uses one of two methods:

- It uses SSH library routines to establish an SSH connection to the NETCONF server, provide the username and password or passphrase, and create a channel that acts as an SSH subsystem for the NETCONF session. Providing instructions for using library routines is beyond the scope of this document.
- It issues the following **ssh** command to create a NETCONF session as an SSH subsystem:

  ssh -p 830 -s *user*@*hostname* netconf

  The **-p** option defines the port number on which the NETCONF server listens. This option can be omitted if you enabled access to SSH over the default port in "Enabling NETCONF Service over SSH" on page 576.

  The **-s** option establishes the NETCONF session as an SSH subsystem.

  The application must include code to intercept the NETCONF server's prompt for the password or passphrase. Perhaps the most straightforward method is for the application

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to use a utility such as the **expect** command. The NETCONF Perl client uses this method, for example.

Starting the NETCONF Session

Each NETCONF session begins with a handshake in which the NETCONF server and the client application specify the NETCONF capabilities they support. The following sections describe how to start a NETCONF session:

- Exchanging <hello> Tag Elements on page 578
- Verifying Compatibility on page 580

Exchanging <hello> Tag Elements

The NETCONF server and client application each begin by emitting a **<hello>** tag element to specify which operations, or *capabilities,* they support from among those defined in the NETCONF specification. The **<hello>** tag element encloses the **<capabilities>** tag element and the **<session-id>** tag element, which specifies the UNIX process ID (PID) of the NETCONF server for the session. Within the **<capabilities>** tag element, a **<capability>** tag element specifies each supported function.

The client application must emit the **<hello>** tag element before any other tag element during the NETCONF session, and must not emit it more than once.

Each capability defined in the NETCONF specification is represented in a **<capability>** tag element by a uniform resource name (URN). Capabilities defined by individual vendors are represented by uniform resource identifiers (URIs), which can be URNs or URLs. The NETCONF XML management protocol for Junos OS Release 12.1 emits the following **<hello>** tag element (each **<capability>** tag element appears on three lines for legibility only):

```
<hello>
  <capabilities>
    <capability>urn:ietf:params:xml:ns:netconf:base:1.0</capability>
    <capability>
      urn:ietf:params:xml:ns:netconf:capability:candidate:1.0
    </capability>
    <capability>
      urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0
    </capability>
    <capability>
      urn:ietf:params:xml:ns:netconf:capability:validate:1.0
    </capability>
    <capability>
      urn:itf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file
    </capability>
    <capability>http://xml.juniper.net/netconf/junos/1.0</capability>
  </capabilities>
  <session-id>3911</session-id>
</hello>
]]>]]>
```


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(For information about the **]]>]]>** character sequence, see "Generating Well-Formed XML Documents" on page 566.)

The URIs in the **<hello>** tag element indicate the following supported capabilities:

- **urn:ietf:params:xml:ns:netconf:base:1.0**—The NETCONF server supports the basic NETCONF operations and tag elements defined in this namespace.
- **urn:ietf:params:xml:ns:netconf:capability:candidate:1.0**—The NETCONF server supports operations on a candidate configuration. For more information, see "Requesting Information from the Committed or Candidate Configuration" on page 603 and "Committing Configurations" on page 651.
- **urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0**—The NETCONF server supports confirmed commit operations. For more information, see "Committing the Candidate Configuration Only After Confirmation" on page 652.
- **urn:ietf:params:xml:ns:netconf:capability:validate:1.0**—The NETCONF server supports the validation operation, which verifies the syntactic correctness of a configuration without actually committing it. For more information, see "Verifying a Configuration Before Committing It" on page 651.
- **urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file**—The NETCONF server accepts configuration data stored in a file. It can retrieve files both from its local filesystem (indicated by the **file** option in the URN) and from remote machines by using Hypertext Transfer Protocol (HTTP) or FTP (indicated by the **http** and **ftp** options in the URN). For more information, see "Referencing Configuration Data Files" on page 629.
- **http://xml.juniper.net/netconf/junos/1.0**—The NETCONF server supports the operations defined in the Junos XML API for requesting and changing operational information (the tag elements in the *Junos XML API Operational Developer Reference*). The NETCONF server also supports operations in the Junos XML management protocol for requesting or changing configuration information.

  NETCONF client applications should use only native NETCONF XML management protocol operations and the extensions available in the Junos XML management protocol as documented in "Summary of Junos XML Protocol Tag Elements Supported in NETCONF Sessions" on page 671 for configuration functions. The semantics of corresponding Junos XML protocol operations and NETCONF XML protocol operations are not necessarily identical, so using Junos XML protocol configuration operations other than the extensions documented in "Summary of Junos XML Protocol Tag Elements Supported in NETCONF Sessions" on page 671 can lead to unexpected results.

To comply with the NETCONF specification, the client application also emits a **<hello>** tag element to define the capabilities it supports. It does not include the **<session-id>** tag element:

```
<hello>
<capabilities>
  <capability>first-capability</capability>
   <!-- tag elements for additional capabilities -->
```

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```
</capabilities>
</hello>
]]>]]>
```

Verifying Compatibility

Exchanging **<hello>** tag elements enables a client application and the NETCONF server to determine if they support the same capabilities. In addition, we recommend that the client application determine the version of the Junos OS running on the NETCONF server. After emitting its **<hello>** tag, the client application emits the **<get-software-information>** tag element in an **<rpc>** tag element:

```
<rpc>
  <get-software-information/>
</rpc>
]]>]]>
```

The NETCONF server returns the **<software-information>** tag element, which encloses the **<host-name>** and **<product-name>** tag elements plus a **<package-information>** tag element for each Junos OS module. (For information about the **<rpc-reply>** tag element, see "Parsing the NETCONF Server Response" on page 584.) The **<comment>** tag element within the **<package-information>** tag element specifies the Junos OS Release number (in the following example, **8.2** for Junos OS Release 8.2) and the build date in the form ***YYYYMMDD*** (year, month, day—12 January 2007 in the following example). Some tag elements appear on multiple lines, for legibility only:

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" \
        xmlns:junos="http://xml.juniper.net/junos/8.2R1/junos">
  <software-information>
    <host-name>router1</host-name>
    <product-name>m20</product-name>
    <package-information>
      <name>junos</name>
      <comment>JUNOS Base OS boot [8.2-20070112.0]</comment>
    </package-information>
    <package-information>
      <name>jbase</name>
      <comment>JUNOS Base OS Software Suite \
              [8.2-20070112.0]</comment>
    </package-information>
    <!-- <package-information> tag elements for additional modules -->
  </software-information>
  </capabilities>
</rpc-reply>
]]>]]>
```

Normally, the version is the same for all Junos OS modules running on the device (we recommend this configuration for predictable routing performance). Therefore, verifying the version number of just one module is usually sufficient.

The client application is responsible for determining how to handle any differences in version or capabilities. For fully automated performance, include code in the client application that determines whether it supports the same capabilities and Junos OS

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version as the NETCONF server. Decide which of the following options is appropriate when there are differences, and implement the corresponding response:

- Ignore differences in capabilities and Junos version, and do not alter the client application's behavior to accommodate the NETCONF server. A difference in Junos versions does not necessarily make the server and client incompatible, so this is often a valid approach. Similarly, it is a valid approach if the capabilities that the client application does not support are operations that are always initiated by a client, such as validation of a configuration and confirmed commit. In that case, the client maintains compatibility by not initiating the operation.
- Alter standard behavior to be compatible with the NETCONF server. If the client application is running a later version of the Junos OS, for example, it can choose to emit only NETCONF and Junos XML tag elements that represent the software features available in the NETCONF server's version of the Junos OS.
- End the NETCONF session and terminate the connection. This is appropriate if you decide that it is not practical to accommodate the NETCONF server's version or capabilities. For instructions, see "Ending a NETCONF Session and Closing the Connection" on page 591.

Exchanging Information with the NETCONF Server

The session continues when the client application sends a request to the NETCONF server. The NETCONF server does not emit any tag elements after session initialization except in response to the client application's requests. The following sections describe the exchange of tagged data:

- Sending a Request to the NETCONF Server on page 581
- Parsing the NETCONF Server Response on page 584
- Handling an Error or Warning on page 587

Sending a Request to the NETCONF Server

To initiate a request to the NETCONF server, a client application emits the opening **<rpc>** tag, followed by one or more tag elements that represent the particular request, and the closing **</rpc>** tag, in that order:

```
<rpc>
    <!-- tag elements representing a request -->
</rpc>
]]>]]>
```

Each request is enclosed in its own separate pair of opening **<rpc>** and closing **</rpc>** tags and must constitute a well-formed XML document by including only compliant and correctly ordered tag elements. For information about the **]]>]]>** character sequence, see "Generating Well-Formed XML Documents" on page 566. For an example of emitting an **<rpc>** tag element in the context of a complete NETCONF session, see "Example of a NETCONF Session" on page 593.

The NETCONF server ignores any newline characters, spaces, or other white space characters that occur between tag elements in the tag stream, but it preserves white

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space within tag elements. For more information, see "XML and NETCONF XML Management Protocol Conventions Overview" on page 551.

See the following sections for further information:

- Request Classes on page 582
- Including Attributes in the Opening <rpc> Tag on page 584

Request Classes

A client application can make three classes of requests:

- Operational Requests on page 582
- Configuration Information Requests on page 582
- Configuration Change Requests on page 583

NOTE: Although operational and configuration requests conceptually belong to separate classes, a NETCONF session does not have distinct modes that correspond to CLI operational and configuration modes. Each request tag element is enclosed within its own <rpc> tag element, so a client application can freely alternate operational and configuration requests.

Operational Requests

Operational requests are requests for information about the status of a device running Junos OS. Operational requests correspond to the CLI operational mode commands listed in the Junos OS command references. The Junos XML API defines a request tag element for many CLI commands. For example, the **<get-interface-information>** tag element corresponds to the **show interfaces** command, and the **<get-chassis-inventory>** tag element requests the same information as the **show chassis hardware** command.

The following sample request is for detailed information about the interface **ge-2/3/0**:

```
<rpc>
  <get-interface-information>
    <interface-name>ge-2/3/0</interface-name>
    <detail/>
  </get-interface-information>
</rpc>
]]>]]>
```

For more information, see "Requesting Operational Information" on page 598. For information about the Junos XML request tag elements available in the current Junos OS Release, see the *Junos XML API Operational Developer Reference*.

Configuration Information Requests

Configuration information requests are requests for information about the device's candidate configuration, a private configuration, or the committed configuration (the one currently in active use on the switching, routing, or security platform). The candidate and committed configurations diverge when there are uncommitted changes to the candidate configuration.

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The NETCONF protocol defines the **<get-config>** operation for retrieving configuration information. The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy.

The following example shows how to request information from the **[edit system login]** hierarchy level of the candidate configuration:

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter type="subtree">
      <configuration>
        <system>
          <login/>
        </system>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

For more information, see "Requesting Configuration Information" on page 602. For a summary of the available configuration tag elements, see the *Junos XML API Configuration Developer Reference*

Configuration Change Requests

Configuration change requests are requests to change the candidate configuration, or to commit those changes to put them into active use on the device running Junos OS. The NETCONF protocol defines the **<edit-config>** and **<copy-config>** operations for changing configuration information. The Junos XML API defines a tag element for every CLI configuration statement described in the Junos OS configuration guides.

The following example shows how to create a new Junos OS user account called **admin** at the **[edit system login]** hierarchy level in the candidate configuration:

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <system>
          <login>
            <user>
              <name>admin</name>
              <full-name>Administrator</full-name>
              <class>superuser</class>
            </user>
          </login>
          <login/>
        </system>
```

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```
        </configuration>
      </config>
    </edit-config>
  </rpc>
  ]]>]]>
```

For more information, see "Changing Configuration Information" on page 627. For a summary of Junos XML configuration tag elements, see the *Junos XML API Configuration Developer Reference*

Including Attributes in the Opening <rpc> Tag

Optionally, a client application can include one or more attributes of the form ***attribute-name*="*value***" in the opening **<rpc>** tag for each request. The NETCONF server echoes each attribute, unchanged, in the opening **<rpc-reply>** tag in which it encloses its response.

A client application can use this feature to associate requests and responses by including an attribute in each opening **<rpc>** request tag that assigns a unique identifier. The NETCONF server echoes the attribute in its opening **<rpc-reply>** tag, making it easy to map the response to the initiating request. The NETCONF specification specifies the name **message-id** for this attribute.

Parsing the NETCONF Server Response

The NETCONF server encloses its response to each client request in a separate pair of opening **<rpc-reply>** and closing **</rpc-reply>** tags. Each response constitutes a well-formed XML document. The opening **<rpc-reply>** tag includes the **xmlns** and **xmlns:junos** attributes (the opening tag appears here on multiple lines for legibility only):

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" \
        xmlns:junos="http://xml.juniper.net/junos/release/junos" \
        [echoed attributes]>
  <!-- tag elements representing a response -->
</rpc-reply>
]]>]]>
```

The **xmlns** attribute defines the namespace for enclosed tag elements that do not have the **junos:** prefix on their names and that are not enclosed in a child container tag that has the **xmlns** attribute with a different value.

The **xmlns:junos** attribute defines the namespace for enclosed Junos XML tag elements that have the **junos:** prefix on their names. The variable ***release*** is replaced by a code such as **12.1R1** for the initial version of Junos OS Release 12.1.

For information about the **]]>]]>** character sequence, see "Generating Well-Formed XML Documents" on page 566. For information about echoed attributes, see "Including Attributes in the Opening <rpc> Tag" on page 584.

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Client applications must include code for parsing the stream of response tag elements coming from the NETCONF server, either processing them as they arrive or storing them until the response is complete. See the following sections for further information:

- NETCONF Server Response Classes on page 585
- Using a Standard API to Parse Response Tag Elements on page 586

NETCONF Server Response Classes

The NETCONF server returns three classes of responses:

- Operational Responses on page 585
- Configuration Information Responses on page 586
- Configuration Change Responses on page 586

Operational Responses

Operational responses are responses to requests for information about the status of a switching, routing, or security platform. They correspond to the output from CLI operational commands as described in the Junos OS command references.

The Junos XML API defines response tag elements for all defined operational request tag elements. For example, the NETCONF server returns the information requested by the **<get-interface-information>** tag element in a response tag element called **<interface-information>** and returns the information requested by the **<get-chassis-inventory>** tag element in a response tag element called **<chassis-inventory>**. Operational responses also can be returned in formatted ASCII, which is enclosed in an **output** tag element. For more information about formatting operational responses see "Specifying the Output Format for Operational Information Requests in a NETCONF Session" on page 600.

The following sample response includes information about the interface **ge-2/3/0**. The namespace indicated by the **xmlns** attribute in the opening **<interface-information>** tag is for interface information in the initial version of Junos OS Release 12.1. The opening tags appear on two lines here for legibility only:

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"\
        xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
  <interface-information \
        xmlns="http://xml.juniper.net/junos/12.1R1/junos-interface">
    <physical-interface>
      <name>ge-2/3/0</name>
      <!-- other data tag elements for the ge-2/3/0 interface - ->
    </physical-interface>
  </interface-information>
</rpc-reply>
]]>]]>
```

For more information about the **xmlns** attribute and the contents of operational response tag elements, see "Requesting Operational Information" on page 598. For a summary of operational response tag elements, see the *Junos XML API Operational Developer Reference*.

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Configuration Information Responses

Configuration information responses are responses to requests for information about the device's current configuration. The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy.

The following sample response includes the information at the **[edit system login]** hierarchy level in the configuration hierarchy. For brevity, the sample shows only one user defined at this level. The opening **<rpc-reply>** tag appears on two lines for legibility only. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"\
  xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
  <data>
    <configuration attributes>
      <system>
        <login>
          <user>
            <name>admin</name>
            <full-name>Administrator</full-name>
            <!-- other data tag elements for the admin user -->
          </user>
        </login>
      </system>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

Configuration Change Responses

Configuration change responses are responses to requests that change the state or contents of the device configuration. The NETCONF server indicates successful execution of a request by returning the **<ok/>** tag within the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the operation fails, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element that describes the cause of the failure. For information about handling errors, see "Handling an Error or Warning" on page 587.

For information about changing the device configuration, see "Changing Configuration Information" on page 627. For a summary of the available configuration tag elements, see the *Junos XML API Configuration Developer Reference*.

Using a Standard API to Parse Response Tag Elements

Client applications can handle incoming XML tag elements by feeding them to a parser that is based on a standard API such as the Document Object Model (DOM) or Simple API for XML (SAX). Describing how to implement and use a parser is beyond the scope of this document.

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Routines in the DOM accept incoming XML and build a tag hierarchy in the client application's memory. There are also DOM routines for manipulating an existing hierarchy. DOM implementations are available for several programming languages, including C, C++, Perl, and Java. For detailed information, see the *Document Object Model (DOM) Level 1 Specification* from the World Wide Web Consortium (W3C) at http://www.w3.org/TR/REC-DOM-Level-1/ . Additional information is available from the Comprehensive Perl Archive Network (CPAN) at http://search.cpan.org/~tjmather/XML-DOM/lib/XML/DOM.pm .

One potential drawback with DOM is that it always builds a hierarchy of tag elements, which can become very large. If a client application needs to handle only one subhierarchy at a time, it can use a parser that implements SAX instead. SAX accepts XML and feeds the tag elements directly to the client application, which must build its own tag hierarchy. For more information, see the official SAX website at http://sax.sourceforge.net/ .

Handling an Error or Warning

If the NETCONF server encounters an error condition, it emits an **<rpc-error>** tag element containing tag elements that describe the error:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rpc-error>
    <error-severity>error-severity</error-severity>
    <error-path>error-path</error-path>
    <error-message>error-message</error-message>
    <error-info>
      <bad-element>command-or-statement</bad-element>
    </error-info>
  <rpc-error>
</rpc-reply>
]]>]]>
```

<bad-element> identifies the command or configuration statement that was being processed when the error or warning occurred. For a configuration statement, the **<error-path>** tag element enclosed in the **<rpc-error>** tag element specifies the statement's parent hierarchy level.

<error-message> describes the error or warning in a natural-language text string.

<error-path> specifies the path to the Junos OS configuration hierarchy level at which the error or warning occurred, in the form of the CLI configuration mode banner.

<error-severity> indicates the severity of the event that caused the NETCONF server to return the **<rpc-error>** tag element. The two possible values are **error** and **warning**.

An error can occur while the server is performing any of the following operations, and the server can send a different combination of child tag elements in each case:

- Processing an operational request submitted by a client application
- Locking, changing, committing, or closing a configuration as requested by a client application

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- Parsing configuration data submitted by a client application in an **<edit-config>** tag element

Client applications must be prepared to receive and handle an **<rpc-error>** tag element at any time. The information in any response tag elements already received and related to the current request might be incomplete. The client application can include logic for deciding whether to discard or retain the information.

When the **<error-severity>** tag element has the value **error**, the usual response is for the client application to discard the information and terminate. When the **<error-severity>** tag element has the value **warning**, indicating that the problem is less serious, the usual response is for the client application to log the warning or pass it to the user and to continue parsing the server's response.

Locking and Unlocking the Candidate Configuration

When a client application is requesting or changing configuration information, it can use one of two methods to access the configuration:

- Lock the candidate configuration, which prevents other users or applications from changing it until the application releases the lock (equivalent to the CLI **configure exclusive** command).
- Change the candidate configuration without locking it. We do not recommend this method, because of the potential for conflicts with changes made by other applications or users that are editing the configuration at the same time.

If an application is simply requesting configuration information and not changing it, locking the configuration is not required. The application can begin requesting information immediately, as described in "Requesting Configuration Information" on page 602. However, it is appropriate to lock the configuration if it is important that the information being returned not change during the session.

For more information about locking and unlocking the candidate configuration, see the following sections:

- Locking the Candidate Configuration on page 588
- Unlocking the Candidate Configuration on page 589

Locking the Candidate Configuration

To lock the candidate configuration, a client application emits the **<lock>** and **<target>** tag elements and the **<candidate/>** tag in the **<rpc>** tag element:

```
<rpc>
  <lock>
    <target>
      <candidate/>
    </target>
  </lock>
</rpc>
]]>]]>
```


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Locking the candidate configuration prevents other users or applications from changing the candidate configuration until the lock is released (equivalent to the CLI **configure exclusive** command). Locking the configuration before making changes is recommended, particularly on devices where multiple users are authorized to change the configuration. A commit operation applies to all changes in the candidate configuration, not just those made by the user or application that requests the commit. Allowing multiple users or applications to make changes simultaneously can lead to unexpected results.

The NETCONF server confirms that it has locked the candidate by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the NETCONF server cannot lock the configuration, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element explaining the reason for the failure. Reasons for the failure can include the following:

- Another user or application has already locked the candidate configuration. The error message reports the NETCONF session identifier of the user or application. If the client application has the necessary Junos access privilege, it can terminate the session that holds the lock. For more information, see "Terminating Another NETCONF Session" on page 590.
- The candidate configuration already includes changes that have not yet been committed. To commit the changes, see "Committing a Configuration" on page 652. To discard uncommitted changes, see "Rolling Back a Configuration" on page 639.

Only one application can hold the lock on the candidate configuration at a time. Other users and applications can read the candidate configuration while it is locked. The lock persists until either the NETCONF session ends or the client application unlocks the configuration by emitting the **<unlock>** tag element, as described in "Unlocking the Candidate Configuration" on page 589.

If the candidate configuration is not committed before the client application unlocks it, or if the NETCONF session ends for any reason before the changes are committed, the changes are automatically discarded. The candidate and committed configurations remain unchanged.

Unlocking the Candidate Configuration

As long as a client application holds a lock on the candidate configuration, other applications and users cannot change the candidate. To unlock the candidate configuration, the client application includes the **<unlock>** and **<target>** tag elements and the **<candidate/>** tag in an **<rpc>** tag element:

```
<rpc>
  <unlock>
    <target>
      <candidate/>
```

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```
      </target>
    </unlock>
  </rpc>
  ]]>]]>
```

The NETCONF server confirms that it has unlocked the candidate by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the NETCONF server cannot unlock the configuration, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element explaining the reason for the failure.

Terminating Another NETCONF Session

A client application's attempt to lock the candidate configuration can fail because another user or application already holds the lock, as mentioned in "Locking the Candidate Configuration" on page 588. In this case, the NETCONF server returns an error message that includes the username and process ID (PID) for the entity that holds the existing lock:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rpc-error>
    <error-severity>error</error-severity>
    <error-message>
      configuration database locked by:
user terminal (pid PID) on since YYYY-MM-DD hh:mm:ss TZ, idle hh:mm:ss
      exclusive
    </error-message>
  </rpc-error>
</rpc-reply>
]]>]]>
```

If the client application has the Junos **maintenance** permission, it can end the session that holds the lock by emitting the **<kill-session>** and **<session-id>** tag elements in an **<rpc>** tag element. The **<session-id>** tag element specifies the PID obtained from the error message:

```
<rpc>
  <kill-session>
    <session-id>PID</session-id>
  </kill-session>
</rpc>
]]>]]>
```

The NETCONF server confirms that it has terminated the other session by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```


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We recommend that the application include logic for determining whether it is appropriate to terminate another session, based on factors such as the identity of the user or application that holds the lock, or the length of idle time.

When a session is terminated, the NETCONF server that is servicing the session rolls back all uncommitted changes that have been made during the session. If a confirmed commit is pending (changes have been committed but not yet confirmed), the NETCONF server restores the configuration to its state before the confirmed commit instruction was issued. (For information about the confirmed commit operation, see "Committing the Candidate Configuration Only After Confirmation" on page 652.)

The following example shows how to terminate another session:

Client Application

```
<rpc>
  <kill-session>
    <session-id>3250</session-id>
  </kill-session>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2101

Ending a NETCONF Session and Closing the Connection

When a client application is finished making requests, it ends the NETCONF session by emitting the empty **<close-session/>** tag within an **<rpc>** tag element:

```
<rpc>
  <close-session/>
</rpc>
]]>]]>
```

In response, the NETCONF server emits the **<ok/>** tag enclosed in an **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

For an example of the exchange of closing tag elements, see "Closing the NETCONF Session" on page 596.

Because the connection to the NETCONF server is an SSH subsystem, it closes automatically when the NETCONF session ends.

Displaying CLI Output as XML Tag Elements

To display the output from a CLI command as NETCONF and Junos XML tag elements instead of as the default formatted ASCII, pipe the command to the **display xml** command. Infrastructure tag elements in the response belong to the Junos XML management

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protocol instead of the NETCONF XML management protocol. The tag elements that describe Junos OS configuration or operational data belong to the Junos XML API, which defines the Junos content that can be retrieved and manipulated by both the Junos XML management protocol and the NETCONF XML management protocol operations.

The following example shows the output from the **show chassis hardware** command issued on an M20 router that is running the initial version of Junos OS Release 12.1 (the opening **<chassis-inventory>** tag appears on two lines for legibility only):

```
user@host> show chassis hardware | display xml
  <rpc-reply xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
    <chassis-inventory \
          xmlns="http://xml.juniper.net/junos/12.1R1/junos-chassis">
      <chassis junos:style="inventory">
        <name>Chassis</name>
        <serial-number>00118</serial-number>
        <description>M20</description>
        <chassis-module>
          <name>Backplane</name>
          <version>REV 06</version>
          <part-number>710-001517</part-number>
          <serial-number>AB5911</serial-number>
        </chassis-module>
        <chassis-module>
          <name>Power Supply A</name>
          <!-- other child tags of <chassis-module> -->
        </chassis-module>
        <!-- other child tags of <chassis> -->
      </chassis>
    </chassis-inventory>
  </rpc-reply>
  ]]>]]>
```

Displaying the RPC Tags for a Command

To display the remote procedure call (RPC) XML tags for an operational mode command, enter **display xml rpc** after the pipe symbol (|).

The following example displays the RPC tags for the **show route** command:

```
user@host> show route | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.1I0/junos">
    <rpc>
        <get-route-information>
        </get-route-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```


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Example of a NETCONF Session

This section describes the sequence of tag elements in a sample NETCONF session. The client application begins by establishing a connection to a NETCONF server. See the following sections:

- Exchanging Initialization Tag Elements on page 593
- Sending an Operational Request on page 594
- Locking the Configuration on page 594
- Changing the Configuration on page 595
- Committing the Configuration on page 595
- Unlocking the Configuration on page 596
- Closing the NETCONF Session on page 596

Exchanging Initialization Tag Elements

After the client application establishes a connection to a NETCONF server, the two exchange **<hello>** tag elements, as shown in the following example. For legibility, the example places the client application's **<hello>** tag element below the NETCONF server's. The two parties can actually emit their **<hello>** tag elements at the same time. For information about the **]]>]]>** character sequence used in this and the following examples, see "Generating Well-Formed XML Documents" on page 566. For a detailed discussion of the **<hello>** tag element, see "Exchanging <hello> Tag Elements" on page 578.

NETCONF Client Application
Server

```
<hello>
  <capabilities>
    <capability>urn:ietf:params:xml:ns:netconf:base:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:candidate:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:validate:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file </capability>
    <capability>http://xml.juniper.net/netconf/junos/1.0</capability>
  </capabilities>
  <session-id>3911</session-id>
</hello>
]]>]]>
```

```
<hello>
  <capabilities>
    <capability>urn:ietf:params:xml:ns:netconf:base:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:candidate:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:validate:1.0</capability>
    <capability>urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file</capability>
    <capability>http://xml.juniper.net/netconf/junos/1.0</capability>
  </capabilities>
</hello>
]]>]]>
```

T2102

Sending an Operational Request

The client application now emits the **<get-chassis-inventory>** tag element to request information about the device's chassis hardware. The NETCONF server returns the requested information in the **<chassis-inventory>** tag element.

Client Application

```
<rpc>
  <get-chassis-inventory>
    <detail/>
  </get-chassis-inventory>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <chassis-inventory xmlns="URL">
    <chassis>
      <name>Chassis</name>
      <serial-number>1122</serial-number>
      <description>M320</description>
      <chassis-module>
        <name>Midplane</name>
        <!- - other child tags for the midplane - ->
      </chassis-module>
      <!- - tags for other chassis modules - ->
    </chassis>
  </chassis-inventory>
</rpc-reply>
]]>]]>
```

T2103

Locking the Configuration

The client application then prepares to incorporate a change into the candidate configuration by emitting the **<lock/>** tag to prevent any other users or applications from altering the candidate configuration at the same time. To confirm that the candidate configuration is locked, the NETCONF server returns an **<ok/>** tag in an **<rpc-reply>** tag element. For more information and locking the configuration, see "Locking the Candidate Configuration" on page 588.

Client Application

```
<rpc>
  <lock>
    <target>
      <candidate/>
    </target>
  </lock>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2104

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Changing the Configuration

The client application now emits tag elements to create a new Junos login class called **network-mgmt** at the **[edit system login class]** hierarchy level in the candidate configuration. To confirm that it incorporated the changes, the NETCONF server returns an **<ok/>** tag in an **<rpc-reply>** tag element. (Understanding the meaning of these tag elements is not necessary for the purposes of this example, but for information about them, see "Changing Configuration Information" on page 627.)

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <system>
          <login>
            <class>
              <name>network-mgmt</name>
              <permissions>configure</permissions>
              <permissions>snmp</permissions>
              <permissions>system</permissions>
            </class>
          </login>
        </system>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2105

Committing the Configuration

The client application commits the candidate configuration. To confirm that it committed the candidate configuration, the NETCONF server returns an **<ok/>** tag in an **<rpc-reply>** tag element. For more information about the commit operation, see "Committing the Candidate Configuration" on page 652.

Client Application

```
<rpc>
  <commit/>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2106

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Unlocking the Configuration

The client application unlocks (and by implication closes) the candidate configuration. To confirm that it unlocked the candidate configuration, the NETCONF server returns an **<ok/>** tag in an **<rpc-reply>** tag element. For more information about unlocking a configuration, see "Unlocking the Candidate Configuration" on page 589.

Client Application

```
<rpc>
  <unlock>
    <target>
      <candidate/>
    </target>
  </unlock>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2107

Closing the NETCONF Session

The client application closes the NETCONF session. For more information about closing the session, see "Ending a NETCONF Session and Closing the Connection" on page 591.

Client Application

```
<rpc>
  <close-session/>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2108

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CHAPTER 8

Requesting Information

This chapter explains how to use the NETCONF XML management protocol and Junos XML API to request information about the status and the current configuration of a routing, switching, or security platform running Junos OS.

The tag elements for operational requests are defined in the Junos XML API and correspond to Junos OS command-line interface (CLI) operational commands, which are described in the Junos OS command references. There is a request tag element for many commands in the CLI **show** family of commands.

The tag element for configuration requests is the NETCONF **<get-config>** tag element. It corresponds to the CLI configuration mode **show** command, which is described in the *CLI User Guide*. The Junos XML tag elements that make up the content of both the client application's requests and the NETCONF server's responses correspond to CLI configuration statements, which are described in the Junos OS configuration guides.

In addition to information about the current configuration, client applications can request other configuration-related information, including an XML schema representation of the configuration hierarchy, information about previously committed (rollback) configurations, or information about the rescue configuration.

This chapter discusses the following topics:

- Overview of the Request Procedure on page 597
- Requesting Operational Information on page 598
- Specifying the Output Format for Operational Information Requests in a NETCONF Session on page 600
- Requesting Configuration Information on page 602
- Requesting an XML Schema for the Configuration Hierarchy on page 617
- Requesting a Previous (Rollback) Configuration on page 621
- Comparing Two Previous (Rollback) Configurations on page 622
- Requesting the Rescue Configuration on page 624

Overview of the Request Procedure

To request information from the NETCONF server, a client application performs the procedures described in the indicated sections:

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1. Establishes a connection to the NETCONF server on the routing, switching, or security platform, as described in "Connecting to the NETCONF Server" on page 577.
2. Opens a NETCONF session, as described in "Starting the NETCONF Session" on page 578.
3. If making configuration requests, optionally locks the candidate configuration, as described in "Locking the Candidate Configuration" on page 588.
4. Makes any number of requests one at a time, freely intermingling operational and configuration requests. See "Requesting Operational Information" on page 598 and "Requesting Configuration Information" on page 602.

   The application can also intermix requests with configuration changes, which are described in "Changing Configuration Information" on page 627.
5. Accepts the tag stream emitted by the NETCONF server in response to each request and extracts its content, as described in "Parsing the NETCONF Server Response" on page 584.
6. Unlocks the candidate configuration if it is locked, as described in "Unlocking the Candidate Configuration" on page 589. Other users and applications cannot change the configuration while it remains locked.
7. Ends the NETCONF session and closes the connection to the device, as described in "Ending a NETCONF Session and Closing the Connection" on page 591.

Requesting Operational Information

To request information about the current status of a device running Junos OS, a client application emits the specific tag element from the Junos XML API that returns the desired information. For example, the **<get-interface-information>** tag element corresponds to the **show interfaces** command, the **<get-chassis-inventory>** tag element requests the same information as the **show chassis hardware** command, and the **<get-system-inventory>** tag element requests the same information as the **show software information** command.

For complete information about the operational request tag elements available in the current Junos OS release, see "Mapping Between Operational Tag Elements, Perl Methods, and CLI Commands" and "Summary of Operational Request Tag Elements" in the *Junos XML API Operational Developer Reference*.

The application encloses the request tag element in an **<rpc>** tag element. The syntax depends on whether the corresponding CLI command has any options:

```
<rpc>
  <!-- If the command does not have options -->
  <operational-request/>

  <!-- If the command has options -->
  <operational-request>
    <!-- tag elements representing the options -->
  </operational-request>
</rpc>
```


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]]>]]>

The client application can specify the formatting of the information returned by the NETCONF server. By setting an optional attribute in the opening operational request tag, a client application can specify the format of the response as either XML-tagged format, which is the default, or formatted ASCII text.

If the client application requests the output in formatted ASCII text, the NETCONF server encloses its response in an **<output>** tag element, which is enclosed in an **<rpc-reply>** tag element.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
    <output>
      operational-response
    </output>
  </rpc-reply>
]]>]]>
```

If the client application requests the output in XML-tagged format, the NETCONF server encloses its response in the specific response tag element that corresponds to the request tag element, enclosed in an **<rpc-reply>** tag element.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <operational-response xmlns="URL-for-DTD">
    <!-- tag elements for the requested information -->
  </operational-response>
</rpc-reply>
]]>]]>
```

For XML-tagged format, the opening tag for each operational response includes the **xmlns** attribute to define the XML namespace for the enclosed tag elements that do not have a prefix (such as **junos:**) in their names. The namespace indicates which Junos XML document type definition (DTD) defines the set of tag elements in the response. The Junos XML API defines separate DTDs for operational responses from different software modules. For instance, the DTD for interface information is called **junos-interface.dtd** and the DTD for chassis information is called **junos-chassis.dtd**. The division into separate DTDs and XML namespaces means that a tag element with the same name can have distinct functions depending on which DTD it is defined in.

The namespace is a URL of the following form:

http://xml.juniper.net/junos/*release-code*/junos-*category*

release-code is the standard string that represents the release of the Junos OS running on the NETCONF server device.

category specifies the DTD.

The *Junos XML API Operational Developer Reference* includes the text of the Junos XML DTDs for operational responses.

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Specifying the Output Format for Operational Information Requests in a NETCONF Session

In a NETCONF session, to request information about a routing, switching, or security platform running Junos OS, a client application encloses a Junos XML request tag element in an **<rpc>** tag element. By setting the optional **format** attribute in the opening operational request tag, the client application can specify the formatting of the output returned by the NETCONF server. Information can be returned as XML-tagged format or formatted ASCII text. The basic syntax is as follows:

```
<rpc>
  <operational-request [format="(xml | text | ascii)"]>
    <!-- tag elements for options -->
  </operational-request>
</rpc>
```

XML Format By default, the NETCONF server returns operational information in XML-tagged format. If the value of the **format** attribute is set to **xml**, or if the **format** attribute is omitted, the server returns the response in XML. The following example requests information for the **ge-0/3/0** interface. The **format** attribute is omitted.

```
<rpc>
  <get-interface-information>
    <brief/>
    <interface-name>ge-0/3/0</interface-name>
  </get-interface-information>
</rpc>
]]>]]>
```

The NETCONF server returns the information in XML-tagged format, which is identical to the output displayed in the CLI when you include the **| display xml** option after the operational mode command.

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
           xmlns:junos="http://xml.juniper.net/junos/11.4R1/junos">
<interface-information
 xmlns="http://xml.juniper.net/junos/11.4R1/junos-interface" junos:style="brief">

       <physical-interface>
           <name>ge-0/3/0</name>
           <admin-status junos:format="Enabled">up</admin-status>
           <oper-status>down</oper-status>
           <link-level-type>Ethernet</link-level-type>
           <mtu>1514</mtu>
           <source-filtering>disabled</source-filtering>
           <speed>1000mbps</speed>
           <bpdu-error>none</bpdu-error>
           <l2pt-error>none</l2pt-error>
           <loopback>disabled</loopback>
           <if-flow-control>enabled</if-flow-control>
           <if-auto-negotiation>enabled</if-auto-negotiation>
           <if-remote-fault>online</if-remote-fault>
           <if-device-flags>
               <ifdf-present/>
               <ifdf-running/>
               <ifdf-down/>
```

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```
            </if-device-flags>
            <if-config-flags>
                <iff-hardware-down/>
                <iff-snmp-traps/>
                <internal-flags>0x4000</internal-flags>
            </if-config-flags>
            <if-media-flags>
                <ifmf-none/>
            </if-media-flags>
        </physical-interface>
    </interface-information>
</rpc-reply>
]]>]]>
```

ASCII Format

To request that the NETCONF server return operational information as formatted ASCII text instead of tagging it with Junos XML tag elements, the client application includes the **format="text"** or **format="ascii"** attribute in the opening request tag. The client application encloses the request in an **<rpc>** tag element.

```
<rpc>
  <get-interface-information [format="(text | ascii)"]>
    <brief/>
    <interface-name>ge-0/3/0</interface-name>
  </get-interface-information>
</rpc>
]]>]]>
```

When the client application includes the **format="text"** or **format="ascii"** attribute in the request tag, the NETCONF server formats the reply as ASCII text and encloses it in an **<output>** tag element. The **format="text"** and **format="ascii"** attributes produce identical output.

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
           xmlns:junos="http://xml.juniper.net/junos/11.4R1/junos">
<output>
Physical interface: ge-0/3/0, Enabled, Physical link is Down
  Link-level type: Ethernet, MTU: 1514, Speed: 1000mbps, Loopback: Disabled,
  Source filtering: Disabled, Flow control: Enabled, Auto-negotiation: Enabled,
  Remote fault: Online
  Device flags   : Present Running Down
  Interface flags: Hardware-Down SNMP-Traps Internal: 0x4000
  Link flags     : None
</output>
</rpc-reply>
]]>]]>
```

The following example shows the equivalent operational mode command executed in the CLI:

```
user@host> show interfaces ge-0/3/0 brief
Physical interface: ge-0/3/0, Enabled, Physical link is Down
  Link-level type: Ethernet, MTU: 1514, Speed: 1000mbps, Loopback: Disabled,
Source filtering: Disabled,
  Flow control: Enabled, Auto-negotiation: Enabled, Remote fault: Online
  Device flags   : Present Running Down
  Interface flags: Hardware-Down SNMP-Traps Internal: 0x4000
  Link flags     : None
```

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The formatted ASCII text returned by the NETCONF server is identical to the CLI output except in cases where the output includes disallowed characters such as '<' (less-than sign), '>' (greater-than sign), and '&' (ampersand). The NETCONF server substitutes these characters with the equivalent predefined entity reference of '<', '>', and '&' respectively.

If the Junos XML API does not define a response tag element for the type of output requested by a client application, the NETCONF server returns the reply as formatted ASCII text enclosed in an **<output>** tag element, even if XML-tagged output is requested.

For information about the **<output>** tag element, see the *Junos XML API Operational Developer Reference*.

NOTE: The content and formatting of data within an <output> tag element are subject to change, so client applications must not depend on them.

Requesting Configuration Information

To request information about a configuration on a routing, switching, or security platform, a client application encloses the **<get-config>**, **<source>**, and **<filter>** tag elements in an **<rpc>** tag element. By including the appropriate child tag element in the **<source>** tag element, the client application requests information from either the candidate or active configuration. By including the appropriate child tag elements in the **<filter>** tag element, the application can request the entire configuration or specific portions of the configuration:

```
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
    <filter type="subtree">
      <!-- tag elements representing the configuration elements to return -->
    </filter>
  </get-config>
</rpc>
]]>]]>
```

The **type="subtree"** attribute in the opening **<filter>** tag indicates that the client application is using Junos XML tag elements to represent the configuration elements about which it is requesting information. For information about the syntax used within the **<filter>** tag element to represent elements, see "Specifying the Scope of Configuration Information to Return" on page 605.

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NOTE: If the client application locks the candidate configuration before making requests, it needs to unlock it after making its read requests. Other users and applications cannot change the configuration while it remains locked. For more information, see "Locking and Unlocking the Candidate Configuration" on page 588.

The NETCONF server encloses its reply in **<configuration>**, **<data>**, and **<rpc-reply>** tag elements. It includes attributes in the opening **<configuration>** tag that indicate the XML namespace for the enclosed tag elements and when the configuration was last changed or committed. For information about the attributes of the **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- JUNOS XML tag elements representing configuration elements -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

If a Junos XML tag element is returned within an **<undocumented>** tag element, the corresponding configuration element is not documented in the Junos OS configuration guides or officially supported by Juniper Networks. Most often, the enclosed element is used for debugging only by support personnel. In a smaller number of cases, the element is no longer supported or has been moved to another area of the configuration hierarchy, but appears in the current location for backward compatibility.

Client applications can also request other configuration-related information, including an XML schema representation of the configuration hierarchy or information about previously committed configurations. For more information, see the following sections:

- Requesting an XML Schema for the Configuration Hierarchy on page 617
- Requesting a Previous (Rollback) Configuration on page 621
- Comparing Two Previous (Rollback) Configurations on page 622
- Requesting the Rescue Configuration on page 624

The following sections describe how a client application specifies the source and scope of configuration information returned by the NETCONF server:

- Requesting Information from the Committed or Candidate Configuration on page 603
- Specifying the Scope of Configuration Information to Return on page 605

Requesting Information from the Committed or Candidate Configuration

To request information from the candidate configuration, a client application includes the **<source>** tag element and **<candidate/>** tag within the **<rpc>** and **<get-config>** tag elements:

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <!-- tag elements representing the configuration elements to return -->
    </filter>
  </get-config>
</rpc>
]]>]]>
```

To request information from the active configuration—the one most recently committed on the device—a client application includes the **<source>** tag element and **<running/>** tag within the **<rpc>** and **<get-config>** tag elements:

```
<rpc>
  <get-config>
    <source>
      <running/>
    </source>
    <filter>
      <!-- tag elements representing the configuration elements to return -->
    </filter>
  </get-config>
</rpc>
]]>]]>
```

NOTE: If requesting the entire configuration, the application omits the **<filter>** tag element. For information about the **<filter>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 605.

The NETCONF server encloses its reply in **<rpc-reply>**, **<data>**, and **<configuration>** tag elements. In the opening **<configuration>** tag, it includes the **xmlns** attribute to specify the namespace for the enclosed tag elements.

When returning information from the candidate configuration, the NETCONF server also includes attributes that indicate when the configuration last changed (they appear on multiple lines here only for legibility):

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" junos:changed-seconds="seconds" \
      junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
      <!-- Junos XML tag elements representing the configuration -->
    </configuration>
  </data>
</rpc-reply>
]>]]>
```

junos:changed-localtime represents the time of the last change as the date and time in the device's local time zone.

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junos:changed-seconds represents the time of the last change as the number of seconds since midnight on 1 January 1970.

When returning information from the active configuration, the NETCONF server also includes attributes that indicate when the configuration was committed (they appear on multiple lines here only for legibility):

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" junos:commit-seconds="seconds" \
      junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
      junos:commit-user="username">
      <!-- Junos XML tag elements representing the configuration -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

junos:commit-localtime represents the commit time as the date and time in the device's local time zone.

junos:commit-seconds represents the commit time as the number of seconds since midnight on 1 January 1970.

junos:commit-user specifies the Junos OS username of the user who requested the commit operation.

Specifying the Scope of Configuration Information to Return

By including the appropriate child tag elements in the **<filter>** tag element within the **<rpc>** and **<get-config>** tag elements, a client application can request the entire configuration or specific portions of the configuration:

```
<rpc>
  <get-config>
    <source>
      ( <candidate/> | <running/> )
    </source>
    <filter>
      <!-- tag elements representing the configuration elements to return -->
    </filter>
  </get-config>
</rpc>
]]>]]>
```

For information about requesting different amounts of configuration information, see the following sections:

- Requesting the Complete Configuration on page 606
- Requesting a Hierarchy Level or Container Object Without an Identifier on page 606
- Requesting All Configuration Objects of a Specified Type on page 608
- Requesting Identifiers for Configuration Objects of a Specified Type on page 610
- Requesting One Configuration Object on page 612

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- Requesting Specific Child Tags for a Configuration Object on page 614
- Requesting Multiple Configuration Elements Simultaneously on page 616

Requesting the Complete Configuration

To request the entire candidate configuration, a client application encloses **<get-config>** and **<source>** tag elements and the **<candidate/>** tag in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
  </get-config>
</rpc>
]]>]]>
```

To request the entire active configuration, a client application encloses **<get-config>** and **<source>** tag elements and the **<running/>** tag in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <running/>
    </source>
  </get-config>
</rpc>
]]>]]>
```

The NETCONF server encloses its reply in **<configuration>**, **<data>**, and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- Junos XML tag elements representing the configuration -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

Requesting a Hierarchy Level or Container Object Without an Identifier

To request complete information about all child configuration elements at a hierarchy level or in a container object that does not have an identifier, a client application emits a **<filter>** tag element that encloses the tag elements representing all levels in the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level of the level or container object, which is represented by an empty tag. The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
```


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```
      <filter type="subtree">
        <configuration>
          <!-- opening tags for each parent of the requested level -->
            <level-or-container/>
          <!-- closing tags for each parent of the requested level -->
        </configuration>
      </filter>
    </get-config>
  </rpc>
  ]]>]]>
```

For information about the **<source>** tag element, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

The NETCONF server returns the requested section of the configuration in **<data>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- opening tags for each parent of the level -->
        <level-or-container>
          <!-- child tag elements of the level or container -->
        </level-or-container>
      <!-- closing tags for each parent of the level -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-config>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 616.

The following example shows how to request the contents of the **[edit system login]** hierarchy level in the candidate configuration.

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Client Application

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <configuration>
        <system>
          <login/>
        </system>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <system>
        <login>
          <user>
            <name>barbara</name>
            <full-name>Barbara Anderson</full-name>
            <class>superuser</class>
            <uid>632</uid>
          </user>
          <!- - other child tag elements of <login> - ->
        </login>
      </system>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

T2128

Requesting All Configuration Objects of a Specified Type

To request complete information about all configuration objects of a specified type in a hierarchy level, a client application emits a **<filter>** tag element that encloses the tag elements representing all levels in the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object type. An empty tag represents the requested object type. The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
    <filter type="subtree">
      <configuration>
        <!-- opening tags for each parent of the requested object type -->
          <object-type/>
        <!-- closing tags for each parent of the requested object type -->
      </configuration>
```


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```
      </filter>
    </get-config>
  </rpc>
  ]]>]]>
```

For information about the **<source>** tag element, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

This type of request is useful when the object's parent hierarchy level has more than one type of child object. If the requested object is the only child type that can occur in its parent hierarchy level, then this type of request yields the same output as a request for the complete parent hierarchy, which is described in "Requesting a Hierarchy Level or Container Object Without an Identifier" on page 606.

The NETCONF server returns the requested objects in **<data>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- opening tags for each parent of the object type -->
        <first-object>
          <!-- child tag elements for the first object -->
        </first-object>
        <second-object>
          <!-- child tag elements for the second object -->
        </second-object>
        <!-- additional instances of the object -->
      <!-- closing tags for each parent of the object type -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-config>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 616.

The following example shows how to request complete information about all **radius-server** objects at the **[edit system]** hierarchy level in the candidate configuration.

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Client Application

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <configuration>
        <system>
          <radius-server/>
        </system>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <system>
        <radius-server>
          <name>10.25.34.166</name>
          <secret>$9$Pf390OREcr/9t...</secret>
          <timeout>5</timeout>
          <retry>3</retry>
        </radius-server>
        <radius-server>
          <name>10.25.6.204</name>
          <secret>$9$K5Kvxd2gJZUi-d...</secret>
          <timeout>5</timeout>
          <retry>3</retry>
        </radius-server>
      </system>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

T2129

Requesting Identifiers for Configuration Objects of a Specified Type

To request output that shows only the identifier for each configuration object of a specific type in a hierarchy, a client application emits a **<filter>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object type. The object type is represented by its container tag element enclosing an empty **<name/>** tag. (The **<name>** tag element can always be used, even if the actual identifier tag element has a different name. The actual name is also valid.) The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
    <filter type="subtree">
```


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```
        <configuration>
          <!-- opening tags for each parent of the object type -->
            <object-type>
              <name/>
            </object-type>
          <!-- closing tags for each parent of the object type -->
        </configuration>
      </filter>
    </get-config>
  </rpc>
  ]]>]]>
```

For information about the **<source>** tag element, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

NOTE: You cannot request only identifiers for object types that have multiple identifiers. However, for many such objects the identifiers are the only child tag elements, so requesting complete information yields the same output as requesting only identifiers. For instructions, see "Requesting All Configuration Objects of a Specified Type" on page 608.

The NETCONF server returns the requested objects in **<data>** and **<rpc-reply>** tag elements (here, objects for which the identifier tag element is called **<name>**). For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- opening tags for each parent of the object type -->
        <first-object>
          <name>identifier-for-first-object</name>
        </first-object>
        <second-object>
          <name>identifier-for-second-object</name>
        </second-object>
        <!-- additional objects -->
      <!-- closing tags for each parent of the object type -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-config>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 616.

The following example shows how to request the identifier for each BGP neighbor configured at the **[edit protocols bgp group next-door-neighbors]** hierarchy level in the candidate configuration.

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Client Application **NETCONF Server**

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <configuration>
        <protocols>
          <bgp>
            <group>
              <name>next-door-neighbors</name>
              <neighbor>
                <name/>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <protocols>
        <bgp>
          <group>
            <name>next-door-neighbors</name>
            <neighbor>
              <name>10.2.35.188</name>
            </neighbor>
            <neighbor>
              <name>10.3.62.95</name>
            </neighbor>
            <neighbor>
              <name>10.4.122.9</name>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

T2130

Requesting One Configuration Object

To request complete information about a specific configuration object, a client application emits a **<filter>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object.

To represent the requested object, the application emits its container tag element and each of its identifier tag elements, complete with identifier value. For objects with a single

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identifier, the **<name>** tag element can always be used, even if the actual identifier tag element has a different name. The actual name is also valid. For objects with multiple identifiers, the actual names of the identifier tag elements must be used. To verify the name of each of the identifiers for a configuration object, see the *Junos XML API Configuration Developer Reference*. The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <!--tag specifying the source configuration -->
    </source>
    <filter type="subtree">
      <configuration>
        <!-- opening tags for each parent of the object -->
          <object>
            <name>identifier</name>
          </object>
        <!-- closing tags for each parent of the object -->
      </configuration>
    </filter >
  </get-config>
</rpc>
]]>]]>
```

For information about the **<source>** tag element, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

The NETCONF server returns the requested object in **<data>** and **<rpc-reply>** tag elements (here, an object for which the identifier tag element is called **<name>**). For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- opening tags for each parent of the object -->
        <object>
          <name>identifier</name>
          <!-- other child tag elements of the object -->
        </object>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-config>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 616.

The following example shows how to request the contents of one multicasting scope called **local**, which is at the **[edit routing-options multicast]** hierarchy level in the candidate configuration. To specify the desired object, the client application emits the **<name>local</name>** identifier tag element as the innermost tag element.

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Client Application **NETCONF Server**

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <configuration>
        <routing-options>
          <multicast>
            <scope>
              <name>local</name>
            </scope>
          </multicast>
        </routing-options>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL"  \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <routing-options>
        <multicast>
          <scope>
            <name>local</name>
            <prefix>239.255.0.0/16</prefix>
            <interface>ip-f/p/0</interface>
          </scope>
        </multicast>
      </routing-options>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

T2131

Requesting Specific Child Tags for a Configuration Object

To request specific child tag elements for a specific configuration object, a client application emits a **<filter>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object. To represent the requested object, the application emits its container tag element and identifier tag element. For objects with a single identifier, the **<name>** tag element can always be used, even if the actual identifier tag element has a different name. The actual name is also valid. For objects with multiple identifiers, the actual names of the identifier tag elements must be used. To represent the child tag elements to return, it emits each one as an empty tag. The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
```


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```
    <filter type="subtree">
      <configuration>
        <!-- opening tags for each parent of the object -->
          <object>
            <name>identifier</name>
            <first-child/>
            <second-child/>
            <!-- empty tag for each additional child to return -->
          </object>
        <!-- closing tags for each parent of the object -->
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

For information about the **<source>** tag element, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

The NETCONF server returns the requested children of the object in **<data>** and **<rpc-reply>** tag elements (here, an object for which the identifier tag element is called **<name>**). For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration attributes>
      <!-- opening tags for each parent of the object -->
        <object>
          <name>identifier</name>
        </object>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-config>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 616.

The following example shows how to request only the address of the next-hop device for the **192.168.5.0/24** route at the **[edit routing-options static]** hierarchy level in the candidate configuration.

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Client Application **NETCONF Server**

```
<rpc>
  <get-config>
    <source>
      <candidate/>
    </source>
    <filter>
      <configuration>
        <routing-options>
          <static>
            <route>
              <name>192.168.5.0/24</name>
              <next-hop/>
            </route>
          </static>
        </routing-options>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration xmlns="URL" \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <routing-options>
        <static>
          <route>
            <name>192.168.5.0/24</name>
            <next-hop>192.168.71.254</next-hop>
          </route>
        </static>
      </routing-options>
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

T2132

Requesting Multiple Configuration Elements Simultaneously

Within a **<get-config>** tag element, a client application can request multiple configuration elements of the same type or different types. The request includes only one **<filter>** and **<configuration>** tag element (the NETCONF server returns an error if there is more than one of each).

If two requested objects have the same parent hierarchy level, the client can either include both requests within one parent tag element, or repeat the parent tag element for each request. For example, at the **[edit system]** hierarchy level the client can request the list of configured services and the identifier tag element for RADIUS servers in either of the following two ways:

```
<!-- both requests in one <system> tag element -->
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
```


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```
    </source>
    <filter type="subtree">
      <configuration>
        <system>
          <services/>
          <radius-server>
            <name/>
          </radius-server>
        </system>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
<!-- separate <system> tag element for each element -->
<rpc>
  <get-config>
    <source>
      <!-- tag specifying the source configuration -->
    </source>
    <filter type="subtree">
      <configuration>
        <system>
          <services/>
        </system>
        <system>
          <radius-server>
            <name/>
          </radius-server>
        </system>
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

The client can combine requests for any of the following types of information:

- Requesting a Hierarchy Level or Container Object Without an Identifier on page 606
- Requesting All Configuration Objects of a Specified Type on page 608
- Requesting Identifiers for Configuration Objects of a Specified Type on page 610
- Requesting One Configuration Object on page 612
- Requesting Specific Child Tags for a Configuration Object on page 614

Requesting an XML Schema for the Configuration Hierarchy

To request an XML Schema-language representation of the entire configuration hierarchy, a client application emits the Junos XML **<get-xnm-information>** tag element and its **<type>** and **<namespace>** child tag elements with the indicated values in an **<rpc>** tag element:

```
<rpc>
```

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```
    <get-xnm-information>
      <type>xml-schema</type>
      <namespace>junos-configuration</namespace>
    </get-xnm-information>
  </rpc>
  ]]>]]>
```

The NETCONF server encloses the XML schema in **<rpc-reply>** and **<xsd:schema>** tag elements:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <xsd:schema>
    <!-- tag elements for the Junos XML schema -->
  </xsd:schema>
</rpc-reply>
]]>]]>
```

The schema represents all configuration elements available in the version of the Junos OS that is running on a device. (To determine the Junos OS version, emit the **<get-software-information>** operational request tag element, which is documented in the *Junos XML API Operational Developer Reference*.)

Client applications can use the schema to validate the configuration on a device or simply to learn which configuration statements are available in the version of the Junos OS running on the device. The schema does not indicate which elements are actually configured or even that an element can be configured on that type of device (some configuration statements are available only on certain device types). To request the set of currently configured elements and their settings, emit the **<get-config>** tag element instead, as described in "Requesting Configuration Information" on page 602.

Explaining the structure and notational conventions of the XML Schema language is beyond the scope of this document. For information, see *XML Schema Part 0: Primer*, available from the World Wide Web Consortium (W3C) at http://www.w3.org/TR/xmlschema-0/ . The primer provides a basic introduction and lists the formal specifications where you can find detailed information.

For further information, see the following sections:

- Creating the junos.xsd File on page 618
- Example: Requesting an XML Schema on page 619

Creating the junos.xsd File

Most of the tag elements defined in the schema returned in the **<xsd:schema>** tag belong to the default namespace for Junos OS configuration elements. However, at least one tag, **<junos:comment>**, belongs to a different namespace: **http://xml.juniper.net/junos/*Junos-version*/junos**. By XML convention, a schema describes only one namespace, so schema validators need to import information about any additional namespaces before they can process the schema.

Starting with Junos OS Release 6.4, the **<xsd:import>** tag element is enclosed in the **<xsd:schema>** tag element and references the file **junos.xsd**, which contains the required information about the **junos** namespace. For example, the following **<xsd:import>** tag

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element specifies the file for Junos OS Release 12.1R1 (and appears on two lines for legibility only):

```
<xsd:import schemaLocation="junos.xsd" \
    namespace="http://xml.juniper.net/junos/12.1R1/junos"/>
```

To enable the schema validator to interpret the **<xsd:import>** tag element, you must manually create a file called **junos.xsd** in the directory where you place the **.xsd** file that contains the complete Junos configuration schema. Include the following text in the file. Do not use line breaks in the list of attributes in the opening **<xsd:schema>** tag. Line breaks appear in the following example for legibility only. For the ***Junos-version*** variable, substitute the release number of the Junos OS running on the device (for example, **12.1R1** for the first release of Junos OS 12.1).

```
<?xml version="1.0" encoding="us-ascii"?>
<xsd:schema elementFormDefault="qualified" \
    attributeFormDefault="unqualified" \
    xmlns:xsd="http://www.w3.org/2001/XMLSchema" \
    targetNamespace="http://xml.juniper.net/junos/Junos-version/junos">
  <xsd:element name="comment" type="xsd:string"/>
</xsd:schema>
```

NOTE: Schema validators might not be able to process the schema if they cannot locate or open the junos.xsd file.

Whenever you change the version of Junos OS running on the device, remember to update the *Junos-version* variable in the junos.xsd file to match.

Example: Requesting an XML Schema

The following examples show how to request the Junos configuration schema. In the NETCONF server's response, the first **<xsd:element>** statement defines the **<undocumented>** Junos XML tag element, which can be enclosed in most other container tag elements defined in the schema (container tag elements are defined as **<xsd:complexType>**).

The attributes in the opening tags of the NETCONF server's response appear on multiple lines for legibility only. The NETCONF server does not insert newline characters within tags or tag elements. Also, in actual output the ***JUNOS-version*** variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

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Client Application **NETCONF Server**

```
<rpc>
  <get-xnm-information>
    <type>xml-schema</type>
    <namespace>junos-configuration</namespace>
  </get-xnm-information>
</rpc>
]]>]]>
                        <rpc-reply  xmlns="URN" xmlns:junos="URL">
                          <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" \
                                      elementFormDefault="qualified">
                            <xsd:import schemaLocation="junos.xsd" \
                                      namespace="http://xml.juniper.net/junos/JUNOS-version/junos"/>
                              <xsd:element name="undocumented">
                                <xsd:complexType>
                                  <xsd:sequence>
                                    <xsd:any namespace="##any" processContents="skip"/>
                                  </xsd:sequence>
                                </xsd:complexType>
                              </xsd:element>
                              <xsd:complexType name="hostname">
                                <xsd:simpleContent>
                                  <xsd:extension base="xsd:string"/>
                                </xsd:simpleContent>
                              </xsd:complexType>
                                      .
                                      .
                                      .
```

T2114

Another **<xsd:element>** statement near the beginning of the schema defines the Junos XML **<configuration>** tag element. It encloses the **<xsd:element>** statement that defines the **<system>** tag element, which corresponds to the **[edit system]** hierarchy level. The statements corresponding to other hierarchy levels are omitted for brevity.

Client Application **NETCONF Server**

```
                                      .
                                      .
                                      .
                            </xsd:element>
                              <xsd:element name="configuration">
                                <xsd:complexType>
                                  <xsd:sequence>
                                    <xsd:choice minOccurs="0" maxOccurs="unbounded">
                                      <xsd:element ref="undocumented"/>
                                      <xsd:element ref="comment"/>
                                      <xsd:element name="system" minOccurs="0">
                                        <xsd:complexType>
                                          <xsd:sequence>
                                            <xsd:choice minOccurs="0" maxOccurs="unbounded">
                                              <xsd:element ref="undocumented"/>
                                              <xsd:element ref="comment"/>
                                              <!-- child elements of <system> here -->
                                            </xsd:choice >
                                          </xsd:sequence>
                                        </xsd:complexType>
                                      </xsd:element>
                                      <!-- statements for other hierarchy levels here -->
                                    </xsd:choice >
                                  </xsd:sequence>
                                </xsd:complexType>
                              </xsd:element>
                            </xsd:schema>
                        </rpc-reply>
                        ]]>]]>
```

T2115

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Requesting a Previous (Rollback) Configuration

To request a previously committed (rollback) configuration, a client application emits the Junos XML **<get-rollback-information>** tag element and its child **<rollback>** tag element in an **<rpc>** tag element. This operation is equivalent to the **show system rollback** operational mode command. The **<rollback>** tag element specifies the index number of the previous configuration to display; its value can be from **0** (zero, for the most recently committed configuration) through **49**.

To request Junos XML-tagged output, the application either includes the **<format>** tag element with the value **xml** or omits the **<format>** tag element (Junos XML tag elements are the default):

```
<rpc>
  <get-rollback-information>
    <rollback> index-number </rollback>
  </get-rollback-information>
</rpc>
]]>]]>
```

The NETCONF server encloses its response in **<rpc-reply>**, **<rollback-information>**, and **<configuration>** tag elements. The **<ok/>** tag is a side effect of the implementation and does not affect the results. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rollback-information>
    <ok/>
    <configuration attributes>
      <!-- tag elements representing the complete previous configuration -->
    </configuration>
  </rollback-information>
</rpc-reply>
]]>]]>
```

To request formatted ASCII output, the application includes the **<format>** tag element with the value **text**:

```
<rpc>
  <get-rollback-information>
    <rollback>index-number</rollback>
    <format>text</format>
  </get-rollback-information>
</rpc>
]]>]]>
```

The NETCONF server encloses its response in **<rpc-reply>**, **<rollback-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. For more information about the formatted ASCII notation used in Junos configuration statements, see the *CLI User Guide*.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rollback-information>
```

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```
      <ok/>
      <configuration-information>
        <configuration-output>
          /* formatted ASCII representing the complete previous configuration*/
        </configuration-output>
      </configuration-information>
    </rollback-information>
  </rpc-reply>
  ]]>]]>
```

The following example shows how to request Junos XML-tagged output for the rollback configuration that has an index of **2**. In actual output, the ***Junos-version*** variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

Client Application

```
<rpc>
  <get-rollback-information>
    <rollback>2</rollback>
  </get-rollback-information>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rollback-information>
    <ok/>
    <configuration xmlns="URL" \
        junos:changed-seconds="seconds" \
        junos:changed-localtime="timestamp">
      <version>JUNOS-version</version>
      <system>
        <host-name>big-router</host-name>
        <!- - other children of <system> - ->
      </system>
      <!- - other children of <configuration> - ->
    </configuration>
  </rollback-information>
</rpc-reply>
]]>]]>
```

T2133

Comparing Two Previous (Rollback) Configurations

To compare the contents of two previously committed (rollback) configurations, a client application emits the Junos XML **<get-rollback-information>** tag element and its child **<rollback>** and **<compare>** tag elements in an **<rpc>** tag element. This operation is equivalent to the **show system rollback** operational mode command with the **compare** option. The **<rollback>** tag element specifies the index number of the configuration that is the basis for comparison. The **<compare>** tag element specifies the index number of the configuration to compare with the base configuration. Valid values in both tag elements range from **0** (zero, for the most recently committed configuration) through **49**:

```
<rpc>
  <get-rollback-information>
    <rollback>index-number</rollback>
    <compare>index-number</compare>
  </get-rollback-information>
```


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```
</rpc>
]]>]]>
```

NOTE: The output corresponds more logically to the chronological order of changes if the older configuration (the one with the higher index number) is the base configuration. Its index number is enclosed in the **<rollback>** tag element and the index of the more recent configuration is enclosed in the **<compare>** tag element.

The NETCONF server encloses its response in **<rpc-reply>**, **<rollback-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. The **<ok/>** tag is a side effect of the implementation and does not affect the results.

The information in the **<configuration-output>** tag element is formatted ASCII and includes a banner line (such as **[edit interfaces]**) for each hierarchy level at which the two configurations differ. Each line between banner lines begins with either a plus sign (**+**) or a minus sign (**–**). The plus sign indicates that adding the statement to the base configuration results in the second configuration, whereas a minus sign means that removing the statement from the base configuration results in the second configuration.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rollback-information>
    <ok/>
    <configuration-information>
      <configuration-output>
        /* formatted ASCII representing the changes */
      </configuration-output>
    </configuration-information>
  </rollback-information>
</rpc-reply>
]]>]]>
```

The following example shows how to request a comparison of the rollback configurations that have indexes of **20** and **4**.

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Client Application

```
<rpc>
  <get-rollback-information>
    <rollback>20</rollback>
    <compare>4</compare>
  </get-rollback-information>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rollback-information>
    <ok/>
    <configuration-information>
      <configuration-output>
        [edit interfaces]
        -     ge-0/2/0 {
        -         stacked-vlan-tagging;
        -         mac 00.01.02.03.04.05;
        -         gigether-options {
        -             loopback;
        -         }
        -     }
        [edit]
        +     services {
        +         l2tp {
        +             tunnel-group 12 {
        +                 local-gateway;
        +             }
        +         }
        +     }
      </configuration-output>
    </configuration-information>
  </rollback-information>
</rpc-reply>
]]>]]>
```

T2117

Requesting the Rescue Configuration

To request the rescue configuration, a client application emits the Junos XML **<get-rescue-information>** tag element in an **<rpc>** tag element. This operation is equivalent to the **show system configuration rescue** operational mode command.

The rescue configuration is a configuration saved in case it is necessary to restore a valid, nondefault configuration. (To create a rescue configuration, use the Junos XML **<request-save-rescue-configuration>** tag element or the **request system configuration rescue save** CLI operational mode command. For more information, see the *Junos XML API Operational Developer Reference* or the CLI Explorer.)

To request Junos XML-tagged output, the application either includes the **<format>** tag element with the value **xml** or omits the **<format>** tag element (Junos XML tag elements are the default):

```
<rpc>
  <get-rescue-information/>
</rpc>
]]>]]>
```


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The NETCONF server encloses its response in **<rpc-reply>**, **<rescue-information>**, and **<configuration>** tag elements. The **<ok/>** tag is a side effect of the implementation and does not affect the results. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 603.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rescue-information>
    <ok/>
    <configuration attributes
      <!-- tag elements representing the rescue configuration -->
    </configuration>
  </rescue-information>
</rpc-reply>
]]>]]>
```

To request formatted ASCII output, the application includes the **<format>** tag element with the value **text**:

```
<rpc>
  <get-rescue-information>
    <format>text</format>
  </get-rescue-information>
</rpc>
]]>]]>
```

The NETCONF server encloses its response in **<rpc-reply>**, **<rescue-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. For more information about the formatted ASCII notation used in Junos configuration statements, see the *CLI User Guide*.

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rescue-information>
    <ok/>
    <configuration-information>
      <configuration-output>
        /* formatted ASCII for the rescue configuration*/
      </configuration-output>
    </configuration-information>
  </rescue-information>
</rpc-reply>
]]>]]>
```

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CHAPTER 9

Changing Configuration Information

This chapter explains how to use the NETCONF XML management protocol along with Junos XML or command-line interface (CLI) configuration statements to change the configuration on a routing, switching, or security platform. The NETCONF protocol operations**<copy-config>**, **<edit-config>**, and **<discard-changes>** offer functionality that is analogous to configuration mode commands in the Junos OS CLI. These CLI configuration mode commands, as well as the CLI configuration statements, are described in the *CLI User Guide*. The Junos XML tag elements described here correspond to configuration statements, which are described in the Junos OS configuration guides.

This chapter discusses how to use the NETCONF XML management protocol to make changes to a device's configuration. To see how this activity fits in within the overall NETCONF session, see "Client Application's Role in a NETCONF Session" on page 565.

This chapter discusses the following topics:

- Editing the Candidate Configuration on page 628
- Replacing the Candidate Configuration on page 637
- Rolling Back a Configuration on page 639
- Deleting the Candidate Configuration on page 639
- Changing Individual Configuration Elements on page 640

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Editing the Candidate Configuration

To change the candidate configuration on a device, a client application emits the **<copy-config>**, the **<edit-config>**, or the **<discard-changes>** tag element and the corresponding tag subelements within the **<rpc>** tag element.

The following examples shows the various tag elements available:

```
<rpc>
  <copy-config>
    <target><candidate/></target>
    <error-operation> (ignore-error | stop-on-error) </error-operation>
    <source><url>location</url></source>
  </copy-config>
</rpc>
]]>]]>
```

```
<rpc>
   <edit-config>
    <target><candidate/></target>
    <default-operation>operation</default-operation>
    <error-operation>error</error-operation>
    <(config | config-text | url)>
      <!-- configuration change file or data -->
    </(config | config-text | url)>
  </edit-config>
</rpc>
]]>]]>
```

```
<rpc>
  <discard-changes/>
</rpc>
]]>]]>
```

Notice that the three tags—**<copy-config>**, **<edit-config>**, and **<discard-changes>**—correspond to the three basic configuration tasks available to you:

- Overwriting the candidate configuration with a new configuration—Using the **<copy-config>** tag element, you can replace the current candidate configuration with a new configuration.
- Editing the candidate configuration elements—Using the **<edit-config>** tag element, you can add, change, or delete specific configuration elements within the candidate configuration.
- Rolling back changes to the current configuration—Using the **<discard-changes>** tag element, you can roll back the candidate configuration to a previously committed configuration. This tag element provides functionality analogous to the CLI command **rollback**.

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Notice also that the **<copy-config>** and the **<edit-config>** tags both have additional subtags related to each tag element. These subtag elements are described in the following sections:

- Formatting the Configuration Data on page 629
- Setting the Edit Configuration Mode on page 633
- Handling Errors on page 637

Formatting the Configuration Data

A client application can use a text file or streaming data to deliver configuration data to the candidate configuration. The data delivered can be in one of two formats: Junos XML or CLI configuration statements. You can specify the delivery mechanism and the format used when delivering configuration changes to the device.

For more information on Junos XML tag elements, see "XML Overview" on page 546. For more information on CLI configuration statements, see the *CLI User Guide*.

- Delivery Mechanism: Data Files Versus Streaming Data on page 629
- Data Format: Junos XML versus CLI Configuration Statements on page 632

Delivery Mechanism: Data Files Versus Streaming Data

When formatting your configuration data output, you can choose to stream your configuration changes within your session or reference data files that include the desired configuration changes. Each method has advantages and disadvantages. Streaming data allows you to send your configuration change data in line, using your NETCONF connection. This is useful when the device is behind a firewall and you cannot establish another connection to upload a data file. With text files you can keep the edit configuration commands simple; with data files, there is no need to include the possibly complex configuration data stream.

Referencing Configuration Data Files

To reference configuration data as a file, a client application emits the file location between **<url>** tag elements within the **<rpc>** and the **<edit-config>** tag elements.

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <url>
      <!-- location and name of  file containing configuration data -->
    </url>
  </edit-config>
</rpc>
]]>]]>
```

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The data within these files can be formatted as either Junos XML or CLI configuration statements. When the configuration data is formatted as CLI configuration statements, you set the **<url>** format attribute to **text**.

```
<rpc>
  <edit-config>
    ...
    <url format="text">
     <!-- location and name of file containing configuration data -->
    </url>
  </edit-config>
</rpc>
```

The configuration file can be placed locally or as a network resource:

- When placed locally, the configuration file path can be relative or absolute:
  - Relative file path—The file location is based on the user's home directory.
  - Absolute file path—The file location is based on the directory structure of the device, for example ***<drive>:filename*** or ***<drive>/:path/filename***, If you are using removable media, the drive can be in the MS-DOS or UNIX (UFS) format.
- When located on the network, the configuration file can be accessed using FTP or HTTP:
  - FTP example:

    ftp://*username*:*password*@*hostname/path/filename*

    NOTE: The default value for the FTP ***path*** variable is the user's home directory. Thus, by default the file path to the configuration file is relative to the user directory. To specify an absolute path when using FTP, start the path with the characters %2F; for example: ftp://*username*:*password*@*hostname*/%2F*path/filename*.

  - HTTP example:

    http://*username*:*password*@*hostname/path/filename*

Before loading the file, the client application or an administrator saves Junos XML tag elements as the contents of the file. The file includes the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to each element to change. The notation is the same as that used to request configuration information, as described in "Requesting Information" on page 597. For more detailed information about the Junos XML representation of Junos configuration statements, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556.

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The following example shows how to incorporate configuration data stored in the file **/var/tmp/configFile** on the FTP server called **ftp.myco.com**:

Client Application **NETCONF Server**

```
<rpc message-id="messageID">
  <edit-config>
    <target>
      <candidate/>
    </target>
    <url>
      ftp://admin:AdminPwd@ftp.myco.com/%F2var/tmp/configFile
    </url>
  </edit-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
   <ok/>
</rpc-reply>
]]>]]>
```

T2134

Streaming Configuration Data

To provide configuration data as a data stream, a client application emits the **<config>** or **<config-text>** tag elements within the **<rpc>** and **<edit-config>** tag elements. To specify the configuration elements to change, the application emits Junos XML or CLI configuration statements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** or **<configuration-text>** tag element) down to each element to change. The Junos XML notation is the same as that used to request configuration information, as described in "Requesting Information" on page 597. For more detailed information about the mappings between Junos configuration elements and Junos XML tag elements, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556. The CLI configuration statement notation are further described in the *CLI User Guide*.

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config> or <config-text>
      <configuration> or <configuration-text>
        <!-- configuration changes -->
      </configuration> or </configuration-text>
    </config> or </config-text>
  </edit-config>
</rpc>
]]>]]>
```

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The following example shows how to provide Junos XML configuration data for the **messages** system log file in a data stream:

Client Application **NETCONF Server**

```
<rpc message-id="messageID">
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <system>
          <syslog>
            <file>
              <name>messages</name>
              <contents>
                <name>any</name>
                <warning/>
              </contents>
              <contents>
                <name>authorization</name>
                <info/>
              </contents>
            </file>
          </syslog>
        </system>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns='URN' xmlns:junos=" URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2135

Data Format: Junos XML versus CLI Configuration Statements

You can format the configuration data using one of two formats: Junos XML or CLI configuration statements. The choice between one data format over the other is personal preference.

If you are supplying the configuration changes in the form of data files, you enclose the data filename and path within **<url>** tags. By default, these tags specify that the referenced data files are written in Junos XML. Thus, the following code declares that the data within the file is Junos XML:

```
<url>dataFile</url>
```

To specify that the data file be written as CLI configuration statements, you set the **<url>** tag's format attribute to **text**:

```
<url format="text">dataFile</url>
```

When streaming data, you specify the data format by selecting one of two tags: **<config>** for Junos XML statements and **<config-text>** for CLI configuration statements.

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In the following example, Junos XML formatted configuration data is included between the **<configuration>** tag:

```
<config>
 <configuration>
  <system>
   <services>
    <ssh>
     <protocol-version>v2</protocol-version>
    </ssh>
   </services>
  </system>
 <configuration>
</config>
```

In this next example, the same data written formatted as CLI configuration statements and included within **<configuration-text>** tags:

```
<config-text>
 <configuration-text>
  system {
   services {
    ssh {
     protocol-version v2 ;
    }
   }
  }
 </configuration-text>
</config-text>
```

Setting the Edit Configuration Mode

When sending operation data to the NETCONF server, you have the option to specify how a device should handle these configuration changes. This is known as the edit configuration mode. You can set the edit configuration mode globally for the entire session. You can also set the edit mode only for specific elements within the session.

The device has the following edit configuration modes:

- **merge**—The device merges new configuration data into the current candidate configuration. This is the default.
- **replace**—The device replaces existing configuration data with the new configuration data.
- **no-change**—The device does not change the existing configuration unless the new configuration element includes an operation attribute.

To set the mode globally for the session, place a configuration mode value within **<default-operation>** tags:

```
<rpc>
 <edit-config>
  <default-operation>ConfigModeValue</default-operation>
 <edit-config>
</rpc>
```

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You can also set the mode for a specific configuration statement by adding an **operation** attribute with a value of **replace** to the configuration element:

```
<rpc>
 <edit-config>
  <config>
   <configuration>
    <protocols>
     <rip>
      <message-size operation="replace">255</message-size>
     </rip>
    </protocols>
   </configuration>
  </config>
 </edit-config>
</rpc>
```

You can set a global edit configuration mode for an entire set of configuration changes and specify a different mode for individual elements that you want handled in a different manner. For example:

```
<rpc>
 <edit-config>
  <default-operation>merge</default-operation>
  <config>
   <configuration>
    <protocols>
     <rip>
      <message-size operation="replace">255</message-size>
     </rip>
    </protocols>
   </configuration>
  </config>
 </edit-config>
</rpc>
```


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Specifying the merge Data Mode

By default, the NETCONF server *merges* new configuration data into the candidate configuration. Thus, if no edit-configuration mode is specified, the device will merge the new configuration elements into the existing candidate configuration. Merging configurations is performed according to the following rules:

- A configuration element (hierarchy level or configuration object) that exists in the candidate configuration but not in the new configuration remains unchanged.
- A configuration element that exists in the new configuration but not in the candidate configuration is added to the candidate configuration.
- If a configuration element exists in both configurations, the following results occur:
  - If a child statement of the configuration element (represented by a child tag element) exists in the candidate configuration but not in the new configuration, it remains unchanged.
  - If a child statement exists in the new configuration but not in the candidate, it is added to the candidate configuration.
  - If a child statement exists in both configurations, the value in the new data replaces the value in the candidate configuration.

To explicitly specify that data be merged, the application can include the **<default-operation>** tag element with the value **merge** in the **<edit-config>** tag element:

```
<rpc>
  <edit-config>
    <default-operation>merge</default-operation>
    <!-- other child tag elements of the <edit-config> tag element -->
  </edit-config>
</rpc>
]]>]]>
```

Specifying the replace Data Mode

In the *replace* edit configuration mode, the new configuration data completely replaces the candidate configuration. To specify that the data be replaced, the application can include the **<default-operation>** tag element with the value **replace** in the **<edit-config>** tag element:

```
<rpc>
  <edit-config>
    <default-operation>replace</default-operation>
  </edit-config>
</rpc>
]]>]]>
```

We recommend using the global replace mode only when you plan to completely overwrite the candidate configuration with new configuration data. Furthermore, when the edit configuration mode is set to **replace**, we do not recommend using the **operation** attribute on individual configuration elements.

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You can also replace individual configuration elements while merging or creating others. See "Replacing Configuration Elements" on page 642.

Specifying the no-change Data Mode

In the *no-change* mode, configuration changes to the configuration are ignored. This mode is useful when you are deleting elements, and it prevents the NETCONF server from creating parent hierarchy levels for an element that is being deleted. For more information, see "Deleting Configuration Elements" on page 645:

To set the no-change edit configuration mode globally, the application can include the **<default-operation>** tag element with the value **none** in the **<edit-config>** tag element:

```
<rpc>
 <edit-config>
  <default-operation>none</default-operation>
 </edit-config>
</rpc>
```

NOTE: If the new configuration data includes a configuration element that does not exist in the candidate, the NETCONF server returns an error. We recommend using no-change mode only when removing configuration elements from the candidate configuration. When creating or modifying elements, applications need to use merge mode. For more information, see "Deleting Configuration Elements" on page 645.

When the no-change edit configuration mode is set globally, using the **<default-operation>** tag, you can override this behavior by specifying a different edit configuration mode for a specific element using the **operation** attribute. For example:

```
<rpc>
 <edit-config>
  <default-operation>none</default-operation>
  <config>
   <configuration>
    <system>
     <services>
      <outbound-ssh>
       <client>
        <name>test</name>
        <device-id>test</device-id>
        <keep-alive>
         <retry operation="merge">4</retry>
         <timeout operation="merge">15</timeout>
        </keep-alive>
       </client>
      </outbound-ssh>
     </services>
    </system>
   </configuration>
  </config>
 </edit-config>
</rpc>
```


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Handling Errors

If the NETCONF server cannot incorporate the configuration data, the **<rpc-error>** tag element is returned with information explaining the reason for the failure. By default, when the NETCONF server encounters an error while incorporating new configuration data into the candidate configuration, it halts the incorporation process. A client application can explicitly specify this response to errors by including the **<error-option>** tag element with the value **stop-on-error** in the **<edit-config>** tag element:

```
<rpc>
  <edit-config>
    <error-option>stop-on-error</error-option>
    <!-- other child tag elements of the <edit-config> tag element -->
  </edit-config>
</rpc>
]]>]]>
```

Alternatively, the application can specify that the NETCONF server continue to incorporate new configuration data when it encounters an error. The application includes the **<error-option>** tag element with the value **ignore-error** in the **<edit-config>** tag element:

```
<rpc>
  <edit-config>
    <error-option>ignore-error</error-option>
    <!-- other child tag elements of the <edit-config> tag element -->
  </edit-config>
</rpc>
]]>]]>
```

The client application can include the optional **<test-option>** tag element described in the NETCONF specification. Regardless of the value provided, the NETCONF server for the Junos OS performs a basic syntax check on the configuration data in the **<edit-config>** tag element. When the **<test-option>** tag is included, NETCONF performs a complete syntactic and semantic validation in response to the **<commit>** and **<validate>** tag elements (that is, when the configuration is committed or explicitly checked), but not in response to the **<edit-config>** tag element. For information about the **<commit>** and **<validate>** tag elements, see "Committing Configurations" on page 651.

Replacing the Candidate Configuration

You can replace the candidate configuration with a new configuration file using the **<copy-config>** tag, or you can use the **<edit-config>** tag with the **<default-operation>** subtag value set to **replace**.

For information about completely replacing the candidate configuration, see the following sections:

- Using <copy-config> on page 638
- Using <edit-config> on page 638

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Using <copy-config>

One method for replacing the entire candidate configuration is to include the **<copy-config>** tag element in the **<rpc>** tag element. The **<source>** tag element encloses the **<url>** tag element to specify the filename that contains the new configuration data. The **<target>** tag element encloses the **<candidate/>** tag to indicate that the new configuration data replaces the candidate configuration:

```
<rpc>
  <copy-config>
    <target>
      <candidate/>
    </target>
    <source>
      <url>
        <!-- location specifier for file containing the new configuration -->
      </url>
    </source>
  </copy-config>
</rpc>
]]>]]>
```

Using <edit-config>

The other method for replacing the entire candidate configuration is to set the edit configuration mode to **replace** as a global variable. The candidate configuration includes the **<default-operation>** tag element with the value **replace** in the **<edit-config>** tag element, as described in "Setting the Edit Configuration Mode" on page 633. To specify the new configuration data, the application includes a **<config>** or **<config-text>** tag element that contains the data or a **<url>** tag element that names the file containing the data, as discussed in "Formatting the Configuration Data" on page 629.

```
<rpc>
  <edit-config>
    <target>
        <candidate/>
    </target>
    <default-operation>replace</default-operation>

  <!-- EITHER -->
    <config>
      <configuration>
        <!-- tag elements representing the configuration elements to change -->
      </configuration>
    </config>
  <!-- OR -->
    <config-text>
      <configuration-text>
        <!-- tag elements representing the configuration elements to change -->
      </configuration-text>
    </config-text>
  <!-- OR -->
    <url>
      <!-- location specifier for file containing changes -->
```


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```
    </url>

  </edit-config>
</rpc>
]]>]]>
```

Rolling Back a Configuration

The **<discard-changes>** tag allows you to roll back the candidate configuration to a previous configuration. To roll back the candidate to the current running configuration, insert the **<discard-changes>** tag within the **<rpc>** tag.

```
<rpc>
  <discard-changes/>
</rpc>
]]>]]>
```

This operation is equivalent to the CLI configuration mode **rollback 0** command.

The NETCONF server indicates that it discarded the changes by returning the **<load-success/>** tag after you issue the **</discard-changes>** tag.

Deleting the Candidate Configuration

You can use the **<delete-config>** tag element to delete the current candidate configuration. Exercise caution when issuing the **<delete-config>** tag element. If you commit an empty candidate configuration, the device will go offline.

```
<rpc>
 <delete-config>
  <target>
   <candidate/>
  </target>
 </delete-config>
</rpc>
```

WARNING: If you take the device offline, you will need to access the device through the console port on the device. From this console, you can access the CLI and perform a rollback to a suitable configuration. For more information on the console port, see the hardware manual for your specific device.

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Changing Individual Configuration Elements

You change individual configuration elements within a candidate configuration using the **<edit-config>** tag element within the **<rpc>** tag. By default, the NETCONF server merges new configuration data into the existing candidate configuration. However, a client application can also replace, create, or delete individual configuration elements (hierarchy levels or configuration objects). The same basic tag elements are emitted for all operations: **<config>**, **<config-text>**, or **<url>** tag sub-elements within the **<edit-config>** tag element:

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>

  <!-- EITHER -->
    <config>
      <configuration>
        <!-- tag elements representing the configuration elements to change -->
      </configuration>
    </config>
  <!-- OR -->
    <config-text>
      <configuration-text>
        <!-- tag elements representing the configuration elements to change -->
      </configuration-text>
    </config-text>
  <!-- OR -->
    <url>
      <!-- location specifier for file containing changes -->
    </url>

  </edit-config>
</rpc>
]]>]]>
```

Using configuration data within the **<config>** or **<config-text>** tag elements or the file specified within the **<url>** tag element, the application defines a configuration element by including the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the element. To represent the element, the application includes its container tag element. The child tag elements included within the container tag element depend on the operation, and are described in the following sections:

- Merging Configuration Elements on page 641
- Replacing Configuration Elements on page 642
- Creating New Configuration Elements on page 643
- Deleting Configuration Elements on page 645

For more information about the tag elements that represent configuration statements, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556. For

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information about the tag elements for a specific configuration element, see the *Junos XML API Configuration Developer Reference*.

The NETCONF server indicates that it changed the configuration in the requested way by enclosing the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

For more information, see the following sections:

Merging Configuration Elements

To merge configuration elements (hierarchy levels or configuration objects) into the candidate configuration, a client application emits the basic tag elements described in "Changing Individual Configuration Elements" on page 640.

To represent each element to merge in (either within the **<config>** tag element or in the file named by the **<url>** tag element), the application includes the tag elements representing its parent hierarchy levels and its container tag element, as described in "Changing Individual Configuration Elements" on page 640. Within the container tag, the application includes each of the element's identifier tag elements (if it has them) and the tag element for each child to add or for which to set a different value. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tags for each parent of the element -->
    <element>
      <name>identifier</name>
      <!-- - child tag elements to add or change -->
    </element>
  <!-- closing tags for each parent of the element -->
</configuration>
```

The NETCONF server merges in the new configuration element according to the rules specified in "Setting the Edit Configuration Mode" on page 633. As described in that section, the application can explicitly specify merge mode by including the **<default-operation>** tag element with the value **merge** in the **<edit-config>** tag element.

The following example shows how to merge information for a new interface called **so-3/0/0** into the **[edit interfaces]** hierarchy level in the candidate configuration:

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Client Application **NETCONF Server**

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <interfaces>
          <interface>
            <name>so-3/0/0</name>
            <unit>
              <name>0</name>
              <family>
                <inet>
                  <address>
                    <name>10.0.0.1/8</name>
                  <address>
                </inet>
              </family>
            </unit>
          </interface>
        </interfaces>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
   <ok/>
</rpc-reply>
]]>]]>
```

T2120

Replacing Configuration Elements

To replace configuration elements (hierarchy levels or configuration objects) in the candidate configuration, a client application emits the basic tag elements described in "Changing Individual Configuration Elements" on page 640.

To represent the new definition for each configuration element being replaced (either within the **<config>** tag element or in the file named by the **<url>** tag element), the application emits the tag elements representing its parent hierarchy levels and its container tag element, as described in "Changing Individual Configuration Elements" on page 640. Within the container tag, the application includes each of the element's identifier tag elements (if it has them) and all child tag elements (with values, if appropriate) that are being defined for the new version of the element. In the following, the identifier tag element is called **<name>**. The application includes the **operation="replace"** attribute in the opening container tag:

```
<configuration>
  <!-- opening tags for each parent of the element -->
    <container-tag operation="replace">
      <name>identifier</name>
      <!-- other child tag elements -->
    </container-tag>
  <!-- closing tags for each parent of the element -->
```

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```
</configuration>
```

The NETCONF server removes the existing element that has the specified identifiers and inserts the new element.

The application can also replace all objects in the configuration in one operation. For instructions, see "Replacing the Candidate Configuration" on page 637.

The following example shows how to grant new permissions for the object named **operator** at the **[edit system login class]** hierarchy level.

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <system>
          <login>
            <class operation="replace">
              <name>operator</name>
              <permissions>configure</permissions>
              <permissions>admin-control</permissions>
            </class>
          </login>
        </system>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2121

Creating New Configuration Elements

To create configuration elements (hierarchy levels or configuration objects) in the candidate configuration only if the elements do not already exist, a client application emits the basic tag elements described in "Changing Individual Configuration Elements" on page 640.

To represent each configuration element being created (either within the **<config>** tag element or in the file named by the **<url>** tag element), the application emits the tag elements representing its parent hierarchy levels and its container tag element, as described in "Changing Individual Configuration Elements" on page 640. Within the container tag, the application includes each of the element's identifier tag elements (if it has them) and all child tag elements (with values, if appropriate) that are being defined for the element. In the following, the identifier tag element is called **<name>**. The application includes the **operation="create"** attribute in the opening container tag:

```
<configuration>
```

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```
    <!-- opening tags for each parent of the element -->
      <element operation="create">
        <name>identifier</name> <!-- if the element has an identifier -->
        <!-- other child tag elements -->
      </element>
    <!-- closing tags for each parent of the element -->
  </configuration>
```

The NETCONF server adds the new element to the candidate configuration only if there is no existing element with that name (for a hierarchy level) or with the same identifiers (for a configuration object).

The following example shows how to enable OSPF on a device if it is not already configured:

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <config>
      <configuration>
        <protocols>
          <ospf operation="create">
            <area>
              <name>0</name>
              <interface>
                <name>at-0/1/0.100</name>
              </interface>
            </area>
          </ospf>
        </protocols>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2122

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Deleting Configuration Elements

To delete a configuration element (hierarchy level or configuration object) from the candidate configuration, a client application emits the basic tag elements described in "Changing Individual Configuration Elements" on page 640. It also emits the **<default-operation>** tag element with the value **none** to change the default mode to no-change.

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <default-operation>none</default-operation>

  <!-- EITHER -->
    <config>
      <configuration>
        <!-- tag elements representing the configuration elements to delete -->
      </configuration>
    </config>
  <!-- OR -->
    <url>
      <!-- location specifier for file containing elements to delete -->
    </url>

  </edit-config>
</rpc>
]]>]]>
```

In no-change mode, existing configuration elements remain unchanged unless the corresponding element in the new configuration has the **operation="delete"** attribute in its opening tag. This mode prevents the NETCONF server from creating parent hierarchy levels for an element that is being deleted. We recommend that the only operation performed in no-change mode be deletion. When merging, replacing, or creating configuration elements, client applications use merge mode.

To represent each configuration element being deleted (either within the **<config>** tag element or in the file named by the **<url>** tag element), the application emits the tag elements representing its parent hierarchy levels, as described in "Changing Individual Configuration Elements" on page 640. The tag element in which the **operation="delete"** attribute is included depends on the element type, as described in the following sections:

- Deleting a Hierarchy Level or Container Object on page 646
- Deleting a Configuration Object That Has an Identifier on page 646
- Deleting a Single-Value or Fixed-Form Option from a Configuration Object on page 647
- Deleting Values from a Multivalue Option of a Configuration Object on page 648

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Deleting a Hierarchy Level or Container Object

To delete a hierarchy level and all of its children (or a container object that has children but no identifier), a client application includes the **operation="delete"** attribute in the empty tag that represents the level:

```
<configuration>
  <!-- opening tags for each parent level -->
    <level-to-delete operation="delete"/>
  <!-- closing tags for each parent level -->
</configuration>
```

We recommend that the application set the default mode to no-change by including the **<default-operation>** tag element with the value **none**, as described in "Deleting Configuration Elements" on page 645. For more information about hierarchy levels and container objects, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556.

The following example shows how to remove the **[edit protocols ospf]** hierarchy level of the candidate configuration:

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <default-operation>none</default-operation>
    <config>
      <configuration>
        <protocols>
          <ospf operation="delete"/>
        </protocols>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2123

Deleting a Configuration Object That Has an Identifier

To delete a configuration object that has an identifier, a client application includes the **operation="delete"** attribute in the container tag element for the object. Inside the container tag element, it includes the identifier tag element only, not any tag elements that represent other characteristics. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tags for each parent of the object -->
    <object operation="delete">
      <name>identifier</name>
```


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```
    </object>
  <!-- closing tags for each parent of the object -->
</configuration>
```

NOTE: The delete attribute appears in the opening container tag, not in the identifier tag element. The presence of the identifier tag element results in the removal of the specified object, not in the removal of the entire hierarchy level represented by the container tag element.

We recommend that the application set the default mode to no-change by including the **<default-operation>** tag element with the value **none**, as described in "Deleting Configuration Elements" on page 645. For more information about identifiers, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556.

The following example shows how to remove the user object **barbara** from the **[edit system login user]** hierarchy level in the candidate configuration:

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <default-operation>none</default-operation>
    <config>
      <configuration>
        <system>
          <login>
            <user operation="delete">
              <name>barbara</name>
            </user>
          </login>
        </system>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2124

Deleting a Single-Value or Fixed-Form Option from a Configuration Object

To delete from a configuration object either a fixed-form option or an option that takes just one value, a client application includes the **operation="delete"** attribute in the tag element for the option. In the following, the identifier tag element for the object is called **<name>**. (For information about deleting an option that can take multiple values, see "Deleting Values from a Multivalue Option of a Configuration Object" on page 648.)

```
<configuration>
  <!-- opening tags for each parent of the object -->
```

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```
    <object>
      <name>identifier</name> <!-- if object has an identifier -->
      <option1 operation="delete">
      <option2 operation="delete">
      <!-- tag elements for other options to delete -->
    </object>
  <!-- closing tags for each parent of the object -->
</configuration>
```

We recommend that the application set the default mode to no-change by including the **<default-operation>** tag element with the value **none**, as described in "Deleting Configuration Elements" on page 645. For more information about options, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556.

The following example shows how to remove the fixed-form **disable** option at the **[edit forwarding-options sampling]** hierarchy level:

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <default-operation>none</default-operation>
    <config>
      <configuration>
        <forwarding-options>
          <sampling>
            <disable operation="delete"/>
          </sampling>
        </forwarding-options>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2125

Deleting Values from a Multivalue Option of a Configuration Object

As described in "Mapping Configuration Statements to Junos XML Tag Elements" on page 556, some Junos OS configuration objects are leaf statements that have multiple values. In the formatted ASCII CLI representation, the values are enclosed in square brackets following the name of the object:

object[*value1 value2 value3* ...];

The Junos XML representation does not use a parent tag for the object, but instead uses a separate instance of the object tag element for each value. In the following, the identifier tag element is called **<name>**:

```
<parent-object>
  <name>identifier</name>
```


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```
  <object>value1</object>
  <object>value2</object>
  <object>value3</object>
</parent-object>
```

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To remove one or more values for such an object, a client application includes the **operation="delete"** attribute in the opening tag for each value. It does not include tag elements that represent values to be retained. The identifier tag element in the following is called **<name>**:

```
<configuration>
  <!-- opening tags for each parent of the parent object -->
    <parent-object>
      <name>identifier</name>
      <object operation="delete">value1</object>
      <object operation="delete">value2</object>
    </parent-object>
  <!-- closing tags for each parent of the parent object -->
</configuration>
```

We recommend that the application set the default mode to no-change by including the **<default-operation>** tag element with the value **none**, as described in "Deleting Configuration Elements" on page 645. For more information about leaf statements with multiple values, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556.

The following example shows how to remove two of the permissions granted to the **user-accounts** login class:

Client Application

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>
    <default-operation>none</default-operation>
    <config>
      <configuration>
        <system>
          <login>
            <class>
              <name>user-accounts</name>
              <permissions operation="delete">configure</permissions>
              <permissions operation="delete">control</permissions>
            </class>
          </login>
        </system>
      </configuration>
    </config>
  </edit-config>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2126

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CHAPTER 10

Committing Configurations

This chapter explains how to commit a candidate configuration so that it becomes the active configuration on the routing, switching, or security platform. For more detailed information about commit operations, including a discussion of the interaction among different variants of the operation, see the *CLI User Guide*

- Verifying a Configuration Before Committing It on page 651
- Committing a Configuration on page 652

Verifying a Configuration Before Committing It

During the process of committing the candidate configuration or a private copy, the NETCONF server confirms that it is syntactically correct. If the syntax check fails, the server does not commit the candidate configuration. To avoid the potential complications of such a failure, it often makes sense to confirm the candidate's correctness before actually committing it. A client application includes the **<validate>** and **<source>** tag elements and **<candidate/>** tag in an **<rpc>** tag element:

```
<rpc>
  <validate>
    <source>
      <candidate/>
    </source>
  </validate>
</rpc>
]]>]]>
```

The NETCONF server confirms that the candidate configuration is valid by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the candidate configuration is not valid, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element explaining the reason for the failure.

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Committing a Configuration

The following sections describe how to commit the candidate configuration so that it becomes the active configuration on the routing, switching, or security platform. For more detailed information about commit operations, including a discussion of the interaction among different commit operations, see the *CLI User Guide*.

- Committing the Candidate Configuration on page 652
- Committing the Candidate Configuration Only After Confirmation on page 652

Committing the Candidate Configuration

To commit the candidate configuration, a client application encloses the **<commit/>** tag in an **<rpc>** tag element:

```
<rpc>
  <commit/>
</rpc>
]]>]]>
```

The NETCONF server confirms that it committed the candidate configuration by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the NETCONF server cannot commit the candidate configuration, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element explaining the reason for the failure. The most common causes are semantic or syntactic errors in the candidate configuration.

To avoid inadvertently committing changes made by other users or applications, a client application locks the candidate configuration before changing it and emits the **<commit/>** tag while the configuration is still locked. (For instructions on locking and changing the candidate configuration, see "Locking the Candidate Configuration" on page 588 and "Changing Configuration Information" on page 627.) After committing the configuration, the client application unlocks the candidate as described in "Unlocking the Candidate Configuration" on page 589.

Committing the Candidate Configuration Only After Confirmation

To commit the candidate configuration but require an explicit confirmation for the commit to become permanent, a client application includes the **<confirmed/>** tag in **<commit>** and **<rpc>** tag elements:

```
<rpc>
  <commit>
    <confirmed/>
  </commit>
</rpc>
]]>]]>
```


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If the commit is not confirmed within a certain amount of time (600 seconds [10 minutes] by default), the NETCONF server automatically retrieves and commits (rolls back to) the previously committed configuration. To specify a different number of minutes for the rollback deadline, the application encloses a positive integer value in the **<confirm-timeout>** tag element:

```
<rpc>
  <commit>
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
  </commit>
</rpc>
]]>]]>
```

In either case, the NETCONF server confirms that it committed the candidate configuration temporarily by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

If the NETCONF server cannot commit the candidate, the **<rpc-reply>** tag element instead encloses an **<rpc-error>** tag element explaining the reason for the failure. The most common causes are semantic or syntactic errors in the candidate configuration.

The confirmed commit operation is useful for verifying that a configuration change works correctly and does not prevent management access to the device. If the change prevents access or causes other errors, the automatic rollback to the previous configuration restores access after the rollback deadline passes.

To delay the rollback to a time later than the current rollback deadline, the client application emits the **<confirmed/>** tag in a **<commit>** tag element again before the deadline passes. Optionally, it includes the **<confirm-timeout>** tag element to specify how long to delay the next rollback; omit that tag element to delay the rollback by the default of 10 minutes. The client application can delay the rollback indefinitely by emitting the **<confirmed/>** tag repeatedly in this way.

To cancel the rollback completely (and commit a configuration permanently), the client application emits the **<commit/>** tag renclosed in an **<rpc>** tag element before the rollback deadline passes. The rollback is canceled and the candidate configuration is committed immediately, as described in "Committing a Configuration" on page 652. If the candidate configuration is still the same as the temporarily committed configuration, this effectively recommits the temporarily committed configuration.

If another application uses the **<kill-session/>** tag element to terminate this application's session while a confirmed commit is pending (this application has committed changes but not yet confirmed them), the NETCONF server that is servicing this session restores the configuration to its state before the confirmed commit instruction was issued. For more information about session termination, see "Terminating Another NETCONF Session" on page 590.

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The following example shows how to commit the candidate configuration with a rollback deadline of 20 minutes.

Client Application

```
<rpc>
  <commit>
    <confirmed/>
    <confirm-timeout>20</confirm-timeout>
  </commit>
</rpc>
]]>]]>
```

NETCONF Server

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

T2127

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CHAPTER 11

Summary of NETCONF Tag Elements

This chapter lists the tag elements that client applications and the NETCONF server use to control the NETCONF session and to exchange configuration information. It also describes the **]]>]]>** character sequence, which signals the end of each request and response. The entries are in alphabetical order. For information about the notational conventions used in this chapter, see Table 2 on page ccxciii.

]]>]]>

Usage

```
<hello>
  <!-- child tag elements included by client application or NETCONF server -->
</hello>
]]>]]>
```

```
<rpc [attributes]>
  <!-- tag elements in a request from a client application -->
</rpc>
]]>]]>
```

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <!-- tag elements in the response from the NETCONF server -->
</rpc-reply>
]]>]]>
```

Description

Signal the end of each XML document sent by the NETCONF server and client applications. Client applications send the sequence after its closing **</hello>** tag and each closing **</rpc>** tag. The NETCONF server sends the sequence after its closing **</hello>** tag and each closing **</rpc-reply>** tag.

Use of this signal is required by RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, available at http://www.ietf.org/rfc/rfc4742.txt .

Usage Guidelines

See "Generating Well-Formed XML Documents" on page 566.

Related Documentation

- <hello> on page 663
- <rpc> on page 666
- <rpc-reply> on page 667

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<close-session/>

Usage

```
<rpc>
  <close-session/>
</rpc>
]]>]]>
```

Description Request that the NETCONF server end the current session.

Usage Guidelines See "Ending a NETCONF Session and Closing the Connection" on page 591.

Related Documentation

-]]>]]> on page 655
- <rpc> on page 666

<commit>

Usage

```
<rpc>
  <commit/>
</rpc>
]]>]]>
```

```
<rpc>
  <commit>
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
  </commit>
</rpc>
]]>]]>
```

Description Request that the NETCONF server perform one of the variants of the commit operation on the candidate configuration:

- To commit the configuration immediately, making it the active configuration on the device, emit the empty **<commit/>** tag.
- To commit the candidate configuration but require an explicit confirmation for the commit to become permanent, enclose the **<confirmed/>** tag in the **<commit>** tag element.

  By default, the NETCONF server rolls back to the previous running configuration after 10 minutes; to set a different rollback delay, also emit the optional **<confirm-timeout>** tag element. To delay the rollback again (past the original rollback deadline), emit the **<confirmed/>** tag (enclosed in the **<commit>** tag element) again before the deadline passes. Include the **<confirm-timeout>** tag element to specify how long to delay the next rollback, or omit that tag element to use the default of 10 minutes. The rollback can be delayed repeatedly in this way.

  To commit the configuration immediately and permanently after emitting the **<confirmed/>** tag, emit the empty **<commit/>** tag before the rollback deadline passes. The NETCONF server commits the candidate configuration and cancels the rollback.

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If the candidate configuration is still the same as the running configuration, the effect is the same as recommitting the current running configuration.

Contents **<confirmed>**—Requests a temporary commit of the candidate configuration. The device reverts to the previous active configuration after a specified time.

<confirm-timeout>—Specifies the number of minutes before the device reverts to the previously active configuration. If this tag element is omitted, the default is 10 minutes.

Usage Guidelines See "Committing a Configuration" on page 652.

Related Documentation
-]]>]]> on page 655
- <rpc> on page 666

<copy-config>

Usage

```
<rpc>
  <copy-config>
    <target>
      <candidate/>
    </target>
    <source>
      <url>
        <!-- location specifier for file containing the new configuration -->
      </url>
    </source>
  <copy-config>
</rpc>
]]>]]>
```

Description Replace the existing candidate configuration with configuration data contained in a file.

Contents **<source>**—Encloses the **<url>** tag element, which specifies the source of the configuration data.

<url>—Names the file that contains the new configuration data to substitute for the existing candidate configuration. For information about specifying the file location, see "Referencing Configuration Data Files" on page 629.

The **<target>** tag element and its contents are explained separately.

Usage Guidelines See "Using <copy-config>" on page 638.

Related Documentation
-]]>]]> on page 655
- <rpc> on page 666
- <target> on page 668

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<data>

Usage

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <data>
    <configuration>
      <!-- Junos XML tag elements for the configuration data -->
    </configuration>
  </data>
</rpc-reply>
]]>]]>
```

Description Enclose configuration data returned by the NETCONF server in response to a **<get-config>** tag element.

Contents **<configuration>**—Encloses configuration tag elements. It is the top-level tag element in the Junos XML API, equivalent to the **[edit]** hierarchy level in the Junos OS CLI. For information about Junos configuration elements, see the *Junos XML API Configuration Developer Reference*.

Usage Guidelines See "Requesting Configuration Information" on page 602.

Related Documentation

-]]>]]> on page 655
- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <get-config> on page 662
- <rpc-reply> on page 667

<delete-config>

Usage

```
<rpc>
  <delete-config>
    <target>
      <candidate/>
    </target>
  <delete-config>
</rpc>
]]>]]>
```

Description Delete the existing candidate configuration.

Contents The **<target>** tag element and its contents are explained separately.

Usage Guidelines See "Replacing the Candidate Configuration" on page 637.

Related Documentation

-]]>]]> on page 655
- <rpc> on page 666

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- <target> on page 668

<discard-changes/>

Usage

```
<rpc>
  <discard-changes/>
</rpc>
]]>]]>
```

Description Discard changes made to the candidate configuration and make its contents match the contents of the current running (active) configuration. This operation is equivalent to the Junos OS CLI configuration mode **rollback 0** command.

Usage Guidelines See "Rolling Back a Configuration" on page 639.

Related Documentation

-]]>]]> on page 655
- <rpc> on page 666

<edit-config>

Usage

```
<rpc>
  <edit-config>
    <target>
      <candidate/>
    </target>

    <!-- EITHER -->

    <config>
      <configuration>
        <!-- tag elements representing the data to incorporate -->
      </configuration>
    </config>

    <!-- OR -->

    <config-text>
      <configuration-text>
        <!-- tag elements inline configuration data in text format -->
      </configuration-text>
    </config-text>

    <!-- OR -->

    <url>
      <!-- location specifier for file containing data -->
    </url>

    <default-operation>(merge | none | replace)</default-operation>
    <error-option>(ignore-error | stop-on-error)</error-option>
```

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```
    <test-option>(set | test-then-set)</test-option>
  <edit-config>
</rpc>
]]>]]>
```

Description Request that the NETCONF server incorporate configuration data into the candidate configuration. Provide the data in one of three ways:

- Include the **<config>** tag element to provide a data stream of Junos XML configuration tag elements to incorporate. The tag elements are enclosed in the **<configuration>** tag element.
- Include the **<config-text>** tag element to provide a data stream of CLI configuration statements to incorporate. The configuration statements are enclosed in the **<configuration-text>** tag element.
- Include the **<url>** tag element to specify the location of a file that contains the Junos XML configuration tag elements to incorporate.

Contents **<config>**—Encloses the **<configuration>** tag element.

<configuration>—Encloses the configuration data written in Junos XML. This configuration data will be incorporated into the candidate configuration and provided as a data stream. For information about the syntax for representing the elements to create, delete, or modify, see "Mapping Configuration Statements to Junos XML Tag Elements" on page 556 and "Changing Individual Configuration Elements" on page 640.

<config-text>—Encloses the **<configuration-text>** tag element.

<configuration-text>—Encloses the configuration data written in CLI configuration statements. This configuration data will be incorporated into the candidate configuration and provided as a data stream. For information about the CLI configuration statements, see the *CLI User Guide*.

<default-operation>—(Optional) Specifies how to incorporate the new configuration data into the candidate configuration, particularly when there are conflicting statements. The following are acceptable values:

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- **merge**—Combines the new configuration data with the candidate configuration according to the rules defined in "Setting the Edit Configuration Mode" on page 633. This is the default mode if the **<default-operation>** tag element is omitted. It applies to all elements in the new data that do not have the **operation** attribute in their opening container tag to specify a different mode (for information about the **operation** attribute, see "Changing Individual Configuration Elements" on page 640).

- **none**—Retains each configuration element in the existing candidate configuration unless the new data includes a corresponding element that has the **operation** attribute in its opening container tag to specify an incorporation mode. This mode prevents the NETCONF server from creating parent hierarchy levels for an element that is being deleted. For more information, see "Deleting Configuration Elements" on page 645.

- **replace**—Discards the existing candidate configuration and replaces it with the new data. For more information, see "Using <edit-config>" on page 638.

<error-option>—(Optional) Specifies how the NETCONF server handles errors encountered while it incorporates the configuration data. The following are acceptable values:

- **ignore-error**—Specifies that the NETCONF server continue to incorporate the new configuration data even if it encounters an error.

- **stop-on-error**—Specifies that the NETCONF server stop incorporating the new configuration data when it encounters an error. This is the default behavior if the **<error-option>** tag element is omitted.

<test-option>—(Optional) Specifies whether the NETCONF server validates the configuration data before incorporating it into the candidate configuration. The acceptable values defined in the NETCONF specification are **set** (no validation) and the default **test-then-set** (do not incorporate data if validation fails).

Regardless of the value provided, the NETCONF server for Junos OS performs a basic syntax check on the configuration data in the **<edit-config>** tag element. It performs a complete syntactic and semantic validation in response to the **<validate>** and **<commit>** tag elements, but not for the **<edit-config>** tag element.

<url>—Specifies the full pathname of the file that contains the configuration data to load. When the configuration data is formatted as CLI configuration statements, you set the **<url>** format attribute to **text**. For more information, see "Referencing Configuration Data Files" on page 629.

The **<target>** tag element and its contents are explained separately.

Usage Guidelines See "Changing Configuration Information" on page 627.

Related Documentation

-]]>]]> on page 655
- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc> on page 666
- <target> on page 668

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<error-info>

Usage

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rpc-error>
    <error-info>
      <bad-element>command-or-statement</bad-element>
    </error-info>
  </rpc-error>
</rpc-reply>
]]>]]>
```

Description Provide additional information about the event or condition that causes the NETCONF server to report an error or warning in the **<rpc-error>** tag element.

Contents **<bad-element>**—Identifies the command or configuration statement that was being processed when the error or warning occurred. For a configuration statement, the **<error-path>** tag element enclosed in the **<rpc-error>** tag element specifies the statement's parent hierarchy level.

Usage Guidelines See "Handling an Error or Warning" on page 587.

Related Documentation

-]]>]]> on page 655
- <rpc-error> on page 666
- <rpc-reply> on page 667

<get-config>

Usage

```
<rpc>
  <get-config>
    <source>
      <( candidate | running )/>
    </source>
  </get-config>

  <get-config>
    <source>
      <( candidate | running )/>
    </source>
    <filter type="subtree">
      <configuration>
        <!-- tag elements for each configuration element to return -->
      </configuration>
    </filter>
  </get-config>
</rpc>
]]>]]>
```

Description Request configuration data from the NETCONF server. The child tag elements **<source>** and **<filter>** specify the source and scope of data to display:

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- To display the entire active configuration, enclose the **<source>** tag element and **<running/>** tag in the **<get-config>** tag element.
- To display the entire candidate configuration, enclose the **<source>** tag element and **<candidate/>** tag in the **<get-config>** tag element.
- To display one or more sections of the configuration hierarchy (hierarchy levels or configuration objects), enclose the appropriate child tag elements in the **<source>** and **<filter>** tag elements.

Contents

<candidate/>—Represents the candidate configuration.

<configuration>—Encloses tag elements that specify which configuration elements to return.

<filter>—Encloses the **<configuration>** tag element. The mandatory **type** attribute indicates the kind of syntax used to represent the requested configuration elements; the only acceptable value is **subtree**.

To specify the configuration elements to return, include within the **<filter>** tag element the Junos XML tag elements that represent all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to each element to display. For information about the syntax for representing each kind of element, see "Specifying the Scope of Configuration Information to Return" on page 605. For information about the configuration elements available in the current version of Junos OS, see the *Junos XML API Configuration Developer Reference*.

<running/>—Represents the active (mostly recently committed) configuration.

<source>—Encloses the tag that specifies the source of the configuration data. To specify the candidate configuration, include the **<candidate/>** tag. To specify the active configuration, include the **<running/>** tag.

Usage Guidelines

See "Requesting Configuration Information" on page 602.

Related Documentation

-]]>]]> on page 655
- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <data> on page 658
- <rpc> on page 666

<hello>

Usage

```
<!-- emitted by a client application -->
<hello>
  <capabilities>
    <capability>URI</capability>
  </capabilities>
</hello>
]]>]]>
```

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```
<!-- emitted by the NETCONF server -->
<hello>
  <capabilities>
    <capability>URI</capability>
  </capabilities>
  <session-id>session-identifier</session-id>
</hello>
]]>]]>
```

Description Specify which operations, or *capabilities*, the emitter supports from among those defined in the NETCONF specification. The client application must emit the **<hello>** tag element before any other tag element during the NETCONF session, and must not emit it more than once.

Contents **<capabilities>**—Encloses one or more **<capability>** tags, which together specify the set of supported NETCONF operations.

<capability>—Specifies the uniform resource identifier (URI) of a capability defined in the NETCONF specification or by a vendor. Each capability from the NETCONF specification is represented by a uniform resource name (URN). Capabilities defined by vendors are represented by URNs or URLs. For a list of the capabilities supported by the NETCONF server for Junos OS, see "Exchanging <hello> Tag Elements" on page 578.

<session-id>—(Generated by NETCONF server only) Specifies the UNIX process ID (PID) of the NETCONF server for the session.

Usage Guidelines See "Exchanging <hello> Tag Elements" on page 578.

Related Documentation

-]]>]]> on page 655

<kill-session>

Usage

```
<rpc>
  <kill-session>
    <session-id>PID</session-id>
  </kill-session>
</rpc>
]]>]]>
```

Description Request that the NETCONF server terminate another CLI or NETCONF session. The usual reason to emit this tag is that the user or application for the other session holds a lock on the candidate configuration, preventing the client application from locking the configuration itself.

The client application must have the Junos **maintenance** permission to perform this operation.

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Contents **<session-id>**—The PID of the entity conducting the session to terminate. The PID is reported in the **<rpc-error>** tag element that the NETCONF server generates when it cannot lock a configuration as requested.

Usage Guidelines See "Terminating Another NETCONF Session" on page 590.

Related Documentation
-]]>]]> on page 655
- <lock> on page 665
- <rpc> on page 666

<lock>

Usage

```
<rpc>
  <lock>
    <target>
      <candidate/>
    </target>
  </lock>
</rpc>
]]>]]>
```

Description Request that the NETCONF server lock the candidate configuration, enabling the client application both to read and change it, but preventing any other users or applications from changing it. The client application must emit the **<unlock/>** tag to unlock the configuration.

If the NETCONF session ends or the application emits the **<unlock>** tag element before the candidate configuration is committed, all changes made to the candidate are discarded.

Contents The **<target>** tag element and its contents are explained separately.

Usage Guidelines See "Locking the Candidate Configuration" on page 588.

Related Documentation
-]]>]]> on page 655
- <rpc> on page 666
- <target> on page 668
- <unlock> on page 668

<ok/>

Usage

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
]]>]]>
```

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Description Indicate that the NETCONF server successfully performed a requested operation that changes the state or contents of the device configuration.

Usage Guidelines See "Configuration Change Responses" on page 586.

Related Documentation
-]]>]]> on page 655
- <rpc-reply> on page 667

<rpc>

Usage

```
<rpc [attributes]>
  <!-- tag elements in a request from a client application -->
</rpc>
]]>]]>
```

Description Enclose all tag elements in a request generated by a client application.

Attributes (Optional) One or more attributes of the form ***attribute-name="value"***. This feature can be used to associate requests and responses if the value assigned to an attribute by the client application is unique in each opening **<rpc>** tag. The NETCONF server echoes the attribute unchanged in its opening **<rpc-reply>** tag, making it simple to map the response to the initiating request. The NETCONF specification assigns the name **message-id** to this attribute.

Usage Guidelines See "Sending a Request to the NETCONF Server" on page 581.

Related Documentation
-]]>]]> on page 655
- <rpc-reply> on page 667

<rpc-error>

Usage

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <rpc-error>
    <error-severity>error-severity</error-severity>
    <error-path>error-path</error-path>
    <error-message>error-message</error-message>
    <error-info>...</error-info>
  </rpc-error>
</rpc-reply>
]]>]]>
```

Description Indicate that the NETCONF server has experienced an error while processing the client application's request. If the server has already emitted the response tag element for the current request, the information enclosed in that response tag element might be incomplete. The client application must include code that discards or retains the information, as appropriate. The child tag elements described in the Contents section

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detail the nature of the error. The NETCONF server does not necessarily emit all child tag elements; it omits tag elements that are not relevant to the current request.

Contents **<error-message>**—Describes the error or warning in a natural-language text string.

<error-path>— Specifies the path to the Junos configuration hierarchy level at which the error or warning occurred, in the form of the CLI configuration mode banner.

<error-severity>—Indicates the severity of the event that caused the NETCONF server to return the **<rpc-error>** tag element. The two possible values are **error** and **warning**.

The **<error-info>** tag element is described separately.

Usage Guidelines See "Handling an Error or Warning" on page 587.

Related Documentation

-]]>]]> on page 655
- <error-info> on page 662
- <rpc-reply> on page 667

<rpc-reply>

Usage

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <!-- tag elements in a reply from the NETCONF server-->
</rpc-reply>
]]>]]>
```

Description Enclose all tag elements in a reply from the NETCONF server. The immediate child tag element is usually one of the following:

- The Junos XML tag element that encloses the data requested by a client application with a Junos XML operational request tag element; for example, the **<interface-information>** tag element in response to the **<get-interface-information>** tag element
- The **<data>** tag element, to enclose the data requested by a client application with the **<get-config>** tag element
- The **<ok/>** tag, to confirm that the NETCONF server successfully performed an operation that changes the state or contents of a configuration (such as a lock, change, or commit operation)
- The **<output>** tag element, if the Junos XML API does not define a specific tag element for requested operational information
- The **<rpc-error>** tag element, if the requested operation generated an error or warning

Attributes **xmlns**—Names the default XML namespace for the enclosed tag elements.

Usage Guidelines See "Parsing the NETCONF Server Response" on page 584.

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Related Documentation

-]]>]]> on page 655
- <data> on page 658
- <ok/> on page 665
- <output> in the *Junos XML API Operational Developer Reference*
- <rpc> on page 666
- <rpc-error> on page 666

<target>

Usage

```
<rpc>
  <( copy-config | delete-config | edit-config | lock | unlock )>
    <target>
      <candidate/>
    </target>
  </( copy-config | delete-config | edit-config | lock | unlock )>
</rpc>
]]>]]>
```

Description Specify the configuration on which to perform an operation.

Contents **<candidate/>**—Specifies the candidate configuration as the configuration on which to perform the operation. This is the only acceptable value for Junos OS.

Usage Guidelines See "Locking the Candidate Configuration" on page 588, "Unlocking the Candidate Configuration" on page 589, "Editing the Candidate Configuration" on page 628, and "Using <copy-config>" on page 638.

Related Documentation

-]]>]]> on page 655
- <copy-config> on page 657
- <delete-config> on page 658
- <edit-config> on page 659
- <lock> on page 665
- <rpc> on page 666
- <unlock> on page 668

<unlock>

Usage

```
<rpc>
  <unlock>
    <target>
      <candidate/>
    </target>
  </unlock>
```


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```
</rpc>
]]>]]>
```

Description Request that the NETCONF server unlock and close the candidate configuration, which the client application previously locked by emitting the **<lock>** tag element. Until the application emits this tag element, other users or applications can read the configuration but cannot change it.

Contents The **<target>** tag element and its contents are explained separately.

Usage Guidelines See "Unlocking the Candidate Configuration" on page 589.

Related Documentation

-]]>]]> on page 655
- <lock> on page 665
- <rpc> on page 666
- <target> on page 668

<validate>

Usage

```
<rpc>
  <validate>
    <source>
      <candidate/>
    </source>
  </validate>
</rpc>
]]>]]>
```

Description Check that the candidate configuration is syntactically valid.

Contents **<source>**—Encloses the tag that specifies the configuration to validate.

<candidate/>—Represents the candidate configuration.

Usage Guidelines See "Verifying a Configuration Before Committing It" on page 651.

Related Documentation

-]]>]]> on page 655
- <rpc> on page 666

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CHAPTER 12

Summary of Junos XML Protocol Tag Elements Supported in NETCONF Sessions

The NETCONF server supports operations in the Junos XML management protocol that client applications can use to request or change configuration information on Juniper Networks devices running Junos OS. The additional capabilities are Juniper Networks proprietary extensions to NETCONF and are identified in the capabilities exchange with the URI http://xml.juniper.net/netconf/junos/1.0 .

This chapter lists Junos XML protocol operations that are supported in NETCONF sessions on Juniper Networks devices running Junos OS. The entries are in alphabetical order. For information about the notational conventions used in this chapter, see Table 2 on page ccxciii.

<abort/>

Usage

```
<rpc>
  <!-- child tag elements -->
</rpc>
<abort/>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description

Direct the NETCONF server to stop processing the request that is currently outstanding. The server responds by returning the **<abort-acknowledgment/>** tag, but might already have sent tagged data in response to the request. The client application must discard those tag elements.

Related Documentation

- <abort-acknowledgement/> on page 672
- <rpc> on page 666

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<abort-acknowledgement/>

Usage

```
<rpc-reply xmlns:junos="URL">
  <any-child-of-rpc-reply>
    <abort-acknowledgement/>
  </any-child-of-rpc-reply>
</rpc-reply>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Indicate that the NETCONF protocol server has received the **<abort/>** tag and has stopped processing the current request. If the client application receives any tag elements related to the request between sending the **<abort/>** tag and receiving this tag, it must discard them.

Related Documentation

- <rpc-reply> on page 667
- <xnm:error> on page 691

<checksum-information>

Usage

```
<rpc-reply>
  <checksum-information>
    <file-checksum>
      <computation-method>MD5</computation-method>
      <input-file>
        <!-- name and path of file-->
      </input-file>
    </file-checksum>
  </checksum-information>
</rpc-reply>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Enclose tag elements that include the file to check, the checksum algorithm used, and the checksum output.

Contents

<file-checksum>—Wrapper that holds the resulting **<input-file>**, **<computation-method>**, and **<checksum>** attributes for a particular checksum computation.

<input-file>—Name and path of the file that the checksum algorithm was run against.

<computation-method>—Checksum algorithm used. Currently, all checksum computations use the MD5 algorithm; thus, the only possible value is MD5.

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<checksum>—Resulting value from the checksum computation.

Usage Guidelines See the *Junos XML API Operational Developer Reference*.

Related Documentation
- <get-checksum-information> on page 680

<close-configuration/>

Usage

```
<rpc>
  <close-configuration/>
</rpc>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Discard a candidate configuration and any changes to it.

This tag element is normally used only to discard a private copy of the candidate configuration without committing it. The application must have previously emitted the **<open-configuration>** tag element. Closing the NETCONF session (by emitting the **<request-end-session/>** tag, for example) has the same effect as emitting this tag element.

Related Documentation
- <open-configuration> on page 688
- <request-end-session/> on page 690
- <rpc> on page 666

<commit-configuration>

Usage

```
<rpc>
  <commit-configuration/>

  <commit-configuration>
    <check/>
  </commit-configuration>

  <commit-configuration>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <at-time>time-specification</at-time>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
```

```
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <synchronize/>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <synchronize/>
    <at-time>time-specification</at-time>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <synchronize/>
    <check/>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <synchronize/>
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <synchronize/>
    <force-synchronize/>
  </commit-configuration>
</rpc>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Request that the NETCONF server perform one of the variants of the commit operation on either the regular candidate configuration or a private copy of the candidate configuration (if the application emitted the **<open-configuration><private/></open-configuration>** tag sequence before making changes).

Some restrictions apply to the commit operation for a private copy. For example, the commit operation fails if the regular candidate configuration is locked by another user or application, or if it includes uncommitted changes made since the private copy was created. For more information, see the *CLI User Guide*.

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Enclose the appropriate tag in the **<commit-configuration>** tag element to specify the type of commit operation:

- To commit the configuration immediately, making it the active configuration on the device, emit the empty **<commit-configuration/>** tag.
- To verify the syntactic correctness of the configuration without actually committing it, enclose the **<check/>** tag in the **<commit-configuration>** tag element.
- To record a message in the **/var/log/commits** file when the associated commit operation succeeds, define the log message string in the **<log>** tag element and enclose the tag element in the **<commit-configuration>** tag element. The **<log>** tag element can be combined with any other tag element. When the **<log>** tag element is emitted alone, the associated commit operation begins immediately.
- To commit the candidate configuration but roll back to the previous configuration after a short time, enclose the **<confirmed/>** tag in the **<commit-configuration>** tag element.

  By default, the rollback occurs after 10 minutes; to set a different rollback delay, also emit the optional **<confirm-timeout>** tag element. To delay the rollback again (past the original rollback deadline), emit the **<confirmed/>** tag (enclosed in the **<commit-configuration>** tag element) before the deadline passes. Include the **<confirm-timeout>** tag element to specify how long to delay the next rollback, or omit that tag element to use the default of 10 minutes. The rollback can be delayed repeatedly in this way.

  To commit the configuration immediately and permanently after emitting the **<confirmed/>** tag, emit the empty **<commit-configuration/>** tag before the rollback deadline passes. The NETCONF server commits the candidate configuration and cancels the rollback. If the candidate configuration is still the same as the current committed configuration, the effect is the same as recommitting the current committed configuration.

  NOTE: The confirmed commit operation is not available for a private copy of the configuration.

- On a device with two Routing Engines, commit the candidate configuration stored on the local Routing Engine on both Routing Engines. Combine tag elements as indicated in the following:
  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it immediately on both Routing Engines, enclose the **<synchronize/>** tag in the **<commit-configuration>** tag element.
  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it on both Routing Engines at a defined future time, enclose the **<synchronize/>** or **<force-synchronize/>** tag and **<at-time>** tag element in the **<commit-configuration>**

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tag element. Set the value in the **<at-time>** tag element as previously described for use of the **<at-time>** tag element alone.

- To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine and verify the candidate's syntactic correctness on each Routing Engine, enclose the **<synchronize/>** or **<force-synchronize/>** and **<check/>** tag elements in the **<commit-configuration>** tag element.
- To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it on both Routing Engines but require confirmation, enclose the **<synchronize/>** tag and **<confirmed/>** tag elements, and optionally the **<confirm-timeout>** tag element, in the **<commit-configuration>** tag element. Set the value in the **<confirm-timeout>** tag element as previously described for use of the **<confirmed/>** tag and **<confirm-timeout>** tag element alone.
- To force the same synchronized commit operation as invoked by the **<synchronize/>** tag to succeed, even if there are open configuration sessions or uncommitted configuration changes on the remote machine, enclose the **<force-synchronize/>** tag in the **<commit-configuration>** tag element.

- To schedule the configuration for commit at a future time, enclose the **<at-time>** tag element in the **<commit-configuration>** tag element. There are three valid types of time specifiers:
  - The string **reboot**, to commit the configuration the next time the device reboots.
  - A time value of the form ***hh*:*mm*[:*ss*]** (hours, minutes, and, optionally, seconds), to commit the configuration at the specified time, which must be in the future but before 11:59:59 PM on the day the **<commit-configuration>** tag element is emitted. Use 24-hour time for the ***hh*** value; for example, **04:30:00** means 4:30:00 AM and **20:00** means 8:00 PM. The time is interpreted with respect to the clock and time zone settings on the device.
  - A date and time value of the form ***yyyy*-*mm*-*dd* *hh*:*mm*[:*ss*]** (year, month, date, hours, minutes, and, optionally, seconds), to commit the configuration at the specified date and time, which must be after the **<commit-configuration>** tag element is emitted. Use 24-hour time for the ***hh*** value. For example, **2005-08-21 15:30:00** means 3:30 PM on August 21, 2005. The time is interpreted with respect to the clock and time zone settings on the device.

  NOTE: **The time you specify must be more than 1 minute later than the current time on the device.**

  The configuration is checked immediately for syntactic correctness. If the check succeeds, the configuration is scheduled for commit at the specified time. If the check fails, the commit operation is not scheduled.

Contents **<at-time>**—Schedules the commit operation for a specified future time.

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<check>—Requests verification that the configuration is syntactically correct, but does not actually commit it.

<confirmed>—Requests a commit of the candidate configuration and a rollback to the previous configuration after a short time, 10 minutes by default. Use the **<confirm-timeout>** tag element to specify a different amount of time.

<confirm-timeout>—Specifies the number of minutes for which the configuration remains active when the **<confirmed/>** tag is enclosed in the **<commit-configuration>** tag element.

<log>—Records a message in the file **/var/log/commits** when the commit operation succeeds.

<synchronize>—On dual control plane systems, requests that the candidate configuration on one control plane be copied to the other control plane, checked for correct syntax, and committed on both Routing Engines.

<force-synchronize>—On dual control plane systems, forces the candidate configuration on one control plane to be copied to the other control plane.

Related Documentation

- <commit-results> on page 677
- <open-configuration> on page 688
- <rpc> on page 666

<commit-results>

Usage

```
<rpc-reply xmlns:junos="URL">
  <!-- for the candidate configuration -->
  <commit-results>
    <routing-engine>...</routing-engine>
  </commit-results>

  <!-- for a private copy -->
  <commit-results>
    <load-success/>
    <routing-engine>...</routing-engine>
  </commit-results>

  <!-- for a private copy that does not include changes -->
  <commit-results>
  </commit-results>
</rpc-reply>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description

Enclose tag elements that contain information about a commit operation performed by the NETCONF server on a particular Routing Engine.

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Contents **<load-success/>**—Indicates that the NETCONF server successfully merged changes from the private copy into a copy of the candidate configuration, before committing the combined candidate on the specified Routing Engine.

The **<routing-engine>** tag element is described separately.

Related Documentation

- <commit-configuration> on page 673
- <routing-engine> on page 690
- <rpc-reply> on page 667

<database-status>

Usage

```
<xnm:error>
  <database-status-information>
    <database-status>
      <user>username</user>
      <terminal>terminal</terminal>
      <pid>pid</pid>
      <start-time>start-time</start-time>
      <idle-time>idle-time</idle-time>
      <commit-at>time</commit-at>
      <exclusive/>
      <edit-path>edit-path</edit-path>
    </database-status>
  </database-status-information>
</xnm:error>
```

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Description Describe a user or NETCONF client application that is logged in to the configuration database. For simplicity, the Contents section uses the term user to refer to both human users and client applications, except where the information differs for the two.

Contents **<commit-at/>**—Indicates that the user has scheduled a commit operation for a later time.

<edit-path>—Specifies the user's current location in the configuration hierarchy, in the form of the CLI configuration mode banner.

<exclusive/>—Indicates that the user or application has an exclusive lock on the configuration database. A user enters exclusive configuration mode by issuing the **configure exclusive** command in CLI operational mode. A client application obtains the lock by emitting the **<lock-configuration/>** tag element.

<idle-time>—Specifies how much time has passed since the user last performed an operation in the database.

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<pid>—Specifies the process ID of the Junos management process (mgd) that is handling the user's login session.

<start-time>—Specifies the time when the user logged in to the configuration database, in the format ***YYYY-MM-DD hh:mm:ss TZ*** (year, month, date, hour in 24-hour format, minute, second, time zone).

<terminal>—Identifies the UNIX terminal assigned to the user's connection.

<user>—Specifies the Junos OS login ID of the user whose login to the configuration database caused the error.

Related Documentation

- <database-status-information> on page 679
- <xnm:error> on page 691

<database-status-information>

Usage

```
<xnm:error>
  <database-status-information>
    <database-status>...</database-status>
  </database-status-information>
<xnm:error>
]]>]]>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description

Describe one or more users who have an open editing session in the configuration database.

The **<database-status>** tag element is explained separately.

Related Documentation

- <database-status> on page 678
- <xnm:error> on page 691

<end-session/>

Usage

```
<rpc-reply xmlns:junos="URL">
  <end-session/>
</rpc-reply>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

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Description Indicate that the NETCONF server is about to end the current session for a reason other than an error. Most often, the reason is that the client application has sent the **<request-end-session/>** tag.

Related Documentation
- <request-end-session/> on page 690
- <rpc-reply> on page 667

<get-checksum-information>

Usage

```
<rpc>
  <get-checksum-information>
    <path>
    <!-- name and path of file -->
    </path>
  </get--checksum-information>
</rpc>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Enclose all tag elements in a request generated by a client application.

Contents **<path>**—The name and path of the file to check.

Usage Guidelines See the *Junos XML API Operational Developer Reference*.

Related Documentation
- <checksum-information> on page 672

<get-configuration>

Usage

```
<rpc>
  <get-configuration
          [changed="changed"]
          [commit-scripts="view"]
          [compare="rollback" [rollback="[0-49]"]]
          [database="(candidate | committed)"]
          [format="(text | xml)"]
          [inherit="(defaults | inherit)"
               [groups="groups"] [interface-ranges="interface-ranges"]]/>

    <!-- tag elements for the configuration element to display -->
  </get-configuration>
</rpc>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI

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http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Request configuration data from the NETCONF server. The attributes specify the source and formatting of the data to display. Either the entire configuration hierarchy or a section can be displayed:

- To display the entire configuration hierarchy, emit the empty **<get-configuration/>** tag.
- To display a configuration element (hierarchy level or configuration object), emit tag elements within the **<get-configuration>** tag element to represent all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the level or object to display. To represent a hierarchy level or a configuration object that does not have an identifier, emit it as an empty tag. To represent an object that has one or more identifiers, emit its container tag element and identifier tag elements only, not any tag elements that represent other characteristics.

Attributes For detailed information on the attributes, see the *Junos XML Management Protocol Developer Guide*

changed—Specifies that the **junos:changed="changed";** attribute should appear in the opening tag of each changed configuration element.

The attribute appears in the opening tag of every parent tag element in the path to the changed configuration element, including the top-level opening **<configuration>** tag. If the changed configuration element is represented by a single (empty) tag, the **junos:changed="changed"** attribute appears in the tag. If the changed element is represented by a container tag element, the **junos:changed="changed"** attribute appears in the opening container tag and also in each child tag element enclosed in the container tag element.

The **database** attribute can be combined with the **changed="changed"** attribute to request either the candidate or active configuration:

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- When the candidate configuration is requested (the **database="changed"** attribute is included or the **database** attribute is omitted completely), elements added to the candidate configuration after the last commit operation are marked with the **junos:changed="changed"** attribute.
- When the active configuration is requested (the **database="candidate"** attribute is included), elements added to the active configuration by the most recent commit are marked with the **junos:changed="changed"** attribute.

NOTE: When a commit operation succeeds, the NETCONF server removes the junos:changed="changed" attribute from all tag elements. However, if warnings are generated during the commit, the attribute is not removed. In this case, the junos:changed="changed" attribute appears in tag elements that changed before the commit operation as well as on those that changed after it.

An example of a commit-time warning is the message explaining that a configuration element will not actually apply until the device is rebooted. The warning appears in the tag string that the NETCONF server returns to confirm the success of the commit, enclosed in an **<xnm:warning>** tag element.

To remove the **junos:changed="changed"** attribute from elements that changed before the commit, take the action necessary to eliminate the cause of the warning, and commit the configuration again.

commit-scripts—Requests that the NETCONF server display commit-script-style XML data, which displays the configuration in the XML format that is input to a commit script. The only acceptable value for the **commit-scripts** attribute is **view**. The output is equivalent to the CLI output when using the **| display commit-scripts view** option.

compare—Requests that the NETCONF server display the differences between the active or candidate configuration and a previously committed configuration. The only acceptable value for the **compare** attribute is **rollback**. The compare attribute is combined with the **rollback="*rollback-number*"** to specify which previously committed configuration should be used in the comparison. If the **rollback** attribute is omitted, the comparison uses rollback number 0, which is the active configuration.

The **database** attribute can be combined with the **compare="rollback"** attribute to request either the candidate or active configuration. If the **database** attribute is omitted, the candidate configuration is used. When the **compare** attribute is used, the default format for the output is text. If the client application attempts to include the **format="xml"** attribute when the **compare="rollback"** attribute is present, the protocol server will return an **<xnm:error>** element indicating an error.

database—Specifies the version of the configuration from which to display data. There are two acceptable values:

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- **candidate**—The candidate configuration
- **committed**—The active configuration (the one most recently committed)

format—Specifies the format in which the NETCONF server returns the configuration data. There are two acceptable values:

- **text**—Configuration statements are formatted as ASCII text, using the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on a device running Junos OS and displayed by the CLI **show configuration** command.
- **xml**—Configuration statements are represented by the corresponding Junos XML tag elements. This is the default value if the **format** attribute is omitted.

groups—Specifies that the **junos:group="*group-name*"** attribute appears in the opening tag for each configuration element that is inherited from a configuration group. The ***group-name*** variable specifies the name of the configuration group.

The **groups** attribute must be combined with the **inherit** attribute, and the one acceptable value for it is **groups**.

inherit—Specifies how the NETCONF server displays statements that are defined in configuration groups and interface ranges. If the **inherit** attribute is omitted, the output uses the **<groups>**, **<apply-groups>**, and **<apply-groups-except>** tag elements to represent user-defined configuration groups and uses the **<interface-range>** tag element to represent user-defined interface ranges; it does not include tag elements for statements defined in the **junos-defaults** group.

There are two acceptable values:

- **defaults**—The output does not include the **<groups>**, **<apply-groups>**, and **<apply-groups-except>** tag elements, but instead displays tag elements that are inherited from user-defined groups and from the **junos-defaults** group as children of the inheriting tag elements.
- **inherit**—The output does not include the **<groups>**, **<apply-groups>**, **<apply-groups-except>**, and **<interface-range>** tag elements, but instead displays tag elements that are inherited from user-defined groups and ranges as children of the inheriting tag elements. The output does not include tag elements for statements defined in the **junos-defaults** group.

interface-ranges—Specifies that the **junos:interface-ranges="*source-interface-range*"** attribute appears in the opening tag for each configuration element that is inherited from an interface-range. The ***source-interface-range*** variable specifies the name of the interface-range.

The **interface-ranges** attribute must be combined with the **inherit** attribute, and the one acceptable value for it is **interface-ranges**.

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Related Documentation

- <rpc> on page 666
- <xnm:warning> on page 693
- *Junos XML API Configuration Developer Reference*

<load-configuration>

Usage

```
<rpc>
  <load-configuration rescue="rescue"/>

  <load-configuration rollback="index"/>

  <load-configuration url="url" [action="(merge | override | replace | update)"] \
          [format="(text | xml)"]/>

  <load-configuration url="url"  action="set" format="text"/>

  <load-configuration [action="(merge | override | replace | update)"]
          [format="xml"]>
    <configuration>
      <!-- tag elements for configuration elements to load -->
    </configuration>
  </load-configuration>

  <load-configuration [action="(merge | override | replace | update)"]
          format="text">
    <configuration-text>
      <!-- formatted ASCII configuration statements to load -->
    </configuration-text>
  </load-configuration>

  <load-configuration action="set" format="text">
    <configuration-set>
      <!-- set configuration mode commands to load -->
    </configuration-set>
  </load-configuration>
</rpc>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

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Description Request that the NETCONF server load configuration data into the candidate configuration. Provide the data to load in one of four ways:

- Set the empty **<load-configuration/>** tag's **rescue** attribute to the value **rescue**. The rescue configuration completely replaces the candidate configuration.
- Set the empty **<load-configuration/>** tag's **rollback** attribute to the numerical index of a previous configuration. The routing platform stores a copy of the most recently committed configuration and up to 49 previous configurations. The specified previous configuration completely replaces the candidate configuration.
- Set the empty **<load-configuration/>** tag's **url** attribute to the pathname of a file that contains the configuration data to load. If providing the configuration data as formatted ASCII text, set the **format** attribute to **text**. If providing the configuration data as Junos XML tag elements, either omit the **format** attribute or set the value to **xml**. If providing the configuration data as a set of configuration mode commands, set the **action** attribute to **set**, and either omit the **format** attribute or set the value to **text**.

  In the following example, the **url** attribute identifies **/tmp/add.conf** as the file to load.

  ```
  <load-configuration url="/tmp/add.conf"/>
  ```

- Enclose the configuration data within an opening **<load-configuration>** and closing **</load-configuration>** tag. If providing the configuration data as formatted ASCII text, enclose it in a **<configuration-text>** tag element, and set the **format** attribute to **text**. If providing the configuration data as Junos XML tag elements, enclose it in a **<configuration>** tag element, and either omit the **format** attribute or set the value to **xml**. If providing the configuration data as a set of configuration mode commands, enclose it in a **<configuration-set>** tag element, set the **action** attribute to **set**, and either omit the **format** attribute or set the value to **text**.

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Attributes For detailed information on the attributes, see the *Junos XML Management Protocol Developer Guide*

- **action**—Specifies how to load the configuration data, particularly when the candidate configuration and loaded configuration contain conflicting statements. The following are acceptable values:
- **merge**—Combines the data in the loaded configuration with the candidate configuration. If statements in the loaded configuration conflict with statements in the candidate configuration, the loaded statements replace the candidate ones. This is the default behavior if the **action** attribute is omitted.
- **override**—Discards the entire candidate configuration and replaces it with the loaded configuration. When the configuration is later committed, all system processes parse the new configuration.
- **replace**—Substitutes each hierarchy level or configuration object defined in the loaded configuration for the corresponding level or object in the candidate configuration.

  If providing the configuration data as formatted ASCII text (either in the file named by the **url** attribute or enclosed in a **<configuration-text>** tag element), also place the **replace:** statement on the line directly preceding the statements that represent the hierarchy level or object to replace. For more information, see the discussion of loading a file of configuration data in the *CLI User Guide*.

  If providing the configuration data as Junos XML tag elements, also set the **replace** attribute to the value **replace** on the opening tag of the container tag element that represents the hierarchy level or object to replace.
- **set**—Loads a set of Junos OS configuration mode commands. This option executes the configuration instructions line by line as they are stored in a file named by the **url** attribute or enclosed in a **<configuration-set>** tag element. The instructions can contain any configuration mode command, such as **set**, **delete**, **edit**, or **deactivate**. When providing the configuration data as a set of commands, the only acceptable value for the **format** attribute is **text**. If the **action** attribute value is **set**, and the **format** attribute is omitted, the format automatically defaults to **text** rather than **xml**. This option was added in Junos OS Release 11.4.
- **update**—Compares the loaded configuration and candidate configuration. For each hierarchy level or configuration object that is different in the two configurations, the version in the loaded configuration replaces the version in the candidate configuration. When the configuration is later committed, only system processes that are affected by the changed configuration elements parse the new configuration.

format—Specifies the format used for the configuration data. There are two acceptable values:

- **text**—Indicates that configuration data is formatted as ASCII text or as a set of configuration mode commands.

  ASCII text format uses the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on a routing platform running Junos OS and is displayed by the CLI **show configuration** command. Set command format

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consists of a series of Junos OS configuration mode commands and is displayed by the CLI **show configuration | display set** command. To import a set of configuration mode commands, you must set the **action** attribute to **set**.

- **xml**—Indicates that configuration statements are represented by the corresponding Junos XML tag elements. If the **format** attribute is omitted, **xml** is the default format for all values of the **action** attribute except **set**, which defaults to format **text**.

rescue—Specifies that the rescue configuration replace the current candidate configuration. The only valid value is **rescue**.

rollback—Specifies the numerical index of the previous configuration to load. Valid values are **0** (zero, for the most recently committed configuration) through one less than the number of stored previous configurations (maximum is **49**).

url—Specifies the full pathname of the file that contains the configuration data to load. The value can be a local file path, an FTP location, or a Hypertext Transfer Protocol (HTTP) URL:

- A local filename can have one of the following forms:
  - ***/path/filename***—File on a mounted file system, either on the local flash disk or on hard disk.
  - **a:*filename*** or **a:*path/filename***—File on the local drive. The default path is **/** (the root-level directory). The removable media can be in MS-DOS or UNIX (UFS) format.
- A filename on an FTP server has the following form:

  ftp://*username*:*password*@*hostname/path/filename*
- A filename on an HTTP server has the following form:

  http://*username*:*password*@*hostname/path/filename*

In each case, the default value for the ***path*** variable is the home directory for the username. To specify an absolute path, the application starts the path with the characters **%2F**; for example, **ftp://*username*:*password*@*hostname*/%2F*path/filename***.

Related Documentation

- <load-configuration-results> on page 687
- <rpc> on page 666
- entries for **<configuration>** and **<configuration-text>**, and **<configuration-set>** in the *Junos XML API Configuration Developer Reference*
- *Junos XML Management Protocol Developer Guide*

<load-configuration-results>

Usage

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
    <load-error-count>errors</load-error-count>
```

```
    </load-configuration-results>
</rpc-reply>
```

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Description Enclose one of the two following tag elements, which indicate the status of a configuration loading operation performed by the NETCONF server.

Contents **<load-error-count>**—Specifies the number of errors that occurred when the NETCONF server attempted to load new data into the candidate configuration. The candidate configuration must be restored to a valid state before it is committed.

<load-success/>—Indicates that the NETCONF server successfully loaded new data into the candidate configuration.

Related Documentation
- <load-configuration> on page 684
- <rpc-reply> on page 667

<lock-configuration/>

Usage

```
<rpc>
  <lock-configuration/>
</rpc>
```

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Description Request that the NETCONF server open and lock the candidate configuration, enabling the client application both to read and change it, but preventing any other users or applications from changing it. The application must emit the **<unlock-configuration/>** tag to unlock the configuration.

If the NETCONF session ends or the application emits the **<unlock-configuration/>** tag before the candidate configuration is committed, all changes made to the candidate are discarded.

Related Documentation
- <rpc> on page 666
- <unlock-configuration/> on page 691

<open-configuration>

Usage

```
<rpc>
  <open-configuration>
```


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```
    <private/>
  </open-configuration>
</rpc>
```

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Description Create a private copy of the candidate configuration.

The client application can perform the same operations on the private copy as on the regular candidate configuration, including the commit operation. There are, however, restrictions on the commit operation. For details, see "<commit-configuration>" on page 673.

To discard the private copy without committing it, emit the empty **<close-configuration/>** tag. Changes to the private copy are also lost if the NETCONF session ends for any reason before the changes are committed. It is not possible to save changes to a private copy other than by emitting the **<commit-configuration/>** tag.

Related Documentation

- <close-configuration/> on page 673
- <commit-configuration> on page 673
- <lock-configuration/> on page 688
- <rpc> on page 666

<reason>

Usage

```
<xnm:error | xnm:warning>
  <reason>
    <daemon>process</daemon>
    <process-not-configured/>
    <process-disabled/>
    <process-not-running/>
  </reason>
</xnm:error | xnm:warning>
```

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Description Explain why a process could not service a request.

Contents **<daemon>**—Identifies the process.

<process-disabled>—Indicates that the process has been explicitly disabled by an administrator.

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<process-not-configured>—Indicates that the process has been disabled because it is not configured.

<process-not-running>—Indicates that the process is not running.

Related Documentation

- <xnm:error> on page 691
- <xnm:warning> on page 693

<request-end-session/>

Usage

```
<rpc>
  <request-end-session/>
</rpc>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description

Request that the NETCONF server end the current session.

Related Documentation

- <end-session/> on page 679
- <rpc> on page 666

<routing-engine>

Usage

```
<rpc-reply xmlns:junos="URL">
  <commit-results>

  <!-- when the candidate configuration is committed -->
    <routing-engine>
      <name>reX</name>
      <commit-success/>
    </routing-engine>

  <!-- when the candidate configuration is syntactically valid -->
    <routing-engine>
      <name>reX</name>
      <commit-check-success/>
    </routing-engine>

  </commit-results>
</rpc-reply>
```

Release Information

This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

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Description Enclose tag elements indicating that the NETCONF server successfully fulfilled a commit request.

Contents **<commit-check-success>**—Indicates that the candidate configuration is syntactically correct.

<commit-success>—Indicates that the NETCONF server successfully committed the candidate configuration.

<name>—Name of the Routing Engine on which the commit operation was performed. Possible values are **re0** and **re1**.

Related Documentation
- <commit-results> on page 677
- <rpc-reply> on page 667

<unlock-configuration/>

Usage

```
<rpc>
  <unlock-configuration/>
</rpc>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Request that the NETCONF server unlock and close the candidate configuration. Until the application emits this tag, other users or applications can read the configuration but cannot change it.

Related Documentation
- <lock-configuration/> on page 688
- <rpc> on page 666

<xnm:error>

Usage

```
<xnm:error xmlns="namespace-URL" xmlns:xnm="namespace-URL">
  <parse/>
  <source-daemon>module-name </source-daemon>
  <filename>filename</filename>
  <line-number>line-number </line-number>
  <column>column-number</column>
  <token>input-token-id </token>
  <edit-path>edit-path</edit-path>
  <statement>statement-name </statement>
  <message>error-string</message>
  <re-name>re-name-string</re-name>
  <database-status-information>...</database-status-information>
  <reason>...</reason>
```

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```
</xnm:error>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Indicate that the NETCONF server has experienced an error while processing the client application's request. If the server has already emitted the response tag element for the current request, the information enclosed in the response tag element might be incomplete. The client application must include code that discards or retains the information, as appropriate. The child tag elements described in the Contents section detail the nature of the error. The NETCONF server does not necessarily emit all child tag elements; it omits tag elements that are not relevant to the current request.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—(Occurs only during loading of a configuration file) Identifies the element that caused the error by specifying its position as the number of characters after the first character in the specified line in the configuration file that was being loaded. The line and file are specified by the accompanying **<line-number>** and **<filename>** tag elements.

<edit-path>—(Occurs only during loading of configuration data) Specifies the path to the configuration hierarchy level at which the error occurred, in the form of the CLI configuration mode banner.

<filename>—(Occurs only during loading of a configuration file) Names the configuration file that was being loaded.

<line-number>—(Occurs only during loading of a configuration file) Specifies the line number where the error occurred in the configuration file that was being loaded, which is named by the accompanying **<filename>** tag element.

<message>—Describes the error in a natural-language text string.

<parse/>—Indicates that there was a syntactic error in the request submitted by the client application.

<re-name>—Names the Routing Engine on which the error occurred.

<source-daemon>—Names the Junos OS module that was processing the request in which the error occurred.

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<statement>—(Occurs only during loading of configuration data) Identifies the configuration statement that was being processed when the error occurred. The accompanying **<edit-path>** tag element specifies the statement's parent hierarchy level.

<token>—Names which element in the request caused the error.

The other tag elements are explained separately.

Related Documentation

- <database-status-information> on page 679
- <reason> on page 689
- <xnm:warning> on page 693

<xnm:warning>

Usage

```
<xnm:warning xmlns="namespace-URL" xmlns:xnm="namespace-URL">
  <source-daemon>module-name </source-daemon>
  <filename>filename</filename>
  <line-number>line-number </line-number>
  <column>column-number</column>
  <token>input-token-id </token>
  <edit-path>edit-path</edit-path>
  <statement>statement-name </statement>
  <message>error-string</message>
  <reason>...</reason>
</xnm:warning>
```

Release Information This is a Junos XML management protocol operation. It is a Juniper Networks proprietary extension to NETCONF and is identified in the capabilities exchange by the URI http://xml.juniper.net/netconf/junos/1.0 . This operation is only supported in NETCONF sessions on Juniper Networks devices running Junos OS.

Description Indicate that the server has encountered a problem while processing the client application's request. The child tag elements described in the Contents section detail the nature of the warning.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix in their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—(Occurs only during loading of a configuration file) Identifies the element that caused the problem by specifying its position as the number of characters after the first character in the specified line in the configuration file that was being loaded. The line and file are specified by the accompanying **<line-number>** and **<filename>** tag elements.

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<edit-path>—(Occurs only during loading of configuration data) Specifies the path to the configuration hierarchy level at which the problem occurred, in the form of the CLI configuration mode banner.

<filename>—(Occurs only during loading of a configuration file) Names the configuration file that was being loaded.

<line-number>—(Occurs only during loading of a configuration file) Specifies the line number where the problem occurred in the configuration file that was being loaded, which is named by the accompanying **<filename>** tag element.

<message>—Describes the warning in a natural-language text string.

<source-daemon>—Names the Junos OS module that was processing the request in which the warning occurred.

<statement>—(Occurs only during loading of configuration data) Identifies the configuration statement that was being processed when the error occurred. The accompanying **<edit-path>** tag element specifies the statement's parent hierarchy level.

<token>—Names which element in the request caused the warning.

The other tag element is explained separately.

Related Documentation

- <reason> on page 689
- <xnm:error> on page 691

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CHAPTER 13

Summary of Attributes in Junos XML Tags

This chapter describes the attributes that the NETCONF server and client applications include in opening Junos XML tags. For information about the notational conventions used in this chapter, see Table 2 on page ccxciii.

junos:changed-localtime

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:changed-seconds="seconds" \
    junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the candidate configuration is requested) Specify the time when the configuration was last changed as the date and time in the device's local time zone.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 603.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:changed-seconds on page 695
- xmlns on page 698

junos:changed-seconds

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:changed-seconds="seconds" \
    junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the candidate configuration is requested) Specify the time when the configuration was last changed as the number of seconds since midnight on 1 January 1970.

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Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 603.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:changed-localtime on page 695
- xmlns on page 698

junos:commit-localtime

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:commit-seconds="seconds" \
    junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
    junos:commit-user="username">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the time when the configuration was committed as the date and time in the device's local time zone.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 603.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:commit-user on page 697
- junos:commit-seconds on page 696
- xmlns on page 698

junos:commit-seconds

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:commit-seconds="seconds" \
    junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
    junos:commit-user="username">
    <!--Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the time when the configuration was committed as the number of seconds since midnight on 1 January 1970.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 603.

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Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:commit-user on page 697
- junos:commit-localtime on page 696
- xmlns on page 698

junos:commit-user

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:commit-seconds="seconds" \
    junos:commit-localtime="YYY-MM-DD hh:mm:ss TZ" \
    junos:commit-user="username">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the Junos username of the user who requested the commit operation.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 603.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:commit-localtime on page 696
- junos:commit-seconds on page 696
- xmlns on page 698

operation

Usage

```
<rpc>
  <edit-config>
    <config>
      <configuration>
        <!-- opening tags for each parent of the changing element -->
          <changing-element operation="( create | delete | replace )">
            <name>identifier</name>
            <!-- if changing element has an identifier -  ->
            <!-- other child tag elements, if appropriate for the operation -->
          </changing-element>
        <!-- closing tags for each parent of the changing element -->
      </configuration>
    </config>
    <!-- other child tag elements of the <edit-config> tag element -->
  <edit-config>
</rpc>
```

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```
]]>]]>
```

Description Specify how the NETCONF server incorporates an individual configuration element into the candidate configuration. If the attribute is omitted, the element is merged into the configuration according to the rules defined in "Setting the Edit Configuration Mode" on page 633. The following are acceptable values:

- **create**—Creates the specified element in the configuration only if the element does not already exist. See "Creating New Configuration Elements" on page 643.
- **delete**—Deletes the specified element from the candidate configuration. We recommend that the **<default-operation>** tag element with the value **none** also be included in the **<edit-config>** tag element. See "Deleting Configuration Elements" on page 645.
- **replace**—Replaces the specified element in the candidate configuration with the provided new configuration data. See "Replacing Configuration Elements" on page 642.

Usage Guidelines See "Changing Individual Configuration Elements" on page 640.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <edit-config> on page 659
- <rpc> on page 666
- xmlns on page 698

xmlns

Usage

```
<rpc-reply xmlns:junos="URL">
  <operational-response xmlns="URL-for-DTD">
    <!-- Junos XML tag elements for the requested operational data -->
  </operational-response>
</rpc-reply>
<rpc-reply xmlns:junos="URL">
  <configuration xmlns="URL" junos:(changed | commit)-seconds="seconds" \
        junos:(changed | commit)-localtime="YYY-MM-DD hh:mm:ss TZ" \
        [junos:commit-user="username"]>
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description For operational responses, define the XML namespace for the enclosed tag elements that do not have a prefix (such as **junos:**) in their names. The namespace indicates which Junos XML document type definition (DTD) defines the set of tag elements in the response.

For configuration data responses, define the XML namespace for the enclosed tag elements.

Usage Guidelines See "Requesting Operational Information" on page 598 and "Requesting Information from the Committed or Candidate Configuration" on page 603.

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Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 667
- junos:changed-localtime on page 695
- junos:changed-seconds on page 695
- junos:commit-user on page 697
- junos:commit-localtime on page 696
- junos:commit-seconds on page 696

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CHAPTER 14

Writing NETCONF Perl Client Applications

Juniper Networks provides a Perl module, called **NET::Netconf::Manager**, to help you more quickly and easily develop custom NETCONF scripts for configuring and monitoring switches, routers, and security devices. The module implements a **NET::Netconf::Manager** object that client applications can use to communicate with the NETCONF server on a device. The Perl distribution includes several sample Perl scripts, which illustrate how to use the module in scripts that perform various functions.

This chapter discusses the following topics:

- Overview of the NETCONF::Netconf::Manager Perl Module and Sample Scripts on page 701
- Downloading the NETCONF Perl Client and Prerequisites Package on page 702
- Installing the NETCONF Perl Client and Prerequisites Package on page 703
- Tutorial: Writing Perl Client Applications on page 707

Overview of the NETCONF::Netconf::Manager Perl Module and Sample Scripts

The NETCONF Perl distribution uses the same directory structure for Perl modules as the Comprehensive Perl Archive Network (http://www.cpan.org). This includes a **lib** directory for the **NET::Netconf** module and its supporting files, and an **examples** directory for the sample scripts.

Client applications use the **NET::Netconf::Manager** object to communicate with a NETCONF server. All of the sample scripts use this object.

The sample scripts illustrate how to perform the following functions:

- **diagnose_bgp.pl**—Illustrates how to write scripts to monitor device status and diagnose problems. The sample script extracts and displays information about a device's unestablished Border Gateway Protocol (BGP) peers from the full set of BGP configuration data. The script is provided in the **examples/diagnose_bgp** directory in the NETCONF Perl distribution.
- **get_chassis_inventory.pl**—Illustrates how to use a predefined query to request information from a device. The sample script invokes the **get_chassis_inventory** query with the **detail** option to request the same information as the Junos XML <get-chassis-inventory><detail></get-chassis-inventory> tag sequence and the command-line interface (CLI) **show chassis hardware detail** command. The script is

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provided in the **examples/get_chassis_inventory** directory in the NETCONF Perl distribution.

- **edit_configuration.pl**—Illustrates how to change the device configuration by loading a file that contains configuration data formatted with Junos XML tag elements. The distribution includes a sample configuration file, **config.xml**; however, you can specify another configuration file on the command line. The script is provided in the **examples/edit_configuration** directory in the NETCONF Perl distribution.

For instructions on running the scripts, see the **README** or **README.html** file included in the NETCONF Perl distribution.

Downloading the NETCONF Perl Client and Prerequisites Package

To download the compressed tar archives that contains the NETCONF Perl client distribution and the prerequisites package, perform the following steps:

1. Access the Juniper Networks Customer Support Center Web page at http://www.juniper.net/customers/support/ .
2. Under Support, click the link labeled Download Software.
3. Under the Network Management section, click the link labeled NETCONF XML Management Protocol.
4. Click the link for the appropriate software release.
5. Select the Software tab.
6. Click the links labeled NETCONF API Perl client and NETCONF API Perl client prerequisites to download the client distribution and the prerequisites package.

NOTE: **The NETCONF XML protocol Perl client software should be installed and run on a regular computer with a UNIX-like operating system; it is not meant to be installed on a Juniper Networks device.**

Optionally, download the packages containing the document type definitions (DTDs) and the XML Schema language representation of the Junos configuration hierarchy:

1. Access the download page at http://www.juniper.net/support/products/xmlapi/ .
2. Click the link for the appropriate software release.
3. Select the Software tab.
4. Click the links to download the desired packages.

Related Documentation

- Installing the NETCONF Perl Client and Prerequisites Package on page 703

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Installing the NETCONF Perl Client and Prerequisites Package

To install the NETCONF Perl client and the prerequisites package, perform the following procedures:

- Verifying the Installation and Version of Perl on page 703
- Extracting the NETCONF Perl Client and Sample Scripts on page 703
- Extracting and Installing the NETCONF Perl Client Prerequisites Package on page 704
- Installing the NETCONF Perl Client on page 706

Verifying the Installation and Version of Perl

Perl must be installed on your system before you install the NETCONF Perl client prerequisites package or client software. The NETCONF Perl client requires Perl version 5.6.1 or later. To confirm whether Perl is installed on your system and to determine which version of Perl is currently running, issue the following commands:

```
$ which perl
$ perl -v
```

If the issued output indicates that Perl is not installed or that the version is earlier than the required version, you must download and install Perl version 5.6.1 or later in order to use the NETCONF Perl client. The Perl source packages are located at:

http://www.cpan.org/src/ .

After installing a suitable version of Perl, extract the NETCONF Perl client, extract and install the prerequisites package, and then install the NETCONF Perl client application.

Extracting the NETCONF Perl Client and Sample Scripts

To uncompress and extract the contents of the compressed tar archive that contains the NETCONF Perl client and sample scripts:

1. Create the directory where you want to store the **NET::Netconf** Perl client application and sample scripts, move the downloaded client application file into that directory, and then make that directory the working directory.

   ```
   $ mkdir parent-directory
   $ mv netconf-perl-release.tar.gz parent-directory
   $ cd parent-directory
   ```

2. Uncompress and extract the contents of the NETCONF Perl client package:

   - On FreeBSD and Linux systems:

     ```
     $ tar zxf netconf-perl-release.tar.gz
     ```

   - On Solaris systems:

     ```
     $ gzip -dc netconf-perl-release.tar.gz | tar xf
     ```

where *release* is the release code, for example **10.4R2.6**. The command creates a directory called **netconf-perl-*release*** and extracts the contents of the tar archive to it. For example,

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a typical filename for the compressed tar archive is **netconf-perl-10.4R2.6.tar.gz**. Extracting the contents of this archive creates the directory **netconf-perl-10.4R2.6** directly under ***parent-directory*** and places the application files and sample scripts into this new directory.

The **netconf-perl-*release*/README** file contains instructions for extracting and installing the Perl prerequisite modules, creating a **Makefile**, and installing and testing the **NET::Netconf** module.

Extracting and Installing the NETCONF Perl Client Prerequisites Package

The prerequisites package consists of C libraries, executables, and Perl modules. It must be installed on the client machine in order for the NETCONF Perl client and the included examples to work correctly. The NETCONF Perl distribution includes the **install-prereqs.pl** script, which you use to install the prerequisites. Starting with Junos OS Release 11.4, you have the option to install all Perl modules that are part of the prerequisites directly from the Comprehensive Perl Archive Network (CPAN) global repository.

To uncompress and extract the contents of the compressed tar archive containing the prerequisite files:

1. Move the downloaded prerequisites package into the ***parent-directory*/netconf-perl-*release*/** directory that was created in "Extracting the NETCONF Perl Client and Sample Scripts" on page 703.

   The compressed tar archive containing the prerequisite files must be uncompressed, unpacked, and installed in that directory.

2. Uncompress and extract the contents of the package:

   - On FreeBSD and Linux systems:

     $ tar zxf netconf-perl-prereqs-*release*.tar.gz

   - On Solaris systems:

     $ gzip -dc netconf-perl-prereqs-*release*.tar.gz | tar xf

where *release* is the release code, for example **10.4R2.6**. This command creates a directory called **prereqs/** and extracts the contents of the tar archive to it.

By default, the prerequisite Perl modules are installed in the standard directory, which is **/usr/local/lib/**. You can opt to install the modules in a private directory.

- To install the required modules in the standard directory:

  1. Log in as root.
  2. Go to the **netconf-perl-*release*/** directory where you extracted the contents of the prerequisites package.
  3. Issue the following command:

     # perl install-prereqs.pl -used_by *example* -force

     where the **-used_by *example*** option is invoked to install only modules used by a specific example, and the **-force** option installs the module even if an earlier version of the module exists or if the **make test** command fails.

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- To install the required modules in a private directory:

  1. Set the **PERL5LIB**, **MANPATH**, and **PATH** environment variables.

     $ setenv PERL5LIB *private-directory-path*
     $ setenv MANPATH "$MANPATH/:$PERL5LIB/../man"
     $ setenv PATH "$PATH/:$PERL5LIB/../bin"

     For sh, ksh, and bash shells, **$PERL5LIB** can be set with **EXPORT PERL5LIB=*private-directory-path***

  2. Go to the **netconf-perl-*release*** directory where you extracted the contents of the prerequisites package.

  3. Issue the following command:

     $ perl install-prereqs.pl -used_by *example* -install_directory $PERL5LIB -force

     where the **-used_by *example*** option is invoked to install only modules used by a specific example, and the **-force** option installs the module even if an earlier version of the module exists or if the **make test** command fails. The **-install_directory $PERL5LIB** option installs the prerequisite Perl modules in the private directory that you specified in Step 1.

Starting with Junos OS Release 11.4, after issuing the **perl install-prereqs.pl** command, the script provides the option to install the prerequisites from CPAN. The CPAN module is included with standard Perl installations. If you choose to install from CPAN, the script checks that the CPAN module is installed on your system and that you have connectivity to http://www.cpan.org. If the CPAN module is present and connectivity is verified, installation begins automatically.

1. To install from CPAN, press Enter or type 'y' when prompted.

```
# perl install-prereqs.pl
This script installs all modules required by default.
Would you like to install the pre-requisite modules from CPAN? [y]/n y
Testing MCPAN on your system...
OK
Trying to ping CPAN
OK
These modules will be installed in the system directory.

This installation takes around 15 minutes

Begin automatic installation:
<output omitted>
```

You might be prompted for additional information during the installation. For example, if additional dependent modules are required for a specific module, the installer might ask if the missing modules should be added to the install queue.

NOTE: On some systems, the firewall might reject utilities that are set to use active FTP, and CPAN installation might hang. If this is an issue, set the corresponding environment variable so that passive FTP is enabled.

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Installation log files are written to **netconf-perl-*release*/tmp/output/**. After installation, you can view any missing dependencies by issuing the following command:

```
$ perl required-mod.pl
```

This command lists the modules that still require installation.

Installing the NETCONF Perl Client

After installing the prerequisites package as detailed in "Extracting and Installing the NETCONF Perl Client Prerequisites Package" on page 704, install the NETCONF Perl client software.

To install the client software:

1. Go to the **netconf-perl-*release*/** directory that was created in "Extracting the NETCONF Perl Client and Sample Scripts" on page 703.
2. Create the makefile.
   - To install the Perl client in the standard directory (usually **/usr/local/lib**):

     ```
     # perl Makefile.PL
     Checking if your kit is complete...
     Looks good
     Writing Makefile for netconf-perl
     ```

   - To install the Perl client in a private directory:

     Make sure that the **PERL5LIB**, **MANPATH**, and **PATH** environment variables are set as detailed in "Extracting and Installing the NETCONF Perl Client Prerequisites Package" on page 704, and create the makefile:

     ```
     # perl Makefile.PL LIB=$PERL5LIB INSTALLMAN3DIR=$PERL5LIB/../man/man3
     ```

3. Install the **Net::NETCONF** module:

   ```
   # make
   # make install
   ```

The NETCONF Perl client application is installed and ready for use. For information about the **Net::NETCONF::Manager**, **Net::NETCONF::Transform**, or **Net::NETCONF::Trace** classes, consult the appropriate man page by invoking the **man** command and specifying the class. For example:

```
$ man Net::NETCONF::Manager
$ man Net::NETCONF::Transform
$ man Net::NETCONF::Trace
```

The sample scripts reside in the **netconf-perl-*release*/examples/** directory. You can review and run these examples to acquire some familiarity with the client before writing your own applications.

Related Documentation

- Downloading the NETCONF Perl Client and Prerequisites Package on page 702

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Tutorial: Writing Perl Client Applications

This tutorial explains how to write a Perl client application that requests operational or configuration information from the NETCONF server or loads configuration information onto a device. The following sections use the sample scripts included in the NETCONF XML Protocol Perl distribution as examples:

- Import Perl Modules and Declare Constants on page 707
- Connect to the NETCONF Server on page 708
- Submitting a Request to the NETCONF Server on page 712
- Parsing and Formatting the Response from the NETCONF Server on page 720
- Closing the Connection to the NETCONF Server on page 722

Import Perl Modules and Declare Constants

Include the following statement at the start of the application. This statement imports the functions provided by the **Net::Netconf::Manager** object, which the application uses to connect to the NETCONF server on a device.

```
use Net::Netconf::Manager;
```

Include statements to import other Perl modules as appropriate for your application. For example, several of the sample scripts import the following standard Perl modules, which include functions that handle input from the command line:

- **Carp**—Includes functions for user error warnings.
- **Getopt::Std**—Includes functions for reading in keyed options from the command line.
- **Term::ReadKey**—Includes functions for controlling terminal modes, for example suppressing onscreen echo of a typed string such as a password.

If the application uses constants, declare their values at this point. For example, the sample **diagnose_bgp.pl** script includes the following statement to declare a constant for the access method:

```
use constant VALID_ACCESS_METHOD => 'ssh';
```

The **edit_configuration.pl** script includes the following statements to declare constants for reporting return codes and the status of the configuration database:

```
use constant REPORT_SUCCESS => 1;
use constant REPORT_FAILURE => 0;
use constant STATE_CONNECTED => 1;
use constant STATE_LOCKED => 2;
use constant STATE_CONFIG_LOADED => 3;
```

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Connect to the NETCONF Server

The following sections explain how to use the **NET::Netconf::Manager** object to connect to the NETCONF server on a device:

- Satisfy Protocol Prerequisites on page 708
- Group Requests on page 708
- Obtain and Record Parameters Required by the NET::Netconf::Manager Object on page 708
- Obtain Application-Specific Parameters on page 711
- Establishing the Connection on page 712

Satisfy Protocol Prerequisites

The NETCONF server supports several access protocols. For each connection to the NETCONF server on a device, the application must specify the protocol it is using. Client Perl applications can communicate with the NETCONF server via SSH only.

Before your application can run, you must satisfy the prerequisites for SSH. This involves enabling NETCONF on the device (**set system services netconf ssh**).

Group Requests

Establishing a connection to the NETCONF server on a device is one of the more time-intensive and resource-intensive functions performed by an application. If the application sends multiple requests to a device, it makes sense to send all of them within the context of one connection. If your application sends the same requests to multiple devices, you can structure the script to iterate through either the set of devices or the set of requests. Keep in mind, however, that your application can effectively send only one request to one NETCONF server at a time. This is because the **NET::Netconf::Manager** object does not return control to the application until it receives the closing </rpc-reply> tag that represents the end of the NETCONF server's response to the current request.

Obtain and Record Parameters Required by the NET::Netconf::Manager Object

The **NET::Netconf::Manager** object takes the following required parameters, specified as keys in a Perl hash:

- The access protocol to use when communicating with the NETCONF server (key name: **access**). Before the application runs, satisfy the SSH prerequisites.
- The name of the device to which to connect (key name: hostname). For best results, specify either a fully-qualified hostname or an IP address.
- The username under which to establish the connection to the NETCONF server and issue requests (key name: **login**). The username must already exist on the specified device and have the permission bits necessary for making the requests invoked by the application.
- The password for the username (key name: **password**).

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The sample scripts record the parameters in a Perl hash called **%deviceinfo**, declared as follows:

```
my %deviceinfo = (
    'access' => $access,
    'login' => $login,
    'password' => $password,
    'hostname' => $hostname,
);
```

The sample scripts obtain the parameters from options entered on the command line by a user. Your application can also obtain values for the parameters from a file or database, or you can hardcode one or more of the parameters into the application code if they are constant.

Example: Collect Parameters Interactively

Each sample script obtains the parameters required by the **NET::Netconf::Manager** object from command-line options provided by the user who invokes the script. The script records the options in a Perl hash called **%opt**, using the **getopts** function defined in the **Getopt::Std** Perl module to read the options from the command line. (Scripts used in production environments probably do not obtain parameters interactively, so this section is important mostly for understanding the sample scripts.)

In the following example from the **get_chassis_inventory.pl** script, the first parameter to the **getopts** function defines the acceptable options, which vary depending on the application. A colon after the option letter indicates that it takes an argument.

The second parameter, **\%opt**, specifies that the values are recorded in the **%opt** hash. If the user does not provide at least one option, provides an invalid option, or provides the **-h** option, the script invokes the **output_usage** subroutine, which prints a usage message to the screen:

```
my %opt;
getopts('l:p:d:x:f:m:o:h', \%opt) || output_usage();
output_usage() if $opt{'h'};
```

The following code defines the **output_usage** subroutine for the **get_chassis_inventory.pl** script. The contents of the **my $usage** definition and the **Where** and **Options** sections are specific to the script, and differ for each application.

```
sub output_usage
{
  my $usage = "Usage: $0 [options] <target>

Where:

 <target>   The hostname of the target device.

Options:

 -l <login>    A login name accepted by the target device.
 -p <password> The password for the login name.
 -m <access>   Access method. The only supported method is 'ssh'.
 -x <format>   The name of the XSL file to display the response.
          Default: xsl/chassis_inventory.xsl
```

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```
 -f <xmlfile>  The name of the XML file to print server response to.
        Default: xsl/chassis_inventory.xml
 -o <filename> output is written to this file instead of standard output.
 -d <level>    Debug level [1-6]\n\n";

  croak $usage;
}
```

The **get_chassis_inventory.pl** script includes the following code to obtain values from the command line for the parameters required by the **NET::Netconf::Manager** object. A detailed discussion of the various functional units follows the complete code sample.

```
# Get the hostname
my $hostname = shift || output_usage();

# Get the access method, can be ssh only
my $access = $opt{'m'} || 'ssh';
use constant VALID_ACCESS_METHOD => 'ssh';
output_usage() unless (VALID_ACCESS_METHOD =~ /$access/);

# Check for login name. If not provided, prompt for it
my $login = "";
if ($opt{'l'}) {
  $login = $opt{'l'};
} else {
  print STDERR "login: ";
  $login = ReadLine 0;
  chomp $login;
}

# Check for password. If not provided, prompt for it
my $password = "";
if ($opt{'p'}) {
  $password = $opt{'p'};
} else {
  print STDERR "password: ";
  ReadMode 'noecho';
  $password = ReadLine 0;
  chomp $password;
  ReadMode 'normal';
  print STDERR "\n";
}
```

In the first line of the preceding code sample, the script uses the Perl **shift** function to read the hostname from the end of the command line. If the hostname is missing, the script invokes the **output_usage** subroutine to print the usage message, which specifies that a hostname is required:

```
my $hostname = shift || output_usage();
```


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The script next determines which access protocol to use, setting the **$access** variable to the value of the **-m** command-line option. If the specified value does not match the only valid value defined by the **VALID_ACCESSES** constant, the script invokes the **output_usage** subroutine to print the usage message.

```
my $access = $opt{'m'} || 'ssh';
use constant VALID_ACCESS_METHOD => 'ssh';
output_usage() unless (VALID_ACCESS_METHOD =~ /$access/);
```

The script then determines the username, setting the **$login** variable to the value of the **-l** command-line option. If the option is not provided, the script prompts for it and uses the **ReadLine** function (defined in the standard Perl **Term::ReadKey** module) to read it from the command line:

```
my $login = "";
if ($opt{'l'}) {
  $login = $opt{'l'};
} else {
  print STDERR "login: ";
  $login = ReadLine 0;
  chomp $login;
}
```

The script finally determines the password for the username, setting the **$password** variable to the value of the **-p** command-line option. If the option is not provided, the script prompts for it. It uses the **ReadMode** function (defined in the standard Perl **Term::ReadKey** module) twice: first to prevent the password from echoing visibly on the screen and then to return the shell to normal (echo) mode after it reads the password:

```
my $password = "";
if ($opt{'p'}) {
  $password = $opt{'p'};
} else {
  print STDERR "password: ";
  ReadMode 'noecho';
  $password = ReadLine 0;
  chomp $password;
  ReadMode 'normal';
  print STDERR "\n";
}
```

Obtain Application-Specific Parameters

In addition to the parameters required by the **NET::Netconf::Manager** object, applications might need to define other parameters, such as the name of the file to which to write the data returned by the NETCONF server in response to a request, or the name of the Extensible Stylesheet Transformation Language (XSLT) file to use for transforming the data.

As with the parameters required by the **NET::Netconf::Manager** object, your application can hardcode the values in the application code, obtain them from a file, or obtain them interactively. The sample scripts obtain values for these parameters from command-line options in the same manner as they obtain the parameters required by the **NET::Netconf::Manager** object. Several examples follow.

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The following line enables a debugging trace if the user includes the **-d** command-line option.

```
my $debug_level = $opt{'d'};
```

The following line sets the **$outputfile** variable to the value specified by the **-o** command-line option. It names the local file to which the NETCONF server's response is written. If the **-o** option is not provided, the variable is set to the empty string.

```
my $outputfile = $opt{'o'} || "";
```

The following code from the **diagnose_bgp.pl** script defines which XSLT file to use to transform the NETCONF server's response. The first line sets the **$xslfile** variable to the value specified by the **-x** command-line option. If the option is not provided, the script uses the **text.xsl** file supplied with the script, which transforms the data to ASCII text. The **if** statement verifies that the specified XSLT file exists; the script terminates if it does not.

```
# Get the xsl file
my $xslfile = $opt{'x'} || "xsl/bgp.xsl";

# Check for the existence of the given file
if (! -f $xslfile) {
  croak "XSL file $xslfile does not exist.";
}
```

Establishing the Connection

After obtaining values for the parameters required for the **NET::Netconf::Manager** object, each sample script records them in the **%deviceinfo** hash:

```
my %deviceinfo = (
    'access' => $access,
    'login' => $login,
    'password' => $password,
    'hostname' => $hostname,
);
```

The script then invokes the NETCONF-specific **new** subroutine to create a **NET::Netconf::Manager** object and establish a connection to the specified routing, switching, or security platform. If the connection attempt fails (as tested by the **ref** operator), the script exits.

```
my $jnx = new Net::Netconf::Manager(%deviceinfo);
unless (ref $jnx) {
  croak "ERROR: $deviceinfo{hostname}: failed to connect.\n";
}
```

Submitting a Request to the NETCONF Server

After establishing a connection to a NETCONF server (see "Submitting a Request to the NETCONF Server" on page 712), your application can submit one or more requests by invoking the Perl methods that are supported in the version of the NETCONF XML protocol and Junos XML API used by the application:

- Each version of software supports a set of methods that correspond to CLI operational mode commands (later releases generally support more methods). For a list of the operational methods supported in the current version, see the files stored in the

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lib\Net\Netconf\Plugins\Plugin*release* directory of the NETCONF Perl distribution (*release* is the Junos OS version code, such as **6.1R1** for the initial version of Junos OS Release 6.1). The files have names in the format ***package*_methods.pl**, where *package* is a software package.

- The set of methods that correspond to operations on configuration objects is defined in the **lib/Net/Netconf/Plugins.pm** file in the NETCONF distribution.

See the following sections for more information:

- Providing Method Options or Attributes on page 713
- Submitting a Request on page 715
- Example: Get an Inventory of Hardware Components on page 716
- Example: Edit Configuration Statements on page 717

Providing Method Options or Attributes

Many Perl methods have one or more options or attributes. The following list describes the notation used to define a method's options in the **lib/Net/Netconf/Plugins.pm** and **lib/Net/Netconf/*release/package*_methods.pl** files, and the notation that an application uses when invoking the method:

- A method without options is defined as **$NO_ARGS**, as in the following entry for the **get_autoinstallation_status_information** method:

  ```
  ## Method : get-autoinstallation-status-information
  ## Returns: autoinstallation-status-information
  ## Command: "show system autoinstallation status"
  get_autoinstallation_status_information => $NO_ARGS,
  ```

  To invoke a method without options, follow the method name with an empty set of parentheses as in the following example:

  ```
  $jnx->get_autoinstallation_status_information( );
  ```

- A fixed-form option is defined as type **$TOGGLE**. In the following example, the **get_software_information** method takes two fixed-form options, **brief** and **detail**:

  ```
  ## Method : <get-ancp-neighbor-information>
  ## Returns: <ancp-neighbor-information>
  ## Command: "show ancp neighbor"
  get_ancp_neighbor_information => {
    brief => $TOGGLE,
    detail => $TOGGLE,
  }
  ```

  To include a fixed-form option when invoking a method, set it to the value **1** (one) as in the following example:

  ```
  $jnx->get-ancp-neighbor-information(brief => 1);
  ```

- An option with a variable value is defined as type **$STRING**. In the following example, the **get_cos_drop_profile_information** method takes the **profile_name** argument:

  ```
  ## Method : <get-passive-monitoring-usage-information>
  ## Returns: <passive-monitoring-usage-information>
  ```

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```
## Command: "show passive-monitoring usage"
get_passive_monitoring_usage_information => {
  interface_name => $STRING,
}
```

To include a variable value when invoking a method, enclose the value in single quotes as in the following example:

```
$jnx->get_cos_drop_profile_information(profile_name => 'user-drop-profile');
```

- A set of configuration statements or corresponding tag elements is defined as type **$DOM**. In the following example, the **get_config** method takes a set of configuration statements (along with two attributes):

```
'get_config' => {
    'source' => $DOM_STRING,
    'source_url' => $URL_STRING,
    'filter' => $DOM
},
```

A DOM object is XML code:

```
my $xml_string = "
<filter type=\"subtree\">
<configuration>
 <protocols>
  <bgp></bgp>
 </protocols>
</configuration>
</filter>
";

my %queryargs = (
 'source' => "running",
 'filter' => $xml_string,
);
```

This generates an RPC request:

```
<rpc message-id='1'> <get-config> <source> <running/> </source>
<filter type="subtree">
<configuration>
 <protocols>
  <bgp></bgp>
 </protocols>
</configuration>
</filter>
</get-config></rpc>
```

A method can have a combination of fixed-form options, options with variable values, attributes, and a set of configuration statements. For example, the **get_forwarding_table_information** method has four fixed-form options and five options with variable values:

```
## Method : <get-forwarding-table-information>
## Returns: <forwarding-table-information>
## Command: "show route forwarding-table"
get_forwarding_table_information => {
```

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```
    detail => $TOGGLE,
    extensive => $TOGGLE,
    multicast => $TOGGLE,
    family => $STRING,
    vpn => $STRING,
    summary => $TOGGLE,
    matching => $STRING,
    destination => $STRING,
    label => $STRING,
  },
```

Submitting a Request

The following code is the recommended way to send a request to the NETCONF server and shows how to handle error conditions. The **$jnx** variable is defined to be a **NET::Netconf::Manager** object.

```
my $res; # Netconf server response

# connect to the Netconf server
my $jnx = new Net::Netconf::Manager(%deviceinfo);
unless (ref $jnx) {
  croak "ERROR: $deviceinfo{hostname}: failed to connect.\n";
}

# Lock the configuration database before making any changes
print "Locking configuration database ...\n";
my %queryargs = ( 'target' => 'candidate' );
$res = $jnx->lock_config(%queryargs);

# See if you got an error
if ($jnx->has_error) {
  print "ERROR: in processing request \n $jnx->{'request'} \n";
  graceful_shutdown($jnx, STATE_CONNECTED, REPORT_FAILURE);
}

# Load the configuration from the given XML file
print "Loading configuration from $xmlfile \n";
if (! -f $xmlfile) {
  print "ERROR: Cannot load configuration in $xmlfile\n";
  graceful_shutdown($jnx, STATE_LOCKED, REPORT_FAILURE);
}

# Read in the XML file
my $config = read_xml_file($xmlfile);
print "\n\n$config \n\n";

%queryargs = (
  'target' => 'candidate',
  'config' => $config
);
$res = $jnx->edit_config(%queryargs);

# See if you got an error
if ($jnx->has_error) {
  print "ERROR: in processing request \n $jnx->{'request'} \n";
```

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```
  # Get the error
  my $error = $jnx->get_first_error();
  get_error_info(%$error);
  # Disconnect
  graceful_shutdown($jnx, STATE_LOCKED, REPORT_FAILURE);
}

# Commit the changes
print "Committing the edit-config changes ...\n";
$jnx->commit();
if ($jnx->has_error) {
  print "ERROR: Failed to commit the configuration.\n";
  graceful_shutdown($jnx, STATE_CONFIG_LOADED, REPORT_FAILURE);
}

# Unlock the configuration database and
# disconnect from the Netconf server
print "Disconnecting from the Netconf server ...\n";
graceful_shutdown($jnx, STATE_LOCKED, REPORT_SUCCESS);
```

Example: Get an Inventory of Hardware Components

The **get_chassis_inventory.pl** script retrieves and displays a detailed inventory of the hardware components installed in a routing, swtiching, or security platform. It is equivalent to issuing the **show chassis hardware detail** command.

After establishing a connection to the NETCONF server, the script defines **get_chassis_inventory** as the request to send and includes the **detail** argument:

```
my $query = "get_chassis_inventory";
my %queryargs = ( 'detail' => 1 );
```

The script sends the query and assigns the results to the **$res** variable. It performs two tests on the results, and prints an error message if it cannot send the request or if errors occurred when executing it. If no errors occurred, the script uses XSLT to transform the results.

```
# send the command and get the server response
my $res = $jnx->$query(%queryargs);
print "Server request: \n $jnx->{'request'}\n Server response: \n $jnx->{'server_response'}
 \n";

# print the server response into xmlfile
print_response($xmlfile, $jnx->{'server_response'});

# See if you got an error
if ($jnx->has_error) {
  croak "ERROR: in processing request \n $jnx->{'request'} \n";
} else {
  # Transform the server response using XSL file
  my $res = new Net::Netconf::Transform();
  print "Transforming ...\n";
  my $nm = $res->translateXSLtoRelease('xmlns:lc', $xslfile,
                       "$xslfile.tmp",
                       $xmlfile);
  if ($nm) {
    format_by_xslt($nm, $xmlfile, );
```


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```
  } else {
    print STDERR "ERROR: Invalid XSL File $xslfile\n";
  }
}

# Disconnect from the Netconf server
$jnx->disconnect();
```

Example: Edit Configuration Statements

The **edit_configuration.pl** script edits configuration statements and loads the configuration onto a device. It uses the basic structure for sending requests but also defines a **graceful_shutdown** subroutine that handles errors. The following sections describe the different functions that the script performs:

- Handling Error Conditions on page 717
- Locking the Configuration on page 718
- Reading In the Configuration Data on page 718
- Editing the Configuration Data on page 719
- Committing the Configuration on page 720

Handling Error Conditions

The **graceful_shutdown** subroutine in the **edit_configuration.pl** script handles errors in a slightly more elaborate manner than the generic structure described in "Handling Error Conditions" on page 717. It employs the following additional constants:

```
# query execution status constants
use constant REPORT_SUCCESS => 1;
use constant REPORT_FAILURE => 0;
use constant STATE_CONNECTED => 1;
use constant STATE_LOCKED => 2;
use constant STATE_CONFIG_LOADED => 3;
```

The first two **if** statements in the subroutine refer to the **STATE_CONFIG_LOADED** and **STATE_LOCKED** conditions, which apply specifically to loading a configuration in the **edit_configuration.pl** script.

```
sub graceful_shutdown
{
  my ($jnx, $state, $success) = @_;
  if ($state >= STATE_CONFIG_LOADED) {
    # We have already done an <edit-config> operation
    # - Discard the changes
    print "Discarding the changes made ...\n";
    $jnx->discard_changes();
    if ($jnx->has_error) {
      print "Unable to discard <edit-config> changes\n";
    }
  }

  if ($state >= STATE_LOCKED) {
    # Unlock the configuration database
    $jnx->unlock_config();
    if ($jnx->has_error) {
```

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```
      print "Unable to unlock the candidate configuration\n";
    }
  }

  if ($state >= STATE_CONNECTED) {
    # Disconnect from the Netconf server
    $jnx->disconnect();
  }

  if ($success) {
    print "REQUEST succeeded !!\n";
  } else {
    print "REQUEST failed !!\n";
  }

  exit;
}
```

Locking the Configuration

The main section of the **edit_configuration.pl** script begins by establishing a connection to a NETCONF server. It then invokes the **lock_configuration** method to lock the configuration database. In case of error, the script invokes the **graceful_shutdown** subroutine described in "Handling Error Conditions" on page 717.

```
print "Locking configuration database ...\n";
my %queryargs = ( 'target' => 'candidate' );
$res = $jnx->lock_config(%queryargs);
# See if you got an error
if ($jnx->has_error) {
  print "ERROR: in processing request \n $jnx->{'request'} \n";
  graceful_shutdown($jnx, STATE_CONNECTED, REPORT_FAILURE);
}
```

Reading In the Configuration Data

In the following code sample, the **edit_configuration.pl** script reads in and parses a file that contains Junos XML configuration tag elements or ASCII-formatted statements. A detailed discussion of the functional subsections follows the complete code sample.

```
# Load the configuration from the given XML file
print "Loading configuration from $xmlfile \n";
if (! -f $xmlfile) {
  print "ERROR: Cannot load configuration in $xmlfile\n";
  graceful_shutdown($jnx, STATE_LOCKED, REPORT_FAILURE);
}

# Read in the XML file
my $config = read_xml_file($xmlfile);
print "\n\n$config \n\n";

%queryargs = (
          'target' => 'candidate'
        );

# If we are in text mode, use config-text arg with wrapped
# configuration-text, otherwise use config arg with raw XML
```


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```
if ($opt{t}) {
 $queryargs{'config-text'} = '<configuration text> . $config . </configuration-text>';
} else {
 $queryargs{'config'} = $config;
```

The first subsection of the preceding code sample verifies the existence of the file containing configuration data. The name of the file was previously obtained from the command line and assigned to the **$xmlfile** variable. If the file does not exist, the script invokes the **graceful_shutdown** subroutine.

```
print "Loading configuration from $xmlfile \n";
if (! -f $xmlfile) {
  print "ERROR: Cannot load configuration in $xmlfile\n";
  graceful_shutdown($jnx, STATE_LOCKED, REPORT_FAILURE);
}
```

The script then invokes the **read_xml_file** subroutine, which opens the file for reading and return its contents in the **$config** variable. The **queryargs** key **target** is set to the value **candidate**. When the script calls the **edit_configuration** method, the candidate configuration is edited.

```
# Read in the XML file
my $config = read_xml_file($xmlfile);
print "\n\n$config \n\n";

%queryargs = (
          'target' => 'candidate'
        );
```

If the **-t** command-line option was included when the **edit_configuration.pl** script was invoked, the file referenced by the **$xmlfile** variable should contain ASCII-formatted configuration statements like those returned by the CLI configuration-mode **show** command. If the configuration statements are in ASCII-formatted text, the script encloses the configuration stored in the **$config** variable within the <configuration-text> tag element and stores the result in the value associated with the **queryargs** hash key **config-text**.

If the **-t** command-line option was not included when the **edit_configuration.pl** script was invoked, the file referenced by the **$xmlfile** variable contains Junos XML configuration tag elements. In this case, the script stores just the **$config** variable as the value associated with the **queryargs** hash key **config**.

```
if ($opt{t}) {
 $queryargs{'config-text'} = '<configuration text> . $config . </configuration-text>';
} else {
 $queryargs{'config'} = $config;
```

Editing the Configuration Data

The script now invokes the **edit_config** method to edit the candidate configuration on the device. It invokes the **graceful_shutdown** subroutine if the response from the NETCONF server has errors.

```
$res = $jnx->edit_config(%queryargs);
```

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```
# See if you got an error
if ($jnx->has_error) {
  print "ERROR: in processing request \n $jnx->{'request'} \n";
  # Get the error
  my $error = $jnx->get_first_error();
  get_error_info(%$error);
  # Disconnect
  graceful_shutdown($jnx, STATE_LOCKED, REPORT_FAILURE);
```

Committing the Configuration

If there are no errors, the script invokes the **commit** method:

```
# Commit the changes
print "Committing the <edit-config> changes ...\n";
$jnx->commit();
if ($jnx->has_error) {
  print "ERROR: Failed to commit the configuration.\n";
  graceful_shutdown($jnx, STATE_CONFIG_LOADED, REPORT_FAILURE);
}
```

Parsing and Formatting the Response from the NETCONF Server

As the last step in sending a request, the application verifies that there are no errors with the response from the NETCONF server. It can then write the response to a file, to the screen, or both. If the response is for an operational query, the application usually uses XSLT to transform the output into a more readable format, such as HTML or formatted ASCII. If the response consists of configuration data, the application can store it as XML (the Junos XML tag elements generated by default from the NETCONF server) or transform it into formatted ASCII text.

The following sections discuss parsing and formatting options:

- Parsing and Formatting an Operational Response on page 720

Parsing and Formatting an Operational Response

The following code sample from the **diagnose_bgp.pl** script uses XSLT to transform an operational response from the NETCONF server into a more readable format. A detailed discussion of the functional subsections follows the complete code sample.

```
# Get the output file
my $outputfile = $opt{'o'} || "";

# Get the xsl file
my $xslfile = $opt{'x'} || "xsl/bgp.xsl";

# Check for the existence of the given file
if (! -f $xslfile) {
  croak "XSL file $xslfile does not exist.";
}

# Get the xmlfile
my $xmlfile = $opt{'f'} || "xsl/bgp.xml";

# send the command and get the server response
```


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```
my $res = $jnx->$query();

# print the server response into xmlfile
print_response($xmlfile, $jnx->{'server_response'});

# See if you got an error
if ($jnx->has_error) {
  croak "ERROR: in processing request \n $jnx->{'request'} \n";
} else {
  # Transform the server response using XSL file
  my $res = new Net::Netconf::Transform();
  print "Transforming ...\n";
  my $nm = $res->translateXSLtoRelease('xmlns:lc', $xslfile,
                       "$xslfile.tmp",
                       $xmlfile);
  if ($nm) {
    format_by_xslt($nm, $xmlfile, );
  } else {
    print STDERR "ERROR: Invalid XSL File $xslfile\n";
  }
}
```

The first line of the preceding code sample illustrates how the scripts read the **-o** option from the command line to obtain the name of the file into which to write the results of the XSLT transformation:

```
my $outputfile = $opt{'o'} || "";
```

From the **-x** command-line option, the scripts obtain the name of the XSLT file to use, setting a default value if the option is not provided. The scripts exit if the specified file does not exist. The following example is from the **diagnose_bgp.pl** script:

```
my $xslfile = $opt{'x'} || "xsl/bgp.xsl";
if (! -f $xslfile) {
  croak "XSL file $xslfile does not exist.";
}
```

For examples of XSLT files, see the following directories in the NETCONF Perl distribution:

- The **examples/diagnose_bpg/xsl** directory contains an XSLT file for the **diagnose_bpg.pl** script.
- The **examples/get_chassis_inventory/xsl** directory contains XSLT files for the **get_chassis_inventory.pl** script.

The actual parsing operation invokes the **translateXSLtoRelease** function (defined in the **Net::Netconf::Transform** module) to alter one of the namespace definitions in the XSLT file.

```
my $res = new Net::Netconf::Transform();
  print "Transforming ...\n";
  my $nm = $res->translateXSLtoRelease('xmlns:lc', $xslfile,
                       "$xslfile.tmp",
                       $xmlfile);
  if ($nm) {
    format_by_xslt($nm, $xmlfile, );
  } else {
```

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```
    print STDERR "ERROR: Invalid XSL File $xslfile\n";
  }
```

This is necessary because the XSLT 1.0 specification requires that every XSLT file define a specific value for each default namespace used in the data being transformed. The **xmlns** attribute in a NETCONF operational response tag element includes a code representing the Junos OS version, such as**10.3R1** for the initial version of Junos OS Release 10.3. Because the same XSLT file can be applied to operational response tag elements from devices running different versions of the Junos OS, the XSLT file cannot predefine an **xmlns** namespace value that matches all versions. The **translateXSLtoRelease** function alters the namespace definition in the XSLT file identified by the **$xslfile** variable to match the value in the NETCONF server's response. It assigns the resulting XSLT file to the **$nm** variable.

After verifying that the **translateXSLtoRelease** function succeeded, the script invokes the **format_by_xslt** function, which builds a command string and assigns it to the **$command** variable. The first part of the command string invokes the **xsltproc** command and specifies the names of the XSLT and configuration data files (**$xslfile** and **$xmlfile**)::

```
sub format_by_xslt
{
  my ($xslfile, $xmlfile, $outfile)  = @_;

  print "Transforming $xmlfile with $xslfile...\n" if $outfile;
  my $command = "xsltproc $xslfile $xmlfile";
  $command .= "> $outfile" if $outfile;
  system($command);
  print "Done\n" if $outfile;
  print "See $outfile\n" if $outfile;
}
```

If the **$outfile** variable is defined (the file for storing the result of the XSLT transformation exists), the script appends a string to the **$command** variable to write the results of the **xsltproc** command to the file. (If the file does not exist, the script writes the results to standard out [stdout].) The script then invokes the **system** function to execute the command string and prints status messages to stdout.

If the **translateXSLtoRelease** function fails (the **if ($nm)** expression evaluates to “false”), the script prints an error:

```
if ($nm) {
   format_by_xslt($nm, $xmlfile, );
} else {
   print STDERR "ERROR: Invalid XSL File $xslfile\n";
}
```

Closing the Connection to the NETCONF Server

To end the NETCONF session and close the connection to the device, each sample script invokes the **disconnect** method. Several of the scripts do this in standalone statements:

```
$jnx->disconnect();
```

The **edit_configuration.pl** script invokes the **graceful_shutdown** method instead.

```
graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_SUCCESS);
```


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The **graceful_shutdown** method takes the appropriate actions with regard to the configuration database and then invokes the **disconnect** method.

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PART 3

NETCONF Java Toolkit Developer Guide

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- Using the NETCONF Java Toolkit on page 731

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CHAPTER 15

Overview and Installation

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- NETCONF Java Toolkit Installation on page 729

NETCONF Java Toolkit Overview

- NETCONF XML Management Protocol and Junos XML API Overview on page 727
- NETCONF Java Toolkit Overview on page 728

NETCONF XML Management Protocol and Junos XML API Overview

The NETCONF XML management protocol is an XML-based protocol that client applications use to request and change configuration information on routing, switching, and security devices. The NETCONF XML management protocol uses an Extensible Markup Language (XML)-based data encoding for the configuration data and remote procedure calls. The NETCONF protocol defines basic operations that are equivalent to configuration mode commands in the command-line interface (CLI). Applications use the protocol operations to display, edit, and commit configuration statements (among other operations), just as administrators use CLI configuration mode commands to perform those operations.

The Junos XML API is an XML representation of Junos OS configuration statements and operational mode commands. When the client application manages a device running Junos OS, Junos XML configuration tag elements are the content to which the NETCONF XML protocol operations apply. Junos XML operational tag elements are equivalent in function to operational mode commands in the CLI, which administrators use to retrieve status information for a routing platform running Junos OS.

The NETCONF XML management protocol is described in RFC 4741, *NETCONF Configuration Protocol*, which is available at http://www.ietf.org/rfc/rfc4741.txt .

Client applications request or change information on a switch, router, or security device by encoding the request with tag elements from the NETCONF XML management protocol and Junos XML API and then sending it to the NETCONF server on the device. On devices running Junos OS, the NETCONF server is integrated into Junos OS and does not appear as a separate entry in process listings. The NETCONF server directs the request to the appropriate software modules within the device, encodes the response in NETCONF and Junos XML API tag elements, and returns the result to the client application. For example, to request information about the status of a device's interfaces, a client application sends

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the **<get-interface-information>** tag element from the Junos XML API. The NETCONF server gathers the information from the interface process and returns it in the **<interface-information>** tag element.

You can use the NETCONF XML management protocol and Junos XML API to configure devices running Junos OS or to request information about the device configuration or operation. You can write client applications to interact with the NETCONF server, but you can also use the NETCONF XML management protocol to build custom end-user interfaces for configuration and information retrieval and display, such as a Web browser-based interface.

NETCONF Java Toolkit Overview

The NETCONF Java toolkit provides an object-oriented interface for communicating with a NETCONF server. The toolkit enables programmers familiar with the Java programming language to create Java applications to easily connect to a device, open a NETCONF session, construct configuration hierarchies in XML, and create and execute operational and configuration requests. You can create your own Java applications to manage and configure routing, switching, and security devices.

The NETCONF Java toolkit provides classes with methods that implement the functionality of the NETCONF protocol operations defined in RFC 4741. All basic protocol operations are supported. The NETCONF XML management protocol uses XML-based data encoding for configuration data and remote procedure calls. The toolkit provides classes and methods that aid in creating, modifying, and parsing XML.

The NETCONF Java toolkit has four basic classes, which are described in Table 32 on page 728.

Table 32: NETCONF Java Toolkit Classes

Class	Summary
Device	Defines the device on which the NETCONF server runs, and represents the SSHv2 connection and default NETCONF session with that device.
NetconfSession	Represents a NETCONF session established with the device on which the NETCONF server runs.
XMLBuilder	Creates XML-encoded data.
XML	XML-encoded data that represents an operational or configuration request or configuration data.

A *configuration management server* is generally a PC or workstation that is used to configure a router, switch, or security device remotely. The communication between the configuration management server and the NETCONF server via the NETCONF Java toolkit involves:

- Establishing a NETCONF session over SSHv2 between the configuration management server and the NETCONF server.

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- Creating RPCs corresponding to requests and sending these requests to the NETCONF server.
- Receiving and processing the RPC replies from the NETCONF server.

To use the NETCONF Java toolkit, you must install the toolkit and add the **.jar** path to your CLASSPATH. For more information about installing the NETCONF Java toolkit, see "Downloading and Installing the NETCONF Java Toolkit" on page 729.

Once the toolkit is installed, you connect to a device, create a NETCONF session, and execute operations by adding the associated code to a Java program file, which is then compiled and executed. For more information about creating NETCONF Java toolkit programs, see "Creating and Executing a NETCONF Java Toolkit Program File" on page 739.

NOTE: **Juniper Networks devices running Junos OS Release 7.5R1 or later support the NETCONF XML management protocol.**

Related Documentation

- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XML on page 735
- NETCONF Java Toolkit Class: XMLBuilder on page 734
- NETCONF XML Management Protocol and Junos XML API Overview on page 545
- Downloading and Installing the NETCONF Java Toolkit on page 729
- Creating and Executing a NETCONF Java Toolkit Program File on page 739

NETCONF Java Toolkit Installation

- Downloading and Installing the NETCONF Java Toolkit on page 729

Downloading and Installing the NETCONF Java Toolkit

A *configuration management server* is a PC or workstation that is used to configure a router, switch, or security device remotely. To use the NETCONF Java toolkit, download and install the toolkit on the configuration management server. The toolkit contains the Netconf.jar library, which is compatible with Java Version 1.4 and later. The following tasks are discussed:

1. Downloading the NETCONF Java Toolkit on page 730
2. Installing the NETCONF Java Toolkit on page 730
3. Satisfying Requirements for SSHv2 Connections on page 730

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Downloading the NETCONF Java Toolkit

To download the NETCONF Java toolkit to the configuration management server:

1. Access the Juniper Networks Customer Support Center Web page at http://www.juniper.net/support/ .
2. Under Support, click the Download Software link.
3. Under the Network Management section, click the NETCONF XML Management Protocol link.
4. Click the link for the appropriate software release.
5. Select the Software tab.
6. Click the NETCONF API Java Toolkit link, and download the file to the configuration management server.

Installing the NETCONF Java Toolkit

To install the NETCONF Java toolkit on the configuration management server:

1. Unzip the NETCONF API Java Toolkit zip file downloaded in the previous section.
2. Include the **Netconf.jar** file in the CLASSPATH of your local Java development environment.
3. Ensure SSHv2/NETCONF connectivity to the device on which the NETCONF server is running.

Satisfying Requirements for SSHv2 Connections

The NETCONF server communicates with client applications within the context of a NETCONF session. The server and client explicitly establish a connection and session before exchanging data, and close the session and connection when they are finished.

The NETCONF Java toolkit accesses the NETCONF server using the SSH protocol and uses the standard SSH authentication mechanism. To establish an SSHv2 connection with a device running Junos OS, you must ensure that the following requirements are met:

- The client application has a user account and can log in to each device where a NETCONF session will be established.
- The login account used by the client application has an SSH public/private key pair or a text-based password.
- The client application can access the public/private keys or text-based password.
- The NETCONF service over SSH is enabled on each device where a NETCONF session will be established.

For information about NETCONF over SSH, see RFC 4742, *Using the NETCONF Configuration Protocol over Secure SHell (SSH)*, which is available at http://www.ietf.org/rfc/rfc4742.txt .

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CHAPTER 16

Using the NETCONF Java Toolkit

- NETCONF Java Toolkit Classes on page 731
- NETCONF Java Toolkit Program Files on page 739
- Performing Operational and Configuration Tasks on page 750
- NETCONF Java Toolkit Examples on page 765

NETCONF Java Toolkit Classes

- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XMLBuilder on page 734
- NETCONF Java Toolkit Class: XML on page 735

NETCONF Java Toolkit Class: Device

A **net.juniper.netconf.Device** object represents an SSHv2 connection and a default NETCONF session between the configuration management server and the device on which the NETCONF server resides.

When creating a **Device** object, you must provide the IP address or DNS name and the authentication details to create the SSHv2 connection. Authentication can be user-password based or RSA/DSA key-based. You also have the option of specifying the port number for the SSHv2 connection and the client capabilities to be sent to the NETCONF server.

The constructor syntax is:

Device (String *hostname*, String *login*, String *password*, String *pemKeyFile*)
Device (String *hostname*, String *login*, String *password*, String *pemKeyFile*, int *port*)
Device (String *hostname*, String *login*, String *password*, String *pemKeyFile*, ArrayList *capabilities*)
Device (String *hostname*, String *login*, String *password*, String *pemKeyFile*, int *port*, ArrayList *capabilities*)

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The constructor parameters are:

- **hostname**—(Required) IP address or DNS name of the device on which the NETCONF server is running and to which to connect via SSHv2.
- **login**—(Required) Username for the login account on the device on which the NETCONF server is running.
- **password**—(Required) Password for either user password-based authentication or key-based authentication. If no password is required for key-based authentication, pass this argument as null.
- **pemKeyFile**—(Required) Path of the file containing the DSA/RSA private key in PEM format for key-based authentication. For user password-based authentication, pass this argument as null.
- **port**—(Optional) Port number on which to establish the SSHv2 connection. The default port is 830. If you are connecting to a device that is configured for NETCONF over SSH on a port other than the default port, you must specify that port number in the arguments.
- **capabilities**—(Optional) Client capabilities to be communicated to the NETCONF server, if the capabilities are other than the default capabilities.

  The default capabilities sent to the NETCONF server are:

  ```
  urn:ietf:params:xml:ns:netconf:base:1.0
  urn:ietf:params:xml:ns:netconf:base:1.0#candidate
  urn:ietf:params:xml:ns:netconf:base:1.0#confirmed-commit
  urn:ietf:params:xml:ns:netconf:base:1.0#validate
  urn:ietf:params:xml:ns:netconf:base:1.0#url?protocol=http,ftp,file
  ```

The general syntax for creating a **Device** object is:

```
Device device_name = new Device (String hostname, String login,
                                 String password, String pemKeyFile,
                                 <int port>, <ArrayList capabilities>)
```

By default, a **NetconfSession** object is created when you create a new instance of **Device** and connect to a NETCONF server. Once you have created a **Device** object, you can perform NETCONF operations.

Examples The following example creates a **Device** object with an authenticated SSHv2 connection to IP address 10.10.1.1. The connection uses user password-based authentication with the login name “admin” and the password “PaSsWoRd”. When the **connect()** method is called, it connects to the device and automatically establishes a default NETCONF session.

```
Device my_device = new Device("10.10.1.1", "admin", "PaSsWoRd", null);
my_device.connect();
```

To create a **Device** object with a NETCONF-over-SSH connection on port 49000 instead of the default port 830, add the port number to the constructor arguments.

```
Device my_device = new Device("10.10.1.1", "admin", "PaSsWoRd", null, 49000);
```

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The default timeout value for connecting to the device is 5000 milliseconds. To set the timeout value to a different interval, call the **setTimeOut()** method on the device object.

Related Documentation

- Using Device Object Methods to Execute RPCs and Operational Commands on page 750
- Creating and Executing a NETCONF Java Toolkit Program File on page 739
- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XML on page 735
- NETCONF Java Toolkit Class: XMLBuilder on page 734
- NETCONF Java Toolkit Overview on page 728

NETCONF Java Toolkit Class: NetconfSession

A **net.juniper.netconf.NetconfSession** object represents the NETCONF session between the configuration management server and the device on which the NETCONF server resides.

By default, a NETCONF session is created when you create a new instance of **Device** and connect to a NETCONF server, so you do not need to explicitly create a **NetconfSession** object. You can perform the NETCONF operations directly from the **Device** object by calling the associated methods.

However, there might be times when you need multiple NETCONF sessions on the same SSHv2 connection. To create multiple sessions, call the **createNetconfSession()** method on the **Device** object as shown in the following example:

```
Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null);
device.connect();
NetconfSession second_session = device.createNetconfSession();
```

Once you create an additional NETCONF session, you call the NETCONF operation methods for the new **NetconfSession** object in the same way as you call them for the **Device** object.

The **Device** and **NetconfSession** classes contain many identical methods, which perform NETCONF operations such as executing remote procedure calls (RPCs) and performing configuration changes. When you call a method on the **Device** object, it acts on the default NETCONF session. When you call a method on any additional **NetconfSession** object, it acts on that NETCONF session.

Example: Creating Multiple NETCONF Sessions

In the following example, the code snippet creates a new **Device** object. When the **connect()** method is called, the program connects to the remote device and establishes a default NETCONF session. The program creates a second **NetconfSession** object, **second_session**. Calling **device.getSessionID()** returns the session ID of the default NETCONF session, and calling **second_session.getSessionID()** returns the session ID of the second NETCONF session.

```
// Create a device object and a default NETCONF session
Device device = new Device("10.10.1.34", "admin", "PaSsWoRd", null);
device.connect();
```

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```
// Create an additional NETCONF session
NetconfSession second_session = device.createNetconfSession();

// There are two independent NETCONF sessions
String default_session_id = device.getSessionID();
String second_session_id = second_session.getSessionID();
```

Related Documentation

- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: XML on page 735
- NETCONF Java Toolkit Class: XMLBuilder on page 734
- NETCONF Java Toolkit Overview on page 728

NETCONF Java Toolkit Class: XMLBuilder

In a NETCONF session, communication between the configuration management server and the NETCONF server is through XML-encoded data. The configuration management server sends remote procedure calls (RPCs) to the NETCONF server, and the NETCONF server processes the RPC and returns an RPC reply. The **net.juniper.netconf.XMLBuilder** and **net.juniper.netconf.XML** objects help create and parse XML-encoded data.

You use the XMLBuilder object to create a new XML object. The constructor syntax is:

```
XMLBuilder ()
```

The XMLBuilder class includes methods to create a configuration hierarchy, an RPC, or an XML object as XML-encoded data. Each method is overloaded to accept multiple hierarchy levels. The methods return an XML object. For example, the methods to construct a configuration, RPC, or XML object with a single-tier hierarchy are:

- createNewConfig(String *elementLevelOne*)
- createNewRPC(String *elementLevelOne*)
- createNewXML(String *elementLevelOne*)

The following sample code creates a new **XMLBuilder** object, **builder**. The **XMLBuilder** object calls the **createNewConfig()** method to construct a three-tier configuration hierarchy consisting of a “security” element, a “policies” element child tag, and a “policy” element that is a child of “policies”.

```
XMLBuilder builder = new XMLBuilder();
XML policy = builder.createNewConfig("security","policies","policy");
```

The resulting XML hierarchy is as follows.

```
<configuration>
  <security>
    <policies>
      <policy>
      </policy>
    </policies>
```


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```
    </security>
  </configuration>
```

Notice that the **createNewConfig()** method always encloses the hierarchy within a top-level root element **<configuration>**. Similarly, the **createNewRPC()** method encloses the hierarchy within an **<rpc>** tag element.

Once you generate an XML object, you can call methods from the **XML** class to manipulate that object.

Related Documentation

- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XML on page 735
- NETCONF Java Toolkit Overview on page 728

NETCONF Java Toolkit Class: XML

A **net.juniper.netconf.XML** object represents XML-encoded data and provides methods to modify and parse the XML. The XML object internally maintains an **org.w3c.dom.Document** object, corresponding to the XML data it represents.

It is recommended that you work with the XML object to create new configurations, remote procedure calls (RPCs), or any XML-based data. Using an XML object, you can easily add, delete, or modify elements and attributes. To facilitate modification of XML content, the XML object maintains an 'active' element, which represents the hierarchy level exposed for modification.

To create an XML object, you first create an **XMLBuilder** object and construct the initial XML hierarchy. The **XMLBuilder** methods return an XML object on which you can then build. This makes it convenient to create XML-based configurations and RPCs and also parse the XML-based replies received from the NETCONF server.

Example: Creating a Configuration Hierarchy

This example creates the following sample XML configuration hierarchy. The steps used to create the configuration hierarchy are outlined in Table 33 on page 736.

```
<configuration>
  <security>
    <policies>
      <policy>
        <from-zone-name>trust</from-zone-name>
        <to-zone-name>untrust</to-zone-name>
        <policy>
          <name>my-sec-policy</name>
          <match>
            <source-address>any</source-address>
            <destination-address>any</destinationaddress>
            <application>junos-ftp</application>
            <application>junos-ntp</application>
            <application>junos-ssh</application>
          </match>
          <then>
            <permit>
```

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```
            </permit>
          </then>
        </policy>
      </policy>
    </policies>
  </security>
</configuration>
```

Table 33: Creating a Configuration Hierarchy with XMLBuilder and XML Objects

Java Code	Resulting Hierarchy
// Create an XMLBuilder object and a 3-level hierarchy **XMLBuilder builder = new XMLBuilder();** **XML policy =** **builder.createNewConfig("security","policies","policy");**	<configuration> <security> <policies> <policy> </policy> </policies> </security> </configuration>
// Append nodes at the 'policy' level **policy.append("from-zone-name","trust");** **policy.append("to-zone-name","untrust");**	<configuration> <security> <policies> <policy> **<from-zone-name>trust</from-zone-name>** **<to-zone-name>untrust</to-zone-name>** </policy> </policies> </security> </configuration>
// Create a new hierarchy level for the first policy **XML policyOne = policy.append("policy");** **policyOne.append("name","my-sec-policy");**	<configuration> <security> <policies> <policy> <from-zone-name>trust</from-zone-name> <to-zone-name>untrust</to-zone-name> **<policy>** **<name>my-sec-policy</name>** **</policy>** </policy> </policies> </security> </configuration>

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Table 33: Creating a Configuration Hierarchy with XMLBuilder and XML Objects *(continued)*

Java Code	Resulting Hierarchy

// Create the 'match' hierarchy
 	
XML match = policyOne.append("match");
 	
// Create and append an applications array
// to make three nodes with the same node name
 	
String[] applications =
{"junos-ftp","junos-ntp","junos-ssh"};
match.append("application", applications);
	<configuration>
	<security>
	<policies>
	<policy>
	<from-zone-name>trust</from-zone-name>
	<to-zone-name>untrust</to-zone-name>
	<policy>
	<name>my-sec-policy</name>
	
	<match>
	<application>junos-ftp</application>
	<application>junos-ntp</application>
	<application>junos-ssh</application>
	</match>
	
	</policy>
	</policy>
	</policies>
	</security>
	</configuration>

// Add elements under 'match' **match.append("source-address","any");** **match.append("destination-address","any");**	<configuration> <security> <policies> <policy> <from-zone-name>trust</from-zone-name> <to-zone-name>untrust</to-zone-name> <policy> <name>my-sec-policy</name> <match> <application>junos-ftp</application> <application>junos-ntp</application> <application>junos-ssh</application> <source-address>any</source-address> <destination-address>any</destination-address> </match> </policy> </policy> </policies> </security> </configuration>

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Table 33: Creating a Configuration Hierarchy with XMLBuilder and XML Objects *(continued)*

Java Code	Resulting Hierarchy
// Add the 'then' hierarchy with a child 'permit' element **policyOne.append("then").append("permit");**	<configuration> <security> <policies> <policy> <from-zone-name>trust</from-zone-name> <to-zone-name>untrust</to-zone-name> <policy> <name>my-sec-policy</name> <match> <application>junos-ftp</application> <application>junos-ntp</application> <application>junos-ssh</application> <source-address>any</source-address> <destination-address>any</destination-address> </match> <then> <permit/> </then> </policy> </policy> </policies> </security> </configuration>

// Complete code and final configuration
 	
XMLBuilder builder = new XMLBuilder();
XML policy =
builder.createNewConfig("security","policies","policy");
policy.append("from-zone-name","trust");
policy.append("to-zone-name","untrust");
XML policyOne = policy.append("policy");
policyOne.append("name","my-sec-policy");
XML match = policyOne.append("match");
String[] applications =
{"junos-ftp","junos-ntp","junos-ssh"};
match.append("application", applications);
match.append("source-address","any");
match.append("destination-address","any");
policyOne.append("then").append("permit");
	<configuration>
	<security>
	<policies>
	<policy>
	<from-zone-name>trust</from-zone-name>
	<to-zone-name>untrust</to-zone-name>
	<policy>
	<name>my-sec-policy</name>
	<match>
	<application>junos-ftp</application>
	<application>junos-ntp</application>
	<application>junos-ssh</application>
	<source-address>any</source-address>
	<destination-address>any</destination-address>
	</match>
	<then>
	<permit/>
	</then>
	</policy>
	</policy>
	</policies>
	</security>
	</configuration>

Related Documentation

- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XMLBuilder on page 734

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- NETCONF Java Toolkit Overview on page 728

NETCONF Java Toolkit Program Files

- Creating NETCONF Java Toolkit Program Files on page 739
- Using the NETCONF Java Toolkit to Parse an RPC Reply on page 745
- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747

Creating NETCONF Java Toolkit Program Files

- Creating and Executing a NETCONF Java Toolkit Program File on page 739
- Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC on page 741

Creating and Executing a NETCONF Java Toolkit Program File

You can use the NETCONF Java toolkit to connect to a device, open a NETCONF session, and create and execute operational and configuration requests. After installing the NETCONF Java toolkit, which is described in "Downloading and Installing the NETCONF Java Toolkit" on page 729, the general procedure is:

1. Create a Java program that includes code to connect to a device and to execute the desired operations or requests.
2. Compile the Java code and execute the program.

These steps are reviewed in detail in the following sections:

- Creating a NETCONF Java Toolkit Program File on page 739
- Compiling and Executing a NETCONF Java Toolkit Program File on page 741

Creating a NETCONF Java Toolkit Program File

NETCONF Java toolkit programs have the same generic framework. To create a basic NETCONF Java toolkit program:

1. Create a **.java** file.

   The filename should be identical to the class name, excluding the extension. For example, the **ShowChassis** class is saved in the file **ShowChassis.java**.

2. Create the general boilerplate, which includes the code for import statements, the class declaration, and the Java method, **main()**.

```
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class ShowChassis {
  public static void main(String args[]) throws NetconfException,
```

```
        ParserConfigurationException, SAXException, IOException {

    }
}
```

3. Within **main()**, create a **Device** object and call the **connect()** method.

   This also creates a default NETCONF session with the NETCONF server over SSHv2.

   ```
   Device device = new Device("hostname", "username", "password", null);
   device.connect();
   ```

4. Execute operational and configuration requests by executing RPCs and performing NETCONF operations on the **Device** object.

   For example, to execute an operational request to retrieve chassis inventory information from the device, include the following line of code:

   ```
   XML reply = device.executeRPC(“get-chassis-inventory”);
   ```

5. Add code to print, parse, or take action on RPC replies received from the NETCONF server.

   The following line of code prints the RPC reply in XML format to standard output:

   ```
   System.out.println(reply.toString());
   ```

6. Close the device and release resources by calling the **close()** method on the **Device** object.

   ```
   device.close();
   ```

Sample NETCONF Java Toolkit Program

The following sample code illustrates a simple NETCONF Java toolkit program, **ShowChassis.java**, which connects to a device and executes an operational request for chassis inventory information:

```
/* ShowChassis.java */
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class ShowChassis {
  public static void main(String args[]) throws NetconfException,
      ParserConfigurationException, SAXException, IOException {

    //Create the device object and establish a NETCONF session
    Device device = new Device("hostname", "username", "password", null);
    device.connect();

    //Send RPC and receive RPC reply as XML
    XML rpc_reply = device.executeRPC("get-chassis-inventory");

    //Print the RPC reply and close the device
    System.out.println(rpc_reply.toString());
    device.close();
```


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```
    }
}
```

Compiling and Executing a NETCONF Java Toolkit Program File

To execute a NETCONF Java toolkit program, compile the code and run the program from the configuration management server. You need a Java compiler to compile the source code and to create an executable program.

1. Compile the Java source code to create a Java class file containing Java bytecode.

   For example, to compile the **ShowChassis.java** file using the javac compiler included in the Java Development Kit (JDK) from Oracle Corporation, you would issue the following command on the command line of the configuration management server:

   ```
   >javac ShowChassis.java
   ```

   This creates the **ShowChassis.class** file.

2. Execute the resulting program.

   ```
   >java ShowChassis
   ```

Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC

This NETCONF Java toolkit program executes an RPC to obtain operational information from a device, which is then printed to standard output. This example serves as an instructional example for creating and executing a basic NETCONF Java toolkit program.

- Requirements on page 741
- Overview on page 741
- Configuration on page 742
- Verification on page 743
- Troubleshooting on page 744

Requirements

- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

You can use the NETCONF Java toolkit to request operational information from a remote device. The following example illustrates how to create a NETCONF Java toolkit program to execute an operational request from the Junos XML API on a device running Junos OS. The example also explains how to compile the code, execute the program, and verify the results.

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Configuration

Creating the Java Program

Step-by-Step Procedure

To construct the Java program file that contains the code for the operational request:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **GetChassisInventory**.

2. Include the appropriate import statements, and the code for the class declaration and the Java method, **main()**.

```
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class GetChassisInventory {
  public static void main(String args[]) throws NetconfException,
        ParserConfigurationException, SAXException, IOException {
  }
}
```

3. Within **main()**, create a **Device** object and call the **connect()** method.

   This creates a default NETCONF session over SSHv2 with the NETCONF server. You must update the code with the appropriate arguments for connection to and authentication on your specific device.

```
Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null);
device.connect();
```

   Having established a **Device** object, you can perform NETCONF operations on the device. For a complete list of available methods corresponding to NETCONF operations, refer to the NETCONF Java toolkit Javadocs.

4. Call the **executeRPC()** method with the operational request RPC command as the argument.

   This example uses the Junos XML API **get-chassis-inventory** RPC. The reply, which is returned in XML, is stored in the **rpc_reply** variable.

```
XML rpc_reply = device.executeRPC("get-chassis-inventory");
```

5. Add code to take action on the RPC reply.

   The following code converts the NETCONF server's reply to a string and prints it to the screen:

```
System.out.println(rpc_reply.toString());
```

6. Close the device and release resources by calling the **close()** method on the device object.

```
device.close();
```


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Results The complete program is:

```
/*GetChassisInventory*/
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class GetChassisInventory {
  public static void main(String args[]) throws NetconfException,
       ParserConfigurationException, SAXException, IOException {

    Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
    device.connect();
    XML rpc_reply = device.executeRPC("get-chassis-inventory");
    System.out.println(rpc_reply.toString());
    device.close();
  }
}
```

Compiling and Running the Java Program

Step-by-Step Procedure You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **GetChassisInventory.java** file.

   ```
   >javac GetChassisInventory.java
   ```

2. Execute the resulting **GetChassisInventory** program.

   ```
   >java GetChassisInventory
   ```

Verification

Verifying Program Execution

Purpose Verify that the GetChassisInventory program runs correctly.

Action If the program executes successfully, it establishes a connection and a creates a NETCONF session with the specified device. The program sends the **get-chassis-inventory** RPC to the NETCONF server, and the server responds with the requested operational information enclosed in the **<rpc-reply>** tag element. The program prints the reply to standard out. Following is a sample RPC reply with some output omitted for brevity.

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
     xmlns:junos="http://xml.juniper.net/junos/11.2R1/junos">
<chassis-inventory xmlns="http://xml.juniper.net/junos/11.2R1/junos-chassis">
<chassis junos:style="inventory">
<name>Chassis</name>
<serial-number>12345</serial-number>
<description>M7i</description>
```

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```
<chassis-module>

...output omitted...

</chassis>
</chassis-inventory>
</rpc-reply>
```

Troubleshooting

- Troubleshooting NETCONF Exceptions on page 744

Troubleshooting NETCONF Exceptions

Problem A NETCONF exception occurs, and you see the following error message:

```
Exception in thread "main" net.juniper.netconf.NetconfException: There was a
problem while connecting to 10.10.1.1:830
        at net.juniper.netconf.Device.createNetconfSession(Device.java:344)
        at net.juniper.netconf.Device.connect(Device.java:225)
        at GetChassisInventory.main(GetChassisInventory.java:14)
```

NETCONF over SSH might not be enabled on the device where the NETCONF server resides, or it might be enabled on a different port.

Solution Ensure that you have enabled NETCONF over SSH on the device where the NETCONF server resides. Since the example program does not specify a specific port number in the **Device** arguments, the NETCONF session is established on the default NETCONF-over-SSH port, 830. To verify whether NETCONF over SSH is enabled on the default port for a device running Junos OS, enter the following operational mode command on the remote device:

```
user@host> show configuration system services

ftp;
netconf {
    ssh;
}
```

If the **netconf** configuration hierarchy is absent, issue the following statements in configuration mode to enable NETCONF over SSH on the default port:

```
[edit]
user@host# set system services netconf ssh
user@host# commit
```

If the **netconf** configuration hierarchy specifies a port other than the default port, include the new port number in the **Device** object constructor arguments. For example, the following device is configured for NETCONF over SSH on port 12345:

```
user@host> show configuration system services
netconf {
    ssh {
        port 12345;
    }
}
```


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To correct the connection issue, include the new port number in the **Device** arguments.

```
Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null, 12345);
```

Using the NETCONF Java Toolkit to Parse an RPC Reply

After submitting an operational or configuration request to the NETCONF server, the server responds with an RPC reply.

```
XML rpc_reply = device.executeRPC("get-chassis-inventory");
```

There are two approaches to parse an XML reply within the context of the NETCONF Java toolkit:

- Get the **org.w3c.dom.Document** object and use the native parsing methods available in the standard Java class libraries for a **Document** object.
- Use the **findValue(List *list*)** and **findNodes(List *list*)** methods available in the **net.juniper.netconf.XML** class on the XML object.

For the first approach, call the **getOwnerDocument()** method on the reply object to return the **Document** object.

```
Document doc = rpc_reply.getOwnerDocument();
```

You can then use methods in the standard Java libraries on the resulting **Document** object. This method is useful for the flexibility and options available in terms of the standard Java library methods.

For the second approach, the **net.juniper.netconf.XML** class contains the **findValue(List *list*)** and **findNodes(List *list*)** methods, which you can use to parse the XML object. You must include the "import java.util.*;" statement in your program code to use the functionality of the **List** interface or to create an **Arrays** object as shown in the corresponding examples.

Study the following RPC reply for the **get-interface-information** operational request:

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
      xmlns:junos="http://xml.juniper.net/junos/11.3I0/junos">
  <interface-information>
    <physical-interface>
      <name>ge-0/0/0</name>
      <admin-status>up</admin-status>
      <oper-status>up</oper-status>
      /* hierarchy truncated for brevity */
    </physical-interface>
    <physical-interface>
      <name>ge-0/0/1</name>
      /* hierarchy truncated for brevity */
    </physical-interface>
  </interface-information>
</rpc-reply>
```

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Parsing an RPC Reply Using findValue()

You can use the **findValue()** method to determine the value of a given element at any level of the hierarchy. In the example RPC reply for **get-interface-information**, suppose you want to determine the value of the **<admin-status>** element of the physical interface ge-0/0/0. Being aware of the format of the RPC reply, you can extract this information using the following code:

```
XML rpc_reply = device.executeRPC(“get-interface-information”);
List<String> list = Arrays.asList("interface-information","physical-interface",
                    "name~ge-0/0/0", “admin-status");
String admin_status = rpc_reply.findValue(list);
System.out.println(admin_status);
```

Note that the interface name uses a tilde (~) character to identify the particular element. Execution of this code prints “up” to standard output.

Parsing an RPC Reply Using findNodes()

You can use the **findNodes()** method to obtain the list of all nodes under a given hierarchy as **org.w3c.dom.Node** objects. The following code snippet obtains a list of all **<physical-interface>** nodes under the **<interface-information>** element in the hierarchy:

```
XML rpc_reply = device.executeRPC("get-interface-information");
List<String> list = Arrays.asList("interface-information","physical-interface");
List physical_interfaces_list = rpc_reply.findNodes(list);
```

However, you might want to extract a specific node. The following code returns the hierarchy for the ge-0/0/1 interface only:

```
XML rpc_reply = device.executeRPC("get-interface-information");
List<String> list = Arrays.asList("interface-information","physical-interface",
                    "name~ge-0/0/1");
List physical_interfaces_list = rpc_reply.findNodes(list);
Node ge001_node = (Node)physical_interfaces_list.get(0);
```

Example: Parsing an RPC Reply Using findNodes() (Detailed)

The following example takes this approach a step further and parses through the child nodes to extract and print the content for just the **<name>** elements. This sample code focuses on the portion of the program that parses the RPC reply and does not represent a complete program.

```
import java.util.Arrays;
import java.util.Iterator;
import java.util.List;
import org.w3c.dom.Node;
import org.w3c.dom.NodeList;

/* code omitted for brevity */

   XML rpc_reply = device.executeRPC("get-interface-information");

   // Obtain a list of list of ‘org.w3c.dom.Node’ objects
   List<String> list = Arrays.asList("interface-information","physical-interface");
   List physical_interfaces_list = rpc_reply.findNodes(list);

   // Print the value for each of the name elements:
   Iterator iter = physical_interfaces_list.iterator();
   while(iter.hasNext()) {
      Node node = (Node)iter.next();
      NodeList child_nodes_of_phy_interface = node.getChildNodes();
      // child_nodes_of_phy_interface contains nodes like <name> and <admin-status>
```


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```
        // Get each <name> node from the NodeList
        for (int i = 0; i < child_nodes_of_phy_interface.getLength(); i++) {
            Node child_node = child_nodes_of_phy_interface.item(i);
            if (child_node.getNodeType() != Node.ELEMENT_NODE){
                continue;
            }
            if (child_node.getNodeName().equals("name")) {
                // Print the text value of the <name> node
                System.out.println(child_node.getTextContent());
            }
            break;
        }
    }
```

Related Documentation

- Creating and Executing a NETCONF Java Toolkit Program File on page 739
- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Class: XML on page 735
- NETCONF Java Toolkit Class: XMLBuilder on page 734
- NETCONF Java Toolkit Overview on page 728

Troubleshooting Exception Errors in a NETCONF Java Toolkit Program

The following sections outline exception errors that you might encounter when executing a NETCONF Java toolkit program. These sections also present potential causes and solutions for each error.

- Troubleshooting Connection Errors: Socket Timed Out on page 747
- Troubleshooting Connection Errors: No Connection on page 748
- Troubleshooting Authentication Errors on page 748
- Troubleshooting NETCONF Session Errors on page 749

Troubleshooting Connection Errors: Socket Timed Out

Problem

Description:

A NETCONF exception occurs, and you see the following error message:

```
Exception in thread "main" net.juniper.netconf.NetconfException: The connect()
operation on the socket timed out.
        at net.juniper.netconf.Device.createNetconfSession(Device.java:344)
        at net.juniper.netconf.Device.connect(Device.java:225)
        at GetChassisInventory.main(GetChassisInventory.java:14)
```

Cause

Potential causes for the socket timed out error include:

- The device or interface to which you are connecting is down or unavailable.

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- The IP address or DNS name in the arguments for the **Device** object is incorrect.
- The connection timeout value was exceeded before the connection was established.

Solution Ensure that the device is up and running. Also verify that the IP address or DNS name is correct in the arguments of the **Device** constructor in your program code.

The default timeout value for connecting to a device is 5000 milliseconds. To set the timeout value to a larger interval to ensure that the program has sufficient time to establish the connection, call the **setTimeOut()** method on the device object. The following code sets the timeout interval to 10 seconds:

```
Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
device.setTimeOut(10000);
device.connect();
```

Troubleshooting Connection Errors: No Connection

Problem **Description:**

An IllegalStateException exception occurs, and you see the following error message:

```
Exception in thread "main" java.lang.IllegalStateException: Cannot execute RPC,
you need to establish a connection first.
        at net.juniper.netconf.Device.executeRPC(Device.java:498)
        at GetChassisInventoryRun.main(GetChassisInventoryRun.java:15)
```

Cause An SSHv2 connection or NETCONF session was not established with the remote device.

Solution Call the **connect()** method on the device object to establish an SSHv2 connection and a default NETCONF session with the device on which the NETCONF server runs. Once the connection and session are established, RPC execution should be successful.

Troubleshooting Authentication Errors

Problem **Description:**

A NETCONF exception occurs, and you see the following error message:

```
Exception in thread "main" net.juniper.netconf.NetconfException: Authentication
failed.
        at net.juniper.netconf.Device.createNetconfSession(Device.java:358)
        at net.juniper.netconf.Device.connect(Device.java:225)
        at GetChassisInventory.main(GetChassisInventory.java:14)

<!-- or -->
Could not connect to device:Authentication failed.
```

Cause An error message for failed authentication could have several possible causes, including the following:

- The host or authentication details passed as arguments to the **Device** constructor are incorrectly entered in the program code.

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- The arguments for the **Device** object are correct, but there is no corresponding user account created on the device to which you are connecting.

Solution If there is no user account on the device to which you are connecting, create the account with the appropriate authentication. For more information about configuring user accounts on a device running Junos OS, see the *Junos OS System Basics Configuration Guide*.

If the user account exists on the remote device, but the arguments for the **Device** constructor are entered incorrectly in the program code, correct the arguments and recompile the program.

Troubleshooting NETCONF Session Errors

Problem **Description:**

A NETCONF exception occurs, and you see the following error message:

```
Exception in thread "main" net.juniper.netconf.NetconfException: There was a
problem while connecting to 10.10.1.1:830
        at net.juniper.netconf.Device.createNetconfSession(Device.java:344)
        at net.juniper.netconf.Device.connect(Device.java:225)
        at GetChassisInventory.main(GetChassisInventory.java:14)
```

Cause NETCONF over SSH might not be enabled on the device where the NETCONF server resides, or it might be enabled on a different port.

Solution Ensure that you have enabled NETCONF over SSH on the device where the NETCONF server resides. If your NETCONF Java toolkit program does not specify a specific port number in the **Device** argurments, the NETCONF session is established on the default NETCONF-over-SSH port, 830. To verify whether NETCONF over SSH is enabled on the default port for a device running Junos OS, enter the following operational mode command on the remote device:

```
user@host> show configuration system services

ftp;
netconf {
    ssh;
}
```

If the **netconf** configuration hierarchy is absent, issue the following statements in configuration mode to enable NETCONF over SSH on the default port:

```
[edit]
user@host# set system services netconf ssh
user@host# commit
```

If the **netconf** configuration hierarchy specifies a port other than the default port, you should include the new port number in the **Device** object constructor arguments. For example, the following device is configured for NETCONF over SSH on port 12345:

```
user@host> show configuration system services
```

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```
netconf {
    ssh {
        port 12345;
    }
}
```

To correct the connection issue, include the new port number in the **Device** arguments.

```
Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null, 12345);
```

Related Documentation

- Creating and Executing a NETCONF Java Toolkit Program File on page 739
- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Class: NetconfSession on page 733
- NETCONF Java Toolkit Overview on page 728

Performing Operational and Configuration Tasks

- Using the NETCONF Java Toolkit to Perform Operational Tasks on page 750
- Using the NETCONF Java Toolkit to Perform Configuration Tasks on page 755

Using the NETCONF Java Toolkit to Perform Operational Tasks

- Using Device Object Methods to Execute RPCs and Operational Commands on page 750
- Example: Using the NETCONF Java Toolkit to Execute CLI Commands on page 752

Using Device Object Methods to Execute RPCs and Operational Commands

The NETCONF Java toolkit **Device** object has methods to request information from and perform operational tasks on remote devices. When appropriate, the methods are overloaded to take a number of different formats.

- Executing RPCs on page 751
- Executing Operational Mode Commands on page 751

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Executing RPCs

To execute a remote procedure call (RPC), call the **executeRPC()** method on the **Device** object. The **executeRPC()** method is overloaded to accept a **String** object, a **net.juniper.netconf.XML** object, or an **org.w3c.dom.Document** object as the argument. The RPC is processed by the NETCONF server, which returns the RPC reply as an XML object.

The method syntax is:

```
public XML executeRPC (String rpcContent)
public XML executeRPC (net.juniper.netconf.XML rpc)
public XML executeRPC (org.w3c.dom.Document rpcDoc)
```

The following code snippet executes the Junos XML API **get-chassis-inventory** RPC using a string argument. The **get-chassis-inventory** RPC is equivalent to the **show chassis hardware** operational mode command in the Junos OS command-line interface (CLI).

```
Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
device.connect();
try {
  XML rpc_reply = device.executeRPC("get-chassis-inventory");
  System.out.println(rpc_reply.toString());
}
catch (Exception e) {
  System.out.println("exception: " + e.getMessage());
  // additional processing for exception
}
device.close();
```

Executing Operational Mode Commands

To execute an operational mode command to request information from or perform operational tasks on a device running Junos OS, call the **runCliCommand()** method on the **Device** object. The **runCliCommand()** method sends a Junos OS operational mode command to the NETCONF server on the remote device. The argument is a string representing the operational mode command that you would enter in the Junos OS CLI. The RPC is processed by the NETCONF server, which returns the RPC reply. Starting with Junos OS Release 11.4, the return string is the same ASCII-formatted output that you see in the Junos OS CLI. For devices running earlier versions of Junos OS, the return string contains Junos XML tag elements.

The method syntax is:

```
public String runCLICommand (String command)
```

The following code snippet sends the CLI operational mode command **show chassis hardware** to the NETCONF server on a device running Junos OS:

```
Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
device.connect();
try {
    cli_reply = device.runCliCommand("show chassis hardware");
    System.out.println(cli_reply);
  }
catch (Exception e) {
  System.out.println("exception: " + e.getMessage());
  // additional processing for exception
```

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```
}
device.close();
```

Example: Using the NETCONF Java Toolkit to Execute CLI Commands

This NETCONF Java toolkit program demonstrates the **runCLICommand()** method, which sends the specified Junos OS operational mode command to the NETCONF server to request information from or perform operational tasks on a device running Junos OS.

- Requirements on page 752
- Overview on page 752
- Configuration on page 752
- Verification on page 753

Requirements

- Routing, switching, or security device running Junos OS.
- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

The NETCONF Java toolkit **Device** class contains the **runCliCommand()** method, which takes a Junos OS CLI operational mode command and converts it to an equivalent RPC in XML that can be processed by the NETCONF server. The **runCLICommand()** method takes as an argument the string representing an operational mode command that you enter in the Junos OS CLI.

The following example executes the **show chassis hardware** command on a device running Junos OS. The return value for the method is a string. Starting with Junos OS Release 11.4, the return string is the same ASCII-formatted output that you see in the Junos OS CLI. For devices running earlier versions of Junos OS, the return string contains Junos XML tag elements.

Configuration

Creating the Java program

Step-by-Step Procedure

To construct the Java program file:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **ExecuteCLICommand**.

2. Add the code to the file and update the environment-specific variables such as the remote host IP address, username, password, and **<rpc-reply>** tag elements.

   The complete Java code for the **ExecuteCLICommand.java** program is presented here.

   ```
   /*ExecuteCLICommand*/
   import java.io.IOException;
   ```


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```
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class ExecuteCLICommand {
  public static void main(String args[]) throws NetconfException,
       ParserConfigurationException, SAXException, IOException {

    String cli = "show chassis hardware";

    Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
    device.connect();
    try {
      String cli_reply = device.runCliCommand(cli);
      System.out.println(cli_reply);
    }
    catch (Exception e) {
      System.out.println("exception: " + e.getMessage());
      // additional processing for exception
    }
    device.close();
  }
}
```

Compiling and Running the Java Program

Step-by-Step Procedure You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **ExecuteCLICommand.java** file.

   ```
   >javac ExecuteCLICommand.java
   ```

2. Execute the resulting **ExecuteCLICommand** program.

   ```
   >java ExecuteCLICommand
   ```

Verification

Verifying Program Execution

Purpose Verify that the **ExecuteCLICommand** program runs correctly.

Action If the program executes successfully, it establishes a connection and creates a NETCONF session with the specified device. The program converts the Junos OS CLI operational mode command **show chassis hardware** to an RPC and sends the RPC to the NETCONF server. The server responds with the requested operational information enclosed in the

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<rpc-reply> tag element The program parses the RPC reply and prints the resulting chassis inventory. The following sample output is from a Juniper Networks m7i router.

On a device running Junos OS Release 11.4 or later release, the output is in ASCII-formatted text, which is identical to the output in the CLI.

```
Hardware inventory:
Item             Version  Part number  Serial number     Description
Chassis                                30010             M7I
Midplane         REV 03   710-008761   CB3874            M7i Midplane
Power Supply 0   Rev 04   740-008537   PG10715           AC Power Supply
Routing Engine   REV 07   740-009459   1000445584        RE-5.0
CFEB             REV 07   750-010464   CM4612            Internet Processor II
FPC 0                                                   E-FPC
  PIC 0          REV 06   750-002971   CB0032            4x OC-3 SONET, MM
  PIC 1          REV 02   750-002982   HS2878            1x Tunnel
  PIC 2          REV 08   750-005724   CL9084            2x OC-3 ATM-II IQ, MM
  PIC 3          REV 12   750-012838   DJ1107            4x 1GE(LAN), IQ2
    Xcvr 0       REV 01   740-013111   7303405           SFP-T
    Xcvr 1       REV 01   740-013111   7303391           SFP-T
    Xcvr 2       REV 01   740-013111   7303350           SFP-T
    Xcvr 3       REV 01   740-013111   7303420           SFP-T
FPC 1                                                   E-FPC
  PIC 2          REV 07   750-009487   CL5745            ASP - Integrated
(Layer-2-3)
  PIC 3          REV 07   750-009098   CB7256            2x F/E, 100 BASE-TX
Fan Tray                                                Rear Fan Tray
```

On a device running Junos OS Release 11.3 or earlier release, the output contains Junos XML tag elements.

```
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/11.2R1/junos">
    <chassis-inventory xmlns="http://xml.juniper.net/junos/11.2R1/junos-chassis">

        <chassis junos:style="inventory">
            <name>Chassis</name>
            <serial-number>30010</serial-number>
            <description>M7I</description>
            <chassis-module>
                <name>Midplane</name>
                <version>REV 03</version>
                <part-number>710-008761</part-number>
                <serial-number>CB3874</serial-number>
                <description>M7i Midplane</description>
                <model-number>CHAS-MP-M7i-1GE-S</model-number>
            </chassis-module>

            /* Output omitted for brevity */

        </chassis>
    </chassis-inventory>
</rpc-reply>
```

Related Documentation

- Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC on page 741
- Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration on page 757

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- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747
- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Overview on page 728

Using the NETCONF Java Toolkit to Perform Configuration Tasks

- Using Device Object Methods to Load Configuration Changes on page 755
- Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration on page 757
- Example: Using the NETCONF Java Toolkit to Load Set Configuration Commands on page 761

Using Device Object Methods to Load Configuration Changes

The NETCONF Java toolkit **Device** object has methods to help you configure remote devices. When appropriate, the methods are overloaded to take a number of different formats.

To load configuration data on a remote device, the **Device** object has several methods that enable you to define the configuration data as a set of Junos OS configuration mode commands, formatted ASCII text, or Junos XML tag elements. You can supply the configuration data in the program code, or you can reference data files that include the desired configuration changes.

To configure a private copy of the candidate configuration, call the **openConfiguration("private")** method with the string argument "private" on the device object before loading your configuration changes. This is equivalent to the **configure private** command in the Junos OS CLI. If you omit the call to the **openConfiguration("private")** method, your configuration changes are loaded into the global copy of the candidate configuration.

The method used to load the configuration data depends on the source and the format of the data. In the following methods, the string argument ***loadType*** has a value of either **merge** or **replace**, which performs the equivalent of the configuration mode commands **load merge** or **load replace** on a device running Junos OS.

- *Junos OS configuration mode commands*—The following methods load configuration data as a set of Junos OS configuration mode commands. These methods are only supported on devices running Junos OS Release 11.4 or a later release. Junos OS executes the configuration instructions line by line. For each element, you can specify the complete statement path in the command, or you can use navigation commands, such as **edit**, to move around the configuration hierarchy as you do in CLI configuration mode.
  - **loadSetConfiguration(String *setCommands*)**—Specify the configuration data in the program code, either as a method argument or as a variable passed to the method.
  - **loadSetFile(String *filePath*)**—Load the configuration data from the file specified by *filePath*.

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- *Formatted ASCII text*—The following methods load configuration data as formatted ASCII text. Use the standard Junos OS CLI notations—the newline character, tabs, spaces, braces, and square brackets—to indicate the hierarchical relationships between configuration statements.
  - **loadTextConfiguration(String *textConfiguration*, String *loadType*)**—Specify the configuration data in the program code, either as a method argument or as a variable passed to the method.
  - **loadTextFile(String *filePath*, String *loadType*)**—Load the configuration data from the file specified by *filePath*.
- *Junos XML tag elements*—The following methods load configuration data as Junos XML tag elements. Include the tag elements representing all levels of the configuration hierarchy under the root, the **<configuration>** tag element, down to each new or changed element.
  - **loadXMLConfiguration(String *XMLConfiguration*, String *loadType*)**—Specify the configuration data in the program code as a **net.juniper.netconf.XML** object, which is passed to the method.
  - **loadXMLFile(String *filePath*, String *loadType*)**—Load the configuration data from the file specified by *filePath*.

The following code snippet merges the **ftp** statement into the candidate configuration at the **[edit system services]** hierarchy level. The Java statement for each type of load configuration method is shown. When loading from a file, the file should contain the appropriate hierarchy in the desired format.

```
/*
r1-config-set.txt:
set system services ftp

r1-config-text.txt:
system {
  services {
    ftp;
  }
}

r1-config-xml.txt:
<system>
  <services>
    <ftp/>
  </services>
</system>
*/

String config_file_set =  "configs/r1-config-set.txt"
String config_file_text = "configs/r1-config-text.txt"
String config_file_xml = "configs/r1-config-xml.txt"

XMLBuilder builder = new XMLBuilder();
XML ftp_config = builder.createNewConfig("system", "services", "ftp");
```


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```
Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
device.connect();

//open a private copy of the candidate configuration
device.openConfiguration("private");

// load  configuration data as Junos OS configuration mode commands
device.loadSetConfiguration("set system services ftp");
device.loadSetFile(config_file_set);

// load configuration data as formatted ASCII text
device.loadTextConfiguration("system { services { ftp; } }", "merge");
device.loadTextFile(config_file_text, "merge");

// load configuration data as Junos XML tag elements
device.loadXMLConfiguration(ftp_config.toString(), "merge");
device.loadXMLFile(config_file_xml, "merge");

device.commit();
device.close();
```

Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration

The following example NETCONF Java toolkit program constructs a configuration hierarchy, which is then merged with the candidate configuration on the specified device. The resulting configuration is then committed. The sample configuration hierarchy is for a device running Junos OS.

- Requirements on page 757
- Overview on page 757
- Configuration on page 758
- Verification on page 760
- Troubleshooting on page 760

Requirements

- Routing, switching, or security device running Junos OS.
- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

The following example performs a **load merge** operation to update the candidate configuration on a device running Junos OS and then commits the new configuration. The XML hierarchy that will be added into the configuration is constructed with the **XMLBuilder** object and stored in the **ftp_config** variable. Alternatively, you can load configuration data as text and, for devices running Junos OS Release 11.4 or a later release, as a set of Junos OS configuration mode commands.

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The new configuration hierarchy, which enables FTP service on the device, is:

```
<configuration>
  <system>
    <services>
      <ftp/>
    </services>
  </system>
</configuration>
```

The program code creates a new **Device** object and calls the **connect()** method. This establishes an SSHv2 connection and a default NETCONF session with the device on which the NETCONF server runs.

To prevent conflicts with other users who might simultaneously edit the candidate configuration, the code calls the **lockConfig()** method on the device object to lock the configuration. If the lock fails, the method generates an error message, and the program exits. If the lock is successful, the **loadXMLConfiguration(ftp_config.toString(), "merge")** method loads the new configuration hierarchy into the candidate configuration using the **merge** option. Notice that, although the configuration hierarchy is initially constructed as XML, you must convert it to a string before passing it as an argument to the **loadXMLConfiguration()** method.

Once the new configuration hierarchy is merged with the candidate configuration, the program attempts to commit the configuration. If the commit operation is unsuccessful, the program prints the associated error message. The program then unlocks the configuration and closes the NETCONF session and device connection.

NOTE: For more information about the **merge** and **replace** options for loading configuration hierarchies and statements into the candidate configuration, see the *CLI User Guide*.

Configuration

Creating the Java Program

Step-by-Step Procedure

To construct the Java program file that contains the code for the configuration changes and requests:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **EditConfig**.

2. Add the code to the file and update the environment-specific variables such as the remote host IP address, username, and password.

   The complete Java code for the EditConfig program is presented here.

```
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.CommitException;
import net.juniper.netconf.Device;
import net.juniper.netconf.LoadException;
```


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```
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import net.juniper.netconf.XMLBuilder;
import org.xml.sax.SAXException;

public class EditConfig {
  public static void main(String[] args) throws LoadException, IOException,
      NetconfException, ParserConfigurationException, SAXException {

    /*Build the following XML hierarchy to add to the configuration:
    * <configuration>
    *    <system>
    *       <services>
    *          <ftp/>
    *       </services>
    *    </system>
    * </configuration>
    */

    XMLBuilder builder = new XMLBuilder();
    XML ftp_config = builder.createNewConfig("system", "services", "ftp");

    //Create the device
    Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
    device.connect();

    //Lock the configuration
    boolean isLocked = device.lockConfig();
    if(!isLocked) {
      System.out.println("Could not lock configuration. Exit now.");
      return;
    }

    //Load and commit the configuration
    try {
      device.loadXMLConfiguration(ftp_config.toString(), "merge");
      device.commit();
    } catch(LoadException e) {
      System.out.println(e.getMessage());
      return;
    } catch(CommitException e) {
      System.out.println(e.getMessage());
      return;
    }

    //Unlock the configuration and close the device
    device.unlockConfig();
    device.close();
  }
}
```

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Compiling and Running the Java Program

Step-by-Step Procedure

You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **EditConfig.java** file.

   >javac EditConfig.java

2. Execute the resulting **EditConfig** program.

   >java EditConfig

Verification

Verifying Program Execution

Purpose

Verify that the **EditConfig** program runs correctly.

Action

If the program executes successfully, it establishes a connection and a creates a NETCONF session with the specified device. The program merges the new hierarchy with the candidate configuration on the device and commits the configuration.

You can verify that the configuration was correctly merged and committed by viewing the resulting configuration on the remote device. The **ftp** statement should now be in the active configuration. On a device running Junos OS, enter the following operational mode command to view the **[edit system services]** hierarchy:

```
user@host> show configuration system services
ftp;
netconf {
    ssh;
}
```

Troubleshooting

- Troubleshooting Error Messages on page 760

Troubleshooting Error Messages

Problem

The following error message is printed to the display:

```
Could not lock configuration. Exit now.
```

Solution

Another user currently has a lock on the candidate configuration. Wait until the lock is released and execute the program.

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Example: Using the NETCONF Java Toolkit to Load Set Configuration Commands

This NETCONF Java toolkit program demonstrates the **loadSetConfiguration()** method, which updates the configuration using a set of Junos OS configuration mode commands.

- Requirements on page 761
- Overview on page 761
- Configuration on page 762
- Verification on page 763

Requirements

- Routing, switching, or security device running Junos OS Release 11.4 or later.
- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

The **Device** class contains the **loadSetConfiguration()** and **loadSetFile()** methods, which load configuration data as a set of Junos OS configuration mode commands on devices running Junos OS Release 11.4 or a later release. For each configuration element, you can specify the complete statement path in the command, or you can use navigation commands , such as **edit**, to move around the configuration hierarchy as you do in CLI configuration mode. The NETCONF Java toolkit converts the command set to the equivalent RPC in XML that can be processed by the NETCONF server on devices running Junos OS. Junos OS executes the configuration instructions line by line.

The method syntax is:

public void **loadSetConfiguration** (String *setCommands*)
public void **loadSetFile** (String *filePath*)

The **loadSetConfiguration()** method takes as an argument the configuration command string that you would enter in Junos OS CLI configuration mode. For example, to add the **ftp** statement at the **[edit system services]** hierarchy level, you use the **set system services ftp** command. The **loadSetFile()** method takes as an argument the path of the file containing the set of configuration commands.

You can also use both methods to load multiple commands. To load multiple commands using the **loadSetConfiguration()** method, you can either list the commands as a single string and separate them with the **\n** newline sequence, or you can execute the method separately for each command. To load multiple commands using the **loadSetFile()** method, place each command on a separate line in the file.

NOTE: When using the **loadSetConfiguration()** method with navigation commands, you should list the commands as a single string and separate them with the **\n** newline sequence. You cannot call the **loadSetConfiguration()** method with a single navigation command such as **up**.

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The program in this example loads two configuration commands, which merge two statements into the candidate configuration on a device running Junos OS Release 11.4. The first command, **set system services ftp**, adds the **ftp** statement at the **[edit system services]** hierarchy level. The second command, **set interfaces ge-0/0/0 disable**, adds the **disable** statement at the **[edit interfaces ge-0/0/0]** hierarchy level. The relevant statements in the program code are:

```
String system_config = "set system services ftp";
String interfaces_config = "set interfaces ge-0/0/0 disable";

device.loadSetConfiguration(system_config);
device.loadSetConfiguration(interfaces_config);
```

Configuration

Creating the Java Program

Step-by-Step Procedure

To construct the Java program file:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **LoadSetConfig**.

2. Add the code to the file and update the environment-specific variables such as the remote host IP address, username, password, and **<rpc-reply>** tag elements.

   The complete Java code for the **LoadSetConfig.java** program is presented here.

   If you load the set of commands from a file, create a file containing the commands, and replace the two **loadSetConfiguration()** method calls with a call to the **loadSetFile()** method.

```
/*LoadSetConfig*/
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.CommitException;
import net.juniper.netconf.LoadException;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class LoadSetConfig {
  public static void main(String args[]) throws NetconfException,
       ParserConfigurationException, SAXException, IOException {

    String system_config = "set system services ftp";
    String interfaces_config = "set interfaces ge-0/0/0 disable";

    Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);

    try {
      device.connect();
      System.out.println("Connection successful.");

      if (device.lockConfig()) {
```


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```
            System.out.println("Configuration successfully locked.");
            try {
              System.out.println("Updating configuration.");
              device.loadSetConfiguration(system_config);
              device.loadSetConfiguration(interfaces_config);
              System.out.println("Committing configuration.");
              device.commit();
            }
            catch (LoadException e) {
               System.out.println("LoadException occurred: " + e.getMessage());
            }
            catch (CommitException e) {
               System.out.println("CommitException occurred: " + e.getMessage());
            }
            device.unlockConfig();
            device.close();
          }
          else {
            System.out.println("Error - cannot lock configuration");
          }
        }
        catch (NetconfException e) {
          System.out.println("Could not connect to device: " + e.getMessage());
        }
      }
    }
```

Compiling and Running the Java Program

Step-by-Step Procedure

You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **LoadSetConfig.java** file.

   ```
   >javac LoadSetConfig.java
   ```

2. Execute the resulting **LoadSetConfig** program.

   ```
   >java LoadSetConfig
   ```

Verification

To confirm that the program is working properly:

- Verifying Program Execution on page 763
- Verifying the Configuration Changes on page 764
- Verifying the Commit on page 764

Verifying Program Execution

Purpose

Verify that the **LoadSetConfig** program runs correctly.

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Action If the program executes successfully, it establishes a connection and creates a NETCONF session with the specified device. The program merges the new statements with the candidate configuration on the device and commits the configuration.

```
>java LoadSetConfig
Connection successful.
Configuration successfully locked.
Updating configuration.
Committing configuration.
```

Verifying the Configuration Changes

Purpose You can verify that the configuration was correctly merged and committed by viewing the resulting configuration on the remote device. The **ftp** and the **disable** statements should now be in the active configuration. On a device running Junos OS, issue the following operational mode commands to view the **[edit system services]** and **[edit interfaces]** hierarchy levels:

Action

```
admin@host> show configuration system services
ftp;
netconf {
    ssh;
}
```

```
admin@host> show configuration interfaces
ge-0/0/0 {
    disable;
}
```

Verifying the Commit

Purpose Additionally, you can review the commit log to verify that the commit was successful. On a device running Junos OS, issue the **show system commit** operational mode command to view the commit log. In this example, the log confirms that the user **admin** committed the candidate configuration in a NETCONF session at the given date and time.

Action Issue the **show system commit** operational mode command and review the commit log.

```
admin@host> show system commit
0   2011-09-02 14:16:44 PDT by admin via netconf
1   2011-07-08 14:33:46 PDT by root via other
```

Related Documentation

- Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC on page 741
- Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration on page 757
- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747
- NETCONF Java Toolkit Class: Device on page 731
- NETCONF Java Toolkit Overview on page 728

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NETCONF Java Toolkit Examples

- Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC on page 765
- Example: Using the NETCONF Java Toolkit to Print Component Temperatures on page 769

Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC

This NETCONF Java toolkit program executes an RPC to obtain operational information from a device, which is then printed to standard output. This example serves as an instructional example for creating and executing a basic NETCONF Java toolkit program.

- Requirements on page 765
- Overview on page 765
- Configuration on page 765
- Verification on page 767
- Troubleshooting on page 767

Requirements

- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

You can use the NETCONF Java toolkit to request operational information from a remote device. The following example illustrates how to create a NETCONF Java toolkit program to execute an operational request from the Junos XML API on a device running Junos OS. The example also explains how to compile the code, execute the program, and verify the results.

Configuration

Creating the Java Program

Step-by-Step Procedure

To construct the Java program file that contains the code for the operational request:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **GetChassisInventory**.

2. Include the appropriate import statements, and the code for the class declaration and the Java method, **main( )**.

```
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
```

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```
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class GetChassisInventory {
  public static void main(String args[]) throws NetconfException,
      ParserConfigurationException, SAXException, IOException {
  }
}
```

3. Within **main()**, create a **Device** object and call the **connect()** method.

   This creates a default NETCONF session over SSHv2 with the NETCONF server. You must update the code with the appropriate arguments for connection to and authentication on your specific device.

   ```
   Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null);
   device.connect();
   ```

   Having established a **Device** object, you can perform NETCONF operations on the device. For a complete list of available methods corresponding to NETCONF operations, refer to the NETCONF Java toolkit Javadocs.

4. Call the **executeRPC()** method with the operational request RPC command as the argument.

   This example uses the Junos XML API **get-chassis-inventory** RPC. The reply, which is returned in XML, is stored in the **rpc_reply** variable.

   ```
   XML rpc_reply = device.executeRPC(“get-chassis-inventory”);
   ```

5. Add code to take action on the RPC reply.

   The following code converts the NETCONF server’s reply to a string and prints it to the screen:

   ```
   System.out.println(rpc_reply.toString());
   ```

6. Close the device and release resources by calling the **close()** method on the device object.

   ```
   device.close();
   ```

Results The complete program is:

```
/*GetChassisInventory*/
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.Device;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import org.xml.sax.SAXException;

public class GetChassisInventory {
  public static void main(String args[]) throws NetconfException,
      ParserConfigurationException, SAXException, IOException {

    Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
    device.connect();
    XML rpc_reply = device.executeRPC("get-chassis-inventory");
```


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```
        System.out.println(rpc_reply.toString());
        device.close();
      }
    }
```

Compiling and Running the Java Program

Step-by-Step Procedure

You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **GetChassisInventory.java** file.

   ```
   >javac GetChassisInventory.java
   ```

2. Execute the resulting **GetChassisInventory** program.

   ```
   >java GetChassisInventory
   ```

Verification

Verifying Program Execution

Purpose Verify that the GetChassisInventory program runs correctly.

Action If the program executes successfully, it establishes a connection and a creates a NETCONF session with the specified device. The program sends the **get-chassis-inventory** RPC to the NETCONF server, and the server responds with the requested operational information enclosed in the **<rpc-reply>** tag element. The program prints the reply to standard out. Following is a sample RPC reply with some output omitted for brevity.

```
<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
     xmlns:junos="http://xml.juniper.net/junos/11.2R1/junos">
<chassis-inventory xmlns="http://xml.juniper.net/junos/11.2R1/junos-chassis">
<chassis junos:style="inventory">
<name>Chassis</name>
<serial-number>12345</serial-number>
<description>M7i</description>
<chassis-module>

...output omitted...

</chassis>
</chassis-inventory>
</rpc-reply>
```

Troubleshooting

- Troubleshooting NETCONF Exceptions on page 767

Troubleshooting NETCONF Exceptions

Problem A NETCONF exception occurs, and you see the following error message:

```
Exception in thread "main" net.juniper.netconf.NetconfException: There was a
problem while connecting to 10.10.1.1:830
```

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```
        at net.juniper.netconf.Device.createNetconfSession(Device.java:344)
        at net.juniper.netconf.Device.connect(Device.java:225)
        at GetChassisInventory.main(GetChassisInventory.java:14)
```

NETCONF over SSH might not be enabled on the device where the NETCONF server resides, or it might be enabled on a different port.

Solution Ensure that you have enabled NETCONF over SSH on the device where the NETCONF server resides. Since the example program does not specify a specific port number in the **Device** arguments, the NETCONF session is established on the default NETCONF-over-SSH port, 830. To verify whether NETCONF over SSH is enabled on the default port for a device running Junos OS, enter the following operational mode command on the remote device:

```
user@host> show configuration system services

ftp;
netconf {
    ssh;
}
```

If the **netconf** configuration hierarchy is absent, issue the following statements in configuration mode to enable NETCONF over SSH on the default port:

```
[edit]
user@host# set system services netconf ssh
user@host# commit
```

If the **netconf** configuration hierarchy specifies a port other than the default port, include the new port number in the **Device** object constructor arguments. For example, the following device is configured for NETCONF over SSH on port 12345:

```
user@host> show configuration system services
netconf {
    ssh {
        port 12345;
    }
}
```

To correct the connection issue, include the new port number in the **Device** arguments.

```
Device device = new Device("10.10.1.1", "admin", "PaSsWoRd", null, 12345);
```

Related Documentation

- Example: Using the NETCONF Java Toolkit to Execute CLI Commands on page 752
- Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration on page 757
- Example: Using the NETCONF Java Toolkit to Load Set Configuration Commands on page 761
- Example: Using the NETCONF Java Toolkit to Print Component Temperatures on page 769
- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747
- NETCONF Java Toolkit Overview on page 728

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Example: Using the NETCONF Java Toolkit to Print Component Temperatures

This NETCONF Java toolkit program prints the name and corresponding temperature of components on a device running Junos OS.

- Requirements on page 769
- Overview on page 769
- Configuration on page 770
- Verification on page 771

Requirements

- Routing, switching, or security device running Junos OS.
- NETCONF Java toolkit is installed on the configuration management server.
- Client application can log in to the device where the NETCONF server resides.
- NETCONF service over SSH is enabled on the device where the NETCONF server resides.

Overview

The following example executes the Junos XML API **get-environment-information** RPC, which is the equivalent of the **show chassis environment** operational mode command on a device running Junos OS. The program parses the RPC reply, and for all components that list a temperature, the program prints the component name and corresponding temperature.

The RPC reply format for the **get-environment-information** RPC request is:

```
<rpc-reply>
  <environment-information>
    <environment-item>
      <name>item-name</name>
      ...
      <temperature>temperature</temperature>
    </environment-item>
    <environment-item>
      <name>item-name2</name>
      ...
      <temperature>temperature</temperature>
    </environment-item>
      ...
  </environment-information>
</rpc-reply>
```

To parse the reply, the program uses the **findNodes()** method to return a list of **org.w3c.dom.Node** objects. For each **<environment-item>** node, the program obtains a list of child nodes. If a temperature element is present in the child node list, the program prints the name and temperature of that environment item.

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Configuration

Creating the Java program

Step-by-Step Procedure

To construct the Java program file:

1. Give the file a descriptive name.

   The filename must be the same as the class name. For this example, the file and class are named **ShowTemps**.

2. Add the code to the file and update the environment-specific variables such as the remote host IP address, username, password, and **<rpc-reply>** tag elements.

   The complete Java code for the **ShowTemps.java** program is presented here.

```
import java.io.IOException;
import java.util.Arrays;
import java.util.Iterator;
import java.util.List;
import javax.xml.parsers.ParserConfigurationException;
import net.juniper.netconf.CommitException;
import net.juniper.netconf.Device;
import net.juniper.netconf.LoadException;
import net.juniper.netconf.NetconfException;
import net.juniper.netconf.XML;
import net.juniper.netconf.XMLBuilder;
import org.xml.sax.SAXException;
import org.w3c.dom.Node;
import org.w3c.dom.NodeList;

public class showTemps {
   public static void main(String[] args) throws LoadException, IOException,
        NetconfException, ParserConfigurationException, SAXException {

      String name="", temp="";

      //Create the device
      Device device = new Device("10.10.1.1","admin","PaSsWoRd",null);
      device.connect();

      //Call executeRPC(String rpc) to send RPC and receive RPC reply
      XML rpc_reply = device.executeRPC("get-environment-information");

      // Parse reply and only print items that have a temperature element
      List<String> list =
              Arrays.asList("environment-information","environment-item");
      List itemlist = rpc_reply.findNodes(list);
      Iterator iter = itemlist.iterator();

      while (iter.hasNext()) {
         Node item_node = (Node) iter.next();
         NodeList child_nodes = item_node.getChildNodes();
         // child_nodes contains nodes like <name> and <temperature>

         for (int i = 0; i < child_nodes.getLength(); i++) {
```


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```
                Node child = child_nodes.item(i);
                if (child.getNodeType() == Node.ELEMENT_NODE) {

                  if (child.getNodeName().equals("name"))
                    // Capture the text value in <name> node
                    name = child.getTextContent();
                  if (child.getNodeName().equals("temperature")) {
                    // Capture the text value in <temperature> node
                    temp = child.getTextContent();
                    System.out.println(name + ": " + temp);
                  }
                }
              }
            }

            device.close();
          }
        }
```

Compiling and Running the Java Program

Step-by-Step Procedure

You need a Java compiler to compile the source code and to create an executable program.

To compile the code and run the program on the configuration management server:

1. Compile the **ShowTemps.java** file.

   ```
   >javac ShowTemps.java
   ```

2. Execute the resulting **ShowTemps** program.

   ```
   >java ShowTemps
   ```

Verification

Verifying the Results

Purpose

Verify that the **ShowTemps** program runs correctly.

Action

If the program executes successfully, it establishes a connection and a creates a NETCONF session with the specified device. The program then executes the Junos XML API **get-environment-information** RPC, parses the RPC reply, and prints all environment items that contain a child node **<temperature>**.

The following sample output is from a Juniper Networks m7i router:

```
Intake: 25 degrees C / 77 degrees F
FPC 0: 26 degrees C / 78 degrees F
Power Supplies: 28 degrees C / 82 degrees F
CFEB Intake: 22 degrees C / 71 degrees F
CFEB Exhaust: 30 degrees C / 86 degrees F
Routing Engine: 28 degrees C / 82 degrees F
Routing Engine CPU: 28 degrees C / 82 degrees F
```

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Related Documentation

- Example: Using the NETCONF Java Toolkit to Execute an Operational Request RPC on page 741
- Example: Using the NETCONF Java Toolkit to Execute CLI Commands on page 752
- Example: Using the NETCONF Java Toolkit to Load and Commit a Configuration on page 757
- Example: Using the NETCONF Java Toolkit to Load Set Configuration Commands on page 761
- Troubleshooting Exception Errors in a NETCONF Java Toolkit Program on page 747
- Using the NETCONF Java Toolkit to Parse an RPC Reply on page 745
- NETCONF Java Toolkit Overview on page 728

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PART 4

Junos XML Management Protocol Developer Guide

- Introduction to the Junos XML Management Protocol and Junos XML API on page 775
- Using Junos XML Management Protocol and Junos XML Tag Elements on page 783
- Controlling the Junos XML Management Protocol Session on page 797
- Requesting Information on page 835
- Changing Configuration Information on page 885
- Committing a Configuration on page 923
- Summary of Junos XML Protocol Tag Elements on page 939
- Summary of Attributes in Junos XML Tags on page 967
- Writing Junos XML Protocol Perl Client Applications on page 983
- Writing Junos XML Protocol C Client Applications on page 1013

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CHAPTER 17

Introduction to the Junos XML Management Protocol and Junos XML API

This chapter discusses the following

- XML and Junos OS Overview on page 775
- Junos XML Management Protocol and Junos XML API Overview on page 777
- XML Overview on page 778
- Advantages of Using the Junos XML Management Protocol and Junos XML API on page 780
- Overview of a Junos XML Protocol Session on page 781

XML and Junos OS Overview

Extensible Markup Language (XML) is a standard for representing and communicating information. It is a metalanguage for defining customized tags that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Junos OS natively supports XML for the operation and configuration of devices running Junos OS.

The Junos OS command-line interface (CLI) and the Junos OS infrastructure communicate using XML. When you issue an operational mode command in the CLI, the CLI converts the command into XML format for processing. After processing, Junos OS returns the output in the form of an XML document, which the CLI converts back into a readable format for display. Remote client applications also use XML-based data encoding for operational and configuration requests on devices running Junos OS.

The Junos XML API is an XML representation of Junos configuration statements and operational mode commands. It defines an XML equivalent for all statements in the Junos configuration hierarchy and many of the commands that you issue in CLI operational mode. Each operational mode command with a Junos XML counterpart maps to a request tag element and, if necessary, a response tag element.

You can view the XML-formatted output of any operational mode command by issuing the command in the CLI and adding the **| display xml** option. The following example shows the text-fomatted and XML-formatted output for the **show chassis alarms** operational mode command:

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```
user@host> show chassis alarms
No alarms currently active

user@host> show chassis alarms | display xml
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <alarm-information xmlns="http://xml.juniper.net/junos/10.4B1/junos-alarm">
        <alarm-summary>
            <no-active-alarms/>
        </alarm-summary>
    </alarm-information>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

You can view the Junos XML API representation of any operational mode command by issuing the command in the CLI and adding the **| display xml rpc** option. The following example shows the Junos XML API tag element for the **show chassis alarms** command.

```
user@host> show chassis alarms | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.4B1/junos">
    <rpc>
        <get-alarm-information>
        </get-alarm-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```

As shown in the previous example, the **| display xml rpc** option displays the command's corresponding Junos XML API request tag element that is sent to Junos OS for processing whenever the command is issued. In contrast, the **| display xml** option displays the actual output of the processed command in XML format.

When you issue the **show chassis alarms** operational mode command, the CLI converts the command into its equivalent Junos XML API request tag **<get-alarm-information>** and sends the XML request to the Junos infrastructure for processing. Junos OS processes the request and returns the **<alarm-information>** response tag element to the CLI. The CLI then converts the XML output into the "No alarms currently active" message that is displayed to the user.

Junos automation scripts use XML to communicate with the host device. Junos OS provides XML-formatted input to a script. The script processes the input source tree and then returns XML-formatted output to Junos OS. The script type determines the XML input document that is sent to the script as well as the output document that is returned to Junos OS for processing. Commit script input consists of an XML representation of the post-inheritance candidate configuration file. Event scripts receive an XML document containing the description of the triggering event. All script input documents contain a common node set with information pertaining to the Junos OS environment.

Related Documentation

- *Junos XML API Configuration Developer Reference*
- *Junos XML API Operational Developer Reference*

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Junos XML Management Protocol and Junos XML API Overview

The Junos XML Management Protocol is an XML-based protocol that client applications use to request and change configuration information on routing, switching, and security platforms running Junos OS. It uses an XML-based data encoding for the configuration data and remote procedure calls. The protocol defines basic operations that are equivalent to configuration mode commands in the Junos OS command-line interface (CLI). Applications use the protocol operations to display, edit, and commit configuration statements (among other operations), just as administrators use CLI configuration mode commands such as **show**, **set**, and **commit** to perform those operations.

The Junos XML API is an XML representation of Junos configuration statements and operational mode commands. Junos XML configuration tag elements are the content to which the Junos XML protocol operations apply. Junos XML operational tag elements are equivalent in function to operational mode commands in the CLI, which administrators use to retrieve status information for a device.

Client applications request information and change the configuration on a device by encoding the request with tag elements from the Junos XML management protocol and Junos XML API and sending it to the Junos XML protocol server on the device. The Junos XML protocol server is integrated into Junos OS and does not appear as a separate entry in process listings. The Junos XML protocol server directs the request to the appropriate software modules within the device, encodes the response in Junos XML and Junos XML protocol tag elements, and returns the result to the client application. For example, to request information about the status of a device's interfaces, a client application sends the Junos XML API **<get-interface-information>** request tag element . The Junos XML protocol server gathers the information from the interface process and returns it in the Junos XML API **<interface-information>** response tag element.

You can use the Junos XML management protocol and Junos XML API to configure devices running Junos OS or request information about the device configuration or operation. You can write client applications to interact with the Junos XML protocol server, and you can also utilize the Junos XML protocol to build custom end-user interfaces for configuration and information retrieval and display, such as a Web browser-based interface.

Related Documentation

- Advantages of Using the Junos XML Management Protocol and Junos XML API on page 7
- XML and Junos OS Overview on page 46
- XML Overview on page 44

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XML Overview

Extensible Markup Language (XML) is a language for defining a set of markers, called *tags*, that are applied to a data set or document to describe the function of individual elements and codify the hierarchical relationships between them. Tags look much like Hypertext Markup Language (HTML) tags, but XML is actually a metalanguage used to define tags that best suit the kind of data being marked.

For more details about XML, see *A Technical Introduction to XML* at http://www.xml.com/pub/a/98/10/guide0.html and the additional reference material at the http://www.xml.com site.

The official XML specification from the World Wide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0*, is available at http://www.w3.org/TR/REC-xml.

The following sections discuss general aspects of XML:

- Tag Elements on page 778
- Attributes on page 779
- Namespaces on page 779
- Document Type Definition on page 780

Tag Elements

XML has three types of tags: opening tags, closing tags, and empty tags. XML tag names are enclosed in angle brackets and are case sensitive. Items in an XML-compliant document or data set are always enclosed in paired opening and closing tags, and the tags must be properly nested. That is, you must close the tags in the same order in which you opened them. XML is stricter in this respect than HTML, which sometimes uses only opening tags. The following examples show paired opening and closing tags enclosing a value. The closing tags are indicated by the forward slash at the start of the tag name.

```
<interface-state>enabled</interface-state>
<input-bytes>25378</input-bytes>
```

The term *tag element* refers to a three-part set: opening tag, contents, and closing tag. The content can be an alphanumeric character string as in the preceding examples, or can itself be a *container* tag element, which contains other tag elements. For simplicity, the term *tag* is often used interchangeably with *tag element* or *element*.

If a tag element is *empty*—has no contents—it can be represented either as paired opening and closing tags with nothing between them, or as a single tag with a forward slash after the tag name. For example, the notation **<snmp-trap-flag/>** is equivalent to **<snmp-trap-flag></snmp-trap-flag>**.

As the preceding examples show, angle brackets enclose the name of the tag element. This is an XML convention, and the brackets are a required part of the complete tag element name. They are not to be confused with the angle brackets used in the documentation to indicate optional parts of Junos OS CLI command strings.

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Junos XML and Junos XML protocol tag elements obey the XML convention that the tag element name indicates the kind of information enclosed by the tags. For example, the name of the Junos XML **<interface-state>** tag element indicates that it contains a description of the current status of an interface on the device, whereas the name of the **<input-bytes>** tag element indicates that its contents specify the number of bytes received.

When discussing tag elements in text, this documentation conventionally uses just the opening tag to represent the complete tag element (opening tag, contents, and closing tag). For example, the documentation refers to the **<input-bytes>** tag to indicate the entire **<input-bytes>***number-of-bytes***</input-bytes>** tag element.

Attributes

XML elements can contain associated properties in the form of *attributes*, which specify additional information about an element. Attributes appear in the opening tag of an element and consist of an attribute name and value pair. The attribute syntax consists of the attribute name followed by an equals sign and then the attribute value enclosed in quotation marks. An XML element can have multiple attributes. Multiple attributes are separated by spaces and can appear in any order.

In the following example, the **configuration** tag element has two attributes, **junos:changed-seconds** and **junos:changed-localtime**.

```
<configuration junos:changed-seconds="1279908006"
junos:changed-localtime="2010-07-23 11:00:06 PDT">
```

The value of the **junos:changed-seconds** attribute is "1279908006", and the value of the **junos:changed-localtime** attribute is "2010-07-23 11:00:06 PDT".

Namespaces

Namespaces allow an XML document to contain the same tag, attribute, or function names for different purposes and avoid name conflicts. For example, many namespaces may define a **print** function, and each may exhibit a different functionality. To use the functionality defined in one specific namespace, you must associate that function with the namespace that defines the desired functionality.

To refer to a tag, attribute, or function from a defined namespace, you must first provide the namespace Uniform Resource Identifier (URI) in your style sheet declaration . You then qualify a tag, attribute, or function from the namespace with the URI. Since a URI is often lengthy, generally a shorter prefix is mapped to the URI.

In the following example the **jcs** prefix is mapped to the namespace identified by the URI http://xml.juniper.net/junos/commit-scripts/1.0, which defines extension functions used in commit, op, and event scripts. The **jcs** prefix is then prepended to the **output** function, which is defined in that namespace.

```
<?xml version=”1.0”?>
 <xsl:stylesheet version=”1.0”
xmlns:jcs="http://xml.juniper.net/junos/commit-scripts/1.0">
   ...
   <xsl:value-of select="jcs:output('The VPN is up.')"/>
</xsl: stylesheet>
```

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During processing, the prefix is expanded into the URI reference. Although there may be multiple namespaces that define an **output** element or function, the use of **jcs:output** explicitly defines which **output** function is used. You can choose any prefix to refer to the contents in a namespace, but there must be an existing declaration in the XML document that binds the prefix to the associated URI.

Document Type Definition

An XML-tagged document or data set is *structured*, because a set of rules specifies the ordering and interrelationships of the items in it. The rules define the contexts in which each tagged item can—and in some cases must—occur. A file called a *document type definition*, or *DTD*, lists every tag element that can appear in the document or data set, defines the parent-child relationships between the tags, and specifies other tag characteristics. The same DTD can apply to many XML documents or data sets.

Related Documentation

- Junos XML Management Protocol and Junos XML API Overview on page 6
- XML and Junos OS Overview on page 46

Advantages of Using the Junos XML Management Protocol and Junos XML API

The Junos XML management protocol and Junos XML API fully document all options for every supported Junos operational request, all statements in the Junos configuration hierarchy, and basic operations that are equivalent to configuration mode commands. The tag names clearly indicate the function of an element in an operational or configuration request or a configuration statement.

The combination of meaningful tag names and the structural rules in a DTD makes it easy to understand the content and structure of an XML-tagged data set or document. Junos XML and Junos XML protocol tag elements make it straightforward for client applications that request information from a device to parse the output and find specific information.

Parsing Device Output

The following example illustrates how the Junos XML API makes it easier to parse device output and extract the needed information. The example compares formatted ASCII and XML-tagged versions of output from a device running Junos OS.

The formatted ASCII follows:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, SNMP ifIndex: 3
```

The corresponding XML-tagged version is:

```
<interface>
  <name>fxp0</name>
  <admin-status>enabled</admin-status>
  <operational-status>up</operational-status>
  <index>4</index>
  <snmp-index>3</snmp-index>
</interface>
```


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When a client application needs to extract a specific value from formatted ASCII output, it must rely on the value's location, expressed either absolutely or with respect to labels or values in adjacent fields. Suppose that the client application wants to extract the interface index. It can use a regular-expression matching utility to locate specific strings, but one difficulty is that the number of digits in the interface index is not necessarily predictable. The client application cannot simply read a certain number of characters after the **Interface index:** label, but must instead extract everything between the label and the subsequent label **SNMP ifIndex** and also account for the included comma.

A problem arises if the format or ordering of text output changes in a later version of Junos OS. For example, if a **Logical index** field is added following the interface index number, the new formatted ASCII might appear as follows:

```
Physical interface: fxp0, Enabled, Physical link is Up
  Interface index: 4, Logical index: 12, SNMP ifIndex: 3
```

An application that extracts the interface index number delimited by the **Interface index:** and **SNMP ifIndex:** labels now obtains an incorrect result. The application must be updated manually to search for the **Logical index:** label as the new delimiter.

In contrast, the structured nature of XML-tagged output enables a client application to retrieve the interface index by extracting everything within the opening **<index>** tag and closing **</index>** tag. The application does not have to rely on an element's position in the output string, so the Junos XML protocol server can emit the child tag elements in any order within the **<interface>** tag element. Adding a new **<logical-index>** tag element in a future release does not affect an application's ability to locate the **<index>** tag element and extract its contents.

Displaying Device Output

XML-tagged output is also easier to transform into different display formats than formatted ASCII output. For instance, you might want to display different amounts of detail about a given device component at different times. When a device returns formatted ASCII output, you have to write special routines and data structures in your display program to extract and show the appropriate information for a given detail level. In contrast, the inherent structure of XML output is an ideal basis for a display program's own structures. It is also easy to use the same extraction routine for several levels of detail, simply ignoring the tag elements you do not need when creating a less detailed display.

Related Documentation

- Junos XML Management Protocol and Junos XML API Overview on page 6
- XML Overview on page 44

Overview of a Junos XML Protocol Session

Communication between the Junos XML protocol server and a client application is session based. The two parties explicitly establish a connection before exchanging data and close the connection when they are finished. Each request from the client application and each response from the Junos XML protocol server constitutes a *well-formed* XML document, because the tag streams obey the structural rules defined in the Junos XML

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protocol and Junos XML DTDs for the kind of information they encode. Client applications must produce a well-formed XML document for each request by emitting tag elements in the required order and only in the legal contexts.

The following list outlines the basic structure of a Junos XML protocol session.

1. The client application establishes a connection to the Junos XML protocol server and opens the Junos XML protocol session.
2. The Junos XML protocol server and client application exchange initialization information, which is used to determine if they are using compatible versions of Junos OS and the Junos XML management protocol.
3. The client application sends one or more requests to the Junos XML protocol server and parses its responses.
4. The client application closes the Junos XML protocol session and the connection to the Junos XML protocol server.

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CHAPTER 18

Using Junos XML Management Protocol and Junos XML Tag Elements

This chapter describes the syntactic and notational conventions used by the Junos XML protocol server and client applications, including the mappings between statements and commands in the Junos OS command-line interface (CLI) and the tag elements in the Junos Extensible Markup Language (XML) application programming interface (API).

For more information about the syntax of CLI commands and configuration statements, see the *CLI User Guide*. For information about specific configuration statements, see the Junos OS configuration guides. For information about specific operational mode commands, see the Junos OS command references.

This chapter discusses the following topics:

- XML and Junos XML Management Protocol Conventions Overview on page 783
- Mapping Commands to Junos XML Tag Elements on page 788
- Mapping Configuration Statements to Junos XML Tag Elements on page 789
- Using the Same Configuration Tag Elements in Requests and Responses on page 795

XML and Junos XML Management Protocol Conventions Overview

A client application must comply with XML and Junos XML management protocol conventions. Each request from the client application must be a *well-formed* XML document; that is, it must obey the structural rules defined in the Junos XML protocol and Junos XML document type definitions (DTDs) for the kind of information encoded in the request. The client application must emit tag elements in the required order and only in legal contexts. Compliant applications are easier to maintain in the event of changes to Junos OS or the Junos XML management protocol.

Similarly, each response from the Junos XML protocol server constitutes a well-formed XML document (the Junos XML protocol server obeys XML and Junos XML management protocol conventions).

The following sections describe Junos XML management protocol conventions:

- Request and Response Tag Elements on page 784
- Child Tag Elements of a Request Tag Element on page 785

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- Child Tag Elements of a Response Tag Element on page 785
- Spaces, Newline Characters, and Other White Space on page 785
- XML Comments on page 786
- XML Processing Instructions on page 786
- Predefined Entity References on page 786

Request and Response Tag Elements

A *request* tag element is one generated by a client application to request information about a device's current status or configuration, or to change the configuration. A request tag element corresponds to a CLI operational or configuration command. It can occur only within an **<rpc>** tag element. For information about the **<rpc>** tag element, see "Sending a Request to the Junos XML Protocol Server" on page 818.

A *response* tag element represents the Junos XML protocol server's reply to a request tag element and occurs only within an **<rpc-reply>** tag element. For information about the **<rpc-reply>** tag element, see "Parsing the Junos XML Protocol Server Response" on page 821.

The following example represents an exchange in which a client application emits the **<get-interface-information>** request tag element with the **<extensive/>** flag and the Junos XML protocol server returns the **<interface-information>** response tag element.

Client Application

```
<rpc>
  <get-interface-information>
    <extensive/>
  </get-interface-information>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <interface-information xmlns="URL">
    <!- - children of  <interface-information> - ->
  </interface-information>
</rpc-reply>
```

T1100

NOTE: This example, like all others in this guide, shows each tag element on a separate line, in the tag streams emitted by both the client application and Junos XML protocol server. In practice, a client application does not need to include newline characters between tag elements, because the server automatically discards such white space. For further discussion, see "Spaces, Newline Characters, and Other White Space" on page 785.

For information about the attributes in the opening **rpc-reply** tag, see "Parsing the Junos XML Protocol Server Response" on page 821. For information about the **xmlns** attribute in the opening **<interface-information>** tag, see "Requesting Operational Information" on page 836.

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Child Tag Elements of a Request Tag Element

Some request tag elements contain child tag elements. For configuration requests, each child tag element represents a configuration element (hierarchy level or configuration object). For operational requests, each child tag element represents one of the options you provide on the command line when issuing the equivalent CLI command.

Some requests have mandatory child tag elements. To make a request successfully, a client application must emit the mandatory tag elements within the request tag element's opening and closing tags. If any of the children are themselves container tag elements, the opening tag for each must occur before any of the tag elements it contains, and the closing tag must occur before the opening tag for another tag element at its hierarchy level.

In most cases, the client application can emit children that occur at the same level within a container tag element in any order. The important exception is a configuration element that has an *identifier tag element*, which distinguishes the configuration element from other elements of its type. The identifier tag element must be the first child tag element in the container tag element. Most frequently, the identifier tag element specifies the name of the configuration element and is called **<name>**.

Child Tag Elements of a Response Tag Element

The child tag elements of a response tag element represent the individual data items returned by the Junos XML protocol server for a particular request. The children can be either individual tag elements (empty tags or tag element triples) or container tag elements that enclose their own child tag elements. For some container tag elements, the Junos XML protocol server returns the children in alphabetical order. For other elements, the children appear in the order in which they were created in the configuration.

The set of child tag elements that can occur in a response or within a container tag element is subject to change in later releases of the Junos XML API. Client applications must not rely on the presence or absence of a particular tag element in the Junos XML protocol server's output, nor on the ordering of child tag elements within a response tag element. For the most robust operation, include logic in the client application that handles the absence of expected tag elements or the presence of unexpected ones as gracefully as possible.

Spaces, Newline Characters, and Other White Space

As dictated by the XML specification, the Junos XML protocol server ignores white space (spaces, tabs, newline characters, and other characters that represent white space) that occurs between tag elements in the tag stream generated by a client application. Client applications can, but do not need to, include white space between tag elements. However, they must not insert white space within an opening or closing tag. If they include white space in the contents of a tag element that they are submitting as a change to the candidate configuration, the Junos XML protocol server preserves the white space in the configuration database.

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In its responses, the Junos XML protocol server includes white space between tag elements to enhance the readability of responses that are saved to a file: it uses newline characters to put each tag element on its own line, and spaces to indent child tag elements to the right compared to their parents. A client application can ignore or discard the white space, particularly if it does not store responses for later review by human users. However, it must not depend on the presence or absence of white space in any particular location when parsing the tag stream.

For more information about white space in XML documents, see the XML specification from the World Wide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0*, at http://www.w3.org/TR/REC-xml/.

XML Comments

Client applications and the Junos XML protocol server can insert XML comments at any point between tag elements in the tag stream they generate, but not within tag elements. Client applications must handle comments in output from the Junos XML protocol server gracefully but must not depend on their content. Client applications also cannot use comments to convey information to the Junos XML protocol server, because the server automatically discards any comments it receives.

XML comments are enclosed within the strings **<!--** and **-->**, and cannot contain the string **- -** (two hyphens). For more details about comments, see the XML specification at http://www.w3.org/TR/REC-xml/.

The following is an example of an XML comment:

```
<!- -This is a comment. Please ignore it. -->
```

XML Processing Instructions

An XML processing instruction (PI) contains information relevant to a particular protocol and has the following form:

```
<?PI-name attributes?>
```

Some PIs emitted during a Junos XML protocol session include information that a client application needs for correct operation. A prominent example is the **<?xml?>** tag element, which the client application and Junos XML protocol server each emit at the beginning of every Junos XML protocol session to specify which version of XML and which character encoding scheme they are using. For more information, see "Emitting the <?xml?> PI" on page 811 and "Parsing the Junos XML Protocol Server's <?xml?> PI" on page 813.

The Junos XML protocol server can also emit PIs that the client application does not need to interpret (for example, PIs intended for the CLI). If the client application does not understand a PI, it must treat the PI like a comment instead of exiting or generating an error message.

Predefined Entity References

By XML convention, there are two contexts in which certain characters cannot appear in their regular form:

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- In the string that appears between opening and closing tags (the contents of the tag element)
- In the string value assigned to an attribute of an opening tag

When including a disallowed character in either context, client applications must substitute the equivalent *predefined entity reference*, which is a string of characters that represents the disallowed character. Because the Junos XML protocol server uses the same predefined entity references in its response tag elements, the client application must be able to convert them to actual characters when processing response tag elements.

Table 34 on page 787 summarizes the mapping between disallowed characters and predefined entity references for strings that appear between the opening and closing tags of a tag element.

Table 34: Predefined Entity Reference Substitutions for Tag Content Values

Disallowed Character	Predefined Entity Reference
& (ampersand)	**&**
> (greater-than sign)	**>**
< (less-than sign)	**<**

Table 35 on page 787 summarizes the mapping between disallowed characters and predefined entity references for attribute values.

Table 35: Predefined Entity Reference Substitutions for Attribute Values

Disallowed Character	Predefined Entity Reference
& (ampersand)	**&**
' (apostrophe)	**'**
>> (greater-than sign)	**>**
< (less-than sign)	**<**
" (quotation mark)	**"**

As an example, suppose that the following string is the value contained by the **<condition>** tag element:

```
if (a<b && b>c) return "Peer's not responding"
```

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The **<condition>** tag element looks like this (it appears on two lines for legibility only):

```
<condition>if (a&lt;b &amp;amp;&amp;amp; b&gt;c) return "Peer's not \
   responding"</condition>
```

Similarly, if the value for the **<example>** tag element's **heading** attribute is **Peer's "age" <> 40**, the opening tag looks like this:

```
<example heading="Peer&apos;s &quot;age&quot; &lt;&gt; 40">
```

Mapping Commands to Junos XML Tag Elements

The Junos XML API defines tag-element equivalents for many commands in CLI operational mode. For example, the **<get-interface-information>** tag element corresponds to the **show interfaces** command.

Information about the available command equivalents in the current release of Junos OS can be found in the *Junos XML API Operational Developer Reference*. For the mapping between commands and Junos XML tag elements, see the *Junos XML API Operational Developer Reference* "Mapping Between Operational Tag Elements, Perl Methods, and CLI Commands" chapter. For detailed information about a specific operation, see the *Junos XML API Operational Developer Reference* "Summary of Operational Request Tags" chapter.

The following sections describe the tag elements that map to command options:

- Mapping for Command Options with Variable Values on page 788
- Mapping for Fixed-Form Command Options on page 789

Mapping for Command Options with Variable Values

Many CLI commands have options that identify the object that the command affects or reports about, distinguishing the object from other objects of the same type. In some cases, the CLI does not precede the identifier with a fixed-form keyword, but XML convention requires that the Junos XML API define a tag element for every option. To learn the names for each identifier (and any other child tag elements) for an operational request tag element, consult the tag element's entry in the appropriate DTD or in the *Junos XML API Operational Developer Reference*.

The following example shows the Junos XML tag elements for two CLI operational commands that have variable-form options. In the **show interfaces** command, **t3-5/1/0:0** is the name of the interface. In the **show bgp neighbor** command, **10.168.1.222** is the IP address for the BGP peer of interest.

CLI Command	JUNOS XML Tags
show interfaces t3-5/1/0:0	<rpc> <get-interface-information> <interface-name>t3-5/1/0:0</interface-name> </get-interface-information> </rpc>
show bgp neighbor 10.168.1.122	<rpc> <get-bgp-neighbor-information> <neighbor-address>10.168.1.122</neighbor-address> </get-bgp-neighbor-information> </rpc>

T1500

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Mapping for Fixed-Form Command Options

Some CLI commands include options that have a fixed form, such as the **brief** and **detail** strings, which specify the amount of detail to include in the output. The Junos XML API usually maps such an option to an empty tag whose name matches the option name.

The following example shows the Junos XML tag elements for the **show isis adjacency** command, which has a fixed-form option called **detail**.

CLI Command	JUNOS XML Tags
show isis adjacency detail	<rpc> <get-isis-adjacency-information> <detail/> </get-isis-adjacency-information> </rpc>

T1501

Mapping Configuration Statements to Junos XML Tag Elements

The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy. At the top levels of the configuration hierarchy, there is almost always a one-to-one mapping between tag elements and statements, and most tag names match the configuration statement name. At deeper levels of the hierarchy, the mapping is sometimes less direct, because some CLI notational conventions do not map directly to XML-compliant tagging syntax.

NOTE: For some configuration statements, the notation used when you type the statement at the CLI configuration-mode prompt differs from the notation used in a configuration file. The same Junos XML tag element maps to both notational styles.

The following sections describe the mapping between configuration statements and Junos XML tag elements:

- Mapping for Hierarchy Levels and Container Statements on page 789
- Mapping for Objects That Have an Identifier on page 790
- Mapping for Single-Value and Fixed-Form Leaf Statements on page 791
- Mapping for Leaf Statements with Multiple Values on page 792
- Mapping for Multiple Options on One or More Lines on page 793
- Mapping for Comments About Configuration Statements on page 794

Mapping for Hierarchy Levels and Container Statements

The **<configuration>** tag element is the top-level Junos XML container tag element for configuration statements. It corresponds to the **[edit]** hierarchy level in CLI configuration mode. Most statements at the next few levels of the configuration hierarchy are container statements. The Junos XML container tag element that corresponds to a container statement almost always has the same name as the statement.

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The following example shows the Junos XML tag elements for two statements at the top level of the configuration hierarchy. Note that a closing brace in a CLI configuration statement corresponds to a closing Junos XML tag.

CLI Configuration Statements	JUNOS XML Tags
system {	<configuration>
login {	<system>
...*child statements*...	<login>
	<!- - *tags for child statements* - ->
}	</login>
}	</system>
protocols {	<protocols>
ospf {	<ospf>
...*child statements*...	<!- - *tags for child statements* - ->
}	</ospf>
}	</protocols>
	</configuration>

T1502

Mapping for Objects That Have an Identifier

At some hierarchy levels, the same kind of configuration object can occur multiple times. Each instance of the object has a unique identifier to distinguish it from the other instances. In the CLI notation, the parent statement for such an object consists of a keyword and identifier of the following form:

keyword *identifier* {
... *configuration statements for individual characteristics* ...
}

keyword is a fixed string that indicates the type of object being defined, and ***identifier*** is the unique name for this instance of the type. In the Junos XML API, the tag element corresponding to the keyword is a container tag element for child tag elements that represent the object's characteristics. The container tag element's name generally matches the **keyword** string.

The Junos XML API differs from the CLI in its treatment of the identifier. Because the Junos XML API does not allow container tag elements to contain both other tag elements and untagged character data such as an identifier name, the identifier must be enclosed in a tag element of its own. Most frequently, identifier tag elements for configuration objects are called **<name>**. Some objects have multiple identifiers, which usually have names other than **<name>**. To verify the name of each identifier tag element for a configuration object, consult the entry for the object in the *Junos XML API Configuration Developer Reference*.

NOTE: Junos OS reserves the prefix junos- for the identifiers of configuration groups defined within the junos-defaults configuration group. User-defined identifiers cannot start with the string junos-.

Identifier tag elements also constitute an exception to the general XML convention that tag elements at the same level of hierarchy can appear in any order; the identifier tag element always occurs first within the container tag element.

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The configuration for most objects that have identifiers includes additional leaf statements, which represent other characteristics of the object. For example, each BGP group configured at the **[edit protocols bgp group]** hierarchy level has an associated name (the identifier) and can have leaf statements for other characteristics such as type, peer autonomous system (AS) number, and neighbor address. For information about the Junos XML mapping for leaf statements, see "Mapping for Single-Value and Fixed-Form Leaf Statements" on page 559, "Mapping for Leaf Statements with Multiple Values" on page 560, and "Mapping for Multiple Options on One or More Lines" on page 560.

The following example shows the Junos XML tag elements for configuration statements that define two BGP groups called **G1** and **G2**. Notice that the Junos XML **<name>** tag element that encloses the identifier of each group (and the identifier of the neighbor within a group) does not have a counterpart in the CLI statements. For complete information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

CLI Configuration Statements

```
protocols {
   bgp {
      group G1 {

         type external;
         peer-as 56;
         neighbor 10.0.0.1;


      }
      group G2 {

         type external;
         peer-as 57;
         neighbor 10.0.10.1;


      }
   }
}
```

JUNOS XML Tags

```
<configuration>
   <protocols>
      <bgp>
         <group>
            <name>G1</name>
            <type>external</type>
            <peer-as>56</peer-as>
            <neighbor>
               <name>10.0.0.1</name>
            </neighbor>
         </group>
         <group>
            <name>G2</name>
            <type>external</type>
            <peer-as>57</peer-as>
            <neighbor>
               <name>10.0.10.1</name>
            </neighbor>
         </group>
      </bgp>
   </protocols>
</configuration>
```

T1503

Mapping for Single-Value and Fixed-Form Leaf Statements

A *leaf statement* is a CLI configuration statement that does not contain any other statements. Most leaf statements define a value for one characteristic of a configuration object and have the following form:

keyword *value*;

In general, the name of the Junos XML tag element corresponding to a leaf statement is the same as the **keyword** string. The string between the opening and closing Junos XML tags is the same as the ***value*** string.

The following example shows the Junos XML tag elements for two leaf statements that have a keyword and a value: the **message** statement at the **[edit system login]** hierarchy level and the **preference** statement at the **[edit protocols ospf]** hierarchy level.

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CLI Configuration Statements	JUNOS XML Tags

system {
  login {
  message "Authorized users only";
  ...*other statements under* login...
  }
}
protocols {
  ospf {
  preference 15;
  ...*other statements under* ospf...
  }
}
	<configuration>
	  <system>
	  <login>
	  <message>Authorized users only</message>
	  <!- - *tags for other child statements* - ->
	  </login>
	  </system>
	  <protocols>
	  <ospf>
	  <preference>15</preference>
	  <!- - *tags for other child statements* - ->
	  </ospf>
	  </protocols>
	</configuration>

T1504

Some leaf statements consist of a fixed-form keyword only, without an associated variable-form value. The Junos XML API represents such statements with an empty tag. The following example shows the Junos XML tag elements for the **disable** statement at the **[edit forwarding-options sampling]** hierarchy level.

CLI Configuration Statement	JUNOS XML Tags

forwarding-options {
  sampling {
  disable;
  ...other statements under sampling ...
  }
}
	<configuration>
	  <forwarding-options>
	  <sampling>
	  <disable/>
	  <!- - *tags for other child statements* - ->
	  </sampling>
	  </forwarding-options>
	</configuration>

T1505

Mapping for Leaf Statements with Multiple Values

Some Junos leaf statements accept multiple values, which can be either user-defined or drawn from a set of predefined values. CLI notation uses square brackets to enclose all values in a single statement, as in the following:

statement [*value1 value2 value3* ...];

The Junos XML API instead encloses each value in its own tag element. The following example shows the Junos XML tag elements for a CLI statement with multiple user-defined values. The **import** statement imports two routing policies defined elsewhere in the configuration. For complete information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

CLI Configuration Statements	JUNOS XML Tags

protocols {
  bgp {
  group 23 {
 	
  import [policy1 policy2];
 	
  }
  }
}
	<configuration>
	  <protocols>
	  <bgp>
	  <group>
	  <name>23</name>
	  <import>policy1</import>
	  <import>policy2</import>
	  </group>
	  </bgp>
	  </protocols>
	</configuration>

T1506

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The following example shows the Junos XML tag elements for a CLI statement with multiple predefined values. The **permissions** statement grants three predefined permissions to members of the **user-accounts** login class.

CLI Configuration Statements

```
system {
  login {
    class user-accounts {

      permissions [ configure admin control ];


    }
  }
}
```

JUNOS XML Tags

```
<configuration>
  <system>
    <login>
      <class>
        <name>user-accounts</name>
        <permissions>configure</permissions>
        <permissions>admin</permissions>
        <permissions>control</permissions>
      </class>
    </login>
  </system>
</configuration>
```

T1507

Mapping for Multiple Options on One or More Lines

For some Junos configuration objects, the standard CLI syntax places multiple options on a single line, usually for greater legibility and conciseness. In most such cases, the first option identifies the object and does not have a keyword, but later options are paired keywords and values. The Junos XML API encloses each option in its own tag element. Because the first option has no keyword in the CLI statement, the Junos XML API assigns a name to its tag element.

The following example shows the Junos XML tag elements for a CLI configuration statement with multiple options on a single line. The Junos XML API defines a tag element for both options and assigns a name to the tag element for the first option (**10.0.0.1**), which has no CLI keyword.

CLI Configuration Statements

```
system {
  backup-router 10.0.01 destination 10.0.0.2;



}
```

JUNOS XML Tags

```
<configuration>
  <system>
    <backup-router>
      <address>10.0.0.1</address>
      <destination>10.0.0.2</destination>
    </backup-router>
  </system>
</configuration>
```

T1508

The syntax for some configuration objects includes more than one multioption line. Again, the Junos XML API defines a separate tag element for each option. The following example shows Junos XML tag elements for a **traceoptions** statement at the **[edit protocols isis]** hierarchy level. The statement has three child statements, each with multiple options.

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CLI Configuration Statements

```
protocols {
   isis {
      traceoptions {
         file trace-file size 3m files 10 world-readable;
         flag route detail;
         flag state receive;
      }
   }
}
```

JUNOS XML Tags

```
<configuration>
  <protocols>
    <isis>
      <traceoptions>
        <file>
          <filename>trace-file</filename>
          <size>3m</size>
          <files>10</files>
          <world-readable/>
        </file>
        <flag>
          <name>route</name>
          <detail/>
        </flag>
        <flag>
          <name>state</name>
          <receive/>
        </flag>
      </traceoptions>
    </isis>
  </protocols>
</configuration>
```

T1509

Mapping for Comments About Configuration Statements

A Junos configuration can include comments that describe statements in the configuration. In CLI configuration mode, the **annotate** command specifies the comment to associate with a statement at the current hierarchy level. You can also use a text editor to insert comments directly into a configuration file. For more information, see the *CLI User Guide*.

The Junos XML API encloses comments about configuration statements in the **<junos:comment>** tag element. (These comments are different from the comments that are enclosed in the strings **<!--** and **-->** and are automatically discarded by the protocol server.)

In the Junos XML API, the **<junos:comment>** tag element immediately precedes the tag element for the associated configuration statement. (If the tag element for the associated statement is omitted, the comment is not recorded in the configuration database.) The comment text string can include one of the two delimiters that indicate a comment in the configuration database: either the **#** character before the comment or the paired strings **/*** before the comment and ***/** after it. If the client application does not include the delimiter, the protocol server adds the appropriate one when it adds the comment to the configuration. The protocol server also preserves any white space included in the comment.

The following example shows the Junos XML tag elements that associate comments with two statements in a sample configuration statement. The first comment illustrates how including newline characters in the contents of the **<junos:comment>** tag element (**/* New backbone area */**) results in the comment appearing on its own line in the configuration file. There are no newline characters in the contents of the second **<junos:comment>** tag element, so in the configuration file the comment directly follows the associated statement on the same line.

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CLI Configuration Statements

```
protocols {
   ospf {

      /* New backbone area */
      area 0.0.0.0 {

         interface so-0/0/0 { # From jnpr1 to jnpr2

            hello-interval 5;
         }
      }
   }
}
```

JUNOS XML Tags

```
<configuration>
   <protocols>
      <ospf>
         <junos:comment>
               /* New backbone area */
         </junos:comment>
         <area>
            <name>0.0.0.0</name>
            <junos:comment> # From jnpr1 to jnpr2</junos:comment>
            <interface>
               <name>so-0/0/0</name>
               <hello-interval>5</hello-interval>
            </interface>
         </area>
      </ospf>
   </protocols>
</configuration>
```

T1510

Using the Same Configuration Tag Elements in Requests and Responses

The Junos XML protocol server encloses its response to each configuration request in **<rpc-reply>** and **<configuration>** tag elements. Enclosing each configuration response within a **<configuration>** tag element contrasts with how the server encloses each different operational response in a tag element named for that type of response—for example, the **<chassis-inventory>** tag element for chassis information or the **<interface-information>** tag element for interface information.

The Junos XML tag elements within the **<configuration>** tag element represent configuration hierarchy levels, configuration objects, and object characteristics, always ordered from higher to deeper levels of the hierarchy. When a client application loads a configuration, it can emit the same tag elements in the same order as the Junos XML protocol server uses when returning configuration information. This consistent representation makes handling configuration information more straightforward. For instance, the client application can request the current configuration, store the Junos XML protocol server's response to a local memory buffer, make changes or apply transformations to the buffered data, and submit the altered configuration as a change to the candidate configuration. Because the altered configuration is based on the Junos XML protocol server's response, it is certain to be syntactically correct. For more information about changing routing platform configuration, see "Changing Configuration Information" on page 627.

Similarly, when a client application requests information about a configuration element (hierarchy level or configuration object), it uses the same tag elements that the Junos XML protocol server will return in response. To represent the element, the client application sends a complete stream of tag elements from the top of the configuration hierarchy (represented by the **<configuration>** tag element) down to the requested element. The innermost tag element, which represents the level or object, is either empty or includes the identifier tag element only. The Junos XML protocol server's response includes the same stream of parent tag elements, but the tag element for the requested configuration element contains all the tag elements that represent the element's characteristics or child levels. For more information, see "Requesting Configuration Information" on page 840.

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The tag streams emitted by the Junos XML protocol server and by a client application can differ in the use of white space, as described in "XML and Junos XML Management Protocol Conventions Overview" on page 783.

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CHAPTER 19

Controlling the Junos XML Management Protocol Session

This chapter explains how to start and terminate a session with the Junos XML protocol server, and describes the Extensible Markup Language (XML) tag elements from the Junos XML management protocol that client applications and the Junos XML protocol server use to coordinate information exchange during the session. It discusses the following topics:

- Client Application's Role in a Junos XML Protocol Session on page 797
- Establishing a Junos XML Management Protocol Session on page 798
- Exchanging Information with the Junos XML Protocol Server on page 818
- Locking and Unlocking the Candidate Configuration or Creating a Private Copy on page 825
- Ending a Junos XML Protocol Session and Closing the Connection on page 829
- Displaying CLI Output as XML Tag Elements on page 830
- Displaying the RPC Tags for a Command on page 830
- Example of a Junos XML Protocol Session on page 831

Client Application's Role in a Junos XML Protocol Session

To create a session and communicate with the Junos XML protocol server, a client application performs the following procedures, which are described in the indicated sections:

1. Establishes a connection to the Junos XML protocol server on the routing platform, as described in "Connecting to the Junos XML Protocol Server" on page 809.
2. Opens a Junos XML protocol session, as described in "Starting the Junos XML Protocol Session" on page 810.
3. (Optional) Locks the candidate configuration or creates a private copy, as described in "Exchanging Information with the Junos XML Protocol Server" on page 818. Locking the configuration prevents other users or applications from changing it at the same time. Creating a private copy of the configuration enables the application to make changes without affecting the candidate or active configuration until the copy is committed.

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4. Requests operational or configuration information, or changes configuration information, as described in "Requesting Information" on page 835 and "Changing Configuration Information" on page 627.
5. (Optional) Verifies the syntactic correctness of a configuration before attempting to commit it, as described in "Verifying a Configuration Before Committing It" on page 923.
6. Commits changes made to the configuration, as described in "Committing a Configuration" on page 923.
7. Unlocks the candidate configuration if it is locked, as described in "Unlocking the Candidate Configuration" on page 827.
8. Ends the Junos XML protocol session and closes the connection to the device, as described in "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Establishing a Junos XML Management Protocol Session

The Junos XML protocol server communicates with client applications within the context of a Junos XML protocol *session*. The server and client explicitly establish a connection and session before exchanging data and close the session and connection when they are finished.

The streams of Junos XML protocol tag elements and Junos XML tag elements emitted by the Junos XML protocol server and the client application must each constitute well-formed XML by obeying the structural rules defined in the document type definition (DTD) for the kind of information they are exchanging. The client application must emit tag elements in the required order and only in the allowed contexts.

Client applications access the Junos XML protocol server using one of the protocols listed in "Supported Access Protocols" on page 799. To authenticate with the Junos XML protocol server, they use either a Junos XML protocol-specific mechanism or the access protocol's standard authentication mechanism, depending on the protocol. After authentication, the Junos XML protocol server uses the Junos login usernames and classes already configured on the device to determine whether a client application is authorized to make each request.

For information about establishing a connection and a Junos XML protocol session, see the following sections:

- Supported Access Protocols on page 799
- Prerequisites for Establishing a Connection on page 799
- Connecting to the Junos XML Protocol Server on page 809
- Starting the Junos XML Protocol Session on page 810
- Authenticating with the Junos XML Protocol Server on page 815

For an example of a complete Junos XML protocol session, see "Example of a Junos XML Protocol Session" on page 831.

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Supported Access Protocols

To connect to the Junos XML protocol server, client applications can use the access protocols and associated authentication mechanisms listed in Table 36 on page 799.

Table 36: Supported Access Protocols and Authentication Mechanisms

Access Protocol	Authentication Mechanism
clear-text, a Junos XML protocol-specific access protocol for sending unencrypted text over a Transmission Control Protocol (TCP) connection	Junos XML protocol-specific
SSH	Standard SSH
Outbound SSH	Outbound SSH
Secure Sockets Layer (SSL)	Junos XML protocol-specific
Telnet	Standard Telnet

The SSH and SSL protocols are preferred because they encrypt security information (such as passwords) before transmitting it across the network. Outbound SSH allows you to create an encrypted connection to the device in situations where you cannot connect to the device using standard SSH. The clear-text and Telnet protocols do not encrypt information.

For information about the prerequisites for each access protocol, see "Prerequisites for Establishing a Connection" on page 799. For authentication instructions, see "Authenticating with the Junos XML Protocol Server" on page 815.

Prerequisites for Establishing a Connection

To enable a client application to establish a connection to the Junos XML protocol server, you must satisfy the requirements discussed in the following sections:

- Prerequisites for All Access Protocols on page 799
- Prerequisites for Clear-Text Connections on page 801
- Prerequisites for SSH Connections on page 802
- Prerequisites for Outbound SSH Connections on page 803
- Prerequisites for SSL Connections on page 807
- Prerequisites for Telnet Connections on page 809

Prerequisites for All Access Protocols

A client application must be able to log in to each device on which it establishes a connection with the Junos XML protocol server. The following instructions explain how to create a Junos login account for the application; for detailed information, see the

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chapter about configuring user access in the *Junos OS System Basics Configuration Guide*. Alternatively, you can skip this section and enable authentication through RADIUS or TACACS+; for instructions, see the chapter about system authentication in the *Junos OS System Basics Configuration Guide*.

To determine whether a login account exists on a device running Junos OS, enter the CLI configuration mode on the device and issue the following commands:

```
[edit]
user@host# edit system login
[edit system login]
user@host# show user account-name
```

If the appropriate account does not exist, perform the following steps:

1. Include the **user** statement at the **[edit system login]** hierarchy level and specify a username. Also include the **class** statement at the **[edit system login user *username*]** hierarchy level, and specify a login class that has the permissions required for all actions to be performed by the application. You can also include the optional **full-name** and **uid** statements. Optionally, include the **full-name** and **uid** statements.

   ```
   [edit system login]
   user@host# set user account-name  class class-name
   ```

   NOTE: For detailed information about creating user accounts, see the chapter about configuring user access in the *Junos OS System Basics Configuration Guide*.

2. Create a text-based password for the account by including either the **plain-text-password** or **encrypted-password** statement at the **[edit system login user *account-name* authentication]** hierarchy level.

   ```
   [edit system login]
   user@host# edit user account-name authentication
   ```

   NOTE: A text-based password is not strictly necessary if the account is used to access the Junos XML protocol server through SSH with public/private key pairs for authentication, but we recommend that you create one anyway. The key pair alone is sufficient if the account is used only for SSH access, but a password is required if the account is also used for any other type of access (for login on the console, for example). The password is also used—the SSH server prompts for it—if key-based authentication is configured but fails. For information about creating a public/private key pair, see "Prerequisites for SSH Connections" on page 802.

   To enter a password as text, issue the following command. You are prompted for the password, which is encrypted before being stored.

   ```
   [edit system login user account-name authentication]
   user@host# set plain-text-password
   New password: password
   ```


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Retype new password: ***password***

To store a password that you have previously created and hashed using Message Digest 5 (MD5) or Secure Hash Algorithm 1 (SHA-1), issue the following command:

```
[edit system login user account-name authentication]
user@host# set encrypted-password "password"
```

3. Issue the **commit** command.

```
[edit system login user account-name authentication]
user@host# top
[edit]
user@host# commit
```

4. Repeat the preceding steps on each device where the client application establishes Junos XML protocol sessions.

5. Enable the client application to access the password and provide it when the Junos XML protocol server prompts for it. There are several possible methods, including the following:

   - Code the application to prompt the user for a password at startup and to store the password temporarily in a secure manner.
   - Store the password in encrypted form in a secure local-disk location or secured database and code the application to access it.

Prerequisites for Clear-Text Connections

A client application that uses the Junos XML protocol-specific clear-text access protocol sends unencrypted text directly over a TCP connection without using any additional protocol (such as SSH, SSL, or Telnet).

NOTE: Devices running the Junos-FIPS software do not accept Junos XML protocol clear-text connections. We recommend that you do not use the clear-text protocol in a Common Criteria environment. For more information, see the *Secure Configuration Guide for Common Criteria and Junos-FIPS*.

To enable client applications to use the clear-text protocol to connect to the Junos XML protocol server, perform the following steps:

1. Verify that the application can access the TCP software. On most operating systems, TCP is accessible in the standard distribution. Do this on each computer where the application runs.

2. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.

3. Configure the device running Junos OS to accept clear-text connections from client applications on port 3221 by including the **xnm-clear-text** statement at the **[edit system services]** hierarchy level:

```
[edit]
user@host# set system services xnm-clear-text
```

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By default, the Junos XML protocol server supports up to 75 simultaneous clear-text sessions and 150 connection attempts per minute. Optionally, you can include either or both the **connection-limit** statement to limit the number of concurrent sessions and the **rate-limit** statement to limit the number of connection attempts. Both statements accept a value from **1** through **250**.

```
[edit]
user@host# set system services xnm-clear-text connection-limit limit
user@host# set system services xnm-clear-text rate-limit limit
```

For more information about the **xnm-clear-text** statement, see the *Junos OS System Basics Configuration Guide*.

4. Commit the configuration:

```
[edit]
user@host# commit
```

5. Repeat Step 2 through Step 4 on each device where the client application establishes Junos XML protocol sessions.

Prerequisites for SSH Connections

To enable a client application to use the SSH protocol to connect to the Junos XML protocol server, perform the following steps:

1. Enable the application to access the SSH software.

   If the application uses the Junos XML protocol Perl module provided by Juniper Networks, no action is necessary. As part of the installation procedure for the Perl module, you install a prerequisites package that includes the necessary SSH software. For instructions, see "Downloading the Junos XML Protocol Perl Client and Prerequisites Package" on page 984.

   If the application does not use the Junos XML protocol Perl module, obtain the SSH software and install it on the computer where the application runs. For information about obtaining and installing SSH software, see http://www.ssh.com/ and http://www.openssh.com/ .

2. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.

3. (Optional) If you want to use key-based SSH authentication for the application, create a public/private key pair and associate it with the Junos OS login account you created in "Prerequisites for All Access Protocols" on page 799. Perform the following steps:

   a. Working on the computer where the client application runs, issue the **ssh-keygen** command in a standard command shell (not the Junos OS CLI). By providing the appropriate arguments, you encode the public key with either RSA (supported by SSH versions 1 and 2) or the Digital Signature Algorithm (DSA), supported by SSH version 2. For more information, see the man page provided by your SSH vendor for the **ssh-keygen** command. The Junos OS uses SSH version 2 by default but also supports version 1.

      ```
      % ssh-keygen options
      ```


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b. Enable the application to access the public and private keys. One method is to run the **ssh-agent** program on the computer where the application runs.

c. On the device running Junos OS that needs to accept SSH connections from Junos XML protocol client applications, associate the public key with the Junos login account by including the **load-key-file** statement at the **[edit system login user *account-name* authentication]** hierarchy level. First, move to that hierarchy level:

```
[edit]
user@host# edit system login user account-name authentication
```

Issue the following command to copy the contents of the specified file onto the device running Junos OS:

```
[edit system login user account-name authentication]
user@host# set load-key-file URL
```

URL is the path to the file that contains one or more public keys. The **ssh-keygen** command by default stores each public key in a file in the **.ssh** subdirectory of the user home directory; the filename depends on the encoding (DSA or RSA) and SSH version. For information about specifying URLs, see the *CLI User Guide*.

Alternatively, you can include one or both of the **ssh-dsa** and **ssh-rsa** statements at the **[edit system login user *account-name* authentication]** hierarchy level. We recommend using the **load-key-file** statement, however, because it eliminates the need to type or cut and paste the public key on the command line. For more information about the **ssh-dsa** and **ssh-rsa** statements, see the *Junos OS System Basics Configuration Guide*.

4. Configure the device running Junos OS to accept SSH connections by including the **ssh** statement at the **[edit system services]** hierarchy level. This statement enables SSH access for all users and applications, not just Junos XML protocol client applications.

```
[edit system login user account-name authentication]
user@host# top
[edit]
user@host# set system services ssh
```

5. Commit the configuration:

```
[edit]
user@host# commit
```

6. Repeat Step 1 on each computer where the application runs, and Step 2 through Step 5 on each device to which the application connects.

Prerequisites for Outbound SSH Connections

The outbound SSH feature allows the initiation of an SSH session between devices running Junos OS and Network and System Management servers where client-initiated TCP/IP connections are blocked (for example, when the device is behind a firewall). To configure outbound SSH, you add an **outbound-ssh** configuration statement to the device. Once configured and committed, the device running Junos OS will begin to initiate outbound SSH sessions with the configured management clients. Once the outbound SSH session is initialized and the connection is established, the management server

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initiates the SSH sequence as the client and the device running Junos OS, acting as the server, authenticates the client.

Setting up outbound SSH involves:

- Configuring the device running Junos OS for outbound SSH
- Configuring the management server for outbound SSH.

To configure the device for outbound SSH:

1. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.
2. In the **[edit system services ssh]** hierarchy level, set the SSH protocol to v2:

   ```
   [edit system services ssh]
   set protocol-version v2
   ```

3. Generate/obtain a public/private key pair for the device running Junos OS. This key pair will be used to encrypt the data transferred across the SSH connection. For more information on generating key pairs, see the *Junos OS System Basics Configuration Guide*.
4. If the public key will be installed on the application management system manually, transfer the public key to the NSM server.
5. Add the following **outbound-ssh** statement at the **[edit system services]** hierarchy level:

   ```
   [edit system services]
   outbound-ssh client {
     application-id {
       device-id device-id;
       secret secret;
       keep-alive {
         retry number;
         timeout number;
       }
       reconnect-strategy (sticky | in-order) ;
       services netconf;
       address {
         port destination-port;
         retry number;
         timeout number;
       }
     }
   }
   ```

   The attributes are as follows:

   - **application-id**—(Required) Identifies the **outbound-ssh** configuration stanza on the device. Each **outbound-ssh** stanza represents a single outbound SSH connection. This attribute is not sent to the client.
   - **device-id**—(Required) Identifies the device to the client during the initiation sequence.

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- **secret** *secret*—(Optional) Public SSH host key of the device running the Junos OS. If this statement is added to the **outbound-ssh** configuration hierarchy, the device running Junos OS will pass its public key to the configuration management server during the initialization of the outbound SSH service. This is the recommended method of maintaining a current copy of the router's public key on the configuration management server.
- **keep-alive**—(Optional) Specify that keepalive messages be sent from the device running Junos OS to the configuration management server. To configure the keepalive message, you must set both the **timeout** and **retry** attributes.
  - **retry** *number*—Number of keepalive messages the device running Junos OS sends without receiving a response from the configuration management server before the current SSH connection is terminated. The default is three tries.
  - **timeout** *seconds*—Amount of time, in seconds, that the server waits for data before sending a keepalive signal. The default is 15 seconds.
- **reconnect-strategy (sticky | in-order)**—(Optional) Method that the device running Junos OS uses to reestablish a disconnected outbound SSH connection. Two methods are available:
  - **sticky**—The device attempts to reconnect to the configuration management server to which it was last connected. If the connection is unavailable, the device attempts to establish a connection with the next configuration management server on the list and so forth until a connection is established.
  - **in-order**—The device attempts to establish an outbound SSH session based on the configuration management server address list. The device attempts to establish a session with the first server on the list. If this connection is not available, the device attempts to establish a session with the next server, and so on down the list until a connection is established.

  When reconnecting to a client, the device running Junos OS attempts to reconnect to the client based on the **retry** and **timeout** values for each of the clients listed in the configuration management server list..
- **services**—(Required) Specifies the services available for the session. Currently, NETCONF is the only service available.
- **address**—(Required) The host name or the IPv4 address of the configuration management server. You can list multiple clients by adding each client's IP address or host name along with the connection parameters listed below.
  - **port** *destination-port*—Outbound SSH port for the client. The default is port 22.
  - **retry** *number*– Number of times the device running Junos OS attempts to establish an outbound SSH connection before gving up. The default is three tries.
  - **timeout** *seconds*—Amount of time, in seconds, that the device running Junos OS attempts to establish an outbound SSH connection before giving up. The default is 15 seconds.

6. Commit the configuration:

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```
[edit]
user@host# commit
```

To set up the configuration management server:

1. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.
2. Enable the application to access the SSH software.
   - If the application uses the Junos XML protocol Perl module provided by Juniper Networks, no action is necessary. As part of the installation procedure for the Perl module, you install a prerequisites package that includes the necessary SSH software. For instructions, see "Downloading the Junos XML Protocol Perl Client and Prerequisites Package" on page 984.
   - If the application does not use the Junos XML protocol Perl module, obtain the SSH software and install it on the computer where the application runs. For information about obtaining and installing SSH software, see http://www.ssh.com/ and http://www.openssh.com/ .
3. (Optional) Manually install the device's public key for use with the SSH connection.
4. Configure the client system to receive and process initialization broadcast requests. The intialization requests use the following syntax:
   - If the secret attribute is configured, the device running Junos OS will send its public SSH key along with the intialization sequence (recommended method). When the key has been received, the client needs to determine what to do with the device's public key. We recommend that you replace any current public SSH key for the device with the new key. This ensures that the client always has the current key available for authentication.

     ```
     MSG-ID: DEVICE-CONN-INFO\r\n
     MSG-VER: V1\r\n
     DEVICE-ID: <device-id>\r\n
     HOST-KEY: <pub-host-key>\r\n
     HMAC: <HMAC(pub-SSH-host-key, <secret>)>\r\n
     ```

   - If the secret attribute is not configured, the device does not send its public SSH key along with the initialization sequence. You need to manually install the current public SSH key for the device.

     ```
     MSG-ID: DEVICE-CONN-INFO\r\n
     MSG-VER: V1\r\n
     DEVICE-ID: <device-id>\r\n
     ```

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Prerequisites for SSL Connections

To enable a client application to use the SSL protocol to connect to the Junos XML protocol server, perform the following steps:

1. Enable the application to access the SSL software.

   If the application uses the Junos XML protocol Perl module provided by Juniper Networks, no action is necessary. As part of the installation procedure for the Perl module, you install a prerequisites package that includes the necessary SSL software. For instructions, see "Downloading the Junos XML Protocol Perl Client and Prerequisites Package" on page 984.

   If the application does not use the Junos XML protocol Perl module, obtain the SSL software and install it on the computer where the application runs. For information about obtaining and installing the SSL software, see http://www.openssl.org/ .

2. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.

3. Use one of the following two methods to obtain an authentication certificate in privacy-enhanced mail (PEM) format:

   - Request a certificate from a certificate authority; these agencies usually charge a fee.
   - Working on the computer where the client application runs, issue the following **openssl** command in a standard command shell (not the Junos OS CLI). The command generates a self-signed certificate and an unencrypted 1024-bit RSA private key, and writes them to the file called ***certificate-file*.pem** in the working directory. The command appears here on two lines only for legibility:

     **% openssl req -x509 -nodes -newkey rsa:1024 **
     -keyout *certificate-file*.pem -out *certificate-file*.pem

4. Import the certificate onto the device running Junos OS by including the **local** statement at the **[edit security certificates]** hierarchy level and the **load-key-file** statement at the **[edit security certificates local *certificate-name*]** hierarchy level.

   ```
   [edit]
   user@host# edit security certificates local certificate-name

   [edit security certificates local certificate-name]
   user@host# set load-key-file URL-or-path
   ```

   certificate-name is a name you choose to identify the certificate uniquely (for example, **junos-xml-protocol-ssl-client-*hostname***, where ***hostname*** is the computer where the client application runs).

   URL-or-path specifies the file that contains the paired certificate and private key (if you issued the **openssl** command in Step 3, the ***certificate-name*.pem** file). Specify either the URL to its location on the client computer or a pathname on the local disk (if you have already used another method to copy the certificate file to the device's local disk). For more information about specifying URLs and pathnames, see the *CLI User Guide*.

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NOTE: The CLI expects the private key in the *URL-or-path* file to be unencrypted. If the key is encrypted, the CLI prompts you for the passphrase associated with it, decrypts it, and stores the unencrypted version.

The **set-load-key-file** *URL-or-path* command copies the contents of the certificate file into the configuration. When you view the configuration, the CLI displays the string of characters that constitute the private key and certificate, marking them as **SECRET-DATA**. The **load-key-file** keyword is not recorded in the configuration.

5. Configure the device running Junos OS to accept SSL connections from Junos XML protocol client applications on port 3220 by including the **xnm-ssl** statement at the **[edit system services]** hierarchy level.

   [edit security certificates local *certificate-name*]
   user@host# **top**
   [edit]
   user@host# **set system services xnm-ssl local-certificate** ***certificate-name***

   certificate-name is the unique name you assigned to the certificate in Step 4.

   By default, the Junos XML protocol server supports up to 75 simultaneous SSL sessions and 150 connection attempts per minute. Optionally, you can include either or both the **connection-limit** statement to limit the number of concurrent sessions and the **rate-limit** statement to limit connection attempts. Both statements accept a value from **1** through **250**.

   [edit]
   user@host# **set system services xnm-ssl connection-limit** ***limit***
   user@host# **set system services xnm-ssl rate-limit** ***limit***

   For more information about the **xnm-ssl** statement, see the *Junos OS System Basics Configuration Guide*.

6. Commit the configuration:

   [edit]
   user@host# **commit**

7. Repeat Step 1 on each computer where the client application runs, and Step 2 through Step 6 on each device to which the client application connects.

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Prerequisites for Telnet Connections

To enable a client application to use the Telnet protocol to access the Junos XML protocol server, perform the steps described in this section.

Devices running the Junos-FIPS software do not accept Telnet connections. We recommend that you do not use the Telnet protocol in a Common Criteria environment. For more information, see the *Secure Configuration Guide for Common Criteria and Junos-FIPS*.

1. Verify that the application can access the Telnet software. On most operating systems, Telnet is accessible in the standard distribution.
2. Satisfy the prerequisites discussed in "Prerequisites for All Access Protocols" on page 799.
3. Configure the device running Junos OS to accept Telnet connections by including the **telnet** statement at the **[edit system services]** hierarchy level. This statement enables Telnet access for all users and applications, not just Junos XML protocol client applications.

   ```
   [edit]
   user@host# set system services telnet
   ```

4. Repeat Step 1 on each computer where the application runs, and Step 2 and Step 3 on each device to which the application connects.

Connecting to the Junos XML Protocol Server

- Connecting to the Junos XML Protocol Server from the Client Application on page 809
- Connecting to the Junos XML Protocol Server from the CLI on page 810

Connecting to the Junos XML Protocol Server from the Client Application

For a client application to connect to the Junos XML protocol server and open a session, you must first satisfy the prerequisites described in "Prerequisites for Establishing a Connection" on page 799.

When the prerequisites are satisfied, an application written in Perl can most efficiently establish a connection and open a session by using the Junos XML protocol Perl module provided by Juniper Networks. For more information, see "Writing Junos XML Protocol Perl Client Applications" on page 983.

A client application that does not use the Junos XML protocol Perl module connects to the Junos XML protocol server by opening a socket or other communications channel to the Junos XML protocol server device, invoking one of the remote-connection routines appropriate for the programming language and access protocol that the application uses.

What the client application does next depends on which access protocol it is using:

- If using the clear-text or SSL protocol, the client application performs the following steps:

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1. Emits the initialization PI and tag, as described in "Emitting the Initialization PI and Tag" on page 811.
2. Authenticates with the Junos XML protocol server, as described in "Authenticating with the Junos XML Protocol Server" on page 815.

- If using the SSH or Telnet protocol, the client application performs the following steps:
  1. Uses the protocol's built-in authentication mechanism to authenticate.
  2. Issues the **junoscript** command to request that the Junos XML protocol server convert the connection into a Junos XML protocol session. For a C programming language example, see "Writing Junos XML Protocol C Client Applications" on page 1013.
  3. Emits the initialization PI and tag, as described in "Emitting the Initialization PI and Tag" on page 811.

Connecting to the Junos XML Protocol Server from the CLI

The Junos XML management protocol and Junos XML API are primarily intended for use by client applications; however, for testing purposes you can establish an interactive Junos XML protocol session and type commands in a shell window. To connect to the Junos XML protocol server from the CLI operational mode, issue the **junoscript interactive** command (the **interactive** option causes the Junos XML protocol server to echo what you type):

```
user@host> junoscript interactive
```

To begin a Junos XML protocol session over the connection, emit the initialization PI and tag that are described in "Emitting the Initialization PI and Tag" on page 811. You can then type sequences of tag elements that represent operational and configuration operations, which are described in "Requesting Information" on page 835, "Changing Configuration Information" on page 627, and "Committing a Configuration" on page 923. To eliminate typing errors, save complete tag element sequences in a file and use a cut-and-paste utility to copy the sequences to the shell window.

NOTE: When you close the connection to the Junos XML protocol server (for example, by emitting the <request-end-session/> and </junoscript> tags), the routing platform completely closes your connection instead of returning you to the CLI operational mode prompt. For more information about ending a Junos XML protocol session, see "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Starting the Junos XML Protocol Session

Each Junos XML protocol session begins with a handshake in which the Junos XML protocol server and the client application specify the version of XML and the version of the Junos XML management protocol they are using. Each party parses the version

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information emitted by the other, using it to determine whether they can communicate successfully. The following sections describe how to start a Junos XML protocol session:

- Emitting the Initialization PI and Tag on page 811
- Parsing the Initialization PI and Tag from the Junos XML Protocol Server on page 813
- Verifying Software Compatibility on page 815
- Supported Software Versions on page 815

Emitting the Initialization PI and Tag

When the Junos XML protocol session begins, the client application emits an **<?xml?>** PI and an opening **<junoscript>** tag, as described in the following sections:

- Emitting the <?xml?> PI on page 811
- Emitting the Opening <junoscript> Tag on page 812

Emitting the <?xml?> PI

The client application begins by emitting an **<?xml?>** PI.

NOTE: In the following example (and in all examples in this document of tag elements emitted by a client application), bold font is used to highlight the part of the tag sequence that is discussed in the text.

```
<?xml version="version" encoding="encoding"?>
```

The attributes are as follows. For a list of the attribute values that are acceptable in the current version of the Junos XML management protocol, see "Supported Software Versions" on page 815.

- **version**—The version of XML with which tag elements emitted by the client application comply
- **encoding**—The standardized character set that the client application uses and can understand

In the following example of a client application's **<?xml?>** PI, the **version="1.0"** attribute indicates that the application is emitting tag elements that comply with the XML 1.0 specification. The **encoding="us-ascii"** attribute indicates that the client application is using the 7-bit ASCII character set standardized by the American National Standards Institute (ANSI). For more information about ANSI standards, see http://www.ansi.org/ .

```
<?xml version="1.0" encoding="us-ascii"?>
```

NOTE: If the application fails to emit the <?xml?> PI before emitting the opening <junoscript> tag, the Junos XML protocol server emits an error message and immediately closes the session and connection. For more information, see "Emitting the Opening <junoscript> Tag" on page 812.

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Emitting the Opening <junoscript> Tag

The client application then emits its opening **<junoscript>** tag, which has the following syntax (and appears here on two lines only for legibility):

```
<junoscript version="version" hostname="hostname" junos:key="key"
  release="release-code">
```

The attributes are as follows. For a list of the attribute values that are acceptable in the current version of the Junos XML management protocol, see "Supported Software Versions" on page 815.

- **version**—(Required) Specifies the version of the Junos XML management protocol that the client application is using.
- **hostname**—(Optional) Names the machine on which the client application is running. The information is used only when diagnosing problems. The Junos XML protocol does not include support for establishing trusted-host relationships or otherwise altering Junos XML protocol server behavior depending on the client hostname.
- **junos:key**—(Optional) Requests that the Junos XML protocol server indicate whether a child configuration element is an identifier for its parent element. The only acceptable value is **key**. For more information, see "Requesting an Indicator for Identifiers" on page 846.
- **release**—(Optional) Identifies the Junos OS Release (and by implication, the Junos XML API) for which the client application is designed. The value of this attribute indicates that the client application can interoperate successfully with a Junos XML protocol server that also supports that version of the Junos XML API. In other words, it indicates that the client application emits request tag elements from that API and knows how to parse response tag elements from it. If the application does not include this attribute, the Junos XML protocol server emits tag elements from the Junos XML API that it supports. For more information, see "Verifying Software Compatibility" on page 815.

  For the value of the **release** attribute, use the standard notation for Junos OS version numbers. For example, the value **12.1R1** represents the initial version of Junos OS Release 12.1.

In the following example of a client application's opening **<junoscript>** tag, the **version="1.0"** attribute indicates that it is using Junos XML protocol version 1.0. The **hostname="client1"** attribute indicates that the client application is running on the machine called **client1**. The **release="12.1R1"** attribute indicates that the switch, router, or security device is running the initial version of Junos OS Release 12.1.

```
<junoscript version="1.0" hostname="client1" release="12.1R1">
```


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NOTE: If the application fails to emit the <?xml?> PI before emitting the opening <junoscript> tag, the Junos XML protocol server emits an error message similar to the following and immediately closes the session and connection:

```
<rpc-reply>
  <xnm:error xmlns="http://xml.juniper.net/xnm/1.1/xnm" \
    xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
    <message>
      communication error while exchanging credentials
    </message>
  </xnm:error>
</rpc-reply>
<!-- session end at YYYY-MM-DD hh:mm:ss TZ -->
</junoscript>
```

For more information about the <xnm:error> tag, see "Handling an Error or Warning" on page 823.

Parsing the Initialization PI and Tag from the Junos XML Protocol Server

When the Junos XML protocol session begins, the Junos XML protocol server emits an **<?xml?>** PI and an opening **<junoscript>** tag, as described in the following sections:

- Parsing the Junos XML Protocol Server's <?xml?> PI on page 813
- Parsing the Junos XML Protocol Server's Opening <junoscript> Tag on page 814

Parsing the Junos XML Protocol Server's <?xml?> PI

The syntax for the **<?xml?>** PI is as follows:

```
<?xml version="version" encoding="encoding"?>
```

The attributes are as follows. For a list of the attribute values that are acceptable in the current version of the Junos XML management protocol, see "Supported Software Versions" on page 815.

- **version**—The version of XML with which tag elements emitted by the Junos XML protocol server comply
- **encoding**—The standardized character set that the Junos XML protocol server uses and can understand

In the following example of a Junos XML protocol server's **<?xml?>** PI, the **version="1.0"** attribute indicates that the server is emitting tag elements that comply with the XML 1.0 specification. The **encoding="us-ascii"** attribute indicates that the server is using the 7-bit ASCII character set standardized by ANSI. For more information about ANSI standards, see http://www.ansi.org/ .

```
<?xml version="1.0" encoding="us-ascii"?>
```

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Parsing the Junos XML Protocol Server's Opening <junoscript> Tag

After emitting the **<?xml?>**PI, the server then emits its opening **<junoscript>** tag, which has the following form (the tag appears on multiple lines only for legibility):

```
<junoscript xmlns="namespace-URL" xmlns:junos="namespace-URL" \
 schemaLocation="namespace-URL" os="JUNOS" \
 release="release-code" hostname="hostname" version="version">
```

The attributes are as follows:

- **hostname**—The name of the device on which the Junos XML protocol server is running.
- **os**—The operating system of the device on which the Junos XML protocol server is running. The value is always **JUNOS**.
- **release**—The identifier for the version of the Junos OS from which the Junos XML protocol server is derived and that it is designed to understand. It is presumably in use on the device where the Junos XML protocol server is running. The value of the **release** attribute uses the standard notation for Juniper Networks software version numbers. For example, the value **12.1R1** represents the initial version of Junos OS Release 12.1.
- **schemaLocation**—The XML namespace for the XML Schema-language representation of the Junos configuration hierarchy.
- **version**—The version of the Junos XML management protocol that the Junos XML protocol server is using.
- **xmlns**—The XML namespace for the tag elements enclosed by the **<junoscript>** tag element that do not have a prefix on their names (that is, the default namespace for Junos XML tag elements). The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.
- **xmlns:junos**—The XML namespace for the tag elements enclosed by the **<junoscript>** tag element that have the **junos:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/junos/*release-code*/junos**, where ***release-code*** is the standard string that represents a release of the Junos OS. For example, the value **12.1R1** represents the initial version of Junos OS Release 12.1.

In the following example of a Junos XML protocol server's opening **<junoscript>** tag, the **version** attribute indicates that the server is using Junos XML protocol version 1.0, and the **hostname** attribute indicates that the router's name is **big-device**. The **os** and **release** attributes indicate that the device is running the initial version of Junos OS Release 12.1. The **xmlns** attribute indicate that the default namespace for Junos XML tag elements is **http://xml.juniper.net/xnm/1.1/xnm** . The **xmlns:junos** attribute indicates that the namespace for tag elements that have the **junos:** prefix is **http://xml.juniper.net/junos/12.1R1/junos** . The tag appears on multiple lines only for legibility.

```
<junoscript xmlns="http://xml.juniper.net/xnm/1.1/xnm"\
   xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos" \
  schemaLocation="http://xml.juniper.net/junos/12.1R1/junos" os="JUNOS" \
  release="12.1R1.8" hostname="big-device" version="1.0">
```


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Verifying Software Compatibility

Exchanging **<?xml?>** and **<junoscript>** tag elements enables a client application and the Junos XML protocol server to determine if they are running different versions of the software used during a Junos XML protocol session. Different versions are sometimes incompatible, and by Junos XML protocol convention the party running the later version of software determines how to handle any incompatibility. For fully automated performance, include code in the client application that determines if its version of software is later than that of the Junos XML protocol server. Decide which of the following options is appropriate when the application's version is more recent, and implement the corresponding response:

- Ignore differences in Junos version, and do not alter the client application's behavior to accommodate the Junos XML protocol server. A difference in Junos versions does not necessarily make the server and client incompatible, so this is often a valid approach.
- Alter standard behavior to be compatible with the Junos XML protocol server. If the client application is running a later version of the Junos OS, for example, it can choose to emit only tag elements that represent the software features available in the Junos XML protocol server's version of the Junos OS.
- End the Junos XML protocol session and terminate the connection. This is appropriate if you decide that it is not practical to accommodate the Junos XML protocol server's version of software. For instructions, see "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Supported Software Versions

Table 37 on page 815 specifies the PI or opening tag and attribute used to convey version information during Junos XML protocol session initialization in version 1.0 of the Junos XML management protocol.

Table 37: Junos XML Protocol version 1.0 PI and Opening Tag

Software and Versions	PI or Tag	Attribute
XML 1.0	**<?xml?>**	**version="1.0"**
ANSI-standardized 7-bit ASCII character set	**<?xml?>**	**encoding="us-ascii"**
Junos XML protocol 1.0	**<junoscript>**	**version="1.0"**
Junos OS Release	**<junoscript>**	**release="m.nZb"** For example: **release="10.3R1"**

Authenticating with the Junos XML Protocol Server

A client application that uses the clear-text or SSL protocol must now authenticate with the Junos XML protocol server. (Applications that use the SSH or Telnet protocol use

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the protocol's built-in authentication mechanism before emitting initialization tag elements, as described in "Connecting to the Junos XML Protocol Server" on page 809.)

See the following sections:

- Submitting an Authentication Request on page 816
- Interpreting the Authentication Response on page 817

Submitting an Authentication Request

The client application begins the authentication process by emitting an **<rpc>** tag element enclosing the **<request-login>** tag element. In the **<request-login>** tag element, it encloses the **<username>** tag element to specify the Junos OS account (username) under which to establish the connection. The account must already be configured on the Junos XML protocol server device, as described in "Prerequisites for All Access Protocols" on page 799. You can choose whether or not the application provides the account password as part of the initial tag sequence.

Providing the Password with the Username

To provide the password along with the username, the application emits the following tag sequence:

```
<rpc>
  <request-login>
    <username>username</username>
    <challenge-response>password</challenge-response>
  </request-login>
</rpc>
```

This tag sequence is appropriate if the application automates access to routing, switching, or security platform information and does not interact with users, or obtains the password from a user before beginning the authentication process.

Providing Only the Username

To omit the password and specify only the username, the application emits the following tag sequence:

```
<rpc>
  <request-login>
    <username>username</username>
  </request-login>
</rpc>
```

This tag sequence is appropriate if the application does not obtain the password until the authentication process has already begun. In this case, the Junos XML protocol server returns the **<challenge>** tag element within an **<rpc-reply>** tag element to request the password associated with the username. The tag element encloses the **Password:** string, which the client application can forward to the screen as a prompt for a user. The **echo="no"** attribute in the opening **<challenge>** tag specifies that the password string typed by the user does not echo on the screen. The tag sequence is as follows:

```
<rpc-reply xmlns:junos="URL">
  <challenge echo="no">Password:</challenge>
</rpc-reply>
```


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The client application obtains the password and emits the following tag sequence to forward it to the Junos XML protocol server:

```
<rpc>
  <request-login>
    <username>username</username>
    <challenge-response>password</challenge-response>
  </request-login>
</rpc>
```

Interpreting the Authentication Response

After it receives the username and password, the Junos XML protocol server emits the **<authentication-response>** tag element to indicate whether the authentication attempt is successful.

Server Response When Authentication Succeeds

If the password is correct, the authentication attempt succeeds and the Junos XML protocol server emits the following tag sequence:

```
<rpc-reply xmlns:junos="URL">
  <authentication-response>
    <status>success</status>
    <message>username</message>
    <login-name>remote-username</login-name>
  </authentication-response>
</rpc-reply>
```

The **<message>** tag element contains the Junos username under which the connection is established.

The **<login-name>** tag element contains the username that the client application provided to an authentication utility such as RADIUS or TACACS+. This tag element appears only if the username differs from the username contained in the **<message>** tag element.

The Junos XML protocol session begins, as described in "Starting the Junos XML Protocol Session" on page 810.

Server Response When Authentication Fails

If the password is not correct or the **<request-login>** tag element is otherwise malformed, the authentication attempt fails and the Junos XML protocol server emits the following tag sequence:

```
<rpc-reply xmlns:junos="URL">
  <authentication-response>
    <status>fail</status>
    <message>error-message</message>
  </authentication-response>
</rpc-reply>
```

The ***error-message*** string in the **<message>** tag element explains why the authentication attempt failed. The Junos XML protocol server emits the **<challenge>** tag element up to two more times before rejecting the authentication attempt and closing the connection.

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Exchanging Information with the Junos XML Protocol Server

The session continues when the client application sends a request to the Junos XML protocol server. The Junos XML protocol server does not emit any tag elements after session initialization except in response to the client application's requests. The following sections describe the exchange of tagged data:

- Sending a Request to the Junos XML Protocol Server on page 818
- Parsing the Junos XML Protocol Server Response on page 821
- Handling an Error or Warning on page 823
- Halting a Request on page 824

Sending a Request to the Junos XML Protocol Server

To initiate a request to the Junos XML protocol server, a client application emits the opening **<rpc>** tag, followed by one or more tag elements that represent the particular request, and the closing **</rpc>** tag, in that order:

```
<rpc>
  <!--tag elements representing a request-->
</rpc>
```

The application encloses each request in a separate pair of opening **<rpc>** and closing **</rpc>** tags. The **<rpc>** tag element can occur only within the **<junoscript>** tag element. For an example of emitting an **<rpc>** tag element in the context of a complete Junos XML protocol session, see "Example of a Junos XML Protocol Session" on page 831.

The Junos XML protocol server ignores any newline characters, spaces, or other white space characters that occur between tag elements in the tag stream, but does preserve white space within tag elements. For more information, see "XML and Junos XML Management Protocol Conventions Overview" on page 783.

See the following sections for further information:

- Request Classes on page 818
- Including Attributes in the Opening <rpc> Tag on page 820

Request Classes

A client application can make three classes of requests:

- Operational Requests on page 819
- Configuration Information Requests on page 819
- Configuration Change Requests on page 820

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NOTE: Although operational and configuration requests conceptually belong to separate classes, a Junos XML protocol session does not have distinct modes that correspond to CLI operational and configuration modes. Each request tag element is enclosed within its own <rpc> tag element, so a client application can freely alternate operational and configuration requests.

Operational Requests

Operational requests are requests for information about the status of a device running Junos OS. Operational requests correspond to the CLI operational mode commands listed in the Junos OS command references. The Junos XML API defines a request tag element for many CLI commands. For example, the **<get-interface-information>** tag element corresponds to the **show interfaces** command, and the **<get-chassis-inventory>** tag element requests the same information as the **show chassis hardware** command.

The following sample request is for detailed information about the interface **ge-2/3/0**:

```
<rpc>
  <get-interface-information>
    <interface-name>ge-2/3/0</interface-name>
    <detail/>
  </get-interface-information>
</rpc>
```

For more information, see "Requesting Operational Information" on page 836. For information about the Junos XML request tag elements available in the current Junos OS Release, see the *Junos XML API Operational Developer Reference*.

Configuration Information Requests

Configuration information requests are requests for information about the device's candidate configuration, a private configuration, or the committed configuration (the one currently in active use on the switching, routing, or security platform). The candidate and committed configurations diverge when there are uncommitted changes to the candidate configuration.

The Junos XML protocol defines the **<get-configuration>** operation for retrieving configuration information. The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy.

The following example shows how to request information about the **[edit system login]** hierarchy level in the candidate configuration:

```
<rpc>
  <get-configuration>
    <configuration>
      <system>
        <login/>
      </system>
    </configuration>
  </get-configuration>
</rpc>
```

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For more information, see "Requesting Configuration Information" on page 840. For a summary of Junos XML configuration tag elements, see the *Junos XML API Configuration Developer Reference*.

Configuration Change Requests

Configuration change requests are requests to change the candidate configuration, or to commit those changes to put them into active use on the device running Junos OS. The Junos XML protocol defines the **<load-configuration>** operation for changing configuration information. The Junos XML API defines a tag element for every CLI configuration statement described in the Junos OS configuration guides.

The following example shows how to create a new Junos OS user account called **admin** at the **[edit system login]** hierarchy level in the candidate configuration:

```
<rpc>
  <load-configuration>
    <configuration>
      <system>
        <login>
          <user>
            <name>admin</name>
            <full-name>Administrator</full-name>
            <class>superuser</class>
          </user>
        </login>
      </system>
    </configuration>
  </load-configuration>
</rpc>
```

For more information, see "Changing Configuration Information" on page 627 and "Committing a Configuration" on page 923. For a summary of Junos XML configuration tag elements, see the *Junos XML API Configuration Developer Reference*.

Including Attributes in the Opening <rpc> Tag

Optionally, a client application can include one or more attributes of the form ***attribute-name*="*value*"** in the opening **<rpc>** tag for each request. The Junos XML protocol server echoes each attribute, unchanged, in the opening **<rpc-reply>** tag in which it encloses its response. A client application can use this feature to associate requests and responses by including an attribute in each opening **<rpc>** request tag that assigns a unique identifier. The Junos XML protocol server echoes the attribute in its opening **<rpc-reply>** tag, making it easy to map the response to the initiating request. The client application can freely define attribute names, except as described in the following note.

NOTE: The xmlns:junos attribute name is reserved. The Junos XML protocol server sets the attribute to an appropriate value on the opening <rpc-reply> tag, so client applications must not emit it on the opening <rpc> tag. For more information, see "xmlns:junos Attribute" on page 821.

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Parsing the Junos XML Protocol Server Response

The Junos XML protocol server encloses its response to each client request in a separate pair of opening **<rpc-reply>** and closing **</rpc-reply>** tags. Each response constitutes a well-formed XML document.

```
<rpc-reply xmlns:junos="URL">
  <!-- tag elements representing a response -->
</rpc-reply>
```

The **xmlns:junos** attribute in the opening **<rpc-reply>** tag defines the default namespace for the enclosed tag elements that have the **junos:** prefix in their names, as discussed further in "xmlns:junos Attribute" on page 821. The **<rpc-reply>** tag element occurs only within the **<junoscript>** tag element. Client applications must include code for parsing the stream of response tag elements coming from the Junos XML protocol server, either processing them as they arrive or storing them until the response is complete. See the following sections for further information:

- xmlns:junos Attribute on page 821
- Junos XML Protocol Server Response Classes on page 821
- Using a Standard API to Parse Response Tag Elements on page 823

For an example of parsing the **<rpc-reply>** tag element in the context of a complete Junos XML protocol session, see "Example of a Junos XML Protocol Session" on page 831.

xmlns:junos Attribute

The Junos XML protocol server includes the **xmlns:junos** attribute in the opening **<rpc-reply>** tag to define the XML namespace for the enclosed Junos XML tag elements that have the **junos:** prefix on their names. The namespace is a URL of the form **http://xml.juniper.net/junos/*release-code*/junos**, where ***release-code*** is the standard string that represents the release of the Junos OS running on the Junos XML protocol server machine.

In the following example, the namespace corresponds to the initial version of Junos OS Release 12.1:

```
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
```

Junos XML Protocol Server Response Classes

The Junos XML protocol server returns three classes of responses:

- Operational Responses on page 821
- Configuration Information Responses on page 822
- Configuration Change Responses on page 823

Operational Responses

Operational responses are responses to requests for information about the status of a switching, routing, or security platform. They correspond to the output from CLI operational commands as described in the Junos OS command references.

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The Junos XML API defines response tag elements for all defined operational request tag elements. For example, the Junos XML protocol server returns the information requested by the **<get-interface-information>** tag element in a response tag element called **<interface-information>**, and returns the information requested by the **<get-chassis-inventory>** tag element in a response tag element called **<chassis-inventory>**. Operational responses also can be returned in formatted ASCII, which is enclosed in an **output** tag element. For more information about formatting operational responses see "Specifying the Output Format for Operational Information Requests in a Junos XML Protocol Session" on page 838.

The following sample response includes information about the interface **ge-2/3/0**. The namespace indicated by the **xmlns** attribute contains interface information for the initial version of Junos OS Release 12.1.

```
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
  <interface-information xmlns="http://xml.juniper.net/junos/12.1R1/junos-interface">
    <physical-interface>
      <name>ge-2/3/0</name>
      <!-- other data tag elements for the ge-2/3/0 interface -??->
    </physical-interface>
  </interface-information>
</rpc-reply>
```

For more information about the **xmlns** attribute and contents of operational response tag elements, see "Requesting Operational Information" on page 836. For a summary of operational response tag elements, see the *Junos XML API Operational Developer Reference*.

Configuration Information Responses

Configuration information responses are responses to requests for information about the device's current configuration. The Junos XML API defines a tag element for every container and leaf statement in the configuration hierarchy.

The following sample response includes the information at the **[edit system login]** hierarchy level in the configuration hierarchy. For brevity, the sample shows only one user defined at this level.

```
<rpc-reply xmlns:junos="URL">
  <configuration>
    <system>
      <login>
        <user>
          <name>admin</name>
          <full-name>Administrator</full-name>
          <!-- other data tag elements for the admin user -->
        </user>
      </login>
    </system>
  </configuration>
</rpc-reply>
```

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Configuration Change Responses

Configuration change responses are responses to requests that change the state or contents of the device configuration. For commit operations, the Junos XML protocol server encloses an explicit indicator of success or failure within the **<commit-results>** tag element:

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <!-- tag elements for information about the commit -->
  </commit-results>
</rpc-reply>
```

For other operations, the Junos XML protocol server indicates success by returning an opening **<rpc-reply>** and closing **</rpc-reply>** tag with nothing between them, instead of emitting an explicit success indicator:

```
<rpc-reply xmlns:junos="URL">
</rpc-reply>
```

For more information, see "Changing Configuration Information" on page 627 and "Committing a Configuration" on page 923. For a summary of the available configuration tag elements, see the *Junos XML API Configuration Developer Reference*.

Using a Standard API to Parse Response Tag Elements

Client applications can handle incoming XML tag elements by feeding them to a parser that implements a standard API such as the Document Object Model (DOM) or Simple API for XML (SAX). Describing how to implement and use a parser is beyond the scope of this document.

Routines in the DOM accept incoming XML and build a tag hierarchy in the client application's memory. There are also DOM routines for manipulating an existing hierarchy. DOM implementations are available for several programming languages, including C, C++, Perl, and Java. For detailed information, see the *Document Object Model (DOM) Level 1 Specification* from the World Wide Web Consortium (W3C) at http://www.w3.org/TR/REC-DOM-Level-1/ . Additional information is available from the Comprehensive Perl Archive Network (CPAN) at http://search.cpan.org/~tjmather/XML-DOM/lib/XML/DOM.pm .

One potential drawback with DOM is that it always builds a hierarchy of tag elements, which can become very large. If a client application needs to handle only one subhierarchy at a time, it can use a parser that implements SAX instead. SAX accepts XML and feeds the tag elements directly to the client application, which must build its own tag hierarchy. For more information, see the official SAX website at http://sax.sourceforge.net/ .

Handling an Error or Warning

If the Junos XML protocol server encounters an error condition, it emits an **<xnm:error>** tag element, which encloses child tag elements that describe the nature of the error. Client applications must be prepared to receive and handle an **<xnm:error>** tag element at any time. The information in any response tag elements already received and related to the current request might be incomplete. The client application can include logic for deciding whether to discard or retain the information.

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The syntax of the **<xnm:error>** tag element is as follows. The opening tag appears on multiple lines only for legibility:

```
<xnm:error xmlns="http://xml.juniper.net/xnm/1.1/xnm" \
   xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
   <!-- tag elements describing the error -->
</xnm:error>
```

The attributes are as follows:

- **xmlns**—The XML namespace for the tag elements enclosed by the **<xnm:error>** tag element that do not have a prefix in their names (that is, the default namespace for Junos XML tag elements). The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.
- **xmlns:xnm**—The XML namespace for the **<xnm:error>** tag element and for the enclosed tag elements that have the **xnm:** prefix in their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

The set of child tag elements enclosed in the **<xnm:error>** tag element depends on the operation that server was performing when the error occurred. An error can occur while the server is performing any of the following operations, and the server can send a different combination of child tag elements in each case:

- Processing an operational request submitted by a client application (discussed in "Requesting Information" on page 835)
- Opening, locking, committing, or closing a configuration as requested by a client application (discussed in "Exchanging Information with the Junos XML Protocol Server" on page 818, "Committing a Configuration" on page 923, and "Ending a Junos XML Protocol Session and Closing the Connection" on page 829)
- Parsing configuration data submitted by a client application in a **<load-configuration>** tag element (discussed in "Changing Configuration Information" on page 627)

If the Junos XML protocol server encounters a less serious problem, it can emit an **<xnm:warning>** tag element instead. The usual response for the client application in this case is to log the warning or pass it to the user, but to continue parsing the server's response.

For a description of the child tag elements that can appear within an **<xnm:error>** or **<xnm:warning>** tag element to specify the nature of the problem, see "<xnm:error>" on page 963 and "<xnm:warning>" on page 965.

Halting a Request

To request that the Junos XML protocol server stop processing the current request, a client application emits the **<abort/>** tag directly after the closing **</rpc>** tag for the operation to be halted:

```
<rpc>
   <!-- tag elements for the request -->
</rpc>
<abort/>
```


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The Junos XML protocol server responds with the **<abort-acknowledgement/>** tag:

```
<rpc-reply xmlns:junos="URL">
  <abort-acknowledgement/>
</rpc-reply>
```

Depending on the operation being performed, response tag elements already sent by the Junos XML protocol server for the halted request are possibly invalid. The application can include logic for deciding whether to discard or retain them as appropriate.

For more information, see "<abort/>" on page 939 and "<abort-acknowledgement/>" on page 939.

Locking and Unlocking the Candidate Configuration or Creating a Private Copy

When a client application is requesting or changing configuration information, it can use one of three methods to access the configuration:

- Lock the candidate configuration, which prevents other users or applications from changing the configuration until the application releases the lock (equivalent to the CLI **configure exclusive** command).
- Create a private copy of the candidate configuration, which enables the application to view or change configuration data without affecting the candidate or active configuration until the private copy is committed (equivalent to the CLI **configure private** command).
- Change the candidate configuration without locking it. We do not recommend this method, because of the potential for conflicts with changes made by other applications or users that are editing the configuration at the same time.

If an application is simply requesting configuration information and not changing it, locking the configuration or creating a private copy is not required. However, it is appropriate to lock the configuration if it is important that the information being returned not change during the session. The information from a private copy is guaranteed not to change, but can diverge from the candidate configuration if other users or applications are changing the candidate.

The restrictions on, and interactions between, operations on the locked regular candidate configuration and a private copy are the same as for the CLI **configure exclusive** and **configure private** commands. For more information, see "Committing a Private Copy of the Configuration" on page 925 and the *CLI User Guide*.

For more information about locking and unlocking the candidate configuration or creating a private copy, see the following sections:

- Locking the Candidate Configuration on page 826
- Unlocking the Candidate Configuration on page 827
- Terminating Another Junos XML Protocol Session on page 827
- Creating a Private Copy of the Configuration on page 828

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Locking the Candidate Configuration

To lock the candidate configuration, a client application emits the **<lock-configuration/>** tag within an **<rpc>** tag element:

```
<rpc>
  <lock-configuration/>
</rpc>
```

Emitting this tag prevents other users or applications from changing the candidate configuration until the lock is released (equivalent to the CLI **configure exclusive** command). Locking the configuration is recommended, particularly on devices where multiple users are authorized to change the configuration. A commit operation applies to all changes in the candidate configuration, not just those made by the user or application that requests the commit. Allowing multiple users or applications to make changes simultaneously can lead to unexpected results.

When the Junos XML protocol server locks the configuration, it returns an opening **<rpc-reply>** and closing **</rpc-reply>** tag with nothing between them:

```
<rpc-reply xmlns:junos="URL">
</rpc-reply>
```

If the Junos XML protocol server cannot lock the configuration, the **<rpc-reply>** tag element instead encloses an **<xnm:error>** tag element explaining the reason for the failure. Reasons for the failure can include the following:

- Another user or application has already locked the candidate configuration. The error message reports the login identity of the user or application.
- The candidate configuration already includes changes that have not yet been committed. To commit the changes, see "Committing a Configuration" on page 923. To roll back to a previous version of the configuration (and lose the uncommitted changes), see "Rolling Back to a Previous or Rescue Configuration" on page 892.

Only one application can hold the lock on the candidate configuration at a time. Other users and applications can read the candidate configuration while it is locked, or can change their private copies. The lock persists until either the Junos XML protocol session ends or the client application unlocks the configuration by emitting the **<unlock-configuration/>** tag, as described in "Unlocking the Candidate Configuration" on page 827.

If the candidate configuration is not committed before the client application unlocks it, or if the Junos XML protocol session ends for any reason before the changes are committed, the changes are automatically discarded. The candidate and committed configurations remain unchanged.

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Unlocking the Candidate Configuration

As long as a client application holds a lock on the candidate configuration, other applications and users cannot change the candidate. To unlock the candidate configuration, the client application includes the **<unlock-configuration/>** tag in an **<rpc>** tag element:

```
<rpc>
  <unlock-configuration/>
</rpc>
```

To confirm that it has successfully unlocked the configuration, the Junos XML protocol server returns an opening **<rpc-reply>** and closing **</rpc-reply>** tag with nothing between them:

```
<rpc-reply xmlns:junos="URL">
</rpc-reply>
```

If the Junos XML protocol server cannot unlock the configuration, the **<rpc-reply>** tag element instead encloses an **<xnm:error>** tag element explaining the reason for the failure.

Terminating Another Junos XML Protocol Session

A client application's attempt to lock the candidate configuration can fail because another user or application already holds the lock, as mentioned in "Locking the Candidate Configuration" on page 826. In this case, the Junos XML protocol server returns an error message that includes the username and process ID (PID) for the entity that holds the existing lock:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <xnm:error>
    <message>
      configuration database locked by:
user terminal (pid PID) on since YYYY-MM-DD hh:mm:ss TZ, idle hh:mm:ss
      exclusive [edit]
    </message>
  </xnm:error>
</rpc-reply>
```

If the client application has the Junos **maintenance** permission, it can end the session that holds the lock by emitting the **<kill-session>** and **<session-id>** tag elements in an **<rpc>** tag element. The **<session-id>** tag element specifies the PID obtained from the error message:

```
<rpc>
  <kill-session>
    <session-id>PID</session-id>
  </kill-session>
</rpc>
```

The Junos XML protocol server confirms that it has terminated the other session by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns="URN" xmlns:junos="URL">
  <ok/>
</rpc-reply>
```

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We recommend that the application include logic for determining whether it is appropriate to terminate another session, based on factors such as the identity of the user or application that holds the lock, or the length of idle time.

When a session is terminated, the Junos XML protocol server that is servicing the session rolls back all uncommitted changes that have been made during the session. If a confirmed commit is pending (changes have been committed but not yet confirmed), the Junos XML protocol server restores the configuration to its state before the confirmed commit instruction was issued. (For information about the confirmed commit operation, see "Committing the Candidate Configuration Only After Confirmation" on page 927.)

Creating a Private Copy of the Configuration

To create a private copy of the candidate configuration, a client application emits the **<private/>** tag enclosed in **<rpc>** and **<open-configuration>** tag elements:

```
<rpc>
  <open-configuration>
    <private/>
  </open-configuration>
</rpc>
```

The client application can then perform the same operations on the private copy as on the regular candidate configuration, as described in "Changing Configuration Information" on page 627.

After making changes to the private copy, the client application can commit the changes to the active configuration on the device running Junos OS by emitting the **<commit-configuration>** tag element, as for the regular candidate configuration. However, there are some restrictions on the commit operation for a private copy. For more information, see "Committing a Private Copy of the Configuration" on page 925.

To discard the private copy without committing it, a client application emits the **<close-configuration/>** tag enclosed in an **<rpc>** tag element:

```
<rpc>
  <close-configuration/>
</rpc>
```

Any changes to the private copy are lost. Changes to the private copy are also lost if the Junos XML protocol session ends for any reason before the changes are committed. It is not possible to save changes to a private copy other than by emitting the **<commit-configuration>** tag element.

The following example shows how to create a private copy of the configuration. The Junos XML protocol server includes a reminder in its confirmation response that changes are discarded from a private copy if they are not committed before the session ends.

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Client Application	Junos XML Protocol Server
<rpc> <open-configuration> <private/> </open-configuration> </rpc>	
	<rpc-reply xmlns:junos="URL"> <xnm:warning xmlns="http://xml.juniper.net/xnm/1.1/xnm" \ xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm"> <message>uncommitted changes will be discarded on exit</message> </xnm:warning> </rpc-reply>

T11172

Ending a Junos XML Protocol Session and Closing the Connection

When a client application is finished making requests, it ends the Junos XML protocol session by emitting the **<request-end-session/>** tag within an **<rpc>** tag element:

```
<rpc>
  <request-end-session/>
</rpc>
```

In response, the Junos XML protocol server emits the **<end-session/>** tag enclosed in an **<rpc-reply>** tag element and a closing **</junoscript>** tag:

```
<rpc-reply xmlns:junos="URL">
  <end-session/>
</rpc-reply>
</junoscript>
```

The client application waits to receive this reply before emitting its closing **</junoscript>** tag:

```
</junoscript>
```

For an example of the exchange of closing tags, see "Closing the Junos XML Protocol Session" on page 834.

The client application can then close the SSH, SSL, or other connection to the Junos XML protocol server machine. Client applications written in Perl can close the Junos XML protocol session and connection by using the Junos XML protocol Perl module described in "Writing Junos XML Protocol Perl Client Applications" on page 983. For more information, see that chapter.

Client applications that do not use the Junos XML protocol Perl module use the routine provided for closing a connection in the standard library for their programming language.

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Displaying CLI Output as XML Tag Elements

To display the output from a CLI command as Junos XML protocol tag elements and Junos XML tag elements instead of as the default formatted ASCII text, pipe the output from the command to the **display xml** command. The tag elements that describe Junos OS configuration or operational data belong to the Junos XML API, which defines the Junos content that can be retrieved and manipulated by the Junos XML management protocol operations.

The following example shows the output from the **show chassis hardware** command issued on an M20 router that is running the initial version of Junos OS Release 12.1 (the opening **<chassis-inventory>** tag appears on two lines only for legibility):

```
user@host> show chassis hardware | display xml
  <rpc-reply xmlns:junos="http://xml.juniper.net/junos/12.1R1/junos">
    <chassis-inventory \
          xmlns="http://xml.juniper.net/junos/12.1R1/junos-chassis">
      <chassis junos:style="inventory">
        <name>Chassis</name>
        <serial-number>00118</serial-number>
        <description>M20</description>
        <chassis-module>
          <name>Backplane</name>
          <version>REV 06</version>
          <part-number>710-001517</part-number>
          <serial-number>AB5911</serial-number>
        </chassis-module>
        <chassis-module>
          <name>Power Supply A</name>
          <!-- other child tags of <chassis-module> -->
        </chassis-module>
        <!-- other child tags of <chassis> -->
      </chassis>
    </chassis-inventory>
  </rpc-reply>
```

Displaying the RPC Tags for a Command

To display the remote procedure call (RPC) XML tags for an operational mode command, enter **display xml rpc** after the pipe symbol (|).

The following example displays the RPC tags for the **show route** command:

```
user@host> show route | display xml rpc
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/10.1I0/junos">
    <rpc>
        <get-route-information>
        </get-route-information>
    </rpc>
    <cli>
        <banner></banner>
    </cli>
</rpc-reply>
```


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Example of a Junos XML Protocol Session

This section describes the sequence of tag elements in a sample Junos XML protocol session. The client application begins by establishing a connection to a Junos XML protocol server. See the following sections:

- Exchanging Initialization PIs and Tag Elements on page 831
- Sending an Operational Request on page 831
- Locking the Configuration on page 832
- Changing the Configuration on page 832
- Committing the Configuration on page 833
- Unlocking the Configuration on page 833
- Closing the Junos XML Protocol Session on page 834

Exchanging Initialization PIs and Tag Elements

After the client application establishes a connection to a Junos XML protocol server, the two exchange initialization PIs and tag elements, as shown in the following example. Note that the Junos XML protocol server's opening **<junoscript>** tag appears on multiple lines for legibility only. Neither the Junos XML protocol server nor client applications insert a newline character into the list of attributes. Also, in an actual exchange, the ***JUNOS-release*** variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1. For a detailed discussion of the **<?xml?>** PI and opening **<junoscript>** tag, see "Starting the Junos XML Protocol Session" on page 810.

Client Application

```
<?xml version="1.0" encoding="us-ascii"?>
<junoscript version="1.0" release=" JUNOS-release">
```

Junos XML Protocol Server

```
<?xml version="1.0" encoding="us-ascii"?>
<junoscript version="1.0" hostname="router1" \
   os="JUNOS" release="JUNOS-release"\
   xmlns="URL"xmlns:junos=" URL" \
   xmlns:xnm="URL">
```

T1173

Sending an Operational Request

The client application now emits the **<get-chassis-inventory>** tag element to request information about the device's chassis hardware. The Junos XML protocol server returns the requested information in the **<chassis-inventory>** tag element.

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Client Application

```
<rpc>
  <get-chassis-inventory>
    <detail/>
  </get-chassis-inventory>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <chassis-inventory xmlns="URL">
    <chassis>
      <name>Chassis</name>
      <serial-number>1122</serial-number>
      <description>M320</description>
      <chassis-module>
        <name>Midplane</name>
        <!- -other child tags for the Midplane- ->
      </chassis-module>
      <!- -tags for other chassis modules- ->
    </chassis>
  </chassis-inventory>
</rpc-reply>
```

T1102

Locking the Configuration

The client application then prepares to create a new privilege class called **network-mgmt** at the **[edit system login class]** hierarchy level. It begins by using the **<lock-configuration/>** tag to prevent any other users or applications from altering the candidate configuration at the same time. To confirm that the candidate configuration is locked, the Junos XML protocol server returns an **<rpc-reply>** and an **</rpc-reply>** tag with nothing between them.

Client Application

```
<rpc>
  <lock-configuration/>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
</rpc-reply>
```

T1103

Changing the Configuration

The client application emits the tag elements that add the new **network-mgmt** privilege class to the candidate configuration. The Junos XML protocol server returns the **<load-configuration-results>** tag element to enclose a tag element that reports the outcome of the load operation. (Understanding the meaning of these tag elements is not necessary for the purposes of this example, but for information about them, see "Changing Configuration Information" on page 627.)

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <system>
        <login>
          <class>
            <name>network-mgmt</name>
            <permissions>configure</permissions>
            <permissions>snmp</permissions>
            <permissions>system</permissions>
          </class>
        </login>
      </system>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1104

Committing the Configuration

The client application commits the candidate configuration. The Junos XML protocol server returns the **<commit-results>** tag element to enclose tag elements that report the outcome of the commit operation (for information about these tag elements, see "Committing a Configuration" on page 923).

Client Application **Junos XML Protocol Server**

```
<rpc>
  <commit-configuration/>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <commit-results>
    <routing-engine>
      <name>re0</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

T1105

Unlocking the Configuration

The client application unlocks (and by implication closes) the candidate configuration. As when it opens the configuration, the Junos XML protocol server confirms successful closure of the configuration only by returning an opening **<rpc-reply>** and closing **</rpc-reply>** tag with nothing between them.

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Client Application	Junos XML Protocol Server
<rpc> <unlock-configuration/> </rpc>	
	<rpc-reply xmlns:junos="URL"> </rpc-reply>

T1106

Closing the Junos XML Protocol Session

The client application closes the Junos XML protocol session.

Client Application	Junos XML Protocol Server
<rpc> <request-end-session/> </rpc>	
	<rpc-reply xmlns:junos="URL"> <end-session/> </rpc-reply> </junoscript>
</junoscript>	

T1165

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CHAPTER 20

Requesting Information

This chapter explains how to use the Junos XML management protocol and Junos XML API to request information about the status and the current configuration of a routing, switching, or security platform running Junos OS.

The tags for operational requests are defined in the Junos XML API and correspond to Junos OS command-line interface (CLI) operational commands, which are described in the Junos OS command references. There is a request tag for many commands in the CLI **show** family of commands.

The tag for configuration requests is the Junos XML protocol **<get-configuration>** tag. It corresponds to the CLI configuration mode **show** command, which is described in the *CLI User Guide*. The Junos XML tag elements that make up the content of both the client application's requests and the Junos XML protocol server's responses correspond to CLI configuration statements, which are described in the Junos OS configuration guides.

In addition to information about the current configuration, client applications can request other configuration-related information, including an XML schema representation of the configuration hierarchy, information about previously committed (rollback) configurations, or information about the rescue configuration.

This chapter discusses the following topics:

- Overview of the Request Procedure on page 836
- Requesting Operational Information on page 836
- Specifying the Output Format for Operational Information Requests in a Junos XML Protocol Session on page 838
- Requesting Configuration Information on page 840
- Specifying the Source and Output Format of Configuration Information on page 841
- Specifying the Scope of Configuration Information to Return on page 862
- Requesting an XML Schema for the Configuration Hierarchy on page 876
- Requesting a Previous (Rollback) Configuration on page 879
- Comparing Two Previous (Rollback) Configurations on page 881
- Requesting the Rescue Configuration on page 882

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Overview of the Request Procedure

To request information from the Junos XML protocol server, a client application performs the procedures described in the indicated sections:

1. Establishes a connection to the Junos XML protocol server on the routing, switching, or security platform, as described in "Connecting to the Junos XML Protocol Server" on page 809.
2. Opens a Junos XML protocol session, as described in "Starting the Junos XML Protocol Session" on page 810.
3. If making configuration requests, optionally locks the candidate configuration or creates a private copy, as described in "Locking the Candidate Configuration" on page 826 and "Creating a Private Copy of the Configuration" on page 828.
4. Makes any number of requests one at a time, freely intermingling operational and configuration requests. See "Requesting Operational Information" on page 836 and "Requesting Configuration Information" on page 840.

   The application can also intermix requests with configuration changes, which are described in "Changing Configuration Information" on page 627.
5. Accepts the tag stream emitted by the Junos XML protocol server in response to each request and extracts its content, as described in "Parsing the Junos XML Protocol Server Response" on page 821.
6. Unlocks the candidate configuration if it is locked, as described in "Unlocking the Candidate Configuration" on page 827. Other users and applications cannot change the configuration while it remains locked.
7. Ends the Junos XML protocol session and closes the connection to the device, as described in "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Requesting Operational Information

To request information about the current status of a device running Junos OS, a client application emits the specific tag element from the Junos XML API that returns the desired information. For example, the **<get-interface-information>** tag corresponds to the **show interfaces** command, the **<get-chassis-inventory>** tag requests the same information as the **show chassis hardware** command, and the **<get-system-inventory>** tag requests the same information as the **show software information** command.

For complete information about the operational request tag elements available in the current Junos OS release, see "Mapping Between Operational Tag Elements, Perl Methods, and CLI Commands" and "Summary of Operational Request Tag Elements" in the *Junos XML API Operational Developer Reference*.

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The application encloses the request tag within an **<rpc>** element. The syntax depends on whether the corresponding CLI command has any options:

```
<rpc>
  <!-- If the command does not have options -->
  <operational-request/>

  <!- - If the command has options -->
  <operational-request>
    <!-- tag elements representing the options -->
  </operational-request>
</rpc>
```

The client application can specify the formatting of the information returned by the Junos XML protocol server. By setting an optional attribute in the opening operational request tag, a client application can specify the format of the response as either XML-tagged format, which is the default, or formatted ASCII text.

If the client application requests the output in formatted ASCII text, the Junos XML protocol server encloses its response in an **<output>** tag, which is enclosed in an **<rpc-reply>** tag.

```
<rpc-reply xmlns:junos="URL">
    <output>
      operational-response
    </output>
</rpc-reply>
```

If the client application requests the output in XML-tagged format, the Junos XML protocol server encloses its response in the specific response tag element that corresponds to the request tag element, enclosed in an **<rpc-reply>** tag element.

```
<rpc-reply xmlns:junos="URL">
  <operational-response xmlns="URL-for-DTD">
    <!-- Junos XML tag elements for the requested information -->
  </operational-response>
</rpc-reply>
```

For XML-tagged format, the opening tag for each operational response includes the **xmlns** attribute to define the XML namespace for the enclosed tag elements that do not have a prefix (such as **junos:**) in their names. The namespace indicates which Junos XML document type definition (DTD) defines the set of tag elements in the response. The Junos XML API defines separate DTDs for operational responses from different software modules. For instance, the DTD for interface information is called **junos-interface.dtd** and the DTD for chassis information is called **junos-chassis.dtd**. The division into separate DTDs and XML namespaces means that a tag element with the same name can have distinct functions depending on which DTD it is defined in.

The namespace is a URL of the following form:

http://xml.juniper.net/junos/*release-code*/junos-*category*

release-code is the standard string that represents the release of Junos OS running on the Junos XML protocol server device.

category specifies the DTD.

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The *Junos XML API Operational Developer Reference* includes the text of the Junos XML DTDs for operational responses.

Specifying the Output Format for Operational Information Requests in a Junos XML Protocol Session

In a Junos XML protocol session, to request information about a routing, switching, or security platform running Junos OS, a client application encloses a Junos XML request tag element in an **<rpc>** tag element. By setting the optional **format** attribute in the opening operational request tag, the client application can specify the formatting of the output returned by the Junos XML protocol server. Information can be returned as XML-tagged format or formatted ASCII text. The basic syntax is as follows:

```
<rpc>
  <operational-request [format="(xml | text | ascii)"]>
    <!-- tag elements for options -->
  </operational-request>
</rpc>
```

XML Format By default, the Junos XML protocol server returns operational information in XML-tagged format. If the value of the **format** attribute is set to **xml**, or if the **format** attribute is omitted, the server returns the response in XML. The following example requests information for the **ge-0/3/0** interface. The **format** attribute is omitted.

```
<rpc>
  <get-interface-information>
    <brief/>
    <interface-name>ge-0/3/0</interface-name>
  </get-interface-information>
</rpc>
```

The Junos XML protocol server returns the information in XML-tagged format, which is identical to the output displayed in the CLI when you include the **| display xml** option after the operational mode command.

```
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/11.4R1/junos">
<interface-information
 xmlns="http://xml.juniper.net/junos/11.4R1/junos-interface" junos:style="brief">

        <physical-interface>
            <name>ge-0/3/0</name>
            <admin-status junos:format="Enabled">up</admin-status>
            <oper-status>down</oper-status>
            <link-level-type>Ethernet</link-level-type>
            <mtu>1514</mtu>
            <source-filtering>disabled</source-filtering>
            <speed>1000mbps</speed>
            <bpdu-error>none</bpdu-error>
            <l2pt-error>none</l2pt-error>
            <loopback>disabled</loopback>
            <if-flow-control>enabled</if-flow-control>
            <if-auto-negotiation>enabled</if-auto-negotiation>
            <if-remote-fault>online</if-remote-fault>
            <if-device-flags>
                <ifdf-present/>
                <ifdf-running/>
```

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```
                <ifdf-down/>
            </if-device-flags>
            <if-config-flags>
                <iff-hardware-down/>
                <iff-snmp-traps/>
                <internal-flags>0x4000</internal-flags>
            </if-config-flags>
            <if-media-flags>
                <ifmf-none/>
            </if-media-flags>
        </physical-interface>
</interface-information>
</rpc-reply>
```

ASCII Format

To request that the Junos XML protocol server return operational information as formatted ASCII text instead of tagging it with Junos XML tag elements, the client application includes the **format="text"** or **format="ascii"** attribute in the opening request tag. The client application encloses the request in an **<rpc>** tag element.

```
<rpc>
  <get-interface-information [format="(text | ascii)"]>
    <brief/>
    <interface-name>ge-0/3/0</interface-name>
  </get-interface-information>
</rpc>
```

When the client application includes the **format="text"** or **format="ascii"** attribute in the request tag, the Junos XML protocol server formats the reply as ASCII text and encloses it in an **<output>** tag element. The **format="text"** and **format="ascii"** attributes produce identical output.

```
<rpc-reply xmlns:junos="http://xml.juniper.net/junos/11.4R1/junos">
<output>
Physical interface: ge-0/3/0, Enabled, Physical link is Down
  Link-level type: Ethernet, MTU: 1514, Speed: 1000mbps, Loopback: Disabled,
  Source filtering: Disabled, Flow control: Enabled, Auto-negotiation: Enabled,
  Remote fault: Online
  Device flags   : Present Running Down
  Interface flags: Hardware-Down SNMP-Traps Internal: 0x4000
  Link flags     : None
</output>
</rpc-reply>
```

The following example shows the equivalent operational mode command executed in the CLI:

```
user@host> show interfaces ge-0/3/0 brief
Physical interface: ge-0/3/0, Enabled, Physical link is Down
  Link-level type: Ethernet, MTU: 1514, Speed: 1000mbps, Loopback: Disabled,
Source filtering: Disabled,
  Flow control: Enabled, Auto-negotiation: Enabled, Remote fault: Online
  Device flags   : Present Running Down
  Interface flags: Hardware-Down SNMP-Traps Internal: 0x4000
  Link flags     : None
```

The formatted ASCII text returned by the Junos XML protocol server is identical to the CLI output except in cases where the output includes disallowed characters such as '<'

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(less-than sign), '>' (greater-than sign), and '&' (ampersand). The Junos XML protocol server substitutes these characters with the equivalent predefined entity reference of '<', '>', and '&' respectively.

If the Junos XML API does not define a response tag element for the type of output requested by a client application, the Junos XML protocol server returns the reply as formatted ASCII text enclosed in an **<output>** tag element even if XML-tagged output is requested.

For information about the **<output>** tag element, see the *Junos XML API Operational Developer Reference*.

NOTE: The content and formatting of data within an <output> tag element are subject to change, so client applications must not depend on them.

Requesting Configuration Information

To request information about a configuration on a routing, switching, or security platform, a client application encloses the **<get-configuration>** tag element in an **<rpc>** tag element. By setting optional attributes, the client application can specify the source and formatting of the configuration information returned by the Junos XML protocol server. By including the appropriate optional child tag elements, the application can request the entire configuration or specific portions of the configuration. The basic syntax is as follows:

```
<rpc>
  <!-- If requesting the complete configuration -->
    <get-configuration [optional attributes]/>

  <!-- If requesting part of the configuration -->
    <get-configuration [optional attributes]>
      <configuration>
        <!-- tag elements representing the data to return -->
      </configuration>
    </get-configuration>
</rpc>
```

NOTE: If the client application locks the candidate configuration before making requests, it needs to unlock it after making its read requests. Other users and applications cannot change the configuration while it remains locked. For more information, see "Exchanging Information with the Junos XML Protocol Server" on page 818.

The Junos XML protocol server encloses its reply in an **<rpc-reply>** tag element. It includes attributes with the **junos:** prefix in the opening **<configuration>** tag to indicate when the configuration was last changed or committed and who committed it (the attributes appear on multiple lines in the syntax statement only for legibility). For more information about them, see "Requesting Information from the Committed or Candidate Configuration" on page 842:

```
<rpc-reply xmlns:junos="URL">
```


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```
<!-- If the application requests Junos XML tag elements -->
<configuration junos:(changed | commit)-seconds="seconds" \
    junos:(changed | commit)-localtime="YYYY-MM-DD hh:mm:ss TZ" \
    [junos:commit-user="username"]>
  <!-- Junos XML tag elements representing configuration elements -->
</configuration>

<!-- If the application requests formatted ASCII text -->
<configuration-text>
  <!-- formatted ASCII configuration statements -->
</configuration-text>
</rpc-reply>
```

If a Junos XML tag element is returned within an **<undocumented>** tag element, the corresponding configuration element is not documented in the Junos OS configuration guides or officially supported by Juniper Networks. Most often, the enclosed element is used for debugging only by support personnel. In a smaller number of cases, the element is no longer supported or has been moved to another area of the configuration hierarchy, but appears in the current location for backward compatibility.

For reference pages for the **<configuration>**, **<configuration-text>**, and **<undocumented>** tag elements, see the *Junos XML API Operational Developer Reference*.

Applications can also request other configuration-related information, including an XML schema representation of the configuration hierarchy or information about previously committed configurations. For more information, see the following sections:

- Requesting an XML Schema for the Configuration Hierarchy on page 876
- Requesting a Previous (Rollback) Configuration on page 879
- Comparing Two Previous (Rollback) Configurations on page 881
- Requesting the Rescue Configuration on page 882

The following sections describe how a client application specifies the source, format, and amount of information returned by the Junos XML protocol server:

- Specifying the Source and Output Format of Configuration Information on page 841
- Specifying the Scope of Configuration Information to Return on page 862

Specifying the Source and Output Format of Configuration Information

By including optional attributes when requesting configuration information, a client application can specify the source and formatting of the output returned by the Junos XML protocol server, as described in the following sections:

- Requesting Information from the Committed or Candidate Configuration on page 842
- Requesting Output as Formatted ASCII Text or Junos XML Tag Elements on page 844
- Requesting an Indicator for Identifiers on page 846
- Requesting a Change Indicator for Configuration Elements on page 848
- Displaying Commit-Script-Style XML Data on page 851

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- Specifying the Output Format for Configuration Groups and Interface Ranges on page 853
- Comparing Configuration Changes with a Prior Version on page 861

Requesting Information from the Committed or Candidate Configuration

To request information from the candidate configuration, the application either includes the **database="candidate"** attribute or omits the attribute completely (information from the candidate configuration is the default):

```
<rpc>
  <get-configuration/>

<!-- OR -->

  <get-configuration>
    <!-- tag elements for the configuration elements to return -->
  </get-configuration>
</rpc>
```

To request information from the active configuration—the one most recently committed on the device—a client application includes the **database="committed"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

```
<rpc>
  <get-configuration database="committed"/>

<!-- OR -->

  <get-configuration database="committed">
    <!-- tag elements for the configuration elements to return -->
  </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

The Junos XML protocol server encloses its response in the **<rpc-reply>** tag element and either the **<configuration>** tag element (for Junos XML-tagged output) or **<configuration-text>** tag element (for formatted ASCII output).

When returning information from the candidate configuration as Junos XML tag elements, the Junos XML protocol server includes attributes in the opening **<configuration>** tag that indicate when the configuration last changed (they appear on multiple lines here only for legibility):

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
    junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
    <!-- Junos XML tag elements representing configuration elements -->
  </configuration>
</rpc-reply>
```

junos:changed-localtime represents the time of the last change as the date and time in the device's local time zone.

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junos:changed-seconds represents the time of the last change as the number of seconds since midnight on 1 January 1970.

When returning information from the active configuration as Junos XML tag elements, the Junos XML protocol server includes attributes in the opening **<configuration>** tag that indicate when the configuration was committed (they appear on multiple lines here only for legibility):

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:commit-seconds="seconds" \
    junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
    junos:commit-user="username">
    <!-- Junos XML tag elements representing configuration elements -->
  </configuration>
</rpc-reply>
```

junos:commit-localtime represents the commit time as the date and time in the device's local time zone.

junos:commit-seconds represents the commit time as the number of seconds since midnight on 1 January 1970.

junos:commit-user specifies the Junos OS username of the user who requested the commit operation.

The **database** attribute in the application's request can be combined with one or more of the following attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848
- **commit-scripts**, which is described in "Displaying Commit-Script-Style XML Data" on page 851
- **compare**, which is described in "Comparing Configuration Changes with a Prior Version" on page 861
- **format**, which is described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844
- **inherit** and optionally **groups** and **interface-ranges**, which are described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853

The application can also include the **database** attribute after requesting an indicator for identifiers (as described in "Requesting an Indicator for Identifiers" on page 846).

The following example shows how to request the entire committed configuration. In actual output, the *Junos-version* variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

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Client Application	Junos XML Protocol Server

```
<rpc>
  <get-configuration database="committed"/>
</rpc>
```

```
<rpc-reply xmlns:junos='URL">
  <configuration \
      junos:commit-seconds="seconds" \
      junos:commit-localtime="timestamp" \
      junos:commit-user="username">
    <version>Junos-version</version>
    <system>
      <host-name>big-router</host-name>
      <!- -other children of <system>- ->
    </system>
    <!- -other children of <configuration>- ->
  </configuration>
</rpc-reply>
```

T1185

Requesting Output as Formatted ASCII Text or Junos XML Tag Elements

To request that the Junos XML protocol server return configuration information in Junos XML-tagged output, the client application either includes the **format="xml"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag or omits the attribute completely. The Junos XML protocol server returns Junos XML-tagged output by default, except when the **compare** attribute is included.

```
<rpc>
    <get-configuration/>

  <!-- OR -->

    <get-configuration>
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

To request that the Junos XML protocol server return configuration information as formatted ASCII text instead of tagging it with Junos XML tag elements, the client application includes the **format="text"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration format="text"/>

  <!-- OR -->

    <get-configuration format="text">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

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NOTE: Regardless of which output format they request, client applications use Junos XML tag elements to represent the configuration element to display. The **format** attribute controls the format of the Junos XML protocol server's output only.

When the application requests Junos XML tag elements, the Junos XML protocol server encloses its output in **<rpc-reply>** and **<configuration>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- Junos XML tag elements representing configuration elements -->
  </configuration>
</rpc-reply>
```

When the application requests formatted ASCII output, the Junos XML protocol server formats its response in the same way that the CLI **show configuration** command displays configuration data—it uses the newline character, tabs, braces, and square brackets to indicate the hierarchical relationships between configuration statements. The server encloses formatted ASCII configuration statements in **<rpc-reply>** and **<configuration-text>** tag elements:

```
<rpc-reply xmlns:junos="URL">
  <configuration-text>
    <!-- formatted ASCII configuration statements -->
  </configuration-text>
</rpc-reply>
```

The **format** attribute can be combined with one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **commit-scripts** with a value of **commit-scripts="apply"** or **commit-scripts="apply-no-transients"**
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842
- **inherit** and optionally **groups** and **interface-ranges**, which are described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853

It does not make sense to combine the **format="text"** attribute with the **changed** attribute (described in "Requesting a Change Indicator for Configuration Elements" on page 848) or to include it after requesting an indicator for identifiers (described in "Requesting an Indicator for Identifiers" on page 846). The change and identifier indicators appear only in Junos XML-tagged output, which is the default output format. The **commit scripts="view"** attribute returns Junos XML-tagged output by default, even if the **format="text"** attribute is included, since this is the format that is input to commit script. The **format="xml"** attribute cannot be used with the **compare** attribute, which produces only formatted ASCII output.

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An application can request Junos-XML tagged output or formatted ASCII text for the entire configuration or any portion of it. For instructions on specifying the amount of data to return, see "Specifying the Scope of Configuration Information to Return" on page 862.

The following example shows how to request formatted ASCII output from the **[edit policy-options]** hierarchy level in the candidate configuration.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration format="text">
    <configuration>
      <policy-options/>
    </configuration>
  </get-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
   <configuration-text>
      policy-options {
         policy-statement load-balancing-policy {
            from {
               route-filter 192.168.10/24 orlonger;
               route-filter 10.114/16 orlonger;
            }
            then {
               load-balance per-packet;
            }
         }
      }
   </configuration-text>
</rpc-reply>
```

T1121

Requesting an Indicator for Identifiers

To request that the Junos XML protocol server indicate whether a child configuration element is an identifier for its parent element, a client application includes the **junos:key="key"** attribute in the opening **<junoscript>** tag for the Junos XML protocol session or the **junos:key="key"** or **key="key"** attribute in the **<get-configuration>** request tag:

```
<junoscript version="version" hostname="hostname" junos:key="key"
            release="release-code">

<get-configuration (junos:key | key)="key">
```

For more information about the **<junoscript>** tag, see "Emitting the Opening <junoscript> Tag" on page 812.

When the identifier indicator is requested, the Junos XML protocol server includes the **junos:key="key"** attribute in the opening tag for each identifier. As always, the Junos XML protocol server encloses its response in **<rpc-reply>** and **<configuration>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842. In the following, the identifier tag element is called **<name>**:

```
<rpc-reply xmlns:junos="URL">
    <configuration attributes>
      <!-- opening tag for each parent of the object -->
```

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```
    <!-- For each configuration object with an identifier -->
        <object>
          <name junos:key="key">identifier</name>
          <!-- additional children of object -->
          </object>
        <!-- closing tag for each parent of the object -->

    </configuration>
</rpc-reply>
```

The client application can include one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag when the **junos:key** attribute is included in the opening **<junoscript>** or **<get-configuration>** tags:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848
- **commit-scripts**, which is described in "Displaying Commit-Script-Style XML Data" on page 851
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842
- **inherit** and optionally **groups** and **interface-ranges**, which are described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853

When requesting an indicator for identifiers, it does not make sense to include the **format="text"** attribute in the **<get-configuration>** tag element (as described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844). The **junos:key="key"** attribute appears only in Junos XML-tagged output, which is the default output format. The **compare** attribute produces only text output, so when this attribute is included in the **<get-configuration>** tag, the **junos:key="key"** attribute does not appear in the output.

The following example shows how indicators for identifiers appear on configuration elements at the **[edit interfaces]** hierarchy level in the candidate configuration when the **junos:key="key"** attribute is included in the opening **<junoscript>** tag emitted by the client application for the session. The two opening **<junoscript>** tags appear on multiple lines for legibility only. Neither client applications nor the Junos XML protocol server insert newline characters within tags. Also, for brevity the output includes just one interface, the loopback interface lo0.

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Client Application

```
<?xml version="1.0" encoding="us-ascii"?>
<junoscript version="1.0" \
                junos:key="key" \
                release="JUNOS-release">

<rpc>
  <get-configuration>
    <configuration>
      <interfaces/>
    </configuration>
  </get-configuration>
</rpc>
```

Junos XML Protocol Server

```
<?xml version="1.0" encoding="us-ascii"?>
<junoscript version="1.0" hostname="router1" \
                os="JUNOS" release="JUNOS-release" \
                xmlns="URL" xmlns:junos="URL" \
                xmlns:xnm="URL">

<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <interfaces>
      <!- -tag elements for other interfaces- ->
      <interface>
        <name junos:key="key">lo0</name>
        <unit>
          <name junos:key="key">0</name>
          <family>
            <inet>
              <address>
                <name junos:key="key">127.0.0.1/32</name>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
      <!- -tag elements for other interfaces- ->
    </interfaces>
  </configuration>
</rpc-reply>
```

T1187

Requesting a Change Indicator for Configuration Elements

To request that the Junos XML protocol server indicate which configuration elements have changed since the last commit, a client application includes the **changed="changed"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration changed="changed"/>

  <!-- OR -->

    <get-configuration changed="changed">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

The Junos XML protocol server indicates which elements have changed by including the **junos:changed="changed"** attribute in the opening tag of every parent tag element in the path to the changed configuration element. If the changed configuration element is represented by a single (empty) tag, the **junos:changed="changed"** attribute appears in the tag. If the changed element is represented by a container tag element, the

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junos:changed="changed" attribute appears in the opening container tag and also in the opening tag for each child tag element enclosed in the container tag element.

The Junos XML protocol server encloses its response in **<rpc-reply>** and **<configuration>** tag elements. For information about the standard attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
    <configuration standard-attributes junos:changed="changed">
      <!-- opening-tag-for-each-parent-level junos:changed="changed" -->

  <!-- For each changed element, EITHER -->
    <element junos:changed="changed"/>

  <!-- OR -->

    <element junos:changed="changed">
      <first-child-of-element junos:changed="changed">
      <second-child-of-element junos:changed="changed">
      <!-- additional children of element -->
    </element>

    <!-- closing-tag-for-each-parent-level -->
  </configuration>
</rpc-reply>
```

NOTE: When a commit operation succeeds, the Junos XML protocol server removes the **junos:changed="changed"** attribute from all tag elements. However, if warnings are generated during the commit, the attribute is not removed. In this case, the **junos:changed="changed"** attribute appears on tag elements that changed before the commit as well as those that changed after the commit.

An example of a commit-time warning is the message explaining that a configuration element will not actually apply until the device is rebooted. The warning appears in the tag string that the Junos XML protocol server returns to confirm the success of the commit, enclosed in an **<xnm:warning>** tag element.

To remove the **junos:changed="changed"** attribute from elements that changed before the commit, the client application must take any action necessary to eliminate the cause of the warning, and commit the configuration again.

The **changed** attribute can be combined with one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842. Request change indicators in either the candidate or active configuration:

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  - When the **database="candidate"** attribute is included or the **database** attribute is omitted, the output is from the candidate configuration. Elements added to the candidate configuration after the last commit operation are marked with the **junos:changed="changed"** attribute.
  - When the **database="committed"** attribute is included, the output is from the active configuration. Elements added to the active configuration by the most recent commit are marked with the **junos:changed="changed"** attribute.

- **inherit** and optionally **groups** and **interface-ranges**, which are described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853.
- **junos:key**, which is described in "Requesting an Indicator for Identifiers" on page 846.

It does not make sense to combine the **changed** attribute with the **format="text"** attribute or with the **compare** attribute, which produces only text output. The **junos:changed="changed"** attribute appears only in Junos XML-tagged output, which is the default output format. When the **commit-scripts="view"** attribute is included in the **<get-configuration>** tag, the **junos:changed="changed"** attribute is automatically included in the output, and you do not need to explicitly include this attribute in the **<get-configuration>** request.

The application can also include the **changed** attribute after requesting an indicator for identifiers (as described in "Requesting an Indicator for Identifiers" on page 846).

The following example shows how to request change indicators for configuration elements at the **[edit system syslog]** hierarchy level in the candidate configuration. The output indicates that a log file called **interactive-commands** has been configured since the last commit.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration changed="changed">
    <configuration>
      <system>
        <syslog/>
      </system>
    </configuration>
  </get-configuration>
</rpc>
                                <rpc-reply xmlns:junos='URL'>
                                  <configuration junos:changed-seconds='seconds' \
                                       junos:changed-localtime="timestamp" junos:changed="changed">
                                    <system junos:changed="changed">
                                      <syslog junos:changed="changed">
                                        <file>
                                          <name>messages</name>
                                          <contents>
                                            <name>any</name>
                                            <info/>
                                          </contents>
                                        </file>
                                        <file junos:changed="changed">
                                          <name junos:changed="changed">interactive-commands</name>
                                          <contents>
                                            <name junos:changed="changed">interactive-commands</name>
                                            <notice junos:changed="changed"/>
                                          </contents>
                                        </file>
                                      </syslog>
                                    </system>
                                  </configuration>
                                </rpc-reply>
```

T1186

Displaying Commit-Script-Style XML Data

To view the device's current configuration in Extensible Markup Language (XML) using the command-line interface's (CLI) operational mode, you issue the **show configuration | display xml** command. To view your configuration in commit-script-style XML, you use the **show configuration | display commit-scripts view** command. This command displays the configuration in the format that would be input to a commit script.

To request that the Junos XML protocol server display the configuration as commit-script-style XML data, a client application includes the **commit-scripts="view"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration commit-scripts="view"/>

  <!-- OR -->

    <get-configuration commit-scripts="view">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

To view the configuration with commit script changes applied, including both transient and non-transient changes, you issue the **show configuration | display commit-scripts** operational mode command on a device running Junos OS. Starting with Junos OS Release 12.1, you can also request this data through the Junos XML protocol server.

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To request that the Junos XML protocol server display the configuration with commit script changes applied, including both transient and non-transient changes, a client application includes the **commit-scripts="apply"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration commit-scripts="apply"/>

  <!-- OR -->

    <get-configuration commit-scripts="apply">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

To view the configuration with commit script changes applied, but exclude transient changes, you issue the **show configuration | display commit-scripts no-transients** operational mode command on a device running Junos OS. Starting with Junos OS Release 12.1, you can also request this data through the Junos XML protocol server.

To request that the Junos XML protocol server display the configuration with commit script changes applied, but exclude transient changes, a client application includes the **commit-scripts="apply-no-transients"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration commit-scripts="apply-no-transients"/>

  <!-- OR -->

    <get-configuration commit-scripts="apply-no-transients">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

The **commit-scripts** attribute can be combined with one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848.
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842.
- **format**, when using **commit-scripts="apply"** or **commit-scripts="apply-no-transients"**.
- **groups**, which is described in "Displaying the Source Group for Inherited Configuration Elements" on page 855.
- **inherit**, which is described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853.
- **interface-ranges**, which is described in "Specifying the Output Format for Configuration Groups and Interface Ranges" on page 853.
- **junos:key**, which is described in "Requesting an Indicator for Identifiers" on page 846.

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You do not need to include the **changed**, **groups** or **inherit** attributes with the **commit-scripts="view"** attribute. The commit-scripts-style XML view includes the **junos:changed="changed"** attribute in the XML tags, and it displays the output with inheritance. That is, the output displays tag elements inherited from user-defined groups or interface ranges within the inheriting tag elements, and the XML tags already include the **junos:group** attribute. To explicitly display the **junos:interface-range** attribute in the commit-scripts-style view, you must include the **interface-ranges="interface-ranges"** attribute in the **<get-configuration>** tag.

If you specify a value of **commit-scripts="apply"** or **commit-scripts="apply-no-transients"**, you can specify an output format of formatted ASCII text by also including the **format="text"** attribute.

Specifying the Output Format for Configuration Groups and Interface Ranges

The **<groups>** tag element corresponds to the **[edit groups]** configuration hierarchy. It encloses tag elements representing *configuration groups*, each of which contains a set of configuration statements that are appropriate at multiple locations in the hierarchy. Use the **apply-groups** configuration statement or **<apply-groups>** tag element to insert a configuration group at the appropriate location, achieving the same effect as directly inserting the statements defined in the group. The section of configuration hierarchy to which a configuration group is applied is said to *inherit* the group's statements.

In addition to the groups defined at the **[edit groups]** hierarchy level, Junos OS predefines a group called **junos-defaults**. This group includes configuration statements judged appropriate for basic operations on any routing, switching, or security platform. By default, the statements in this group do not appear in the output of CLI commands that display the configuration, nor in the output returned by the Junos XML protocol server for the **<get-configuration>** tag element. For more information about user-defined configuration groups and the **junos-defaults** group, see the *CLI User Guide*.

The **<interface-range>** tag element corresponds to the **[edit interfaces interface-range]** configuration hierarchy. When you configure an interface range, you specify a set of identical interfaces as an interface group, to which you can apply a common configuration to the entire set of interfaces. If an interface is a member of an interface range, it inherits the configuration statements set for that range.

The following sections explain how to specify the output format for configuration elements that are defined in configuration groups or interface ranges:

- Specifying Whether Configuration Groups and Interface Ranges Are Displayed Separately on page 854
- Displaying the Source Group for Inherited Configuration Elements on page 855
- Examples: Specifying Output Format for Configuration Groups on page 857
- Displaying the Source Interface Range for Inherited Configuration Elements on page 860

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Specifying Whether Configuration Groups and Interface Ranges Are Displayed Separately

By default, the Junos XML protocol server displays the tag element for each user-defined configuration group as a child of the **<groups>** tag element, instead of displaying them as children of the elements to which they are applied. Similarly, the server displays the tag elements for each user-defined interface range as a child of the **<interface-range>** tag element, instead of displaying them as children of the interface elements that are members of the interface range. This display mode parallels the default behavior of the CLI configuration mode **show** command, which displays the **[edit groups]** and **[edit interfaces interface-range]** hierarchies as separate hierarchies in the configuration.

To request that the Junos XML protocol server not display the **<groups>**, **<apply-groups>**, or **<interface-range>** elements separately, but instead enclose tag elements inherited from user-defined groups or interface ranges within the inheriting tag elements, a client application includes the **inherit="inherit"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
  <get-configuration inherit="inherit"/>

  <!-- OR -->

  <get-configuration inherit="inherit">
    <!-- tag elements for the configuration elements to return -->
  </get-configuration>
</rpc>
```

To request that the Junos XML protocol server include tag elements that are inherited from the **junos-defaults** group as well as user-defined configuration groups and interface-ranges, the client application includes the **inherit="defaults"** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

```
<rpc>
  <get-configuration inherit="defaults"/>

  <!-- OR -->

  <get-configuration inherit="defaults">
    <!-- tag elements for the configuration elements to return -->
  </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

When the client includes the **inherit="inherit"** attribute, the output includes the same information as the output from the following CLI configuration mode command, and does not include configuration elements inherited from the **junos-defaults** group:

```
user@host# show | display inheritance | except ##
```

When the client includes the **inherit="defaults"** attribute, the output includes the same information as the output from the following CLI configuration mode command:

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```
user@host# show | display inheritance defaults | except ##
```

In both cases, the Junos XML protocol server encloses its output in the **<rpc-reply>** tag element and either the **<configuration>** tag element (for Junos XML-tagged output) or **<configuration-text>** tag element (for formatted ASCII output). For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <!-- EITHER -->
    <configuration attributes>
      <!-- Junos XML tag elements representing configuration elements -->
    </configuration>

  <!-- OR -->

    <configuration-text>
      <!-- formatted ASCII configuration statements -->
    </configuration-text>
</rpc-reply>
```

The **inherit** attribute can be combined with one or more of the following attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842
- **format**, which is described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844
- **groups**, which is described in "Displaying the Source Group for Inherited Configuration Elements" on page 855
- **interface-ranges**, which is described in "Displaying the Source Interface Range for Inherited Configuration Elements" on page 860
- **junos:key**, which is described in "Requesting an Indicator for Identifiers" on page 846.

The application can also include the **inherit** attribute after requesting an indicator for identifiers (as described in "Requesting an Indicator for Identifiers" on page 846).

Displaying the Source Group for Inherited Configuration Elements

To request that the Junos XML protocol server indicate the configuration group from which configuration elements are inherited, a client application combines the **groups="groups"** attribute with the **inherit** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration inherit="(defaults | inherit)" groups="groups"/>

  <!-- OR -->

    <get-configuration inherit="(defaults | inherit)" groups="groups">
      <!-- tag elements for the configuration elements to return -->
```

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```
    </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

When the **groups="groups"** attribute is combined with the **inherit="inherit"** attribute, the output includes the same information as the output from the following CLI configuration mode command, and does not include configuration elements inherited from the **junos-defaults** group:

```
user@host# show | display inheritance | display xml groups
```

When the **groups="groups"** attribute is combined with the **inherit="defaults"** attribute, the output includes the same information as the output from the following CLI configuration mode command:

```
user@host# show | display inheritance defaults
```

The **inherit** and **groups** attributes can be combined with one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848.
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842.
- **format**, which is described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844. The application can request either Junos XML-tagged or formatted ASCII output:
  - If the output is tagged with Junos XML tag elements (the **format="xml"** attribute is included or the **format** attribute is omitted), the Junos XML protocol server includes the **junos:group="*source-group*"** attribute in the opening tags of configuration elements that are inherited from configuration groups and encloses its response in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

    ```
    <rpc-reply xmlns:junos="URL">
      <configuration attributes>
      <!-- For each inherited element -->
        <!-- opening-tags-for-parents-of-the-element -->
          <inherited-element junos:group="source-group">
            <inherited-child-of-inherited-element junos:group="source-group">
              <!-- inherited-children-of-child junos:group="source-group" -->
            </inherited-child-of-inherited-element>
          </inherited-element>
        <!-- closing-tags-for-parents-of-the-element -->
      </configuration>
    </rpc-reply>
    ```

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- If the output is formatted ASCII text (the **format="text"** attribute is included), the Junos XML protocol server encloses its response in **<configuration-text>** and **<rpc-reply>** tag elements, and inserts three commented lines immediately above each inherited element, as in the following:

```
<rpc-reply xmlns:junos="URL">
  <configuration-text>
*/ For each inherited element */
    /* parent levels for the element */
      ##
      ## 'inherited-element' was inherited from group 'source-group'
      ##
      inherited-element {
        ##
        ## 'inherited-child' was inherited from group 'source-group'
        ##
        inherited-child {
          ... child statements of inherited-child ...
        }
      }
    /* closing braces for parent levels for the element */
  </configuration-text>
</rpc-reply>
```

- **interface-ranges**, which is described in "Displaying the Source Interface Range for Inherited Configuration Elements" on page 860
- **junos:key**, which is described in "Requesting an Indicator for Identifiers" on page 846.

The application can also include the **inherit** and **groups** attributes after requesting an indicator for identifiers (as described in "Requesting an Indicator for Identifiers" on page 846).

Examples: Specifying Output Format for Configuration Groups

The following sample configuration hierarchy defines a configuration group called **interface-group**. The **apply-groups** statement applies the statements in the group at the **[edit interfaces]** hierarchy level:

```
[edit]
groups {
  interface-group {
    interfaces {
      so-1/1/1 {
        encapsulation ppp;
      }
    }
  }
}
apply-groups interface-group;
interfaces {
  fxp0 {
    unit 0 {
      family inet {
        address 192.168.4.207/24;
      }
```

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```
    }
  }
}
```

When the **inherit** attribute is not included in the **<get-configuration/>** tag, the output includes the **<groups>** and **<apply-groups>** tag elements as separate items. The **<groups>** tag element encloses the tag elements defined in the **interface-group** configuration group. The placement of the **<apply-groups>** tag element directly above the **<interfaces>** tag element indicates that the **[edit interfaces]** hierarchy inherits the statements defined in the **interface-group** configuration group.

Client Application

```
<rpc>
  <get-configuration/>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <groups>
      <name>interface-group</name>
      <interfaces>
        <interface>
          <name>so-1/1/1</name>
          <encapsulation>ppp</encapsulation>
        </interface>
      </interfaces>
    </groups>
    <apply-groups>interface-group</apply-groups>
    <interfaces>
      <interface>
        <name>fxp0</name>
        <unit>
          <name>0</name>
          <family>
            <inet>
              <address>
                <name>192.168.4.207/24</name>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </configuration>
</rpc-reply>
```

T1188

When the **inherit** attribute is included in the **<get-configuration/>** tag, the **<interfaces>** tag element encloses the tag elements defined in the **interface-group** configuration group. The **<groups>** and **<apply-groups>** tag elements are not displayed.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration inherit="inherit"/>
</rpc>
                                <rpc-reply xmlns:junos="URL">
                                  <configuration junos:changed-seconds="seconds" \
                                       junos:changed-localtime="timestamp">
                                    <interfaces>
                                      <interface>
                                        <name>fxp0</name>
                                        <unit>
                                          <name>0</name>
                                          <family>
                                            <inet>
                                              <address>
                                                <name>192.168.4.207/24</name>
                                              </address>
                                            </inet>
                                          </family>
                                        </unit>
                                      </interface>
                                      <interface>
                                        <name>so-1/1/1</name>
                                        <encapsulation>ppp</encapsulation>
                                      </interface>
                                    </interfaces>
                                  </configuration>
                                </rpc-reply>
```

T1189

When the **groups="groups"** attribute is combined with the **inherit** attribute in the **<get-configuration/>** tag, the **<interfaces>** tag element encloses the tag elements defined in the **interface-group** configuration group, which are marked with the **junos:group="interface-group"** attribute.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration inherit="inherit" groups="groups"/>
</rpc>
                              <rpc-reply xmlns:junos="URL">
                                <configuration junos:changed-seconds="seconds" \
                                     junos:changed-localtime="timestamp">
                                  <interfaces>
                                    <interface>
                                      <name>fxp0</name>
                                      <unit>
                                        <name>0</name>
                                        <family>
                                          <inet>
                                            <address>
                                              <name>192.168.4.207/24</name>
                                            </address>
                                          </inet>
                                        </family>
                                      </unit>
                                    </interface>
                                    <interface junos:group="interface-group">
                                      <name junos:group="interface-group">so-1/1/1</name>
                                      <encapsulation junos:group="interface-group">ppp</encapsulation>
                                    </interface>
                                  </interfaces>
                                </configuration>
                              </rpc-reply>
```

T1190

Displaying the Source Interface Range for Inherited Configuration Elements

To request that the Junos XML protocol server indicate the interface range from which configuration elements are inherited, a client application combines the **interface-ranges="interface-ranges"** attribute with the **inherit** attribute in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration inherit="inherit" interface-ranges="interface-ranges"/>

  <!-- OR -->

    <get-configuration inherit="inherit" interface-ranges="interface-ranges">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

For information about the tag elements to enclose in the **<get-configuration>** tag element, see "Specifying the Scope of Configuration Information to Return" on page 862.

When the **interface-ranges="interface-ranges"** attribute is combined with the **inherit="inherit"** attribute, the output includes the same information as the output from the following CLI configuration mode command:

```
user@host# show | display inheritance | display xml interface-ranges
```

The **inherit** and **interface-ranges** attributes can be combined with one or more of the following other attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag:

- **changed**, which is described in "Requesting a Change Indicator for Configuration Elements" on page 848.
- **database**, which is described in "Requesting Information from the Committed or Candidate Configuration" on page 842.
- **format**, which is described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844. The application can request either Junos XML-tagged or formatted ASCII output:
  - If the output is tagged with Junos XML tag elements (the **format="xml"** attribute is included or the **format** attribute is omitted), the Junos XML protocol server includes the **junos:interface-range="*source-interface-range*"** attribute in the opening tags of configuration elements that are inherited from an interface range and encloses its response in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

    ```
    <rpc-reply xmlns:junos="URL">
      <configuration attributes>
        <interfaces>
          <!-- For each inherited element -->
          <interface junos:interface-range="source-interface-range">
            <inherited-element junos:interface-range="source-interface-range">
    ```


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```
                <inherited-child-of-inherited-element
                      junos:interface-range="source-interface-range">
                  <!-- inherited-children-of-child
                        junos:interface-range="source-interface-range" -->
                </inherited-child-of-inherited-element>
              </inherited-element>
            </interface>
          </interfaces>
        </configuration>
      </rpc-reply>
```

- If the output is formatted ASCII text (the **format="text"** attribute is included), the Junos XML protocol server encloses its response in **<configuration-text>** and **<rpc-reply>** tag elements:

```
<rpc-reply xmlns:junos="URL">
  <configuration-text>
    interfaces {
      <!-- For each inherited element -->
      interface-name {
        inherited-element {
          inherited-child {
            ... child statements of inherited-child ...
          }
        }
      }
    }
  </configuration-text>
</rpc-reply>
```

- **groups**, which is described in "Displaying the Source Group for Inherited Configuration Elements" on page 855
- **junos:key**, which is described in "Requesting an Indicator for Identifiers" on page 846.

The application can also include the **inherit** and **interface-ranges** attributes after requesting an indicator for identifiers (as described in "Requesting an Indicator for Identifiers" on page 846).

Comparing Configuration Changes with a Prior Version

In the CLI, when you want to compare the active or candidate configuration to a previously committed configuration, you use the **compare** command. In operational mode, you compare the active configuration to a prior version using the **show configuration | compare rollback *rollback-number*** command. In configuration mode, you compare the candidate configuration to a previously committed configuration using the **show | compare rollback *rollback-number*** command.

The **compare rollback *rollback-number*** command compares the selected configuration with a previously committed configuration and displays the differences between the two. The *rollback-number* for the most recently saved configuration is 0, and the oldest saved configuration is 49.

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To request that the Junos XML protocol server display the differences between the active or candidate configuration and a previously committed configuration, a client application includes the **compare** and **rollback** attributes in the **<get-configuration/>** tag or opening **<get-configuration>** tag. It encloses the request in an **<rpc>** tag element:

```
<rpc>
    <get-configuration compare="rollback" rollback="[0-49]" format="text"/>

  <!-- OR -->

    <get-configuration compare="rollback" rollback="[0-49]" format="text">
      <!-- tag elements for the configuration elements to return -->
    </get-configuration>
</rpc>
```

The client application can include the **database** attribute to specify whether to compare the active or candidate configuration to the previously committed configuration. If the **database** attribute is omitted, the candidate configuration is used. If the **rollback=*"rollback-number"*** attribute is not included, rollback configuration number 0 is used for comparison.

By default, the **<get-configuration>** operation returns Junos XML-tagged output. However, when the **compare** attribute is included, the **<get-configuration>** operation returns the output formatted as ASCII text even if the **format="text"** attribute is not present. If the client application attempts to include the **format="xml"** attribute when the **compare="rollback"** attribute is present, the protocol server will return an **<xnm:error>** element indicating an error.

The comparison output is enclosed in the **<configuration-information>** and **<configuration-output>** tags. The output uses the following conventions to specify the differences between configurations:

- Statements that are only in the active or candidate configuration are prefixed with a plus sign (+).
- Statements that are only in the comparison file are prefixed with a minus sign (–).
- Statements that are unchanged are prefixed with a single blank space ( ).

Specifying the Scope of Configuration Information to Return

By including the appropriate optional child tag elements in the **<get-configuration>** tag element, a client application can request the entire configuration or specific portions of the configuration, as described in the following sections:

- Requesting the Complete Configuration on page 863
- Requesting a Hierarchy Level or Container Object Without an Identifier on page 864
- Requesting All Configuration Objects of a Specified Type on page 865
- Requesting a Specified Number of Configuration Objects on page 866
- Requesting Identifiers Only on page 868
- Requesting One Configuration Object on page 870

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- Requesting a Subset of Objects by Using Regular Expressions on page 872
- Requesting Multiple Configuration Elements Simultaneously on page 875

Requesting the Complete Configuration

To request the entire configuration, a client application encloses the **<get-configuration/>** tag in an **<rpc>** tag element:

```
<rpc>
  <get-configuration/>
</rpc>
```

When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested configuration in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- Junos XML tag elements for all configuration elements -->
  </configuration>
</rpc-reply>
```

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the **<get-configuration/>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The following example shows how to request the complete candidate configuration tagged with Junos XML tag elements (the default). In actual output, the *JUNOS-version* variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

Client Application

```
<rpc>
  <get-configuration/>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <version>JUNOS-version</version>
    <system>
      <host-name>big-router</host-name>
      <!- -other children of <system>- ->
    </system>
    <!- -other children of <configuration>- ->
  </configuration>
</rpc-reply>
```

T11191

Requesting a Hierarchy Level or Container Object Without an Identifier

To request complete information about all child configuration elements at a hierarchy level or in a container object that does not have an identifier, a client application emits a **<get-configuration>** tag element that encloses the tag elements representing all levels in the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the level's immediate parent level. An empty tag represents the requested level. The entire request is enclosed in an **<rpc>** tag element.

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the level -->
        <requested-level/>
      <!-- closing tags for each parent of the level -->
    </configuration>
  </get-configuration>
</rpc>
```

When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested section of the configuration in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- opening tags for each parent of the level -->
      <hierarchy-level>
        <!-- child tag elements of the level -->
      </hierarchy-level>
    <!-- closing tags for each parent of the level -->
  </configuration>
</rpc-reply>
```

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-configuration>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

The following example shows how to request the contents of the **[edit system login]** hierarchy level in the candidate configuration. The output is tagged with Junos XML tag elements (the default).

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Client Application

```
<rpc>
  <get-configuration>
    <configuration>
      <system>
        <login/>
      </system>
    </configuration>
  </get-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <system>
      <login>
        <user>
          <name>barbara</name>
          <full-name>Barbara Anderson</full-name>
          <!- -other child tags for this user- ->
        </user>
        <!- -other children of <login>- ->
      </login>
    </system>
  </configuration>
</rpc-reply>
```

T1192

Requesting All Configuration Objects of a Specified Type

To request complete information about all configuration objects of a specified type in a hierarchy level, a client application emits a **<get-configuration>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object type. An empty tag represents the requested object type. The entire request is enclosed in an **<rpc>** tag element.

This type of request is useful when the object's parent hierarchy level has child objects of multiple types and the application is requesting just one of the types. If the requested object is the only possible child type, then this type of request yields the same output as a request for the complete parent hierarchy (described in "Requesting a Hierarchy Level or Container Object Without an Identifier" on page 864).

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object type -->
        <object-type/>
      <!-- closing tags for each parent of the object type -->
    </configuration>
  </get-configuration>
</rpc>
```

When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested objects in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
```

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```
<configuration attributes>
  <!-- opening tags for each parent of the object type -->
    <first-object>
      <!-- child tag elements for the first object -->
    </first-object>
    <second-object>
      <!-- child tag elements for the second object -->
    </second-object>
    <!-- additional instances of the object -->
  <!-- closing tags for each parent of the object type -->
</configuration>
</rpc-reply>
```

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-configuration>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

Requesting a Specified Number of Configuration Objects

To request information about a specific number of configuration objects of a specific type, a client application emits the **<get-configuration>** tag element and encloses the tag elements that represent all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object type. An empty tag represents the requested object type, and the following attributes are included in it:

- **count**, to specify the number of objects to return
- **start**, to specify the index number of the first object to return (**1** for the first object, **2** for the second, and so on)

(If the application is requesting only the first object in the hierarchy, it includes the **count="1"** attribute and omits the **start** attribute.) The application encloses the entire request in an **<rpc>** tag element:

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object -->
        <object-type  count="count" start="index"/>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </get-configuration>
</rpc>
```


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When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested objects in **<configuration>** and **<rpc-reply>** tag elements, starting with the object specified by the **start** attribute and running consecutively. In the opening container tag for each object, it includes two attributes:

- **junos:position**, to specify the object's numerical index
- **junos:total**, to report the total number of such objects that exist in the hierarchy

In the following, the identifier tag element is called **<name>**. (For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.)

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- opening tags for each parent of the object type -->
      <first-object junos:position="index1" junos:total="total">
        <name>identifier-for-first-object</name>
        <!-- other child tag elements of the first object -->
      </first-object>
      <second-object junos:position="index2" junos:total="total">
        <name>identifier-for-second-object</name>
        <!-- other child tag elements of the second object -->
      </second-object>
      <!-- additional objects -->
    <!-- closing tags for each parent of the object type -->
  </configuration>
</rpc-reply>
```

The **junos:position** and **junos:total** attributes do not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the **<get-configuration>** tag element (as described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844).

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-configuration>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

The following example shows how to request the third and fourth Junos user accounts at the **[edit system login]** hierarchy level. The output is from the candidate configuration and is tagged with Junos XML tag elements (the default).

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration>
    <configuration>
      <system>
        <login>
          <user count="2" start="3"/>
        </login>
      </system>
    </configuration>
  </get-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <system>
      <login>
        <user junos:position="3" junos:total="22">
          <name>barbara</name>
          <uid>1423</uid>
          <class>operator</class>
        </user>
        <user junos:position="4" junos:total="22">
          <name>carlo</name>
          <uid>1426</uid>
          <class>operator</class>
        </user>
      </login>
    </system>
  </configuration>
</rpc-reply>
```

T1193

Requesting Identifiers Only

To request just the identifier tag element for configuration objects of a specified type in a hierarchy, a client application emits a **<get-configuration>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the immediate parent level for the object type. An empty tag represents the requested object type, and the **recurse="false"** attribute is included. The entire request is enclosed in an **<rpc>** tag element.

To request the identifier for all objects of a specified type, the client application includes only the recurse="false" attribute:

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object type -->
        <object-type recurse="false"/>
      <!-- closing tags for each parent of the object type -->
    </configuration>
  </get-configuration>
</rpc>
```


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To request the identifier for a specified number of objects, the client application combines the **recurse="false"** attribute with the **count** and **start** attributes discussed in "Requesting a Specified Number of Configuration Objects" on page 866:

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object type -->
        <object-type recurse="false" count="count" start="index"/>
      <!-- closing tags for each parent of the object type -->
    </configuration>
  </get-configuration>
</rpc>
```

When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested objects in **<configuration>** and **<rpc-reply>** tag elements. If the application has requested a specified number of objects, the **junos:position** and **junos:total** attributes are included in the opening tag for each object, as described in "Requesting a Specified Number of Configuration Objects" on page 866. In the following, the identifier tag element is called **<name>**. (For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.)

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- opening tags for each parent of the object type -->
      <first-object [junos:position="index1" junos:total="total"]>
        <name>identifier-for-first-object</name>
      </first-object>
      <second-object [junos:position="index2" junos:total="total"]>
        <name>identifier-for-second-object</name>
      </second-object>
      <!-- additional instances of the object -->
    <!-- closing tags for each parent of the object type -->
  </configuration>
</rpc-reply>
```

The **junos:position** and **junos:total** attributes do not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the **<get-configuration>** tag element (as described in "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844).

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-configuration>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

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The following example shows how to request the identifier for each interface configured at the **[edit interfaces]** hierarchy level. The output is from the candidate configuration and is tagged with Junos XML tag elements (the default).

Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration>
    <configuration>
      <interfaces>
        <interface recurse="false"/>
      </interfaces>
    </configuration>
  </get-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <interfaces>
      <interface>
          <name>fe-0/0/0</name>
      </interface>
      <interface>
          <name>fxp0</name>
      </interface>
      <interface>
          <name>lo0</name>
      </interface>
    </interfaces>
  </configuration>
</rpc-reply>
```

T1194

Requesting One Configuration Object

To request information about a single configuration object, a client application emits the **<get-configuration>** tag element and encloses the tag elements that represent the entire statement path down to the object, starting with the **<configuration>** tag element. To represent the requested object, the application emits only the container tag element and identifier tag elements (each complete with the identifier value) for the object. It does not emit tag elements that represent other object characteristics. It encloses the entire request in an **<rpc>** tag element. In the following, the identifier tag element is called **name**:

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object -->
        <object>
          <name>identifier</name>
        </object>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </get-configuration>
</rpc>
```


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When the client application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested object in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- opening tags for each parent of the object -->
      <object>
        <!-- child tag elements of the object -->
      </object>
    <!-- closing tags for each parent of the object -->
  </configuration>
</rpc-reply>
```

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can also request additional configuration elements of the same or other types by including the appropriate tag elements in the same **<get-configuration>** tag element. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

The following example shows how to request the contents of one multicasting scope called **local**, which is at the **[edit routing-options multicast]** hierarchy level. To specify the desired object, the client application emits the **<name>local</name>** identifier tag element as the innermost tag element. The output is from the candidate configuration and is tagged with Junos XML tag elements (the default).

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration>
    <configuration>
      <routing-options>
        <multicast>
          <scope>
            <name>local</name>
          </scope>
        </multicast>
      </routing-options>
    </configuration>
  </get-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
      junos:changed-localtime="timestamp">
    <routing-options>
      <multicast>
        <scope>
          <name>local</name>
          <prefix>239.255.0.0/16</prefix>
          <interface>ip-f/p/0</interface>
        </scope>
      </multicast>
    </routing-options>
  </configuration>
</rpc-reply>
```

T11195

Requesting a Subset of Objects by Using Regular Expressions

To request information about only those instances of a configuration object type that have a specified set of characters in their identifier names, a client application includes the **matching** attribute with a regular expression that matches the identifier name. For example, the application can request information about just the SONET/SDH interfaces at the **[edit interfaces]** hierarchy level by specifying the characters **so-** at the start of the regular expression.

Using the **matching** attribute enables the application to represent the objects to return in a form similar to the XML Path Language (XPath) representation, which is described in *XML Path Language (XPath) Version 1.0*, available from the World Wide Web Consortium (W3C) at http://www.w3.org/TR/xpath. In an XPath representation, an object and its parent levels are an ordered series of tag element names separated by forward slashes. The angle brackets around tag element names are omitted, and the opening tag is used to represent the entire tag element. For example, the following XPath:

```
configuration/system/radius-server/name
```

is equivalent to the following tagged representation:

```
<configuration>
  <system>
    <radius-server>
      <name/>
    </radius-server>
  </system>
</configuration>
```


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The application includes the **matching** attribute in the empty tag that represents a parent level for the object type. As with all requests for configuration information, the client emits a **<get-configuration>** tag element that encloses the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the level at which the **matching** attribute is included. The entire request is enclosed in an **<rpc>** tag element:

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the level -->
        <level  matching="matching-expression"/>
      <!-- closing tags for each parent of the level -->
    </configuration>
  </get-configuration>
</rpc>
```

In the value for the **matching** attribute, each level in the XPath-like representation can be either a full level name or a regular expression that matches the identifier name of one or more instances of an object type:

object-type[name='*regular-expression*']"

The regular expression uses the notation defined in POSIX Standard 1003.2 for extended (modern) UNIX regular expressions. Explaining regular expression syntax is beyond the scope of this document, but Table 38 on page 873 specifies which character or characters are matched by some of the regular expression operators that can be used in the expression. In the descriptions, the term *term* refers to either a single alphanumeric character or a set of characters enclosed in square brackets, parentheses, or braces.

NOTE: The matching attribute is not case-sensitive.

Table 38: Regular Expression Operators for the matching Attribute

Operator	Matches
. (period)	One instance of any character except the space.
***** (asterisk)	Zero or more instances of the immediately preceding term.
+ (plus sign)	One or more instances of the immediately preceding term.
? (question mark)	Zero or one instance of the immediately preceding term.
| (pipe)	One of the terms that appear on either side of the pipe operator.
^ (caret)	The start of a line, when the caret appears outside square brackets. One instance of any character that does not follow it within square brackets, when the caret is the first character inside square brackets.

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Table 38: Regular Expression Operators for the matching Attribute *(continued)*

Operator	Matches
$ (dollar sign)	The end of a line.
[ ] (paired square brackets)	One instance of one of the enclosed alphanumeric characters. To indicate a range of characters, use a hyphen (-) to separate the beginning and ending characters of the range. For example, **[a-z0-9]** matches any letter or number.
( ) (paired parentheses)	One instance of the evaluated value of the enclosed term. Parentheses are used to indicate the order of evaluation in the regular expression.

When the application requests Junos XML-tagged output (the default), the Junos XML protocol server returns the requested object in **<configuration>** and **<rpc-reply>** tag elements. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <!-- opening tags for each parent of the parent level -->
      <parent-level>
        <first-matching-object>
          <!-- child tag elements for the first object -->
        </first-matching-object>
        <second-matching-object>
          <!-- child tag elements for the second object -->
        </second-matching-object>
        <!-- additional instances of the object -->
      </parent-level>
    <!-- closing tags for each parent of the object type -->
  </configuration>
</rpc-reply>
```

The application can combine one or more of the **count**, **start**, and **recurse** attributes along with the **matching** attribute, to limit the set of possible matches to a specific range of objects, to request only identifiers, or both. For more information about those attributes, see "Requesting a Specified Number of Configuration Objects" on page 866 and "Requesting Identifiers Only" on page 868.

To specify the source of the output (candidate or active configuration) and request special formatting of the output (for example, formatted ASCII text or an indicator for identifiers), the application can include attributes in the opening **<get-configuration>** tag, its opening **<junoscript>** tag, or both. For more information, see "Specifying the Source and Output Format of Configuration Information" on page 841.

The application can request additional configuration elements of the same or other types in the same **<get-configuration>** tag element by including the appropriate tag elements. For more information, see "Requesting Multiple Configuration Elements Simultaneously" on page 875.

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The following example shows how to request just the identifier for the first two SONET/SDH interfaces configured at the **[edit interfaces]** hierarchy level.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-configuration>
    <configuration>
      <interfaces matching="interface[name='so-.*']" count="2" recurse="false">
    </configuration>
  </get-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL">
  <configuration junos:changed-seconds='seconds' \
        junos:changed-localtime='timestamp">
    <interfaces>
      <interface junos:position="41" junos:total="65">
        <name>so-0/0/0</name>
      </interface>
      <interface junos:position="42" junos:total="65">
        <name>so-0/0/1</name>
      </interface>
    <interfaces>
  </configuration>
</rpc-reply>
```

T1196

Requesting Multiple Configuration Elements Simultaneously

Within a **<get-configuration>** tag element, a client application can request multiple configuration elements of the same type or different types. The request includes only one **<configuration>** tag element (the Junos XML protocol server returns an error if there is more than one).

If two requested objects have the same parent hierarchy level, the client can either include both requests within one parent tag element, or repeat the parent tag element for each request. As an example, at the **[edit system]** hierarchy level the client can request the list of configured services and the identifier tag element for RADIUS servers in either of the following two ways:

```
<!-- both requests in one parent tag element -->
<rpc>
  <get-configuration>
    <configuration>
      <system>
        <services/>
        <radius-server>
          <name/>
        </radius-server>
      </system>
    </configuration>
  </get-configuration>
</rpc>

<!-- separate parent tag element for each request -->
<rpc>
  <get-configuration>
    <configuration>
```

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```
        <system>
          <services/>
        </system>
        <system>
          <radius-server>
            <name/>
          </radius-server>
        </system>
      </configuration>
    </get-configuration>
  </rpc>
```

The client can combine requests for any of the types of information discussed in the following sections:

- Requesting a Hierarchy Level or Container Object Without an Identifier on page 864
- Requesting All Configuration Objects of a Specified Type on page 865
- Requesting a Specified Number of Configuration Objects on page 866
- Requesting Identifiers Only on page 868
- Requesting One Configuration Object on page 870
- Requesting a Subset of Objects by Using Regular Expressions on page 872

Requesting an XML Schema for the Configuration Hierarchy

To request an XML Schema-language representation of the entire configuration hierarchy, a client application emits the Junos XML **<get-xnm-information>** tag element and its **<type>**, and **<namespace>** child tag elements with the indicated values in an **<rpc>** tag element:

```
<rpc>
  <get-xnm-information>
    <type>xml-schema</type>
    <namespace>junos-configuration</namespace>
  </get-xnm-information>
</rpc>
```

The Junos XML protocol server encloses the XML schema in **<rpc-reply>** and **<xsd:schema>** tags:

```
<rpc-reply xmlns:junos="URL">
  <xsd:schema>
    <!-- tag elements for the Junos schema -->
  </xsd:schema>
</rpc-reply>
```

The schema represents all configuration elements available in the version of Junos OS that is running on a device. (To determine the Junos OS version, emit the **<get-software-information>** operational request tag, which is documented in the *Junos XML API Operational Developer Reference*.)

Client applications can use the schema to validate the configuration on a device, or simply to learn which configuration statements are available in the version of Junos OS running

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on the device. The schema does not indicate which elements are actually configured, or even that an element can be configured on that type of device (some configuration statements are available only on certain device types). To request the set of currently configured elements and their settings, emit the **<get-configuration>** tag element instead, as described in "Requesting Configuration Information" on page 840.

Explaining the structure and notational conventions of the XML Schema language is beyond the scope of this document. For information, see *XML Schema Part 0: Primer*, available from the World Wide Web Consortium (W3C) at http://www.w3.org/TR/xmlschema-0/. The primer provides a basic introduction and lists the formal specifications where you can find detailed information.

For further information, see the following sections:

- Creating the junos.xsd File on page 877
- Example: Requesting an XML Schema on page 878

Creating the junos.xsd File

Most of the tag elements defined in the schema returned in the **<xsd:schema>** tag belong to the default namespace for Junos OS configuration elements. However, at least one tag, **<junos:comment>**, belongs to a different namespace: **http://xml.juniper.net/junos/*Junos-version*/junos**. By XML convention, a schema describes only one namespace, so schema validators need to import information about any additional namespaces before they can process the schema.

Starting with Junos OS Release 6.4 , the **<xsd:import>** tag element is enclosed in the **<xsd:schema>** tag element and references the file **junos.xsd**, which contains the required information about the **junos** namespace. For example, the following **<xsd:import>** tag element specifies the file for Junos OS Release 12.1R1 (and appears on two lines for legibility only):

```
<xsd:import schemaLocation="junos.xsd" \
    namespace="http://xml.juniper.net/junos/12.1R1/junos"/>
```

To enable the schema validator to interpret the **<xsd:import>** tag, you must manually create a file called **junos.xsd** in the directory where you place the **.xsd** file that contains the complete Junos configuration schema. Include the following text in the file. Do not use line breaks in the list of attributes in the opening **<xsd:schema>** tag. Line breaks appear in the following example for legibility only. For the *Junos-version* variable, substitute the release number of Junos OS running on the device (for example, **12.1R1** for the first release of Junos OS 12.1).

```
<?xml version="1.0" encoding="us-ascii"?>
<xsd:schema elementFormDefault="qualified" \
    attributeFormDefault="unqualified" \
    xmlns:xsd="http://www.w3.org/2001/XMLSchema" \
    targetNamespace="http://xml.juniper.net/junos/Junos-version/junos">
  <xsd:element name="comment" type="xsd:string"/>
</xsd:schema>
```

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NOTE: Schema validators might not be able to process the schema if they cannot locate or open the junos.xsd file.

Whenever you change the version of Junos OS running on the device, remember to update the *Junos-version* variable in the junos.xsd file to match.

Example: Requesting an XML Schema

The following examples show how to request the Junos configuration schema. In the Junos XML protocol server's response, the first **<xsd:element>** statement defines the **<undocumented>** Junos XML tag element, which can be enclosed in most other container tag elements defined in the schema (container tag elements are defined as **<xsd:complexType>**).

The attributes in the opening tags of the Junos XML protocol server's response appear on multiple lines for legibility only. The Junos XML protocol server does not insert newline characters within tags or tag elements. Also, in actual output the *JUNOS-version* variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-xnm-information>
    <type>xml-schema</type>
    <namespace>junos-configuration</namespace>
  </get-xnm-information>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" \
              elementFormDefault="qualified">
    <xsd:import schemaLocation="junos.xsd" \
                namespace="http://xml.juniper.net/junos/    Junos-version/junos"/>
      <xsd:element name="undocumented">
        <xsd:complexType>
          <xsd:sequence>
            <xsd:any namespace="##any" processContents="skip"/>
          </xsd:sequence>
        </xsd:complexType>
      </xsd:element>
      <xsd:complexType name="hostname">
        <xsd:simpleContent>
          <xsd:extension base="xsd:string"/>
        </xsd:simpleContent>
      </xsd:complexType>
```

T1177

Another **<xsd:element>** statement near the beginning of the schema defines the Junos XML **<configuration>** tag element. It encloses the **<xsd:element>** statement that defines the **<system>** tag element, which corresponds to the **[edit system]** hierarchy level. The statements corresponding to other hierarchy levels are omitted for brevity.

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Client Application **Junos XML Protocol Server**

```
</xsd:element>
  <xsd:element name="configuration">
    <xsd:complexType>
      <xsd:sequence>
        <xsd:choice minOccurs="0" maxOccurs="unbounded">
          <xsd:element ref="undocumented"/>
          <xsd:element ref="comment"/>
          <xsd:element name="system" minOccurs="0">
            <xsd:complexType>
              <xsd:sequence>
                <xsd:choice minOccurs="0" maxOccurs="unbounded">
                  <xsd:element ref="undocumented"/>
                  <xsd:element ref="comment"/>
                  <!- - child elements of <system> - ->
                </xsd:choice >
              </xsd:sequence>
            </xsd:complexType>
          </xsd:element>
          <!- - definitions for other hierarchy levels - ->
        </xsd:choice >
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>
</xsd:schema>
</rpc-reply>
```

T1178

Requesting a Previous (Rollback) Configuration

To request a previously committed (rollback) configuration, a client application emits the Junos XML **<get-rollback-information>** tag element and its child **<rollback>** tag element in an **<rpc>** tag element. This operation is equivalent to the **show system rollback** operational mode command. The **<rollback>** tag element specifies the index number of the previous configuration to display; its value can be from **0** (zero, for the most recently committed configuration) through **49**.

To request Junos XML-tagged output, the application either includes the **<format>** tag element with the value **xml** or omits the **<format>** tag element (Junos XML tag elements are the default):

```
<rpc>
  <get-rollback-information>
    <rollback>index-number</rollback>
  </get-rollback-information>
</rpc>
```

The Junos XML protocol server encloses its response in **<rpc-reply>**, **<rollback-information>**, and **<configuration>** tag elements. The **<load-success/>** tag is a side effect of the implementation and does not affect the results. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <rollback-information>
    <load-success/>
    <configuration attributes>
      <!-- tag elements representing the complete previous configuration -->
    </configuration>
```

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```
    </rollback-information>
  </rpc-reply>
```

To request formatted ASCII output, the application includes the **<format>** tag element with the value **text**:

```
<rpc>
  <get-rollback-information>
    <rollback>index-number</rollback>
    <format>text</format>
  </get-rollback-information>
</rpc>
```

The Junos XML protocol server encloses its response in **<rpc-reply>**, **<rollback-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. For more information about how ASCII output is formatted, see "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844.

```
  <rpc-reply xmlns:junos="URL">
    <rollback-information>
      <load-success/>
      <configuration-information>
        <configuration-output>
          <!-- formatted ASCII text for the complete previous configuration -->
        </configuration-output>
      </configuration-information>
    </rollback-information>
  </rpc-reply>
```

The following example shows how to request Junos XML-tagged output for the rollback configuration that has an index of **2**. In actual output, the *JUNOS-version* variable is replaced by a value such as **12.1R1** for the initial version of Junos OS Release 12.1.

Client Application

```
<rpc>
  <get-rollback-information>
    <rollback>2</rollback>
  </get-rollback-information>
</r pc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <rollback-information>
    <load-success/>
    <configuration junos:changed-seconds="seconds" \
            junos:changed-localtime="timestamp">
      <version>JUNOS-version</ver sion>
      <system>
            <host-name>big-router</host-name>
            <!- - other children of <system>- ->
      </system>
      <!- - other children of <configuration>- ->
    </configuration>
  </rollback-infor mation>
</r pc-reply>
```

T1197

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Comparing Two Previous (Rollback) Configurations

To compare the contents of two previously committed (rollback) configurations, a client application emits the Junos XML **<get-rollback-information>** tag element and its child **<rollback>** and **<compare>** tag elements in an **<rpc>** tag element. This operation is equivalent to the **show system rollback** operational mode command with the **compare** option. The **<rollback>** tag element specifies the index number of the configuration that is the basis for comparison. The **<compare>** tag element specifies the index number of the configuration to compare with the base configuration. Valid values in both tag elements range from **0** (zero, for the most recently committed configuration) through **49**:

```
<rpc>
  <get-rollback-information>
    <rollback>index-number</rollback>
    <compare>index-number</compare>
  </get-rollback-information>
</rpc>
```

NOTE: The output corresponds more logically to the chronological order of changes if the older configuration (the one with the higher index number) is the base configuration. Its index number is enclosed in the **<rollback>** tag element, and the index of the more recent configuration is enclosed in the **<compare>** tag element.

The Junos XML protocol server encloses its response in **<rpc-reply>**, **<rollback-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. The **<load-success/>** tag is a side effect of the implementation and does not affect the results.

```
<rpc-reply xmlns:junos="URL">
  <rollback-information>
    <load-success/>
    <configuration-information>
      <configuration-output>
        <!-- formatted ASCII text representing the changes -->
      </configuration-output>
    </configuration-information>
  </rollback-information>
</rpc-reply>
```

The information in the **<configuration-output>** tag element is formatted ASCII text and includes a banner line (such as **[edit interfaces]**) for each hierarchy level at which the two configurations differ. Each line between banner lines begins with either a plus sign (**+**) or a minus sign (**–**). The plus sign indicates that adding the statement to the base configuration results in the second configuration, whereas a minus sign means that removing the statement from the base configuration results in the second configuration.

The following example shows how to request a comparison of the rollback configurations that have indexes of **20** and **4**.

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Client Application

```
<rpc>
  <get-rollback-information>
    <rollback>20</rollback>
    <compare>4</compare>
  </get-rollback-information>
</r pc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <rollback-information>
    <load-success/>
    <configuration-information>
      <configuration-output>
        [edit interfaces]
        -    ge-0/2/0 {
        -       stacked-vlan-tagging;
        -       mac 00.01.02.03.04.05;
        -       gigether-options {
        -          loopback;
        -       }
        -    }
        [edit]
        +    services {
        +       l2tp {
        +          tunnel-group 12 {
        +             local-gateway;
        +          }
        +       }
        +    }
      </configuration-output>
    </configuration-information>
  </rollback-information>
</r pc-reply>
```

T1170

Requesting the Rescue Configuration

To request the rescue configuration, a client application emits the Junos XML **<get-rescue-information>** tag element in an **<rpc>** tag element. This operation is equivalent to the **show system configuration rescue** operational mode command.

The rescue configuration is a configuration saved in case it is necessary to restore a valid, nondefault configuration. (To create a rescue configuration, use the Junos XML **<request-save-rescue-configuration>** tag element or the **request system configuration rescue save** CLI operational mode command. For more information, see the *Junos XML API Operational Developer Reference* or the CLI Explorer.)

To request Junos XML-tagged output, the application either includes the **<format>** tag element with the value **xml** or omits the **<format>** tag element (Junos XML tag elements are the default):

```
<rpc>
  <get-rescue-information/>
</rpc>
```


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The Junos XML protocol server encloses its response in **<rpc-reply>**, **<rescue-information>**, and **<configuration>** tag elements. The **<load-success/>** tag is a side effect of the implementation and does not affect the results. For information about the attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

```
<rpc-reply xmlns:junos="URL">
  <rescue-information>
    <load-success/>
    <configuration attributes>
      <!-- tag elements representing the rescue configuration -->
    </configuration>
  </rescue-information>
</rpc-reply>
```

To request formatted ASCII output, the application includes the **<format>** tag element with the value **text**:

```
<rpc>
  <get-rescue-information>
    <format>text</format>
  </get-rescue-information>
</rpc>
```

The Junos XML protocol server encloses its response in **<rpc-reply>**, **<rescue-information>**, **<configuration-information>**, and **<configuration-output>** tag elements. For more information about how ASCII output is formatted, see "Requesting Output as Formatted ASCII Text or Junos XML Tag Elements" on page 844.

```
<rpc-reply xmlns:junos="URL">
  <rescue-information>
    <load-success/>
    <configuration-information>
      <configuration-output>
        <!-- formatted ASCII text representing the rescue configuration -->
      </configuration-output>
    </configuration-information>
  </rescue-information>
</rpc-reply>
```

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CHAPTER 21

Changing Configuration Information

This chapter explains how to use the Junos XML management protocol along with Junos XML or command-line interface (CLI) configuration statements to change the configuration on a routing, switching, or security platform configuration. The Junos XML protocol **<load-configuration>** tag element and its attributes correspond to configuration mode commands in the Junos OS CLI, which are described in the *CLI User Guide*. The Junos XML tag elements described here correspond to configuration statements, which are described in the Junos OS configuration guides.

This chapter discusses the following topics:

- Overview of Configuration Changes on page 885
- Specifying the Source and Format of New Configuration Data on page 887
- Replacing the Entire Configuration on page 891
- Creating, Modifying, or Deleting Configuration Elements on page 892
- Reordering Elements in Configuration Objects on page 907
- Renaming a Configuration Object on page 910
- Protecting or Unprotecting a Configuration Object on page 912
- Changing a Configuration Element's Activation State on page 914
- Changing a Configuration Element's Activation State Simultaneously with Other Changes on page 917

Overview of Configuration Changes

To change configuration information, the client application performs the procedures described in the indicated sections:

1. Establishes a connection to the Junos XML protocol server on the routing, switching, or security platform, as described in "Connecting to the Junos XML Protocol Server" on page 809.
2. Opens a Junos XML protocol session, as described in "Starting the Junos XML Protocol Session" on page 810.
3. (Optional) Locks the candidate configuration or creates a private copy, as described in "Locking the Candidate Configuration" on page 826 and "Creating a Private Copy of the Configuration" on page 828. Locking the configuration prevents other users or

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applications from changing it at the same time. Creating a private copy enables the application to make changes without affecting the candidate or active configuration until the copy is committed.

4. Encloses the **<load-configuration>** tag element in an **<rpc>** tag element. By including various attributes in the **<load-configuration/>** tag or opening **<load-configuration>** tag, the application can provide the configuration data either in a file or as a directly loaded tag stream, and as Junos XML tag elements, formatted ASCII text, or a set of Junos OS configuration mode commands. The client application can specify that the configuration data completely replace the existing configuration, or the application can specify the manner in which the Junos XML protocol server loads the data into the existing candidate or copy. The basic syntax is as follows:

```
<rpc>
  <!-- If providing configuration data in a file -->
    <load-configuration url="file" [optional attributes] />

  <!-- If providing configuration data in a data stream -->
    <load-configuration [optional attributes]>
      <!-- configuration data -->
    </load-configuration>
</rpc>
```

5. Accepts the tag stream emitted by the Junos XML protocol server in response to each request and extracts its content, as described in "Parsing the Junos XML Protocol Server Response" on page 821.

   The Junos XML protocol server confirms that it incorporated the configuration data by returning the **<load-configuration-results>** tag element and **<load-success/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

   If the load operation fails, the **<load-configuration-results>** tag element instead encloses the **<load-error-count>** tag element, which indicates the number of errors that occurred. In this case, the application or an administrator must eliminate the errors before committing the configuration.

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-error-count>count</load-error-count>
  </load-configuration-results>
</rpc-reply>
```

6. (Optional) Verifies the syntactic correctness of a configuration before attempting to commit it, as described in "Verifying a Configuration Before Committing It" on page 923.

7. Commits changes made to the configuration, as described in "Committing a Configuration" on page 923.

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8. Unlocks the candidate configuration if it is locked, as described in "Unlocking the Candidate Configuration" on page 827. Other users and applications cannot change the configuration while it remains locked.
9. Ends the Junos XML protocol session and closes the connection to the device, as described in "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Specifying the Source and Format of New Configuration Data

A client application can provide new configuration data either in a file or as a data stream, and as Junos XML tag elements, formatted ASCII text, or a set of Junos OS configuration mode commands. See the following sections:

- Providing Configuration Data in a File on page 887
- Providing Configuration Data as a Data Stream on page 888
- Defining the Configuration Data Format on page 889

Providing Configuration Data in a File

To provide new configuration data in a file, a client application encloses the **<load-configuration/>** tag with the **url** attribute in an **<rpc>** tag element.

If the data is Junos XML tag elements, either include the **format="xml"** attribute or omit the **format** attribute, which defaults to XML.

```
<rpc>
  <load-configuration url="file-location"/>
</rpc>
```

If the data is formatted ASCII text, include the **format="text"** attribute.

```
<rpc>
  <load-configuration url="file-location" format="text"/>
</rpc>
```

If the data is a set of configuration mode commands, include the **action="set"** and **format="text"** attributes.

```
<rpc>
  <load-configuration url="file-location" action="set" format="text"/>
</rpc>
```

Before loading the file, the client application or an administrator saves the configuration data as the contents of the file. Enclose Junos XML tag elements in a **<configuration>** tag element. Formatted ASCII text and sets of configuration mode commands are not enclosed in **<configuration-text>** or **<configuration-set>** tag elements in the file. For information about the syntax for the data in the file, see "Defining the Configuration Data Format" on page 889.

The value of the **url** attribute can be a local file path, an FTP location, or a Hypertext Transfer Protocol (HTTP) URL:

- A local filename can have one of the following forms:

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- */path/filename*—File on a mounted file system, either on the local flash disk or on hard disk.
- **a:***filename* or **a:***path/filename*—File on the local drive. The default path is **/** (the root-level directory). The removable media can be in MS-DOS or UNIX (UFS) format.

- A filename on an FTP server has the following form:

  ftp://*username*:*password*@*hostname*/*path*/*filename*

- A filename on an HTTP server has the following form:

  http://*username*:*password*@*hostname*/*path*/*filename*

In each case, the default value for the ***path*** variable is the home directory for the username. To specify an absolute path, the application starts the path with the characters **%2F**; for example, **ftp://***username*:*password*@*hostname*/%2F*path*/*filename*.

The **url** attribute can be combined with one or more of the following attributes in the **<load-configuration/>** tag:

- **format**, which is described in "Defining the Configuration Data Format" on page 889.
- **action**, which is described in "Replacing the Entire Configuration" on page 891 and the subsections of "Creating, Modifying, or Deleting Configuration Elements" on page 892.

The following example shows how to incorporate Junos XML-tagged configuration data stored in the file **/var/configs/user-accounts** on the FTP server called **cfg-server.mycompany.com**. The opening **<load-configuration>** tag appears on two lines for legibility only.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration \
    url="ftp://admin:AdminPwd@cfg-server.mycompany.com/var/configs/user-accounts"/>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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Providing Configuration Data as a Data Stream

To provide new configuration data as a data stream, a client application encloses the **<load-configuration>** tag element in an **<rpc>** tag element.

To define the configuration elements to change as Junos XML tag elements, the application emits the tag elements representing all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to each element to change.

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- tag elements representing the configuration data -->
    </configuration>
  </load-configuration>
```

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```
</rpc>
```

To define the configuration elements to change as formatted ASCII text, the application encloses them in a **<configuration-text>** tag element and includes the **format="text"** attribute in the opening **<load-configuration>** tag.

```
<rpc>
  <load-configuration format="text">
    <configuration-text>
      /* formatted ASCII configuration data */
    </configuration-text>
  </load-configuration>
</rpc>
```

To define the configuration elements to change as a set of Junos OS configuration mode commands, the application encloses them in a **<configuration-set>** tag element and includes the **action="set"** and **format="text"** attributes in the opening **<load-configuration>** tag.

```
<rpc>
  <load-configuration action="set" format="text">
    <configuration-set>
      /* configuration mode commands */
    </configuration-set>
  </load-configuration>
</rpc>
```

For information about the syntax for Junos XML tag elements, formatted ASCII text, and configuration mode commands see "Defining the Configuration Data Format" on page 889.

Defining the Configuration Data Format

As discussed in "Providing Configuration Data in a File" on page 887 and "Providing Configuration Data as a Data Stream" on page 888, a client application can provide new configuration data to the Junos XML protocol server either in a file or as a data stream emitted during the Junos XML protocol session. In both cases, it can use Junos XML tag elements, formatted ASCII text, or sets of configuration mode commands to define the new configuration data.

If the application uses Junos XML tag elements, it includes the tag elements representing all levels of the configuration hierarchy from the root (the **<configuration>** tag element) down to each new or changed element. The notation is the same as that used to request configuration information, and is described in detail in "Overview of Configuration Changes" on page 885.

```
<configuration>
  <!-- tag elements representing the configuration data -->
</configuration>
```

If the application provides the new data as formatted ASCII text, it uses the standard Junos OS CLI notation to indicate the hierarchical relationships between configuration statements—the newline character, tabs and other white space, braces, and square brackets. For each new or changed element, the complete statement path is specified, starting with the top-level statement that appears directly under the **[edit]** hierarchy level.

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When ASCII text is provided as a data stream, it is enclosed in the **<configuration-text>** tag element:

```
<configuration-text>
  /* formatted ASCII configuration statements */
</configuration-text>
```

When ASCII text is provided in a previously saved file, the **<configuration-text>** tag element is not included in the file.

When providing new data as ASCII text, the application also includes the **format="text"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag.

```
<rpc>
  <load-configuration url="file-location" format="text"/>
</rpc>

<rpc>
  <load-configuration format="text">
    <configuration-text>
      /* formatted ASCII configuration data */
    </configuration-text>
  </load-configuration>
</rpc>
```

Starting with Junos OS Release 11.4, you can provide the data as a set of configuration mode commands. Junos OS executes these configuration instructions line by line. For each element, you can specify the complete statement path in the command, or you can use navigation commands, such as **edit** and **up**, to move around the configuration hierarchy as you would in CLI configuration mode.

When a set of configuration mode commands is provided as a data stream, it is enclosed in the **<configuration-set>** tag element.

```
<configuration-set>
  /* configuration mode commands */
</configuration-set>
```

When a set of configuration mode commands is provided in a previously saved file, the **<configuration-set>** tag element is not included in the file.

When providing new data as a set of configuration mode commands, the application also includes the **action="set"** and **format="text"** attributes in the **<load-configuration/>** tag or opening **<load-configuration>** tag.

```
<rpc>
  <load-configuration url="file-location" action="set" format="text"/>
</rpc>

<rpc>
  <load-configuration action="set" format="text">
    <configuration-set>
      /* configuration mode commands to load */
    </configuration-set>
  </load-configuration>
</rpc>
```


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The **format** attribute can be combined with one or more of the following attributes:

- **url**, which is discussed in "Providing Configuration Data in a File" on page 887.
- **action**, which is discussed in "Replacing the Configuration with New Data" on page 891 and the subsections of "Creating, Modifying, or Deleting Configuration Elements" on page 892.

For reference pages for the **<configuration>**, **<configuration-text>**, and **<configuration-set>** tag elements, see the *Junos XML API Operational Developer Reference*.

Replacing the Entire Configuration

A client application can completely replace the current candidate configuration or a private copy of it, either with new data or by rolling back to a previous configuration. See the following sections:

- Replacing the Configuration with New Data on page 891
- Rolling Back to a Previous or Rescue Configuration on page 892

For instructions about modifying individual configuration elements, see "Creating, Modifying, or Deleting Configuration Elements" on page 892.

Replacing the Configuration with New Data

To discard the entire candidate configuration or private copy and replace it with new configuration data, a client application includes the **action="override"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag:

```
<rpc>
  <!-- For a file -->
    <load-configuration action="override" url="file" [format="text"]/>

  <!-- For a data stream -->
    <load-configuration action="override" [format="text"]>
      <!-- configuration data -->
    </load-configuration>
</rpc>
```

For more information about the **url** and **format** attributes and the syntax for the new configuration data, see "Specifying the Source and Format of New Configuration Data" on page 887.

The following example shows how to specify that the contents of the file **/tmp/new.conf** replace the entire candidate configuration. The file contains Junos XML tag elements (the default), so the **format** attribute is omitted.

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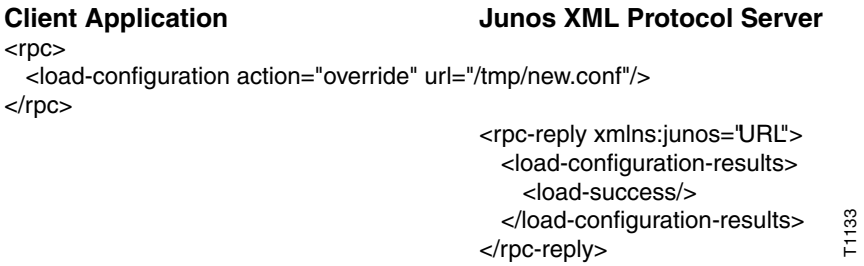

Rolling Back to a Previous or Rescue Configuration

The routing, switching, or security platform stores a copy of the most recently committed configuration and up to 49 additional previous configurations. To replace the candidate configuration or private copy with a previously committed configuration, a client application includes the **rollback="*index*"** attribute in the **<load-configuration/>** tag, where ***index*** is the numerical index of the appropriate previous configuration. The index for the most recently committed configuration is **0** (zero), and the index for the oldest possible previous configuration is **49**.

```
<rpc>
  <load-configuration rollback="index">
</rpc>
```

To replace the configuration with the rescue configuration, include the **rescue="rescue"** attribute in the **<load-configuration/>** tag.

```
<rpc>
  <load-configuration rescue="rescue"/>
</rpc>
```

For more information about rollback and rescue configurations, see the *CLI User Guide*.

Creating, Modifying, or Deleting Configuration Elements

In addition to replacing the entire configuration (as described in "Replacing the Entire Configuration" on page 891), a client application can create, modify, or delete one or more configuration elements (hierarchy levels and configuration objects) in the candidate configuration or a private copy.

To use Junos XML tag elements to represent an element, the application includes the tag elements representing all levels in the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the element's container tag element. Which attributes and child tag elements are included depends on the operation being performed on the element. The syntax applies both to the contents of a file and to a data stream. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <container-tag [operation-attribute="value"]>
      <name>identifier</name> <!-- if the element has an identifier -->
      <!-- other child tag elements --> <!-- if appropriate for the operation -->
    </container-tag>
  <!-- closing tag for each parent of the element -->
</configuration>
```


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To use formatted ASCII text to represent an element, the application includes the complete statement path, starting with a statement that can appear directly under the **[edit]** hierarchy level. The attributes and child statements to include depend on the operation being performed on the element. The set of statements is enclosed in a **<configuration-text>** tag element when the application provides a data stream. When saving statements to a file for later loading, omit the **<configuration-text>** tag element.

```
<configuration-text>
  /* statements for parent levels of the element */
    operation-to-perform: # if appropriate
    element identifier  { # if the element has an identifier
      /* child statements */  # if appropriate for the operation
    }
  /* closing braces for parent levels for the element */
</configuration-text>
```

When loading formatted ASCII text, the application includes the **format="text"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag.

To use a set of configuration mode commands to create, modify, or delete an element, the application includes commands as they would be typed in configuration mode in the CLI. The configuration instructions are executed in the order provided. You can specify the complete statement path in the command, or you can use CLI navigation commands such as **edit** and **up**, to move around the configuration hierarchy.

The set of commands is enclosed in a **<configuration-set>** tag element when the application provides a data stream. When saving statements to a file for later loading, omit the **<configuration-set>** tag element.

```
<configuration-set>
  /* configuration mode commands */
</configuration-set>
```

When loading a set of configuration mode commands, the application includes the **action="set"** and **format="text"** attributes in the **<load-configuration/>** tag or opening **<load-configuration>** tag.

For more information about the source and formatting for configuration elements, see "Specifying the Source and Format of New Configuration Data" on page 887.

For information about the operations a client application can perform on configuration elements, see the following sections:

- Merging Configuration Elements on page 894
- Replacing Configuration Elements on page 897
- Creating New Configuration Elements on page 899
- Replacing Configuration Elements Only If They Have Changed on page 900
- Deleting Configuration Elements on page 901

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Merging Configuration Elements

By default, the Junos XML protocol server *merges* loaded configuration data into the candidate configuration according to the following rules. (The rules also apply to a private copy of the configuration, but for simplicity the following discussion refers to the candidate configuration only.)

- A configuration element (hierarchy level or configuration object) that exists in the candidate but not in the loaded configuration remains unchanged.
- A configuration element that exists in the loaded configuration but not in the candidate is added to the candidate.
- If a configuration element exists in both configurations, the semantics are as follows:
  - If a child statement of the configuration element (represented by a child tag element) exists in the candidate but not in the loaded configuration, it remains unchanged.
  - If a child statement exists in the loaded configuration but not in the candidate, it is added to the candidate.
  - If a child statement exists in both configurations, the value in the loaded configuration replaces the value in the candidate.

Merge mode is the default mode for new configuration elements, so the application simply emits the **<load-configuration>** tag element in an **<rpc>** tag element:

```
<rpc>
  <!-- For a file -->
    <load-configuration url="file" [format="text"]/>

<!-- For a data stream -->
  <load-configuration [format="text"]>
    <!-- configuration data -->
  </load-configuration>
</rpc>
```

For more information about the **url** and **format** attributes, see "Specifying the Source and Format of New Configuration Data" on page 887.

To explicitly specify merge mode, the application can include the **action="merge"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag, as shown in the examples at the end of this section.

If using Junos XML tag elements to represent the element to merge into the configuration, the application includes the basic tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. It does not include any attributes in the element's container tag. If adding or changing the value of a child element, the application includes the tag elements for it. If a child remains unchanged, it does not need to be included in the loaded configuration. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <container-tag>
```


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```
        <name>identifier</name> <!-- if the element has an identifier -->
        <!-- tag elements for other children, if any -->
      </container-tag>
    <!-- closing tag for each parent of the element -->
</configuration>
```

If using formatted ASCII text, the application includes the statement path described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. It does not include a preceding operator, but does include the element's identifier if it has one. If adding or changing the value of a child element, the application includes the tag elements for it. If a child remains unchanged, it does not need to be included in the loaded configuration.

```
<configuration-text>
/* statements for parent levels of the element */
  element identifier  {
      /* child statements if any */
  }
/* closing braces for parent levels for the element */
</configuration-text>
```

If using configuration mode commands to merge new elements, the application includes the **action="set"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag, as shown in the examples at the end of this section. The application includes the **set** command, the statement path to the element, and the element's identifier if it has one. If adding or changing the value of a child element, the application includes the child elements or statements in the command. If a child remains unchanged, it does not need to be included.

```
<configuration-set>
  set statement-path-to-element element identifier child-elements-or-statements
</configuration-set>
```

The following example shows how to merge in a new interface called **so-3/0/0** at the **[edit interfaces]** hierarchy level in the candidate configuration. The information is provided as Junos XML tag elements (the default).

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration action="merge">
    <configuration>
      <interfaces>
        <interface>
          <name>so-3/0/0</name>
          <unit>
            <family>
              <inet>
                <address>
                  <name>10.0.0.1/8</name>
                </address>
              </inet>
            </family>
          </unit>
        </interface>
      </interfaces>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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The following example shows how to use formatted ASCII text to define the same new interface.

Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration action="merge" format="text">
    <configuration-text>
      interfaces {
        so-3/0/0 {
          unit 0 {
            family inet {
              address 10.0.0.1/8;
            }
          }
        }
      }
    </configuration-text>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1132

The following example shows how to use configuration mode commands to define the same new interface.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration action="set" format="text">
    <configuration-set>
      set interfaces so-3/0/0 unit 0 family inet address 10.0.0.1/8
    </configuration-set>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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Replacing Configuration Elements

To replace individual configuration elements (hierarchy levels or configuration objects), a client application emits the **<load-configuration>** tag element with the **action="replace"** attribute in an **<rpc>** tag element:

```
<rpc>
  <!-- For a file -->
    <load-configuration action="replace" url="file" [format="text"]/>

  <!-- For a data stream -->
    <load-configuration action="replace" [format="text"]>
      <!-- configuration data -->
    </load-configuration>
</rpc>
```

For more information about the **url** and **format** attributes, see "Providing Configuration Data in a File" on page 887.

To use Junos XML tag elements to define the replacement, the application includes the basic tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. Within the container tag, it includes the same child tag elements as for a new element: each of the replacement's identifier tag elements (if it has them) and all child tag elements being defined for the replacement element. In the following, the identifier tag element is called **<name>**. The application also includes the **replace= "replace"** attribute in the opening container tag:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <container-tag replace="replace">
      <name>identifier</name>
      <!-- tag elements for other children, if any -->
    </container-tag>
  <!-- closing tag for each parent of the element -->
</configuration>
```

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To use formatted ASCII text to represent the element, the application includes the complete statement path described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. As for a new element, it includes each of the replacement's identifiers (if it has them) and all child statements (with values if appropriate) that it is defining for the replacement. It places the **replace:** statement above the element's container statement.

```
<configuration-text>
  /* statements for parent levels of the element */
    replace:
    element  identifier {
      /* child statements if any */
    }
  /* closing braces for parent levels for the element */
</configuration-text>
```

The following example shows how to grant new permissions for the object named **operator** at the **[edit system login class]** hierarchy level. The information is provided in Junos XML-tagged format (the default).

Client Application

```
<rpc>
  <load-configuration action="replace">
    <configuration>
      <system>
        <login>
          <class replace="replace">
            <name>operator</name>
            <permissions>configure</permissions>
            <permissions>admin-control</permissions>
          </class>
        </login>
      </system>
    </configuration>
  </load-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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The following example shows how to use formatted ASCII text to make the same change.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration action="replace" format="text">
    <configuration-text>
      system {
        login {
        replace:
          class operator {
            permissions [ configure admin-control ];
          }
        }
      }
    </configuration-text>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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Creating New Configuration Elements

To create new configuration elements (hierarchy levels or configuration objects), a client application includes the basic tag elements, formatted ASCII statements, or configuration mode commands described in "Creating, Modifying, or Deleting Configuration Elements" on page 892.

For Junos XML tag elements and formatted ASCII text, new elements can be created in either merge mode or replace mode, which are described in "Merging Configuration Elements" on page 894 and "Replacing Configuration Elements" on page 897. In replace mode, the application includes the **action="replace"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag.

To use Junos XML tag elements to represent the element, the application includes each of the element's identifier tag elements (if it has them) and all child tag elements being defined for the element. In the following, the identifier tag element is called **<name>**. The application does not need to include any attributes in the opening container tag for the new element:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <container-tag>
      <name>identifier</name>
        <!-- tag elements for other children, if any -->
    </container-tag>
  <!-- closing tag for each parent of the element -->
</configuration>
```

To use formatted ASCII text to represent the element, the application includes each of the element's identifiers (if it has them) and all child statements (with values if appropriate) that it is defining for the element. It does not need to include an operator before the new element:

```
<configuration-text>
  /* statements for parent levels of the element */
```

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```
    element identifier {
      /* child statements if any */
    }
  /* closing braces for parent levels for the element */
</configuration-text>
```

To use configuration mode commands to create new elements, the application includes the **action="set"** attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag. The application includes the **set** command as it would be executed in the CLI. The command includes the statement path to the element, the element's identifier if it has one, and all child statements (with values if appropriate) that it is defining for the element.

```
<configuration-set>
  set statement-path-to-element element identifier child-elements
</configuration-set>
```

Replacing Configuration Elements Only If They Have Changed

To replace configuration elements (hierarchy levels and configuration objects) only if they differ in the loaded configuration and the candidate configuration or private copy, the application emits the **<load-configuration>** tag element with the **action="update"** attribute in an **<rpc>** tag element:

```
<rpc>
  <!-- For a file -->
    <load-configuration action="update" url="file" [format="text"]/>

  <!-- For a data stream -->
    <load-configuration action="update" [format="text"]>
      <!-- configuration data -->
  </load-configuration>
</rpc>
```

For more information about the **url** and **format** attributes, see "Specifying the Source and Format of New Configuration Data" on page 887.

This operation is equivalent to the Junos OS CLI **load update** configuration mode command. The Junos configuration management software compares the two configurations. Each configuration element that is different in the loaded configuration replaces its corresponding element in the existing configuration. Elements that are the same in both configurations, or exist only in the existing configuration, remain unchanged. When the configuration is later committed, only system processes that are affected by the changed configuration elements parse the new configuration.

To represent the replacement elements, the application uses the same syntax as for new elements, as described in "Creating New Configuration Elements" on page 899. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <container-tag>
      <name>identifier</name>
      <!-- tag elements for other children, if any -->
    </container-tag>
  <!-- closing tag for each parent of the element -->
</configuration>
```


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OR

```
<configuration-text>
  /* statements for parent levels of the element */
    element identifier {
      /* child statements if any */
    }
  /* closing braces for parent levels for the element */
</configuration-text>
```

The following example shows how to update the candidate configuration with the contents of the file **/tmp/new.conf** (which resides on the device). The file contains a complete configuration represented as Junos XML tag elements (the default), so the **format** attribute is omitted.

Client Application

```
<rpc>
  <load-configuration action="update" url="/tmp/new.conf"/>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T11134

Deleting Configuration Elements

To delete configuration elements (hierarchy levels or configuration objects) from the candidate configuration or private copy, a client application emits the basic tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. When using Junos XML tag elements to represent the elements to delete, the client application includes the **delete="delete"** attribute in the opening tag for each element. When using configuration mode commands to delete elements, the client application uses the **delete** command and specifies the path to the element. When using formatted ASCII text, the client application precedes each element to delete with the **delete:** operator. The placement of the attribute or operator depends on the type of element being deleted, as described in the following sections:

- Deleting a Hierarchy Level or Container Object on page 901
- Deleting a Configuration Object That Has an Identifier on page 902
- Deleting a Single-Value or Fixed-Form Option from a Configuration Object on page 904
- Deleting Values from a Multivalue Option of a Configuration Object on page 905

Deleting a Hierarchy Level or Container Object

To delete a hierarchy level and all of its children (or a container object that has children but no identifier), a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892.

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If using Junos XML tag elements, the application includes the **delete="delete"** attribute in the empty tag that represents the level or container object:

```
<configuration>
  <!-- opening tag for each parent level -->
    <level-or-object delete="delete"/>
  <!-- closing tag for each parent level -->
</configuration>
```

If using formatted ASCII text, the application places the **delete:** statement above the level to be removed, which is followed by a semicolon (even though in the existing configuration it is followed by curly braces that enclose its child statements):

```
<configuration-text>
  /* statements for parent levels */
    delete:
    object-or-level;
  /* closing braces for parent levels */
</configuration-text>
```

If using configuration mode commands, the application specifies the **delete** command and the statement path to the hierarchy level to be removed.

```
<configuration-set>
  delete statement-path-to-hierarchy
</configuration-set>
```

The following example shows how to remove the **[edit protocols ospf]** hierarchy level from the candidate configuration using Junos XML tag elements:

Client Application

```
<rpc>
  <load-configuration>
    <configuration>
      <protocols>
        <ospf delete="delete"/>
      </protocols>
    </configuration>
  </load-configuration>
</r pc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
      <load-success/>
  </load-configuration-results>
</r pc-reply>
```

T1137

Deleting a Configuration Object That Has an Identifier

To delete a configuration object that has an identifier, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892.

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If using Junos XML tag elements, the application includes the **delete="delete"** attribute in the opening tag for the object. In the container tag element for the object, it encloses only the identifier tag element, not tag elements that represent any other characteristics of the object. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object delete="delete">
      <name>identifier</name>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

NOTE: The delete attribute appears in the opening container tag, not in the identifier tag element. The presence of the identifier tag element results in the removal of the specified object, not in the removal of the entire hierarchy level represented by the container tag element.

If using formatted ASCII text, the application places the **delete:** statement above the object and its identifier:

```
<configuration-text>
/* statements for parent levels of the object */
  delete:
  object identifier;
/* closing braces for parent levels of the object */
</configuration-text>
```

If using configuration mode commands, the application specifies the **delete** command, the statement path to the object, and the object and its identifier.

```
<configuration-set>
  delete statement-path-to-object object identifier
</configuration-set>
```

The following example uses Junos XML tag elements to remove the user object **barbara** from the **[edit system login user]** hierarchy level in the candidate configuration.

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Client Application

```
<rpc>
  <load-configuration>
    <configuration>
      <system>
        <login>
          <user delete="delete">
            <name>barbara</name>
          </user>
        </login>
      </system>
    </configuration>
  </load-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1138

Deleting a Single-Value or Fixed-Form Option from a Configuration Object

To delete from a configuration object either a fixed-form option or an option that takes just one value, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. (For information about deleting an option that can take multiple values, see "Deleting Values from a Multivalue Option of a Configuration Object" on page 905.)

If using Junos XML tag elements, the application includes the **delete="delete"** attribute in the empty tag for each option. It does not include tag elements for children that are to remain in the configuration. In the following, the identifier tag element for the object is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object>
      <name>identifier</name> <!-- if the object has an identifier -->
      <option1 delete="delete"/>
      <option2 delete="delete"/>
      <!-- tag elements for other options to delete -->
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

If using formatted ASCII text, the application places the **delete:** statement above each option:

```
<configuration-text>
/* statements for parent levels of the object */
  object identifier;
  delete:
    option1;
  delete:
    option2;
/* closing braces for parent levels of the object */
```


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```
</configuration-text>
```

If using configuration mode commands, the application specifies the **delete** command, the statement path to the option, and the option to be removed. You can specify the full path to the option statement or navigate to the hierarchy level of the object and delete the option statement from that location. Use a separate command to delete each option.

```
<configuration-set>
  delete statement-path-to-object object identifier option1
  delete statement-path-to-object object identifier option2
</configuration-set>

<configuration-set>
  edit statement-path-to-object object identifier
  delete option1
  delete option2
</configuration-set>
```

The following example shows how to remove the fixed-form **disable** option at the **[edit forwarding-options sampling]** hierarchy level using Junos XML tag elements.

Client Application

```
<rpc>
  <load-configuration>
    <configuration>
      <forwarding-options>
        <sampling>
          <disable delete="delete"/>
        </sampling>
      </forw arding-options>
    </configuration>
  </load-configuration>
</r pc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</r pc-reply>
```

T1140

Deleting Values from a Multivalue Option of a Configuration Object

As described in "Mapping Configuration Statements to Junos XML Tag Elements" on page 556, some Junos configuration objects are leaf statements that have multiple values. In the formatted ASCII CLI representation, the values are enclosed in square brackets following the name of the object:

object [*value1 value2 value3* ...];

The Junos XML representation does not use a parent tag for the object, but instead uses a separate instance of the object tag element for each value. In the following, the identifier tag element is called **<name>**:

```
<parent-object>
  <name>identifier</name>
  <object>value1</object>
  <object>value2</object>
  <object>value3</object>
</parent-object>
```

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To remove one or more values for such an object, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. If using Junos XML tag elements, the application includes the **delete="delete"** attribute in the opening tag for each value. It does not include tag elements that represent values to be retained. In the following, the identifier tag element for the parent object is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the parent object -->
    <parent-object>
      <name>identifier</name>
      <object delete="delete">value1</object>
      <object delete="delete">value2</object>
    </parent-object>
  <!-- closing tag for each parent of the parent object -->
</configuration>
```

If using formatted ASCII text, the application repeats the parent statement for each value and places the **delete:** statement above each paired statement and value:

```
<configuration-text>
  /* statements for parent levels of the parent object */
    parent-object identifier;
    delete:
      object value1;
    delete:
      object value2;
  /* closing braces for parent levels of the parent object */
</configuration-text>
```

If using configuration mode commands, the application specifies the **delete** command, the statement path to each value, and the value to be removed. You can specify the full path to the value or navigate to the hierarchy level of the object and delete the value from that location. Use a separate command to delete each value.

```
<configuration-set>
  delete statement-path-to-parent-object parent-object identifier object value1
  delete statement-path-to-parent-object parent-object identifier object value2
</configuration-set>

<configuration-set>
  edit statement-path-to-parent-object parent-object identifier object
  delete value1
  delete value2
</configuration-set>
```

The following example shows how to remove two of the permissions granted to the **user-accounts** login class.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <system>
        <login>
          <class>
            <name>user-accounts</name>
            <permissions delete="delete">configure</permissions>
            <permissions delete="delete">control</permissions>
          </class>
        </login>
      </system>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1139

Reordering Elements in Configuration Objects

For most configuration objects, the order in which the object or its children are created is not significant, because the Junos configuration management software stores and displays configuration objects in predetermined positions in the configuration hierarchy. However, some configuration objects—such as routing policies and firewall filters—consist of elements that must be processed and analyzed sequentially in order to produce the intended routing behavior. When a client application uses the Junos XML management protocol to add a new element to an ordered set, the element is appended to the existing list of elements. The client application can then reorder the elements, if appropriate.

To change the order of configuration elements in an ordered set, a client application includes the tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. If using Junos XML tag elements, the application emits the container tag element that represents the ordered set, and encloses the tag element for each identifier of the configuration element that is moving. In the following, the identifier tag element is called **<name>**. In the opening container tag, it includes the **insert="before"** or **insert="after"** attribute to indicate the new position of the moving element relative to another reference element in the set. To identify the reference element, it includes each of the reference element's identifiers as an attribute in the opening container tag for the ordered set.

In the following, the elements in the set have one identifier, called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the set -->
    <ordered-set insert="(before | after)" name="referent-value">
      <name>identifier-for-moving-object</name>
    </ordered-set>
  <!-- closing tag for each parent of the set -->
</configuration>
```

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In the following, each element in the set has two identifiers. The opening tag appears on two lines for legibility only:

```
<configuration>
  <!-- opening tag for each parent of the set -->
    <ordered-set insert="(before | after)" identifier1="referent-value" \
            identifier2="referent-value">
      <identifier1>value-for-moving-object</identifier1>
      <identifier2>value-for-moving-object</identifier2>
    </ordered-set>
  <!-- closing tag for each parent of the set -->
</configuration>
```

The **insert** attribute can be combined with the **inactive** or **active** attribute to deactivate or reactivate the configuration element as it is reordered. For more information, see "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917.

The reordering operation is not available when formatted ASCII text is used to represent the configuration data.

If using configuration mode commands, the application specifies the **insert** command equivalent to the CLI configuration mode command.

```
<configuration-set>
  insert statement-path-to-object identifier-for-moving-object (before | after)
    referent-value
</configuration-set>
```

The following example shows how to move a firewall filter called **older-filter**, defined at the **[edit firewall filter]** hierarchy level, and place it after another filter called **newer-filter** using Junos XML tag elements. This operation is equivalent to the following configuration mode command:

```
[edit]
user@host# insert firewall family inet filter older-filter after filter newer-filter
```


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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <firewall>
        <family>
          <inet>
            <filter insert="after" name="newer-filter">
              <name>older-filter</name>
            </filter>
          </inet>
        </family>
      </firewall>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1141

The following example shows how to move a firewall filter called **older-filter**, defined at the **[edit firewall filter]** hierarchy level, and place it after another filter called **newer-filter** using configuration mode commands:

```
<rpc>
  <load-configuration action="set" format="text">
    <configuration-set>
      insert firewall family inet filter older-filter after filter newer-filter
    </configuration-set>
  </load-configuration>
</rpc>
```

The following example shows how to move an OSPF virtual link defined at the **[edit protocols ospf area *area*]** hierarchy level. The link with identifiers **neighbor-id 192.168.0.3** and **transit-area 1.1.1.1** moves before the link with identifiers **neighbor-id 192.168.0.5** and **transit-area 1.1.1.2**. This operation is equivalent to the following configuration mode command (which appears on two lines for legibility only):

```
[edit protocols ospf area area]
user@host# insert virtual-link neighbor-id 192.168.0.3 transit-area 1.1.1.1 \
        before virtual-link neighbor-id 192.168.0.5 transit-area 1.1.1.2
```

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <protocols>
        <ospf>
          <area>
            <filter insert="before" neighbor-id="192.168.0.5" transit-area="1.1.1.2">
              <neighbor-id>192.168.0.3</neighbor-id>
              <transit-area>1.1.1.1</transit-area>
            </filter>
          </area>
        </ospf>
      </protocols>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1180

Renaming a Configuration Object

To change the name of one or more of a configuration object's identifiers, a client application includes the tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. When using Junos XML tag elements, the client application includes the **rename="rename"** attribute and an attribute named after the identifier keyword in the object's opening tag. The value of the attribute is the new identifier value. The application includes the identifier tag element to specify the current name. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object rename="rename" name="new-name">
      <name>current-name</name>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

If the object has multiple identifiers, for each one the application includes both an attribute in the opening tag and an identifier tag element. If one or more of the identifiers is not changing, the attribute value for it is set to its current name. The opening tag appears on two lines for legibility only:

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object rename="rename" changing-identifier="new-name" \
          unchanging-identifier="current-name">
      <changing-identifier>current-name</changing-identifier>
      <unchanging-identifier>current-name</unchanging-identifier>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

The renaming operation is not available when formatted ASCII text is used to represent the configuration data.

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If using configuration mode commands to rename an object, the application specifies the **rename** command equivalent to the CLI configuration mode command. If the object has multiple identifiers, the application includes a separate **rename** command for each identifier.

```
<configuration-set>
  rename statement-path-to-object object current-name to object new-name
</configuration-set>
```

For Junos XML tag elements the **rename** attribute can be combined with the **inactive** or **active** attribute to deactivate or reactivate the configuration element as it is renamed. For more information, see "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917.

The following example shows how to change the name of a firewall filter from **access-control** to **new-access-control** using Junos XML tag elements. This operation is equivalent to the following configuration mode command:

```
[edit firewall family inet]
user@host# rename filter access-control to filter new-access-control
```

Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <firewall>
        <family>
          <inet>
            <filter rename="rename" name="new-access-control">
              <name>access-control</name>
            </filter>
          </inet>
        </family>
      </firewall>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1143

The following example shows how to change the name of a firewall filter from **access-control** to **new-access-control** using configuration mode commands:

```
<rpc>
  <load-configuration action="set" format="text">
    <configuration-set>
      rename firewall family inet filter access-control to filter new-access-control
    </configuration-set>
  </load-configuration>
</rpc>
```

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The following example shows how to change the identifiers for an OSPF virtual link (defined at the **[edit protocols ospf area *area*]** hierarchy level) from **neighbor-id 192.168.0.3** and **transit-area 1.1.1.1** to **neighbor-id 192.168.0.7** and **transit-area 1.1.1.5**. This operation is equivalent to the following configuration mode command (which appears on two lines for legibility only):

```
[edit protocols ospf area area]
user@host# rename filter virtual-link neighbor-id 192.168.0.3 transit-area \
1.1.1.1 to virtual-link neighbor-id 192.168.0.7 transit-area 1.1.1.5
```

Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration>
    <configuration>
      <protocols>
        <ospf>
          <area>
            <filter rename="rename" neighbor-id="192.168.0.7" transit-area="1.1.1.5">
              <neighbor-id>192.168.0.3</neighbor-id>
              <transit-area>1.1.1.1</transit-area>
            </filter>
          </area>
        </ospf>
      </protocols>
    </configuration>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

T1181

Protecting or Unprotecting a Configuration Object

The **protect** attribute prevents changes to a configuration element or statement. You cannot alter a protected element either manually through the CLI or automatically using commit scripts or remote procedure calls. If you attempt to make configuration changes to a protected statement or within a protected hierarchy, Junos OS issues a warning, and the configuration change fails.

If a configuration hierarchy or statement is protected, users cannot perform the following activities:

- Deleting or modifying the hierarchy or a statement or identifier within the protected hierarchy (Deletion of an unprotected hierarchy that contains protected elements deletes all unprotected child elements and preserves all protected child elements.)
- Inserting a new configuration statement or an identifier within the protected hierarchy
- Renaming the protected statement or a statement or identifier within the protected hierarchy
- Copying a configuration into the protected hierarchy

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- Activating or deactivating the protected statements or statements within the protected hierarchy
- Annotating the protected statement or hierarchy, or statements within the protected hierarchy

If you protect a configuration statement or hierarchy that does not exist, Junos OS first creates the configuration element and then protects it. If you unprotect a statement or element that is not protected, no action is taken.

You can identify protected elements when you display the configuration. If you display the configuration in text format, protected elements are preceded by **protect:**. If you display the configuration in XML format using the **| display xml** option, the opening tag of the protected element contains the **protect="protect"** attribute.

NOTE: A user or client application must have permission to modify the configuration in order to protect or unprotect configuration objects.

To protect a configuration element from changes or unprotect a previously protected element, a client application includes the tag elements described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. If using Junos XML tag elements, the client application includes the **protect="protect"** or **unprotect="unprotect"** attribute in the object's opening tag. The application includes any necessary identifier tag element. In the following sample RPC, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object (protect="protect" | unprotect="unprotect")>
      <name>identifier</name>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

If using formatted ASCII text to protect or unprotect an object, the application precedes the element with the **protect:** or **unprotect:** operator as appropriate. If you are protecting a hierarchy level and no additional child elements under that hierarchy, add a semicolon after the element statement.

```
<configuration-text>
  /* statements for parent levels */

    /* For an object with an identifier */
      (protect: | unprotect:)
      object identifier {
        /* Child configuration statements */
      }

    /* For a hierarchy level or object without an identifier */
      (protect: | unprotect:)
      element {
        /* Child configuration statements */
      }

  /* closing braces for parent levels */
```

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```
</configuration-text>
```

If using configuration mode commands to protect an object, the application specifies the **protect** or **unprotect** command equivalent to the CLI configuration mode command. You can protect both hierarchies and individual statements.

```
<configuration-set>
  (protect | unprotect) statement-path-to-hierarchy
  (protect | unprotect) statement-path-to-object object identifier
</configuration-set>
```

The following example protects the **[edit access]** hierarchy level of the configuration using Junos XML tag elements:

```
<rpc>
   <load-configuration>
      <configuration>
         <access protect="protect"/>
      </configuration>
   </load-configuration>
</rpc>
```

Once protected, any attempt to modify the **[edit access]** hierarchy level produces a warning. The following RPC attempts to delete the **[edit access]** hierarchy level. Because that hierarchy level is protected, the RPC returns a warning that the hierarchy is protected, and the configuration change fails.

```
<rpc>
   <load-configuration>
      <configuration>
         <access delete="delete"/>
      </configuration>
   </load-configuration>
</rpc>

<xnm:warning xmlns="http://xml.juniper.net/xnm/1.1/xnm"
xmlns:xnm="http://xml.juniper.net/xnm/1.1/xnm">
 <message>
  [access] is protected, 'access' cannot be deleted
 </message>
</xnm:warning>
```

Related Documentation

- *Example: Protecting the Junos OS Configuration from Modification or Deletion*

Changing a Configuration Element's Activation State

When a configuration element (hierarchy level or configuration object) is deactivated, it remains in the candidate configuration or private copy, but when the configuration is later committed, the element does not affect the functioning of the routing platform. A client application can deactivate an element immediately as it creates it, or can deactivate an existing element. It can also reactivate an existing deactivated element so that when the configuration is committed, the element again has an effect on routing platform functioning.

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See the following sections:

- Deactivating a Newly Created Element on page 915
- Deactivating or Reactivating an Existing Element on page 916

Deactivating a Newly Created Element

To define an element and immediately deactivate it, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892.

If using Junos XML tag elements to define the new element, the application includes the **inactive="inactive"** attribute in the opening tag for the element. It includes tag elements for all children being defined for the element. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <element inactive="inactive">
      <name>identifier</name> <!-- if the element has an identifier -->
      <!-- tag elements for each child of the element -->
    </element>
  <!-- closing tag for each parent of the element -->
</configuration>
```

If using formatted ASCII text to define the new element, the application precedes the element with the **inactive:** operator. It includes all child statements that it is defining for all children of the element:

```
<configuration-text>
/* statements for parent levels */

  /* For an object with an identifier */
    inactive:
    object identifier {
      /* Child configuration statements */
    }

  /* For a hierarchy level or object without an identifier */
    inactive:
    element {
      /* Child configuration statements */
    }

/* closing braces for parent levels */
</configuration-text>
```

If using configuration mode commands to create an inactive element, the application first creates the element with the **set** command and then uses the **deactivate** command equivalent to the CLI configuration mode command.

```
<configuration-set>
  set statement-path-to-object object identifier
  deactivate statement-path-to-object object identifier
</configuration-set>
```

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Deactivating or Reactivating an Existing Element

To deactivate an existing element, or reactivate a previously deactivated one, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892.

If using Junos XML tag elements to represent a configuration object that has an identifier, the application includes the **inactive="inactive"** or **active="active"** attribute in the object's opening container tag and also emits the identifier tag element and value. In the following, the identifier tag element is called **<name>**. To represent a hierarchy level or container object that has children but not an identifier, the application uses an empty tag:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <!- - For an object with an identifier -->
    <object (inactive="inactive" | active="active")>
      <name>identifier</name>
    </object>

    <!-- For a hierarchy level or object without an identifier -->
    <level-or-container (inactive="inactive" | active="active")/>
  <!-- closing tag for each parent of the element -->
</configuration>
```

If using formatted ASCII text to represent the element, the application precedes the element with the **inactive:** or **active:** operator. The name of a hierarchy level or container object is followed by a semicolon (even though in the existing configuration it is followed by curly braces that enclose its child statements):

```
<configuration-text>
/* statements for parent levels */

  /* For an object with an identifier */
    (inactive | active):
    object identifier;

  /* For a hierarchy level or object without an identifier */
    (inactive | active):
    object-or-level;

/* closing braces for parent levels */
</configuration-text>
```

If using configuration mode commands to activate or deactivate an object, the application specifies the **activate** or **deactivate** command equivalent to the CLI configuration mode command.

```
<configuration-set>
  /* For an object with an identifier */
  activate statement-path-to-object object identifier
  deactivate statement-path-to-object object identifier

  /* For a hierarchy level or object without an identifier */
  activate statement-path-to-object-or-level object-or-level
  deactivate statement-path-to-object-or-level object-or-level
```


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```
    </configuration-set>
```

The following example shows how to deactivate the **isis** hierarchy level at the **[edit protocols]** hierarchy level in the candidate configuration using Junos XML tag elements.

Client Application

```
<rpc>
  <load-configuration>
    <configuration>
      <protocols>
        <isis inactive="inactive"/>
      </protocols>
    </configuration>
  </load-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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Changing a Configuration Element's Activation State Simultaneously with Other Changes

A client application can deactivate or reactivate an element at the same time it performs other operations on it (except deletion), by combining the appropriate attributes or operators with the **inactive** or **active** attribute or operator. For basic information about activating or deactivating an element, see "Changing a Configuration Element's Activation State" on page 914.

To define the element to deactivate or activate, a client application includes the basic tag elements or configuration statements for its parent levels, as described in "Creating, Modifying, or Deleting Configuration Elements" on page 892. When using Junos XML tag elements to represent the element, the application includes the **inactive="inactive"** or **active="active"** attribute along with the appropriate other attribute in the **<load-configuration/>** tag or opening **<load-configuration>** tag. When using formatted ASCII text, the application combines the **inactive** or **active** operator with the other operator.

For instructions, see the following sections:

- Replacing an Element and Setting Its Activation State on page 917
- Reordering an Element and Setting Its Activation State on page 919
- Renaming an Object and Setting Its Activation State on page 919
- Example: Replacing an Object and Deactivating It on page 920

Replacing an Element and Setting Its Activation State

To replace (completely reconfigure) an element and simultaneously deactivate or activate it, a client application includes the tag elements or statements that represent all of the element's characteristics (for complete information about the syntax for defining elements, see "Replacing Configuration Elements" on page 897). The client application

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uses the attributes and operators discussed in the following sections to indicate which element is being replaced and activated or deactivated:

- Using Junos XML Tag Elements for the Replacement Element on page 918
- Using Formatted ASCII Text for the Replacement Element on page 918

Using Junos XML Tag Elements for the Replacement Element

If using Junos XML tag elements to represent the element, a client application includes the **action="replace"** attribute in the **<load-configuration>** tag element:

```
<rpc>
  <!-- For a file -->
    <load-configuration action="replace" url="file"/>

  <!-- For a data stream -->
    <load-configuration action="replace">
      <!-- Junos XML tag elements -->
    </load-configuration>
</rpc>
```

In the opening tag for the replacement element, the application includes two attributes—the **replace="replace"** attribute and either the **inactive="inactive"** or **active="active"** attribute. It includes tag elements for all children being defined for the element. In the following, the identifier tag element is called **<name>**:

```
<configuration>
  <!-- opening tag for each parent of the element -->
    <element replace="replace" (inactive="inactive" | active="active")>
      <name>identifier</name> <!-- if the element has an identifier -->
      <!-- tag elements for each child of the element -->
    </element>
  <!-- closing tag for each parent of the element -->
</configuration>
```

Using Formatted ASCII Text for the Replacement Element

If using formatted ASCII text to represent the element, a client application includes the **action="replace"** and **format="text"** attributes in the **<load-configuration/>** tag or opening **<load-configuration>** tag:

```
<rpc>
  <!-- For a file -->
    <load-configuration action="replace" format="text" url="file"/>

  <!-- For a data stream -->
    <load-configuration action="replace" format="text">
      <!-- formatted ASCII configuration statements -->
    </load-configuration>
</rpc>
```

The application places the **inactive:** or **active:** operator on the line above the new element and the **replace:** operator directly before the new element. It includes all child statements that it is defining for all children of the element:

```
<configuration-text>
/* statements for parent levels */
```


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```
    /* For an object with an identifier */
    (inactive | active):
    replace: object identifier {
      /* Child configuration statements */
    }

  /* For a hierarchy level or object without an identifier */
    (inactive | active):
    replace: element {
      /* Child configuration statements */
    }

/* closing braces for parent levels */
</configuration-text>
```

Reordering an Element and Setting Its Activation State

To reorder an element in an ordered list and simultaneously deactivate or activate it, the application combines the **insert** attribute and identifier attribute for the reference element with the **inactive** or **active** attribute. In the following, the identifier tag element for the moving element is called **<name>**. The opening tag appears on two lines for legibility only:

```
<configuration>
  <!-- opening tag for each parent of the set -->
    <ordered-set insert="(before | after)" reference-identifier="value" \
          (inactive="inactive" | active="active")>
      <name>identifier-for-moving-object</name>
    </ordered-set>
  <!-- closing tag for each parent of the set -->
</configuration>
```

The reordering operation is not available when formatted ASCII text is used to represent the configuration data. For complete information about reordering elements, see "Reordering Elements in Configuration Objects" on page 907.

Renaming an Object and Setting Its Activation State

To rename an object (change the value of one or more of its identifiers) and simultaneously deactivate or activate it, the application combines the **rename** attribute and identifier attribute for the new name with the **inactive** or **active** attribute.

If the object has one identifier (here called **<name>**), the syntax is as follows (the opening tag appears on two lines for legibility only):

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object rename="rename" name="new-name" \
          (inactive="inactive" | active="active")>
      <name>current-name</name>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

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If the object has multiple identifiers and only one is changing, the syntax is as follows (the opening tag appears on multiple lines for legibility only):

```
<configuration>
  <!-- opening tag for each parent of the object -->
    <object rename="rename"changing-identifier="new-name" \
          unchanging-identifier="current-name" \
          (inactive="inactive" | active="active")>
      <changing-identifier>current-name</changing-identifier>
      <unchanging-identifier>current-name</unchanging-identifier>
    </object>
  <!-- closing tag for each parent of the object -->
</configuration>
```

The renaming operation is not available when formatted ASCII text is used to represent the configuration data. For complete information about renaming elements, see "Renaming a Configuration Object" on page 910.

Example: Replacing an Object and Deactivating It

The following example shows how to replace the information at the **[edit protocols bgp]** hierarchy level in the candidate configuration for the group called **G3**, and also deactivate the group so that it is not used in the actual configuration when the candidate is committed:

Client Application

```
<rpc>
  <load-configuration action="replace">
    <configuration>
      <protocols>
        <bgp>
          <group replace="replace" inactive="inactive">
            <name>G3</name>
            <type>external</type>
            <peer-as>58</peer-as>
            <neighbor>
              <name>10.0.20.1</name>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </configuration>
  </load-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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The following example shows how to use formatted ASCII text to make the same changes:

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <load-configuration action="replace" format="text">
    <configuration-text>
      protocols {
        bgp {
        replace:
          inactive: group G3 {
            type external;
            peer-as 58;
            neighbor 10.0.20.1;
          }
        }
      }
    </configuration-text>
  </load-configuration>
</rpc>
```

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
  </load-configuration-results>
</rpc-reply>
```

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CHAPTER 22

Committing a Configuration

This chapter explains how to commit a configuration so that it becomes the active configuration on the routing, switching, or security platform. For more detailed information about commit operations, including a discussion of the interaction among different variants of the operation, see the *CLI User Guide*.

- Verifying a Configuration Before Committing It on page 923
- Committing the Candidate Configuration on page 924
- Committing a Private Copy of the Configuration on page 925
- Committing a Configuration at a Specified Time on page 926
- Committing the Candidate Configuration Only After Confirmation on page 927
- Committing and Synchronizing a Configuration on Redundant Control Planes on page 930
- Logging a Message About a Commit Operation on page 936

Verifying a Configuration Before Committing It

During the process of committing the candidate configuration or a private copy, the Junos XML protocol server confirms that it is syntactically correct. If the syntax check fails, the server does not commit the candidate. To avoid the potential complications of such a failure, it often makes sense to confirm the candidate's correctness before actually committing it. The client application encloses the empty **<check/>** tag in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <check/>
  </commit-configuration>
</rpc>
```

The Junos XML protocol server encloses its response in **<rpc-reply>**, **<commit-results>**, and **<routing-engine>** tag elements. If the syntax check succeeds, the **<routing-engine>** tag element encloses the **<commit-check-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the check succeeded (**re0** on routing platforms that use a single Routing Engine, and either **re0** or **re1** on routing platforms that can have two Routing Engines):

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>(re0 | re1)</name>
```

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```
        <commit-check-success/>
      </routing-engine>
    </commit-results>
  </rpc-reply>
```

If the syntax check fails, an **<xnm:error>** tag element encloses tag elements that describe the error.

The **<check/>** tag can be combined with the **<synchronize/>** tag, which is described in "Verifying the Configuration on Both Routing Engines" on page 934.

Committing the Candidate Configuration

To commit the candidate configuration, a client application encloses the empty **<commit-configuration/>** tag in an **<rpc>** tag element:

```
<rpc>
  <commit-configuration/>
</rpc>
```

We recommend that the application lock the candidate configuration before changing it and emit the **<commit-configuration/>** tag while the configuration is still locked. Doing so avoids inadvertent commit of changes made by other users or applications. After committing the configuration, the application must unlock it for other users and applications to be able to make changes. For instructions, see "Exchanging Information with the Junos XML Protocol Server" on page 818 and "Changing Configuration Information" on page 627.

The Junos XML protocol server reports the results of the commit operation in **<rpc-reply>**, **<commit-results>**, and **<routing-engine>** tag elements. If the commit operation succeeds, the **<routing-engine>** tag element encloses the **<commit-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the commit operation succeeded (**re0** on devices that use a single Routing Engine, and either **re0** or **re1** on devices that can have two Routing Engines):

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>(re0 | re1)</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

If the commit operation fails, an **<xnm:error>** tag element encloses tag elements that describe the error. The most common causes of failure are semantic or syntactic errors in the candidate configuration.

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Committing a Private Copy of the Configuration

To commit a private copy of the configuration so that it becomes the active configuration on the routing, switching, or security platform, a client application encloses the empty **<commit-configuration/>** tag in an **<rpc>** tag element (just as for the candidate configuration):

```
<rpc>
  <commit-configuration/>
</rpc>
```

The Junos XML protocol server creates a copy of the current regular candidate configuration, merges in the changes made to the private copy, and commits the combined candidate to make it the active configuration on the device. The server reports the results of the commit operation in **<rpc-reply>** and **<commit-results>** tag elements.

If the private copy does not include any changes, the server emits the **<commit-results>** and **</commit-results>** tags with nothing between them:

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
  </commit-results>
</rpc-reply>
```

If the private copy includes changes and the commit operation succeeds, the server emits the **<load-success/>** tag when it merges the changes in the private copy into the candidate configuration. The subsequent **<routing-engine>** tag element encloses the **<commit-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the commit operation succeeded (**re0** on devices that use a single Routing Engine, and either **re0** or **re1** on devices that can have two Routing Engines):

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <load-success/>
    <routing-engine>
      <name>(re0 | re1)</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

If the private copy includes changes that conflict with the regular candidate configuration, the commit fails. The **<load-error-count>** tag element reports the number of errors and an **<xnm:error>** tag element encloses tag elements that describe the error.

There are restrictions on committing a private copy. For example, the commit fails if the regular candidate configuration is locked by another user or application, or if it includes uncommitted changes made since the private copy was created. For more information, see the *CLI User Guide*.

Most of the variants of the commit operation are available for a private copy. The variants are described in subsequent sections in this chapter:

- Scheduling the commit for a later time, as described in "Committing a Configuration at a Specified Time" on page 926.

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- Synchronizing the configuration on both Routing Engines, as described in "Committing and Synchronizing a Configuration on Redundant Control Planes" on page 930.
- Logging a commit-time message, as described in "Logging a Message About a Commit Operation" on page 936.

NOTE: The confirmed-commit operation is not available for a private copy. For information about using that operation for the regular candidate configuration, see "Committing the Candidate Configuration Only After Confirmation" on page 927.

Committing a Configuration at a Specified Time

To commit a configuration at a specified time in the future, a client application encloses the **<at-time>** tag element in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <at-time>time</at-time>
  </commit-configuration>
</rpc>
```

To indicate when to perform the commit operation, the application includes one of three types of values in the **<at-time>** tag element:

- The string **reboot**, to commit the configuration the next time the device reboots.
- A time value of the form ***hh:mm***[**:*ss***] (hours, minutes, and optionally seconds), to commit the configuration at the specified time, which must be after the time at which the application emits the **<commit-configuration>** tag element, but before 11:59:59 PM on the current day. For example, if the **<at-time>** tag element encloses the value **02:00** (2:00 AM) and the application emits the **<commit-configuration>** tag element at 2:10 AM, the commit will never take place, because the scheduled time has already passed for that day.

  Use 24-hour time; for example, **04:30:00** means 4:30:00 AM and **20:00** means 8:00 PM. The time is interpreted relative to the clock and time zone settings on the device..
- A date and time value of the form ***yyyy-mm-dd hh:mm***[**:*ss***] (year, month, date, hours, minutes, and optionally seconds), to commit the configuration at the specified day and time, which must be after the **<commit-configuration>** tag element is emitted. Use 24-hour time. For example, **2006-08-21 15:30:00** means 3:30 PM on August 21, 2006. The time is interpreted relative to the clock and time zone settings on the device.

NOTE: The specified time must be more than 1 minute later than the current time on the device.

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The Junos XML protocol server immediately checks the configuration for syntactic correctness and returns **<rpc-reply>**, **<commit-results>**, and **<routing-engine>** tag elements. If the syntax check succeeds, the **<routing-engine>** tag element encloses the **<commit-check-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the check succeeded (**re0** on devices that use a single Routing Engine, and either **re0** or **re1** on devices that can have two Routing Engines). It also encloses an **<output>** tag element that reports the time at which the commit will occur:

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>(re0 | re1)</name>
      <commit-check-success/>
      <output>commit at will be executed at timestamp</output>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

The configuration is scheduled for commit at the specified time. The Junos XML protocol server does not emit additional tag elements when it performs the actual commit operation.

If the configuration is not syntactically correct, an **<xnm:error>** tag element encloses tag elements that describe the error. The commit operation is not scheduled.

The **<at-time>** tag element can be combined with the **<synchronize/>** tag, the **<log/>** tag element, or both. For more information, see "Committing and Synchronizing a Configuration on Redundant Control Planes" on page 930 and "Logging a Message About a Commit Operation" on page 936.

The following example shows how to schedule a commit operation for 10:00 PM on the current day.

Client Application

```
<rpc>
  <commit-configuration>
    <at-time>22:00</at-time>
  </commit-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL">
  <commit-results>
    <routing-engine>
      <name>re1</name>
      <commit-check-success/>
      <output>commit at will be executed at  date 22:00:00  timezone</output>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

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Committing the Candidate Configuration Only After Confirmation

To commit the candidate configuration but require an explicit confirmation for the commit to become permanent, a client application encloses the empty **<confirmed/>** tag in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
```

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```
<commit-configuration>
  <confirmed/>
</commit-configuration>
</rpc>
```

If the commit is not confirmed within a certain amount of time (600 seconds [10 minutes] by default), the Junos XML protocol server automatically retrieves and commits (rolls back to) the previously committed configuration. To specify a different number of minutes for the rollback deadline, the application encloses a positive integer value in the **<confirm-timeout>** tag element:

```
<rpc>
  <commit-configuration>
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
  </commit-configuration>
</rpc>
```

NOTE: You cannot perform this commit operation on a private copy of the configuration.

In either case, the Junos XML protocol server confirms that it committed the candidate configuration temporarily by returning the **<ok/>** tag in the **<rpc-reply>** tag element:

```
<rpc-reply xmlns:junos="URL">
  <ok/>
</rpc-reply>
```

If the Junos XML protocol server cannot commit the candidate, the **<rpc-reply>** tag element instead encloses an **<xnm:error>** tag element explaining the reason for the failure. The most common causes are semantic or syntactic errors in the candidate configuration.

The confirmed commit operation is useful for verifying that a configuration change works correctly and does not prevent management access to the device. If the change prevents access or causes other errors, the automatic rollback to the previous configuration restores access after the rollback deadline passes.

In response to a confirmed commit operation, the Junos XML protocol server returns **<rpc-reply>**, **<commit-results>**, and **<routing-engine>** tag elements. If the commit operation succeeds, the **<routing-engine>** tag element encloses the **<commit-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the commit operation succeeded (**re0** on devices that use a single Routing Engine, and either **re0** or **re1** on devices that can have two Routing Engines):

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>(re0 | re1)</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```


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If the Junos XML protocol server cannot commit the candidate, the **<rpc-reply>** tag element instead encloses an **<xnm:error>** tag element explaining the reason for the failure. The most common causes are semantic or syntactic errors in the candidate configuration.

To delay the rollback to a time later than the current rollback deadline, the application emits the **<confirmed/>** tag in a **<commit-configuration>** tag element again before the deadline passes. It can include the **<confirm-timeout>** tag element to specify how long to delay the next rollback; omit that tag element to delay the rollback by the default of 10 minutes. The client application can delay the rollback indefinitely by emitting the **<confirmed/>** tag repeatedly in this way.

To cancel the rollback completely (and commit a configuration permanently), the client application emits one of the following tag sequences before the rollback deadline passes:

- The empty **<commit-configuration/>** tag enclosed in an **<rpc>** tag element. The rollback is canceled and the candidate configuration is committed immediately, as described in "Committing the Candidate Configuration" on page 924. If the candidate configuration is still the same as the temporarily committed configuration, this effectively recommits the temporarily committed configuration:

  ```
  <rpc>
    <commit-configuration/>
  </rpc>
  ```

- The **<synchronize/>** tag enclosed in **<commit-configuration>** and **<rpc>** tag elements:

  ```
  <rpc>
    <commit-configuration>
      <synchronize/>
    </commit-configuration>
  </rpc>
  ```

  The rollback is canceled and the candidate configuration is checked and committed immediately on both Routing Engines, as described in "Committing and Synchronizing a Configuration on Redundant Control Planes" on page 930. If a confirmed commit operation has been performed on both Routing Engines, then emitting the **<synchronize/>** tag cancels the rollback on both.

- The **<at-time>** tag element enclosed in **<commit-configuration>** and **<rpc>** tag elements:

  ```
  <rpc>
    <commit-configuration>
      <at-time>time</at-time>
    </commit-configuration>
  </rpc>
  ```

  The rollback is canceled and the configuration is checked immediately for syntactic correctness, then committed at the scheduled time, as described in "Committing a Configuration at a Specified Time" on page 926.

The **<confirmed/>** and **<confirm-timeout>** tag elements can be combined with the **<synchronize/>** tag, the **<log/>** tag element, or both. For more information, see "Committing and Synchronizing a Configuration on Redundant Control Planes" on page 930 and "Logging a Message About a Commit Operation" on page 936.

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If another application uses the **<kill-session/>** tag element to terminate this application's session while a confirmed commit is pending (this application has committed changes but not yet confirmed them), the Junos XML protocol server that is servicing this session restores the configuration to its state before the confirmed commit instruction was issued. For more information about session termination, see "Terminating Another NETCONF Session" on page 590.

The following example shows how to commit the candidate configuration on Routing Engine 1 with a rollback deadline of 20 minutes.

Client Application

```
<rpc>
  <commit-configuration>
    <confirmed/>
    <confirm-timeout>20</confirm-timeout>
  </commit-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>re1</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

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Committing and Synchronizing a Configuration on Redundant Control Planes

A Routing Engine resides within a control plane. For single-chassis configurations, there is one control plane. In redundant systems, there are two control planes, the master plane and the backup plane. In multichassis configurations, the control plane includes all Routing Engines with the same Routing Engine designation. For example, all master Routing Engines reside within the *master* control plane, and all backup Routing Engines reside within the *backup* control plane.

Committing a configuration applies a new configuration to the device Engine. In a multichassis configuration, once a change to the configuration has been committed to the system, this change is propagated throughout the control plane using the distribution function.

In a redundant architecture, you can issue the **synchronize** command to commit the new configuration to both the master and the slave control planes. When issued, this command will save the current configuration to both device Engines and commit the new configuration to both control planes. On a multichassis system, once the configuration has been committed on both planes, the distribution function will distribute the new configuration across both planes.

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NOTE: In a multichassis architecture with redundant control planes, there is a difference between synchronizing the two planes and distributing the configuration throughout each plane. Synchronization only occurs between the Routing Engines within the same chassis. Once this synchronization is complete, the new configuration is distributed to all other Routing Engines within each plane as a separate distribution function.

Because synchronization happens across two separate control planes, synchronizing configurations is only valid on redundant Routing Engine architectures. Further, **re0** and **re1** configuration groups must be defined on each routing, swtiching, or security platform. For more information about configuration groups, see the *CLI User Guide*.

NOTE: If you issue the **synchronize** command on a nonredundant Routing Engine system, the Junos XML protocol server will commit the configuration on the one control plane.

For more information about synchronizing configurations, see the following sections:

- Synchronizing the Configuration on Both Routing Engines on page 931
- Forcing a Synchronized Commit Operation on page 933
- Synchronizing Configurations Simultaneously with Other Operations on page 934

Synchronizing the Configuration on Both Routing Engines

To synchronize a configuration on a redundant Routing Engine system, a client application needs to enclose the empty **<synchronize/>** tag in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
  </commit-configuration>
</rpc>
```

The Junos XML protocol server verifies the configuration's syntactic correctness on the Routing Engine where the **<synchronize/>** tag is emitted (referred to as the local Routing Engine), copies the configuration to the remote Routing Engine and verifies its syntactic correctness there, and then commits the configuration on both Routing Engines.

The Junos XML protocol server encloses its response in **<rpc-reply>** and **<commit-results>** tag elements. It emits a separate **<routing-engine>** tag element for each operation on each Routing Engine:

- If the syntax check succeeds on a Routing Engine, the **<routing-engine>** tag element encloses the **<commit-check-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the check succeeded (**re0** or **re1**):

  ```
  <routing-engine>
    <name>(re0 | re1)</name>
  ```

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```
    <commit-check-success/>
  </routing-engine>
```

If the configuration is incorrect, an **<xnm:error>** tag element encloses a description of the error.

- If the commit operation succeeds on a Routing Engine, the **<routing-engine>** tag element encloses the **<commit-success/>** tag and the **<name>** tag element, which reports the name of the Routing Engine on which the commit operation succeeded:

```
<routing-engine>
  <name>(re0 | re1)</name>
  <commit-success/>
</routing-engine>
```

If the commit operation fails, an **<xnm:error>** tag element encloses a description of the error. The most common causes of failure are semantic or syntactic errors in the configuration.

Example: Synchronizing the Configuration on Both Routing Engines

The following example shows how to commit and synchronize the candidate configuration on both Routing Engines.

Client Application

```
<rpc>
  <commit-configuration>
    <synchronize/>
  </commit-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos="URL">
  <commit-results>
    <routing-engine>
      <name>re0</name>
      <commit-check-success/>
    </routing-engine>
    <routing-engine>
      <name>re1</name>
      <commit-check-success/>
    </routing-engine>
    <routing-engine>
      <name>re1</name>
      <commit-success/>
    </routing-engine>
    <routing-engine>
      <name>re0</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

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Forcing a Synchronized Commit Operation

The synchronize operation fails if the second Routing Engine's configuration is locked. If a synchronization failure occurs, it is best to determine the cause of the failure, take corrective action, and then synchronize the two Routing Engines again. However, when necessary, you can use the **<force-synchronize/>** command to override a locked configuration and force the synchronization.

NOTE: When you use a **force-synchronize** command, any uncommitted changes to the configuration will be lost.

To force a synchronization, enclose the empty **<synchronize/>** and **<force-synchronize/>** tags in the **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
    <force-synchronize/>
  </commit-configuration>
</rpc>
```

NOTE: In a multichassis environment, synchronization occurs between Routing Engines on the same chassis. Once the synchronization occurs, the configuration changes are propagated across each control plane using the distribution function. If one or more Routing Engines are locked during the distribution of the configuration, the distribution and thus the synchronization will fail. You will need to clear the error in the remote chassis and run the **synchronize** command again.

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Example: Forcing a Synchronization

The following example shows how to force a synchronization across both Routing Engine planes:

Client Application	Junos XML Protocol Server
<rpc> <commit-configuration> <synchronize/> <force-synchronize/> <commit-configuration> </rpc>	
	<rpc-reply xmlns:junos= ”http://xml.juniper.net/junos/9.010/junos”> <commit-results> <routing-engine junos:style=”show-name”> <name>re0</name> <commit-check-success/> </routing-engine> <routing-engine junos:style=”show-name”> <name>re1</name> <commit-success/> </routing-engine> <routing-engine junos:style=”show-name”> <name>re0</name> <commit-success/> </routing-engine> </commit-resuls> </rpc-reply>

Synchronizing Configurations Simultaneously with Other Operations

The **<synchronize/>** tag can be combined with the other tag elements that can occur within the **<commit-configuration>** tag element. The Junos XML protocol server checks, copies, and commits the configuration, and emits the same response tag elements as when the **<synchronize/>** tag is used by itself. The possible combinations are described in the following sections.

Verifying the Configuration on Both Routing Engines

To check the syntactic correctness of a local configuration on both Routing Engines without committing it, the application encloses the **<synchronize/>** and **<check/>** tag elements in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
    <check/>
  </commit-configuration>
</rpc>
```

The **<force-synchronize/>** tag cannot be combined with the **<check/>** tag elements.

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For more information about verifying configurations, see "Verifying a Configuration Before Committing It" on page 923.

Scheduling Synchronization for a Specified Time

To commit a configuration on both Routing Engines at a specified time in the future, the application encloses the **<synchronize/>** and **<at-time>** tag elements in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
    <at-time>time</at-time>
  </commit-configuration>
</rpc>

<rpc>
  <commit-configuration>
    <force-synchronize/>
    <at-time>time</at-time>
  </commit-configuration>
</rpc>
```

As when the **<at-time>** tag element is emitted by itself, the Junos XML protocol server verifies syntactic correctness immediately and does not emit additional tag elements when it actually performs the commit operation on each Routing Engine. For information about how to specify the time in the **<at-time>** tag element, see "Committing the Candidate Configuration Only After Confirmation" on page 927.

Synchronizing Configurations but Requiring Confirmation

To commit the candidate configuration on both Routing Engines but require confirmation for the commit to become permanent, the application encloses the **<synchronize/>**, **<confirmed/>**, and (optionally) **<confirm-timeout>** tag elements in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
    <confirmed/>
      [<confirm-timeout>minutes</confirm-timeout>]
  </commit-configuration>
</rpc>
```

The same rollback deadline applies to both Routing Engines and can be extended on both at once by again emitting the **<synchronize/>**, **<confirmed/>**, and (optionally) **<confirm-timeout>** tag elements on the Routing Engine where the tag elements were emitted the first time.

The **<force-synchronize/>** tag cannot be combined with the **<confirmed/>** and **<confirm-timeout>** tag elements.

For more information about confirmed commit operations, see "Committing the Candidate Configuration Only After Confirmation" on page 927.

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Logging a Message About Synchronized Configurations

To synchronize configurations and record a log message when the commit succeeds on each Routing Engine, the application encloses the **<synchronize/>** and **<log/>** tag elements in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <synchronize/>
    <log>message</log>
  </commit-configuration>
</rpc>
<rpc>
  <commit-configuration>
    <force-synchronize/>
    <log>message</log>
  </commit-configuration>
</rpc>
```

The commit operation proceeds as previously described in the **<synchronize/>** or **<force-synchronize/>** tag descriptions. The message for each Routing Engine is recorded in the separate **/var/log/commits** file maintained by that Routing Engine. For more information about logging, see "Logging a Message About a Commit Operation" on page 936.

Logging a Message About a Commit Operation

To record a message in the **/var/log/commits** file when a commit operation succeeds, a client application encloses the **<log>** tag element in **<commit-configuration>** and **<rpc>** tag elements:

```
<rpc>
  <commit-configuration>
    <log>message</log>
  </commit-configuration>
</rpc>
```

The **<log>** tag element can be combined with other tag elements within the **<commit-configuration>** tag element (the **<at-time>**, **<confirmed/>**, and **<confirm-timeout>**, or **<synchronize/>** tag elements) and does not change the effect of the operation. When the **<log>** tag element is emitted by itself, the associated commit operation begins immediately.

The following example shows how to log a message as the candidate configuration is committed.

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Client Application

```
<rpc>
  <commit-configuration>
    <log>Enable xnm-ssl service</log>
  </commit-configuration>
</rpc>
```

Junos XML Protocol Server

```
<rpc-reply xmlns:junos='URL'>
  <commit-results>
    <routing-engine>
      <name>re0</name>
      <commit-success/>
    </routing-engine>
  </commit-results>
</rpc-reply>
```

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The **/var/log/commits** file includes an entry for each pending commit and up to 50 previous commits. To request the contents of the file, a client application encloses the **<get-commit-information/>** tag in **<rpc>** tag elements:

```
<rpc>
  <get-commit-information/>
</rpc>
```

(The equivalent operational mode CLI command is **show system commit**.) The Junos XML protocol server encloses the information in **<commit-information>** and **<rpc-reply>** tag elements. For information about the child tag elements of the **<commit-information>** tag element, see its entry in the *Junos XML API Operational Developer Reference*.

```
<rpc-reply xmlns:junos="URL">
  <commit-information>
    <!-- tag elements representing the commit log -->
  </commit-information>
</rpc-reply>
```

The following example shows how to request the commit log.

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Client Application **Junos XML Protocol Server**

```
<rpc>
  <get-commit-information/>
</rpc>
                <rpc-reply xmlns:junos="URL">
                  <commit-information>
                    <commit-history>
                      <sequence-number>0</sequence-number>
                      <user>barbara</user>
                      <client>other</client>
                      <date-time junos:seconds="1058370173">2003-07-16 08:42:53 PDT</date-time>
                      <log>Enable xnm-ssl service</log>
                    </commit-history>
                    <commit-history>
                      <sequence-number>1</sequence-number>
                      <user>root</user>
                      <client>other</client>
                      <date-time junos:seconds="1058322166">2003-07-15 19:22:46 PDT</date-time>
                    </commit-history>
                    <commit-history>
                      <sequence-number>2</sequence-number>
                      <user>root</user>
                      <client>cli</client>
                      <date-time junos:seconds="1058219717">2003-07-14 14:55:17 PDT</date-time>
                    </commit-history>
                          .
                          .
                          .
                  </commit-information>
                </rpc-reply>
```

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CHAPTER 23

Summary of Junos XML Protocol Tag Elements

This chapter lists the tag elements that client applications and the Junos XML protocol server use to control the Junos XML protocol session and to exchange configuration information. The entries are in alphabetical order. For information about the notational conventions used in this chapter, see Table 2 on page ccxciii.

<abort/>

Usage

```
<rpc>
  <!-- child tag elements -->
</rpc>
<abort/>
```

Description Direct the Junos XML protocol server to stop processing the request that is currently outstanding. The server responds by returning the **<abort-acknowledgment/>** tag, but might already have sent tagged data in response to the request. The client application must discard those tag elements.

Usage Guidelines See "Halting a Request" on page 824.

Related Documentation

- <abort-acknowledgement/> on page 939
- <rpc> on page 961

<abort-acknowledgement/>

Usage

```
<rpc-reply xmlns:junos="URL">
  <any-child-of-rpc-reply>
    <abort-acknowledgement/>
  </any-child-of-rpc-reply>
</rpc-reply>
```

Description Indicate that the Junos XML protocol server has received the **<abort/>** tag and has stopped processing the current request. If the client application receives any tag elements related to the request between sending the **<abort/>** tag and receiving this tag, it must discard them.

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Usage Guidelines See "Halting a Request" on page 824.

Related Documentation
- <rpc-reply> on page 962
- <xnm:error> on page 963

<authentication-response>

Usage

```
<rpc-reply xmlns:junos="URL">
  <authentication-response>
    <status>authentication-outcome</status>
    <message>message</message>
    <login-name>remote-username</login-name>
  </authentication-response>
</rpc-reply>
```

Description Indicate whether an authentication attempt succeeded. The Junos XML protocol server returns the tag element in response to the **<request-login>** tag element emitted by a client application that uses the clear-text or Secure Sockets Layer (SSL) access protocol.

Contents

<login-name>—Specifies the username that the client application provided to an authentication utility such as RADIUS or TACACS+. This tag element appears only if the username that it contains differs from the username contained in the **<message>** tag element.

<message>—Names the account under which a connection to the Junos XML protocol server is established, if authentication succeeds. If authentication fails, explains the reason for the failure.

<status>—Indicates whether the authentication attempt succeeded. There are two possible values:

- **fail**—The attempt failed. The Junos XML protocol server also emits the **<challenge>** tag element to request the password again, up to a maximum of three attempts.
- **success**—The attempt succeeded. An authenticated connection to the Junos XML protocol server is established.

Usage Guidelines See "Interpreting the Authentication Response" on page 817.

Related Documentation
- <challenge> on page 940
- <request-login> on page 960
- <rpc-reply> on page 962

<challenge>

Usage

```
<rpc-reply xmlns:junos="URL">
  <challenge echo="no">Password:</challenge>
```

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```
</rpc-reply>
```

Description Request the password associated with an account during authentication with a client application that uses the clear-text or SSL access protocol. The Junos XML protocol server emits this tag element when the initial **<request-login>** tag element emitted by the client application does not enclose a **<challenge-response>** tag element, and when the password enclosed in a **<challenge-response>** tag element is incorrect (in the latter case, the server also emits an **<authentication-response>** tag element enclosing child tag elements that indicate the password is incorrect).

The tag element encloses the string **Password:** which the client application can forward to the screen as a prompt for a user.

Attributes **echo**—Specifies whether the password string typed by the user appears on the screen. The value **no** specifies that it does not.

Usage Guidelines See "Submitting an Authentication Request" on page 816.

Related Documentation

- <authentication-response> on page 940
- <request-login> on page 960
- <rpc-reply> on page 962

<checksum-information>

Usage

```
<rpc-reply>
  <checksum-information>
    <file-checksum>
      <computation-method>MD5</computation-method>
      <input-file>
        <!-- name and path of file-->
      </input-file>
    </file-checksum>
  </checksum-information>
</rpc-reply>
```

Description Enclose tag elements that include the file to check, the checksum algorithm used, and the checksum output.

Contents **<file-checksum>**—Wrapper that holds the resulting **<input-file>**, **<computation-method>**, and **<checksum>** attributes for a particular checksum computation.

<input-file>—Name and path of the file that the checksum algorithm was run against.

<computation-method>—Checksum algorithm used. Currently, all checksum computations use the MD5 algorithm; thus, the only possible value is MD5.

<checksum>—Resulting value from the checksum computation.

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Usage Guidelines See the *Junos XML API Operational Developer Reference*.

Related Documentation
- <get-checksum-information> on page 949

<close-configuration/>

Usage

```
<rpc>
  <close-configuration/>
</rpc>
```

Description Discard a candidate configuration and any changes to it.

This tag element is normally used only to discard a private copy of the candidate configuration without committing it. The application must have previously emitted the **<open-configuration>** tag element. Closing the Junos XML protocol session (by emitting the **<request-end-session/>** tag, for example) has the same effect as emitting this tag element.

Usage Guidelines See "Creating a Private Copy of the Configuration" on page 828.

Related Documentation
- <open-configuration> on page 958
- <request-end-session/> on page 960
- <rpc> on page 961

<commit-configuration>

Usage

```
<rpc>
  <commit-configuration/>

  <commit-configuration>
    <check/>
  </commit-configuration>

  <commit-configuration>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <at-time>time-specification</at-time>
    <log>log-message</log>
  </commit-configuration>

  <commit-configuration>
    <confirmed/>
    <confirm-timeout>rollback-delay</confirm-timeout>
    <log>log-message</log>
  </commit-configuration>
```


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```
<commit-configuration>
  <synchronize/>
  <log>log-message</log>
</commit-configuration>

<commit-configuration>
  <synchronize/>
  <at-time>time-specification</at-time>
  <log>log-message</log>
</commit-configuration>

<commit-configuration>
  <synchronize/>
  <check/>
  <log>log-message</log>
</commit-configuration>

<commit-configuration>
  <synchronize/>
  <confirmed/>
  <confirm-timeout>rollback-delay</confirm-timeout>
  <log>log-message</log>
</commit-configuration>

<commit-configuration>
  <synchronize/>
  <force-synchronize/>
</commit-configuration>
</rpc>
```

Description Request that the Junos XML protocol server perform one of the variants of the commit operation on either the regular candidate configuration or a private copy of the candidate configuration (if the application emitted the **<open-configuration><private/></open-configuration>** tag sequence before making changes).

Some restrictions apply to the commit operation for a private copy. For example, the commit operation fails if the regular candidate configuration is locked by another user or application, or if it includes uncommitted changes made since the private copy was created. For more information, see the *CLI User Guide*.

Enclose the appropriate tag in the **<commit-configuration>** tag element to specify the type of commit operation:

- To commit the configuration immediately, making it the active configuration on the device, emit the empty **<commit-configuration/>** tag.
- To verify the syntactic correctness of the configuration without actually committing it, enclose the **<check/>** tag in the **<commit-configuration>** tag element.
- To record a message in the **/var/log/commits** file when the associated commit operation succeeds, define the log message string in the **<log>** tag element and enclose the tag element in the **<commit-configuration>** tag element. The **<log>** tag element can be

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combined with any other tag element. When the **<log>** tag element is emitted alone, the associated commit operation begins immediately.

- To commit the candidate configuration but roll back to the previous configuration after a short time, enclose the **<confirmed/>** tag in the **<commit-configuration>** tag element.

  By default, the rollback occurs after 10 minutes; to set a different rollback delay, also emit the optional **<confirm-timeout>** tag element. To delay the rollback again (past the original rollback deadline), emit the **<confirmed/>** tag (enclosed in the **<commit-configuration>** tag element) before the deadline passes. Include the **<confirm-timeout>** tag element to specify how long to delay the next rollback, or omit that tag element to use the default of 10 minutes. The rollback can be delayed repeatedly in this way.

  To commit the configuration immediately and permanently after emitting the **<confirmed/>** tag, emit the empty **<commit-configuration/>** tag before the rollback deadline passes. The Junos XML protocol server commits the candidate configuration and cancels the rollback. If the candidate configuration is still the same as the current committed configuration, the effect is the same as recommitting the current committed configuration.

  NOTE: The confirmed commit operation is not available for a private copy of the configuration.

- On a device with two Routing Engines, commit the candidate configuration stored on the local Routing Engine on both Routing Engines. Combine tag elements as indicated in the following:

  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it immediately on both Routing Engines, enclose the **<synchronize/>** tag in the **<commit-configuration>** tag element.
  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it on both Routing Engines at a defined future time, enclose the **<synchronize/>** or **<force-synchronize/>** tag and **<at-time>** tag element in the **<commit-configuration>** tag element. Set the value in the **<at-time>** tag element as previously described for use of the **<at-time>** tag element alone.
  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine and verify the candidate's syntactic correctness on each Routing Engine, enclose the **<synchronize/>** or **<force-synchronize/>** and **<check/>** tag elements in the **<commit-configuration>** tag element.
  - To copy the candidate configuration stored on the local Routing Engine to the other Routing Engine, verify the candidate's syntactic correctness, and commit it on both Routing Engines but require confirmation, enclose the **<synchronize/>** tag and **<confirmed/>** tag elements, and optionally the **<confirm-timeout>** tag element, in the **<commit-configuration>** tag element. Set the value in the **<confirm-timeout>**

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tag element as previously described for use of the **<confirmed/>** tag and **<confirm-timeout>** tag element alone.

- To force the same synchronized commit operation as invoked by the **<synchronize/>** tag to succeed, even if there are open configuration sessions or uncommitted configuration changes on the remote machine, enclose the **<force-synchronize/>** tag in the **<commit-configuration>** tag element.

- To schedule the configuration for commit at a future time, enclose the **<at-time>** tag element in the **<commit-configuration>** tag element. There are three valid types of time specifiers:
  - The string **reboot**, to commit the configuration the next time the device reboots.
  - A time value of the form ***hh*:*mm*[:*ss*]** (hours, minutes, and, optionally, seconds), to commit the configuration at the specified time, which must be in the future but before 11:59:59 PM on the day the **<commit-configuration>** tag element is emitted. Use 24-hour time for the ***hh*** value; for example, **04:30:00** means 4:30:00 AM and **20:00** means 8:00 PM. The time is interpreted with respect to the clock and time zone settings on the device.
  - A date and time value of the form ***yyyy-mm-dd hh*:*mm*[:*ss*]** (year, month, date, hours, minutes, and, optionally, seconds), to commit the configuration at the specified date and time, which must be after the **<commit-configuration>** tag element is emitted. Use 24-hour time for the ***hh*** value. For example, **2005-08-21 15:30:00** means 3:30 PM on August 21, 2005. The time is interpreted with respect to the clock and time zone settings on the device.

NOTE: The time you specify must be more than 1 minute later than the current time on the device.

The configuration is checked immediately for syntactic correctness. If the check succeeds, the configuration is scheduled for commit at the specified time. If the check fails, the commit operation is not scheduled.

Contents **<at-time>**—Schedules the commit operation for a specified future time.

<check>—Requests verification that the configuration is syntactically correct, but does not actually commit it.

<confirmed>—Requests a commit of the candidate configuration and a rollback to the previous configuration after a short time, 10 minutes by default. Use the **<confirm-timeout>** tag element to specify a different amount of time.

<confirm-timeout>—Specifies the number of minutes for which the configuration remains active when the **<confirmed/>** tag is enclosed in the **<commit-configuration>** tag element.

<log>—Records a message in the file **/var/log/commits** when the commit operation succeeds.

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<synchronize>—On dual control plane systems, requests that the candidate configuration on one control plane be copied to the other control plane, checked for correct syntax, and committed on both Routing Engines.

<force-synchronize>—On dual control plane systems, forces the candidate configuration on one control plane to be copied to the other control plane.

Usage Guidelines See "Committing a Configuration" on page 923.

Related Documentation

- <commit-results> on page 946
- <open-configuration> on page 958
- <rpc> on page 961

<commit-results>

Usage

```
<rpc-reply xmlns:junos="URL">
  <!-- for the candidate configuration -->
  <commit-results>
    <routing-engine>...</routing-engine>
  </commit-results>

  <!-- for a private copy -->
  <commit-results>
    <load-success/>
    <routing-engine>...</routing-engine>
  </commit-results>

  <!-- for a private copy that does not include changes -->
  <commit-results>
  </commit-results>
</rpc-reply>
```

Description Enclose tag elements that contain information about a commit operation performed by the Junos XML protocol server on a particular Routing Engine.

Contents **<load-success/>**—Indicates that the Junos XML protocol server successfully merged changes from the private copy into a copy of the candidate configuration, before committing the combined candidate on the specified Routing Engine.

The **<routing-engine>** tag element is described separately.

Usage Guidelines See "Committing a Configuration" on page 923.

Related Documentation

- <commit-configuration> on page 942
- <routing-engine> on page 961
- <rpc-reply> on page 962

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<database-status>

Usage

```
<junoscript>
  <any-child-of-junoscript>
    <xnm:error>
      <database-status-information>
        <database-status>
          <user>username</user>
          <terminal>terminal</terminal>
          <pid>pid</pid>
          <start-time>start-time</start-time>
          <idle-time>idle-time</idle-time>
          <commit-at>time</commit-at>
          <exclusive/>
          <edit-path>edit-path</edit-path>
        </database-status>
      </database-status-information>
    </xnm:error>
  </any-child-of-junoscript>
</junoscript>
```

Description Describe a user or Junos XML protocol client application that is logged in to the configuration database. For simplicity, the Contents section uses the term user to refer to both human users and client applications, except where the information differs for the two.

Contents

<commit-at/>—Indicates that the user has scheduled a commit operation for a later time.

<edit-path>—Specifies the user's current location in the configuration hierarchy, in the form of the CLI configuration mode banner.

<exclusive/>—Indicates that the user or application has an exclusive lock on the configuration database. A user enters exclusive configuration mode by issuing the **configure exclusive** command in CLI operational mode. A client application obtains the lock by emitting the **<lock-configuration/>** tag element.

<idle-time>—Specifies how much time has passed since the user last performed an operation in the database.

<pid>—Specifies the process ID of the Junos management process (mgd) that is handling the user's login session.

<start-time>—Specifies the time when the user logged in to the configuration database, in the format ***YYYY-MM-DD hh:mm:ss TZ*** (year, month, date, hour in 24-hour format, minute, second, time zone).

<terminal>—Identifies the UNIX terminal assigned to the user's connection.

<user>—Specifies the Junos OS login ID of the user whose login to the configuration database caused the error.

Usage Guidelines See "Handling an Error or Warning" on page 823.

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Related Documentation

- <database-status-information> on page 948
- <junoscript> on page 952
- <xnm:error> on page 963

<database-status-information>

Usage

```
<junoscript>
  <any-child-of-junoscript>
    <xnm:error>
      <database-status-information>
        <database-status>...</database-status>
      </database-status-information>
    <xnm:error>
  </any-child-of-junoscript>
<junoscript>
```

Description Describe one or more users who have an open editing session in the configuration database.

The **<database-status>** tag element is explained separately.

Usage Guidelines See "Handling an Error or Warning" on page 823.

Related Documentation

- <database-status> on page 947
- <junoscript> on page 952
- <xnm:error> on page 963

<end-session/>

Usage

```
<rpc-reply xmlns:junos="URL">
  <end-session/>
</rpc-reply>
```

Description Indicate that the Junos XML protocol server is about to end the current session for a reason other than an error. Most often, the reason is that the client application has sent the **<request-end-session/>** tag.

Usage Guidelines See "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Related Documentation

- <request-end-session/> on page 960
- <rpc-reply> on page 962

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<get-checksum-information>

Usage

```
<rpc>
  <get-checksum-information>
    <path>
    <!-- name and path of file -->
    </path>
  </get--checksum-information>
</rpc>
```

Description Enclose all tag elements in a request generated by a client application.

Contents **<path>**—The name and path of the file to check.

Usage Guidelines See the *Junos XML API Operational Developer Reference*.

Related Documentation

- <checksum-information> on page 941

<get-configuration>

Usage

```
<rpc>
  <get-configuration
            [changed="changed"]
            [commit-scripts="view"]
            [compare="rollback" [rollback="[0-49]"]]
            [database="(candidate | committed)"]
            [format="(text | xml)"]
            [inherit="(defaults | inherit)"
                  [groups="groups"] [interface-ranges="interface-ranges"]]/>

    <!-- tag elements for the configuration element to display -->
  </get-configuration>
</rpc>
```

Description Request configuration data from the Junos XML protocol server. The attributes specify the source and formatting of the data to display. Either the entire configuration hierarchy or a section can be displayed:

- To display the entire configuration hierarchy, emit the empty **<get-configuration/>** tag.
- To display a configuration element (hierarchy level or configuration object), emit tag elements within the **<get-configuration>** tag element to represent all levels of the configuration hierarchy from the root (represented by the **<configuration>** tag element) down to the level or object to display. To represent a hierarchy level or a configuration object that does not have an identifier, emit it as an empty tag. To represent an object that has one or more identifiers, emit its container tag element and identifier tag elements only, not any tag elements that represent other characteristics.

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Attributes **changed**—Specifies that the **junos:changed="changed";** attribute should appear in the opening tag of each changed configuration element.

The attribute appears in the opening tag of every parent tag element in the path to the changed configuration element, including the top-level opening **<configuration>** tag. If the changed configuration element is represented by a single (empty) tag, the **junos:changed="changed"** attribute appears in the tag. If the changed element is represented by a container tag element, the **junos:changed="changed"** attribute appears in the opening container tag and also in each child tag element enclosed in the container tag element.

The **database** attribute can be combined with the **changed="changed"** attribute to request either the candidate or active configuration:

- When the candidate configuration is requested (the **database="candidate"** attribute is included or the **database** attribute is omitted completely), elements added to the candidate configuration after the last commit operation are marked with the **junos:changed="changed"** attribute.
- When the active configuration is requested (the **database="committed"** attribute is included), elements added to the active configuration by the most recent commit are marked with the **junos:changed="changed"** attribute.

NOTE: When a commit operation succeeds, the server removes the **junos:changed="changed"** attribute from all tag elements. However, if warnings are generated during the commit, the attribute is not removed. In this case, the **junos:changed="changed"** attribute appears in tag elements that changed before the commit operation as well as on those that changed after it.

An example of a commit-time warning is the message explaining that a configuration element will not actually apply until the device is rebooted. The warning appears in the tag string that the Junos XML protocol server returns to confirm the success of the commit, enclosed in an **<xnm:warning>** tag element.

To remove the **junos:changed="changed"** attribute from elements that changed before the commit, take the action necessary to eliminate the cause of the warning, and commit the configuration again.

commit-scripts—Requests that the Junos XML protocol server display commit-script-style XML data, which displays the configuration in the XML format that is input to a commit script. The only acceptable value for the **commit-scripts** attribute is **view**. The output is equivalent to the CLI output when using the **| display commit-scripts view** option.

compare—Requests that the Junos XML protocol server display the differences between the active or candidate configuration and a previously committed configuration. The only acceptable value for the **compare** attribute is **rollback**. The compare attribute is combined with the **rollback="*rollback-number*"** to specify which previously committed configuration

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should be used in the comparison. If the **rollback** attribute is omitted, the comparison uses rollback number 0, which is the active configuration.

The **database** attribute can be combined with the **compare="rollback"** attribute to request either the candidate or active configuration. If the **database** attribute is omitted, the candidate configuration is used. When the **compare** attribute is used, the default format for the output is text. If the client application attempts to include the **format="xml"** attribute when the **compare="rollback"** attribute is present, the protocol server will return an **<xnm:error>** element indicating an error.

database—Specifies the version of the configuration from which to display data. There are two acceptable values:

- **apply**—Display the configuration with commit script changes applied, including both transient and non-transient changes. The output is equivalent to the CLI output when using the **| display commit-scripts** option. This attribute value is available starting with Junos OS Release 12.1.
- **apply-no-transients**—Display the configuration with commit script changes applied, but exclude transient changes. The output is equivalent to the CLI output when using the **| display commit-scripts no-transients** option. This attribute value is available starting with Junos OS Release 12.1.
- **committed**—The active configuration (the one most recently committed)

format—Specifies the format in which the Junos XML protocol server returns the configuration data. There are two acceptable values:

- **json**—Configuration statements are formatted in JavaScript Object Notation (JSON).
- **text**—Configuration statements are formatted as ASCII text, using the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on a device running Junos OS and displayed by the CLI **show configuration** command.
- **xml**—Configuration statements are represented by the corresponding Junos XML tag elements. This is the default value if the **format** attribute is omitted.

groups—Specifies that the **junos:group="*group-name*"** attribute appears in the opening tag for each configuration element that is inherited from a configuration group. The *group-name* variable specifies the name of the configuration group.

The **groups** attribute must be combined with the **inherit** attribute, and the one acceptable value for it is **groups**.

inherit—Specifies how the NETCONF or Junos XML protocol server displays statements that are defined in configuration groups and interface ranges. If the **inherit** attribute is omitted, the output uses the **<groups>**, **<apply-groups>**, and **<apply-groups-except>** tag elements to represent user-defined configuration groups and uses the **<interface-range>** tag element to represent user-defined interface ranges; it does not include tag elements for statements defined in the junos-defaults group.

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There are two acceptable values:

- **defaults**—The output does not include the **<groups>**, **<apply-groups>**, and **<apply-groups-except>** tag elements, but instead displays tag elements that are inherited from user-defined groups and from the junos-defaults group as children of the inheriting tag elements.
- **inherit**—The output does not include the **<groups>**, **<apply-groups>**, **<apply-groups-except>**, and **<interface-range>** tag elements, but instead displays tag elements that are inherited from user-defined groups and ranges as children of the inheriting tag elements. The output does not include tag elements for statements defined in the junos-defaults group.

interface-ranges—Specifies that the **junos:interface-ranges="*source-interface-range*"** attribute appears in the opening tag for each configuration element that is inherited from an interface-range. The ***source-interface-range*** variable specifies the name of the interface-range.

The **interface-ranges** attribute must be combined with the **inherit** attribute, and the one acceptable value for it is **interface-ranges**.

Usage Guidelines See "Requesting Configuration Information" on page 840.

Related Documentation

- junos:changed on page 971
- junos:group on page 974
- junos:interface-range on page 974
- <rpc> on page 961
- <xnm:warning> on page 965
- *Junos XML API Configuration Developer Reference*

<junoscript>

Usage

```
<!-- emitted by a client application -->
<junoscript version="version" [hostname="hostname"] [junos:key="key"]
            [release="release"]>
  <!-- all tag elements generated by the application during the session -->
</junoscript>

<!-- emitted by the Junos XML protocol server -->
<junoscript xmlns="namespace-URL" xmlns:junos="namespace-URL"
            schemaLocation="namespace-URL" os="os" release="release"
            hostname="hostname" version="version">
  <!- - all tag elements generated by the Junos XML protocol server during the session -
->
</junoscript>
```

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Description Enclose all tag elements in a Junos XML protocol session (act as the root tag element for the session). The client application and Junos XML protocol server each emit this tag element, enclosing all other tag elements that they emit during a session inside it.

Attributes **hostname**—Names the machine on which the tag element's originator is running.

junos:key—Requests that the Junos XML protocol server include the **junos:key="key"** attribute in the opening tag of each tag element that serves as an identifier for a configuration object.

os—Specifies the operating system of the machine named by the **hostname** attribute.

release—Identifies the Junos OS release being run by the tag element's originator. Software modules always set this attribute, but client applications are not required to set it.

schemaLocation—Specifies the XML namespace for the XML Schema-language representation of the Junos configuration hierarchy.

version—(Required for a client application) Specifies the version of the Junos XML management protocol used for the enclosed set of tag elements.

xmlns—Names the XML namespace for the tag elements enclosed by the **<junoscript>** tag element that do not have a prefix on their names (that is, the default namespace for Junos XML tag elements). The value is a URL of the form **http://xml.juniper.net/xnm/*version-code*/xnm**, where ***version-code*** is a string such as **1.1**.

xmlns:junos—Names the XML namespace for the tag elements enclosed by the **<junoscript>** tag element that have the **junos:** prefix. The value is a URL of the form **http://xml.juniper.net/junos/*release-code*/junos**, where ***release-code*** is the standard string that represents a release of Junos OS, such as **12.1R1** for the initial version of Junos OS Release 12.1.

Usage Guidelines See "Emitting the Opening <junoscript> Tag" on page 812, "Parsing the Junos XML Protocol Server's Opening <junoscript> Tag" on page 814, and "Requesting an Indicator for Identifiers" on page 846.

Related Documentation

- <rpc> on page 961
- <rpc-reply> on page 962
- junos:key on page 975

<kill-session>

Usage

```
<rpc>
  <kill-session>
    <session-id>PID</session-id>
  </kill-session>
</rpc>
```

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Description Request that the Junos XML protocol server terminate another CLI or Junos XML protocol session. The usual reason to emit this tag is that the user or application for the other session holds a lock on the candidate configuration, preventing the client application from locking the configuration itself.

The client application must have the Junos **maintenance** permission to perform this operation.

Contents **<session-id>**—The PID of the entity conducting the session to terminate. The PID is reported in the **<xnm:error>** tag element that the Junos XML protocol server generates when it cannot lock a configuration as requested.

Usage Guidelines "Terminating Another NETCONF Session" on page 590

Related Documentation
- <lock-configuration/> on page 958
- <xnm:error> on page 963

<load-configuration>

Usage

```
<rpc>
  <load-configuration rescue="rescue"/>

  <load-configuration rollback="index"/>

  <load-configuration url="url" [action="(merge | override | replace | update)"] \
            [format="(text | xml)"]/>

  <load-configuration url="url"  action="set" format="text"/>

  <load-configuration [action="(merge | override | replace | update)"]
             [format="xml"]>
    <configuration>
      <!-- tag elements for configuration elements to load -->
    </configuration>
  </load-configuration>

  <load-configuration [action="(merge | override | replace | update)"]
            format="text">
    <configuration-text>
      <!-- formatted ASCII configuration statements to load -->
    </configuration-text>
  </load-configuration>

  <load-configuration action="set" format="text">
    <configuration-set>
      <!-- configuration mode commands to load -->
    </configuration-set>
  </load-configuration>
</rpc>
```


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Description Request that the Junos XML protocol server load configuration data into the candidate configuration. Provide the data to load in one of the following ways:

- Set the empty **<load-configuration/>** tag's **rescue** attribute to the value **rescue**. The rescue configuration completely replaces the candidate configuration.
- Set the empty **<load-configuration/>** tag's **rollback** attribute to the numerical index of a previous configuration. The routing platform stores a copy of the most recently committed configuration and up to 49 previous configurations. The specified previous configuration completely replaces the candidate configuration.
- Set the empty **<load-configuration/>** tag's **url** attribute to the pathname of a file that contains the configuration data to load. If providing the configuration data as formatted ASCII text, set the **format** attribute to **text**. If providing the configuration data as Junos XML tag elements, either omit the **format** attribute or set the value to **xml**. If providing the configuration data as a set of configuration mode commands, set the **action** attribute to **set**, and either omit the **format** attribute or set the value to **text**.

  In the following example, the **url** attribute identifies **/tmp/add.conf** as the file to load.

  ```
  <load-configuration url="/tmp/add.conf"/>
  ```

- Enclose the configuration data within an opening **<load-configuration>** and closing **</load-configuration>** tag. If providing the configuration data as formatted ASCII text, enclose it in a **<configuration-text>** tag element, and set the **format** attribute to **text**. If providing the configuration data as Junos XML tag elements, enclose it in a **<configuration>** tag element, and either omit the **format** attribute or set the value to **xml**. If providing the configuration data as a set of configuration mode commands, enclose it in a **<configuration-set>** tag element, set the **action** attribute to **set**, and either omit the **format** attribute or set the value to **text**.

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Attributes **action**—Specifies how to load the configuration data, particularly when the candidate configuration and loaded configuration contain conflicting statements. The following are acceptable values:

- **merge**—Combines the data in the loaded configuration with the candidate configuration. If statements in the loaded configuration conflict with statements in the candidate configuration, the loaded statements replace the candidate ones. This is the default behavior if the **action** attribute is omitted.
- **override**—Discards the entire candidate configuration and replaces it with the loaded configuration. When the configuration is later committed, all system processes parse the new configuration.
- **replace**—Substitutes each hierarchy level or configuration object defined in the loaded configuration for the corresponding level or object in the candidate configuration.

  If providing the configuration data as formatted ASCII text (either in the file named by the **url** attribute or enclosed in a **<configuration-text>** tag element), also place the **replace:** statement on the line directly preceding the statements that represent the hierarchy level or object to replace. For more information, see the discussion of loading a file of configuration data in the *CLI User Guide*.

  If providing the configuration data as Junos XML tag elements, also set the **replace** attribute to the value **replace** on the opening tag of the container tag element that represents the hierarchy level or object to replace.
- **set**—Loads a set of Junos OS configuration mode commands. This option executes the configuration instructions line by line as they are stored in a file named by the **url** attribute or enclosed in a **<configuration-set>** tag element. The instructions can contain any configuration mode command, such as **set**, **delete**, **edit**, or **deactivate**. When providing the configuration data as a set of commands, the only acceptable value for the **format** attribute is **text**. If the **action** attribute value is **set**, and the **format** attribute is omitted, the format automatically defaults to **text** rather than **xml**. This option was added in Junos OS Release 11.4.
- **update**—Compares the loaded configuration and candidate configuration. For each hierarchy level or configuration object that is different in the two configurations, the version in the loaded configuration replaces the version in the candidate configuration. When the configuration is later committed, only system processes that are affected by the changed configuration elements parse the new configuration.

format—Specifies the format used for the configuration data. There are two acceptable values:

- **text**—Indicates that configuration data is formatted as ASCII text or as a set of configuration mode commands.

  ASCII text format uses the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on the routing platform and is displayed by the CLI **show configuration** command. Set command format consists of a series of Junos OS configuration mode commands and is displayed by the CLI

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show configuration | display set command. To import a set of configuration mode commands, you must set the **action** attribute to **set**.

- **xml**—Indicates that configuration statements are represented by the corresponding Junos XML tag elements. If the **format** attribute is omitted, **xml** is the default format for all values of the **action** attribute except **set**, which defaults to format **text**.

rescue—Specifies that the rescue configuration replace the current candidate configuration. The only valid value is **rescue**.

rollback—Specifies the numerical index of the previous configuration to load. Valid values are **0** (zero, for the most recently committed configuration) through one less than the number of stored previous configurations (maximum is **49**).

url—Specifies the full pathname of the file that contains the configuration data to load. The value can be a local file path, an FTP location, or a Hypertext Transfer Protocol (HTTP) URL:

- A local filename can have one of the following forms:
  - ***/path/filename***—File on a mounted file system, either on the local flash disk or on hard disk.
  - **a:*filename*** or **a:*path/filename***—File on the local drive. The default path is **/** (the root-level directory). The removable media can be in MS-DOS or UNIX (UFS) format.
- A filename on an FTP server has the following form:

  ftp://*username*:*password*@*hostname*/*path*/*filename*
- A filename on an HTTP server has the following form:

  http://*username*:*password*@*hostname*/*path*/*filename*

In each case, the default value for the ***path*** variable is the home directory for the username. To specify an absolute path, the application starts the path with the characters **%2F**; for example, **ftp://*username*:*password*@*hostname*/%2F*path*/*filename***.

Usage Guidelines See "Changing Configuration Information" on page 627.

Related Documentation

- <load-configuration-results> on page 957
- <rpc> on page 961
- replace on page 980
- entries for **<configuration>**, **<configuration-text>**, and **<configuration-set>** in the *Junos XML API Configuration Developer Reference*

<load-configuration-results>

Usage

```
<rpc-reply xmlns:junos="URL">
  <load-configuration-results>
    <load-success/>
```

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```
    <load-error-count>errors</load-error-count>
  </load-configuration-results>
</rpc-reply>
```

Description Enclose one of the two following tag elements, which indicate the status of a configuration loading operation performed by the Junos XML protocol server.

Contents **<load-error-count>**—Specifies the number of errors that occurred when the Junos XML protocol server attempted to load new data into the candidate configuration. The candidate configuration must be restored to a valid state before it is committed.

<load-success/>—Indicates that the Junos XML protocol server successfully loaded new data into the candidate configuration.

Usage Guidelines See "Changing Configuration Information" on page 627.

Related Documentation
- <load-configuration> on page 954
- <rpc-reply> on page 962

<lock-configuration/>

Usage

```
<rpc>
  <lock-configuration/>
</rpc>
```

Description Request that the Junos XML protocol server open and lock the candidate configuration, enabling the client application both to read and change it, but preventing any other users or applications from changing it. The application must emit the **<unlock-configuration/>** tag to unlock the configuration.

If the Junos XML protocol session ends or the application emits the **<unlock-configuration/>** tag before the candidate configuration is committed, all changes made to the candidate are discarded.

Usage Guidelines See "Locking the Candidate Configuration" on page 826.

Related Documentation
- <rpc> on page 961
- <unlock-configuration/> on page 963

<open-configuration>

Usage

```
<rpc>
  <open-configuration>
    <private/>
  </open-configuration>
</rpc>
```


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Description Create a private copy of the candidate configuration.

The client application can perform the same operations on the private copy as on the regular candidate configuration, including the commit operation. There are, however, restrictions on the commit operation. For details, see "<commit-configuration>" on page 942.

To discard the private copy without committing it, emit the empty **<close-configuration/>** tag. Changes to the private copy are also lost if the Junos XML protocol session ends for any reason before the changes are committed. It is not possible to save changes to a private copy other than by emitting the **<commit-configuration/>** tag.

Usage Guidelines See "Creating a Private Copy of the Configuration" on page 828.

Related Documentation

- <close-configuration/> on page 942
- <commit-configuration> on page 942
- <lock-configuration/> on page 958
- <rpc> on page 961

<reason>

Usage

```
<xnm:error | xnm:warning>
  <reason>
    <daemon>process</daemon>
    <process-not-configured/>
    <process-disabled/>
    <process-not-running/>
  </reason>
</xnm:error | xnm:warning>
```

Description Explain why a process could not service a request.

Contents **<daemon>**—Identifies the process.

<process-disabled>—Indicates that the process has been explicitly disabled by an administrator.

<process-not-configured>—Indicates that the process has been disabled because it is not configured.

<process-not-running>—Indicates that the process is not running.

Usage Guidelines See "Handling an Error or Warning" on page 823.

Related Documentation

- <xnm:error> on page 963
- <xnm:warning> on page 965

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<request-end-session/>

Usage

```
<rpc>
  <request-end-session/>
</rpc>
```

Description Request that the Junos XML protocol server end the current session.

Usage Guidelines See "Ending a Junos XML Protocol Session and Closing the Connection" on page 829.

Related Documentation

- <end-session/> on page 948
- <rpc> on page 961

<request-login>

Usage

```
<rpc>
  <request-login>
    <username>account</username>
    <challenge-response>password</challenge-response>
  </request-login>
</rpc>
```

Description Request authentication by the Junos XML protocol server when using the clear-text or SSL access protocol.

Emitting both the **<username>** and **<challenge-response>** tag elements is appropriate if the client application automates access to device information and does not interact with users, or obtains the password from a user before beginning the authentication process.

Emitting only the **<username>** tag element is appropriate if the application does not obtain the password until the authentication process has already begun. In this case, the Junos XML protocol server returns the **<challenge>** tag element to request the password associated with the account.

Contents **<challenge-response>**—Specifies the password for the account named in the **<username>** tag element. Omit this tag element to have the Junos XML protocol server emit the **<challenge>** tag element to request the password.

<username>—Names the account under which to authenticate with the Junos XML protocol server. The account must already be configured on the device where the Junos XML protocol server is running.

Usage Guidelines See "Submitting an Authentication Request" on page 816.

Related Documentation

- <challenge> on page 940
- <rpc> on page 961

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<routing-engine>

Usage

```
<rpc-reply xmlns:junos="URL">
  <commit-results>

  <!-- when the candidate configuration is committed -->
    <routing-engine>
      <name>reX</name>
      <commit-success/>
    </routing-engine>

  <!-- when the candidate configuration is syntactically valid -->
    <routing-engine>
      <name>reX</name>
      <commit-check-success/>
    </routing-engine>

  </commit-results>
</rpc-reply>
```

Description Enclose tag elements indicating that the Junos XML protocol server successfully fulfilled a commit request.

Contents **<commit-check-success>**—Indicates that the candidate configuration is syntactically correct.

<commit-success>—Indicates that the Junos XML protocol server successfully committed the candidate configuration.

<name>—Name of the Routing Engine on which the commit operation was performed. Possible values are **re0** and **re1**.

Usage Guidelines See "Committing a Configuration" on page 923.

Related Documentation

- <commit-results> on page 946
- <rpc-reply> on page 962

<rpc>

Usage

```
<junoscript>
  <rpc [attributes]>
    <!-- tag elements in a request from a client application -->
  </rpc>
</junoscript>
```

Description Enclose all tag elements in a request generated by a client application.

Attributes (Optional) One or more attributes of the form ***attribute-name*="*value***". This feature can be used to associate requests and responses if the value assigned to an attribute by the

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client application is unique in each opening **<rpc>** tag. The Junos XML protocol server echoes the attribute unchanged in its opening **<rpc-reply>** tag, making it simple to map the response to the initiating request.

NOTE: The **xmlns:junos** attribute name is reserved. The Junos XML protocol server sets the attribute to an appropriate value on the opening **<rpc-reply>** tag, so client applications must not emit it on the opening **<rpc>** tag.

Usage Guidelines See "Sending a Request to the Junos XML Protocol Server" on page 818.

Related Documentation
- <junoscript> on page 952
- <rpc-reply> on page 962

<rpc-reply>

Usage

```
<junoscript>
<rpc-reply xmlns:junos="namespace-URL">
    <!-- tag elements in a reply from the Junos XML protocol server -->
</rpc-reply>
</junoscript>
```

Description Enclose all tag elements in a reply from the Junos XML protocol server. The immediate child tag element is usually one of the following:

- The tag element used to enclose data generated by the Junos XML protocol server or a Junos OS module in response to a client application's request.
- The **<output>** tag element, if the Junos XML API does not define a specific tag element for requested information.

Attributes xmlns:junos—Names the XML namespace for the Junos XML tag elements enclosed by the **<rpc-reply>** tag element that have the **junos:** prefix. The value is a URL of the form **http://xml.juniper.net/junos/*release-code*/junos**, where *release-code* is the standard string that represents a release of the Junos OS, such as 12.1R1 for the initial version of Junos OS Release 12.1.

Usage Guidelines See "Parsing the Junos XML Protocol Server Response" on page 821.

Related Documentation
- <junoscript> on page 952
- **<output>** in the *Junos XML API Operational Developer Reference*
- <rpc> on page 961

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<unlock-configuration/>

Usage

```
<rpc>
  <unlock-configuration/>
</rpc>
```

Description Request that the Junos XML protocol server unlock and close the candidate configuration. Until the application emits this tag, other users or applications can read the configuration but cannot change it.

Usage Guidelines See "Unlocking the Candidate Configuration" on page 827.

Related Documentation

- <lock-configuration/> on page 958
- <rpc> on page 961

<?xml?>

Usage **<?xml version="*version*" encoding="*encoding*"?>**

Description Specify the XML version and character encoding scheme for the session.

Attributes **encoding**—Specifies the standardized character set that the emitter uses and can interpret.

version—Specifies the version of XML used by the emitter.

Usage Guidelines See "Emitting the <?xml?> PI" on page 811 and "Parsing the Junos XML Protocol Server's <?xml?> PI" on page 813.

Related Documentation

- <junoscript> on page 952

<xnm:error>

Usage

```
<junoscript>
  <any-child-of-junoscript>
    <xnm:error xmlns="namespace-URL" xmlns:xnm="namespace-URL">
      <parse/>
      <source-daemon>module-name </source-daemon>
      <filename>filename</filename>
      <line-number>line-number </line-number>
      <column>column-number</column>
      <token>input-token-id </token>
      <edit-path>edit-path</edit-path>
      <statement>statement-name </statement>
      <message>error-string</message>
      <re-name>re-name-string</re-name>
      <database-status-information>...</database-status-information>
      <reason>...</reason>
```

```
      </xnm:error>
    </any-child-of-junoscript>
  </junoscript>
```

Description Indicate that the Junos XML protocol server has experienced an error while processing the client application's request. If the server has already emitted the response tag element for the current request, the information enclosed in the response tag element might be incomplete. The client application must include code that discards or retains the information, as appropriate. The child tag elements described in the Contents section detail the nature of the error. The Junos XML protocol server does not necessarily emit all child tag elements; it omits tag elements that are not relevant to the current request.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix on their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—(Occurs only during loading of a configuration file) Identifies the element that caused the error by specifying its position as the number of characters after the first character in the specified line in the configuration file that was being loaded. The line and file are specified by the accompanying **<line-number>** and **<filename>** tag elements.

<edit-path>—(Occurs only during loading of configuration data) Specifies the path to the configuration hierarchy level at which the error occurred, in the form of the CLI configuration mode banner.

<filename>—(Occurs only during loading of a configuration file) Names the configuration file that was being loaded.

<line-number>—(Occurs only during loading of a configuration file) Specifies the line number where the error occurred in the configuration file that was being loaded, which is named by the accompanying **<filename>** tag element.

<message>—Describes the error in a natural-language text string.

<parse/>—Indicates that there was a syntactic error in the request submitted by the client application.

<re-name>—Names the Routing Engine on which the error occurred.

<source-daemon>—Names the Junos OS module that was processing the request in which the error occurred.

<statement>—(Occurs only during loading of configuration data) Identifies the configuration statement that was being processed when the error occurred. The accompanying **<edit-path>** tag element specifies the statement's parent hierarchy level.

<token>—Names which element in the request caused the error.

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The other tag elements are explained separately.

Usage Guidelines See "Handling an Error or Warning" on page 823.

Related Documentation

- <database-status-information> on page 948
- <junoscript> on page 952
- <reason> on page 959
- <xnm:warning> on page 965

<xnm:warning>

Usage

```
<junoscript>
  <any-child-of-junoscript>
    <xnm:warning xmlns="namespace-URL" xmlns:xnm="namespace-URL">
      <source-daemon>module-name </source-daemon>
      <filename>filename</filename>
      <line-number>line-number </line-number>
      <column>column-number</column>
      <token>input-token-id </token>
      <edit-path>edit-path</edit-path>
      <statement>statement-name </statement>
      <message>error-string</message>
      <reason>...</reason>
    </xnm:warning>
  </any-child-of-junoscript>
</junoscript>
```

Description Indicate that the server has encountered a problem while processing the client application's request. The child tag elements described in the Contents section detail the nature of the warning.

Attributes **xmlns**—Names the XML namespace for the contents of the tag element. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

xmlns:xnm—Names the XML namespace for child tag elements that have the **xnm:** prefix in their names. The value is a URL of the form **http://xml.juniper.net/xnm/*version*/xnm**, where ***version*** is a string such as **1.1**.

Contents **<column>**—(Occurs only during loading of a configuration file) Identifies the element that caused the problem by specifying its position as the number of characters after the first character in the specified line in the configuration file that was being loaded. The line and file are specified by the accompanying **<line-number>** and **<filename>** tag elements.

<edit-path>—(Occurs only during loading of configuration data) Specifies the path to the configuration hierarchy level at which the problem occurred, in the form of the CLI configuration mode banner.

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<filename>—(Occurs only during loading of a configuration file) Names the configuration file that was being loaded.

<line-number>—(Occurs only during loading of a configuration file) Specifies the line number where the problem occurred in the configuration file that was being loaded, which is named by the accompanying **<filename>** tag element.

<message>—Describes the warning in a natural-language text string.

<source-daemon>—Names the Junos OS module that was processing the request in which the warning occurred.

<statement>—(Occurs only during loading of configuration data) Identifies the configuration statement that was being processed when the error occurred. The accompanying **<edit-path>** tag element specifies the statement's parent hierarchy level.

<token>—Names which element in the request caused the warning.

The other tag element is explained separately.

Usage Guidelines See "Handling an Error or Warning" on page 823.

Related Documentation

- <junoscript> on page 952
- <reason> on page 959
- <xnm:error> on page 963

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CHAPTER 24

Summary of Attributes in Junos XML Tags

This chapter lists the attributes that client applications include in an opening Junos XML tag when performing some operations on configuration elements, such as deletion, renaming, and reordering. It also lists the attributes that the Junos XML protocol server includes in an opening XML tag when returning certain kinds of information. The entries are in alphabetical order. For information about the notational conventions used in this chapter, see Table 2 on page ccxciii.

active

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the element -->
        <element active="active">
          <name>identifier</name> <!-- if element has an identifier -->
        </element>
      <!-- closing tag for each parent of the element -->
    </configuration>
  </load-configuration>
</rpc>
```

Description Reactivate a previously deactivated configuration element.

The **active** attribute can be combined with one or more of the **insert**, **rename**, or **replace** attributes. To deactivate an element, include the **inactive** attribute instead.

Usage Guidelines See "Changing a Configuration Element's Activation State" on page 914 and "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917.

Related Documentation

- inactive on page 969
- insert on page 970
- <load-configuration> on page 954
- rename on page 979
- replace on page 980
- <rpc> on page 961

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count

Usage

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object -->
        <object-type count="count"/>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </get-configuration>
</rpc>
```

Description Specify the number of configuration objects of the specified type about which to return information. If the attribute is omitted, the Junos XML protocol server returns information about all objects of the type.

The attribute can be combined with one or more of the **matching**, **recurse**, and **start** attributes.

If the application requests Junos XML-tagged output (the default), the Junos XML protocol server includes two attributes in the opening container tag for each returned object:

- **junos:position**—Specifies the object's numerical index.
- **junos:total**—Reports the total number of such objects that exist in the hierarchy.

These attributes do not appear if the application requests formatted ASCII output by including the **format="text"** attribute in the opening **<get-configuration>** tag.

Usage Guidelines See "Requesting a Specified Number of Configuration Objects" on page 866.

Related Documentation

- <get-configuration> on page 949
- matching on page 977
- recurse on page 978
- <rpc> on page 961
- start on page 981

delete

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the element -->

      <!-- For a hierarchy level or object without an identifier -->
        <level-or-object delete="delete">

      <!-- For an object with an identifier (here, called <name>) -->
```


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```
    <object delete="delete">
      <name>identifier</name>
    </object>

  <!-- For a single-value or fixed-form option of an object -->
    <object>
      <name>identifier</name> <!-- if the object has an identifier -->
      <option delete="delete"/>
    </object>

  <!-- closing tag for each parent of the element -->

  <!-- For a value in a multivalued option of an object -->
  <!-- opening tag for each parent of the parent object -->
      <parent-object>
        <name>identifier</name>
      <object delete="delete">value</object>
    </parent-object>
<!-- closing tag for each parent of the parent object -->

  </configuration>
 </load-configuration>
</rpc>
```

Description Specify that the Junos XML protocol server remove the configuration element from the candidate configuration. The only acceptable value for the attribute is **delete**.

Usage Guidelines See "Deleting Configuration Elements" on page 901.

Related Documentation

- <load-configuration> on page 954
- <rpc> on page 961

inactive

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the element -->

        <!-- if immediately deactivating a newly created element -->
        <element inactive="inactive">
          <name>identifier</name> <!-- if element has an identifier -->
          <!-- tag elements for each child of the element -->
        </element>

        <!-- if deactivating an existing element -->
        <element inactive="inactive">
          <name>identifier</name> <!-- if element has an identifier -->
        </element>
      <!-- closing tag for each parent of the element -->
    </configuration>
  </load-configuration>
```

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```
</rpc>
```

Description Deactivate a configuration element. The element remains in the candidate configuration or private copy, but when the configuration is later committed, the element does not affect the functioning of the routing, switching, or security platform.

The **inactive** attribute can be combined with one or more of the **insert**, **rename**, or **replace** attributes, as described in "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917. To reactivate a deactivated element, include the **active** attribute instead.

Usage Guidelines See "Changing a Configuration Element's Activation State" on page 914.

Related Documentation

- active on page 967
- insert on page 970
- <load-configuration> on page 954
- rename on page 979
- <rpc> on page 961

insert

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the set -->

        <!-- if each element in the ordered set has one identifier -->
        <ordered-set insert="(before | after)" name="referent-value">
          <name>value-for-moving-object</name>
        </ordered-set>

        <!-- if each element in the ordered set has two identifiers -->
        <ordered-set insert="(before | after)" identifier1="referent-value" \
              identifier2="referent-value">
          <identifier1>value-for-moving-object</identifier1>
          <identifier2>value-for-moving-object</identifier2>
        </ordered-set>

       <!-- closing tag for each parent of the set -->
    </configuration>
  </load-configuration>
</rpc>
```

Description Change the position of a configuration element in an ordered set. The new position is specified relative to a reference element, which is specified by including an attribute named after each of its identifier tags. In the Usage section, the identifier tag element is called **<name>** when each element in the set has one identifier.

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The **insert** attribute can be combined with either the **active** or **inactive** attribute, as described in "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917.

Usage Guidelines See "Reordering Elements in Configuration Objects" on page 907.

Related Documentation

- active on page 967
- inactive on page 969
- <load-configuration> on page 954
- <rpc> on page 961

junos:changed

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration standard-attributes junos:changed="changed">
    <!-- opening-tag-for-each-parent-level junos:changed="changed" -->

      <!-- If the changed element is an empty tag -->
      <element junos:changed="changed"/>

      <!-- If the changed element has child tag elements -->
      <element junos:changed="changed">
        <first-child-of-element junos:changed="changed">
        <second-child-of-element junos:changed="changed">
        <!-- additional children of element - ->
      </element>

    <!-- closing-tag-for-each-parent-level -->
  </configuration>
</rpc-reply>
```

Description Indicate that a configuration element has changed since the last commit operation. The Junos XML protocol server includes the attribute when the client application includes the **changed** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag. The attribute appears in the opening tag of every parent tag element in the path to the changed configuration element, including the opening top-level **<configuration>** tag.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag.

For information about the standard attributes in the opening **<configuration>** tag, see "Requesting Information from the Committed or Candidate Configuration" on page 842.

Usage Guidelines See "Requesting a Change Indicator for Configuration Elements" on page 848.

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Related Documentation
- <get-configuration> on page 949
- <rpc-reply> on page 962

junos:changed-localtime

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
        junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the candidate configuration is requested) Specify the time when the configuration was last changed as the date and time in the device's local time zone.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 842.

Related Documentation
- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 962
- junos:changed-seconds on page 972

junos:changed-seconds

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:changed-seconds="seconds" \
        junos:changed-localtime="YYYY-MM-DD hh:mm:ss TZ">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the candidate configuration is requested) Specify the time when the configuration was last changed as the number of seconds since midnight on 1 January 1970.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 842.

Related Documentation
- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 962
- junos:changed-localtime on page 972

junos:commit-localtime

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:commit-seconds="seconds" \
```

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```
        junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
            junos:commit-user="username">
          <!-- Junos XML tag elements for the requested configuration data -->
        </configuration>
      </rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the time when the configuration was committed as the date and time in the device's local time zone.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 842.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 962
- junos:commit-user on page 973
- junos:commit-seconds on page 973

junos:commit-seconds

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:commit-seconds="seconds" \
        junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
        junos:commit-user="username">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the time when the configuration was committed as the number of seconds since midnight on 1 January 1970.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 842.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 962
- junos:commit-user on page 973
- junos:commit-localtime on page 972

junos:commit-user

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration junos:commit-seconds="seconds" \
        junos:commit-localtime="YYYY-MM-DD hh:mm:ss TZ" \
        junos:commit-user="username">
    <!-- Junos XML tag elements for the requested configuration data -->
  </configuration>
</rpc-reply>
```

Description (Displayed when the active configuration is requested) Specify the Junos OS username of the user who requested the commit operation.

Usage Guidelines See "Requesting Information from the Committed or Candidate Configuration" on page 842.

Related Documentation

- **<configuration>** in the *Junos XML API Configuration Developer Reference*
- <rpc-reply> on page 962
- junos:commit-localtime on page 972
- junos:commit-seconds on page 973

junos:group

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration>
    <!-- opening tag for each parent of the element -->
      <inherited-element junos:group="source-group">
        <inherited-child-of-inherited-element junos:group="source-group">
          <!-- inherited-children-of-child junos:group="source-group" -->
        </inherited-child-of-inherited-element>
      </inherited-element>
    <!-- closing tag for each parent of the element  -->
  </configuration>
</rpc-reply>
```

Description Name the configuration group from which each configuration element is inherited. The Junos XML protocol server includes the attribute when the client application includes the **groups** and **inherit** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag. Instead, the Junos XML protocol server provides the information in a comment directly above each inherited element.

Usage Guidelines See "Displaying the Source Group for Inherited Configuration Elements" on page 855.

Related Documentation

- <get-configuration> on page 949
- <rpc-reply> on page 962

junos:interface-range

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration attributes>
    <interfaces>
      <!-- For each inherited element -->
      <interface junos:interface-range="source-interface-range">
```


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```
        <inherited-element junos:interface-range="source-interface-range">
          <inherited-child-of-inherited-element
                junos:interface-range="source-interface-range">
            <!-- inherited-children-of-child
                  junos:interface-range="source-interface-range" -->
          </inherited-child-of-inherited-element>
        </inherited-element>
      </interface>
    </interfaces>
  </configuration>
</rpc-reply>
```

Description Name the interface range from which each configuration element is inherited. The Junos XML protocol server includes the attribute when the client application includes the **interface-ranges** and **inherit** attributes in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag.

Usage Guidelines See "Displaying the Source Interface Range for Inherited Configuration Elements" on page 860.

Related Documentation

- <get-configuration> on page 949
- <rpc-reply> on page 962

junos:key

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration>
    <!-- opening tag for each parent of the object -->
      <object>
        <name junos:key="key">identifier</name>
        <!-- additional children of object -->
      </object>
    <!-- closing tag for each parent of the object  -->
  </configuration>
</rpc-reply>
```

Description Indicate that a child configuration tag element is the identifier for its parent tag element. The Junos XML protocol server includes the attribute when the client application requests information about an object type (with the **<get-configuration>** tag element) and has included the **junos:key** attribute in the opening **<junoscript>** tag for the current session.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the empty **<get-configuration/>** tag or opening **<get-configuration>** tag.

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When requesting configuration data with Perl client applications using the get_configuration() method, the Junos XML protocol server includes the **junos:key="key"** attribute in the configuration data output when the client application sets the value of the **Junos::Device** constructor argument **junos_key** to 1. The default value is 0.

The attribute does not appear if the Perl client application requests formatted ASCII output by including the **format=>'text'** attribute in the options for the **get_configuration()** method.

Usage Guidelines See "Requesting an Indicator for Identifiers" on page 846.

Related Documentation

- <get-configuration> on page 949
- <junoscript> on page 952
- <rpc> on page 961

junos:position

Usage

```
<rpc-reply xmlns:junos="URL">
  <configuration>
    <!-- opening tags for each parent of the object -->
      <object junos:position="index" junos:total="total" >
    <!-- closing tags for each parent of the object -->
  </configuration>
</rpc-reply>
```

Description Specify the index number of the configuration object in the list of objects of a specified type about which information is being returned. The Junos XML protocol server includes the attribute when the client application requests information about an object type (with the **<get-configuration>** tag element) and includes the **count** attribute, the **start** attribute, or both, in the opening tag for the object type.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the opening **<get-configuration>** tag.

Usage Guidelines See "Requesting a Specified Number of Configuration Objects" on page 866.

Related Documentation

- count on page 968
- <get-configuration> on page 949
- junos:total on page 976
- <rpc> on page 961
- start on page 981

junos:total

Usage

```
<rpc-reply xmlns:junos="URL">
```


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```
<configuration>
  <!-- opening tags for each parent of the object -->
    <object junos:position="index" junos:total="total">
  <!-- closing tags for each parent of the object -->
</configuration>
</rpc-reply>
```

Description Specify the number of configuration objects of a specified type about which information is being returned. The Junos XML protocol server includes the attribute when the client application requests information about an object type (with the **<get-configuration>** tag element) and includes the **count** attribute, the **start** attribute, or both, in the opening tag for the object type.

The attribute does not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the opening **<get-configuration>** tag.

Usage Guidelines See "Requesting a Specified Number of Configuration Objects" on page 866.

Related Documentation

- count on page 968
- <get-configuration> on page 949
- junos:position on page 976
- <rpc> on page 961
- start on page 981

matching

Usage

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the level -->
        <level matching="matching-expression"/>
      <!-- closing tags for each parent of the level -->
  </configuration>
  </get-configuration>
</rpc>
```

Description Request information about only those instances of a configuration object type at the specified level in the configuration hierarchy that have the specified set of characters in their identifier names (characters that match a regular expression). If the attribute is omitted, the Junos XML protocol server returns the complete set of child tag elements for the specified parent level.

The attribute can be combined with one or more of the **count**, **recurse**, and **start** attributes.

To represent the objects to return, the ***matching-expression*** value uses a slash-separated list of hierarchy level and object names similar to an XML Path Language (XPath) representation. Each level in the representation can be either a full level name or a regular expression that matches the identifier name of one or more instances of an object type:

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object-type[name='*regular-expression*']"

The regular expression uses the notation defined in POSIX Standard 1003.2 for extended (modern) UNIX regular expressions. For details about the notation, see "Requesting a Subset of Objects by Using Regular Expressions" on page 872.

Usage Guidelines See "Requesting a Subset of Objects by Using Regular Expressions" on page 872.

Related Documentation

- count on page 968
- <get-configuration> on page 949
- <rpc> on page 961
- start on page 981

protect

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the element -->
        <element protect="protect">
          <name>identifier</name> <!-- if element has an identifier -->
        </element>
      <!-- closing tag for each parent of the element -->
    </configuration>
  </load-configuration>
</rpc>
```

Release Information Command introduced in Junos OS Release 11.2.

Description Protect a configuration element from being modified or deleted. The **protect** attribute can be applied to configuration hierarchies or individual configuration statements. The **protect** attribute can be combined with the **active** and **inactive** attributes. To unprotect a protected element, include the **unprotect** attribute instead.

Usage Guidelines See "Protecting or Unprotecting a Configuration Object" on page 912

Related Documentation

- *Example: Protecting the Junos OS Configuration from Modification or Deletion*
- <load-configuration> on page 954
- <rpc> on page 961
- unprotect on page 981

recurse

Usage

```
<rpc>
  <get-configuration>
    <configuration>
```

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```
        <!-- opening tags for each parent of the object -->
          <object-type recurse="false"/>
        <!-- closing tags for each parent of the object -->
      </configuration>
    </get-configuration>
  </rpc>
```

Description Request only the identifier tag element for each configuration object of a specified type in the configuration hierarchy. If the attribute is omitted, the Junos XML protocol server returns the complete set of child tag elements for every object. The only acceptable value for the attribute is **false**.

The attribute can be combined with one or more of the **count**, **matching**, and **start** attributes.

Usage Guidelines See "Requesting Identifiers Only" on page 868.

Related Documentation

- count on page 968
- <get-configuration> on page 949
- <rpc> on page 961
- start on page 981

rename

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the object -->

        <!-- if the object has one identifier -->
        <object rename="rename" name="new-name">
          <name>current-name</name>
        </object>

        <!-- if the object has two identifiers, both changing -->
        <object rename="rename" identifier1="new-name" \
            identifier2=new-name">
          <identifier1>current-name</identifier1>
          <identifier2>current-name</identifier2>
        </object>

      <!-- closing tag for each parent of the object -->
    </configuration>
  </load-configuration>
</rpc>
```

Description Change the name of one or more of a configuration object's identifiers. In the Usage section, the identifier tag element is called **<name>** when the element has one identifier.

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The **rename** attribute can be combined with either the **inactive** or **active** attribute.

Usage Guidelines See "Renaming a Configuration Object" on page 910.

Related Documentation

- active on page 967
- inactive on page 969
- <load-configuration> on page 954
- <rpc> on page 961

replace

Usage

```
<rpc>
  <load-configuration action="replace">
    <configuration>
      <!-- opening tag for each parent of the element -->
        <container-tag replace="replace">
          <name>identifier</name>
          <!-- tag elements for other children, if any -->
        </container-tag>
      <!-- closing tag for each parent of the element -->
    </configuration>
  </load-configuration>
</rpc>
```

Description Specify that the configuration element completely replace the element in the candidate configuration that has the same identifier (in the Usage section, the identifier tag element is called **<name>**). If the attribute is omitted, the Junos XML protocol server merges the element with the existing element as described in "Merging Configuration Elements" on page 894. The only acceptable value for the attribute is **replace**.

The client application must also include the **action="replace"** attribute in the opening **<load-configuration>** tag.

The **replace** attribute can be combined with either the **active** or **inactive** attribute, as described in "Changing a Configuration Element's Activation State Simultaneously with Other Changes" on page 917.

Usage Guidelines See "Replacing Configuration Elements" on page 897.

Related Documentation

- active on page 967
- inactive on page 969
- <load-configuration> on page 954
- <rpc> on page 961

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start

Usage

```
<rpc>
  <get-configuration>
    <configuration>
      <!-- opening tags for each parent of the object -->
        <object-type start="index"/>
      <!-- closing tags for each parent of the object -->
    </configuration>
  </get-configuration>
</rpc>
```

Description Specify the index number of the first object to return (**1** for the first object, **2** for the second, and so on) when requesting information about a configuration object of a specified type. If the attribute is omitted, the returned set of objects starts with the first one in the configuration hierarchy.

The attribute can be combined with one or more of the **count**, **matching**, and **recurse** attributes.

If the application requests Junos XML-tagged output (the default), the Junos XML protocol server includes two attributes in the opening container tag for each returned object:

- **junos:position**—Specifies the object's numerical index.
- **junos:total**—Reports the total number of such objects that exist in the hierarchy.

These attributes do not appear if the client requests formatted ASCII output by including the **format="text"** attribute in the opening **<get-configuration>** tag.

Usage Guidelines See "Requesting a Specified Number of Configuration Objects" on page 866.

Related Documentation

- count on page 968
- <get-configuration> on page 949
- recurse on page 978
- <rpc> on page 961

unprotect

Usage

```
<rpc>
  <load-configuration>
    <configuration>
      <!-- opening tag for each parent of the element -->
        <element unprotect="unprotect">
          <name>identifier</name> <!-- if element has an identifier -->
        </element>
      <!-- closing tag for each parent of the element -->
    </configuration>
  </load-configuration>
```

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```
</rpc>
```

Release Information Command introduced in Junos OS Release 11.2.

Description Unprotect a previously protected configuration element. The **unprotect** attribute cannot be combined with other attributes such as **active**, **inactive**, **rename**, or **replace**. If an element is protected, a request to simultaneously unprotect and modify the element will unprotect the element, but it will also produce a warning message that the additional modification cannot be completed because the element is protected. You must unprotect the element first and then make the modification.

Usage Guidelines See "Protecting or Unprotecting a Configuration Object" on page 912

Related Documentation

- *Example: Protecting the Junos OS Configuration from Modification or Deletion*
- <load-configuration> on page 954
- <rpc> on page 961
- protect on page 978

xmlns

Usage

```
<rpc-reply xmlns:junos="URL">
  <operational-response xmlns="URL-for-DTD">
    <!-- Junos XML tag elements for the requested information -->
  </operational-response>
</rpc-reply>
```

Description Define the XML namespace for the enclosed tag elements that do not have a prefix (such as **junos:**) in their names. The namespace indicates which Junos XML document type definition (DTD) defines the set of tag elements in the response.

Usage Guidelines See "Requesting Operational Information" on page 836.

Related Documentation

- <rpc-reply> on page 962

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CHAPTER 25

Writing Junos XML Protocol Perl Client Applications

Juniper Networks provides a Perl module **JUNOS::Device** to help you more quickly and easily develop custom Perl scripts for configuring and monitoring switches, routers, and security devices running Junos OS. The module implements a **JUNOS::Device** object that client applications can use to communicate with the Junos XML protocol server on a device running Junos OS. The Perl distribution includes several sample Perl scripts, which illustrate how to use the module in scripts that perform various functions.

This chapter discusses the following topics:

- Overview of the Junos::Device Perl Module and Sample Scripts on page 983
- Downloading the Junos XML Protocol Perl Client and Prerequisites Package on page 984
- Installing the Junos XML Protocol Perl Client and Prerequisites Package on page 985
- Tutorial: Writing Perl Client Applications on page 988
- Mapping CLI Commands to Perl Methods on page 1010

Overview of the Junos::Device Perl Module and Sample Scripts

The Junos XML protocol Perl distribution uses the same directory structure for Perl modules as the Comprehensive Perl Archive Network (http://www.cpan.org). This includes a **lib** directory for the **JUNOS** module and its supporting files, and an **examples** directory for the sample scripts.

Client applications use the **JUNOS::Device** object to communicate with a Junos XML protocol server. The library contains several modules, but client applications directly invoke only the **JUNOS::Device** object. All of the sample scripts use this object.

The sample scripts illustrate how to perform the following functions:

- **diagnose_bgp.pl**—Illustrates how to write scripts to monitor device status and diagnose problems. The sample script extracts and displays information about a device's unestablished Border Gateway Protocol (BGP) peers from the full set of BGP configuration data. The script is provided in the **examples/diagnose_bgp** directory in the Junos XML protocol Perl distribution.

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- **get_chassis_inventory.pl**—Illustrates how to use a predefined query to request information from a device. The sample script invokes the **get_chassis_inventory** method with the **detail** option to request the same information as the Junos XML <get-chassis-inventory><detail></get-chassis-inventory> tag sequence and the command-line interface (CLI) **show chassis hardware detail** command. The script is provided in the **examples/get_chassis_inventory** directory in the Junos XML protocol Perl distribution.
- **load_configuration.pl**—Illustrates how to change a device configuration by loading a file that contains configuration data formatted with Junos XML tag elements. The distribution includes two sample configuration files, **set_login_class_bar.xml** and **set_login_user_foo.xml**; however, you can specify another configuration file on the command line. The script is provided in the **examples/load_configuration** directory in the Junos XML protocol Perl distribution.

The following sample scripts are used together to illustrate how to store and retrieve data from the Junos XML API (or any XML-tagged data set) in a relational database. Although these scripts create and manipulate MySQL tables, the data manipulation techniques that they illustrate apply to any relational database. The scripts are provided in the **examples/RDB** directory in the Perl distribution:

- **get_config.pl**—Illustrates how to retrieve routing platform configuration information.
- **make_tables.pl**—Generates a set of Structured Query Language (SQL) statements for creating relational database tables.
- **pop_tables.pl**—Populates existing relational database tables with data extracted from a specified XML file.
- **unpop_tables.pl**—Transforms data stored in a relational database table into XML and writes it to a file.

For instructions on running the scripts, see the **README** or **README.html** file included in the Perl distribution.

Downloading the Junos XML Protocol Perl Client and Prerequisites Package

To download the compressed tar archives that contain the Junos XML protocol Perl client distribution and the prerequisites package, perform the following steps:

1. Access the Junos XML protocol download page on the Juniper Networks website at https://www.juniper.net/support/products/junoscript/ .
2. Click the link for the appropriate software release.
3. Select the Software tab.
4. Click the links to download the client distribution and the prerequisites package that support the appropriate access protocols. Customers in the United States and Canada can download the packages that support all access protocols including SSH, SSL, clear-text and Telnet protocols (the domestic package). Customers in other countries can download the packages that support only the clear-text and Telnet protocols (the export package).

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NOTE: The Junos XML protocol Perl client software should be installed and run on a regular computer with a UNIX-like operating system; it is not meant to be installed on a Juniper Networks device.

Optionally, download the packages containing the document type definitions (DTDs) and the XML Schema language representation of the Junos configuration hierarchy:

1. Access the download page at https://www.juniper.net/support/products/xmlapi/ .
2. Click the link for the appropriate software release.
3. Select the Software tab.
4. Click the links to download the desired packages.

Related Documentation

- Installing the Junos XML Protocol Perl Client and Prerequisites Package on page 985

Installing the Junos XML Protocol Perl Client and Prerequisites Package

To install the Junos XML protocol Perl client and the prerequisites package, perform the following procedures:

- Verifying Installation and Version of Perl on page 985
- Extracting the Junos XML Protocol Perl Client and Sample Scripts on page 986
- Extracting and Installing the Junos XML Protocol Perl Client Prerequisites Package on page 986
- Installing the Junos XML Protocol Perl Client on page 988

Verifying Installation and Version of Perl

Perl must be installed on your system before you install the Junos XML protocol Perl client prerequisites package or client software. The Junos XML protocol Perl client requires Perl version 5.0004 or later. To confirm whether Perl is installed on your system and to determine which version of Perl is currently running, issue the following commands:

```
% which perl
% perl -v
```

If the issued output indicates that Perl is not installed or the version is older than the required version, you must download and install Perl version 5.0004 or later in order to use the Junos XML protocol Perl client. The Perl source packages are located at:

http://www.cpan.org/src/.

After installing a suitable version of Perl, extract the Junos XML protocol Perl client, extract and install the prerequisites package, and then install the Junos XML protocol Perl client application.

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Extracting the Junos XML Protocol Perl Client and Sample Scripts

To uncompress and extract the contents of the compressed tar archive that contains the Junos XML protocol Perl client and sample scripts, perform the following steps:

1. Create the directory where you want to store the Junos XML protocol Perl client application and sample scripts, and move the downloaded client application file into this directory. Then make this directory the working directory:

   % mkdir *parent-directory*
   % mv junoscript-perl-*release-type*.tar.gz *parent-directory*
   % cd *parent-directory*

2. Issue the following command to uncompress and extract the contents of the Junos XML protocol Perl client package:

   - On FreeBSD and Linux systems:

     % tar zxf junoscript-perl-*release-type*.tar.gz

   - On Solaris systems:

     % gzip -dc junoscript-perl-*release-type*.tar.gz | tar xf

where ***release*** is the release code, for example **12.1R1.1**, and ***type*** is **domestic** or **export**.

Step 2 creates a directory called **junoscript-perl-*release*** and extracts the contents of the tar archive to it. For example, a typical filename for the compressed tar archive is **junoscript-perl-9.5R1.8-domestic.tar.gz**. Extracting the contents of this archive creates the directory **junoscript-perl-9.5R1.8** directly under ***parent-directory*** and places the application files and sample scripts into this new directory.

The **junoscript-perl-*release*/README** file contains instructions for extracting and installing the Perl prerequisite modules, creating a **Makefile**, and installing and testing the **JUNOS::Device** module.

Extracting and Installing the Junos XML Protocol Perl Client Prerequisites Package

The prerequisites package consists of C libraries, executables, and Perl modules. It must be installed on the client machine in order for the Junos XML protocol Perl client and the included examples to work correctly. To uncompress and extract the contents of the compressed tar archive containing the prerequisite files, perform the following steps:

1. Move the downloaded prerequisites package into the ***parent-directory*/junoscript-perl-*release*/** directory that was created in "Extracting the Junos XML Protocol Perl Client and Sample Scripts" on page 986. The compressed tar archive containing the prerequisite files must be uncompressed, unpacked, and installed in this directory.

2. Issue the following command to uncompress and extract the contents of the package:

   - On FreeBSD and Linux systems:

     % tar zxf junoscript-perl-prereqs-*release-type*.tar.gz

   - On Solaris systems:

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```
% gzip -dc junoscript-perl-prereqs-release-type.tar.gz | tar xf
```

where ***release*** is the release code, for example 12.1R1.1, and ***type*** is **domestic** or **export**. This command creates a directory called **prereqs/** and extracts the contents of the tar archive to it.

By default, the prerequisite Perl modules are installed in the standard directory. The standard directory is normally **/usr/local/lib/**. You need root privileges to access the standard directory. You can opt to install the modules in a private directory.

- To install the required modules in the standard directory:

  1. Go to the **junoscript-perl-*release*/** directory where you extracted the contents of the prerequisites package.
  2. Issue the following command:

     ```
     % perl install-prereqs.pl -used_by example -force
     ```

     where the **-used_by *example*** option is invoked to install only modules used by a specific example, and the **-force** option installs the module even if an older version exists or if the **make test** command fails.

- To install the required modules in a private directory:

  1. Set the **PERL5LIB**, **MANPATH**, and **PATH** environment variables.

     ```
     % setenv PERL5LIB private-directory-path
     % setenv MANPATH "$MANPATH/:$PERL5LIB/../man"
     % setenv PATH "$PATH/:$PERL5LIB/../bin"
     ```

     For sh, ksh, and bash shells, **$PERL5LIB** can be set with **EXPORT PERL5LIB=*private-directory-path***

  2. Go to the **junoscript-perl-*release*** directory where you extracted the contents of the prerequisites package.
  3. Issue the following command:

     ```
     % perl install-prereqs.pl -used_by example -install_directory $PERL5LIB -force
     ```

     where the **-used_by *example*** option is invoked to install only modules used by a specific example, and the **-force** option installs the module even if an older version exists or if the **make test** command fails. The **-install_directory $PERL5LIB** option installs the prerequisite Perl modules in the private directory that you specified in Step 1.

Installation log files are written to **junoscript-perl-*release*/tmp/output/**. After installation, you can view any missing dependencies by issuing the following command:

```
% perl required-mod.pl
```

This command lists the modules that still require installation.

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Installing the Junos XML Protocol Perl Client

After installing the prerequisites package as detailed in "Extracting and Installing the NETCONF Perl Client Prerequisites Package" on page 704, install the Junos XML protocol Perl client software. Go to the **junoscript-perl-*release*/** directory that was created in "Extracting the Junos XML Protocol Perl Client and Sample Scripts" on page 986. Perform the following steps to install the client software:

1. Create the makefile:

   - To install the Perl client in the standard directory (generally **/usr/local/lib**):

     % perl Makefile.PL

     ```
     Checking if your kit is complete...
     Looks good
     Writing Makefile for junoscript-perl
     ```

   - To install the Perl client in a private directory:

     Make sure that the **PERL5LIB**, **MANPATH**, and **PATH** environment variables are set as detailed in "Extracting and Installing the NETCONF Perl Client Prerequisites Package" on page 704. Then create the makefile:

     % perl Makefile.PL LIB=$PERL5LIB INSTALLMAN3DIR=$PERL5LIB/../man/man3

2. Test and install the application:

   % make
   % make test
   % make install

The Junos XML protocol Perl client application is installed and ready for use. For information about the **JUNOS::Device** object and a list of valid queries, consult the man page by invoking the **man** command for the **JUNOS::Device** object:

% man JUNOS::Device

The sample scripts reside in the **junoscript-perl-*release*/examples/** directory. You can review and run these examples to acquire some familiarity with the client before writing your own applications.

Related Documentation

- Downloading the Junos XML Protocol Perl Client and Prerequisites Package on page 984

Tutorial: Writing Perl Client Applications

This tutorial explains how to write a Perl client application that requests operational or configuration information from the Junos XML protocol server or loads configuration information onto a device. The following sections use the sample scripts included in the Junos XML protocol Perl distribution as examples:

- Import Perl Modules and Declare Constants on page 989
- Connect to the Junos XML Protocol Server on page 989
- Submitting a Request to the Junos XML Protocol Server on page 996

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- Parsing and Formatting the Response from the Junos XML Protocol Server on page 1004
- Closing the Connection to the Junos XML Protocol Server on page 1010

Import Perl Modules and Declare Constants

Include the following statements at the start of the application. The first statement imports the functions provided by the **JUNOS::Device** object, which the application uses to connect to the Junos XML protocol server on a device. The second statement provides error checking and enforces Perl coding practices such as declaration of variables before use.

```
use JUNOS::Device;
use strict;
```

Include statements to import other Perl modules as appropriate for your application. For example, several of the sample scripts import the following standard Perl modules, which include functions that handle input from the command line:

- **File::Basename**—Includes functions for processing filenames.
- **Getopt::Std**—Includes functions for reading in keyed options from the command line.
- **Term::ReadKey**—Includes functions for controlling terminal modes, for example suppressing onscreen echo of a typed string such as a password.

If the application uses constants, declare their values at this point. For example, the sample **diagnose_bgp.pl** script includes the following statements to declare constants for formatting output:

```
use constant OUTPUT_FORMAT => "%-20s%-8s%-8s%-11s%-14s%s\n";
use constant OUTPUT_TITLE =>
     "\n============== BGP PROBLEM SUMMARY ==============\n\n";
use constant OUTPUT_ENDING =>
     "\n=================================================\n\n";
```

The **load_configuration.pl** script includes the following statements to declare constants for reporting return codes and the status of the configuration database:

```
use constant REPORT_SUCCESS => 1;
use constant REPORT_FAILURE => 0;
use constant STATE_CONNECTED => 1;
use constant STATE_LOCKED => 2;
use constant STATE_CONFIG_LOADED => 3;
```

Connect to the Junos XML Protocol Server

The following sections explain how to use the **JUNOS::Device** object to connect to the Junos XML protocol server on a device running Junos OS:

- Satisfying Protocol Prerequisites on page 990
- Group Requests on page 990
- Obtain and Record Parameters Required by the JUNOS::Device Object on page 990
- Obtaining Application-Specific Parameters on page 993

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- Converting Disallowed Characters on page 994
- Establishing the Connection on page 996

Satisfying Protocol Prerequisites

The Junos XML protocol server supports several access protocols, listed in "Supported Access Protocols" on page 799. For each connection to the Junos XML protocol server on a device, the application must specify the protocol it is using. Using SSH or Secure Sockets Layer (SSL) is recommended because they provide greater security by encrypting all information before transmission across the network.

Before your application can run, you must satisfy the prerequisites for the protocol it uses. For some protocols this involves activating configuration statements on the device, creating encryption keys, or installing additional software on the device running Junos OS or the machine where the application runs. For instructions, see "Prerequisites for Establishing a Connection" on page 799.

Group Requests

Establishing a connection to the Junos XML protocol server on a device is one of the more time- and resource-intensive functions performed by an application. If the application sends multiple requests to a routing platform, it makes sense to send all of them within the context of one connection. If your application sends the same requests to multiple devices, you can structure the script to iterate through either the set of devices or the set of requests. Keep in mind, however, that your application can effectively send only one request to one Junos XML protocol server at a time. This is because the **JUNOS::Device** object does not return control to the application until it receives the closing </rpc-reply> tag that represents the end of the Junos XML protocol server's response to the current request.

Obtain and Record Parameters Required by the JUNOS::Device Object

The **JUNOS::Device** object takes the following parameters, specified as keys in a Perl hash:

- **access**—(Required) The access protocol to use when communicating with the Junos XML protocol server. Acceptable values are "telnet", "ssh", "clear-text", and "ssl". For more information about supported access protocols, see "Supported Access Protocols" on page 799. Before the application runs, satisfy the protocol-specific prerequisites described in "Prerequisites for Establishing a Connection" on page 799.
- **hostname**—(Required) The name of the device to which to connect. For best results, specify either a fully qualified hostname or an IP address.
- **login**—(Required) The username under which to establish the connection to the Junos XML protocol server and issue requests . The username must already exist on the specified device and have the permission bits necessary for making the requests invoked by the application.
- **password**—(Required) The password for the username.
- **junos_key**—(Optional) When requesting configuration data using the get_configuration() method, set the value of the parameter to 1 to include the junos:key="key" attribute in

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the output of XML-formatted configuration data. The default value of the parameter is 0. The junos:key="key" attribute indicates that a child configuration tag element is the identifier for its parent tag element. The attribute does not appear in formatted ASCII output.

The sample scripts record the parameters in a Perl hash called **%deviceinfo**, declared as follows:

```
my %deviceinfo = (
    access => $access,
    login => $login,
    password => $password,
    hostname => $hostname,
    junos_key => $junos_key,
);
```

The sample scripts obtain the parameters from options entered on the command line by a user. Your application can also obtain values for the parameters from a file or database, or you can hardcode one or more of the parameters into the application code if they are constant.

Example: Collecting Parameters Interactively

Each sample script obtains the parameters required by the **JUNOS::Device** object from command-line options provided by the user who invokes the script. The script records the options in a Perl hash called **%opt**, using the **getopts** function defined in the **Getopt::Std** Perl module to read the options from the command line. (Scripts used in production environments probably do not obtain parameters interactively, so this section is important mostly for understanding the sample scripts.)

In the following example from the **get_chassis_inventory.pl** script, the first parameter to the **getopts** function defines the acceptable options, which vary depending on the application. A colon after the option letter indicates that it takes an argument.

The second parameter, **\%opt**, specifies that the values are recorded in the **%opt** hash. If the user does not provide at least one option, provides an invalid option, or provides the **-h** option, the script invokes the **output_usage** subroutine, which prints a usage message to the screen:

```
my %opt;
getopts('l:p:dx:m:o:h', \%opt) || output_usage();
output_usage() if $opt{h};
```

The following code defines the **output_usage** subroutine for the **get_chassis_inventory.pl** script. The contents of the **my $usage** definition and the **Where** and **Options** sections are specific to the script, and differ for each application.

```
sub output_usage
{
  my $usage = "Usage: $0 [options] <target>

    Where:
      <target>   The hostname of the target device.

    Options:
```

```
    -l <login>     A login name accepted by the target device.
    -p <password>   The password for the login name.
    -m <access>     Access method. It can be clear-text, ssl, ssh or telnet.
          Default: telnet.
    -x <format>     The name of the XSL file to display the response.
          Default: xsl/chassis_inventory_csv.xsl
    -o <filename>   File to which to write output, instead of standard output.
    -d          Turn on debugging.\n\n";

    die $usage;
  }
```

The **get_chassis_inventory.pl** script includes the following code to obtain values from the command line for the four parameters required by the **JUNOS::Device** object. A detailed discussion of the various functional units follows the complete code sample.

```
# Get the hostname
my $hostname = shift || output_usage();

# Get the access method
my $access = $opt{m} || "telnet";
use constant VALID_ACCESSES => "telnet|ssh|clear-text|ssl";
output_usage() unless (VALID_ACCESSES =~ /$access/);

# Check for login name. If not provided, prompt for it
my $login = "";
if ($opt{l}) {
  $login = $opt{l};
} else {
  print STDERR "login: ";
  $login = ReadLine 0;
  chomp $login;
}

# Check for password. If not provided, prompt for it
my $password = "";
if ($opt{p}) {
  $password = $opt{p};
} else {
  print STDERR "password: ";
  ReadMode 'noecho';
  $password = ReadLine 0;
  chomp $password;
  ReadMode 'normal';
  print STDERR "\n";
}
```

In the first line of the preceding code sample, the script uses the Perl **shift** function to read the hostname from the end of the command line. If the hostname is missing, the script invokes the **output_usage** subroutine to print the usage message, which specifies that a hostname is required:

```
my $hostname = shift || output_usage();
```


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The script next determines which access protocol to use, setting the **$access** variable to the value of the **-m** command-line option or to the value **telnet** if the **-m** option is not provided. If the specified value does not match one of the values defined by the **VALID_ACCESSES** constant, the script invokes the **output_usage** subroutine to print the usage message.

```
my $access = $opt{m} || "telnet";
use constant VALID_ACCESSES => "telnet|ssh|clear-text|ssl";
output_usage() unless (VALID_ACCESSES =~ /$access/);
```

The script then determines the username, setting the **$login** variable to the value of the **-l** command-line option. If the option is not provided, the script prompts for it and uses the **ReadLine** function (defined in the standard Perl **Term::ReadKey** module) to read it from the command line:

```
my $login = "";
if ($opt{l}) {
  $login = $opt{l};
} else {
  print STDERR "login: ";
  $login = ReadLine 0;
  chomp $login;
}
```

The script finally determines the password for the username, setting the **$password** variable to the value of the **-p** command-line option. If the option is not provided, the script prompts for it. It uses the **ReadMode** function (defined in the standard Perl **Term::ReadKey** module) twice: first to prevent the password from echoing visibly on the screen and then to return the shell to normal (echo) mode after it reads the password:

```
my $password = "";
if ($opt{p}) {
  $password = $opt{p};
} else {
  print STDERR "password: ";
  ReadMode 'noecho';
  $password = ReadLine 0;
  chomp $password;
  ReadMode 'normal';
  print STDERR "\n";
}
```

Obtaining Application-Specific Parameters

In addition to the parameters required by the **JUNOS::Device** object, applications might need to define other parameters, such as the name of the file to which to write the data returned by the Junos XML protocol server in response to a request, or the name of the Extensible Stylesheet Transformation Language (XSLT) file to use for transforming the data.

As with the parameters required by the **JUNOS::Device** object, your application can hardcode the values in the application code, obtain them from a file, or obtain them interactively. The sample scripts obtain values for these parameters from command-line options in the same manner as they obtain the parameters required by the **JUNOS::Device** object (discussed in "Obtain and Record Parameters Required by the JUNOS::Device Object" on page 990). Several examples follow.

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The following line enables a debugging trace if the user includes the **-d** command-line option. It invokes the **JUNOS::Trace::init** routine defined in the **JUNOS::Trace** module, which is already imported with the **JUNOS::Device** object.

```
JUNOS::Trace::init(1) if $opt{d};
```

The following line sets the **$outputfile** variable to the value specified by the **-o** command-line option. It names the local file to which the Junos XML protocol server's response is written. If the **-o** option is not provided, the variable is set to the empty string.

```
my $outputfile = $opt{o} || " " ;
```

The following code from the **diagnose_bgp.pl** script defines which XSLT file to use to transform the Junos XML protocol server's response. The first line sets the **$xslfile** variable to the value specified by the **-x** command-line option. If the option is not provided, the script uses the **text.xsl** file supplied with the script, which transforms the data to ASCII text. The **if** statement verifies that the specified XSLT file exists; the script terminates if it does not.

```
# Retrieve the XSLT file, default is parsed by perl
my $xslfile = $opt{x} || "xsl/text.xsl";
if ($xslfile && ! -f $xslfile) {
  die "ERROR: XSLT file $xslfile does not exist";
}
```

The following code from the **load_configuration.pl** script defines whether to merge, replace, update, or overwrite the new configuration data into the configuration database (for more information about these operations, see "Changing Configuration Information" on page 627). The first two lines set the **$load_action** variable to the value of the **-a** command-line option, or to the default value **merge** if the option is not provided. If the specified value does not match one of the valid actions defined in the third line, the script invokes the **output_usage** subroutine.

```
# The default action for load_configuration is 'merge'
my $load_action = "merge";
$load_action = $opt{a} if $opt{a};
use constant VALID_ACTIONS => "merge|replace|override";
output_usage() unless (VALID_ACTIONS =~ /$load_action/);
```

Converting Disallowed Characters

Scripts that handle configuration data usually accept and output the data either as Junos XML tag elements or as formatted ASCII statements like those used in the Junos OS CLI. As described in "XML and Junos XML Management Protocol Conventions Overview" on page 783, certain characters cannot appear in their regular form in an XML document. These characters include the apostrophe (**'**), the ampersand (**&**), the greater-than (**>**) and less-than (**<**) symbols, and the quotation mark (**"**). Because these characters might appear in formatted ASCII configuration statements, the script must convert the characters to the corresponding predefined entity references.

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The **load_configuration.pl** script uses the **get_escaped_text** subroutine to substitute predefined entity references for disallowed characters (the **get_configuration.pl** script includes similar code). The script first defines the mappings between the disallowed characters and predefined entity references, and sets the variable **$char_class** to a regular expression that contains all of the entity references, as follows:

```
my %escape_symbols = (
  qq(")  => '&quot;',
  qq(>)  => '&gt;',
  qq(<)  => '&lt;',
  qq(')  => '&apos;',
  qq(&)  => '&amp;'
);
my $char_class = join ("|", map { "($_)" } keys %escape_symbols);
```

The following code defines the **get_escaped_text** subroutine for the **load_configuration.pl** script. A detailed discussion of the subsections in the routine follows the complete code sample.

```
sub get_escaped_text
{
  my $input_file = shift;
  my $input_string = "";

  open(FH, $input_file) or return undef;

  while(<FH>) {
    my $line = $_;
    $line =~ s/<configuration-text>//g;
    $line =~ s/<\/configuration-text>//g;
    $line =~ s/($char_class)/$escape_symbols{$1}/ge;
    $input_string .= $line;
  }

  return "<configuration-text>$input_string</configuration-text>";
}
```

The first subsection of the preceding code sample reads in a file containing formatted ASCII configuration statements:

```
sub get_escaped_text
{
  my $input_file = shift;
  my $input_string = "";

  open(FH, $input_file) or return undef;
```

In the next subsection, the subroutine temporarily discards the lines that contain the opening **<get-configuration>** and closing **</get-configuration>** tags, then replaces the disallowed characters on each remaining line with predefined entity references and appends the line to the **$input_string** variable:

```
while(<FH>) {
  my $line = $_;
  $line =~ s/<configuration-text>//g;
  $line =~ s/<\/configuration-text>//g;
  $line =~ s/($char_class)/$escape_symbols{$1}/ge;
```

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```
    $input_string .= $line;
}
```

The subroutine concludes by replacing the opening **<get-configuration>** and closing **</get-configuration>** tags, and returning the converted set of statements:

```
    return "<configuration-text>$input_string</configuration-text>";
}
```

Establishing the Connection

After obtaining values for the parameters for the **JUNOS::Device** object (see "Obtain and Record Parameters Required by the JUNOS::Device Object" on page 990), each sample script records them in the **%deviceinfo** hash:

```
my %deviceinfo = (
  access => $access,
  login => $login,
  password => $password,
  hostname => $hostname,
  junos_key => $junos_key,
);
```

The script then invokes the Junos XML protocol-specific **new** subroutine to create a **JUNOS::Device** object and establish a connection to the specified routing, switching, or security platform. If the connection attempt fails (as tested by the **ref** operator), the script exits.

```
my $jnx = new JUNOS::Device(%deviceinfo);
unless ( ref $jnx ) {
  die "ERROR: $deviceinfo{hostname}: failed to connect.\n";
```

Submitting a Request to the Junos XML Protocol Server

After establishing a connection to a Junos XML protocol server (see "Establishing the Connection" on page 996), your application can submit one or more requests by invoking the Perl methods that are supported in the version of the Junos XML protocol and Junos XML API used by the application:

- Each version of software supports a set of methods that correspond to CLI operational mode commands (later releases generally support more methods). For a list of the operational methods supported in the current version, see "Mapping CLI Commands to Perl Methods" on page 1010 and the files stored in the **lib/JUNOS/*release*** directory of the Junos XML protocol Perl distribution (***release*** is the Junos OS version code, such as **12.1R1** for the initial version of Junos OS Release 12.1). The files have names in the format ***package*_methods.pl**, where ***package*** is a software package.
- The set of methods that correspond to operations on configuration objects is defined in the **lib/JUNOS/Methods.pm** file in the Junos XML protocol Perl distribution. For more information about configuration operations, see "Changing Configuration Information" on page 627 and "Summary of Junos XML Protocol Tag Elements" on page 939.

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See the following sections for more information:

- Providing Method Options or Attributes on page 997
- Submitting a Request on page 999
- Example: Getting an Inventory of Hardware Components on page 1000
- Example: Loading Configuration Statements on page 1000

Providing Method Options or Attributes

Many Perl methods have one or more options or attributes. The following list describes the notation used to define a method's options in the **lib/JUNOS/Methods.pm** and **lib/JUNOS/*release/package*_methods.pl** files, and the notation that an application uses when invoking the method:

- A method without options is defined as **$NO_ARGS**, as in the following entry for the **get_system_uptime_information** method:

  ```
  ## Method : <get-system-uptime-information>
   ## Returns: <system-uptime-information>
   ## Command: "show system uptime"
  get_system_uptime_information => $NO_ARGS,
  ```

  To invoke a method without options, follow the method name with an empty set of parentheses as in the following example:

  ```
  $jnx->get_system_uptime_information( );
  ```

- A fixed-form option is defined as type **$TOGGLE**. In the following example, the **get_software_information** method takes two fixed-form options, **brief** and **detail**:

  ```
  ## Method : <get-software-information>
  ## Returns: <software-information>
  ## Command: "show version"
  get_software_information =>
    brief => $TOGGLE,
    detail => $TOGGLE,
  },
  ```

  To include a fixed-form option when invoking a method, set it to the value **1** (one) as in the following example:

  ```
  $jnx->get_software_information(brief => 1);
  ```

- An option with a variable value is defined as type **$STRING**. In the following example, the **get_cos_drop_profile_information** method takes the **profile_name** argument:

  ```
  ## Method : <get-cos-drop-profile-information>
   ## Returns: <cos-drop-profile-information>
   ## Command: "show class-of-service drop-profile"
  get_cos_drop_profile_information => {
     profile_name => $STRING,
   },
  ```

  To include a variable value when invoking a method, enclose the value in single quotes as in the following example:

  ```
  $jnx->get_cos_drop_profile_information(profile_name => 'user-drop-profile');
  ```

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- An attribute is defined as type **$ATTRIBUTE**. In the following example, the **load_configuration** method takes the **rollback** attribute:

```
load_configuration => {
  rollback => $ATTRIBUTE
},
```

To include a numerical attribute value when invoking a method, set it to the appropriate value. The following example rolls the candidate configuration back to the previous configuration that has an index of 2:

```
$jnx->load_configuration(rollback => 2);
```

To include a string attribute value when invoking a method, enclose the value in single quotes as in the following example:

```
$jnx->get_configuration(format => 'text');
```

- A set of configuration statements or corresponding tag elements is defined as type **$DOM**. In the following example, the **get_configuration** method takes a set of configuration statements (along with two attributes):

```
get_configuration => {
   configuration => $DOM,
   format => $ATTRIBUTE,
   database => $ATTRIBUTE,
},
```

To include a set of configuration statements when invoking a method, provide a parsed set of statements or tag elements. The following example refers to a set of Junos XML configuration tag elements in the **config-input.xml** file. For further discussion, see "Example: Loading Configuration Statements" on page 1000.

```
my $parser = new XML::DOM::Parser;
$jnx->load_configuration(
  format => 'xml',
  action => 'merge',
  configuration => $parser->parsefile(config-input.xml)
);
```

A method can have a combination of fixed-form options, options with variable values, attributes, and a set of configuration statements. For example, the **get_forwarding_table_information** method has four fixed-form options and five options with variable values:

```
## Method : <get-forwarding-table-information>
## Returns: <forwarding-table-information>
## Command: "show route forwarding-table"
get_forwarding_table_information => {
  detail => $TOGGLE,
  extensive => $TOGGLE,
  multicast => $TOGGLE,
  family => $STRING,
  vpn => $STRING,
  summary => $TOGGLE,
  matching => $STRING,
  destination => $STRING,
```


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```
    label => $STRING,
},
```

Submitting a Request

The following code is the recommended way to send a request to the Junos XML protocol server and shows how to handle error conditions. The **$jnx** variable is defined to be a **JUNOS::Device** object, as discussed in "Establishing the Connection" on page 996. A detailed discussion of the functional subsections follows the complete code sample.

```
my %arguments = ( );
%arguments = ( argument1  =>  value1 ,
   argument2  =>  value2 , ...);
   argument3  =>  value3 ,
  ...);

my $res = $jnx-> method (%args);

unless ( ref $res ) {
  $jnx->request_end_session( );
  $jnx->disconnect( );
  print "ERROR: Could not send request to $hostname\n";
}

my $err = $res->getFirstError( );
if ($err) {
  $jnx->request_end_session( );
  $jnx->disconnect();
  print "ERROR: Error for $hostname: " . $err->{message} . "\n";
}
```

The first subsection of the preceding code sample creates a hash called **%arguments** to define values for a method's options or attributes. For each argument, the application uses the notation described in "Providing Method Options or Attributes" on page 997.

```
my %arguments = ( );
%arguments = ( argument1  =>  value1 ,
   argument2  =>  value2 , ...);
   argument3  =>  value3 ,
  ...);
```

The application then invokes the method, defining the **$res** variable to point to the **JUNOS::Response** object that the Junos XML protocol server returns in response to the request (the object is defined in the **lib/JUNOS/Response.pm** file in the Junos XML protocol Perl distribution):

```
my $res = $jnx-> method (%args);
```

If the attempt to send the request failed, the application prints an error message and closes the connection:

```
unless ( ref $res ) {
  $jnx->request_end_session();
  $jnx->disconnect();
  print "ERROR: Could not send request to $hostname\n";
}
```

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If there was an error in the Junos XML protocol server's response, the application prints an error message and closes the connection. The **getFirstError** function is defined in the **JUNOS::Response** module (**lib/JUNOS/Response.pm**) in the Junos XML protocol Perl distribution.

```
my $err = $res->getFirstError( );
if ($err) {
  $jnx->request_end_session( );
  $jnx->disconnect( );
  print "ERROR: Error for $hostname: " . $err->{message} . "\n";
}
```

Example: Getting an Inventory of Hardware Components

The **get_chassis_inventory.pl** script retrieves and displays a detailed inventory of the hardware components installed in a routing, switching, or security platform. It is equivalent to issuing the **show chassis hardware detail** command.

After establishing a connection to the Junos XML protocol server, the script defines **get_chassis_inventory** as the request to send and includes the **detail** argument:

```
my $query = "get_chassis_inventory";
my %queryargs = ( detail => 1 );
```

The script sends the query and assigns the results to the **$res** variable. It performs two tests on the results, and prints an error message if it cannot send the request or if errors occurred when executing it. If no errors occurred, the script uses XSLT to transform the results. For more information, see "Parsing and Formatting an Operational Response" on page 1005.

```
# send the command and receive a XML::DOM object
my $res = $jnx->$query( %queryargs );
unless ( ref $res ) {
  die "ERROR: $deviceinfo{hostname}: failed to execute command $query.\n";
}
# Check and see if there were any errors in executing the command.
my $err = $res->getFirstError( );
if ($err) {
  print STDERR "ERROR: $deviceinfo{'hostname'} - ", $err->{message}, "\n";
} else {
  # Now do the transformation using XSLT
  ... code that uses XSLT to process results ...
}
```

Example: Loading Configuration Statements

The **load_configuration.pl** script loads configuration statements onto a device. It uses the basic structure for sending requests described in "Submitting a Request" on page 999 but also defines a **graceful_shutdown** subroutine that handles errors in a slightly more elaborate manner than that described in "Submitting a Request" on page 999. The following sections describe the different functions that the script performs:

- Handling Error Conditions on page 1001
- Locking the Configuration on page 1002
- Reading In and Parsing the Configuration Data on page 1002

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- Loading the Configuration Data on page 1003
- Committing the Configuration on page 1004

Handling Error Conditions

The **graceful_shutdown** subroutine in the **load_configuration.pl** script handles errors in a slightly more elaborate manner than the generic structure described in "Submitting a Request" on page 999. It employs the following additional constants:

```
use constant REPORT_SUCCESS => 1;
use constant REPORT_FAILURE => 0;
use constant STATE_CONNECTED => 1;
use constant STATE_LOCKED => 2;
use constant STATE_CONFIG_LOADED => 3;
```

The first two **if** statements in the subroutine refer to the **STATE_CONFIG_LOADED** and **STATE_LOCKED** conditions, which apply specifically to loading a configuration in the **load_configuration.pl** script. The **if** statement for **STATE_CONNECTED** is similar to the error checking described in "Submitting a Request" on page 999. The **eval** statement used in each case ensures that any errors that occur during execution of the enclosed function call are trapped so that failure of the function call does not cause the script to exit.

```
sub graceful_shutdown
{
  my ($jnx, $req, $state, $success) = @_;

 if ($state >= STATE_CONFIG_LOADED) {
    print "Rolling back configuration ...\n";
    eval {
      $jnx->load_configuration(rollback => 0);
    };
  }

  if ($state >= STATE_LOCKED) {
    print "Unlocking configuration database ...\n";
    eval {
      $jnx->unlock_configuration();
    };
  }

  if ($state >= STATE_CONNECTED) {
    print "Disconnecting from the device ...\n";
    eval {
      $jnx->request_end_session()
      $jnx->disconnect();
    };
  }

  if ($success) {
    die "REQUEST $req SUCCEEDED\n";
  } else {
    die "REQUEST $req FAILED\n";
  };
}
```

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Locking the Configuration

The main section of the **load_configuration.pl** script begins by establishing a connection to a Junos XML protocol server, as described in "Establishing the Connection" on page 996. It then invokes the **lock_configuration** method to lock the configuration database. In case of error, the script invokes the **graceful_shutdown** subroutine described in "Handling Error Conditions" on page 1001.

```
print "Locking configuration database ...\n";
my $res = $jnx->lock_configuration();
my $err = $res->getFirstError();
if ($err) {
  print "ERROR: $deviceinfo{hostname}: failed to lock configuration. Reason:
$err->{message}.\n";
  graceful_shutdown($jnx, $xmlfile, STATE_CONNECTED, REPORT_FAILURE);
}
```

Reading In and Parsing the Configuration Data

In the following code sample, the **load_configuration.pl** script reads in and parses a file that contains Junos XML configuration tag elements or ASCII-formatted statements. A detailed discussion of the functional subsections follows the complete code sample.

```
# Load the configuration from the given XML file
print "Loading configuration from $xmlfile ...\n";
if (! -f $xmlfile) {
  print "ERROR: Cannot load configuration in $xmlfile\n";
  graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_FAILURE);
}

my $parser = new XML::DOM::Parser;
...

my $doc;
if ($opt{t}) {
  my $xmlstring = get_escaped_text($xmlfile);
  $doc = $parser->parsestring($xmlstring) if $xmlstring;

} else {
  $doc = $parser->parsefile($xmlfile);
}

unless ( ref $doc ) {
  print "ERROR: Cannot parse $xmlfile, check to make sure the XML data is
well-formed\n";
  graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_FAILURE);
}
```

The first subsection of the preceding code sample verifies the existence of the file containing configuration data. The name of the file was previously obtained from the command line and assigned to the **$xmlfile** variable. If the file does not exist, the script invokes the **graceful_shutdown** subroutine:

```
print "Loading configuration from $xmlfile ...\n";
if (! -f $xmlfile) {
```


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```
    print "ERROR: Cannot load configuration in $xmlfile\n";
    graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_FAILURE);
}
```

If the **-t** command-line option was included when the **load_configuration.pl** script was invoked, the file referenced by the **$xmlfile** variable should contain formatted ASCII configuration statements like those returned by the CLI configuration-mode **show** command. The script invokes the **get_escaped_text** subroutine described in "Converting Disallowed Characters" on page 994, assigning the result to the **$xmlstring** variable. The script invokes the **parsestring** function to transform the data in the file into the proper format for loading into the configuration hierarchy, and assigns the result to the **$doc** variable. The **parsestring** function is defined in the **XML::DOM::Parser** module, and the first line in the following sample code instantiates the module as an object, setting the **$parser** variable to refer to it:

```
my $parser = new XML::DOM::Parser;
...
my $doc;
if ($opt{t}) {
    my $xmlstring = get_escaped_text($xmlfile);
    $doc = $parser->parsestring($xmlstring) if $xmlstring;
```

If the file contains Junos XML configuration tag elements instead, the script invokes the **parsefile** function (also defined in the **XML::DOM::Parser** module) on the file:

```
} else {
    $doc = $parser->parsefile($xmlfile);
}
```

If the parser cannot transform the file, the script invokes the **graceful_shutdown** subroutine described in "Handling Error Conditions" on page 1001:

```
unless ( ref $doc ) {
    print "ERROR: Cannot parse $xmlfile, check to make sure the XML data is
well-formed\n";
    graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_FAILURE);
}
```

Loading the Configuration Data

The script now invokes the **load_configuration** method to load the configuration onto thedevice. It places the statement inside an **eval** block to ensure that the **graceful_shutdown** subroutine is invoked if the response from the Junos XML protocol server has errors.

```
eval {
$res = $jnx->load_configuration(
    format => $config_format,
    action => $load_action,
    configuration => $doc);
};
if ($@) {
    print "ERROR: Failed to load the configuration from $xmlfile.   Reason: $@\n";
    graceful_shutdown($jnx, $xmlfile, STATE_CONFIG_LOADED, REPORT_FAILURE);
    exit(1);
}
```

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The variables used to define the method's three arguments were set at previous points in the application file:

- The **$config_format** variable was previously set to **xml** unless the **-t** command-line option was included:

```
my $config_format = "xml";
$config_format = "text" if $opt{t};
```

- The **$load_action** variable was previously set to **merge** unless the **-a** command-line option was included. The final two lines verify that the specified value is one of the acceptable choices:

```
my $load_action = "merge";
$load_action = $opt{a} if $opt{a};
use constant VALID_ACTIONS => "merge|replace|override";
output_usage() unless ( $load_action =~ /VALID_ACTIONS/);
```

- The **$doc** variable was set to the output from the **parsestring** or **parsefile** function (defined in the **XML::DOM::Parser** module), as described in "Reading In and Parsing the Configuration Data" on page 1002.

The script performs two additional checks for errors and invokes the **graceful_shutdown** subroutine in either case:

```
unless ( ref $res ) {
  print "ERROR: Failed to load the configuration from $xmlfile\n";
  graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_FAILURE);
}
$err = $res->getFirstError();
if ($err) {
  print "ERROR: Failed to load the configuration. Reason: $err->{message}\n";
  graceful_shutdown($jnx, $xmlfile, STATE_CONFIG_LOADED, REPORT_FAILURE);
}
```

Committing the Configuration

If there are no errors, the script invokes the **commit_configuration** method (defined in the file **lib/JUNOS/Methods.pm** in the Junos XML protocol Perl distribution):

```
print "Committing configuration from $xmlfile ...\n";
$res = $jnx->commit_configuration();
$err = $res->getFirstError();
if ($err) {
  print "ERROR: Failed to commit configuration. Reason: $err->{message}.\n";
  graceful_shutdown($jnx, $xmlfile, STATE_CONFIG_LOADED, REPORT_FAILURE);
}
```

Parsing and Formatting the Response from the Junos XML Protocol Server

As the last step in sending a request, the application verifies that there are no errors with the response from the Junos XML protocol server (see "Submitting a Request" on page 999). It can then write the response to a file, to the screen, or both. If the response is for an operational query, the application usually uses XSLT to transform the output into a more readable format, such as HTML or formatted ASCII text. If the response consists of configuration data, the application can store it as XML (the Junos XML tag elements

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generated by default from the Junos XML protocol server) or transform it into formatted ASCII text.

The following sections discuss parsing and formatting options:

- Parsing and Formatting an Operational Response on page 1005
- Parsing and Outputting Configuration Data on page 1007

Parsing and Formatting an Operational Response

The following code sample from the **diagnose_bgp.pl** and **get_chassis_inventory.pl** scripts uses XSLT to transform an operational response from the Junos XML protocol server into a more readable format. A detailed discussion of the functional subsections follows the complete code sample.

```
# Get the name of the output file
my $outputfile = $opt{o} || "";

# Retrieve the XSLT file
my $xslfile = $opt{x} || "xsl/text.xsl";
if ($xslfile && ! -f $xslfile) {
  die "ERROR: XSLT file $xslfile does not exist";

#Get the xmlfile
my $xmlfile = "$deviceinfo{hostname}.xml";
$res->printToFile($xmlfile);

my $nm = $res->translateXSLtoRelease('xmlns:lc', $xslfile, "$xslfile.tmp");

if ($nm) {
  print "Transforming $xmlfile with $xslfile...\n" if $outputfile;
  my $command = "xsltproc $nm $deviceinfo{hostname}.xml";

  $command .= "> $outputfile" if $outputfile;
  system($command);
  print "Done\n" if $outputfile;
  print "See $outputfile\n" if $outputfile;
}

else {
  print STDERR "ERROR: Invalid XSL file $xslfile\n";
}
```

The first line of the preceding code sample illustrates how the scripts read the **-o** option from the command line to obtain the name of the file into which to write the results of the XSLT transformation:

```
my $outputfile = $opt{o} || "";
```

From the **-x** command-line option, the scripts obtain the name of the XSLT file to use, setting a default value if the option is not provided. The scripts exit if the specified file does not exist. The following example is from the **diagnose_bgp.pl** script:

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```
my $xslfile = $opt{x} || "xsl/text.xsl";
if ($xslfile && ! -f $xslfile) {
  die "ERROR: XSLT file $xslfile does not exist";
```

For examples of XSLT files, see the following directories in the Junos XML protocol Perl distribution:

- The **examples/diagnose_bpg/xsl** directory contains XSLT files for the **diagnose_bpg.pl** script: **dhtml.xsl** generates dynamic HTML, **html.xsl** generates HTML, and **text.xsl** generates ASCII text.
- The **examples/get_chassis_inventory/xsl** directory contains XSLT files for the **get_chassis_inventory.pl** script: **chassis_inventory_csv.xsl** generates a list of comma-separated values, **chassis_inventory_html.xsl** generates HTML, and **chassis_inventory_xml.xsl** generates XML.

The actual parsing operation begins by setting the variable **$xmlfile** to a filename of the form ***device-name*.xml** and invoking the **printToFile** function to write the Junos XML protocol server's response into the file (the **printToFile** function is defined in the **XML::DOM::Parser** module):

```
my $xmlfile = "$deviceinfo{hostname}.xml";
$res->printToFile($xmlfile);
```

The next line invokes the **translateXSLtoRelease** function (defined in the **Junos::Response** module) to alter one of the namespace definitions in the XSLT file. This is necessary because the XSLT 1.0 specification requires that every XSLT file define a specific value for each default namespace used in the data being transformed. The **xmlns** attribute in a Junos XML operational response tag element includes a code representing the Junos OS version, such as **12.1R1** for the initial version of Junos OS Release 12.1. Because the same XSLT file can be applied to operational response tag elements from devices running different versions of the Junos OS, the XSLT file cannot predefine an **xmlns** namespace value that matches all versions. The **translateXSLtoRelease** function alters the namespace definition in the XSLT file identified by the **$xslfile** variable to match the value in the Junos XML protocol server's response. It assigns the resulting XSLT file to the **$nm** variable.

```
my $nm = $res->translateXSLtoRelease('xmlns:lc', $xslfile, "$xslfile.tmp");
```

After verifying that the **translateXSLtoRelease** function succeeded, the invokes the **format_by_xslt**, which builds a command string and assigns it to the **$command** variable. The first part of the command string invokes the **xsltproc** command and specifies the names of the XSLT and configuration data files (**$nm** and **$deviceinfo{hostname}.xml**):

```
if ($nm) {
  print "Transforming $xmlfile with $xslfile...\n" if $outputfile;
  my $command = "xsltproc $nm $deviceinfo{hostname}.xml";
```

If the **$outputfile** variable is defined (the file for storing the result of the XSLT transformation exists), the script appends a string to the **$command** variable to write the results of the **xsltproc** command to the file. (If the file does not exist, the script writes the results to standard out [stdout].) The script then invokes the **system** function to execute the command string and prints status messages to stdout.

```
  $command .= "> $outputfile" if $outputfile;
  system($command);
```

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```
    print "Done\n" if $outputfile;
    print "See $outputfile\n" if $outputfile;
}
```

If the **translateXSLtoRelease** function fails (the **if ($nm)** expression evaluates to " false"), the script prints an error:

```
else {
    print STDERR "ERROR: Invalid XSL file $xslfile\n";
}
```

Parsing and Outputting Configuration Data

The **get_config.pl** script in the examples\RDB directory uses the **outconfig** subroutine to write the configuration data obtained from the Junos XML protocol server to a file either as Junos XML tag elements or as formatted ASCII text.

The **outconfig** subroutine takes four parameters. Three must have defined values: the directory in which to store the output file, device hostname, and the XML DOM tree (the configuration data) returned by the Junos XML protocol server. The fourth parameter indicates whether to output the configuration as formatted ASCII text, and has a null value if the requested output is Junos XML tag elements. In the following code sample, the script obtains values for the four parameters and passes them to the **outconfig** subroutine. A detailed discussion of each line follows the complete code sample.

```
my(%opt,$login,$password);

getopts('l:p:dm:hit', \%opt) || output_usage();
output_usage() if $opt{h};

my $basepath = shift || output_usage;

my $hostname = shift || output_usage;

my $config = getconfig( $hostname, $jnx, $opt{t} );

outconfig( $basepath, $hostname, $config, $opt{t} );
```

In the first lines of the preceding sample code, the **get_config.pl** script uses the following statements to obtain values for the four parameters to the **outconfig** subroutine:

- If the user provides the **-t** option on the command line, the **getopts** subroutine records it in the **%opt** hash. The value keyed to **$opt{t}** is passed as the fourth parameter to the **outconfig** subroutine. (For more information about reading options from the command line, see "Example: Collecting Parameters Interactively" on page 991.)

  ```
  getopts('l:p:dm:hit', \%opt) || output_usage();
  ```

- The following line reads the first element of the command line that is not an option preceded by a hyphen. It assigns the value to the **$basepath** variable, defining the name of the directory in which to store the file containing the output from the **outconfig** subroutine. The variable value is passed as the first parameter to the **outconfig** subroutine.

  ```
  my $basepath = shift || output_usage;
  ```

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- The following line reads the next element on the command line. It assigns the value to the **$hostname** variable, defining the routing, switching, or security device hostname. The variable value is passed as the second parameter to the **outconfig** subroutine.

  ```
  my $hostname = shift || output_usage;
  ```

- The following line invokes the **getconfig** subroutine to obtain configuration data from the Junos XML protocol server on the specified device, assigning the resulting XML DOM tree to the **$config** variable. The variable value is passed as the third parameter to the **outconfig** subroutine.

  ```
  my $config = getconfig( $hostname, $jnx, $opt{t} );
  ```

The following code sample invokes and defines the **outconfig** subroutine. A detailed discussion of each functional subsection in the subroutine follows the complete code sample.

```
outconfig( $basepath, $hostname, $config, $opt{t} );

sub outconfig( $$$$ ) {
  my $leader = shift;
  my $hostname = shift;
  my $config = shift;
  my $text_mode = shift;
  my $trailer = "xmlconfig";
  my $filename = $leader . "/" . $hostname . "." . $trailer;

  print "# storing configuration for $hostname as $filename\n";

  my $config_node;
  my $top_tag = "configuration";
  $top_tag .= "-text" if $text_mode;
  if ($config->getTagName() eq $top_tag) {
    $config_node = $config;
  } else {
    print "# unknown response component ", $config->getTagName(), "\n";
  }

  if ( $config_node && $config_node ne "" ) {
    if ( open OUTPUTFILE, ">$filename" )   {
      if (!$text_mode) {
        print OUTPUTFILE "<?xml version=\"1.0\"?>\n";
        print OUTPUTFILE $config_node->toString(), "\n";
      } else {
        my $buf = $config_node->getFirstChild()->toString();
        $buf =~ s/($char_class)/$escapes{$1}/ge;
        print OUTPUTFILE "$buf\n";
      }
      close OUTPUTFILE;
    }
    else {
      print "ERROR: could not open output file $filename\n";
    }
  }
  else {
    print "ERROR: empty configuration data for $hostname\n";
```


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```
  }
}
```

The first lines of the **outconfig** subroutine read in the four parameters passed in when the subroutine is invoked, assigning each to a local variable:

```
outconfig( $basepath, $hostname, $config, $opt{t} );
sub outconfig( $$$$ ) {
  my $leader = shift;
  my $hostname = shift;
  my $config = shift;
  my $text_mode = shift;
```

The subroutine constructs the name of the file to which to write the subroutine's output and assigns the name to the **$filename** variable. The filename is constructed from the first two parameters (the directory name and hostname) and the **$trailer** variable, resulting in a name of the form ***directory-name/hostname*.xmlconfig**:

```
my $trailer = "xmlconfig";
my $filename = $leader . "/" . $hostname . "." . $trailer;

print "# storing configuration for $hostname as $filename\n";
```

The subroutine checks that the first tag in the XML DOM tree correctly indicates the type of configuration data in the file. If the user included the **-t** option on the command line, the first tag should be **<configuration-text>** because the file contains formatted ASCII configuration statements; otherwise, the first tag should be **<configuration>** because the file contains Junos XML tag elements. The subroutine sets the **$top_tag** variable to the appropriate value depending on the value of the **$text_mode** variable (which takes its value from **opt{t}**, passed as the fourth parameter to the subroutine). The subroutine invokes the **getTagName** function (defined in the **XML::DOM::Element** module) to retrieve the name of the first tag in the input file, and compares the name to the value of the **$top_tag** variable. If the comparison succeeds, the XML DOM tree is assigned to the **$config_node** variable. Otherwise, the subroutine prints an error message because the XML DOM tree is not valid configuration data.

```
my $config_node;
my $top_tag = "configuration";
$top_tag .= "-text" if $text_mode;
if ($config->getTagName( ) eq $top_tag) {
  $config_node = $config;
} else {
  print "# unknown response component ", $config->getTagName( ), "\n";
}
```

The subroutine then uses several nested **if** statements. The first **if** statement verifies that the XML DOM tree exists and contains data:

```
if ( $config_node && $config_node ne "" ) {
  ... actions if XML DOM tree contains data ...
}
else {
  print "ERROR: empty configuration data for $hostname\n";
}
```

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If the XML DOM tree contains data, the subroutine verifies that the output file can be opened for writing:

```
if ( open OUTPUTFILE, ">$filename" )   {
  ... actions if output file is writable ...
}
else {
  print "ERROR: could not open output file $filename\n";
}
```

If the output file can be opened for writing, the script writes the configuration data into it. If the user requested Junos XML tag elements—the user did not include the **-t** option on the command line, so the **$text_mode** variable does not have a value—the script writes the string **<?xml version=1.0?>** as the first line in the output file, and then invokes the **toString** function (defined in the **XML::DOM** module) to write each Junos XML tag element in the XML DOM tree on a line in the output file:

```
if (!$text_mode) {
  print OUTPUTFILE "<?xml version=\"1.0\"?>\n";
  print OUTPUTFILE $config_node->toString( ), "\n";
```

If the user requested formatted ASCII text, the script invokes the **getFirstChild** and **toString** functions (defined in the **XML::DOM** module) to write the content of each tag on its own line in the output file. The script substitutes predefined entity references for disallowed characters (which are defined in the **%escapes** hash), writes the output to the output file, and closes the output file. (For information about defining the **%escapes** hash to contain the set of disallowed characters, see "Converting Disallowed Characters" on page 994.)

```
} else {
  my $buf = $config_node->getFirstChild( )->toString( );
  $buf =~ s/($char_class)/$escapes{$1}/ge;
  print OUTPUTFILE "$buf\n";
}
close OUTPUTFILE;
```

Closing the Connection to the Junos XML Protocol Server

To end the Junos XML protocol session and close the connection to the device, each sample script invokes the **request_end_session** and **disconnect** methods. Several of the scripts do this in standalone statements:

```
$jnx->request_end_session( );
$jnx->disconnect();
```

The **load_configuration.pl** script invokes the **graceful_shutdown** subroutine instead (for more information, see "Handling Error Conditions" on page 1001):

```
graceful_shutdown($jnx, $xmlfile, STATE_LOCKED, REPORT_SUCCESS);
```

Mapping CLI Commands to Perl Methods

The sample scripts described in "Overview of the Junos::Device Perl Module and Sample Scripts" on page 983 invoke only a small number of the predefined Junos XML Perl methods available in the current version of Junos OS. There is a Perl method for every Junos XML

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request tag element. To derive the Perl method name from the request tag element name, replace each hyphen in the tag element name with an underscore and remove the enclosing angle brackets from the tag element name. For example, the **get_bgp_group_information** Perl method corresponds to the **<get-bgp-group-information>** tag element.

For a list of all of the Perl methods available in the current version of Junos OS, see the chapter in the *Junos XML API Operational Developer Reference* that maps Junos XML request tag elements to CLI commands and Perl methods. For information about optional and required attributes for a particular Perl method, see the entry for the corresponding Junos XML request tag element in the chapter titled " Summary of Operational Request Tags" in the *Junos XML API Operational Developer Reference*.

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CHAPTER 26

Writing Junos XML Protocol C Client Applications

In this section, we offer two examples of using C to create client applications to access routers, switches, and security devices running Junos OS. The first example shows how to establish a Junos XML protocol session. The second example, shows how to retrieve and manipulate device configurations using C.

- Establishing a Junos XML Protocol Session on page 1013
- Accessing and Editing Device Configurations on page 1014

Establishing a Junos XML Protocol Session

The following example illustrates how a client application written in C can use the SSH or Telnet protocol to establish a Junos XML protocol connection and session. In the line that begins with the string **execlp**, the client application invokes the **ssh** command. (Substitute the **telnet** command if appropriate.) The ***routing-platform*** argument to the **execlp** routine specifies the hostname or IP address of the Junos XML protocol server device. The **junoscript** argument is the command that converts the connection to a Junos XML protocol session.

For more information about Junos XML protocol sessions, see "Controlling the Junos XML Management Protocol Session" on page 797.

```
int ipipes[ 2 ], opipes[ 2 ];
pid_t pid;
int rc;
char buf[ BUFSIZ ];

if (pipe(ipipes) <0 || pipe(opipes) <0)
  err(1, "pipe failed");

pid = fork( );
if (pid <0)
  err(1, "fork failed");

if (pid == 0) {
  dup2(opipes[ 0 ], STDIN_FILENO);
  dup2(ipipes[ 1 ], STDOUT_FILENO);
  dup2(ipipes[ 1 ], STDERR_FILENO);
```

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```
    close(ipipes[ 0 ]); /* close read end of pipe */
    close(ipipes[ 1 ]); /* close write end of pipe */
    close(opipes[ 0 ]); /* close read end of pipe */
    close(opipes[ 1 ]); /* close write end of pipe */

    execlp("ssh", "ssh", "-x",  routing-platform  , "junoscript", NULL);
    err (1, "unable to execute: ssh %s junoscript," device);
  }

  close(ipipes[ 1 ]); /* close write end of pipe */
  close(opipes[ 0 ]); /* close read end of pipe */

  if (write(opipes[ 1 ], initial_handshake, strlen(initial_handshake)) <0 )
    err(1, "writing initial handshake failed");

  rc=read(ipipes[ 0 ], buf, sizeof(buf));
  if (rc <0)
     err(1, "read initial handshake failed");
```

Accessing and Editing Device Configurations

This example code shows a script that can be used to access, manipulate and commit device configurations using C.

```
//--Includes--//
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/resource.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>
#include <fcntl.h>
#include <errno.h>
#include <libxml/parser.h>
#include <libxml/xpath.h>

//--Defines--//
//#define PRINT
   //--Toggles printing of all data to and from js server--//

//--Global Variables and Initialization--//
int sockfd;
char *xmlns_start_ptr = NULL;
char *xmlns_end_ptr = NULL;
int sock_bytes, pim_output_len, igmp_output_len, count_a, count_x, count_y,
      count_z, repl_str_len, orig_len, up_to_len, remain_len, conf_chg;
struct sockaddr_in serv_addr;
struct hostent *server;
char temp_buff[1024];        //--Temporary buffer used when --//
                             //--sending js configuration commands--//
char rcvbuffer[255];         //--Stores data from socket--//
char *pim_output_ptr = NULL;   //--Pointer for pim_output from socket--//
                             //--buffer--//
char *igmp_output_ptr = NULL;   //--Pointer for igmp_output from socket buffer--//
```


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```
char small_buff[2048];       //--Buffer to support js communication--//
char jserver[16];            //--Junos XML protocol server IP address--//
int jport = 3221;            //--Junos XML protocol server port --//
                             //--(xnm-clear-text)--//
char msource[16];            //--Multicast source of group being
                             //--configured under igmp--//
char minterface[16];         //--Local multicast source interface--//
                             //--###change in igmp_xpath_ptr as well###--//
xmlDocPtr doc;               //--Pointer struct for parsing XML--//
xmlChar *pim_xpath_ptr =
      (xmlChar*) "/rpc-reply/pim-join-information/join-family
       /join-group[upstream-state-flags/local-source]
       /multicast-group-address";
xmlChar *temp_xpath_ptr =
      (xmlChar*) "/rpc-reply/igmp-group-information
      /mgm-interface-groups/mgm-group
      [../interface-name = '%s']/multicast-group-address";
xmlChar *igmp_xpath_ptr = NULL;
xmlNodeSetPtr nodeset;
xmlXPathObjectPtr pim_result;   //--Pointer for pim result xml parsing--//
xmlXPathObjectPtr igmp_result;  //--Pointer for igmp result xml parsing--//
xmlChar *keyword_ptr = NULL;    //--Pointer for node text--//
char pim_result_buff[128][64];  //--Char array to store pim xPath results--//
char igmp_result_buff[128][64]; //--Char array to store igmp xPath results--//

//--js commands-//
char js_handshake1[64] = "<?xml version=\"1.0\" encoding=\"us-ascii\"?>\n";
char js_handshake2[128] = "<junoscript version=\"1.0\"
      hostname=\"client1\" release=\"8.4R1\">\n";
char js_login[512] = "<rpc>\n<request-login>\n<username>lab</username>
      \n<challenge-response>Lablab</challenge-response>
      \n</request-login>\n</rpc>\n";
char js_show_pim[512] = "<rpc>\n<get-pim-join-information>
      \n<extensive/></get-pim-join-information></rpc>\n";
char js_show_igmp[512] = "<rpc>\n<get-igmp-group-information/>\n</rpc>\n";
char js_rmv_group[512] = "<rpc>\n<load-configuration>\n<configuration>
      \n<protocols>\n<igmp>\n<interface>\n<name>%s</name>
      \n<static>\n<group delete='delete'>\n<name>%s</name>
      \n</group>\n</static>\n</interface>\n</igmp>\n</protocols>
      \n</configuration>\n</load-configuration>\n</rpc>\n\n\n\n\n";
char js_add_group[512] = "<rpc>\n<load-configuration>
      \n<configuration>\n<protocols>\n<igmp>
      \n<interface>\n<name>%s</name>\n<static>
      \n<group>\n<name>%s</name>\n<source>
      \n<name>%s</name>\n</source>\n</group>\n</static>
      \n</interface>\n</igmp>\n</protocols>\n</configuration>
      \n</load-configuration>\n</rpc>\n";
char js_commit[64] = "<rpc>\n<commit-configuration/>\n</rpc>\n";

//--Function prototypes--//
void error(char *msg);       //--Support error messaging--//
xmlDocPtr getdoc(char *buffer); //--Parses XML content and loads it into memory--//
xmlXPathObjectPtr getnodeset (xmlDocPtr doc, xmlChar *xpath);
      //--Parses xml content for result node(s) from XPath search--//

//--Functions--//
```

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```
void error(char *msg) {
 perror(msg);
 exit(0);
}

xmlDocPtr getdoc(char *buffer) {

 xmlDocPtr doc;

 doc = xmlReadMemory(buffer, strlen((char *)buffer), "temp.xml", NULL, 0);
  if (doc == NULL ) {
   fprintf(stderr,"Document not parsed successfully. \n");
   return NULL;
  } else {
   #ifdef PRINT
   printf("Document parsed successfully. \n");
   #endif
  }
  return doc;
 }

 xmlXPathObjectPtr getnodeset (xmlDocPtr doc, xmlChar *xpath) {

  xmlXPathContextPtr context;
  xmlXPathObjectPtr result;

  context = xmlXPathNewContext(doc);
  if (context == NULL) {
   printf("Error in xmlXPathNewContext\n");
   return NULL;
  }
  result = xmlXPathEvalExpression(xpath, context);
  xmlXPathFreeContext(context);
  if (result == NULL) {
   printf("Error in xmlXPathEvalExpression\n");
   return NULL;
  }
  if(xmlXPathNodeSetIsEmpty(result->nodesetval)) {
   xmlXPathFreeObject(result);
   #ifdef PRINT
   printf("No result\n");
   #endif
   return NULL;
  }
  return result;
 }

//--Main--//
 int main(int argc, char **argv) {

  if(argc != 4) {
   printf("\nUsage: %s <device Address> <Interface Name>
        <Multicast Source>\n\n", argv[0]);
   exit(0);
  } else {
   strcpy(jserver, argv[1]);
```


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```
 strcpy(minterface, argv[2]);
 strcpy(msource, argv[3]);
}
igmp_xpath_ptr = (xmlChar *)realloc((xmlChar *)igmp_xpath_ptr, 1024);
sprintf(igmp_xpath_ptr, temp_xpath_ptr, minterface);

sockfd = socket(AF_INET, SOCK_STREAM, 0);
server = gethostbyname(jserver);
bzero((char*) &serv_addr, sizeof(serv_addr));
serv_addr.sin_family = AF_INET;
bcopy((char*) server->h_addr, (char*)
      &serv_addr.sin_addr.sin_addr, server->h_length);
serv_addr.sin_port = htons(jport);

//--Connect to the js server--//
if(connect(sockfd, (struct sockaddr*)&serv_addr, sizeof(serv_addr)) < 0) {
 printf("Socket connect error\n");
}

if(fcntl(sockfd, F_SETOWN, getpid()) < 0)
error("Unable to set process owner to us\n");
printf("\nConnected to %s on port %d\n", jserver, jport);

//--Read data from the initial connect--//
sock_bytes = read(sockfd, rcvbuffer, 255);
#ifdef PRINT
printf("\n%s", rcvbuffer);
#endif

//--js intialization handshake--//
sock_bytes = write(sockfd, js_handshake1, strlen(js_handshake1));
      //--Send xml PI to js server--//
sock_bytes = write(sockfd, js_handshake2, strlen(js_handshake2));
      //--Send xml version and encoding to js server--//
sock_bytes = read(sockfd, rcvbuffer, 255);
      //--Read return data from sock buffer--//
rcvbuffer[sock_bytes] = 0;
printf("XML connection to the Junos XML protocol server has been initialized\n");
#ifdef PRINT
printf("\n%s", rcvbuffer);
#endif

//--js login--//
sock_bytes = write(sockfd, js_login, strlen(js_login));
      //--Send js command--//
while(strstr(small_buff, "superuser") == NULL) {
      //--Continue to read from the buffer until match--//
 sock_bytes = read(sockfd, rcvbuffer, 255);
 rcvbuffer[sock_bytes] = 0;
 strcat(small_buff, rcvbuffer);
       //--Copy buffer contents into pim_buffer--//
}
printf("Login completed to the Junos XML protocol server\n");
#ifdef PRINT
printf("%s\n", small_buff);  //--Print the small buff contents--//
#endif
```

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```
//regfree(&regex_struct);
 bzero(small_buff, strlen(small_buff));
       //--Erase small buffer contents--//

//--Begin the for loop here--//
 printf("Running continuous IGMP and PIM group comparison...\n\n");
 for(;;) {              //--Begin infinite for loop--//

//--Get PIM join information--//
  pim_output_ptr = (char *)realloc((char *)pim_output_ptr,
        strlen(js_handshake1));
        //--Allocate memory for xml PI concatenation --//
        //--to pim_output_ptr--//
  strcpy(pim_output_ptr, js_handshake1);
        //--Copy PI to pim_output_ptr--//
  sock_bytes = write(sockfd, js_show_pim, strlen(js_show_pim));
        //--Send show pim joins command--//
  while(strstr(pim_output_ptr, "</rpc-reply>") == NULL) {
        //--Continue to read from the buffer until match--//
   sock_bytes = read(sockfd, rcvbuffer, 255);
         //--Read from buffer--//
   rcvbuffer[sock_bytes] = 0;
   pim_output_len = strlen((char *)pim_output_ptr);
         //--Determine current string length of pim_output_ptr--//
   pim_output_ptr = (char *)realloc((char *)pim_output_ptr,
         strlen(rcvbuffer)+pim_output_len);
         //--Reallocate memory for additional data--//
   strcat(pim_output_ptr, rcvbuffer);
         //--Copy data from rcvbuffer to pim_output_ptr--//
  }

//--Remove the xmlns entry--//
  xmlns_start_ptr = strstr(pim_output_ptr, "xmlns=\"http:");
        //--Find the start of the xmlns entry--pointer --//
        //--returned by strstr()--//
  xmlns_end_ptr = strstr(xmlns_start_ptr, ">");
        //--Find the end of the xmlns entry--pointer --//
        //--returned by strstr()--//
  repl_str_len = xmlns_end_ptr - xmlns_start_ptr;
        //--Determine the length of the string to be replaced--//
  orig_len = strlen((char *)pim_output_ptr) + 1;
        //--Determine the original length of pim_output--//
  up_to_len = xmlns_start_ptr - pim_output_ptr;
        //--Determine the length up to the beginning --//
        //--of the xmlns entry--//
  remain_len = orig_len - (up_to_len + repl_str_len);
        //--Determine what the remaining length is minus --//
        //--what we are removing--//
  memcpy(xmlns_start_ptr - 1, xmlns_start_ptr + repl_str_len, remain_len);
        //--copy the remaining string to the beginning --//
        //--of the replacement string--//
  #ifdef PRINT
  printf("\n%s\n", pim_output_ptr);
  #endif
//--End of GET PIM join information--//
```


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```
//--Get IGMP membership information--//
  igmp_output_ptr = (char *)realloc((char *)igmp_output_ptr,
       strlen(js_handshake1));
  strcpy(igmp_output_ptr, js_handshake1);
  sock_bytes = write(sockfd, js_show_igmp, strlen(js_show_igmp));
  while(strstr(igmp_output_ptr, "</rpc-reply>") == NULL) {
   sock_bytes = read(sockfd, rcvbuffer, 255);
   rcvbuffer[sock_bytes] = 0;
   igmp_output_len = strlen((char *)igmp_output_ptr);
   igmp_output_ptr = (char *)realloc((char *)igmp_output_ptr,
        strlen(rcvbuffer)+igmp_output_len);
   strcat(igmp_output_ptr, rcvbuffer);
  }
  #ifdef PRINT
  printf("\n%s\n", igmp_output_ptr);
  #endif
//--End of GET IGMP membership information--//

//--Store xPath results for pim buffer search--//
  doc = getdoc(pim_output_ptr);
       //--Call getdoc() to parse XML in pim_output--//
  pim_result = getnodeset (doc, pim_xpath_ptr);
       //--Call getnodeset() which provides xPath result--//
  if (pim_result) {
   nodeset = pim_result->nodesetval;
   for (count_a=0; count_a < nodeset->nodeNr; count_a++) {
        //--Run through all node values found--//
    keyword_ptr = xmlNodeListGetString
         (doc, nodeset->nodeTab[count_a]->xmlChildrenNode, 1);
    strcpy(pim_result_buff[count_a], (char *)keyword_ptr);
         //--Copy each node value to its own array element--//
   #ifdef PRINT
   printf("PIM Groups: %s\n", pim_result_buff[count_a]);
        //--Print the node value--//
   #endif

   xmlFree(keyword_ptr);    //--Free memory used by keyword_ptr--//
   xmlChar *keyword_ptr = NULL;
   }
  xmlXPathFreeObject(pim_result);
       //--Free memory used by result--//
 }
 xmlFreeDoc(doc);          //--Free memory used by doc--//
 xmlCleanupParser();       //--Clean everything else--//
//--End of xPath search--//

//--Store xPath results for igmp buffer search--//
 doc = getdoc(igmp_output_ptr);
 igmp_result = getnodeset (doc, igmp_xpath_ptr);
 if (igmp_result) {
  nodeset = igmp_result->nodesetval;
  for (count_a=0; count_a < nodeset->nodeNr; count_a++) {
   keyword_ptr = xmlNodeListGetString
        (doc, nodeset->nodeTab[count_a]->xmlChildrenNode, 1);
   strcpy(igmp_result_buff[count_a], (char *)keyword_ptr);
   #ifdef PRINT
```

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```
    printf("IGMP Groups: %s\n", igmp_result_buff[count_a]);
    #endif

    xmlFree(keyword_ptr);
    xmlChar *keyword_ptr = NULL;
   }
   xmlXPathFreeObject(igmp_result);
  }
  xmlFreeDoc(doc);
  xmlCleanupParser();
 //--End of xPath search--//

 //--Code to compare pim groups to configured igmp static membership--//
  conf_chg = 0;
  count_x=0;              //--Track pim groups--//
  count_y=0;              //--Track igmp groups--//
  count_z=0;       //--Track matches (if set to 1, igmp group matched pim group)--//
  while(strstr(pim_result_buff[count_x], "2") != NULL) {
        //--Run through igmp pim groups--//
   if(strstr(igmp_result_buff[count_y], "2") == NULL) {
    count_z = 0;
    conf_chg = 1;
   }
   while(strstr(igmp_result_buff[count_y], "2") != NULL) {
         //--For each pim group, run through all igmp groups--//
    if(strcmp(igmp_result_buff[count_y], pim_result_buff[count_x]) == 0) {
          //--If igmp group matches pim group, set z to 1 --//
          //-- (ie  count_z=1; --//
          //--Set z to 1 if there was a match (ie - the static --//
          //--membership is configured)--//
    }
    count_y++;          //--Increment igmp result buffer--//
   }
   if(count_z == 0) {      //--If no igmp group matched the --//
                    //--pim group (z stayed at 0), configure--//
                    //--static membership--//
    printf("Adding this group to igmp: %s\n", pim_result_buff[count_x]);
    sprintf(temp_buff, js_add_group, minterface,
         pim_result_buff[count_x], msource);
         //--Copy js_add_group with pim group to temp_buff--//
    #ifdef PRINT
    printf("%s", temp_buff);
    #endif
    sock_bytes = write(sockfd, temp_buff, strlen(temp_buff));
    while(strstr(small_buff, "</rpc-reply>") == NULL) {
     sock_bytes = read(sockfd, rcvbuffer, 255);
     rcvbuffer[sock_bytes] = 0;
     strcat(small_buff, rcvbuffer);
    }
    #ifdef PRINT
    printf("%s\n", small_buff);
    #endif
    bzero(small_buff, strlen(small_buff));
          //--Erase (copy all 0's) small buffer contents--//
    bzero(temp_buff, strlen(temp_buff));
          //--Erase temp_buff contents--//
```


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```
    conf_chg = 1;
          //--Set conf_chg value to 1 to signify that a --//
          //--commit is needed--//
   }
   count_x++;          //--increment pim result buffer--//
   count_y=0;          //--reset igmp result buffer to start--//
                       //-- at first element--//
   count_z=0;          //--reset group match to 0 --//
                       //--(config needed due to no match)--/
  }

 //--Code for comparing igmp static membership to pim groups--//
  count_x=0;
  count_y=0;
  count_z=0;
  while(strstr(igmp_result_buff[count_y], "2") != NULL) {
   if(strstr(pim_result_buff[count_x], "2") == NULL) {
    count_z = 0;
    conf_chg = 1;
   }
   while(strstr(pim_result_buff[count_x], "2") != NULL) {
    if(strcmp(pim_result_buff[count_x], igmp_result_buff[count_y]) == 0) {
     count_z = 1;
    }
    count_x++;
   }
   if(count_z == 0) {
    printf("Removing this group from igmp: %s\n", igmp_result_buff[count_y]);
    sprintf(temp_buff, js_rmv_group, minterface, igmp_result_buff[count_y]);
    #ifdef PRINT
    printf("%s", temp_buff);
    #endif
    sock_bytes = write(sockfd, temp_buff, strlen(temp_buff));
    while(strstr(small_buff, "</rpc-reply>") == NULL) {
     sock_bytes = read(sockfd, rcvbuffer, 255);
     rcvbuffer[sock_bytes] = 0;
     strcat(small_buff, rcvbuffer);
    }
    #ifdef PRINT
    printf("%s\n", rcvbuffer);
    #endif
    bzero(small_buff, strlen(small_buff));
    bzero(temp_buff, strlen(temp_buff));
    conf_chg = 1;
   }
   count_y++;
   count_x=0;
   count_z=0;
  }

  if(conf_chg == 1) {
   sock_bytes = write(sockfd, js_commit, strlen(js_commit));
   while(strstr(small_buff, "</rpc-reply>") == NULL) {
    sock_bytes = read(sockfd, rcvbuffer, 255);
    rcvbuffer[sock_bytes] = 0;
    strcat(small_buff, rcvbuffer);
```

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```
    }
    bzero(small_buff, strlen(small_buff));
    printf("\nCommitted configuration change\n");
   } else {
    #ifdef PRINT
    printf("\nNo configuration changes made\n");
    #endif
   }
   #ifdef PRINT
   printf("\n%s\n", small_buff);
   #endif

  //--Cleanup before next round of checks--//
   bzero(rcvbuffer, strlen(rcvbuffer));
         //--Erase contents of rcvbuffer--//
   char *xmlns_start_ptr = NULL;
         //--Nullify the contents--//
   char *xmlns_end_ptr = NULL;
         //--Nullify the contents--//
   for(count_x = 0; count_x < 129; count_x++) {
         //--Erase contents of both pim_result_buff and igmp_result_buff--//
    bzero(pim_result_buff[count_x], strlen(pim_result_buff[count_x]));
    bzero(igmp_result_buff[count_x], strlen(igmp_result_buff[count_x]));
   }
  }
}
```


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PART 5

Junos XML API Configuration Reference for Security Devices

This section lists the configuration tag elements that are specific to devices belonging to:

- J Series
- SRX Series

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- Tag Elements Beginning with B on page 1059
- Tag Elements Beginning with C on page 1069
- Tag Elements Beginning with D on page 1103
- Tag Elements Beginning with E on page 1303
- Tag Elements Beginning with F on page 1317
- Tag Elements Beginning with G on page 1423
- Tag Elements Beginning with H on page 1435
- Tag Elements Beginning with I on page 1443
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- Tag Elements Beginning with L on page 1499
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- Tag Elements Beginning with O on page 1557
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- Tag Elements Beginning with Q on page 1683
- Tag Elements Beginning with R on page 1685
- Tag Elements Beginning with S on page 1717
- Tag Elements Beginning with T on page 1779
- Tag Elements Beginning with U on page 1863
- Tag Elements Beginning with V on page 1875
- Tag Elements Beginning with W on page 1901

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- Tag Elements Beginning with X on page 1911
- Tag Elements Beginning with Z on page 1913

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CHAPTER 27

Tag Elements Beginning with A

This chapter lists the configuration tag elements that have names beginning with the letter *a*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<access-point> configuration/wlan

Usage

```
<configuration>
 <wlan>
  <access-point>
   <name>name</name> <!-- identifier -->
   <description>description</description>
   <mac-address>mac-address</mac-address>
   <location>location</location>
   <external>...</external>
   <access-point-options>...</access-point-options>
   <logging-options>...</logging-options>
   <radio>...</radio>
  </access-point>
 </wlan>
</configuration>
```

Description WLAN access point configuration

Contents <name>—Specify the access point name

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<description>—Specify the access point description

<mac-address>—Access point ethernet port MAC address

<location>—Location of the access point

<external>—External type access point

<access-point-options>—Configure access point options

<logging-options>—Configure access point logging options

<radio>—Access point radio settings

<access-point-options> configuration/wlan/access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <country>...</country>
    <station-mac-filter>...</station-mac-filter>
   </access-point-options>
  </access-point>
 </wlan>
</configuration>
```

Description Configure access point options

Contents <country>—Country name

<station-mac-filter>—

<access-point-queues> configuration/wlan/access-point/radio/quality-of-service

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <voice-queue>...</voice-queue>
      <video-queue>...</video-queue>
      <best-effort-queue>...</best-effort-queue>
      <background-queue>...</background-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
```


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```
</configuration>
```

Description Configure the access point queues

Contents <voice-queue>—Configure voice queue

<video-queue>—Configure video queue

<best-effort-queue>—Configure best effort queue

<background-queue>—Configure background queue

<action> configuration/security/gprs/gtp/profile/apn/imsi-prefix

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <apn>
      <imsi-prefix>
       <action>
        <pass/>
        <drop/>
        <selection>...</selection>
       </action>
      </imsi-prefix>
     </apn>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Configure GTP profile APN action

Contents <pass>—Pass all selection modes for this APN

<drop>—Drop all selection modes for this APN

<selection>—Allowed selection modes for this APN

<action> configuration/protocols/oam/ethernet/connectivity-fault-management/action-profile

Usage

```
<configuration>
 <protocols>
  <oam>
```

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```
    <ethernet>
     <connectivity-fault-management>
      <action-profile>
       <action>
        <interface-down/>
       </action>
      </action-profile>
     </connectivity-fault-management>
    </ethernet>
   </oam>
  </protocols>
</configuration>
```

Description

Contents <interface-down>—Mark the interface as down

<action-profile> configuration/security/datapath-debug

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <action-profile>
    <profile-name>profile-name</profile-name> <!-- identifier -->
    <preserve-trace-order/>
    <record-pic-history/>
    <event>...</event>
    <module>...</module>
   </action-profile>
  </datapath-debug>
 </security>
</configuration>
```

Description Action profile definitions

Contents <profile-name>—Name of the action profile

<preserve-trace-order>—Preserve trace order (has performance overhead)

<record-pic-history>—Record the PIC(s) in which the packet has been processed

<event>—

<module>—

<action-profile> configuration/protocols/oam/ethernet/connectivity-fault-management

Usage

```
<configuration>
```


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```
<protocols>
 <oam>
  <ethernet>
   <connectivity-fault-management>
    <action-profile>
    <action-profile-name>action-profile-name</action-profile-name> <!-- identifier
-->
      <event>...</event>
      <action>...</action>
      <default-actions>...</default-actions>
    </action-profile>
   </connectivity-fault-management>
  </ethernet>
 </oam>
</protocols>
</configuration>
```

Description Action profiles to use when one or more remote maintenance association endpoints are down

Contents <action-profile-name>—Name of action profile

<event>—Events that need to be monitored

<action>—

<default-actions>—Action that needs to be taken

<address> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <address>
     <address/>
    </address>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Addresses or hostnames of peer:1 primary, upto 4 backups

Contents <address>—

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<address> configuration/security/group-vpn/member/ike/gateway

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <gateway>
      <address>
       <value>value</value>
      </address>
     </gateway>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Addresses or hostnames of peer:1 primary, upto 4 backups

Contents <value>—Addresses or hostnames of peer:1 primary, upto 4 backups

<address> configuration/security/gprs/sctp/profile/limit/rate

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <limit>
      <rate>
       <address>
        <ip-address>ip-address</ip-address> <!-- identifier -->
        <sccp>sccp</sccp>
        <ssp>ssp</ssp>
        <sst>sst</sst>
       </address>
      </rate>
     </limit>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Rate limit for a list of IP addresses

Contents <ip-address>—IP address

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<sccp>—SCCP messages rate limit

<ssp>—SSP messages rate limit

<sst>—SST messages rate limit

<address> configuration/security/address-book

Usage

```
<configuration>
 <security>
  <address-book>
   <address>
    <address-name>address-name</address-name> <!-- identifier -->
    <description>description</description>
    <ip-prefix>ip-prefix</ip-prefix>
    <dns-name>...</dns-name>
    <wildcard-address>...</wildcard-address>
    <range-address>...</range-address>
   </address>
  </address-book>
 </security>
</configuration>
```

Description Define a security address

Contents <address-name>—Security address name

<description>—Text description of address

<ip-prefix>—Numeric IPv4 or IPv6 address with prefix

<dns-name>—DNS address name

<wildcard-address>—Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

<range-address>—Address range

<address> configuration/security/address-book/address-set

Usage

```
<configuration>
 <security>
  <address-book>
   <address-set>
    <address>
     <address-name>address-name</address-name> <!-- identifier -->
    </address>
   </address-set>
  </address-book>
 </security>
```

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```
</configuration>
```

Description Address to be included in this set

Contents <address-name>—Security address name

<address> configuration/security/nat/source/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <address>
      <ipaddr>ipaddr</ipaddr> <!-- identifier -->
      <to>...</to>
     </address>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```

Description Add address to pool

Contents <ipaddr>—IPv4 or IPv6 address or address range

<to>—Upper limit of address range

<address> configuration/security/nat/destination/pool

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <pool>
     <address>
      <ipaddr>ipaddr</ipaddr> <!-- mandatory -->
      <to>...</to>
      <port>port</port>
     </address>
    </pool>
   </destination>
  </nat>
 </security>
</configuration>
```


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Description Add address or address range to pool

Contents <ipaddr>—IPv4 or IPv6 address or address range

<to>—Upper limit of address range

<port>—Specify the port value

<address> configuration/security/nat/proxy-arp/interface

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-arp>
    <interface>
     <address>
      <ipaddr>ipaddr</ipaddr> <!-- identifier -->
      <to>...</to>
     </address>
    </interface>
   </proxy-arp>
  </nat>
 </security>
</configuration>
```

Description Proxy ARP address

Contents <ipaddr>—Address or address range

<to>—Upper limit of address range

<address> configuration/security/nat/proxy-ndp/interface

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-ndp>
    <interface>
     <address>
      <ipv6addr>ipv6addr</ipv6addr> <!-- identifier -->
      <to>...</to>
     </address>
    </interface>
   </proxy-ndp>
  </nat>
 </security>
</configuration>
```

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Description Proxy ndp address

Contents <ipv6addr>—Address or address range

<to>—Upper limit of address range

<address> configuration/security/zones/security-zone/address-book

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address>
      <address-name>address-name</address-name> <!-- identifier -->
      <description>description</description>
      <ip-prefix>ip-prefix</ip-prefix>
      <dns-name>...</dns-name>
      <wildcard-address>...</wildcard-address>
      <range-address>...</range-address>
     </address>
    </address-book>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Define a security address

Contents <address-name>—Security address name

<description>—Text description of address

<ip-prefix>—Numeric IPv4 or IPv6 address with prefix

<dns-name>—DNS address name

<wildcard-address>—Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

<range-address>—Address range

<address> configuration/security/zones/security-zone/address-book/address-set

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address-set>
```


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```
      <address>
       <address-name>address-name</address-name> <!-- identifier -->
      </address>
     </address-set>
    </address-book>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Address to be included in this set

Contents <address-name>—Security address name

<address-book> configuration/security

Usage

```
<configuration>
 <security>
  <address-book>
   <global/>
   <book-name/>
   <description>description</description>
   <address>...</address>
   <address-set>...</address-set>
   <attach>...</attach>
  </address-book>
 </security>
</configuration>
```

Description Security address book

Contents <global>—Default global address book name

<book-name>—Address book name

<description>—Text description of address book

<address>—Define a security address

<address-set>—Define a security address set

<attach>—Attach this address book to interface, zone or routing-instance

<address-book> configuration/security/zones/security-zone

Usage

```
<configuration>
 <security>
  <zones>
```

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```
<security-zone>
 <address-book>
  <address>...</address>
  <address-set>...</address-set>
 </address-book>
</security-zone>
</zones>
</security>
</configuration>
```

Description Address book entries

Contents <address>—Define a security address

<address-set>—Define a security address set

<address-set> configuration/security/address-book

Usage

```
<configuration>
 <security>
  <address-book>
   <address-set>
    <address-set-name>address-set-name</address-set-name> <!-- identifier -->
    <description>description</description>
    <address>...</address>
    <address-set>...</address-set>
   </address-set>
  </address-book>
 </security>
</configuration>
```

Description Define a security address set

Contents <address-set-name>—Security address-set name

<description>—Text description of address set

<address>—Address to be included in this set

<address-set>—Define an address-set name

<address-set> configuration/security/address-book/address-set

Usage

```
<configuration>
 <security>
  <address-book>
   <address-set>
    <address-set>
```


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```
      <address-set-name>address-set-name</address-set-name> <!-- identifier -->
     </address-set>
    </address-set>
   </address-book>
  </security>
</configuration>
```

Description Define an address-set name

Contents <address-set-name>—

<address-set> configuration/security/zones/security-zone/address-book

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address-set>
      <address-set-name>address-set-name</address-set-name> <!-- identifier -->

      <description>description</description>
      <address>...</address>
      <address-set>...</address-set>
     </address-set>
    </address-book>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Define a security address set

Contents <address-set-name>—Security address-set name

<description>—Text description of address set

<address>—Address to be included in this set

<address-set>—Define an address-set name

<address-set> configuration/security/zones/security-zone/address-book/address-set

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
```

```
        <address-book>
         <address-set>
          <address-set>
           <address-set-name>address-set-name</address-set-name> <!-- identifier
-->
          </address-set>
         </address-set>
        </address-book>
       </security-zone>
      </zones>
     </security>
    </configuration>
```

Description Define an address-set name

Contents <address-set-name>—

<admin-authentication> configuration/wlan

Usage

```
<configuration>
 <wlan>
  <admin-authentication>
   <encrypted-password>encrypted-password</encrypted-password>
  </admin-authentication>
 </wlan>
</configuration>
```

Description Authentication information for WLAN access points

Contents <encrypted-password>—Encrypted password

<administrator> configuration/security/pki/ca-profile

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <administrator>
     <email-address>email-address</email-address>
    </administrator>
   </ca-profile>
  </pki>
 </security>
</configuration>
```

Description Administrator information

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Contents <email-address>—Administrator e-mail to which to send certificate requests

<aging> configuration/security/flow

Usage

```
<configuration>
 <security>
  <flow>
   <aging>
    <early-ageout>early-ageout</early-ageout>
    <low-watermark>low-watermark</low-watermark>
    <high-watermark>high-watermark</high-watermark>
   </aging>
  </flow>
 </security>
</configuration>
```

Description Aging configuration

Contents <early-ageout>—Delay before device declares session invalid

<low-watermark>—Percentage of session-table capacity at which aggressive aging-out ends

<high-watermark>—Percentage of session-table capacity at which aggressive aging-out starts

<alarms> configuration/security

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>...</potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure security alarms

Contents <potential-violation>—Configure potential security violations

<alg> configuration/security

Usage

```
<configuration>
 <security>
  <alg>
```

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```
    <traceoptions>...</traceoptions>
    <alg-manager>...</alg-manager>
    <alg-support-lib>...</alg-support-lib>
    <dns>...</dns>
    <ftp>...</ftp>
    <h323>...</h323>
    <mgcp>...</mgcp>
    <msrpc>...</msrpc>
    <sunrpc>...</sunrpc>
    <real>...</real>
    <rsh>...</rsh>
    <rtsp>...</rtsp>
    <sccp>...</sccp>
    <sip>...</sip>
    <sql>...</sql>
    <talk>...</talk>
    <tftp>...</tftp>
    <pptp>...</pptp>
    <ike-esp-nat>...</ike-esp-nat>
   </alg>
  </security>
</configuration>
```

Description Configure ALG security options

Contents <traceoptions>—ALG trace options

<alg-manager>—Configure ALG-MANAGER

<alg-support-lib>—Configure ALG-SUPPORT-LIB

<dns>—Configure DNS ALG

<ftp>—Configure FTP ALG

<h323>—Configure H.323 ALG

<mgcp>—Configure MGCP ALG

<msrpc>—Configure MSRPC ALG

<sunrpc>—Configure SUNRPC ALG

<real>—Configure Real Audio/Video ALG

<rsh>—Configure RSH ALG

<rtsp>—Configure RTSP ALG

<sccp>—Configure SCCP ALG

<sip>—Configure SIP ALG

<sql>—Configure SQL ALG

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<talk>—Configure Talk ALG

<tftp>—Configure TFTP ALG

<pptp>—Configure PPTP ALG

<ike-esp-nat>—Configure IKE-ESP ALG with NAT

<alg-manager> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <alg-manager>
    <traceoptions>...</traceoptions>
   </alg-manager>
  </alg>
 </security>
</configuration>
```

Description Configure ALG-MANAGER

Contents <traceoptions>—ALG-MANAGER trace options

<alg-support-lib> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <alg-support-lib>
    <traceoptions>...</traceoptions>
   </alg-support-lib>
  </alg>
 </security>
</configuration>
```

Description Configure ALG-SUPPORT-LIB

Contents <traceoptions>—ALG-SUPPORT-LIB trace options

<all-tcp> configuration/security/flow/tcp-mss

Usage

```
<configuration>
 <security>
  <flow>
   <tcp-mss>
```

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```
      <all-tcp>
       <mss>mss</mss> <!-- mandatory -->
      </all-tcp>
     </tcp-mss>
    </flow>
   </security>
  </configuration>
```

Description Enable MSS override for all packets

Contents <mss>—MSS value

<allow-list> configuration/wlan/access-point/access-point-options/station-mac-filter

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <station-mac-filter>
     <allow-list>
      <mac-address>...</mac-address>
     </allow-list>
    </station-mac-filter>
   </access-point-options>
  </access-point>
 </wlan>
</configuration>
```

Description Allow the MAC addresseses

Contents <mac-address>—List of allowed MAC addresses

<allowed-mac> configuration/ethernet-switching-options/secure-access-port/interface

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <interface>
    <allowed-mac>
     <value>value</value>
    </allowed-mac>
   </interface>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```


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Description Allowed MAC address on this interface

Contents <value>—Allowed MAC address on this interface

<analysis> configuration/security

Usage

```
<configuration>
 <security>
  <analysis>
   <no-report/>
  </analysis>
 </security>
</configuration>
```

Description Configure security analysis

Contents <no-report>—Stops security analysis reporting

<analyzer> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <name>name</name> <!-- identifier -->
   <ratio>ratio</ratio>
   <loss-priority>loss-priority</loss-priority>
   <input>...</input>
   <output>...</output>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Analyzer options

Contents <name>—Analyzer name

- low - Low loss priority
- high - High loss priority

<ratio>—Packet ratio

- low - Low loss priority
- high - High loss priority

<loss-priority>—Loss priority of mirrored packets

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- low - Low loss priority
- high - High loss priority

<input>—Ports and VLANs to monitor

<output>—Outgoing port or VLAN for mirrored packets

<anti-spam> configuration/security/utm/feature-profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-spam>
     <address-whitelist>address-whitelist</address-whitelist>
     <address-blacklist>address-blacklist</address-blacklist>
     <traceoptions>...</traceoptions>
     <sbl>...</sbl>
    </anti-spam>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure anti-spam feature

Contents <address-whitelist>—Anti-spam whitelist

<address-blacklist>—Anti-spam blacklist

<traceoptions>—Trace options for anti-spam feature

<sbl>—SBL settings

<anti-spam> configuration/security/utm/utm-policy

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <anti-spam>
     <smtp-profile>smtp-profile</smtp-profile>
    </anti-spam>
   </utm-policy>
  </utm>
 </security>
</configuration>
```


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Description Anti-spam profile

Contents <smtp-profile>—Anti-spam profile

<anti-virus> configuration/security/utm/feature-profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <mime-whitelist>...</mime-whitelist>
     <url-whitelist>url-whitelist</url-whitelist>
     <type>type</type>
     <traceoptions>...</traceoptions>
     <kaspersky-lab-engine>...</kaspersky-lab-engine>
     <juniper-express-engine>...</juniper-express-engine>
     <sophos-engine>...</sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure anti-virus feature

Contents <mime-whitelist>—Anti-virus MIME whitelist

- sophos-engine - Anti-virus sophos-engine
- kaspersky-lab-engine - Anti-virus kaspersky-lab-engine type
- juniper-express-engine - Anti-virus juniper-express-engine type

<url-whitelist>—Anti-virus URL white list

- sophos-engine - Anti-virus sophos-engine
- kaspersky-lab-engine - Anti-virus kaspersky-lab-engine type
- juniper-express-engine - Anti-virus juniper-express-engine type

<type>—Anti-virus engine type

- sophos-engine - Anti-virus sophos-engine
- kaspersky-lab-engine - Anti-virus kaspersky-lab-engine type
- juniper-express-engine - Anti-virus juniper-express-engine type

<traceoptions>—Trace options for anti-virus feature

<kaspersky-lab-engine>—Anti-virus kaspersky-lab-engine profile or pattern-update

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<juniper-express-engine>—Anti-virus juniper-express-engine profile or pattern update

<sophos-engine>—Anti-virus sophos-engine

<anti-virus> configuration/security/utm/utm-policy

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <anti-virus>
     <http-profile>http-profile</http-profile>
     <ftp>...</ftp>
     <smtp-profile>smtp-profile</smtp-profile>
     <pop3-profile>pop3-profile</pop3-profile>
     <imap-profile>imap-profile</imap-profile>
    </anti-virus>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description UTM policy anti-virus profile

Contents <http-profile>—Anti-virus profile

<ftp>—FTP profile

<smtp-profile>—Anti-virus profile

<pop3-profile>—Anti-virus profile

<imap-profile>—Anti-virus profile

<apn> configuration/security/gprs/gtp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <apn>
      <pattern-string>pattern-string</pattern-string> <!-- identifier -->
      <imsi-prefix>...</imsi-prefix>
     </apn>
    </profile>
   </gtp>
  </gprs>
 </security>
```


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```
</configuration>
```

Description GTP Access Point Name (APN) filter

Contents <pattern-string>—Specific APN pattern string

<imsi-prefix>—Specific filter prefix digits for International Mobile Subscriber Identification(IMSI)

<application> configuration/security/alarms/potential-violation/policy

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <policy>
     <application>
      <threshold>threshold</threshold>
      <duration>duration</duration>
      <size>size</size>
     </application>
    </policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure application type of policy violation

Contents <threshold>—Number of application matches to raise alarm

<duration>—Time window matches must occur within

<size>—Total application number that can be done policy violation check concurrently

<application> configuration/applications

Usage

```
<configuration>
 <applications>
  <application>
   <application-name>application-name</application-name> <!-- identifier -->
   <description>description</description>
   <term>...</term>
  </application>
 </applications>
</configuration>
```

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Description Define an application

Contents <application-name>—Application name

<description>—Text description of application

<term>—Define individual application protocols

<application> configuration/applications/application-set

Usage

```
<configuration>
 <applications>
  <application-set>
   <application>
    <application-name>application-name</application-name> <!-- identifier -->
   </application>
  </application-set>
 </applications>
</configuration>
```

Description Application to be included in the set

Contents <application-name>—Application name

<application-firewall> configuration/security

Usage

```
<configuration>
 <security>
  <application-firewall>
   <traceoptions>...</traceoptions>
   <rule-sets>...</rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Configure application-firewall rule-sets

Contents <traceoptions>—Rule-sets Tracing Options

<rule-sets>—Configure application-firewall rule-sets

<application-identification> configuration/services

Description

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<application-proxy> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
   <application-proxy>
    <traceoptions>...</traceoptions>
   </application-proxy>
  </utm>
 </security>
</configuration>
```

Description Trace options for application proxy

Contents <traceoptions>—Trace options for application proxy

<application-screen> configuration/security/alg/h323

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <application-screen>
     <unknown-message>...</unknown-message>
     <message-flood>...</message-flood>
    </application-screen>
   </h323>
  </alg>
 </security>
</configuration>
```

Description Configure application screens

Contents <unknown-message>—Configure ALG action on receiving an unknown message

<message-flood>—Configure Message flood ALG options

<application-screen> configuration/security/alg/mgcp

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <application-screen>
     <unknown-message>...</unknown-message>
     <message-flood>...</message-flood>
```

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```
        <connection-flood>...</connection-flood>
       </application-screen>
      </mgcp>
     </alg>
    </security>
   </configuration>
```

Description Configure application screens

Contents <unknown-message>—Configure ALG action on receiving an unknown message

<message-flood>—Set message flood ALG options

<connection-flood>—Set connection flood options

<application-screen> configuration/security/alg/sccp

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <application-screen>
     <unknown-message>...</unknown-message>
     <call-flood>...</call-flood>
    </application-screen>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description Configure application screens

Contents <unknown-message>—Configure ALG action on receiving an unknown message

<call-flood>—Configure call flood thresholds

<application-screen> configuration/security/alg/sip

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <application-screen>
     <unknown-message>...</unknown-message>
     <protect>...</protect>
    </application-screen>
   </sip>
  </alg>
```


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```
 </security>
</configuration>
```

Description Configure application screens

Contents <unknown-message>—Configure ALG action on receiving an unknown message

<protect>—Configure Protect options

<application-services> configuration/security/forwarding-process

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>
    <maximize-alg-sessions/>
    <maximize-cp-sessions>...</maximize-cp-sessions>

<session-distribution-mode>session-distribution-mode</session-distribution-mode>
    <maximize-idp-sessions>...</maximize-idp-sessions>
   </application-services>
  </forwarding-process>
 </security>
</configuration>
```

Description Configure application service options

Contents <maximize-alg-sessions>—Maximize ALG session capacity

- normal - Normal mode
- hash-based - Hash mode

<maximize-cp-sessions>—Maximize CP session capacity

- normal - Normal mode
- hash-based - Hash mode

<session-distribution-mode>—Session distribution mode

- normal - Normal mode
- hash-based - Hash mode

<maximize-idp-sessions>—Run security services in dedicated processes to maximize IDP session capacity

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<application-set> configuration/applications

Usage

```
<configuration>
 <applications>
  <application-set>
   <application-set-name>application-set-name</application-set-name> <!--
identifier -->
    <description>description</description>
    <application>...</application>
    <application-set>...</application-set>
  </application-set>
 </applications>
</configuration>
```

Description Define an application set

Contents <application-set-name>—Application set name

<description>—Text description of application set

<application>—Application to be included in the set

<application-set>—Define an application-set

<application-set> configuration/applications/application-set

Usage

```
<configuration>
 <applications>
  <application-set>
   <application-set>
    <application-set-name>application-set-name</application-set-name> <!--
identifier -->
    </application-set>
  </application-set>
 </applications>
</configuration>
```

Description Define an application-set

Contents <application-set-name>—Define an application-set name

<application-tracking> configuration/security

Usage

```
<configuration>
 <security>
  <application-tracking>
```


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```
    <disable/>
    <first-update-interval>first-update-interval</first-update-interval>
    <first-update/>
    <session-update-interval>session-update-interval</session-update-interval>
   </application-tracking>
  </security>
 </configuration>
```

Description Application tracking configuration

Contents <disable>—Disable Application tracking

<first-update-interval>—Interval when the first update message is sent

<first-update>—Generate Application tracking initial message when a session is created

<session-update-interval>—Frequency in which Application tracking update messages are generated

<applications> configuration

Usage

```
<configuration>
 <applications>
  <application>...</application>
  <application-set>...</application-set>
 </applications>
</configuration>
```

Description Define applications by protocol characteristics

Contents <application>—Define an application

<application-set>—Define an application set

<applications> configuration/protocols/dcbx/interface

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <interface>
    <applications>
     <fcoe>...</fcoe>
    </applications>
   </interface>
  </dcbx>
 </protocols>
</configuration>
```

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Description Configure application feature

Contents <fcoe>—Configure FCoE application feature

<arp-inspection> configuration/ethernet-switching-options/secure-access-port/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <arp-inspection>
     <forwarding-class>forwarding-class</forwarding-class>
    </arp-inspection>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Enable Dynamic ARP inspection on this VLAN

Contents <forwarding-class>—Forwarding class assigned to re-injected ARP packets

<attach> configuration/security/address-book

Usage

```
<configuration>
 <security>
  <address-book>
   <attach>
    <zone>...</zone>
   </attach>
  </address-book>
 </security>
</configuration>
```

Description Attach this address book to interface, zone or routing-instance

Contents <zone>—Define a zone to be attached

<authentication> configuration/security/ipsec/vpn/manual

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <manual>
```


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```
      <authentication>
       <algorithm>algorithm</algorithm> <!-- mandatory -->
       <key>...</key> <!-- mandatory -->
      </authentication>
     </manual>
    </vpn>
   </ipsec>
  </security>
 </configuration>
```

Description Define authentication parameters

Contents <algorithm>—Define authentication algorithm

- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm

<key>—Define an authentication key

<authentication-source> configuration/security/user-identification

Usage

```
<configuration>
 <security>
  <user-identification>
   <authentication-source>
    <local-authentication-table/>
    <unified-access-control/>
    <priority>priority</priority>
    <disable/>
   </authentication-source>
  </user-identification>
 </security>
</configuration>
```

Description Configure user-identification authentication-source

Contents <local-authentication-table>—Local-authentication-table

<unified-access-control>—Unified-access-control

<priority>—User-identification authentication-source priority

<disable>—Table disable

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<authentication-whitelist> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <authentication-whitelist>
   <mac>mac</mac> <!-- mandatory --> <!-- identifier -->
   <vlan-assignment>vlan-assignment</vlan-assignment>
   <interface>interface</interface>
  </authentication-whitelist>
 </ethernet-switching-options>
</configuration>
```

Description MAC authentication-whitelist configuration needed to bypass Authentication

Contents <mac>—MAC addresses to bypass authentication

<vlan-assignment>—VLAN name or 802.1q tag for the MAC address

<interface>—Interface on which authentication is bypassed

<authenticator> configuration/protocols/dot1x

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <authenticator>

<authentication-profile-name>authentication-profile-name</authentication-profile-name>

    <no-mac-table-binding/>
    <static>...</static>
    <interface>...</interface>
   </authenticator>
  </dot1x>
 </protocols>
</configuration>
```

Description 802.1X authenticator options

Contents <authentication-profile-name>—Access profile name to use for authentication

<no-mac-table-binding>—Disable association between mac table and dot1x

<static>—Static MAC configuration needed to bypass 802.1X

<interface>—802.1X interface specific options

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<auto-re-enrollment> configuration/security/pki

Usage

```
<configuration>
 <security>
  <pki>
   <auto-re-enrollment>
    <certificate-id>...</certificate-id>
   </auto-re-enrollment>
  </pki>
 </security>
</configuration>
```

Description Auto re-enroll of certificate

Contents <certificate-id>—Auto re-enrollment configuration for certificate-id

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CHAPTER 28

Tag Elements Beginning with B

This chapter lists the configuration tag elements that have names beginning with the letter *b*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<background-queue> configuration/wlan/access-point/radio/quality-of-service/access-point-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <background-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

       <minimum-contention-window>...</minimum-contention-window>
       <maximum-contention-window>...</maximum-contention-window>
       <maximum-burst>maximum-burst</maximum-burst>
      </background-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
```

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```
</configuration>
```

Description Configure background queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Minimum contention window size

<maximum-contention-window>—Maximum contention window size

<maximum-burst>—Specify maximum burst

<background-queue> configuration/wlan/access-point/radio/quality-of-service/station-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <background-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

        <minimum-contention-window>...</minimum-contention-window>
        <maximum-contention-window>...</maximum-contention-window>

<transmit-opportunity-limit>transmit-opportunity-limit</transmit-opportunity-limit>
      </background-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure background queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Specify minimum contention window size

<maximum-contention-window>—Specify maximum contention window size

<transmit-opportunity-limit>—Specify transmission opportunity limit

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<backup-options> configuration/interfaces/interface/unit

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <backup-options>
     <interface>interface</interface>
    </backup-options>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Backup interface configuration options

Contents <interface>—Backup interface

<best-effort-queue> configuration/wlan/access-point/radio/quality-of-service/access-point-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <best-effort-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

        <minimum-contention-window>...</minimum-contention-window>
        <maximum-contention-window>...</maximum-contention-window>
        <maximum-burst>maximum-burst</maximum-burst>
       </best-effort-queue>
      </access-point-queues>
     </quality-of-service>
    </radio>
   </access-point>
  </wlan>
</configuration>
```

Description Configure best effort queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Minimum contention window size

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<maximum-contention-window>—Maximum contention window size

<maximum-burst>—Specify maximum burst

<best-effort-queue> configuration/wlan/access-point/radio/quality-of-service/station-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <best-effort-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

       <minimum-contention-window>...</minimum-contention-window>
       <maximum-contention-window>...</maximum-contention-window>

<transmit-opportunity-limit>transmit-opportunity-limit</transmit-opportunity-limit>
      </best-effort-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure best effort queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Specify minimum contention window size

<maximum-contention-window>—Specify maximum contention window size

<transmit-opportunity-limit>—Specify transmission opportunity limit

<block-content-type> configuration/security/utm/feature-profile/content-filtering/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <profile>
      <block-content-type>
```


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```
            <activex/>
            <java-applet/>
            <exe/>
            <zip/>
            <http-cookie/>
           </block-content-type>
          </profile>
         </content-filtering>
        </feature-profile>
       </utm>
      </security>
     </configuration>
```

Description Content-filtering feature block content type

Contents <activex>—Block activex

<java-applet>—Block Java-applet

<exe>—Block Windows/dos exe file

<zip>—Block zip file

<http-cookie>—Block HTTP cookie

<block-message> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <profile>
       <block-message>
        <type>type</type>
        <url>url</url>
       </block-message>
      </profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Juniper enhanced block message settings

Contents <type>—Type of block message desired

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- custom-redirect-url - Custom redirect URL server

<url>—URL of block message

<block-mime> configuration/security/utm/feature-profile/content-filtering/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <profile>
      <block-mime>
       <list>list</list>
       <exception>exception</exception>
      </block-mime>
     </profile>
    </content-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Content-filtering feature block MIME

Contents <list>—Block MIME list

<exception>—Exception of block MIME list

<bpdu-block> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <bpdu-block>
   <interface>...</interface>
   <disable-timeout>disable-timeout</disable-timeout>
  </bpdu-block>
 </ethernet-switching-options>
</configuration>
```

Description Block BPDU on interface (BPDU Protect)

Contents <interface>—Interface name to block BPDU on

<disable-timeout>—Disable timeout for BPDU Protect

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<bpdu-timeout-action> configuration/protocols/stp/interface

Usage

```
<configuration>
 <protocols>
  <stp>
   <interface>
    <bpdu-timeout-action>
     <block/>
     <log/>
    </bpdu-timeout-action>
   </interface>
  </stp>
 </protocols>
</configuration>
```

Description Define action on BPDU expiry (Loop Protect)

Contents <block>—Block the interface

<log>—Log a message

<bpdu-timeout-action> configuration/protocols/rstp/interface

Usage

```
<configuration>
 <protocols>
  <rstp>
   <interface>
    <bpdu-timeout-action>
     <block/>
     <log/>
    </bpdu-timeout-action>
   </interface>
  </rstp>
 </protocols>
</configuration>
```

Description Define action on BPDU expiry (Loop Protect)

Contents <block>—Block the interface

<log>—Log a message

<bpdu-timeout-action> configuration/protocols/mstp/interface

Usage

```
<configuration>
 <protocols>
```

```
<mstp>
 <interface>
  <bpdu-timeout-action>
   <block/>
   <log/>
  </bpdu-timeout-action>
 </interface>
</mstp>
</protocols>
</configuration>
```

Description Define action on BPDU expiry (Loop Protect)

Contents <block>—Block the interface

<log>—Log a message

<bpdu-timeout-action> configuration/protocols/vstp/vlan-group/group/interface

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <interface>
      <bpdu-timeout-action>
       <block/>
       <log/>
      </bpdu-timeout-action>
     </interface>
    </group>
   </vlan-group>
  </vstp>
 </protocols>
</configuration>
```

Description Define action on BPDU expiry (Loop Protect)

Contents <block>—Block the interface

<log>—Log a message

<bpdu-timeout-action> configuration/protocols/vstp/vlan/interface

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
```


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```
      <interface>
       <bpdu-timeout-action>
        <block/>
        <log/>
       </bpdu-timeout-action>
      </interface>
     </vlan>
    </vstp>
   </protocols>
  </configuration>
```

Description Define action on BPDU expiry (Loop Protect)

Contents <block>—Block the interface

<log>—Log a message

<bridge> configuration/security/flow

Usage

```
<configuration>
 <security>
  <flow>
   <bridge>
    <block-non-ip-all/>
    <bypass-non-ip-unicast/>
    <no-packet-flooding>...</no-packet-flooding>
    <bpdu-vlan-flooding/>
   </bridge>
  </flow>
 </security>
</configuration>
```

Description Bridge configuration for flow

Contents <block-non-ip-all>—Block all non-IP and non-ARP traffic including broadcast/multicast

<bypass-non-ip-unicast>—Allow all non-IP (including unicast) traffic

<no-packet-flooding>—Stop IP flooding, send ARP/ICMP to trigger MAC learning

<bpdu-vlan-flooding>—Set 802.1D BPDU flooding based on VLAN

<broadcast-multicast-rate-limit> configuration/wlan/access-point/radio/radio-options

Usage

```
<configuration>
 <wlan>
  <access-point>
```

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```
<radio>
 <radio-options>
  <broadcast-multicast-rate-limit>
   <rate-limit>rate-limit</rate-limit>
   <rate-limit-bursts>rate-limit-bursts</rate-limit-bursts>
  </broadcast-multicast-rate-limit>
 </radio-options>
</radio>
</access-point>
</wlan>
</configuration>
```

Description Configure rate limit for broadcast and multicast traffic

Contents <rate-limit>—Rate limit

<rate-limit-bursts>—Rate limit bursts

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CHAPTER 29

Tag Elements Beginning with C

This chapter lists the configuration tag elements that have names beginning with the letter *c*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<ca-profile> configuration/security/pki

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <ca-profile-name>ca-profile-name</ca-profile-name> <!-- identifier -->
    <ca-identity>ca-identity</ca-identity> <!-- mandatory -->
    <routing-instance>routing-instance</routing-instance>
    <enrollment>...</enrollment>
    <revocation-check>...</revocation-check>
    <administrator>...</administrator>
   </ca-profile>
  </pki>
 </security>
</configuration>
```

Description Certificate authority profile configuration

Contents <ca-profile-name>—Name of certificate authority profile

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<ca-identity>—Certificate authority identifier

<routing-instance>—Use specified routing instance

<enrollment>—Enrollment parameters for certificate authority

<revocation-check>—Method for checking certificate revocations

<administrator>—Administrator information

<ca-profile> configuration/services/unified-access-control/infranet-controller

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <infranet-controller>
    <ca-profile>
     <value_keyword>value_keyword</value_keyword> <!-- identifier -->
    </ca-profile>
   </infranet-controller>
  </unified-access-control>
 </services>
</configuration>
```

Description Define a list of certificate authority

Contents <value_keyword>—Selected certificate authority

<ca-type> configuration/protocols/lldp-med/interface/location/civic-based

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <interface>
    <location>
     <civic-based>
      <ca-type>
       <ca-type>ca-type</ca-type> <!-- identifier -->
       <ca-value>ca-value</ca-value>
      </ca-type>
     </civic-based>
    </location>
   </interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description

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Contents <ca-type>—Address element type

<ca-value>—Address element value

<cache> configuration/security/utm/feature-profile/web-filtering/surf-control-integrated

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <cache>
       <timeout>timeout</timeout>
       <size>size</size>
      </cache>
     </surf-control-integrated>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description

Contents <timeout>—Surf control integrated cache timeout

<size>—Surf control integrated cache size

<cache> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <cache>
       <timeout>timeout</timeout>
       <size>size</size>
      </cache>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

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Description

Contents <timeout>—Juniper enhanced cache timeout

<size>—Juniper enhanced cache size

<calculation-weight> configuration/protocols/oam/ethernet/connectivity-fault-management/performance-monitoring/sla-iterator-profiles

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <performance-monitoring>
      <sla-iterator-profiles>
       <calculation-weight>
        <delay>delay</delay>
        <delay-variation>delay-variation</delay-variation>
       </calculation-weight>
      </sla-iterator-profiles>
     </performance-monitoring>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Configure delay and delay variation calculation weight

Contents <delay>—Weight used in delay calculation

<delay-variation>—Weight used in delay-variation calculation

<call-flood> configuration/security/alg/sccp/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <application-screen>
     <call-flood>
      <threshold>threshold</threshold>
     </call-flood>
    </application-screen>
   </sccp>
  </alg>
 </security>
</configuration>
```


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Description Configure call flood thresholds

Contents <threshold>—Calls per second per client

<caller> configuration/interfaces/interface/unit/dialer-options/incoming-map

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>
     <incoming-map>
      <caller>
       <caller-id>caller-id</caller-id> <!-- identifier -->
      </caller>
     </incoming-map>
    </dialer-options>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Caller Id to be screened

Contents <caller-id>—Caller ID (upto 15 digits)

<captive-portal> configuration/services/unified-access-control

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <captive-portal>
   <redirect-policy-name>redirect-policy-name</redirect-policy-name> <!-- identifier
-->
     <redirect-traffic>redirect-traffic</redirect-traffic> <!-- mandatory -->
     <redirect-url>redirect-url</redirect-url>
    </captive-portal>
   </unified-access-control>
  </services>
 </configuration>
```

Description Unauthenticated HTTP redirect

Contents <redirect-policy-name>—Redirect policy name

- unauthenticated - Redirect unauthenticated traffic
- all - Redirect all traffic

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<redirect-traffic>—Traffic to redirect

- unauthenticated - Redirect unauthenticated traffic
- all - Redirect all traffic

<redirect-url>—Redirect URL for unauthenticated users

<captive-portal> configuration/services

Usage

```
<configuration>
 <services>
  <captive-portal>

<authentication-profile-name>authentication-profile-name</authentication-profile-name>

   <traceoptions>...</traceoptions>
   <interface>...</interface>
   <secure-authentication>secure-authentication</secure-authentication>
   <custom-options>...</custom-options>
  </captive-portal>
 </services>
</configuration>
```

Description Captive Portal options

Contents <authentication-profile-name>—Access profile name to use for authentication

- http - Insecure plain-text HTTP will be used for Captive Portal authentication, username and password can be sniffed
- https - Encrypted HTTPS will be used for Captive Portal authentication

<traceoptions>—Trace options for CAPTIVE PORTAL

- http - Insecure plain-text HTTP will be used for Captive Portal authentication, username and password can be sniffed
- https - Encrypted HTTPS will be used for Captive Portal authentication

<interface>—Captive Portal interface specific options

- http - Insecure plain-text HTTP will be used for Captive Portal authentication, username and password can be sniffed
- https - Encrypted HTTPS will be used for Captive Portal authentication

<secure-authentication>—Set secure authentication using encrypted HTTPS or insecure authentication using plain-text HTTP

- http - Insecure plain-text HTTP will be used for Captive Portal authentication, username and password can be sniffed

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- https - Encrypted HTTPS will be used for Captive Portal authentication

<custom-options>—Captive Portal html user interface customization options

<capture-file> configuration/security/datapath-debug

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <capture-file>
    <filename>filename</filename> <!-- mandatory -->
    <format>format</format>
    <size>size</size>
    <files>files</files>
    <world-readable/>
   </capture-file>
  </datapath-debug>
 </security>
</configuration>
```

Description Packet capture options

Contents <filename>—Capture file name

- pcap - PCAP capture format
- internal - Internal capture format

<format>—Capture file format

- pcap - PCAP capture format
- internal - Internal capture format

<size>—Maximum file size

<files>—Maximum number of files

<world-readable>—Allow any user to read packet-capture files

<category> configuration/security/utm/feature-profile/web-filtering/surf-control-integrated/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <profile>
```

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```
            <category>
             <name>name</name> <!-- identifier -->
             <action>action</action>
            </category>
           </profile>
          </surf-control-integrated>
         </web-filtering>
        </feature-profile>
       </utm>
      </security>
     </configuration>
```

Description Surf control integrated category

Contents <name>—Surf control integrated category type name

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<action>—Surf control integrated category type action

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<category> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <profile>
       <category>
        <name>name</name> <!-- identifier -->
        <action>action</action>
       </category>
      </profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```


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Description Juniper enhanced category

Contents <name>—Name of Juniper enhanced category

- permit -
- log-and-permit -
- block -

<action>—Action to perform when web traffic matches category

- permit -
- log-and-permit -
- block -

<cellular-options> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <cellular-options>
    <gsm-options>...</gsm-options>
   </cellular-options>
  </interface>
 </interfaces>
</configuration>
```

Description Cellular interface specific options

Contents <gsm-options>—Interface specific GSM options

<certificate> configuration/security/ike/policy

Usage

```
<configuration>
 <security>
  <ike>
   <policy>
    <certificate>
     <local-certificate>local-certificate</local-certificate>
     <peer-certificate-type>peer-certificate-type</peer-certificate-type>
    </certificate>
   </policy>
  </ike>
 </security>
</configuration>
```

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Description Certificate configuration

Contents <local-certificate>—Local certificate identifier

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<peer-certificate-type>—Preferred type of certificate from peer

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<certificate> configuration/security/group-vpn/member/ike/policy

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <policy>
      <certificate>
       <local-certificate>local-certificate</local-certificate>
       <peer-certificate-type>peer-certificate-type</peer-certificate-type>
      </certificate>
     </policy>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Certificate configuration

Contents <local-certificate>—Local certificate identifier

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<peer-certificate-type>—Preferred type of certificate from peer

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<certificate> configuration/security/group-vpn/server/ike/policy

Usage

```
<configuration>
```


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```
<security>
 <group-vpn>
  <server>
   <ike>
    <policy>
     <certificate>
      <local-certificate>local-certificate</local-certificate>
      <peer-certificate-type>peer-certificate-type</peer-certificate-type>
     </certificate>
    </policy>
   </ike>
  </server>
 </group-vpn>
</security>
</configuration>
```

Description Certificate configuration

Contents <local-certificate>—Local certificate identifier

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<peer-certificate-type>—Preferred type of certificate from peer

- pkcs7 - PKCS7 encoding
- x509-signature - X509 signature encoding

<certificate-id> configuration/security/pki/auto-re-enrollment

Usage

```
<configuration>
 <security>
  <pki>
   <auto-re-enrollment>
    <certificate-id>
     <certificate-id-name>certificate-id-name</certificate-id-name> <!-- mandatory
--> <!-- identifier -->
      <ca-profile-name>ca-profile-name</ca-profile-name> <!-- mandatory -->
    <challenge-password>challenge-password</challenge-password> <!-- mandatory
-->

<re-enroll-trigger-time-percentage>re-enroll-trigger-time-percentage</re-enroll-trigger-time-percentage>
<!-- mandatory -->
      <re-generate-keypair/>
     </certificate-id>
    </auto-re-enrollment>
   </pki>
  </security>
 </configuration>
```

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Description Auto re-enrollment configuration for certificate-id

Contents <certificate-id-name>—Certificate identifier that needs auto re-enrollment

<ca-profile-name>—Name of certificate authority profile

<challenge-password>—Password used by CA for enrollment and revocation

<re-enroll-trigger-time-percentage>—Re-enrollment trigger time before expiration as percentage

<re-generate-keypair>—Generate new key-pair for auto-re-enrollment

<channel> configuration/wlan/access-point/radio/radio-options

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <radio-options>
     <channel>
      <number>number</number>
      <bandwidth>bandwidth</bandwidth>
      <primary>primary</primary>
     </channel>
    </radio-options>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure channel settings

Contents <number>—Provide channel selection

- 1 - Channel 1
- 2 - Channel 2
- 3 - Channel 3
- 4 - Channel 4
- 5 - Channel 5
- 6 - Channel 6
- 7 - Channel 7
- 8 - Channel 8
- 9 - Channel 9
- 10 - Channel 10

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- 11 - Channel 11
- 12 - Channel 12
- 13 - Channel 13
- 14 - Channel 14
- 36 - Channel 36
- 40 - Channel 40
- 44 - Channel 44
- 48 - Channel 48
- 52 - Channel 52
- 56 - Channel 56
- 60 - Channel 60
- 64 - Channel 64
- 100 - Channel 100
- 108 - Channel 108
- 112 - Channel 112
- 116 - Channel 116
- 120 - Channel 120
- 124 - Channel 124
- 128 - Channel 128
- 132 - Channel 132
- 136 - Channel 136
- 140 - Channel 140
- 149 - Channel 149
- 153 - Channel 153
- 157 - Channel 157
- 161 - Channel 161
- 165 - Channel 165
- auto - Automatically selected
- lower - Set lower channel as primary
- upper - Set upper channel as primary

<bandwidth>—Provide channel bandwidth in MHz(20/40)

- lower - Set lower channel as primary
- upper - Set upper channel as primary

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<primary>—Select primary channel

- lower - Set lower channel as primary
- upper - Set upper channel as primary

<cipher-suites> configuration/wlan/access-point/radio/virtual-access-point/security/wpa-personal

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-personal>
       <cipher-suites>
        <tkip/>
        <ccmp/>
        <both/>
       </cipher-suites>
      </wpa-personal>
     </security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Select the WPA cipher algorithm

Contents <tkip>—TKIP

<ccmp>—CCMP

<both>—Use both TKIP and CCMP cipher suites

<cipher-suites> configuration/wlan/access-point/radio/virtual-access-point/security/wpa-enterprise

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-enterprise>
       <cipher-suites>
        <tkip/>
        <ccmp/>
```


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```
            <both/>
           </cipher-suites>
          </wpa-enterprise>
         </security>
        </virtual-access-point>
       </radio>
      </access-point>
     </wlan>
    </configuration>
```

Description Select the WPA cipher algorithm

Contents <tkip>—TKIP

<ccmp>—CCMP

<both>—Use both TKIP and CCMP cipher suites

<circuit-id> configuration/ethernet-switching-options/secure-access-port/vlan/dhcp-option82

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <dhcp-option82>
     <circuit-id>
      <prefix>prefix</prefix>
      <use-interface-description/>
      <use-vlan-id/>
     </circuit-id>
    </dhcp-option82>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Configure DHCP option 82 circuit id

Contents <prefix>—Configure DHCP option 82 circuit id prefix

- hostname - Set hostname as the prefix

<use-interface-description>—Use interface description instead of name

<use-vlan-id>—Use VLAN id instead of name

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<civic-based> configuration/protocols/lldp-med/interface/location

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <interface>
    <location>
     <civic-based>
      <what>what</what>
      <country-code>country-code</country-code> <!-- mandatory -->
      <ca-type>...</ca-type>
     </civic-based>
    </location>
   </interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description Postal address

Contents <what>—Type of address

<country-code>—Two-letter country code

<ca-type>—

<client-identifier> configuration/interfaces/interface/unit/family/inet/dhcp

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet>
      <dhcp>
       <client-identifier>
        <ascii>ascii</ascii>
        <hexadecimal>hexadecimal</hexadecimal>
       </client-identifier>
      </dhcp>
     </inet>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description DHCP Server identifies a client by client-identifier value

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Contents <ascii>—Client identifier as an ASCII string

<hexadecimal>—Client identifier as a hexadecimal string

<clients> configuration/security/dynamic-vpn

Usage

```
<configuration>
 <security>
  <dynamic-vpn>
   <clients>
    <name>name</name> <!-- identifier -->
    <remote-protected-resources>...</remote-protected-resources> <!-- mandatory
-->
    <remote-exceptions>...</remote-exceptions>
    <ipsec-vpn>ipsec-vpn</ipsec-vpn> <!-- mandatory -->
    <user>...</user> <!-- mandatory -->
   </clients>
  </dynamic-vpn>
 </security>
</configuration>
```

Description Configure for remote access client

Contents <name>—Client config name

<remote-protected-resources>—IP/mask of remote protected resources

<remote-exceptions>—Ip/mask of exceptions being passthru

<ipsec-vpn>—IPSec VPN assigned to remote access client

<user>—Remote IPSec VPN users

<clocking> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <clocking>
    <external>...</external>
   </clocking>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <external>—

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<co-ordinate> configuration/protocols/lldp-med/interface/location

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <interface>
    <location>
     <co-ordinate>
      <longitude>longitude</longitude>
      <lattitude>lattitude</lattitude>
     </co-ordinate>
    </location>
   </interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description Address based on longitude and latitude coordinates

Contents <longitude>—Longitude vlaue

<lattitude>—Lattitude vlaue

<connection-flood> configuration/security/alg/mgcp/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <application-screen>
     <connection-flood>
      <threshold>threshold</threshold>
     </connection-flood>
    </application-screen>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description Set connection flood options

Contents <threshold>—Connection flood threshold

<connectivity-fault-management> configuration/protocols/oam/ethernet

Usage

```
<configuration>
```


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```
<protocols>
 <oam>
  <ethernet>
   <connectivity-fault-management>
    <performance-monitoring>...</performance-monitoring>
    <traceoptions>...</traceoptions>
    <action-profile>...</action-profile>
    <linktrace>...</linktrace>
    <maintenance-domain>...</maintenance-domain>
   </connectivity-fault-management>
  </ethernet>
 </oam>
</protocols>
</configuration>
```

Description Configurations related to 802.1ag ethernet oam

Contents <performance-monitoring>—Configurations related to ethernet performance monitoring

<traceoptions>—Trace options for connectivity fault management

<action-profile>—Action profiles to use when one or more remote maintenance association endpoints are down

<linktrace>—Linktrace protocol global options

<maintenance-domain>—Maintenance domain configuration

<console> configuration/wlan/access-point/external/system

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <console>
      <baud-rate>baud-rate</baud-rate>
     </console>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description

Contents <baud-rate>—Baud-rate values are 9600,19200,38400,57600,115200

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<content-filtering> configuration/security/utm/feature-profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <traceoptions>...</traceoptions>
     <profile>...</profile>
    </content-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure content filtering feature

Contents <traceoptions>—Trace options for content-filtering feature

<profile>—Content filtering profile

<content-filtering> configuration/security/utm/utm-policy

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <content-filtering>
     <http-profile>http-profile</http-profile>
     <ftp>...</ftp>
     <smtp-profile>smtp-profile</smtp-profile>
     <pop3-profile>pop3-profile</pop3-profile>
     <imap-profile>imap-profile</imap-profile>
    </content-filtering>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description Content-filtering profile

Contents <http-profile>—Content-filtering profile

<ftp>—FTP profile

<smtp-profile>—Content-filtering SMTP profile

<pop3-profile>—Content-filtering POP3 profile

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<imap-profile>—Content-filtering IMAP profile

<continuity-check> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain/maintenance-association

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
       <continuity-check>
        <interval>interval</interval>
        <loss-threshold>loss-threshold</loss-threshold>
        <hold-interval>hold-interval</hold-interval>
        <port-status-tlv/>
        <interface-status-tlv/>
       </continuity-check>
      </maintenance-association>
     </maintenance-domain>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Continuity check configuration

Contents <interval>—Interval between continuity-check messages

- 10ms -
- 100ms -
- 1s -
- 10s -
- 1m -
- 10m -

<loss-threshold>—Number of continuity-check messages lost before marking endpoint as down

<hold-interval>—Time before flushing MEP database if no updates occur

<port-status-tlv>—Include port status TLV in CCM

<interface-status-tlv>—Include interface status TLV in CCM

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<control-channel> configuration/protocols/protection-group/ethernet-ring/east-interface

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <east-interface>
     <control-channel>
      <interface>interface</interface> <!-- mandatory -->
      <vlan>vlan</vlan>
     </control-channel>
    </east-interface>
   </ethernet-ring>
  </protection-group>
 </protocols>
</configuration>
```

Description Contro channel of ring port

Contents <interface>—

<vlan>—Dedicated VLAN identifier

<control-channel> configuration/protocols/protection-group/ethernet-ring/west-interface

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <west-interface>
     <control-channel>
      <interface>interface</interface> <!-- mandatory -->
      <vlan>vlan</vlan>
     </control-channel>
    </west-interface>
   </ethernet-ring>
  </protection-group>
 </protocols>
</configuration>
```

Description Contro channel of ring port

Contents <interface>—

<vlan>—Dedicated VLAN identifier

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<country> configuration/wlan/access-point/access-point-options

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <country>
     <AE/>
     <AG/>
     <AN/>
     <AR/>
     <AS/>
     <AT/>
     <AU/>
     <AW/>
     <AZ/>
     <BA/>
     <BB/>
     <BD/>
     <BE/>
     <BG/>
     <BH/>
     <BM/>
     <BN/>
     <BO/>
     <BR/>
     <BS/>
     <BT/>
     <BY/>
     <CA/>
     <CH/>
     <CL/>
     <CN/>
     <CO/>
     <CR/>
     <CU/>
     <CV/>
     <CY/>
     <CZ/>
     <DE/>
     <DK/>
     <DM/>
     <DO/>
     <EC/>
     <EE/>
     <EG/>
     <ES/>
     <FI/>
     <FK/>
     <FM/>
     <FR/>
     <GB/>
     <GF/>
```

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<GG/>
<GI/>
<GP/>
<GR/>
<GT/>
<GU/>
<HK/>
<HN/>
<HR/>
<HT/>
<HU/>
<ID/>
<IE/>
<IL/>
<IM/>
<IN/>
<IR/>
<IS/>
<IT/>
<JE/>
<JM/>
<JO/>
<JP/>
<KE/>
<KI/>
<KR/>
<KW/>
<KY/>
<LA/>
<LB/>
<LI/>
<LK/>
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<LT/>
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<MQ/>
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<MU/>
<MV/>
<MW/>
<MX/>
<MY/>
<NG/>
<NI/>
<NL/>
<NO/>
<NZ/>
<OM/>
<PA/>

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```
            <PE/>
            <PG/>
            <PH/>
            <PK/>
            <PL/>
            <PM/>
            <PR/>
            <PT/>
            <RE/>
            <RO/>
            <RU/>
            <SA/>
            <SE/>
            <SG/>
            <SI/>
            <SK/>
            <SV/>
            <SY/>
            <TH/>
            <TJ/>
            <TN/>
            <TR/>
            <TT/>
            <TW/>
            <TZ/>
            <UA/>
            <UM/>
            <US/>
            <UY/>
            <UZ/>
            <VA/>
            <VE/>
            <VG/>
            <VI/>
            <VN/>
            <YT/>
            <ZA/>
            <ZM/>
          </country>
        </access-point-options>
      </access-point>
    </wlan>
  </configuration>
```

Description Country name

Contents <AE>—United Arab Emirates

<AG>—Antigua and Barbuda

<AN>—Netherlands Antilles

<AR>—Argentina

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<AS>—American Somoa

<AT>—Austria

<AU>—Australia

<AW>—Aruba

<AZ>—Azerbaijan

<BA>—Bosnia

<BB>—Barbados

<BD>—Bangladesh

<BE>—Belgium

<BG>—Bulgaria

<BH>—Bahrain

<BM>—Bermuda

<BN>—Brunei

<BO>—Bolivia

—Brazil

<BS>—Bahamas

<BT>—Bhutan

<BY>—Belarus

<CA>—Canada

<CH>—Switzerland

<CL>—Chile

<CN>—China

<CO>—Colombia

<CR>—Costa Rica

<CU>—Cuba

<CV>—Cape Verde

<CY>—Cyprus

<CZ>—Czech Republic

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<DE>—Germany

<DK>—Denmark

<DM>—Dominica

<DO>—Dominican Republic

<EC>—Ecuador

<EE>—Estonia

<EG>—Egypt

<ES>—Spain

<FI>—Finland

<FK>—Faulkland Islands

<FM>—Federated States of Micronesia

<FR>—France

<GB>—United Kingdom

<GF>—French Guiana

<GG>—Guernsey

<GI>—Gibralter

<GP>—Guadeloupe

<GR>—Greece

<GT>—Guatemala

<GU>—Guam

<HK>—Hong Kong

<HN>—Honduras

<HR>—Croatia

<HT>—Haiti

<HU>—Hungary

<ID>—Indonesia

<IE>—Ireland

<IL>—Israel

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<IM>—Isle of Man

<IN>—India

<IR>—Iran

<IS>—Iceland

<IT>—Italy

<JE>—Jersey

<JM>—Jamaica

<JO>—Jordan

<JP>—Japan

<KE>—Kenya

<KI>—Kiribati

<KR>—Korea Republic

<KW>—Kuwait

<KY>—Cayman Islands

<LA>—LAO People's Democratic Republic

<LB>—Lebanon

<LI>—Liechtenstein

<LK>—Sri Lanka

<LS>—Lesotho

<LT>—Lithuania

<LU>—Luxembourg

<LV>—Latvia

<MA>—Morocco

<MC>—Monaco

<MK>—Macedonia

<MO>—Macao

<MP>—Northern Mariana Islands

<MQ>—Martinique

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<MR>—Mauritania

<MT>—Malta

<MU>—Mauritius

<MV>—Maldives

<MW>—Malawi

<MX>—Mexico

<MY>—Malaysia

<NG>—Nigeria

<NI>—Nicaragua

<NL>—Netherlands

<NO>—Norway

<NZ>—New Zealand

<OM>—Oman

<PA>—Panama

<PE>—Peru

<PG>—Papua New Guinea

<PH>—Philippines

<PK>—Pakistan

<PL>—Poland

<PM>—St. Pierre and Miquelon

<PR>—Puerto Rico

<PT>—Portugal

<RE>—Reunion

<RO>—Romania

<RU>—Russia

<SA>—Saudi Arabia

<SE>—Sweden

<SG>—Singapore

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<SI>—Slovenia

<SK>—Slovak Republic

<SV>—El Salvador

<SY>—Syria

<TH>—Thailand

<TJ>—Tajikistan

<TN>—Tunisia

<TR>—Turkey

<TT>—Trinidad & Tobago

<TW>—Taiwan

<TZ>—Tanzania

<UA>—Ukraine

<UM>—United States (Minor Outlying Islands)

<US>—United States

<UY>—Uruguay

<UZ>—Uzbekistan

<VA>—Holy See (Vatican City State)

<VE>—Venezuela

<VG>—Virgin Islands (British)

<VI>—Virgin Islands (United States)

<VN>—Vietnam

<YT>—Mayotte

<ZA>—South Africa

<ZM>—Zambia

<crl> configuration/security/pki/ca-profile/revocation-check

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
```


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```
    <revocation-check>
     <crl>
      <disable>...</disable>
      <url>...</url>
      <refresh-interval>refresh-interval</refresh-interval>
     </crl>
    </revocation-check>
   </ca-profile>
  </pki>
 </security>
</configuration>
```

Description Certificate revocation list configuration

Contents <disable>—

<url>—

<refresh-interval>—CRL refresh interval

<custom-objects> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <mime-pattern>...</mime-pattern>
    <filename-extension>...</filename-extension>
    <url-pattern>...</url-pattern>
    <custom-url-category>...</custom-url-category>
    <protocol-command>...</protocol-command>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Trace options for custom-objects

Contents <mime-pattern>—Configure mime-list object

<filename-extension>—Configure extension-list object

<url-pattern>—Configure url-list object

<custom-url-category>—Configure category-list object

<protocol-command>—Configure command-list object

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<custom-options> configuration/services/captive-portal

Usage

```
<configuration>
 <services>
  <captive-portal>
   <custom-options>
    <header-logo>header-logo</header-logo>
    <header-bgcolor>header-bgcolor</header-bgcolor>
    <header-text-color>header-text-color</header-text-color>
    <header-message>header-message</header-message>
    <banner-message>banner-message</banner-message>
    <form-header-message>form-header-message</form-header-message>
    <form-header-bgcolor>form-header-bgcolor</form-header-bgcolor>
    <form-header-text-color>form-header-text-color</form-header-text-color>
    <form-submit-label>form-submit-label</form-submit-label>
    <form-reset-label>form-reset-label</form-reset-label>
    <footer-message>footer-message</footer-message>
    <footer-bgcolor>footer-bgcolor</footer-bgcolor>
    <footer-text-color>footer-text-color</footer-text-color>
    <post-authentication-url>post-authentication-url</post-authentication-url>
   </custom-options>
  </captive-portal>
 </services>
</configuration>
```

Description Captive Portal html user interface customization options

Contents <header-logo>—Path to logo image file

<header-bgcolor>—Background color of the html header in hex html format

<header-text-color>—Text color of the html header in hex html format

<header-message>—Message to be displayed in the html header

<banner-message>—Terms and Conditions of usage message

<form-header-message>—Message to be displayed in the login form header

<form-header-bgcolor>—Background color of the login form header in hex html format

<form-header-text-color>—Text color of the login form header in hex html format

<form-submit-label>—Label to be displayed for the login form submit button

<form-reset-label>—Label to be displayed for the login form reset button

<footer-message>—Message to be displayed in the html footer

<footer-bgcolor>—Background color of the html footer in hex html format

<footer-text-color>—Text color of the footer in hex html format

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<post-authentication-url>—Post authentication redirection URL

<custom-url-category> configuration/security/utm/custom-objects

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <custom-url-category>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <value>...</value>
    </custom-url-category>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure category-list object

Contents <name>—Configure name of category-list object

<value>—Configure value of category-list object

<customer-vlans> configuration/vlans/vlan/dot1q-tunneling

Usage

```
<configuration>
 <vlans>
  <vlan>
   <dot1q-tunneling>
    <customer-vlans>
     <native/>
     <range/>
    </customer-vlans>
   </dot1q-tunneling>
  </vlan>
 </vlans>
</configuration>
```

Description

Contents <native>—Untagged and priority tagged packets

<range>—Customer VLAN ranges or IDs [<vlan-range> or <vlan-id>]

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CHAPTER 30

Tag Elements Beginning with D

This chapter lists the configuration tag elements that have names beginning with the letter *d*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<daily> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <daily>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </daily>
  </scheduler>
 </schedulers>
</configuration>
```

Description Everyday; can be overwritten by specific weekday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

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<data-channel> configuration/protocols/protection-group/ethernet-ring

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <data-channel>
     <vlan>...</vlan> <!-- mandatory -->
    </data-channel>
   </ethernet-ring>
  </protection-group>
 </protocols>
</configuration>
```

Description Ring instance data channel

Contents <vlan>—VLAN ID or VLAN ID range [1..4094]

<data-forwarding> configuration/protocols/igmp-snooping/vlan

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <data-forwarding>
     <source>...</source>
     <receiver>...</receiver>
    </data-forwarding>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Data forwarding

Contents <source>—Source

<receiver>—Receiver

<datapath-debug> configuration/security

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <traceoptions>...</traceoptions>
   <capture-file>...</capture-file>
```


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```
    <maximum-capture-size>maximum-capture-size</maximum-capture-size>
    <action-profile>...</action-profile>
    <packet-filter>...</packet-filter>
   </datapath-debug>
  </security>
 </configuration>
```

Description Datapath debug options

Contents <traceoptions>—End to end debug trace options

<capture-file>—Packet capture options

<maximum-capture-size>—Max packet capture length

<action-profile>—Action profile definitions

<packet-filter>—Packet filter configuration

<dcbx> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <disable/>
   <interface>...</interface>
  </dcbx>
 </protocols>
</configuration>
```

Description DCBX Protocol

Contents <disable>—Disable DCBX

<interface>—Interface configuration

<dead-peer-detection> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <dead-peer-detection>
     <always-send/>
     <interval>interval</interval>
     <threshold>threshold</threshold>
    </dead-peer-detection>
   </gateway>
```

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```
    </ike>
   </security>
  </configuration>
```

Description Enable RFC-3706 DPD

Contents <always-send>—Send DPD messages periodically, regardless of traffic

<interval>—The interval at which to send DPD messages

<threshold>—Maximum number of DPD retransmissions

<decryption-failures> configuration/security/alarms/potential-violation

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <decryption-failures>
     <threshold>threshold</threshold>
    </decryption-failures>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description No. of decryption failures before which an alarm needs to be raised

Contents <threshold>—Threshold value [default is 1000]

<default> configuration/services/server-load-balance/virtual-server/policy

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <virtual-server>
    <policy>
     <default>
      <real-server-group>real-server-group</real-server-group> <!-- mandatory -->

<backup-real-server-group>backup-real-server-group</backup-real-server-group>
      <failover-threshold>failover-threshold</failover-threshold>
      <failback-threshold>failback-threshold</failback-threshold>
     </default>
    </policy>
   </virtual-server>
  </server-load-balance>
 </services>
```


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```
</configuration>
```

Description Default rule

Contents <real-server-group>—Default real server group name

<backup-real-server-group>—Backup real server group name

<failover-threshold>—Failover percentage threshold

<failback-threshold>—Failback percentage threshold

<default-actions> configuration/protocols/oam/ethernet/connectivity-fault-management/action-profile

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <action-profile>
      <default-actions>
       <interface-down/>
      </default-actions>
     </action-profile>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Action that needs to be taken

Contents <interface-down>—Bring the interface down

<default-rule> configuration/security/application-firewall/rule-sets

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <default-rule>
     <permit/>
     <deny/>
    </default-rule>
   </rule-sets>
  </application-firewall>
 </security>
```

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```
</configuration>
```

Description Specify default rule for a rule-set

Contents <permit>—Permit packets

<deny>—Deny packets

<deny> configuration/security/alg/sip/application-screen/protect

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <application-screen>
     <protect>
      <deny>
       <destination-ip>...</destination-ip>
       <all/>
       <timeout>timeout</timeout>
      </deny>
     </protect>
    </application-screen>
   </sip>
  </alg>
 </security>
</configuration>
```

Description Protect deny options

Contents <destination-ip>—List of protected destination server IP

<all>—Enable attack protection for all servers

<timeout>—Timeout value for SIP INVITE attack table entry

<deny-list> configuration/wlan/access-point/access-point-options/station-mac-filter

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <station-mac-filter>
     <deny-list>
      <mac-address>...</mac-address>
     </deny-list>
    </station-mac-filter>
```


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```
    </access-point-options>
   </access-point>
  </wlan>
</configuration>
```

Description Deny the MAC addresseses

Contents <mac-address>—List of denied MAC addresses

<destination> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <pool>...</pool>
    <rule-set>...</rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Configure Destination NAT

Contents <pool>—Define a destination address pool

<rule-set>—Configurate a set of rules

<destination-address> configuration/security/screen/ids-option/tcp/syn-flood/white-list

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-flood>
      <white-list>
       <destination-address>
        <address>address</address> <!-- identifier -->
       </destination-address>
      </white-list>
     </syn-flood>
    </tcp>
   </ids-option>
  </screen>
 </security>
```

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```
</configuration>
```

Description Destination address

Contents <address>—IPv4 or IPv6 destination address

<destination-address> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <destination-address>
        <dst-addr>dst-addr</dst-addr> <!-- identifier -->
       </destination-address>
      </match>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Destination address

Contents <dst-addr>—IPv4 or IPv6 destination address

<destination-address> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
       <destination-address>
        <dst-addr>dst-addr</dst-addr>
       </destination-address>
      </match>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
```


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```
</configuration>
```

Description Destination address

Contents <dst-addr>—IPv4 or IPv6 destination address

<destination-address> configuration/security/nat/static/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <match>
       <destination-address>
        <dst-addr>dst-addr</dst-addr> <!-- mandatory -->
       </destination-address>
      </match>
     </rule>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Destination address

Contents <dst-addr>—IPv4 or IPv6 Destination address prefix

<destination-address-name> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <destination-address-name>
        <dst-addr-name>dst-addr-name</dst-addr-name> <!-- identifier -->
       </destination-address-name>
      </match>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
```

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```
</configuration>
```

Description Address/address-set from address book

Contents <dst-addr-name>—Address/address-set from address book

<destination-address-name> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
       <destination-address-name>
        <dst-addr-name>dst-addr-name</dst-addr-name>
       </destination-address-name>
      </match>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Address from address book

Contents <dst-addr-name>—Address from address book

<destination-address-name> configuration/security/nat/static/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <match>
       <destination-address-name>
        <dst-addr-name>dst-addr-name</dst-addr-name> <!-- mandatory -->
       </destination-address-name>
      </match>
     </rule>
    </rule-set>
   </static>
  </nat>
```


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```
 </security>
</configuration>
```

Description Address from address book

Contents <dst-addr-name>—Address from address book

<destination-ip> configuration/security/alarms/potential-violation/policy

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <policy>
     <destination-ip>
      <threshold>threshold</threshold>
      <duration>duration</duration>
      <size>size</size>
     </destination-ip>
    </policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure destination address type of policy violation

Contents <threshold>—Number of destination IP address matches to raise alarm

<duration>—Time window matches must occur within

<size>—Total destination IP address number that can be done policy violation check concurrently

<destination-ip> configuration/security/alg/sip/application-screen/protect/deny

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <application-screen>
     <protect>
      <deny>
       <destination-ip>
        <dest-ip-entry>dest-ip-entry</dest-ip-entry> <!-- identifier -->
       </destination-ip>
      </deny>
     </protect>
```

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```
    </application-screen>
   </sip>
  </alg>
 </security>
</configuration>
```

Description List of protected destination server IP

Contents <dest-ip-entry>—Protected destination server IP entry

<destination-nat> configuration/security/nat/destination/rule-set/rule/then

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <then>
       <destination-nat>
        <off/>
        <pool>...</pool>
       </destination-nat>
      </then>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Destination NAT action

Contents <off>—No action

<pool>—Use Destination NAT pool

<destination-port> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <destination-port>
        <low>low</low> <!-- mandatory -->
```


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```
            <to>...</to>
           </destination-port>
          </match>
         </rule>
        </rule-set>
       </source>
      </nat>
     </security>
    </configuration>
```

Description Destination port

Contents <low>—Port or lower limit of port range

<to>—Port range upper limit

<destination-port> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
       <destination-port>
        <dst-port>dst-port</dst-port>
       </destination-port>
      </match>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Destination port

Contents <dst-port>—Destination port

<dhcp> configuration/interfaces/interface/unit/family/inet

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet>
```

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```
<dhcp>
 <client-identifier>...</client-identifier>
 <lease-time>lease-time</lease-time>
 <retransmission-attempt>retransmission-attempt</retransmission-attempt>

 <retransmission-interval>retransmission-interval</retransmission-interval>
 <server-address>server-address</server-address>
 <update-server/>
 <vendor-id>vendor-id</vendor-id>
</dhcp>
</inet>
</family>
</unit>
</interface>
</interfaces>
</configuration>
```

Description Configure DHCP Client

Contents <client-identifier>—DHCP Server identifies a client by client-identifier value

- infinite - Lease never expires
- length - Number of seconds

<lease-time>—Default lease time requested in

- infinite - Lease never expires
- length - Number of seconds

<retransmission-attempt>—Number of attempts to retransmit the DHCP client protocol packet

<retransmission-interval>—Number of seconds between successive retransmission

<server-address>—DHCP Server-address

<update-server>—Propagate TCP/IP settings to DHCP server

<vendor-id>—Vendor class id for the DHCP Client

<dhcp-option82> configuration/ethernet-switching-options/secure-access-port/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <dhcp-option82>
     <disable/>
     <circuit-id>...</circuit-id>
     <remote-id>...</remote-id>
```


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```
      <vendor-id>...</vendor-id>
     </dhcp-option82>
    </vlan>
   </secure-access-port>
  </ethernet-switching-options>
</configuration>
```

Description Configure DHCP option 82 on this VLAN

Contents <disable>—Disable DHCP option 82 on this VLAN

<circuit-id>—Configure DHCP option 82 circuit id

<remote-id>—Configure DHCP option 82 remote id

<vendor-id>—Configure DHCP option 82 vendor id

<dhcp-snooping-file> configuration/ethernet-switching-options/secure-access-port

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <dhcp-snooping-file>
    <location>location</location> <!-- mandatory -->
    <write-interval>write-interval</write-interval> <!-- mandatory -->
    <timeout>timeout</timeout>
   </dhcp-snooping-file>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Configure DHCP snooping persistence file, write-interval and timeout

Contents <location>—Location of DHCP snooping entries file

<write-interval>—Time interval for writing DHCP snooping entries

<timeout>—Timeout for remote read and write operations

<dial-string> configuration/interfaces/interface/unit/dialer-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>
     <dial-string>
      <value>value</value>
```

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```
      </dial-string>
     </dialer-options>
    </unit>
   </interface>
  </interfaces>
</configuration>
```

Description String to dial out

Contents <value>—String to dial out

<dialer-options> configuration/interfaces/interface/unit

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>
     <pool>pool</pool> <!-- mandatory -->
     <dial-string>...</dial-string>
     <incoming-map>...</incoming-map>
     <callback/>
     <callback-wait-period>callback-wait-period</callback-wait-period>
     <redial-delay>redial-delay</redial-delay>
     <idle-timeout>idle-timeout</idle-timeout>
     <watch-list>...</watch-list>
     <load-threshold>load-threshold</load-threshold>
     <load-interval>load-interval</load-interval>
     <activation-delay>activation-delay</activation-delay>
     <deactivation-delay>deactivation-delay</deactivation-delay>
     <initial-route-check>initial-route-check</initial-route-check>
    </dialer-options>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Dialer options

Contents <pool>—Dialer pool

<dial-string>—String to dial out

<incoming-map>—Map incoming call to dialer

<callback>—Call back on any incoming call to the dialer

<callback-wait-period>—Time to wait before calling back

<redial-delay>—Time to wait before redialing

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<idle-timeout>—Delay before taking down the interface

<watch-list>—Dialer watch list

<load-threshold>—Load threshold for adding interfaces

<load-interval>—Interval used to calculate average load

<activation-delay>—Activation delay

<deactivation-delay>—Deactivation delay

<initial-route-check>—Delay to check primary after the router is up

<dialer-options> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <dialer-options>
    <pool>...</pool>
   </dialer-options>
  </interface>
 </interfaces>
</configuration>
```

Description Dialer options

Contents <pool>—Dialer pool

<disable> configuration/security/pki/ca-profile/revocation-check/crl

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <revocation-check>
     <crl>
      <disable>
       <on-download-failure/>
      </disable>
     </crl>
    </revocation-check>
   </ca-profile>
  </pki>
 </security>
</configuration>
```

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Description

Contents <on-download-failure>—Disable revocation check if failed to download CRL

<distinguished-name> configuration/security/ike/gateway/dynamic

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <dynamic>
     <distinguished-name>
      <container>container</container>
      <wildcard>wildcard</wildcard>
     </distinguished-name>
    </dynamic>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use a distinguished name:

Contents <container>—Specify the container string

<wildcard>—Specify the wildcard string

<distinguished-name> configuration/security/ike/gateway/remote-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <distinguished-name>
      <container>container</container>
      <wildcard>wildcard</wildcard>
     </distinguished-name>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use a distinguished name:

Contents <container>—Specify the container string

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<wildcard>—Specify the wildcard string

<distinguished-name> configuration/security/group-vpn/server/ike/gateway/dynamic

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <dynamic>
       <distinguished-name>
        <container>container</container>
        <wildcard>wildcard</wildcard>
       </distinguished-name>
      </dynamic>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Use a distinguished name:

Contents <container>—Specify the container string

<wildcard>—Specify the wildcard string

<dns> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <dns>
    <disable/>

<maximum-message-length>maximum-message-length</maximum-message-length>

    <doctoring>...</doctoring>
    <traceoptions>...</traceoptions>
   </dns>
  </alg>
 </security>
</configuration>
```

Description Configure DNS ALG

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Contents <disable>—Disable DNS ALG

<maximum-message-length>—Set maximum message length

<doctoring>—Configure DNS ALG doctoring

<traceoptions>—DNS ALG trace options

<dns-name> configuration/security/address-book/address

Usage

```
<configuration>
 <security>
  <address-book>
   <address>
    <dns-name>
     <domain-name>domain-name</domain-name> <!-- identifier -->
     <ipv4-only/>
     <ipv6-only/>
    </dns-name>
   </address>
  </address-book>
 </security>
</configuration>
```

Description DNS address name

Contents <domain-name>—Fully qualified hostname

<ipv4-only>—IPv4 dns address

<ipv6-only>—IPv6 dns address

<dns-name> configuration/security/zones/security-zone/address-book/address

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address>
      <dns-name>
       <domain-name>domain-name</domain-name> <!-- identifier -->
       <ipv4-only/>
       <ipv6-only/>
      </dns-name>
     </address>
    </address-book>
   </security-zone>
  </zones>
 </security>
```


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```
</configuration>
```

Description DNS address name

Contents <domain-name>—Fully qualified hostname

<ipv4-only>—IPv4 dns address

<ipv6-only>—IPv6 dns address

<doctoring> configuration/security/alg/dns

Usage

```
<configuration>
 <security>
  <alg>
   <dns>
    <doctoring>
     <none/>
     <sanity-check/>
    </doctoring>
   </dns>
  </alg>
 </security>
</configuration>
```

Description Configure DNS ALG doctoring

Contents <none>—Disable all DNS ALG Doctoring

<sanity-check>—Perform only DNS ALG sanity checks

<dot1q-tunneling> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <dot1q-tunneling>
   <ether-type>ether-type</ether-type>
  </dot1q-tunneling>
 </ethernet-switching-options>
</configuration>
```

Description Dot1q tunneling global options

Contents <ether-type>—Dot1q Ether-type value

- 0x8100 - Dot1q ether-type value 0x8100

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- 0x9100 - Dot1q ether-type value 0x9100
- 0x88a8 - Dot1q ether-type value 0x88a8

<dot1q-tunneling> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <dot1q-tunneling>
    <customer-vlans>...</customer-vlans>
    <layer2-protocol-tunneling>...</layer2-protocol-tunneling>
   </dot1q-tunneling>
  </vlan>
 </vlans>
</configuration>
```

Description Dot1q-tunneling parameters

Contents <customer-vlans>—

<layer2-protocol-tunneling>—Layer2 protocol tunneling configuration

<dot1x> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <traceoptions>...</traceoptions>
   <authenticator>...</authenticator>
  </dot1x>
 </protocols>
</configuration>
```

Description 802.1X options

Contents <traceoptions>—Trace options for 802.1X

<authenticator>—802.1X authenticator options

<dot1x> configuration/wlan/access-point/radio/virtual-access-point/security

Usage

```
<configuration>
 <wlan>
  <access-point>
```


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```
<radio>
 <virtual-access-point>
  <security>
   <dot1x>
    <radius-server>radius-server</radius-server>
    <radius-key>radius-key</radius-key>

<broadcast-key-refresh-rate>broadcast-key-refresh-rate</broadcast-key-refresh-rate>

    <session-key-refresh-rate>session-key-refresh-rate</session-key-refresh-rate>

   </dot1x>
  </security>
 </virtual-access-point>
</radio>
</access-point>
</wlan>
</configuration>
```

Description Dot1x configuration

Contents <radius-server>—Set RADIUS server IP address

<radius-key>—Secret RADIUS key

<broadcast-key-refresh-rate>—Broadcast key refresh rate

<session-key-refresh-rate>—Session key refresh rate

<dot1x-supplicant> configuration/wlan/access-point/external

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <dot1x-supplicant>
     <username>username</username>
     <password>password</password>
    </dot1x-supplicant>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description

Contents <username>—Username

<password>—Dot1x supplicant mode password

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<drop> configuration/security/gprs/gtp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <drop>
      <aa-create-pdp>aa-create-pdp</aa-create-pdp>
      <aa-delete-pdp>aa-delete-pdp</aa-delete-pdp>
      <bearer-resource>bearer-resource</bearer-resource>
      <change-notification>change-notification</change-notification>
      <config-transfer>config-transfer</config-transfer>
      <context>context</context>
      <create-bearer>create-bearer</create-bearer>
      <create-data-forwarding>create-data-forwarding</create-data-forwarding>
      <create-pdp>create-pdp</create-pdp>
      <create-session>create-session</create-session>
      <create-tnl-forwarding>create-tnl-forwarding</create-tnl-forwarding>
      <cs-paging>cs-paging</cs-paging>
      <data-record>data-record</data-record>
      <delete-bearer>delete-bearer</delete-bearer>
      <delete-command>delete-command</delete-command>
      <delete-data-forwarding>delete-data-forwarding</delete-data-forwarding>
      <delete-pdn>delete-pdn</delete-pdn>
      <delete-pdp>delete-pdp</delete-pdp>
      <delete-session>delete-session</delete-session>
      <detach>detach</detach>
      <downlink-notification>downlink-notification</downlink-notification>
      <echo>echo</echo>
      <error-indication>error-indication</error-indication>
      <failure-report>failure-report</failure-report>
      <fwd-access>fwd-access</fwd-access>
      <fwd-relocation>fwd-relocation</fwd-relocation>
      <fwd-srns-context>fwd-srns-context</fwd-srns-context>
      <g-pdu>g-pdu</g-pdu>
      <identification>identification</identification>
      <mbms-sess-start>mbms-sess-start</mbms-sess-start>
      <mbms-sess-stop>mbms-sess-stop</mbms-sess-stop>
      <mbms-sess-update>mbms-sess-update</mbms-sess-update>
      <modify-bearer>modify-bearer</modify-bearer>
      <modify-command>modify-command</modify-command>
      <node-alive>node-alive</node-alive>
      <note-ms-present>note-ms-present</note-ms-present>
      <pdu-notification>pdu-notification</pdu-notification>
      <ran-info>ran-info</ran-info>
      <redirection>redirection</redirection>
      <release-access>release-access</release-access>
      <relocation-cancel>relocation-cancel</relocation-cancel>
      <resume>resume</resume>
      <send-route>send-route</send-route>
      <sgsn-context>sgsn-context</sgsn-context>
      <stop-paging>stop-paging</stop-paging>
```


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```
        <supported-extension>supported-extension</supported-extension>
        <suspend>suspend</suspend>
        <trace-session>trace-session</trace-session>
        <update-bearer>update-bearer</update-bearer>
        <update-pdn>update-pdn</update-pdn>
        <update-pdp>update-pdp</update-pdp>
        <ver-not-supported>ver-not-supported</ver-not-supported>
       </drop>
      </profile>
     </gtp>
    </gprs>
   </security>
</configuration>
```

Description Drop certain type of messages

Contents <aa-create-pdp>—Create AA pdp request/response message

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<aa-delete-pdp>—Delete AA pdp request/response message

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<bearer-resource>—Bearer resource command/failure message

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<change-notification>—Change notification request/response message

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<config-transfer>—Configuration transfer message

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<context>—Context request/response/ack message

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<create-bearer>—Create bearer request/response message

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<create-data-forwarding>—Create indirect data forwarding tunnel request/response message

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<create-pdp>—Create pdp request/response message

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<create-session>—Create session request/response message

- 0 - Version 0
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<create-tnl-forwarding>—Create forwarding tunnel request/response message

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<cs-paging>—CS paging indication message

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- all - All versions
- 0 - Version 0
- 1 - Version 1
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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<data-record>—Data record request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
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- 2 - Version 2
- all - All versions
- 0 - Version 0
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- 2 - Version 2
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<delete-bearer>—Delete bearer request/response message

- 0 - Version 0
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- 2 - Version 2
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- all - All versions
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- 2 - Version 2
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- 2 - Version 2
- all - All versions

<delete-command>—Delete bearer command/failure message

- 0 - Version 0
- 1 - Version 1
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- 0 - Version 0
- 1 - Version 1
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- all - All versions
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- all - All versions

<delete-data-forwarding>—Delete indirect data forwarding tunnel request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
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- 2 - Version 2
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- 0 - Version 0
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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
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- all - All versions

<delete-pdn>—Delete PDN connection set request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
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- all - All versions

<delete-pdp>—Delete pdp request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
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- all - All versions
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- 2 - Version 2
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<delete-session>—Delete session request/response message

- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
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- 2 - Version 2
- all - All versions

<detach>—Detach notification/ack message

- 0 - Version 0
- 1 - Version 1
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- 0 - Version 0
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- 2 - Version 2

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- all - All versions
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<downlink-notification>—Downlink data notification/ack/failure message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
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- 2 - Version 2
- all - All versions
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- 2 - Version 2
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- 2 - Version 2
- all - All versions
- 0 - Version 0
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- all - All versions

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<echo>—Echo request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
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<error-indication>—Error indication message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
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<failure-report>—Failure report request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
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<fwd-access>—Forward access context notification/ack message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
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- 2 - Version 2
- all - All versions

<fwd-relocation>—Forward relocation request/response/comp/comp-ack message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
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- 2 - Version 2
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- 2 - Version 2
- all - All versions

<fwd-srns-context>—Forward SRNS context/context-ack message

- 0 - Version 0
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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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<g-pdu>—G-PDU (user PDU) message

- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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<identification>—Identification request/response message

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- all - All versions
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- all - All versions

<mbms-sess-start>—MBMS session start request/response message

- 0 - Version 0
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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2

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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
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- 2 - Version 2
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- 0 - Version 0
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- 0 - Version 0
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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<mbms-sess-stop>—MBMS session stop request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<mbms-sess-update>—MBMS session update request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2

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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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<modify-bearer>—Modify bearer request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<modify-command>—Modify bearer command/failure message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<node-alive>—Node alive request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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- 1 - Version 1
- 2 - Version 2
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- 2 - Version 2
- all - All versions
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- 2 - Version 2

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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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<note-ms-present>—Note MS GPRS present request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions

<pdu-notification>—PDU notification requst/response/reject/reject-response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions

<ran-info>—RAN info relay message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<redirection>—Redirection request/response message

- 0 - Version 0
- 1 - Version 1

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- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
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- all - All versions
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- 1 - Version 1
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- all - All versions
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- all - All versions
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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<release-access>—Release access-bearer request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2

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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
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- 0 - Version 0
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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<relocation-cancel>—Relocation cancel request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<resume>—Resume notification/ack message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions

<send-route>—Send route info request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<sgsn-context>—SGSN context request/response/ack message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<stop-paging>—Stop paging indication message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<supported-extension>—Supported extension headers notification message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<suspend>—Suspend notification/ack message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0

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- 1 - Version 1
- 2 - Version 2
- all - All versions

<trace-session>—Trace session activation/deactivation message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<update-bearer>—Update bearer request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2

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- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<update-pdn>—Update PDN connection set request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<update-pdp>—Update pdp request/response message

- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions
- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<ver-not-supported>—Version not supported message

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- 0 - Version 0
- 1 - Version 1
- 2 - Version 2
- all - All versions

<drop> configuration/security/gprs/sctp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <drop>
      <m3ua-service>...</m3ua-service>
      <payload-protocol>...</payload-protocol>
     </drop>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Disallowed sctp payload message

Contents <m3ua-service>—MTP level 3 (MTP3) user adaptation layer service

<payload-protocol>—SCTP payload protocol identifier

<dscp-rewrite> configuration/security/alg/h323

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <dscp-rewrite>
     <code-point>code-point</code-point>
    </dscp-rewrite>
   </h323>
  </alg>
 </security>
</configuration>
```

Description DSCP code rewrite

Contents <code-point>—Set dscp codepoint 6-bit string

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<dscp-rewrite> configuration/security/alg/mgcp

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <dscp-rewrite>
     <code-point>code-point</code-point>
    </dscp-rewrite>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description DSCP code rewrite

Contents <code-point>—Set dscp codepoint 6-bit string

<dscp-rewrite> configuration/security/alg/sccp

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <dscp-rewrite>
     <code-point>code-point</code-point>
    </dscp-rewrite>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description DSCP code rewrite

Contents <code-point>—Set dscp codepoint 6-bit string

<dscp-rewrite> configuration/security/alg/sip

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <dscp-rewrite>
     <code-point>code-point</code-point>
    </dscp-rewrite>
   </sip>
```

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```
    </alg>
   </security>
  </configuration>
```

Description DSCP code rewrite

Contents <code-point>—Set dscp codepoint 6-bit string

<dynamic> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <dynamic>
     <distinguished-name>...</distinguished-name>
     <hostname>hostname</hostname>
     <inet>inet</inet>
     <inet6>inet6</inet6>
     <user-at-hostname>user-at-hostname</user-at-hostname>
     <connections-limit>connections-limit</connections-limit>
     <ike-user-type>ike-user-type</ike-user-type>
    </dynamic>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Site to site peer with dynamic IP address

Contents <distinguished-name>—Use a distinguished name:

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<hostname>—Use a fully-qualified domain name

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<inet>—Use an IPV4 address to identify the dynamic peer

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<inet6>—Use an IPV6 address to identify the dynamic peer

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users

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- shared-ike-id - Email address shared as IKED ID by multiple users

<user-at-hostname>—Use an e-mail address

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<connections-limit>—Maximum number of users connected to gateway

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<ike-user-type>—Type of the IKE ID

- group-ike-id - Email address or FQDN shared as IKED ID by multiple users
- shared-ike-id - Email address shared as IKED ID by multiple users

<dynamic> configuration/security/group-vpn/server/ike/gateway

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <dynamic>
       <distinguished-name>...</distinguished-name>
       <hostname>hostname</hostname>
       <inet>inet</inet>
       <user-at-hostname>user-at-hostname</user-at-hostname>
      </dynamic>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Site to site peer with dynamic IP address

Contents <distinguished-name>—Use a distinguished name:

<hostname>—Use a fully-qualified domain name

<inet>—Use an IPV4 address to identify the dynamic peer

<user-at-hostname>—Use an e-mail address

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<dynamic-application> configuration/security/application-firewall/rule-sets/rule/match

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <rule>
     <match>
      <dynamic-application>
       <system-applications/>
       <junos:UNKNOWN/>
      </dynamic-application>
     </match>
    </rule>
   </rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Dynamic application

Contents <system-applications>—Specify dynamic application name to match

<junos:UNKNOWN>—Unknown application

<dynamic-application-group> configuration/security/application-firewall/rule-sets/rule/match

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <rule>
     <match>
      <dynamic-application-group>
       <system-application-groups/>
       <junos:unassigned/>
      </dynamic-application-group>
     </match>
    </rule>
   </rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Dynamic application group

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Contents <system-application-groups>—Specify dynamic application group name to match

<junos:unassigned>—Unassigned group

<dynamic-call-admission-control> configuration/interfaces/interface/unit

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dynamic-call-admission-control>
    <bearer-bandwidth-limit>bearer-bandwidth-limit</bearer-bandwidth-limit> <!--
mandatory -->
      <activation-priority>activation-priority</activation-priority>
    </dynamic-call-admission-control>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Dynamic call admission control configuration

Contents <bearer-bandwidth-limit>—Bearer bandwidth limit

<activation-priority>—Priority assigned to bearer bandwidth limit

<dynamic-vpn> configuration/security

Usage

```
<configuration>
 <security>
  <dynamic-vpn>
   <force-upgrade/>
   <access-profile>access-profile</access-profile> <!-- mandatory -->
   <clients>...</clients>
  </dynamic-vpn>
 </security>
</configuration>
```

Description Configure dynamic VPN

Contents <force-upgrade>—Force Upgrade

<access-profile>—Configure access

<clients>—Configure for remote access client

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CHAPTER 31

Tag Elements Beginning with E

This chapter lists the configuration tag elements that have names beginning with the letter *e*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<east-interface> configuration/protocols/protection-group/ethernet-ring

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <east-interface>
     <control-channel>...</control-channel> <!-- mandatory -->
     <ring-protection-link-end/>
     <interface-none/>
    </east-interface>
   </ethernet-ring>
  </protection-group>
 </protocols>
</configuration>
```

Description East interface configuration

Contents <control-channel>—Contro channel of ring port

<ring-protection-link-end>—Port is connecting to ring protection link

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<interface-none>—Port is not used

<edge-virtual-bridging> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <traceoptions>...</traceoptions>
   <vsi-discovery>...</vsi-discovery>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description Edge Virtual Bridging options

Contents <traceoptions>—Trace options for Edge Virtual Bridging

<vsi-discovery>—

<egress> configuration/ethernet-switching-options/analyzer/input

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <egress>
     <interface>...</interface>
     <vlan>...</vlan>
    </egress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Ports and VLANs to monitor outgoing traffic

Contents <interface>—Port to monitor outgoing traffic

<vlan>—VLAN to monitor outgoing traffic

<email-notify> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
```


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```
<feature-profile>
 <anti-virus>
  <kaspersky-lab-engine>
   <pattern-update>
    <email-notify>
     <admin-email>admin-email</admin-email>
     <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
    </email-notify>
   </pattern-update>
  </kaspersky-lab-engine>
 </anti-virus>
</feature-profile>
</utm>
</security>
</configuration>
```

Description Virus pattern file updated notification

Contents <admin-email>—Admin emails to be notified about pattern file update

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<email-notify> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <pattern-update>
       <email-notify>
        <admin-email>admin-email</admin-email>
        <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
       </email-notify>
      </pattern-update>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

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Description Virus pattern file updated notification

Contents <admin-email>—Admin emails to be notified about pattern file update

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<email-notify> configuration/security/utm/feature-profile/anti-virus/sophos-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <pattern-update>
       <email-notify>
        <admin-email>admin-email</admin-email>
        <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
       </email-notify>
      </pattern-update>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Virus pattern file updated notification

Contents <admin-email>—Admin emails to be notified about pattern file update

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<encryption> configuration/security/ipsec/internal/security-association/manual

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>
    <security-association>
     <manual>
      <encryption>
```


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```
            <algorithm>algorithm</algorithm> <!-- mandatory -->
            <key>...</key> <!-- mandatory -->
           </encryption>
          </manual>
         </security-association>
        </internal>
       </ipsec>
      </security>
     </configuration>
```

Description Define encryption parameters

Contents <algorithm>—Define encryption algorithm

- 3des-cbc - 3DES-CBC encryption algorithm

<key>—Define an encryption key

<encryption> configuration/security/ipsec/vpn/manual

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <manual>
     <encryption>
      <algorithm>algorithm</algorithm> <!-- mandatory -->
      <key>...</key> <!-- mandatory -->
     </encryption>
    </manual>
   </vpn>
  </ipsec>
 </security>
</configuration>
```

Description Define encryption parameters

Contents <algorithm>—Define encryption algorithm

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<key>—Define an encryption key

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<encryption-failures> configuration/security/alarms/potential-violation

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <encryption-failures>
     <threshold>threshold</threshold>
    </encryption-failures>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description No. of encryption failures before which an alarm needs to be raised

Contents <threshold>—Threshold value [default is 1000]

<enhanced-transmission-selection> configuration/protocols/dcbx/interface

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <interface>
    <enhanced-transmission-selection>
     <no-auto-negotiation/>
    </enhanced-transmission-selection>
   </interface>
  </dcbx>
 </protocols>
</configuration>
```

Description Configure enhanced transmission selection feature

Contents <no-auto-negotiation>—Enable ETS manually

<enrollment> configuration/security/pki/ca-profile

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <enrollment>
     <url>url</url>
     <retry>retry</retry>
     <retry-interval>retry-interval</retry-interval>
```

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```
    </enrollment>
   </ca-profile>
  </pki>
 </security>
</configuration>
```

Description Enrollment parameters for certificate authority

Contents <url>—Enrollment URL of certificate authority

<retry>—Number of enrollment retry attempts before aborting

<retry-interval>—Interval in seconds between the enrollment retries

<esw-interface> configuration/ethernet-switching-options/interfaces

Usage

```
<configuration>
 <ethernet-switching-options>
  <interfaces>
   <esw-interface>
    <interface-name>interface-name</interface-name> <!-- identifier -->
    <no-mac-learning/> <!-- mandatory -->
   </esw-interface>
  </interfaces>
 </ethernet-switching-options>
</configuration>
```

Description Interface name

Contents <interface-name>—Interface name

<no-mac-learning>—Disable mac learning for this interface

<ethernet> configuration/protocols/oam

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <link-fault-management>...</link-fault-management>
    <connectivity-fault-management>...</connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description OAM configuration for ethernet

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Contents <link-fault-management>—

<connectivity-fault-management>—Configurations related to 802.1ag ethernet oam

<ethernet> configuration/wlan/access-point/external/system/ports

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <ports>
      <ethernet>
       <management-vlan>management-vlan</management-vlan>
       <untagged-vlan>untagged-vlan</untagged-vlan>
       <static>...</static>
       <name-server>...</name-server> <!-- mandatory -->
      </ethernet>
     </ports>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description Ethernet settings

Contents <management-vlan>—Management VLAN identifier

<untagged-vlan>—Untagged VLAN identifier

<static>—Specify static parameters

<name-server>—Domain name server IP address

<ethernet-ring> configuration/protocols/protection-group

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <name>name</name> <!-- identifier -->
    <node-id>node-id</node-id>
    <ring-protection-link-owner/>
    <restore-interval>restore-interval</restore-interval>
    <guard-interval>guard-interval</guard-interval>
    <hold-interval>hold-interval</hold-interval>
    <east-interface>...</east-interface> <!-- mandatory -->
    <west-interface>...</west-interface> <!-- mandatory -->
    <control-vlan>control-vlan</control-vlan>
```

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```
      <data-channel>...</data-channel>
     </ethernet-ring>
    </protection-group>
   </protocols>
  </configuration>
```

Description Ethernet ring

Contents <name>—Name of Ethernet Ring protection group

<node-id>—Node ID of the protection group which should be the bridge MAC address

<ring-protection-link-owner>—Ring protection link owner flag, one ring should have only one node as a ring protection link owner

<restore-interval>—Wait to restore interval

<guard-interval>—Guard timer interval in 10ms

<hold-interval>—Hold off timer interval in 100ms steps

<east-interface>—East interface configuration

<west-interface>—West interface configuration

<control-vlan>—Dedicated VLAN identifier - VLAN id or VLAN name

<data-channel>—Ring instance data channel

<ethernet-switching> configuration/interfaces/interface/unit/family

Description

<ethernet-switching-options> configuration

Usage

```
<configuration>
 <ethernet-switching-options>
  <traceoptions>...</traceoptions>
  <voip>...</voip>
  <unknown-unicast-forwarding>...</unknown-unicast-forwarding>
  <dot1q-tunneling>...</dot1q-tunneling>
  <mac-notification>...</mac-notification>
  <interfaces>...</interfaces>
  <mac-table-aging-time>...</mac-table-aging-time>
  <nonstop-bridging/>
  <static>...</static>
  <secure-access-port>...</secure-access-port>
  <authentication-whitelist>...</authentication-whitelist>
  <analyzer>...</analyzer>
  <port-error-disable>...</port-error-disable>
  <bpdu-block>...</bpdu-block>
  <redundant-trunk-group>...</redundant-trunk-group>
```

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```
    <storm-control>...</storm-control>
   </ethernet-switching-options>
  </configuration>
```

Description Ethernet-switching configuration options

Contents

<traceoptions>—Global tracing options for access security

<voip>—Voice-over-IP configuration

<unknown-unicast-forwarding>—Set interface for forwarding of unknown unicast packets

<dot1q-tunneling>—Dot1q tunneling global options

<mac-notification>—MAC notification options

<interfaces>—Ethernet switching family interface names

<mac-table-aging-time>—MAC aging time configuration

<nonstop-bridging>—Enable Non stop operation

<static>—Static forwarding entries

<secure-access-port>—Access port security options

<authentication-whitelist>—MAC authentication-whitelist configuration needed to bypass Authentication

<analyzer>—Analyzer options

<port-error-disable>—Port error disable options

<bpdu-block>—Block BPDU on interface (BPDU Protect)

<redundant-trunk-group>—Redundant trunk group

<storm-control>—Storm control configuration

<event> configuration/security/datapath-debug/action-profile

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <action-profile>
    <event>
     <np-ingress/>
     <np-egress/>
     <mac-ingress/>
     <mac-egress/>
     <lbt/>
     <pot/>
```


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```
        <jexec/>
        <lt-enter/>
        <lt-leave/>
        <trace/>
        <count/>
        <packet-summary/>
        <packet-dump/>
       </event>
      </action-profile>
     </datapath-debug>
    </security>
</configuration>
```

Description

Contents <np-ingress>—NP ingress

<np-egress>—NP egress

<mac-ingress>—A2/A10 IOC Mac(broadcom) ingress

<mac-egress>—A2/A10 IOC Mac(broadcom) egress

<lbt>—Load-Balance-Thread

<pot>—Packet-Order-Thread

<jexec>—JExec

<lt-enter>—LT(Logical Tunnel) enter

<lt-leave>—LT(Logical Tunnel) leave

<trace>—Trace action

<count>—Count action

<packet-summary>—Packet summary action

<packet-dump>—Packet dump action

<event> configuration/protocols/oam/ethernet/connectivity-fault-management/action-profile

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <action-profile>
      <event>
       <adjacency-loss/>
      </event>
```

```
      </action-profile>
     </connectivity-fault-management>
    </ethernet>
   </oam>
  </protocols>
</configuration>
```

Description Events that need to be monitored

Contents <adjacency-loss>—Connectivity is lost

<examine-dhcp> configuration/ethernet-switching-options/secure-access-port/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <examine-dhcp>
     <forwarding-class>forwarding-class</forwarding-class>
    </examine-dhcp>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Enable DHCP snooping on this VLAN

Contents <forwarding-class>—Forwarding class assigned to re-injected DHCP packets

<examine-fip> configuration/ethernet-switching-options/secure-access-port/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <examine-fip>
     <fc-map>fc-map</fc-map>
    </examine-fip>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Enable FIP snooping on this VLAN

Contents <fc-map>—FCoE MAC address prefix

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<external> configuration/interfaces/interface/clocking

Usage

```
<configuration>
 <interfaces>
  <interface>
   <clocking>
    <external>
     <interface>interface</interface>
    </external>
   </clocking>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <interface>—Interface that acts as clock source

<external> configuration/wlan/access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>...</system>
    <dot1x-supplicant>...</dot1x-supplicant>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description External type access point

Contents <system>—System information

<dot1x-supplicant>—

<external-manager> configuration/services/server-load-balance

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <external-manager>
    <ext-manager-name>ext-manager-name</ext-manager-name> <!-- identifier
-->
    <protocol>protocol</protocol>
```

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```
        <address>address</address> <!-- mandatory -->
        <port>port</port>
        <disable/>
       </external-manager>
      </server-load-balance>
     </services>
    </configuration>
```

Description Configure external manager

Contents <ext-manager-name>—Name of the external manager

- sasp - SASP manager (RFC4678)

<protocol>—Protocol of external manager

- sasp - SASP manager (RFC4678)

<address>—External manager IP address

<port>—External manager TCP port

<disable>—Disable external manager

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CHAPTER 32

Tag Elements Beginning with F

This chapter lists the configuration tag elements that have names beginning with the letter *f*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<fallback-block> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <notification-options>
        <fallback-block>
         <type>type</type>
         <display-host/>
         <allow-email/>
         <administrator-email>administrator-email</administrator-email>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </fallback-block>
       </notification-options>
      </profile>
```

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```
        </kaspersky-lab-engine>
       </anti-virus>
      </feature-profile>
     </utm>
    </security>
   </configuration>
```

Description Fallback block notification

Contents <type>—Fallback block notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<display-host>—Display hostname

<allow-email>—Administrator e-mail address

<administrator-email>—Administrator e-mail address

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-block> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <notification-options>
        <fallback-block>
         <type>type</type>
         <display-host/>
         <allow-email/>
         <administrator-email>administrator-email</administrator-email>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </fallback-block>
       </notification-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
```


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```
    </feature-profile>
   </utm>
  </security>
 </configuration>
```

Description Fallback block notification

Contents <type>—Fallback block notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<display-host>—Display hostname

<allow-email>—Administrator e-mail address

<administrator-email>—Administrator e-mail address

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-block> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <notification-options>
        <fallback-block>
         <type>type</type>
         <display-host/>
         <allow-email/>
         <administrator-email>administrator-email</administrator-email>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </fallback-block>
       </notification-options>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
```

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```
    </security>
  </configuration>
```

Description Fallback block notification

Contents <type>—Fallback block notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<display-host>—Display hostname

<allow-email>—Administrator e-mail address

<administrator-email>—Administrator e-mail address

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-non-block> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <notification-options>
        <fallback-non-block>
         <notify-mail-recipient/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </fallback-non-block>
       </notification-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Fallback non block notification

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Contents <notify-mail-recipient>—Notify mail recipient

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-non-block> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <notification-options>
        <fallback-non-block>
         <notify-mail-recipient/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </fallback-non-block>
       </notification-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Fallback non block notification

Contents <notify-mail-recipient>—Notify mail recipient

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-non-block> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
```

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```
                <profile>
                 <notification-options>
                  <fallback-non-block>
                   <notify-mail-recipient/>
                   <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
                  </fallback-non-block>
                 </notification-options>
                </profile>
               </sophos-engine>
              </anti-virus>
             </feature-profile>
            </utm>
           </security>
          </configuration>
```

Description Fallback non block notification

Contents <notify-mail-recipient>—Notify mail recipient

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<fallback-options> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <fallback-options>
        <default>default</default>
        <corrupt-file>corrupt-file</corrupt-file>
        <password-file>password-file</password-file>
        <decompress-layer>decompress-layer</decompress-layer>
        <content-size>content-size</content-size>
        <engine-not-ready>engine-not-ready</engine-not-ready>
        <timeout>timeout</timeout>
        <out-of-resources>out-of-resources</out-of-resources>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
```


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</configuration>

Description Anti-virus fallback options

Contents <default>—Default action

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<corrupt-file>—Fallback action for corrupt file

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

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- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<password-file>—Fallback action for password file

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<decompress-layer>—Fallback action for over decompress layer limit

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

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- log-and-permit -
- block -

<content-size>—Fallback action for content over size limit

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<engine-not-ready>—Fallback action for engine not ready

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<timeout>—Fallback action for engine scan timeout

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<out-of-resources>—Fallback action for out of resources

- log-and-permit -
- block -

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- log-and-permit -
- block -

<too-many-requests>—Fallback action for requests exceed engine limit

- log-and-permit -
- block -

<fallback-options> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <fallback-options>
        <default>default</default>
        <content-size>content-size</content-size>
        <engine-not-ready>engine-not-ready</engine-not-ready>
        <timeout>timeout</timeout>
        <out-of-resources>out-of-resources</out-of-resources>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus juniper-express-engine fallback options

Contents <default>—Default action

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -

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- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<content-size>—Fallback action for over content size

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<engine-not-ready>—Fallback action for engine not ready

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<timeout>—Fallback action for engine scan timeout

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<out-of-resources>—Fallback action for out of resources

- log-and-permit -
- block -
- log-and-permit -
- block -

<too-many-requests>—Fallback action for requests exceed engine limit

- log-and-permit -
- block -

<fallback-options> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <fallback-options>
        <default>default</default>
        <content-size>content-size</content-size>
        <engine-not-ready>engine-not-ready</engine-not-ready>
        <timeout>timeout</timeout>
        <out-of-resources>out-of-resources</out-of-resources>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-options>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus sophos-engine fallback options

Contents <default>—Default action

- permit -
- log-and-permit -
- block -
- permit -

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- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<content-size>—Fallback action for over content size

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<engine-not-ready>—Fallback action for engine not ready

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- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<timeout>—Fallback action for engine scan timeout

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<out-of-resources>—Fallback action for out of resources

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<too-many-requests>—Fallback action for requests exceed engine limit

- permit -
- log-and-permit -

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- block -

<fallback-settings> configuration/security/utm/feature-profile/web-filtering/surf-control-integrated/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <profile>
       <fallback-settings>
        <default>default</default>
        <server-connectivity>server-connectivity</server-connectivity>
        <timeout>timeout</timeout>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-settings>
      </profile>
     </surf-control-integrated>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Surf control integrated fallback settings

Contents <default>—Fallback default settings

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<server-connectivity>—Fallback action when device cannot connect to server

- log-and-permit -
- block -
- log-and-permit -
- block -

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- log-and-permit -
- block -

<timeout>—Fallback action when connection to server timeout

- log-and-permit -
- block -
- log-and-permit -
- block -

<too-many-requests>—Fallback action when requests exceed the limit of engine

- log-and-permit -
- block -

<fallback-settings> configuration/security/utm/feature-profile/web-filtering/web-sense-redirect/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <websense-redirect>
      <profile>
       <fallback-settings>
        <default>default</default>
        <server-connectivity>server-connectivity</server-connectivity>
        <timeout>timeout</timeout>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-settings>
      </profile>
     </websense-redirect>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Websense redirect fallback settings

Contents <default>—Fallback default settings

- log-and-permit -
- block -
- log-and-permit -

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- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<server-connectivity>—Fallback action when device cannot connect to server

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<timeout>—Fallback action when connection to server timeout

- log-and-permit -
- block -
- log-and-permit -
- block -

<too-many-requests>—Fallback action when requests exceed the limit of engine

- log-and-permit -
- block -

<fallback-settings> configuration/security/utm/feature-profile/web-filtering/juniper-local/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-local>
      <profile>
       <fallback-settings>
        <default>default</default>
        <server-connectivity>server-connectivity</server-connectivity>
        <timeout>timeout</timeout>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-settings>
      </profile>
```

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```
            </juniper-local>
          </web-filtering>
        </feature-profile>
      </utm>
    </security>
  </configuration>
```

Description Juniper local fallback settings

Contents <default>—Fallback default settings

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<server-connectivity>—Fallback action when device cannot connect to server

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<timeout>—Fallback action when connection to server timeout

- log-and-permit -
- block -
- log-and-permit -
- block -

<too-many-requests>—Fallback action when requests exceed the limit of engine

- log-and-permit -
- block -

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<fallback-settings> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <profile>
       <fallback-settings>
        <default>default</default>
        <server-connectivity>server-connectivity</server-connectivity>
        <timeout>timeout</timeout>
        <too-many-requests>too-many-requests</too-many-requests>
       </fallback-settings>
      </profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Juniper enhanced fallback settings

Contents <default>—Fallback default settings

- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -
- log-and-permit -
- block -

<server-connectivity>—Fallback action when device cannot connect to server

- log-and-permit -
- block -
- log-and-permit -
- block -

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- log-and-permit -
- block -

<timeout>—Fallback action when connection to server timeout

- log-and-permit -
- block -
- log-and-permit -
- block -

<too-many-requests>—Fallback action when requests exceed the limit of engine

- log-and-permit -
- block -

<family> configuration/security/forwarding-options

Usage

```
<configuration>
 <security>
  <forwarding-options>
   <family>
    <inet6>...</inet6>
    <mpls>...</mpls>
    <iso>...</iso>
   </family>
  </forwarding-options>
 </security>
</configuration>
```

Description Security forwarding-options for family

Contents <inet6>—Family IPv6

<mpls>—Family MPLS

<iso>—Family ISO

<family> configuration/interfaces/interface/unit

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet>...</inet>
     <inet6>...</inet6>
```


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```
      <mpls>...</mpls>
      <ethernet-switching/>
     </family>
    </unit>
   </interface>
  </interfaces>
 </configuration>
```

Description

Contents <inet>—

<inet6>—

<mpls>—

<ethernet-switching>—

<fcoe> configuration/protocols/dcbx/interface/applications

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <interface>
    <applications>
     <fcoe>
      <no-auto-negotiation/>
     </fcoe>
    </applications>
   </interface>
  </dcbx>
 </protocols>
</configuration>
```

Description Configure FCoE application feature

Contents <no-auto-negotiation>—Enable FCoE Application manually

<feature-profile> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>...</anti-virus>
    <web-filtering>...</web-filtering>
    <anti-spam>...</anti-spam>
    <content-filtering>...</content-filtering>
   </feature-profile>
```

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```
  </utm>
 </security>
</configuration>
```

Description Feature-profile settings

Contents <anti-virus>—Configure anti-virus feature

<web-filtering>—Configure web-filtering feature

<anti-spam>—Configure anti-spam feature

<content-filtering>—Configure content filtering feature

<file> configuration/security/ike/traceoptions

Usage

```
<configuration>
 <security>
  <ike>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </ike>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/group-vpn/server/traceoptions

Usage

```
<configuration>
 <security>
```


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```
<group-vpn>
 <server>
  <traceoptions>
   <file>
    <filename>filename</filename>
    <size>size</size>
    <files>files</files>
    <world-readable/>
    <match>match</match>
   </file>
  </traceoptions>
 </server>
</group-vpn>
</security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/pki/traceoptions

Usage

```
<configuration>
 <security>
  <pki>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </pki>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

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<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/gprs/gtp/traceoptions

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <traceoptions>
     <file>
      <filename>filename</filename>
      <size>size</size>
      <files>files</files>
      <world-readable/>
      <match>match</match>
     </file>
    </traceoptions>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/gprs/sctp/traceoptions

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <traceoptions>
     <file>
      <filename>filename</filename>
      <size>size</size>
```


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```
        <files>files</files>
        <world-readable/>
        <match>match</match>
       </file>
      </traceoptions>
     </sctp>
    </gprs>
   </security>
  </configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/alg/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </alg>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

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<match>—Regular expression for lines to be logged

<file> configuration/security/application-firewall/traceoptions

Usage

```
<configuration>
 <security>
  <application-firewall>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </application-firewall>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/softwires/traceoptions

Usage

```
<configuration>
 <security>
  <softwires>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </softwires>
 </security>
</configuration>
```


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Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/flow/traceoptions

Usage

```
<configuration>
 <security>
  <flow>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </flow>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/screen/traceoptions

Usage

```
<configuration>
 <security>
  <screen>
   <traceoptions>
    <file>
```

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```
      <filename>filename</filename>
      <size>size</size>
      <files>files</files>
      <world-readable/>
      <match>match</match>
     </file>
    </traceoptions>
   </screen>
  </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/nat/traceoptions

Usage

```
<configuration>
 <security>
  <nat>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </nat>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

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<match>—Regular expression for lines to be logged

<file> configuration/security/log

Usage

```
<configuration>
 <security>
  <log>
   <file>
    <name>name</name>
    <size>size</size>
    <path>path</path>
    <files>files</files>
   </file>
  </log>
 </security>
</configuration>
```

Description Security log file options for logs in binary format

Contents <filename>—Name of binary log file

<size>—Maximum size of binary log file in megabytes (1..10)

<path>—Path to binary log files

<files>—Maximum number of binary log files (2..10)

<file> configuration/security/log/traceoptions

Usage

```
<configuration>
 <security>
  <log>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </log>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

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<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/traceoptions

Usage

```
<configuration>
 <security>
  <traceoptions>
   <file>
    <filename>filename</filename>
    <size>size</size>
    <files>files</files>
    <world-readable/>
    <match>match</match>
   </file>
  </traceoptions>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/datapath-debug/traceoptions

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
```


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```
    </datapath-debug>
   </security>
  </configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/security/user-identification/traceoptions

Usage

```
<configuration>
 <security>
  <user-identification>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </user-identification>
 </security>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

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<file> configuration/services/ip-monitoring/traceoptions

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </ip-monitoring>
 </services>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/services/unified-access-control/traceoptions

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </unified-access-control>
 </services>
</configuration>
```


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Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/services/server-load-balance/traceoptions

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <traceoptions>
    <file>
     <filename>filename</filename>
     <size>size</size>
     <files>files</files>
     <world-readable/>
     <match>match</match>
    </file>
   </traceoptions>
  </server-load-balance>
 </services>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/services/captive-portal/traceoptions

Usage

```
<configuration>
 <services>
  <captive-portal>
   <traceoptions>
    <file>
```

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```
      <filename>filename</filename> <!-- mandatory -->
      <replace/>
      <size>size</size>
      <files>files</files>
      <no-stamp/>
      <world-readable/>
     </file>
    </traceoptions>
   </captive-portal>
  </services>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/interfaces/interface/traceoptions

Usage

```
<configuration>
 <interfaces>
  <interface>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <size>size</size>
     <files>files</files>
     <world-readable/>
    </file>
   </traceoptions>
  </interface>
 </interfaces>
</configuration>
```

Description Trace file information for ISDN decoded frames

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

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<world-readable>—Allow any user to read the log file

<file> configuration/protocols/oam/ethernet/connectivity-fault-management/trace-options

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <traceoptions>
      <file>
       <filename>filename</filename>
       <size>size</size>
       <files>files</files>
       <world-readable/>
       <match>match</match>
      </file>
     </traceoptions>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Trace file information

Contents <filename>—Name of file in which to write trace information

<size>—Maximum trace file size

<files>—Maximum number of trace files

<world-readable>—Allow any user to read the log file

<match>—Regular expression for lines to be logged

<file> configuration/protocols/lldp/traceoptions

Usage

```
<configuration>
 <protocols>
  <lldp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
```

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```
      <world-readable/>
     </file>
    </traceoptions>
   </lldp>
  </protocols>
 </configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/dot1x/traceoptions

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </dot1x>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

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<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/gvrp/traceoptions

Usage

```
<configuration>
 <protocols>
  <gvrp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </gvrp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/mvrp/traceoptions

Usage

```
<configuration>
 <protocols>
  <mvrp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
```

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```
    </file>
   </traceoptions>
  </mvrp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/protection-group/traceoptions

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </protection-group>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

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<world-readable>—Allow any user to read the log file

<file> configuration/protocols/stp/traceoptions

Usage

```
<configuration>
 <protocols>
  <stp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </stp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/rstp/traceoptions

Usage

```
<configuration>
 <protocols>
  <rstp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
```

```
  </rstp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/mstp/traceoptions

Usage

```
<configuration>
 <protocols>
  <mstp>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </mstp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

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<file> configuration/protocols/vstp/vlan-group/group/traceoptions

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <traceoptions>
      <file>
       <filename>filename</filename> <!-- mandatory -->
       <replace/>
       <size>size</size>
       <files>files</files>
       <no-stamp/>
       <world-readable/>
      </file>
     </traceoptions>
    </group>
   </vlan-group>
  </vstp>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/vstp/vlan/traceoptions

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
    <traceoptions>
     <file>
      <filename>filename</filename> <!-- mandatory -->
      <replace/>
      <size>size</size>
      <files>files</files>
      <no-stamp/>
```

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```
        <world-readable/>
       </file>
      </traceoptions>
     </vlan>
    </vstp>
   </protocols>
  </configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/edge-virtual-bridging/traceoptions

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

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<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/igmp-snooping/traceoptions

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
    </file>
   </traceoptions>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/protocols/mld-snooping/traceoptions

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <traceoptions>
    <file>
     <filename>filename</filename> <!-- mandatory -->
     <replace/>
     <size>size</size>
     <files>files</files>
     <no-stamp/>
     <world-readable/>
```

```
      </file>
     </traceoptions>
    </mld-snooping>
   </protocols>
  </configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

<file> configuration/ethernet-switching-options/traceoptions

Usage

```
<configuration>
 <ethernet-switching-options>
  <traceoptions>
   <file>
    <filename>filename</filename> <!-- mandatory -->
    <replace/>
    <size>size</size>
    <files>files</files>
    <no-stamp/>
    <world-readable/>
   </file>
  </traceoptions>
 </ethernet-switching-options>
</configuration>
```

Description Trace file options

Contents <filename>—Name of file in which to write trace information

<replace>—Replace trace file rather than appending to it

<size>—Maximum trace file size

<files>—Maximum number of trace files

<no-stamp>—Do not timestamp trace file

<world-readable>—Allow any user to read the log file

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<filename-extension> configuration/security/utm/custom-objects

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <filename-extension>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <value>...</value>
    </filename-extension>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure extension-list object

Contents <name>—Configure name of extension-list object

<value>—Configure value of extension-list object

<filter> configuration/interfaces/interface/unit/family/inet

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet>
      <filter>
       <dialer>dialer</dialer>
      </filter>
     </inet>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <dialer>—Name of filter applied on dialer

<filter> configuration/interfaces/interface/unit/family/inet6

Usage

```
<configuration>
```

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```
<interfaces>
 <interface>
  <unit>
   <family>
    <inet6>
     <filter>
      <dialer>dialer</dialer>
     </filter>
    </inet6>
   </family>
  </unit>
 </interface>
</interfaces>
</configuration>
```

Description

Contents <dialer>—Name of filter applied on dialer

<filter> configuration/interfaces/interface/unit/family/mpls

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <mpls>
      <filter>
       <dialer>dialer</dialer>
      </filter>
     </mpls>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <dialer>—Name of filter applied on dialer

<filter> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <filter>
    <input>input</input>
    <output>output</output>
   </filter>
```


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```
  </vlan>
 </vlans>
</configuration>
```

Description Packet filtering

Contents <input>—Name of filter applied to received packets

<output>—Name of filter applied to transmitted packets

<firewall-authentication> configuration/security

Usage

```
<configuration>
 <security>
  <firewall-authentication>
   <traceoptions>...</traceoptions>
  </firewall-authentication>
 </security>
</configuration>
```

Description Firewall authentication parameters

Contents <traceoptions>—Data-plane firewall authentication tracing options

<flag> configuration/security/ike/traceoptions

Usage

```
<configuration>
 <security>
  <ike>
   <traceoptions>
    <flag>
     <timer/>
     <routing-socket/>
     <parse/>
     <config/>
     <ike/>
     <policy-manager/>
     <general/>
     <database/>
     <certificates/>
     <snmp/>
     <thread/>
     <high-availability/>
     <next-hop-tunnels/>
     <all/>
    </flag>
   </traceoptions>
  </ike>
```

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```
 </security>
</configuration>
```

Description Tracing parameters for IKE

Contents <timer>—Trace internal timer events

<routing-socket>—Trace routing socket messages

<parse>—Trace configuration processing

<config>—Trace configuration download processing

<ike>—Trace IKE module processing

<policy-manager>—Trace policy manager processing

<general>—Trace general events

<database>—Trace security associations database events

<certificates>—Trace certificate events

<snmp>—Trace SNMP operations

<thread>—Trace thread processing

<high-availability>—Trace high-availability operations

<next-hop-tunnels>—Trace next-hop-tunnels operations

<all>—Trace everything

<flag> configuration/security/ipsec/traceoptions

Usage

```
<configuration>
 <security>
  <ipsec>
   <traceoptions>
    <flag>
     <packet-processing/>
     <packet-drops/>
     <security-associations/>
     <next-hop-tunnel-binding/>
     <all/>
    </flag>
   </traceoptions>
  </ipsec>
 </security>
</configuration>
```


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Description Events to include in data-plane IPSec trace output

Contents <packet-processing>—Trace data packet processing events

<packet-drops>—Trace packet drops

<security-associations>—Trace security association management events

<next-hop-tunnel-binding>—Trace next-hop tunnel binding events

<all>—Trace with all flags enabled

<flag> configuration/security/group-vpn/server/traceoptions

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <traceoptions>
     <flag>
      <timer/>
      <routing-socket/>
      <parse/>
      <config/>
      <ike/>
      <policy-manager/>
      <general/>
      <database/>
      <certificates/>
      <snmp/>
      <thread/>
      <high-availability/>
      <next-hop-tunnels/>
      <all/>
     </flag>
    </traceoptions>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Tracing parameters for GKSD

Contents <timer>—Trace internal timer events

<routing-socket>—Trace routing socket messages

<parse>—Trace configuration processing

<config>—Trace configuration download processing

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<ike>—Trace IKE module processing

<policy-manager>—Trace policy manager processing

<general>—Trace general events

<database>—Trace security associations database events

<certificates>—Trace certificate events

<snmp>—Trace SNMP operations

<thread>—Trace thread processing

<high-availability>—Trace high-availability operations

<next-hop-tunnels>—Trace next-hop-tunnels operations

<all>—Trace everything

<flag> configuration/security/pki/traceoptions

Usage

```
<configuration>
 <security>
  <pki>
   <traceoptions>
    <flag>
     <certificate-verification/>
     <online-crl-check/>
     <enrollment/>
     <all/>
    </flag>
   </traceoptions>
  </pki>
 </security>
</configuration>
```

Description Tracing parameters

Contents <certificate-verification>—PKI certificate verification tracing

<online-crl-check>—PKI online crl tracing

<enrollment>—PKI certificate enrollment tracing

<all>—Trace with all flags enabled

<flag> configuration/security/gprs/gtp/traceoptions

Usage

```
<configuration>
```


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```
<security>
 <gprs>
  <gtp>
   <traceoptions>
    <flag>
     <configuration/>
     <flow/>
     <parser/>
     <chassis-cluster/>
     <all/>
    </flag>
   </traceoptions>
  </gtp>
 </gprs>
</security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<flow>—Trace flow events

<parser>—Trace parser events

<chassis-cluster>—Trace chassis cluster events

<all>—Trace everything

<flag> configuration/security/gprs/sctp/traceoptions

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <traceoptions>
     <flag>
      <configuration/>
      <flow/>
      <parser/>
      <chassis-cluster/>
      <all/>
     </flag>
    </traceoptions>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<flow>—Trace flow events

<parser>—Trace parser events

<chassis-cluster>—Trace chassis cluster events

<all>—Trace everything

<flag> configuration/security/alg/alg-manager/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <alg-manager>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </alg-manager>
  </alg>
 </security>
</configuration>
```

Description ALG-MANAGER trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/alg-support-lib/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <alg-support-lib>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </alg-support-lib>
  </alg>
 </security>
</configuration>
```


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Description ALG-SUPPORT-LIB trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/dns/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <dns>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </dns>
  </alg>
 </security>
</configuration>
```

Description DNS ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/ftp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <ftp>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </ftp>
  </alg>
 </security>
</configuration>
```

Description FTP ALG trace flags

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Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/h323/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <traceoptions>
     <flag>
      <q931/>
      <h245/>
      <ras/>
      <h225-asn1/>
      <h245-asn1/>
      <ras-asn1/>
      <chassis-cluster/>
      <all/>
      <terse/>
      <detail/>
      <extensive/>
     </flag>
    </traceoptions>
   </h323>
  </alg>
 </security>
</configuration>
```

Description H.323 ALG trace flags

Contents <q931>—Enable tracing for Q.931 processing

<h245>—Enable tracing for H.245 processing

<ras>—Enable tracing for RAS processing

<h225-asn1>—Enable tracing for H.225 ASN.1 processing

<h245-asn1>—Enable tracing for H.245 ASN.1 processing

<ras-asn1>—Enable tracing for RAS ASN.1 processing

<chassis-cluster>—Enable tracing for H.323 chassis cluster functions

<all>—Trace everything

<terse>—Set trace verbosity level to terse

<detail>—Set trace verbosity level to detail

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<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/mgcp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <traceoptions>
     <flag>
      <call/>
      <decode/>
      <error/>
      <chassis-cluster/>
      <nat/>
      <packet/>
      <rm/>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description MGCP ALG trace flags

Contents <call>—Enable tracing for MGCP call processing

<decode>—Enable tracing for MGCP decoder operations

<error>—Enable tracing for MGCP processing errors

<chassis-cluster>—Enable tracing for MGCP chassis cluster functions

<nat>—Enable tracing for MGCP Network Address Translation (NAT) processing

<packet>—Enable tracing for MGCP protocol packet processing

<rm>—Enable tracing MGCP Resource Management (Resmgr) functions

<all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/msrpc/traceoptions

Usage

```
<configuration>
 <security>
```

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```
<alg>
 <msrpc>
  <traceoptions>
   <flag>
    <all/>
    <extensive/>
   </flag>
  </traceoptions>
 </msrpc>
</alg>
</security>
</configuration>
```

Description MSRPC ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/sunrpc/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <sunrpc>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </sunrpc>
  </alg>
 </security>
</configuration>
```

Description SUNRPC ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/real/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <real>
```


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```
      <traceoptions>
       <flag>
        <all/>
        <extensive/>
       </flag>
      </traceoptions>
     </real>
    </alg>
   </security>
  </configuration>
```

Description REAL ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/rsh/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <rsh>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </rsh>
  </alg>
 </security>
</configuration>
```

Description RSH ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/rtsp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <rtsp>
    <traceoptions>
     <flag>
```

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```
            <all/>
            <extensive/>
           </flag>
          </traceoptions>
         </rtsp>
        </alg>
       </security>
      </configuration>
```

Description RTSP ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/sccp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <traceoptions>
     <flag>
      <call/>
      <cli/>
      <decode/>
      <error/>
      <chassis-cluster/>
      <init/>
      <nat/>
      <rm/>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description SCCP ALG trace flags

Contents <call>—Enable tracing SCCP call processing

<cli>—Enable tracing SCCP cli processing

<decode>—Enable tracing for SCCP decoder operations

<error>—Enable tracing for SCCP processing errors

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<chassis-cluster>—Enable tracing for SCCP chassis cluster functions

<init>—Enable tracing for SCCP initialization errors

<nat>—Enable tracing for SCCP Network Address Translation (NAT) processing

<rm>—Enable tracing SCCP Resource Management (Resmgr) functions

<all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/sip/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <traceoptions>
     <flag>
      <call/>
      <chassis-cluster/>
      <nat/>
      <parser/>
      <rm/>
      <all/>
      <terse/>
      <detail/>
      <extensive/>
     </flag>
    </traceoptions>
   </sip>
  </alg>
 </security>
</configuration>
```

Description SIP ALG trace flags

Contents <call>—Enable tracing for SIP call processing

<chassis-cluster>—Enable tracing for SIP chassis cluster functions

<nat>—Enable tracing for SIP Network Address Translation (NAT) processing

<parser>—Enable tracing for SIP parser operations

<rm>—Enable tracing SIP Resource Management (Resmgr) functions

<all>—Trace everything

<terse>—Set trace verbosity level to terse

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<detail>—Set trace verbosity level to detail

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/sql/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <sql>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </sql>
  </alg>
 </security>
</configuration>
```

Description SQL ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/talk/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <talk>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </talk>
  </alg>
 </security>
</configuration>
```

Description TALK ALG trace flags

Contents <all>—Trace everything

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<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/tftp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <tftp>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </tftp>
  </alg>
 </security>
</configuration>
```

Description TFTP ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/alg/pptp/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <pptp>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </pptp>
  </alg>
 </security>
</configuration>
```

Description PPTP ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

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<flag> configuration/security/alg/ike-esp-nat/traceoptions

Usage

```
<configuration>
 <security>
  <alg>
   <ike-esp-nat>
    <traceoptions>
     <flag>
      <all/>
      <extensive/>
     </flag>
    </traceoptions>
   </ike-esp-nat>
  </alg>
 </security>
</configuration>
```

Description IKE-ESP ALG trace flags

Contents <all>—Trace everything

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/application-firewall/traceoptions

Usage

```
<configuration>
 <security>
  <application-firewall>
   <traceoptions>
    <flag>
     <configuration/>
     <lookup/>
     <compilation/>
     <ipc/>
     <all/>
    </flag>
   </traceoptions>
  </application-firewall>
 </security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<lookup>—Trace lookup events

<compilation>—Rule-sets compilation events

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<ipc>—Inter-process communication events

<all>—Trace everything

<flag> configuration/security/utm/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <traceoptions>
    <flag>
     <cli/>
     <daemon/>
     <ipc/>
     <pfe/>
     <all/>
    </flag>
   </traceoptions>
  </utm>
 </security>
</configuration>
```

Description Tracing UTM information

Contents <cli>—Trace CLI

<daemon>—Trace daemon information

<ipc>—Trace IPC information

<pfe>—Trace pfe information

<all>—Enable all utm trace options

<flag> configuration/security/utm/application-proxy/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <application-proxy>
    <traceoptions>
     <flag>
      <abort/>
      <application-objects/>
      <utm-realtime/>
      <anti-virus/>
      <basic/>
      <buffer/>
      <detail/>
      <ftp-data/>
```

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```
            <ftp-control/>
            <http/>
            <imap/>
            <memory/>
            <parser/>
            <pfe/>
            <pop3/>
            <queue/>
            <smtp/>
            <tcp/>
            <timer/>
            <connection-rating/>
            <express-anti-virus/>
            <mime/>
            <regex-engine/>
            <sophos-anti-virus/>
            <all/>
           </flag>
          </traceoptions>
         </application-proxy>
        </utm>
       </security>
      </configuration>
```

Description Tracing parameters for utm application proxy

Contents <abort>—Trace application-proxy session abort

<application-objects>—Trace application-proxy objects information

<utm-realtime>—Trace application-proxy realtime-thread information

<anti-virus>—Trace anti-virus information

<basic>—Trace application-proxy basic information

<buffer>—Trace application-proxy data buffer information

<detail>—Trace application-proxy detailed information

<ftp-data>—Trace FTP data connection information

<ftp-control>—Trace FTP control connection information

<http>—Trace HTTP protocol information

<imap>—Trace IMAP protocol information

<memory>—Trace memory usage

<parser>—Trace protocol parser

<pfe>—Trace communication with PFE

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<pop3>—Trace POP3 protocol information

<queue>—Trace queue information

<smtp>—Trace SMTP protocol information

<tcp>—Trace TCP level information

<timer>—Trace timer processing

<connection-rating>—Trace connection rating information

<express-anti-virus>—Trace anti-virus express engine information

<mime>—Trace MIME parser information

<regex-engine>—Trace Pattern Match Engine (PME) information

<sophos-anti-virus>—Trace anti-virus sophos engine information

<all>—Enable all application-proxy trace options

<flag> configuration/security/utm/ipc/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <ipc>
    <traceoptions>
     <flag>
      <basic/>
      <detail/>
      <connection-manager/>
      <connection-status/>
      <pfe/>
      <utm-realtime/>
      <all/>
     </flag>
    </traceoptions>
   </ipc>
  </utm>
 </security>
</configuration>
```

Description Traceoptions for utm IPC flag

Contents <basic>—Trace basic IPC related information

<detail>—Trace detail IPC related information

<connection-manager>—Trace IPC connection manager

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<connection-status>—Trace IPC connection status

<pfe>—Trace communication with pfe

<utm-realtime>—Trace IPC realtime-thread information

<all>—Enable all IPC trace options

<flag> configuration/security/utm/feature-profile/anti-virus/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <traceoptions>
      <flag>
       <basic/>
       <detail/>
       <engine/>
       <pattern/>
       <updater/>
       <manager/>
       <worker/>
       <sendmail/>
       <ipc/>
       <event/>
       <statistics/>
       <all/>
      </flag>
     </traceoptions>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for anti-virus feature flag

Contents <basic>—Trace anti-virus module generic basic information

<detail>—Trace anti-virus module generic detail information

<engine>—Trace scan engine information

<pattern>—Trace detail information of pattern loading

<updater>—Trace pattern updater process activities

<manager>—Trace anti-virus manager process activities

<worker>—Trace anti-virus worker process activities

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<sendmail>—Trace mail notifier process activities

<ipc>—Trace communication events with PFE

<event>—Trace communication events between RE side processes

<statistics>—Trace statistics information

<all>—Enable trace all anti-virus trace options

<flag> configuration/security/utm/feature-profile/web-filtering/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <traceoptions>
      <flag>
       <basic/>
       <session-manager/>
       <heartbeat/>
       <packet/>
       <profile/>
       <requests/>
       <response/>
       <socket/>
       <timer/>
       <ipc/>
       <cache/>
       <enhanced/>
       <all/>
      </flag>
     </traceoptions>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for web-filtering feature trace flag

Contents <basic>—Trace web-filtering module generic basic information

<session-manager>—Trace session management information

<heartbeat>—Trace connectivity information with web-filter server

<packet>—Trace packet information from session management

<profile>—Trace profile config information

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<requests>—Trace requests sent to web-filter server

<response>—Trace response received from web-filter server

<socket>—Trace communication socket with web-filter server

<timer>—Trace aging information for requests sent to server

<ipc>—Trace communication events with PFE

<cache>—Trace category cache operations

<enhanced>—Trace Juniper enhanced web-filtering operations

<all>—Enable trace all anti-virus trace options

<flag> configuration/security/utm/feature-profile/anti-spam/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-spam>
     <traceoptions>
      <flag>
       <manager/>
       <sbl/>
       <all/>
      </flag>
     </traceoptions>
    </anti-spam>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for anti-spam feature flag

Contents <manager>—Trace anti-spam manager information

<sbl>—Trace SBL server information

<all>—Enable trace all anti-spam trace options

<flag> configuration/security/utm/feature-profile/content-filtering/traceoptions

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
```


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```
<content-filtering>
 <traceoptions>
  <flag>
   <basic/>
   <detail/>
   <all/>
  </flag>
 </traceoptions>
</content-filtering>
</feature-profile>
</utm>
</security>
</configuration>
```

Description Trace options for content-filtering feature flag

Contents <basic>—Trace content-filtering basic information

<detail>—Trace content-filtering detail information

<all>—Enable trace all content-filtering trace options

<flag> configuration/security/softwires/traceoptions

Usage

```
<configuration>
 <security>
  <softwires>
   <traceoptions>
    <flag>
     <configuration/>
     <flow/>
     <all/>
    </flag>
   </traceoptions>
  </softwires>
 </security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<flow>—Trace flow events

<all>—Trace everything

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<flag> configuration/security/flow/traceoptions

Usage

```
<configuration>
 <security>
  <flow>
   <traceoptions>
    <flag>
     <all/>
     <basic-datapath/>
     <packet-drops/>
    </flag>
   </traceoptions>
  </flow>
 </security>
</configuration>
```

Description Events and other information to include in trace output

Contents <all>—All events

<basic-datapath>—Basic packet flow

<packet-drops>—Packet drops

<flag> configuration/security/firewall-authentication/traceoptions

Usage

```
<configuration>
 <security>
  <firewall-authentication>
   <traceoptions>
    <flag>
     <authentication/>
     <proxy/>
     <all/>
     <terse/>
     <detail/>
     <extensive/>
    </flag>
   </traceoptions>
  </firewall-authentication>
 </security>
</configuration>
```

Description Events to include in trace output

Contents <authentication>—Data-plane firewall authentication events

<proxy>—Data-plane firewall authentication proxy events

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<all>—All events

<terse>—Include terse amount of output in trace

<detail>—Include detailed amount of output in trace

<extensive>—Include extensive amount of output in trace

<flag> configuration/security/screen/traceoptions

Usage

```
<configuration>
 <security>
  <screen>
   <traceoptions>
    <flag>
     <configuration/>
     <flow/>
     <all/>
    </flag>
   </traceoptions>
  </screen>
 </security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<flow>—Trace flow events

<all>—Trace everything

<flag> configuration/security/nat/traceoptions

Usage

```
<configuration>
 <security>
  <nat>
   <traceoptions>
    <flag>
     <configuration/>
     <flow/>
     <routing-socket/>
     <routing-protocol/>
     <all/>
     <source-nat-re/>
     <source-nat-rt/>
     <source-nat-pfe/>
     <destination-nat-re/>
     <destination-nat-rt/>
     <destination-nat-pfe/>
```

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```
        <static-nat-re/>
        <static-nat-rt/>
        <static-nat-pfe/>
        <syslog/>
       </flag>
      </traceoptions>
     </nat>
    </security>
   </configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<flow>—Trace flow events

<routing-socket>—Trace routing socket events

<routing-protocol>—Trace routing protocol events

<all>—Trace everything

<source-nat-re>—Trace source nat events on RE side

<source-nat-rt>—Trace source nat events on PFE-RT side

<source-nat-pfe>—Trace source nat events on PFE-ukernel side

<destination-nat-re>—Trace destination nat events on RE side

<destination-nat-rt>—Trace destination nat events on PFE-RT side

<destination-nat-pfe>—Trace destination nat events on PFE-ukernel side

<static-nat-re>—Trace static nat events on RE side

<static-nat-rt>—Trace static nat events on PFE-RT side

<static-nat-pfe>—Trace static nat events on PFE-ukernel side

<syslog>—Write NAT flow traces to system log also

<flag> configuration/security/resource-manager/traceoptions

Usage

```
<configuration>
 <security>
  <resource-manager>
   <traceoptions>
    <flag>
     <client/>
     <group/>
     <resource/>
```


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```
        <gate/>
        <session/>
        <chassis cluster/>
        <messaging/>
        <service pinhole/>
        <error/>
        <all/>
        <terse/>
        <detail/>
        <extensive/>
       </flag>
      </traceoptions>
     </resource-manager>
    </security>
</configuration>
```

Description Resource manager objects and events to include in trace

Contents <client>—Trace resource manager client

<group>—Trace resource manager group

<resource>—Trace resource manager resource

<gate>—Trace resource manager created gates

<session>—Trace resource manager created session

<chassis cluster>—Trace resource manager's chassis cluster events

<messaging>—Trace resource manager messaging

<service pinhole>—Trace resource manager created service pinholes

<error>—Trace all resource manager errors

<all>—Trace all resource manager objects and events

<terse>—Set trace verbosity level to terse

<detail>—Set trace verbosity level to detail

<extensive>—Set trace verbosity level to extensive

<flag> configuration/security/log/traceoptions

Usage

```
<configuration>
 <security>
  <log>
   <traceoptions>
    <flag>
     <source/>
```

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```
      <configuration/>
      <all/>
      <report/>
      <hpl/>
     </flag>
    </traceoptions>
   </log>
  </security>
</configuration>
```

Description List of things to include in trace

Contents <source>—Communication with security log forwarder

<configuration>—Reading of configuration

<all>—Everything

<report>—Trace report

<hpl>—Trace HPL logging

<flag> configuration/security/traceoptions

Usage

```
<configuration>
 <security>
  <traceoptions>
   <flag>
    <configuration/>
    <routing-socket/>
    <compilation/>
    <all/>
   </flag>
  </traceoptions>
 </security>
</configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<routing-socket>—Trace routing socket events

<compilation>—Trace compilation events

<all>—Trace everything

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<flag> configuration/security/datapath-debug/action-profile/module

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <action-profile>
    <module>
     <flag>
      <all/>
     </flag>
    </module>
   </action-profile>
  </datapath-debug>
 </security>
</configuration>
```

Description Events and other information to include in trace output

Contents <all>—All flow trace

<flag> configuration/security/user-identification/traceoptions

Usage

```
<configuration>
 <security>
  <user-identification>
   <traceoptions>
    <flag>
     <all/>
    </flag>
   </traceoptions>
  </user-identification>
 </security>
</configuration>
```

Description Tracing parameters

Contents <all>—Trace everything

<flag> configuration/services/ip-monitoring/traceoptions

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <traceoptions>
    <flag>
     <debug/>
```

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```
        <configuration/>
        <errors/>
        <memory/>
        <event/>
        <all/>
       </flag>
      </traceoptions>
     </ip-monitoring>
    </services>
   </configuration>
```

Description Tracing parameters

Contents <debug>—Trace debug

<configuration>—Trace configuration events

<errors>—Trace errors

<memory>—Trace memory allocation or deallocation messages

<event>—Trace events

<all>—Trace events

<flag> configuration/services/unified-access-control/traceoptions

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <traceoptions>
    <flag>
     <all/>
     <ipc/>
     <config/>
     <connect/>
    </flag>
   </traceoptions>
  </unified-access-control>
 </services>
</configuration>
```

Description Tracing parameters

Contents <all>—Trace with all flags enabled

<ipc>—IPC tracing

<config>—Configuration tracing

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<connect>—Communication with infranet controller tracing

<flag> configuration/services/server-load-balance/traceoptions

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <traceoptions>
    <flag>
     <init/>
     <config/>
     <rtsock/>
     <interface/>
     <eventlib/>
     <misc/>
     <sasp/>
     <daemon-all/>
     <datapath-init/>
     <datapath-config/>
     <datapath-data/>
     <datapath-all/>
     <health-monitor-init/>
     <health-monitor-config/>
     <health-monitor-control/>
     <health-monitor-thread/>
     <health-monitor-all/>
     <all/>
    </flag>
   </traceoptions>
  </server-load-balance>
 </services>
</configuration>
```

Description Tracing parameters

Contents <init>—Trace daemon initialization events

<config>—Trace daemon configuration events

<rtsock>—Trace daemon routing socket events

<interface>—Trace daemon interface events

<eventlib>—Trace daemon eventlib events

<misc>—Trace daemon miscellaneous events

<sasp>—Trace SASP events

<daemon-all>—Trace all daemon events

<datapath-init>—Trace datapath initialization events

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<datapath-config>—Trace datapath configuration events

<datapath-data>—Trace datapath data events

<datapath-all>—Trace all datapath events

<health-monitor-init>—Trace health monitor initialization events

<health-monitor-config>—Trace health monitor configuration events

<health-monitor-control>—Trace health monitor control events

<health-monitor-thread>—Trace health monitor thread events

<health-monitor-all>—Trace all health monitor events

<all>—Trace all events

<flag> configuration/services/captive-portal/traceoptions

Usage

```
<configuration>
 <services>
  <captive-portal>
   <traceoptions>
    <flag>
     <dot1x-debug/>
     <parse/>
     <esw-if/>
     <config-internal/>
     <normal/>
     <general/>
     <state/>
     <task/>
     <timer/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </captive-portal>
 </services>
</configuration>
```

Description Tracing parameters

Contents <dot1x-debug>—Trace dot1x events

<parse>—Trace configuration parsing

<esw-if>—Trace ESW Interactions

<config-internal>—Trace configuration internals

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<normal>—Trace normal events

<general>—Trace general events

<state>—Trace state transitions

<task>—Trace task processing

<timer>—Trace task timer processing

<all>—Trace everything

<disable>—Disable this trace flag

<flag> configuration/interfaces/interface/traceoptions

Usage

```
<configuration>
 <interfaces>
  <interface>
   <traceoptions>
    <flag>
     <q921/>
     <q931/>
    </flag>
   </traceoptions>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <q921>—Trace ISDN Q.921 frames

<q931>—Trace ISDN Q.931 frames

<flag> configuration/protocols/oam/ethernet/connectivity-fault-management/traceoptions

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <traceoptions>
      <flag>
       <configuration/>
       <routing-socket/>
       <protocol/>
       <init/>
       <error/>
```

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```
            <issu/>
            <all/>
           </flag>
          </traceoptions>
         </connectivity-fault-management>
        </ethernet>
       </oam>
      </protocols>
     </configuration>
```

Description Tracing parameters

Contents <configuration>—Trace configuration events

<routing-socket>—Trace routing socket events

<protocol>—Trace protocol processing events

<init>—Trace events related to protocol daemon start-up

<error>—Trace events related to catestrophic errors in daemon

<issu>—Trace ISSU related events

<all>—Trace everything

<flag> configuration/protocols/lldp/traceoptions

Usage

```
<configuration>
 <protocols>
  <lldp>
   <traceoptions>
    <flag>
     <all/>
     <configuration/>
     <rtsock/>
     <packet/>
     <interface/>
     <vlan/>
     <snmp/>
     <netbios/>
     <disable/>
    </flag>
   </traceoptions>
  </lldp>
 </protocols>
</configuration>
```

Description Tracing parameters

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Contents <all>—Trace configuration events

<configuration>—Log configuration events

<rtsock>—Trace rtsock message events

<packet>—Trace packet information

<interface>—Trace interface update events

<vlan>—Trace VLAN update events

<snmp>—Trace SNMP events

<netbios>—Trace NetBIOS events

<disable>—Disable this trace flag

<flag> configuration/protocols/dot1x/traceoptions

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <traceoptions>
    <flag>
     <dot1x-debug/>
     <parse/>
     <esw-if/>
     <eapol/>
     <config-internal/>
     <normal/>
     <general/>
     <state/>
     <task/>
     <timer/>
     <vlan/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </dot1x>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <dot1x-debug>—Trace dot1x events

<parse>—Trace configuration parsing

<esw-if>—Trace ESW Interactions

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<eapol>—Trace EAPOL Transmit/Receive

<config-internal>—Trace configuration internals

<normal>—Trace normal events

<general>—Trace general events

<state>—Trace state transitions

<task>—Trace routing protocol task processing

<timer>—Trace routing protocol task timer processing

<vlan>—Trace VLAN transactions

<all>—Trace everything

<disable>—Disable this trace flag

<flag> configuration/protocols/gvrp/traceoptions

Usage

```
<configuration>
 <protocols>
  <gvrp>
   <traceoptions>
    <flag>
     <event/>
     <receive/>
     <transmit/>
     <eswd/>
     <error/>
     <state/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </gvrp>
 </protocols>
</configuration>
```

Description Tracing parameters for GVRP protocol

Contents <event>—Trace GVRP events

<receive>—Trace GVRP packet receive

<transmit>—Trace GVRP packet sent

<eswd>—Trace ESWD notification handling by GVRP

<error>—Trace GVRP errors

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<state>—Trace GVRP state machine changes

<all>—Trace everything

<disable>—Disable this trace flag

<flag> configuration/protocols/mvrp/traceoptions

Usage

```
<configuration>
 <protocols>
  <mvrp>
   <traceoptions>
    <flag>
     <eswd/>
     <event/>
     <receive/>
     <transmit/>
     <error/>
     <timer/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </mvrp>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <eswd>—Trace eswd notifications

<event>—Trace MVRP state machine events

<receive>—Trace MVRP packet receive

<transmit>—Trace MVRP packet sent

<error>—Trace MVRP errors

<timer>—Trace MVRP timer processing

<all>—Trace everything

<disable>—Disable this trace flag

<flag> configuration/protocols/protection-group/traceoptions

Usage

```
<configuration>
 <protocols>
  <protection-group>
```

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```
<traceoptions>
 <flag>
  <config/>
  <debug/>
  <normal/>
  <events/>
  <pdu/>
  <timers/>
  <state-machine/>
  <periodic-packet-management/>
  <all/>
 </flag>
</traceoptions>
</protection-group>
</protocols>
</configuration>
```

Description Tracing parameters

Contents <config>—Trace configuration messages

<debug>—Trace debug messages

<normal>—Trace normal messages

<events>—Trace events to the protocol state machine

<pdu>—Trace R-APS PDU reception and transmission

<timers>—Trace protocol timers

<state-machine>—Trace R-APS state machine

<periodic-packet-management>—Trace periodic packet management state and events

<all>—Trace all

<flag> configuration/protocols/stp/traceoptions

Usage

```
<configuration>
 <protocols>
  <stp>
   <traceoptions>
    <flag>
     <events/>
     <bpdu/>
     <timers/>
     <port-information-state-machine/>
     <port-receive-state-machine/>
     <port-role-select-state-machine/>
     <port-role-transit-state-machine/>
     <port-state-transit-state-machine/>
```


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```
        <port-migration-state-machine/>
        <port-transmit-state-machine/>
        <topology-change-state-machine/>
        <bridge-detection-state-machine/>
        <state-machine-variables/>
        <ppmd/>
        <all-failures/>
        <all/>
        <disable/>
       </flag>
      </traceoptions>
     </stp>
    </protocols>
</configuration>
```

Description Tracing parameters

Contents <events>—Trace events to the protocol state machine

<bpdu>—Trace BPDU reception and transmission

<timers>—Trace protocol timers

<port-information-state-machine>—Trace port information state machine

<port-receive-state-machine>—Trace port receive state machine

<port-role-select-state-machine>—Trace port role selection state machine

<port-role-transit-state-machine>—Trace port role transit state machine

<port-state-transit-state-machine>—Trace port state transit state machine

<port-migration-state-machine>—Trace port migration state machine

<port-transmit-state-machine>—Trace port transmit state machine

<topology-change-state-machine>—Trace topology change state machine

<bridge-detection-state-machine>—Trace bridge detection state machine

<state-machine-variables>—Trace when state machine variables change

<ppmd>—Trace state and events for ppmd process

<all-failures>—Trace all failure conditions

<all>—Trace all

<disable>—Disable this trace flag

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<flag> configuration/protocols/rstp/traceoptions

Usage

```
<configuration>
 <protocols>
  <rstp>
   <traceoptions>
    <flag>
     <events/>
     <bpdu/>
     <timers/>
     <port-information-state-machine/>
     <port-receive-state-machine/>
     <port-role-select-state-machine/>
     <port-role-transit-state-machine/>
     <port-state-transit-state-machine/>
     <port-migration-state-machine/>
     <port-transmit-state-machine/>
     <topology-change-state-machine/>
     <bridge-detection-state-machine/>
     <state-machine-variables/>
     <ppmd/>
     <all-failures/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </rstp>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <events>—Trace events to the protocol state machine

<bpdu>—Trace BPDU reception and transmission

<timers>—Trace protocol timers

<port-information-state-machine>—Trace port information state machine

<port-receive-state-machine>—Trace port receive state machine

<port-role-select-state-machine>—Trace port role selection state machine

<port-role-transit-state-machine>—Trace port role transit state machine

<port-state-transit-state-machine>—Trace port state transit state machine

<port-migration-state-machine>—Trace port migration state machine

<port-transmit-state-machine>—Trace port transmit state machine

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<topology-change-state-machine>—Trace topology change state machine

<bridge-detection-state-machine>—Trace bridge detection state machine

<state-machine-variables>—Trace when state machine variables change

<ppmd>—Trace state and events for ppmd process

<all-failures>—Trace all failure conditions

<all>—Trace all

<disable>—Disable this trace flag

<flag> configuration/protocols/mstp/traceoptions

Usage

```
<configuration>
 <protocols>
  <mstp>
   <traceoptions>
    <flag>
     <events/>
     <bpdu/>
     <timers/>
     <port-information-state-machine/>
     <port-receive-state-machine/>
     <port-role-select-state-machine/>
     <port-role-transit-state-machine/>
     <port-state-transit-state-machine/>
     <port-migration-state-machine/>
     <port-transmit-state-machine/>
     <topology-change-state-machine/>
     <bridge-detection-state-machine/>
     <state-machine-variables/>
     <ppmd/>
     <all-failures/>
     <all/>
     <disable/>
    </flag>
   </traceoptions>
  </mstp>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <events>—Trace events to the protocol state machine

<bpdu>—Trace BPDU reception and transmission

<timers>—Trace protocol timers

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<port-information-state-machine>—Trace port information state machine

<port-receive-state-machine>—Trace port receive state machine

<port-role-select-state-machine>—Trace port role selection state machine

<port-role-transit-state-machine>—Trace port role transit state machine

<port-state-transit-state-machine>—Trace port state transit state machine

<port-migration-state-machine>—Trace port migration state machine

<port-transmit-state-machine>—Trace port transmit state machine

<topology-change-state-machine>—Trace topology change state machine

<bridge-detection-state-machine>—Trace bridge detection state machine

<state-machine-variables>—Trace when state machine variables change

<ppmd>—Trace state and events for ppmd process

<all-failures>—Trace all failure conditions

<all>—Trace all

<disable>—Disable this trace flag

<flag> configuration/protocols/vstp/vlan-group/group/traceoptions

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <traceoptions>
      <flag>
       <events/>
       <bpdu/>
       <timers/>
       <port-information-state-machine/>
       <port-receive-state-machine/>
       <port-role-select-state-machine/>
       <port-role-transit-state-machine/>
       <port-state-transit-state-machine/>
       <port-migration-state-machine/>
       <port-transmit-state-machine/>
       <topology-change-state-machine/>
       <bridge-detection-state-machine/>
       <state-machine-variables/>
       <ppmd/>
       <all-failures/>
       <all/>
       <disable/>
```


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```
        </flag>
       </traceoptions>
      </group>
     </vlan-group>
    </vstp>
   </protocols>
  </configuration>
```

Description Tracing parameters

Contents <events>—Trace events to the protocol state machine

<bpdu>—Trace BPDU reception and transmission

<timers>—Trace protocol timers

<port-information-state-machine>—Trace port information state machine

<port-receive-state-machine>—Trace port receive state machine

<port-role-select-state-machine>—Trace port role selection state machine

<port-role-transit-state-machine>—Trace port role transit state machine

<port-state-transit-state-machine>—Trace port state transit state machine

<port-migration-state-machine>—Trace port migration state machine

<port-transmit-state-machine>—Trace port transmit state machine

<topology-change-state-machine>—Trace topology change state machine

<bridge-detection-state-machine>—Trace bridge detection state machine

<state-machine-variables>—Trace when state machine variables change

<ppmd>—Trace state and events for ppmd process

<all-failures>—Trace all failure conditions

<all>—Trace all

<disable>—Disable this trace flag

<flag> configuration/protocols/vstp/vlan/traceoptions

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
    <traceoptions>
     <flag>
```

```
            <events/>
            <bpdu/>
            <timers/>
            <port-information-state-machine/>
            <port-receive-state-machine/>
            <port-role-select-state-machine/>
            <port-role-transit-state-machine/>
            <port-state-transit-state-machine/>
            <port-migration-state-machine/>
            <port-transmit-state-machine/>
            <topology-change-state-machine/>
            <bridge-detection-state-machine/>
            <state-machine-variables/>
            <ppmd/>
            <all-failures/>
            <all/>
            <disable/>
           </flag>
          </traceoptions>
         </vlan>
        </vstp>
       </protocols>
      </configuration>
```

Description Tracing parameters

Contents <events>—Trace events to the protocol state machine

<bpdu>—Trace BPDU reception and transmission

<timers>—Trace protocol timers

<port-information-state-machine>—Trace port information state machine

<port-receive-state-machine>—Trace port receive state machine

<port-role-select-state-machine>—Trace port role selection state machine

<port-role-transit-state-machine>—Trace port role transit state machine

<port-state-transit-state-machine>—Trace port state transit state machine

<port-migration-state-machine>—Trace port migration state machine

<port-transmit-state-machine>—Trace port transmit state machine

<topology-change-state-machine>—Trace topology change state machine

<bridge-detection-state-machine>—Trace bridge detection state machine

<state-machine-variables>—Trace when state machine variables change

<ppmd>—Trace state and events for ppmd process

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<all-failures>—Trace all failure conditions

<all>—Trace all

<disable>—Disable this trace flag

<flag> configuration/protocols/edge-virtual-bridging/traceoptions

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <traceoptions>
    <flag>
     <parse/>
     <ecp/>
     <evb-tlv/>
     <vdp/>
     <policy/>
     <all/>
    </flag>
   </traceoptions>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <parse>—Trace configuration parsing

<ecp>—Trace Edge Control Protocol events

<evb-tlv>—Trace EVB TLV events

<vdp>—Trace VDP events

<policy>—Trace policy events

<all>—Trace everything

<flag> configuration/protocols/igmp-snooping/traceoptions

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <traceoptions>
    <flag>
     <packets/>
     <query/>
     <report/>
     <leave/>
```

```
            <vlan/>
            <nexthop/>
            <krt/>
            <route/>
            <normal/>
            <general/>
            <state/>
            <policy/>
            <task/>
            <timer/>
            <all/>
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </igmp-snooping>
    </protocols>
  </configuration>
```

Description Tracing parameters

Contents <packets>—Trace all IGMP packets

<query>—Trace IGMP membership query messages

<report>—Trace membership report messages

<leave>—Trace leave group messages (IGMPv2 only)

<vlan>—Trace VLAN related events

<nexthop>—Trace nexthop related events

<krt>—Trace communication over routing socket

<route>—Trace routing information

<normal>—Trace normal events

<general>—Trace general events

<state>—Trace state transitions

<policy>—Trace policy processing

<task>—Trace routing protocol task processing

<timer>—Trace routing protocol timer processing

<all>—Trace everything

<send>—Trace transmitted packets

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<receive>—Trace received packets

<detail>—Trace detailed information

<disable>—Disable this trace flag

<flag> configuration/protocols/mld-snooping/traceoptions

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <traceoptions>
    <flag>
     <packets/>
     <query/>
     <report/>
     <leave/>
     <vlan/>
     <nexthop/>
     <krt/>
     <route/>
     <normal/>
     <general/>
     <state/>
     <policy/>
     <task/>
     <timer/>
     <all/>
     <send/>
     <receive/>
     <detail/>
     <disable/>
    </flag>
   </traceoptions>
  </mld-snooping>
 </protocols>
</configuration>
```

Description Tracing parameters

Contents <packets>—Trace all MLD packets

<query>—Trace MLD membership query messages

<report>—Trace membership report messages

<leave>—Trace leave group messages (MLDv1 only)

<vlan>—Trace VLAN related events

<nexthop>—Trace nexthop related events

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<krt>—Trace communication over routing socket

<route>—Trace routing information

<normal>—Trace normal events

<general>—Trace general events

<state>—Trace state transitions

<policy>—Trace policy processing

<task>—Trace routing protocol task processing

<timer>—Trace routing protocol timer processing

<all>—Trace everything

<send>—Trace transmitted packets

<receive>—Trace received packets

<detail>—Trace detailed information

<disable>—Disable this trace flag

<flag> configuration/smtp/traceoptions

Usage

```
<configuration>
 <smtp>
  <traceoptions>
   <flag>
    <IPC/>
    <protocol-exchange/>
    <configuration/>
    <send-request/>
    <all/>
   </flag>
  </traceoptions>
 </smtp>
</configuration>
```

Description Tracing parameters

Contents <IPC>—Trace inter-processs communication

<protocol-exchange>—Trace SMTP protocol exchanges

<configuration>—Trace configuration event

<send-request>—Trace send mail request event

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<all>—Trace everything

<flag> configuration/ethernet-switching-options/traceoptions

Usage

```
<configuration>
 <ethernet-switching-options>
  <traceoptions>
   <flag>
    <parse/>
    <regex-parse/>
    <config-internal/>
    <normal/>
    <general/>
    <state/>
    <task/>
    <timer/>
    <krt/>
    <vlan/>
    <forwarding-database/>
    <nexthop/>
    <interface/>
    <lib/>
    <stp/>
    <filter/>
    <access-security/>
    <rtg/>
    <ip-source-guard/>
    <analyzer/>
    <layer2-protocol-tunneling/>
    <unknown-unicast-forwarding/>
    <all/>
    <disable/>
   </flag>
  </traceoptions>
 </ethernet-switching-options>
</configuration>
```

Description Tracing parameters

Contents <parse>—Trace configuration parsing

<regex-parse>—Trace regular-expression parsing

<config-internal>—Trace configuration internals

<normal>—Trace normal events

<general>—Trace general events

<state>—Trace state transitions

<task>—Trace Ethernet-switching task processing

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<timer>—Trace Ethernet-switching task timer processing

<krt>—Trace communication over routing socket

<vlan>—Trace VLAN events

<forwarding-database>—Trace forwarding database events

<nexthop>—Trace next-hop events

<interface>—Trace interface events

<lib>—Trace library calls

<stp>—Trace spanning tree events

<filter>—Trace filter transaction events

<access-security>—Trace access security events

<rtg>—Trace redundant trunk group events

<ip-source-guard>—Trace IP Source Guard events

<analyzer>—Trace analyzer events

<layer2-protocol-tunneling>—Layer2 protocol tunneling events

<unknown-unicast-forwarding>—Trace unknown unicast forwarding events

<all>—Trace everything

<disable>—Disable this trace flag

<flag> configuration/vlans/traceoptions

Usage

```
<configuration>
 <vlans>
  <traceoptions>
   <flag>
    <all/>
    <kernel/>
    <change-events/>
    <kernel-detail/>
    <config-states/>
    <disable/>
   </flag>
  </traceoptions>
 </vlans>
</configuration>
```

Description Tracing parameters

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Contents <all>—Trace everything

<kernel>—Trace kernel information

<change-events>—Trace change events

<kernel-detail>—Trace kernel information

<config-states>—Trace configuration state-machine changes

<disable>—Disable this trace flag

<flood> configuration/security/screen/ids-option/icmp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <icmp>
     <flood>
      <threshold>threshold</threshold>
     </flood>
    </icmp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure icmp flood ids option

Contents <threshold>—Threshold

<flood> configuration/security/screen/ids-option/udp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <udp>
     <flood>
      <threshold>threshold</threshold>
     </flood>
    </udp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

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Description Configure UDP flood ids option

Contents <threshold>—Threshold

<flow> configuration/security

Usage

```
<configuration>
 <security>
  <flow>
   <traceoptions>...</traceoptions>

<pending-sess-queue-length>pending-sess-queue-length</pending-sess-queue-length>

   <allow-dns-reply/>
   <route-change-timeout>route-change-timeout</route-change-timeout>

<syn-flood-protection-mode>syn-flood-protection-mode</syn-flood-protection-mode>

   <aging>...</aging>
   <bridge>...</bridge>
   <tcp-mss>...</tcp-mss>
   <tcp-session>...</tcp-session>
   <force-ip-reassembly/>
  </flow>
 </security>
</configuration>
```

Description FLOW configuration

Contents <traceoptions>—Trace options for flow services

- normal - Normal number of sessions queued
- moderate - Allow more queued sessions than normal
- high - Maximum number of queued sessions
- syn-cookie - Enable SYN cookie protection
- syn-proxy - Enable SYN proxy protection

<pending-sess-queue-length>—Maximum queued length per pending session

- normal - Normal number of sessions queued
- moderate - Allow more queued sessions than normal
- high - Maximum number of queued sessions
- syn-cookie - Enable SYN cookie protection
- syn-proxy - Enable SYN proxy protection

<allow-dns-reply>—Allow unmatched incoming DNS reply packet

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- syn-cookie - Enable SYN cookie protection
- syn-proxy - Enable SYN proxy protection

<route-change-timeout>—Timeout value for route change to nonexistent route

- syn-cookie - Enable SYN cookie protection
- syn-proxy - Enable SYN proxy protection

<syn-flood-protection-mode>—TCP SYN flood protection mode

- syn-cookie - Enable SYN cookie protection
- syn-proxy - Enable SYN proxy protection

<aging>—Aging configuration

<bridge>—Bridge configuration for flow

<tcp-mss>—TCP maximum segment size configuration

<tcp-session>—Transmission Control Protocol session configuration

<force-ip-reassembly>—Force to reassemble ip fragments

<forwarding-options> configuration/security

Usage

```
<configuration>
 <security>
  <forwarding-options>
   <family>...</family>
  </forwarding-options>
 </security>
</configuration>
```

Description Security-forwarding-options configuration

Contents <family>—Security forwarding-options for family

<forwarding-process> configuration/security

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>...</application-services> <!-- mandatory -->
  </forwarding-process>
 </security>
</configuration>
```

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Description Configure security forwarding-process options

Contents <application-services>—Configure application service options

<fpc> configuration/poe/notification-control

Usage

```
<configuration>
 <poe>
  <notification-control>
   <fpc>
    <number>number</number> <!-- identifier -->
    <disable/>
   </fpc>
  </notification-control>
 </poe>
</configuration>
```

Description FPC slot number

Contents <number>—FPC slot number

<disable>—Disable Power over Ethernet notification

<fpc> configuration/poe

Usage

```
<configuration>
 <poe>
  <fpc>
   <number>number</number> <!-- identifier -->
   <maximum-power>maximum-power</maximum-power>
   <priority>priority</priority>
  </fpc>
 </poe>
</configuration>
```

Description FPC configuration for power over ethernet

Contents <number>—FPC slot number

- low - Priority low
- high - Priority high

<maximum-power>—Maximum power(watts)

- low - Priority low
- high - Priority high

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<priority>—Priority level(high/low)

- low - Priority low
- high - Priority high

<friday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <friday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </friday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Friday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

<from> configuration/security/nat/source/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <from>
      <routing-instance>...</routing-instance>
      <zone>...</zone>
      <interface>...</interface>
     </from>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Where is the traffic from

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Contents <routing-instance>—Source routing instance list

<zone>—Source zone list

<interface>—Source interface list

<from> configuration/security/nat/destination/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <from>
      <routing-instance>...</routing-instance>
      <zone>...</zone>
      <interface>...</interface>
     </from>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Where is the traffic from

Contents <routing-instance>—Source routing instance list

<zone>—Source zone list

<interface>—Source interface list

<from> configuration/security/nat/static/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <from>
      <routing-instance>...</routing-instance>
      <zone>...</zone>
      <interface>...</interface>
     </from>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```


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Description Where is the traffic from

Contents <routing-instance>—Source routing instance list

<zone>—Source zone list

<interface>—Source interface list

<ftp> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <ftp>
    <disable/>
    <ftps-extension/>
    <line-break-extension/>
    <allow-mismatch-ip-address/>
    <traceoptions>...</traceoptions>
   </ftp>
  </alg>
 </security>
</configuration>
```

Description Configure FTP ALG

Contents <disable>—Disable FTP ALG

<ftps-extension>—Enable secure FTP and FTP-ssl protocols

<line-break-extension>—Enable CR+LF line termination

<allow-mismatch-ip-address>—Pass FTP packets with mismatched ip address headers and payload

<traceoptions>—FTP ALG trace options

<ftp> configuration/security/utm/utm-policy/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <anti-virus>
     <ftp>
      <upload-profile>upload-profile</upload-profile>
      <download-profile>download-profile</download-profile>
     </ftp>
    </anti-virus>
```

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```
    </utm-policy>
   </utm>
  </security>
</configuration>
```

Description FTP profile

Contents <upload-profile>—Anti-virus profile

<download-profile>—Anti-virus profile

<ftp> configuration/security/utm/utm-policy/content-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <content-filtering>
     <ftp>
      <upload-profile>upload-profile</upload-profile>
      <download-profile>download-profile</download-profile>
     </ftp>
    </content-filtering>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description FTP profile

Contents <upload-profile>—Content-filtering FTP upload profile

<download-profile>—Content-filtering FTP download profile

<functional-zone> configuration/security/zones

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>...</management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description Functional zone

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Contents <management>—Host for out of band management interfaces

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CHAPTER 33

Tag Elements Beginning with G

This chapter lists the configuration tag elements that have names beginning with the letter *g*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<gatekeeper> configuration/security/alg/h323/application-screen/message-flood

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <application-screen>
     <message-flood>
      <gatekeeper>
       <threshold>threshold</threshold>
      </gatekeeper>
     </message-flood>
    </application-screen>
   </h323>
  </alg>
 </security>
</configuration>
```

Description Set options for gatekeeper messages

Contents <threshold>—Message flood gatekeeper threshold

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<gateway> configuration/security/ike

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <gateway_name>gateway_name</gateway_name> <!-- identifier -->
    <ike-policy>ike-policy</ike-policy> <!-- mandatory -->
    <address>...</address>
    <dynamic>...</dynamic>
    <dead-peer-detection>...</dead-peer-detection>
    <no-nat-traversal/>
    <nat-keepalive>nat-keepalive</nat-keepalive>
    <local-identity>...</local-identity>
    <remote-identity>...</remote-identity>
    <external-interface>external-interface</external-interface> <!-- mandatory -->
    <xauth>...</xauth>
    <general-ikeid/>
    <version>version</version>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Define an IKE gateway

Contents <gateway_name>—Label for the remote (peer) gateway

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<ike-policy>—Name of the IKE policy

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<address>—Addresses or hostnames of peer:1 primary, upto 4 backups

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<dynamic>—Site to site peer with dynamic IP address

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<dead-peer-detection>—Enable RFC-3706 DPD

- v1-only - The connection must be initiated using IKE version 1

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- v2-only - The connection must be initiated using IKE version 2

<no-nat-traversal>—Disable IPSec NAT traversal

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<nat-keepalive>—Interval at which to send NAT keepalives

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<local-identity>—Set the local IKE identity

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<remote-identity>—Set the remote IKE identity

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<external-interface>—External interface for IKE negotiations

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<xauth>—Use extended authentication

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<general-ikeid>—Accept peer IKE-ID in general

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<version>—Negotiate using either IKE v1 or IKE v2 protocol

- v1-only - The connection must be initiated using IKE version 1
- v2-only - The connection must be initiated using IKE version 2

<gateway> configuration/security/group-vpn/member/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
```

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```
<member>
 <ike>
  <gateway>
   <gateway_name>gateway_name</gateway_name> <!-- identifier -->
   <ike-policy>ike-policy</ike-policy> <!-- mandatory -->
   <address>...</address>
   <local-identity>...</local-identity>
   <local-address>local-address</local-address> <!-- mandatory -->
  </gateway>
 </ike>
</member>
</group-vpn>
</security>
</configuration>
```

Description Define an IKE gateway

Contents <gateway_name>—Label for the remote (peer) gateway

<ike-policy>—Name of the IKE policy

<address>—Addresses or hostnames of peer:1 primary, upto 4 backups

<local-identity>—Set the local IKE identity

<local-address>—Local IPv4 address for group member

<gateway> configuration/security/group-vpn/server/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <gateway_name>gateway_name</gateway_name> <!-- identifier -->
      <ike-policy>ike-policy</ike-policy> <!-- mandatory -->
      <address>address</address>
      <dynamic>...</dynamic>
      <local-identity>...</local-identity>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IKE gateway

Contents <gateway_name>—Label for the remote (peer) gateway

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<ike-policy>—Name of the IKE policy

<address>—Address or hostname of peer

<dynamic>—Site to site peer with dynamic IP address

<local-identity>—Set the local IKE identity

<global-layer2-domainid-range> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <global-layer2-domainid-range>
    <range-string>range-string</range-string> <!-- identifier -->
   </global-layer2-domainid-range>
  </vlan>
 </vlans>
</configuration>
```

Description Global layer2 domain ID range

Contents <range-string>—Global layer2 domain ID range in form of '<low>-<high>'

<gprs> configuration/security

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>...</gtp>
   <sctp>...</sctp>
  </gprs>
 </security>
</configuration>
```

Description GPRS configuration

Contents <gtp>—GPRS tunneling protocol configuration

<sctp>—GPRS stream control transmission protocol configuration

<gre-in> configuration/security/flow/tcp-mss

Usage

```
<configuration>
 <security>
  <flow>
```

```
    <tcp-mss>
     <gre-in>
      <mss>mss</mss>
     </gre-in>
    </tcp-mss>
   </flow>
  </security>
</configuration>
```

Description Enable MSS override for all GRE packets coming out of an IPSec tunnel

Contents <mss>—MSS value

<gre-out> configuration/security/flow/tcp-mss

Usage

```
<configuration>
 <security>
  <flow>
   <tcp-mss>
    <gre-out>
     <mss>mss</mss>
    </gre-out>
   </tcp-mss>
  </flow>
 </security>
</configuration>
```

Description Enable MSS override for all GRE packets entering an IPsec tunnel

Contents <mss>—MSS value

<group> configuration/security/group-vpn/server

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <group>
     <name>name</name> <!-- identifier -->
     <description>description</description>
     <group-id>group-id</group-id> <!-- mandatory -->
     <ike-gateway>...</ike-gateway> <!-- mandatory -->
     <activation-time-delay>activation-time-delay</activation-time-delay>
    <anti-replay-time-window>anti-replay-time-window</anti-replay-time-window>

     <no-anti-replay/>
     <server-address>server-address</server-address> <!-- mandatory -->
     <server-member-communication>...</server-member-communication>
```

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```
      <ipsec-sa>...</ipsec-sa>
     </group>
    </server>
   </group-vpn>
  </security>
 </configuration>
```

Description Define a Group VPN group

Contents <name>—Name of the group

<description>—Text description of Group VPN group

<group-id>—Enable Group VPN by defining group id

<ike-gateway>—Name of the IKE gateway

<activation-time-delay>—Configure delay in seconds for Group VPN key activation

<anti-replay-time-window>—Configure Anti Replay time in seconds

<no-anti-replay>—Disable Anti Replay

<server-address>—Specify server IP address

<server-member-communication>—Configure Server to Member communication parameters

<ipsec-sa>—Define a Group VPN group SA

<group> configuration/protocols/vstp/vlan-group

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <group-name>group-name</group-name> <!-- identifier -->
     <vlan>...</vlan> <!-- mandatory -->
     <bridge-priority>bridge-priority</bridge-priority>
     <max-age>max-age</max-age>
     <hello-time>hello-time</hello-time>
     <forward-delay>forward-delay</forward-delay>
     <traceoptions>...</traceoptions>
     <interface>...</interface>
    </group>
   </vlan-group>
  </vstp>
 </protocols>
</configuration>
```

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Description Name of VLAN group

Contents <group-name>—VLAN group name

<vlan>—VLAN ID or VLAN ID range [1..4094]

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<max-age>—Maximum age of received protocol bpdu

<hello-time>—Time interval between configuration BPDUs

<forward-delay>—Time spent in listening or learning state

<traceoptions>—Tracing options for debugging protocol operation

<interface>—

<group> configuration/protocols/igmp-snooping/vlan/interface/static

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <interface>
     <static>
      <group>
       <group-address>group-address</group-address> <!-- identifier -->
      </group>
     </static>
    </interface>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description IP multicast group address

Contents <group-address>—IP multicast group address

<group> configuration/protocols/mld-snooping/vlan/interface/static

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <vlan>
    <interface>
     <static>
      <group>
```


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```
        <group-address>group-address</group-address> <!-- identifier -->
       </group>
      </static>
     </interface>
    </vlan>
   </mld-snooping>
  </protocols>
</configuration>
```

Description IP multicast group address

Contents <group-address>—IP multicast group address

<group> configuration/ethernet-switching-options/redundant-trunk-group

Usage

```
<configuration>
 <ethernet-switching-options>
  <redundant-trunk-group>
   <group>
    <rtg-name>rtg-name</rtg-name> <!-- identifier -->
    <preempt-cutover-timer>preempt-cutover-timer</preempt-cutover-timer>
    <description>description</description>
    <interface>...</interface>
   </group>
  </redundant-trunk-group>
 </ethernet-switching-options>
</configuration>
```

Description Name of Redundant trunk group

Contents <rtg-name>—RTG name

<preempt-cutover-timer>—Hold timer for primary interface before preempting secondary interface

<description>—Text description of the RTG

<interface>—Interfaces that are part of this redundant trunk group

<group-vpn> configuration/security

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>...</member>
   <server>...</server>
   <co-location/>
  </group-vpn>
```

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```
 </security>
</configuration>
```

Description Group VPN configuration

Contents <member>—Group VPN member configuration

<server>—Group VPN server configuration

<co-location>—Configure server & member in the same box

<gsm-options> configuration/interfaces/interface/cellular-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <cellular-options>
    <gsm-options>
     <select-profile>...</select-profile>

<encrypted-sim-unlock-code>encrypted-sim-unlock-code</encrypted-sim-unlock-code>

    </gsm-options>
   </cellular-options>
  </interface>
 </interfaces>
</configuration>
```

Description Interface specific GSM options

Contents <select-profile>—Profile to be applied

<encrypted-sim-unlock-code>—Encrypted PIN

<gtp> configuration/security/gprs

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <enable/>
    <profile>...</profile>
    <traceoptions>...</traceoptions>
   </gtp>
  </gprs>
 </security>
</configuration>
```


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Description GPRS tunneling protocol configuration

Contents <enable>—Enable GPRS tunneling protocol functionality

<profile>—Configure GTP Profile

<traceoptions>—Trace options for GPRS tunneling protocol

<gvrp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <gvrp>
   <disable/>
   <join-timer>join-timer</join-timer>
   <leave-timer>leave-timer</leave-timer>
   <leaveall-timer>leaveall-timer</leaveall-timer>
   <interface>...</interface>
   <traceoptions>...</traceoptions>
  </gvrp>
 </protocols>
</configuration>
```

Description GVRP configuration

Contents <disable>—Disable GVRP

<join-timer>—Join timer interval

<leave-timer>—Leave timer interval

<leaveall-timer>—LeaveAll timer interval

<interface>—Configure interface options

<traceoptions>—Tracing options for GVRP protocol

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CHAPTER 34

Tag Elements Beginning with H

This chapter lists the configuration tag elements that have names beginning with the letter *h*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<h323> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <disable/>

<endpoint-registration-timeout>endpoint-registration-timeout</endpoint-registration-timeout>

    <media-source-port-any/>
    <application-screen>...</application-screen>
    <dscp-rewrite>...</dscp-rewrite>
    <traceoptions>...</traceoptions>
   </h323>
  </alg>
 </security>
</configuration>
```

Description Configure H.323 ALG

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Contents <disable>—Disable H.323 ALG

<endpoint-registration-timeout>—Timeout for endpoints

<media-source-port-any>—Permit media from any source port on the endpoint

<application-screen>—Configure application screens

<dscp-rewrite>—DSCP code rewrite

<traceoptions>—H.323 ALG trace options

<host> configuration/security/log/stream

Usage

```
<configuration>
 <security>
  <log>
   <stream>
    <host>
     <ipaddr>ipaddr</ipaddr> <!-- mandatory -->
     <port>port</port>
    </host>
   </stream>
  </log>
 </security>
</configuration>
```

Description Destination to send security logs to

Contents <ipaddr>—IP address

<port>—UDP port number

<host-address-base> configuration/security/nat/source/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <host-address-base>
      <ipaddr>ipaddr</ipaddr>
     </host-address-base>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```


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Description The base of host address

Contents <ipaddr>—IPv4 or IPv6 base address

<host-inbound-traffic> configuration/security/zones/functional-zone/management/interfaces

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <interfaces>
      <host-inbound-traffic>
       <system-services>...</system-services>
       <protocols>...</protocols>
      </host-inbound-traffic>
     </interfaces>
    </management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description

Contents <system-services>—Type of incoming system-service traffic to accept

<protocols>—Protocol type of incoming traffic to accept

<host-inbound-traffic> configuration/security/zones/functional-zone/management

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <host-inbound-traffic>
      <system-services>...</system-services>
      <protocols>...</protocols>
     </host-inbound-traffic>
    </management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description Allowed system services & protocols

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Contents <system-services>—Type of incoming system-service traffic to accept

<protocols>—Protocol type of incoming traffic to accept

<host-inbound-traffic> configuration/security/zones/security-zone

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <host-inbound-traffic>
     <system-services>...</system-services>
     <protocols>...</protocols>
    </host-inbound-traffic>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Allowed system services & protocols

Contents <system-services>—Type of incoming system-service traffic to accept

<protocols>—Protocol type of incoming traffic to accept

<host-inbound-traffic> configuration/security/zones/security-zone/interfaces

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <interfaces>
     <host-inbound-traffic>
      <system-services>...</system-services>
      <protocols>...</protocols>
     </host-inbound-traffic>
    </interfaces>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description

Contents <system-services>—Type of incoming system-service traffic to accept

<protocols>—Protocol type of incoming traffic to accept

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<hostname> configuration/security/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <local-identity>
     <hostname>
      <identity-hostname>identity-hostname</identity-hostname>
     </hostname>
    </local-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use a fully-qualified domain name

Contents <identity-hostname>—The local hostname

<hostname> configuration/security/ike/gateway/remote-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <hostname>
      <identity-hostname>identity-hostname</identity-hostname>
     </hostname>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use a fully-qualified domain name

Contents <identity-hostname>—The remote hostname

<hostname> configuration/security/group-vpn/member/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
```

```
<ike>
 <gateway>
  <local-identity>
   <hostname>
    <identity-hostname>identity-hostname</identity-hostname>
   </hostname>
  </local-identity>
 </gateway>
</ike>
</member>
</group-vpn>
</security>
</configuration>
```

Description Use a fully-qualified domain name

Contents <identity-hostname>—The local hostname

<hostname> configuration/security/group-vpn/server/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <local-identity>
       <hostname>
        <identity-hostname>identity-hostname</identity-hostname>
       </hostname>
      </local-identity>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Use a fully-qualified domain name

Contents <identity-hostname>—The local hostname

<http-redirect> configuration/wlan/access-point/radio/virtual-access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
```


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```
      <virtual-access-point>
       <http-redirect>
        <redirect-url>redirect-url</redirect-url>
       </http-redirect>
      </virtual-access-point>
     </radio>
    </access-point>
   </wlan>
  </configuration>
```

Description Configure HTTP redirect setting

Contents <redirect-url>—Set the HTTP redirect URL address

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CHAPTER 35

Tag Elements Beginning with I

This chapter lists the configuration tag elements that have names beginning with the letter *i*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<icmp> configuration/security/screen/ids-option

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <icmp>
     <ip-sweep>...</ip-sweep>
     <fragment/>
     <large/>
     <flood>...</flood>
     <ping-death/>
    </icmp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure ICMP ids options

Contents <ip-sweep>—Configure ip sweep ids option

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<fragment>—Enable ICMP fragment ids option

<large>—Enable large ICMP packet (size > 1024) ids option

<flood>—Configure icmp flood ids option

<ping-death>—Enable ping of death ids option

<idp> configuration/security/forwarding-process/application-services/maximize-idp-sessions/weight

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>
    <maximize-idp-sessions>
     <weight>
      <idp>
      </idp>
     </weight>
    </maximize-idp-sessions>
   </application-services>
  </forwarding-process>
 </security>
</configuration>
```

Description IDP has more resources than firewall

Contents

<idp> configuration/security

Usage

```
<configuration>
 <security>
  <idp>
   <processes>...</processes>
  </idp>
 </security>
</configuration>
```

Description Configure IDP

Contents <processes>—Configure IDP Processes

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<ids-option> configuration/security/screen

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <name>name</name> <!-- identifier -->
    <description>description</description>
    <alarm-without-drop/>
    <icmp>...</icmp>
    <ip>...</ip>
    <tcp>...</tcp>
    <udp>...</udp>
    <limit-session>...</limit-session>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure ids-option

Contents <name>—Screen object name

<description>—Text description of screen

<alarm-without-drop>—Do not drop packet, only generate alarm

<icmp>—Configure ICMP ids options

<ip>—Configure IP layer ids options

<tcp>—Configure TCP Layer ids options

<udp>—Configure UDP layer ids options

<limit-session>—Limit sessions

<igmp-snooping> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <traceoptions>...</traceoptions>
   <vlan>...</vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

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Description IGMP Snooping Configuration

Contents <traceoptions>—Trace options for IGMP Snooping

<vlan>—VLAN options

<ike> configuration/security

Usage

```
<configuration>
 <security>
  <ike>
   <traceoptions>...</traceoptions>
   <respond-bad-spi>...</respond-bad-spi>
   <proposal>...</proposal>
   <policy>...</policy>
   <gateway>...</gateway>
  </ike>
 </security>
</configuration>
```

Description IKE configuration

Contents <traceoptions>—Trace options for IPSec key management

<respond-bad-spi>—Respond to IPSec packets with bad SPI values

<proposal>—Define an IKE proposal

<policy>—Define an IKE policy

<gateway>—Define an IKE gateway

<ike> configuration/security/ipsec/vpn

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <ike>
     <gateway>gateway</gateway> <!-- mandatory -->
     <idle-time>idle-time</idle-time>
     <no-anti-replay/>
     <proxy-identity>...</proxy-identity>
     <ipsec-policy>ipsec-policy</ipsec-policy> <!-- mandatory -->
     <install-interval>install-interval</install-interval>
    </ike>
   </vpn>
  </ipsec>
 </security>
```


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```
</configuration>
```

Description Define an IKE-keyed IPSec vpn

Contents <gateway>—Name of remote gateway

<idle-time>—Idle time to delete SA

<no-anti-replay>—Disable the anti-replay check

<proxy-identity>—IPSec proxy-id to use in IKE negotiations

<ipsec-policy>—Name of the IPSec policy

<install-interval>—Delay installation of rekeyed outbound SAs on initiator

<ike> configuration/security/group-vpn/member

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <proposal>...</proposal>
     <policy>...</policy>
     <gateway>...</gateway>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Group VPN IKE configuration

Contents <proposal>—Define an IKE proposal

<policy>—Define an IKE policy

<gateway>—Define an IKE gateway

<ike> configuration/security/group-vpn/server

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <proposal>...</proposal>
```

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```
      <policy>...</policy>
      <gateway>...</gateway>
     </ike>
    </server>
   </group-vpn>
  </security>
</configuration>
```

Description Group VPN IKE configuration

Contents <proposal>—Define an IKE proposal

<policy>—Define an IKE policy

<gateway>—Define an IKE gateway

<ike-esp-nat> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <ike-esp-nat>
    <enable/>
    <esp-gate-timeout>esp-gate-timeout</esp-gate-timeout>
    <esp-session-timeout>esp-session-timeout</esp-session-timeout>
    <state-timeout>state-timeout</state-timeout>
    <traceoptions>...</traceoptions>
   </ike-esp-nat>
  </alg>
 </security>
</configuration>
```

Description Configure IKE-ESP ALG with NAT

Contents <enable>—Enable IKE-ESP ALG

<esp-gate-timeout>—Set ESP gate timeout

<esp-session-timeout>—Set ESP session timeout

<state-timeout>—Set ALG state timeout

<traceoptions>—IKE-ESP ALG trace options

<ike-gateway> configuration/security/group-vpn/server/group

Usage

```
<configuration>
 <security>
```


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```
<group-vpn>
 <server>
  <group>
   <ike-gateway>
    <gw-name>gw-name</gw-name> <!-- identifier -->
   </ike-gateway>
  </group>
 </server>
</group-vpn>
</security>
</configuration>
```

Description Name of the IKE gateway

Contents <gw-name>—Name of the IKE gateway

<ike-phase1-failures> configuration/security/alarms/potential-violation

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <ike-phase1-failures>
     <threshold>threshold</threshold>
    </ike-phase1-failures>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description No. of IKE Phase-1 failures before which an alarm needs to be raised

Contents <threshold>—Threshold value [default is 20]

<ike-phase2-failures> configuration/security/alarms/potential-violation

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <ike-phase2-failures>
     <threshold>threshold</threshold>
    </ike-phase2-failures>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

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Description No. of IKE Phase-2 failures before which an alarm needs to be raised

Contents <threshold>—Threshold value [default is 20]

<imsi-prefix> configuration/security/gprs/gtp/profile/apn

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <apn>
      <imsi-prefix>
       <digit-string>digit-string</digit-string> <!-- identifier -->
       <action>...</action> <!-- mandatory -->
      </imsi-prefix>
     </apn>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Specific filter prefix digits for International Mobile Subscriber Identification(IMSI)

Contents <digit-string>—IMSI prefix should be * or 5-15 digits

<action>—Configure GTP profile APN action

<incoming-called-number> configuration/interfaces/interface/isdn-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <isdn-options>
    <incoming-called-number>
     <called-number>called-number</called-number> <!-- identifier -->
     <reject/>
    </incoming-called-number>
   </isdn-options>
  </interface>
 </interfaces>
</configuration>
```

Description Incoming called number to be screened

Contents <called-number>—Number called (upto 15 digits)

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<reject>—Reject the called number

<incoming-map> configuration/interfaces/interface/unit/dialer-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>
     <incoming-map>
      <caller>...</caller>
      <accept-all/>
     </incoming-map>
    </dialer-options>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Map incoming call to dialer

Contents <caller>—Caller Id to be screened

<accept-all>—Accept all incoming calls

<inet> configuration/security/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <local-identity>
     <inet>
      <identity-ipv4>identity-ipv4</identity-ipv4>
     </inet>
    </local-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an IPv4 address

Contents <identity-ipv4>—The local IPv4 identity

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<inet> configuration/security/ike/gateway/remote-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <inet>
      <identity-ipv4>identity-ipv4</identity-ipv4>
     </inet>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an IPv4 address

Contents <identity-ipv4>—The remote IPv4 identity

<inet> configuration/security/group-vpn/member/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <gateway>
      <local-identity>
       <inet>
        <identity-ipv4>identity-ipv4</identity-ipv4>
       </inet>
      </local-identity>
     </gateway>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Use an IPv4 address

Contents <identity-ipv4>—The local IPv4 identity

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<inet> configuration/security/group-vpn/server/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <local-identity>
       <inet>
        <identity-ipv4>identity-ipv4</identity-ipv4>
       </inet>
      </local-identity>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Use an IPv4 address

Contents <identity-ipv4>—The local IPv4 identity

<inet> configuration/security/nat/static/rule-set/rule/then/static-nat

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <then>
       <static-nat>
        <inet>
         <routing-instance>routing-instance</routing-instance>
        </inet>
       </static-nat>
      </then>
     </rule>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Translated to IPv4 address

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Contents <routing-instance>—Routing instance

- default - Default routing-instance
- routing-instance - Routing-instance name

<inet> configuration/interfaces/interface/unit/family

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet>
      <filter>...</filter>
      <dhcp>...</dhcp>
     </inet>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <filter>—

<dhcp>—Configure DHCP Client

<inet6> configuration/security/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <local-identity>
     <inet6>
      <identity-ipv6>identity-ipv6</identity-ipv6>
     </inet6>
    </local-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an IPv6 address

Contents <identity-ipv6>—The local IPv6 identity

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<inet6> configuration/security/ike/gateway/remote-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <inet6>
      <identity-ipv6>identity-ipv6</identity-ipv6>
     </inet6>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an IPv6 address

Contents <identity-ipv6>—The remote IPv6 identity

<inet6> configuration/security/forwarding-options/family

Usage

```
<configuration>
 <security>
  <forwarding-options>
   <family>
    <inet6>
     <mode>mode</mode>
    </inet6>
   </family>
  </forwarding-options>
 </security>
</configuration>
```

Description Family IPv6

Contents <mode>—Forwarding mode

- packet-based - Enable packet-based forwarding
- flow-based - Enable flow-based forwarding
- drop - Disable forwarding

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<inet6> configuration/interfaces/interface/unit/family

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <inet6>
      <filter>...</filter>
     </inet6>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <filter>—

<infranet-controller> configuration/services/unified-access-control

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <infranet-controller>
    <host-name>host-name</host-name> <!-- identifier -->
    <address>address</address> <!-- mandatory -->
    <port>port</port>
    <interface>interface</interface> <!-- mandatory -->
    <password>password</password> <!-- mandatory -->
    <ca-profile>...</ca-profile>
   <server-certificate-subject>server-certificate-subject</server-certificate-subject>

   </infranet-controller>
  </unified-access-control>
 </services>
</configuration>
```

Description Configure infranet controller

Contents <host-name>—Infranet controller name

<address>—Infranet controller IP address

<port>—Infranet controller port

<interface>—Outgoing interface

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<password>—Infranet controller server password

<ca-profile>—Define a list of certificate authority

<server-certificate-subject>—Subject name of infranet controller certificate to match

<ingress> configuration/ethernet-switching-options/analyzer/input

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <ingress>
     <interface>...</interface>
     <vlan>...</vlan>
    </ingress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Ports and VLANs to monitor incoming traffic

Contents <interface>—Port to monitor incoming traffic

<vlan>—VLAN to monitor incoming traffic

<input> configuration/ethernet-switching-options/analyzer

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <ingress>...</ingress>
    <egress>...</egress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Ports and VLANs to monitor

Contents <ingress>—Ports and VLANs to monitor incoming traffic

<egress>—Ports and VLANs to monitor outgoing traffic

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<input-vlan-map> configuration/interfaces/interface/unit

Description VLAN map operation on input

<interface> configuration/security/nat/source

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <interface>
     <port-overloading>...</port-overloading>
    </interface>
   </source>
  </nat>
 </security>
</configuration>
```

Description Configure interface port overloading for persistent NAT

Contents <port-overloading>—Configure port overloading

<interface> configuration/security/nat/source/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <from>
      <interface>
       <if-name>if-name</if-name> <!-- identifier -->
      </interface>
     </from>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Source interface list

Contents <if-name>—Interface name

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<interface> configuration/security/nat/source/rule-set/to

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <to>
      <interface>
       <if-name>if-name</if-name> <!-- identifier -->
      </interface>
     </to>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Destination interface list

Contents <if-name>—Interface name

<interface> configuration/security/nat/source/rule-set/rule/then/source-nat

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <interface>
         <persistent-nat>...</persistent-nat>
        </interface>
       </source-nat>
      </then>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Use egress interface address

Contents <persistent-nat>—Persistent NAT info

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<interface> configuration/security/nat/destination/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <from>
      <interface>
       <if-name>if-name</if-name> <!-- identifier -->
      </interface>
     </from>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Source interface list

Contents <if-name>—Interface name

<interface> configuration/security/nat/static/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <from>
      <interface>
       <if-name>if-name</if-name> <!-- identifier -->
      </interface>
     </from>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Source interface list

Contents <if-name>—Interface name

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<interface> configuration/security/nat/proxy-arp

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-arp>
    <interface>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <address>...</address>
    </interface>
   </proxy-arp>
  </nat>
 </security>
</configuration>
```

Description Interface with proxy arp configured

Contents <name>—Interface name

<address>—Proxy ARP address

<interface> configuration/security/nat/proxy-ndp

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-ndp>
    <interface>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <address>...</address>
    </interface>
   </proxy-ndp>
  </nat>
 </security>
</configuration>
```

Description Interface with proxy arp configured

Contents <name>—Interface name

<address>—Proxy ndp address

<interface> configuration/services/captive-portal

Usage

```
<configuration>
 <services>
```

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```
<captive-portal>
 <interface>
  <all/>
  <name/>
  <supplicant>supplicant</supplicant>
  <retries>retries</retries>
  <quiet-period>quiet-period</quiet-period>
  <server-timeout>server-timeout</server-timeout>
  <session-expiry>session-expiry</session-expiry>
 </interface>
</captive-portal>
</services>
</configuration>
```

Description Captive Portal interface specific options

Contents <all>—All ethernet-switching interfaces

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<name>—Name of ethernet-switching interface

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<supplicant>—Set supplicant mode for this interface

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<retries>—Number of retries after which port is placed into wait state

<quiet-period>—Time to wait after an authentication failure

<server-timeout>—Authentication server timeout interval

<session-expiry>—Session Expiry Timeout

<interface> configuration/interfaces

Usage

```
<configuration>
 <interfaces>
  <interface>
   <interface_name>interface_name</interface_name> <!-- identifier -->
```

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```
    <unit>...</unit>
    <native-vlan-id>native-vlan-id</native-vlan-id>
    <cellular-options>...</cellular-options>
    <modem-options>...</modem-options>
    <clocking>...</clocking>
    <flexible-vlan-tagging/>
    <traceoptions>...</traceoptions>
    <isdn-options>...</isdn-options>
    <dialer-options>...</dialer-options>
    <shdsl-options>...</shdsl-options>
   </interface>
  </interfaces>
</configuration>
```

Description

Contents <interface_name>—

<unit>—

<native-vlan-id>—Virtual LAN identifier for untagged frames

<cellular-options>—Cellular interface specific options

<modem-options>—MODEM interface-specific options

<clocking>—

<flexible-vlan-tagging>—Support for no tagging, or single and double 802.1q VLAN tagging

<traceoptions>—

<isdn-options>—ISDN interface-specific options

<dialer-options>—Dialer options

<shdsl-options>—

<interface> configuration/protocols/oam/ethernet/link-fault-management

Description

<interface> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain/maintenance-association/mep

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
```

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```
            <mep>
             <interface>
              <interface-name>interface-name</interface-name> <!-- mandatory -->
              <vlan-id>vlan-id</vlan-id>
             </interface>
            </mep>
           </maintenance-association>
          </maintenance-domain>
         </connectivity-fault-management>
        </ethernet>
       </oam>
      </protocols>
     </configuration>
```

Description Name of interface

Contents <interface-name>—

<vlan-id>—Trunk port interface VLAN identifier

<interface> configuration/protocols/dcbx

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <interface>
    <name/>
    <all/>
    <disable/>
    <priority-flow-control>...</priority-flow-control>
    <enhanced-transmission-selection>...</enhanced-transmission-selection>
    <applications>...</applications>
    <application-map>application-map</application-map>
   </interface>
  </dcbx>
 </protocols>
</configuration>
```

Description Interface configuration

Contents <name>—Interface name

<all>—Interface all

<disable>—Disable DCBX

<priority-flow-control>—Configure priority flow control feature

<enhanced-transmission-selection>—Configure enhanced transmission selection feature

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<applications>—Configure application feature

<application-map>—Application map to be enabled on the interface

<interface> configuration/protocols/lldp

Usage

```
<configuration>
 <protocols>
  <lldp>
   <interface>
    <name/>
    <all/>
    <disable/>
   </interface>
  </lldp>
 </protocols>
</configuration>
```

Description Interface configuration

Contents <name>—Interface name

<all>—Interface all

<disable>—Disable LLDP

<interface> configuration/protocols/lldp-med

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <interface>
    <name/>
    <all/>
    <disable/>
    <location>...</location>
   </interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description Interface configuration

Contents <name>—Interface name

<all>—Interface all

<disable>—Disable LLDP

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<location>—

<interface> configuration/protocols/dot1x/authenticator

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <authenticator>
    <interface>
     <all/>
     <name/>
     <disable/>
     <supplicant>supplicant</supplicant>
     <retries>retries</retries>
     <quiet-period>quiet-period</quiet-period>
     <transmit-period>transmit-period</transmit-period>
     <mac-radius>...</mac-radius>
     <no-reauthentication/>
     <reauthentication>reauthentication</reauthentication>
     <supplicant-timeout>supplicant-timeout</supplicant-timeout>
     <server-timeout>server-timeout</server-timeout>
     <maximum-requests>maximum-requests</maximum-requests>
     <guest-vlan>guest-vlan</guest-vlan>
     <server-reject-vlan>...</server-reject-vlan>
     <server-fail>...</server-fail>
    </interface>
   </authenticator>
  </dot1x>
 </protocols>
</configuration>
```

Description 802.1X interface specific options

Contents <all>—All ethernet-switching family interfaces

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<name>—Name of Layer 2 interface

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<disable>—Disable 802.1X on this interface

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client

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- multiple - Allow multiple clients; authenticate each individually

<supplicant>—Set supplicant mode for this interface

- single - Allow multiple clients; authenticate first client only
- single-secure - Allow and authenticate only a single client
- multiple - Allow multiple clients; authenticate each individually

<retries>—Number of retries after which port is placed into wait state

<quiet-period>—Time to wait after an authentication failure

<transmit-period>—Interval before retransmitting initial EAPOL PDUs

<mac-radius>—Enable MAC-RADIUS

<no-reauthentication>—Disable reauthentication

<reauthentication>—Reauthentication interval

<supplicant-timeout>—Time to wait for a client response

<server-timeout>—Authentication server timeout interval

<maximum-requests>—Number of EAPOL RequestIDs to send before timing out

<guest-vlan>—VLAN name or 802.1q tag for unauthenticated or non-responsive hosts

<server-reject-vlan>—VLAN name or 802.1q tag for authentication rejected clients

<server-fail>—Action to be taken when server is inaccessible

<interface> configuration/protocols/gvrp

Usage

```
<configuration>
 <protocols>
  <gvrp>
   <interface>
    <all/>
    <name/>
    <disable/>
   </interface>
  </gvrp>
 </protocols>
</configuration>
```

Description Configure interface options

Contents <all>—All etherenet-switching family interfaces

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<name>—Name of Layer 2 interface

<disable>—Disable GVRP on this interface

<interface> configuration/protocols/mvrp

Usage

```
<configuration>
 <protocols>
  <mvrp>
   <interface>
    <all/>
    <name/>
    <disable/>
    <join-timer>join-timer</join-timer>
    <leave-timer>leave-timer</leave-timer>
    <leaveall-timer>leaveall-timer</leaveall-timer>
    <registration>registration</registration>
   </interface>
  </mvrp>
 </protocols>
</configuration>
```

Description Configure interface options

Contents <all>—All etherenet-switching family interfaces

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<name>—Name of Layer 2 interface

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<disable>—Disable MVRP on this interface

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<join-timer>—Join timer interval

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<leave-timer>—Leave timer interval

- normal - Normal registration mode
- forbidden - Forbidden registration mode

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<leaveall-timer>—LeaveAll timer interval

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<registration>—Registration mode

- normal - Normal registration mode
- forbidden - Forbidden registration mode

<interface> configuration/protocols/stp

Usage

```
<configuration>
 <protocols>
  <stp>
   <interface>
    <all/>
    <name/>
    <priority>priority</priority>
    <cost>cost</cost>
    <disable/>
    <arp-on-stp/>
    <mode>mode</mode>
    <edge/>
    <bpdu-timeout-action>...</bpdu-timeout-action>
    <no-root-port/>
   </interface>
  </stp>
 </protocols>
</configuration>
```

Description

Contents <all>—All interfaces

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<name>—Enter interface name

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<priority>—Interface priority (in increments of 16 - 0,16,..240)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<cost>—Cost of the interface

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- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<disable>—Disable Spanning Tree on port

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<arp-on-stp>—Enable ARP on STP

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<mode>—Interface mode (P2P or shared)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<edge>—Port is an edge port

<bpdu-timeout-action>—Define action on BPDU expiry (Loop Protect)

<no-root-port>—Enable root-protect feature on this port

<interface> configuration/protocols/rstp

Usage

```
<configuration>
 <protocols>
  <rstp>
   <interface>
    <all/>
    <name/>
    <priority>priority</priority>
    <cost>cost</cost>
    <disable/>
    <arp-on-stp/>
    <mode>mode</mode>
    <edge/>
    <bpdu-timeout-action>...</bpdu-timeout-action>
    <no-root-port/>
   </interface>
  </rstp>
 </protocols>
</configuration>
```

Description

Contents <all>—All interfaces

- point-to-point - Interface mode is point-to-point

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- shared - Interface mode is shared

<name>—Enter interface name

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<priority>—Interface priority (in increments of 16 - 0,16,..240)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<cost>—Cost of the interface

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<disable>—Disable Spanning Tree on port

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<arp-on-stp>—Enable ARP on STP

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<mode>—Interface mode (P2P or shared)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<edge>—Port is an edge port

<bpdu-timeout-action>—Define action on BPDU expiry (Loop Protect)

<no-root-port>—Enable root-protect feature on this port

<interface> configuration/protocols/mstp

Usage

```
<configuration>
 <protocols>
  <mstp>
   <interface>
    <all/>
    <name/>
    <priority>priority</priority>
    <cost>cost</cost>
    <disable/>
```

```
        <arp-on-stp/>
        <mode>mode</mode>
        <edge/>
        <bpdu-timeout-action>...</bpdu-timeout-action>
        <no-root-port/>
       </interface>
      </mstp>
     </protocols>
    </configuration>
```

Description

Contents <all>—All interfaces

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<name>—Enter interface name

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<priority>—Interface priority (in increments of 16 - 0,16,..240)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<cost>—Cost of the interface

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<disable>—Disable Spanning Tree on port

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<arp-on-stp>—Enable ARP on STP

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<mode>—Interface mode (P2P or shared)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<edge>—Port is an edge port

<bpdu-timeout-action>—Define action on BPDU expiry (Loop Protect)

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<no-root-port>—Enable root-protect feature on this port

<interface> configuration/protocols/mstp/msti

Usage

```
<configuration>
 <protocols>
  <mstp>
   <msti>
    <interface>
     <name>name</name> <!-- identifier -->
     <priority>priority</priority>
     <cost>cost</cost>
     <disable/>
     <arp-on-stp/>
    </interface>
   </msti>
  </mstp>
 </protocols>
</configuration>
```

Description

Contents <name>—

<priority>—Interface priority (in increments of 16 - 0,16,..240)

<cost>—Cost of the interface

<disable>—Disable Spanning Tree on port

<arp-on-stp>—Enable ARP on STP

<interface> configuration/protocols/vstp/vlan-group/group

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <interface>
      <all/>
      <name/>
      <priority>priority</priority>
      <cost>cost</cost>
      <disable/>
      <arp-on-stp/>
      <mode>mode</mode>
      <edge/>
      <bpdu-timeout-action>...</bpdu-timeout-action>
      <no-root-port/>
```

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```
            </interface>
          </group>
        </vlan-group>
      </vstp>
    </protocols>
  </configuration>
```

Description

Contents <all>—All interfaces

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<name>—Enter interface name

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<priority>—Interface priority (in increments of 16 - 0,16,..240)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<cost>—Cost of the interface

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<disable>—Disable Spanning Tree on port

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<arp-on-stp>—Enable ARP on STP

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<mode>—Interface mode (P2P or shared)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<edge>—Port is an edge port

<bpdu-timeout-action>—Define action on BPDU expiry (Loop Protect)

<no-root-port>—Enable root-protect feature on this port

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<interface> configuration/protocols/vstp/vlan

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
    <interface>
     <all/>
     <name/>
     <priority>priority</priority>
     <cost>cost</cost>
     <disable/>
     <arp-on-stp/>
     <mode>mode</mode>
     <edge/>
     <bpdu-timeout-action>...</bpdu-timeout-action>
     <no-root-port/>
    </interface>
   </vlan>
  </vstp>
 </protocols>
</configuration>
```

Description

Contents <all>—All interfaces

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<name>—Enter interface name

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<priority>—Interface priority (in increments of 16 - 0,16,..240)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<cost>—Cost of the interface

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<disable>—Disable Spanning Tree on port

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

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<arp-on-stp>—Enable ARP on STP

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<mode>—Interface mode (P2P or shared)

- point-to-point - Interface mode is point-to-point
- shared - Interface mode is shared

<edge>—Port is an edge port

<bpdu-timeout-action>—Define action on BPDU expiry (Loop Protect)

<no-root-port>—Enable root-protect feature on this port

<interface> configuration/protocols/edge-virtual-bridging/vsi-discovery

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <vsi-discovery>
    <interface>
     <name>name</name> <!-- identifier -->
    </interface>
   </vsi-discovery>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description Configure VSI Discovery Protocol on this interface

Contents <name>—Enter interface name

<interface> configuration/protocols/igmp-snooping/vlan

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <interface>
     <all/>
     <interface-name/>
     <static>...</static>
     <multicast-router-interface/>
    </interface>
   </vlan>
  </igmp-snooping>
```


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```
 </protocols>
</configuration>
```

Description Interface options

Contents <all>—All interfaces on this VLAN

<interface-name>—Interface name

<static>—Static group or source membership

<multicast-router-interface>—Configure this interface as multicast router

<interface> configuration/protocols/mld-snooping/vlan

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <vlan>
    <interface>
     <all/>
     <interface-name/>
     <static>...</static>
     <multicast-router-interface/>
    </interface>
   </vlan>
  </mld-snooping>
 </protocols>
</configuration>
```

Description Interface options

Contents <all>—All interfaces on this VLAN

<interface-name>—Interface name

<static>—Static group or source membership

<multicast-router-interface>—Configure this interface as multicast router

<interface> configuration/poe

Usage

```
<configuration>
 <poe>
  <interface>
   <all/>
   <interface/>
   <disable/>
```

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```
    <priority>priority</priority>
    <maximum-power>maximum-power</maximum-power>
    <telemetries>...</telemetries>
   </interface>
  </poe>
 </configuration>
```

Description Interface configuration for Power over Ethernet

Contents <all>—All interfaces

- low - Low priority
- high - High priority

<interface>—Specific interface

- low - Low priority
- high - High priority

<disable>—Disable interface

- low - Low priority
- high - High priority

<priority>—Priority options

- low - Low priority
- high - High priority

<maximum-power>—Maximum power

<telemetries>—Telemetries settings

<interface> configuration/ethernet-switching-options/voip

Usage

```
<configuration>
 <ethernet-switching-options>
  <voip>
   <interface>
    <name/>
    <access-ports/>
    <vlan>vlan</vlan> <!-- mandatory -->
    <forwarding-class>forwarding-class</forwarding-class>
   </interface>
  </voip>
 </ethernet-switching-options>
</configuration>
```


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Description Enable voice over IP on this port

Contents <name>—Interface name

<access-ports>—All ethernet-switching access ports

<vlan>—VLAN for voice over IP

<forwarding-class>—Forwarding class

<interface> configuration/ethernet-switching-options/secure-access-port

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <interface>
    <name>name</name> <!-- identifier -->
    <mac-limit>...</mac-limit>
    <static-ip>...</static-ip>
    <allowed-mac>...</allowed-mac>
    <no-allowed-mac-log/>
    <dhcp-trusted/>
    <fcoe-trusted/>
    <persistent-learning/>
   </interface>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Configure access port security for this interface

Contents <name>—

<mac-limit>—Number of MAC addresses allowed on this interface

<static-ip>—Static IP address configuration

<allowed-mac>—Allowed MAC address on this interface

<no-allowed-mac-log>—Do not log violation of allowed MAC on this interface

<dhcp-trusted>—Make this interface trusted for DHCP

<fcoe-trusted>—Make this interface trusted for FCoE

<persistent-learning>—Enable persistent MAC learning on this interface

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<interface> configuration/ethernet-switching-options/analyzer/input/ingress

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <ingress>
     <interface>
      <name/>
      <all/>
     </interface>
    </ingress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Port to monitor incoming traffic

Contents <name>—Name of logical interface

<all>—All interfaces

<interface> configuration/ethernet-switching-options/analyzer/input/egress

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <egress>
     <interface>
      <name/>
      <all/>
     </interface>
    </egress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Port to monitor outgoing traffic

Contents <name>—Name of logical interface

<all>—All interfaces

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<interface> configuration/ethernet-switching-options/analyzer/output

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <output>
    <interface>
     <interface_name>interface_name</interface_name> <!-- identifier -->
    </interface>
   </output>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Outgoing port for mirrored packets

Contents <interface_name>—Interface name

<interface> configuration/ethernet-switching-options/bpdu-block

Usage

```
<configuration>
 <ethernet-switching-options>
  <bpdu-block>
   <interface>
    <all/>
    <name/>
   </interface>
  </bpdu-block>
 </ethernet-switching-options>
</configuration>
```

Description Interface name to block BPDU on

Contents <all>—All interfaces

<name>—Enter interface name

<interface> configuration/ethernet-switching-options/redundant-trunk-group/group

Usage

```
<configuration>
 <ethernet-switching-options>
  <redundant-trunk-group>
   <group>
    <interface>
     <name>name</name> <!-- identifier -->
     <primary/>
```

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```
      </interface>
     </group>
    </redundant-trunk-group>
   </ethernet-switching-options>
  </configuration>
```

Description Interfaces that are part of this redundant trunk group

Contents <name>—Interface name

<primary>—Set Primary Redundant Trunk Group interface

<interface> configuration/ethernet-switching-options/storm-control

Usage

```
<configuration>
 <ethernet-switching-options>
  <storm-control>
   <interface>
    <all/>
    <name/>
    <bandwidth>bandwidth</bandwidth>
    <level>level</level>
    <no-broadcast/>
    <no-unknown-unicast/>
    <multicast/>
    <no-registered-multicast/>
    <no-unregistered-multicast/>
   </interface>
  </storm-control>
 </ethernet-switching-options>
</configuration>
```

Description Configure storm control for this interface

Contents <all>—All interfaces

<name>—Enter interface name

<bandwidth>—Link bandwidth

<level>—Percentage of link bandwidth

<no-broadcast>—Disable broadcast storm control

<no-unknown-unicast>—Disable unknown unicast storm control

<multicast>—Enable multicast storm control

<no-registered-multicast>—Disable registered multicast storm control

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<no-unregistered-multicast>—Disable unregistered multicast storm control

<interface> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <interface>
    <interface_name>interface_name</interface_name> <!-- identifier -->
    <pvlan-trunk/>
    <ingress/>
    <egress/>
    <mapping>...</mapping>
   </interface>
  </vlan>
 </vlans>
</configuration>
```

Description Name of interface that uses this VLAN

Contents <interface_name>—Interface name that uses this VLAN

<pvlan-trunk>—Trunk port connecting neighbouring PVLAN switch

<ingress>—Ingress membership for the interface on this vlan

<egress>—Egress membership for the interface on this vlan

<mapping>—Mapping rules for the interface

<interfaces> configuration/security/zones/functional-zone/management

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <interfaces>
      <interface-unit>interface-unit</interface-unit> <!-- identifier -->
      <host-inbound-traffic>...</host-inbound-traffic>
     </interfaces>
    </management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description Interfaces that are part of this zone

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Contents <interface-unit>—Logical interface

<host-inbound-traffic>—

<interfaces> configuration/security/zones/security-zone

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <interfaces>
     <interface-unit>interface-unit</interface-unit> <!-- identifier -->
     <host-inbound-traffic>...</host-inbound-traffic>
    </interfaces>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Interfaces that are part of this zone

Contents <interface-unit>—Logical interface

<host-inbound-traffic>—

<interfaces> configuration

Usage

```
<configuration>
 <interfaces>
  <interface>...</interface>
 </interfaces>
</configuration>
```

Description

Contents <interface>—

<interfaces> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <interfaces>
   <esw-interface>...</esw-interface>
  </interfaces>
 </ethernet-switching-options>
```


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```
</configuration>
```

Description Ethernet switching family interface names

Contents <esw-interface>—Interface name

<internal> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>
    <security-association>...</security-association>
   </internal>
  </ipsec>
 </security>
</configuration>
```

Description Define an IPSec SA for internal RE-RE communication

Contents <security-association>—Define an IPsec security association

<ip> configuration/security/screen/ids-option

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <ip>
     <bad-option/>
     <record-route-option/>
     <timestamp-option/>
     <security-option/>
     <stream-option/>
     <spoofing/>
     <source-route-option/>
     <loose-source-route-option/>
     <strict-source-route-option/>
     <unknown-protocol/>
     <block-frag/>
     <tear-drop/>
    </ip>
   </ids-option>
  </screen>
 </security>
</configuration>
```

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Description Configure IP layer ids options

Contents <bad-option>—Enable ip with bad option ids option

<record-route-option>—Enable ip with record route option ids option

<timestamp-option>—Enable ip with timestamp option ids option

<security-option>—Enable ip with security option ids option

<stream-option>—Enable ip with stream option ids option

<spoofing>—Enable IP address spoofing ids option

<source-route-option>—Enable ip source route ids option

<loose-source-route-option>—Enable ip with loose source route ids option

<strict-source-route-option>—Enable ip with strict source route ids option

<unknown-protocol>—Configure unknown protocol ids option

<block-frag>—Enable ip fragment blocking ids option

<tear-drop>—Enable tear drop ids option

<ip-monitoring> configuration/services

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>...</policy>
   <traceoptions>...</traceoptions>
  </ip-monitoring>
 </services>
</configuration>
```

Description IP monitoring for route action

Contents <policy>—Policy for route action

<traceoptions>—IP-Monitoring trace options

<ip-sweep> configuration/security/screen/ids-option/icmp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
```


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```
<icmp>
 <ip-sweep>
  <threshold>threshold</threshold>
 </ip-sweep>
</icmp>
</ids-option>
</screen>
</security>
</configuration>
```

Description Configure ip sweep ids option

Contents <threshold>—Threshold

<ipc> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
   <ipc>
    <traceoptions>...</traceoptions>
   </ipc>
  </utm>
 </security>
</configuration>
```

Description Trace options for IPC

Contents <traceoptions>—Trace options for IPC

<ipsec> configuration/security

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>...</internal>
   <traceoptions>...</traceoptions>
   <vpn-monitor-options>...</vpn-monitor-options>
   <proposal>...</proposal>
   <policy>...</policy>
   <vpn>...</vpn>
  </ipsec>
 </security>
</configuration>
```

Description IPSec configuration

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Contents <internal>—Define an IPSec SA for internal RE-RE communication

<traceoptions>—Trace options for IPSec data-plane debug

<vpn-monitor-options>—Global options for VPN liveliness monitoring

<proposal>—Define an IPSec proposal

<policy>—Define an IPSec policy

<vpn>—Define an IPSec VPN

<ipsec> configuration/security/group-vpn/member

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ipsec>
     <vpn>...</vpn>
    </ipsec>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Group VPN IPsec configuration

Contents <vpn>—Define an IPSec VPN

<ipsec> configuration/security/group-vpn/server

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ipsec>
     <proposal>...</proposal>
    </ipsec>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Group VPN IPsec configuration

Contents <proposal>—Define an IPSec proposal

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<ipsec-sa> configuration/security/group-vpn/server/group

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <group>
     <ipsec-sa>
      <name>name</name> <!-- identifier -->
      <proposal>proposal</proposal> <!-- mandatory -->
      <match-policy>...</match-policy>
     </ipsec-sa>
    </group>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define a Group VPN group SA

Contents <name>—Name of the SA

<proposal>—Name of the IPsec proposal

<match-policy>—Configure a Group VPN group SA

<ipsec-vpn> configuration/security/flow/tcp-mss

Usage

```
<configuration>
 <security>
  <flow>
   <tcp-mss>
    <ipsec-vpn>
     <mss>mss</mss>
    </ipsec-vpn>
   </tcp-mss>
  </flow>
 </security>
</configuration>
```

Description Enable MSS override for all packets entering IPSec tunnel

Contents <mss>—MSS value

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<isdn-options> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <isdn-options>
    <switch-type>switch-type</switch-type>
    <media-type>media-type</media-type>
    <spid1>spid1</spid1>
    <spid2>spid2</spid2>
    <calling-number>calling-number</calling-number>
    <incoming-called-number>...</incoming-called-number>
    <tei-option>tei-option</tei-option>
    <static-tei-val>static-tei-val</static-tei-val>
    <t310>t310</t310>
    <bchannel-allocation>bchannel-allocation</bchannel-allocation>
   </isdn-options>
  </interface>
 </interfaces>
</configuration>
```

Description ISDN interface-specific options

Contents <switch-type>—ISDN switch type

- ni1 - NI1 BRI variant
- etsi - ETSI variant
- att5e - ATT5E variant
- ntdms100 - NTDMS100 variant
- vn3 - VN3 variant
- ntt - INS NET (NTT) PRI/BRI variant
- ni2 - NI2 PRI variant
- att4e - ATT 4ESS PRI variant
- data - Data
- voice - Voice
- combined - Combined
- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<media-type>—IDSN media type - voice, data or both

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- data - Data
- voice - Voice
- combined - Combined
- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<spid1>—Service profile identifier

- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<spid2>—Additional service profile identifier

- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<calling-number>—Calling number included in outgoing calls

- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<incoming-called-number>—Incoming called number to be screened

- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up
- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<tei-option>—ISDN terminal endpoint identifier negotiation options

- first-call - Terminal endpoint identifier negotiation during first call
- power-up - Terminal endpoint identifier negotiation during power-up

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- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<static-tei-val>—Static TEI value

- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<t310>—Timer T310 value

- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<bchannel-allocation>—Allocate PRI dialout b-channel in ascending/descending order

- ascending - Allocate b-channel in ascending order
- descending - Allocate b-channel in descending order

<iso> configuration/security/forwarding-options/family

Usage

```
<configuration>
 <security>
  <forwarding-options>
   <family>
    <iso>
     <mode>mode</mode>
    </iso>
   </family>
  </forwarding-options>
 </security>
</configuration>
```

Description Family ISO

Contents <mode>—Forwarding mode

- packet-based - Enable packet-based forwarding

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CHAPTER 36

Tag Elements Beginning with J

This chapter lists the configuration tag elements that have names beginning with the letter *j*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<juniper-enhanced> configuration/security/utm/feature-profile/web-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <cache>...</cache>
      <server>...</server>
      <profile>...</profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure web-filtering juniper enhanced engine

Contents <cache>—

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<server>—Juniper enhanced server

<profile>—Juniper enhanced profile

<juniper-express-engine> configuration/security/utm/feature-profile/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <pattern-update>...</pattern-update>
      <profile>...</profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus juniper-express-engine profile or pattern update

Contents <pattern-update>—Anti-virus juniper-express-engine pattern update

<profile>—Anti-virus juniper-express-engine profile

<juniper-local> configuration/security/utm/feature-profile/web-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-local>
      <profile>...</profile>
     </juniper-local>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure web-filtering juniper local engine

Contents <profile>—Juniper local profile

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CHAPTER 37

Tag Elements Beginning with K

This chapter lists the configuration tag elements that have names beginning with the letter *k*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<kaspersky-lab-engine> configuration/security/utm/feature-profile/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <pattern-update>...</pattern-update>
      <profile>...</profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus kaspersky-lab-engine profile or pattern-update

Contents <pattern-update>—Anti-virus kaspersky-lab-engine pattern update

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<profile>—Anti-virus kaspersky-lab-engine profile

<key> configuration/security/ipsec/internal/security-association/manual/encryption

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>
    <security-association>
     <manual>
      <encryption>
       <key>
        <ascii-text>ascii-text</ascii-text>
        <hexadecimal>hexadecimal</hexadecimal>
       </key>
      </encryption>
     </manual>
    </security-association>
   </internal>
  </ipsec>
 </security>
</configuration>
```

Description Define an encryption key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

<key> configuration/security/ipsec/vpn/manual/authentication

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <manual>
     <authentication>
      <key>
       <ascii-text>ascii-text</ascii-text>
       <hexadecimal>hexadecimal</hexadecimal>
      </key>
     </authentication>
    </manual>
   </vpn>
  </ipsec>
 </security>
</configuration>
```


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Description Define an authentication key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

<key> configuration/security/ipsec/vpn/manual/encryption

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <manual>
     <encryption>
      <key>
       <ascii-text>ascii-text</ascii-text>
       <hexadecimal>hexadecimal</hexadecimal>
      </key>
     </encryption>
    </manual>
   </vpn>
  </ipsec>
 </security>
</configuration>
```

Description Define an encryption key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

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CHAPTER 38

Tag Elements Beginning with L

This chapter lists the configuration tag elements that have names beginning with the letter *l*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<l2pt-protocol> configuration/vlans/vlan/dot1q-tunneling/layer2-protocol-tunneling

Usage

```
<configuration>
 <vlans>
  <vlan>
   <dot1q-tunneling>
    <layer2-protocol-tunneling>
     <l2pt-protocol>
      <all/>
      <802.1x/>
      <802.3ah/>
      <cdp/>
      <udld/>
      <e-lmi/>
      <gvrp/>
      <lacp/>
      <lldp/>
      <mmrp/>
      <mvrp/>
      <stp/>
      <vstp/>
      <vtp/>
      <drop-threshold>drop-threshold</drop-threshold>
```

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```
            <shutdown-threshold>shutdown-threshold</shutdown-threshold>
           </l2pt-protocol>
          </layer2-protocol-tunneling>
         </dot1q-tunneling>
        </vlan>
       </vlans>
      </configuration>
```

Description Layer2 protocol tunneling

Contents <all>—Tunnel all layer-2 protocol PDUs

<802.1x>—Tunnel 802.1X PDUs

<802.3ah>—Tunnel 802.3AH (Ethernet Link OAM) PDUs

<cdp>—Tunnel CDP PDUs

<udld>—Tunnel UDLD PDUs

<e-lmi>—Tunnel E-LMI PDUs

<gvrp>—Tunnel GVRP PDUs

<lacp>—Tunnel LACP PDUs

<lldp>—Tunnel LLDP PDUs

<mmrp>—Tunnel MMRP PDUs

<mvrp>—Tunnel MVRP PDUs

<stp>—Tunnel STP PDUs

<vstp>—Tunnel VSTP PDUs

<vtp>—Tunnel VTP PDUs

<drop-threshold>—Drop threshold for the protocol

<shutdown-threshold>—Shutdown threshold for the protocol

<layer2-protocol-tunneling> configuration/vlans/vlan/dot1q-tunneling

Usage

```
<configuration>
 <vlans>
  <vlan>
   <dot1q-tunneling>
    <layer2-protocol-tunneling>
     <l2pt-protocol>...</l2pt-protocol>
    </layer2-protocol-tunneling>
   </dot1q-tunneling>
```


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```
  </vlan>
 </vlans>
</configuration>
```

Description Layer2 protocol tunneling configuration

Contents <l2pt-protocol>—Layer2 protocol tunneling

<limit> configuration/security/gprs/sctp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <limit>
      <rate>...</rate>
     </limit>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Packet limits

Contents <rate>—Rate limit

<limit-session> configuration/security/screen/ids-option

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <limit-session>
     <source-ip-based>source-ip-based</source-ip-based>
     <destination-ip-based>destination-ip-based</destination-ip-based>
    </limit-session>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Limit sessions

Contents <source-ip-based>—Limit sessions from the same source IP

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<destination-ip-based>—Limit sessions to the same destination IP

<link-fault-management> configuration/protocols/oam/ethernet

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <link-fault-management>
     <interface/>
    </link-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description

Contents <interface>—

<linktrace> configuration/protocols/oam/ethernet/connectivity-fault-management

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <linktrace>
      <path-database-size>path-database-size</path-database-size>
      <age>age</age>
     </linktrace>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Linktrace protocol global options

Contents <path-database-size>—Number of linktrace reply entries to be stored per linktrace request

- 10s -
- 30s -
- 1m -
- 10m -
- 30m -

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<age>—Time after which a stale request-response entry is deleted

- 10s -
- 30s -
- 1m -
- 10m -
- 30m -

<lldp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <lldp>
   <disable/>
   <traceoptions>...</traceoptions>
   <management-address>management-address</management-address>
   <advertisement-interval>advertisement-interval</advertisement-interval>
   <transmit-delay>transmit-delay</transmit-delay>
   <hold-multiplier>hold-multiplier</hold-multiplier>

<ptopo-configuration-trap-interval>ptopo-configuration-trap-interval</ptopo-configuration-trap-interval>


<ptopo-configuration-maximum-hold-time>ptopo-configuration-maximum-hold-time</ptopo-configuration-maximum-hold-time>


<lldp-configuration-notification-interval>lldp-configuration-notification-interval</lldp-configuration-notification-interval>

    <netbios-snooping/>
    <interface>...</interface>
   </lldp>
  </protocols>
 </configuration>
```

Description Link Layer Detection Protocol

Contents <disable>—Disable LLDP

<traceoptions>—Trace options for LLDP

<management-address>—LLDP management address

<advertisement-interval>—Transmit interval for LLDP messages

<transmit-delay>—Transmit delay time interval for LLDP messages

<hold-multiplier>—Hold timer interval for LLDP messages

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<ptopo-configuration-trap-interval>—Interval for physical topology configuration change trap

<ptopo-configuration-maximum-hold-time>—Hold time for physical topology connection entries

<lldp-configuration-notification-interval>—Time interval for LLDP notification

<netbios-snooping>—Enable NetBIOS snooping

<interface>—Interface configuration

<lldp-med> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <disable/>
   <fast-start>fast-start</fast-start>
   <interface>...</interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description LLDP Media Endpoint Discovery

Contents <disable>—Disable LLDP

<fast-start>—Discovery count for MED

<interface>—Interface configuration

<local-identity> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <local-identity>
     <inet>...</inet>
     <inet6>...</inet6>
     <hostname>...</hostname>
     <user-at-hostname>...</user-at-hostname>
     <distinguished-name/>
    </local-identity>
   </gateway>
  </ike>
 </security>
```


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```
</configuration>
```

Description Set the local IKE identity

Contents <inet>—Use an IPv4 address

<inet6>—Use an IPv6 address

<hostname>—Use a fully-qualified domain name

<user-at-hostname>—Use an e-mail address

<distinguished-name>—Use a distinguished name specified in local certificate

<local-identity> configuration/security/group-vpn/member/ike/gateway

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <gateway>
      <local-identity>
       <inet>...</inet>
       <hostname>...</hostname>
       <user-at-hostname>...</user-at-hostname>
       <distinguished-name/>
      </local-identity>
     </gateway>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Set the local IKE identity

Contents <inet>—Use an IPv4 address

<hostname>—Use a fully-qualified domain name

<user-at-hostname>—Use an e-mail address

<distinguished-name>—Use a distinguished name specified in local certificate

<local-identity> configuration/security/group-vpn/server/ike/gateway

Usage

```
<configuration>
```

```
<security>
 <group-vpn>
  <server>
   <ike>
    <gateway>
     <local-identity>
      <inet>...</inet>
      <hostname>...</hostname>
      <user-at-hostname>...</user-at-hostname>
      <distinguished-name/>
     </local-identity>
    </gateway>
   </ike>
  </server>
 </group-vpn>
</security>
</configuration>
```

Description Set the local IKE identity

Contents <inet>—Use an IPv4 address

<hostname>—Use a fully-qualified domain name

<user-at-hostname>—Use an e-mail address

<distinguished-name>—Use a distinguished name specified in local certificate

<location> configuration/protocols/lldp-med/interface

Usage

```
<configuration>
 <protocols>
  <lldp-med>
   <interface>
    <location>
     <civic-based>...</civic-based>
     <elin>elin</elin>
     <co-ordinate>...</co-ordinate>
    </location>
   </interface>
  </lldp-med>
 </protocols>
</configuration>
```

Description

Contents <civic-based>—Postal address

<elin>—Emergency line identification (ELIN) string

<co-ordinate>—Address based on longitude and latitude coordinates

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<log> configuration/security/gprs/gtp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <log>
      <forwarded>forwarded</forwarded>
      <state-invalid>state-invalid</state-invalid>
      <prohibited>prohibited</prohibited>
      <rate-limited>...</rate-limited>
     </log>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description GPRS tunneling protocol logs

Contents <forwarded>—Log passed good packets

- basic - Basic logs
- detail - Detailed logs
- basic - Basic logs
- detail - Detailed logs
- basic - Basic logs
- detail - Detailed logs

<state-invalid>—Dropped by state-inspection or sanity failure

- basic - Basic logs
- detail - Detailed logs
- basic - Basic logs
- detail - Detailed logs

<prohibited>—Dropped for type/length/version filtering

- basic - Basic logs
- detail - Detailed logs

<rate-limited>—Dropped for rate-limit

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<log> configuration/security/gprs/sctp

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <log>
     <configuration/>
     <exceeding-rate-limt/>
     <dropped-packet/>
     <decoding-error/>
    </log>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description GPRS stream control transmission protocol logs

Contents <configuration>—Log CLI configuration

<exceeding-rate-limt>—Log exceeding rate limits

<dropped-packet>—Log dropped packets and out of resource errors

<decoding-error>—Log decoding errors

<log> configuration/security

Usage

```
<configuration>
 <security>
  <log>
   <disable/>
   <utc-timestamp/>
   <mode>mode</mode>
   <event-rate>event-rate</event-rate>
   <format>format</format>
   <source-address>source-address</source-address>
   <stream>...</stream>
   <file>...</file>
   <traceoptions>...</traceoptions>
  </log>
 </security>
</configuration>
```

Description Configure security log

Contents <disable>—Disable security logging for the device

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- stream - Process security logs directly in the forwarding plane
- event - Process security logs in the control plane
- syslog - Traditional syslog
- sd-syslog - Structured syslog
- binary - Binary log

<utc-timestamp>—Use UTC time for security log timestamps

- stream - Process security logs directly in the forwarding plane
- event - Process security logs in the control plane
- syslog - Traditional syslog
- sd-syslog - Structured syslog
- binary - Binary log

<mode>—Controls how security logs are processed and exported

- stream - Process security logs directly in the forwarding plane
- event - Process security logs in the control plane
- syslog - Traditional syslog
- sd-syslog - Structured syslog
- binary - Binary log

<event-rate>—Control plane event rate limit of logs per

- syslog - Traditional syslog
- sd-syslog - Structured syslog
- binary - Binary log

<format>—Set security log format for the device

- syslog - Traditional syslog
- sd-syslog - Structured syslog
- binary - Binary log

<source-address>—Source ip address used when exporting security logs

<stream>—Set security log stream settings (maximum 3 streams)

<file>—Security log file options for logs in binary format

<traceoptions>—Security log daemon trace options

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<logging-options> configuration/wlan/access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <logging-options>
    <enable-persistent/>
    <enable-remote/>
    <log-server-address>log-server-address</log-server-address>
    <log-server-port>log-server-port</log-server-port>
    <log-level>log-level</log-level>
   </logging-options>
  </access-point>
 </wlan>
</configuration>
```

Description Configure access point logging options

Contents <enable-persistent>—Turn on persistent logging on the access point

<enable-remote>—Turn on remote logging on the access point

<log-server-address>—Remote log server IP address

<log-server-port>—Remote log serer port

<log-level>—Event severity, 0 - Errors, 7 - Info

<login> configuration/smtp/primary-server

Usage

```
<configuration>
 <smtp>
  <primary-server>
   <login>
    <sender-email>sender-email</sender-email> <!-- identifier -->
    <password>password</password>
   </login>
  </primary-server>
 </smtp>
</configuration>
```

Description Configure a mail sender account to the server

Contents <sender-email>—Default sender email address in user@foo.com format

<password>—Default sender password for user authentication

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<login> configuration/smtp/secondary-server

Usage

```
<configuration>
 <smtp>
  <secondary-server>
   <login>
    <sender-email>sender-email</sender-email> <!-- identifier -->
    <password>password</password>
   </login>
  </secondary-server>
 </smtp>
</configuration>
```

Description Configure a mail sender account to the server

Contents <sender-email>—Default sender email address in user@foo.com format

<password>—Default sender password for user authentication

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CHAPTER 39

Tag Elements Beginning with M

This chapter lists the configuration tag elements that have names beginning with the letter *m*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<m3ua-service> configuration/security/gprs/sctp/profile/drop

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <drop>
      <m3ua-service>
       <sccp/>
       <tup/>
       <isup/>
      </m3ua-service>
     </drop>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description MTP level 3 (MTP3) user adaptation layer service

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Contents <sccp>—Signaling connection control part

<tup>—Telephone user part

<isup>—ISDN user part

<mac> configuration/ethernet-switching-options/static/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <static>
   <vlan>
    <mac>
     <mac_address>mac_address</mac_address> <!-- identifier -->
     <next-hop>next-hop</next-hop> <!-- mandatory -->
    </mac>
   </vlan>
  </static>
 </ethernet-switching-options>
</configuration>
```

Description Static MAC

Contents <mac_address>—IEEE 802.2 MAC address

<next-hop>—Logical next-hop interface

<mac-address> configuration/wlan/access-point/access-point-options/station-mac-filter/allow-list

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <station-mac-filter>
     <allow-list>
      <mac-address>
       <value>value</value>
      </mac-address>
     </allow-list>
    </station-mac-filter>
   </access-point-options>
  </access-point>
 </wlan>
</configuration>
```

Description List of allowed MAC addresses

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Contents <value>—List of allowed MAC addresses

<mac-address> configuration/wlan/access-point/access-point-options/station-mac-filter/deny-list

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <station-mac-filter>
     <deny-list>
      <mac-address>
       <value>value</value>
      </mac-address>
     </deny-list>
    </station-mac-filter>
   </access-point-options>
  </access-point>
 </wlan>
</configuration>
```

Description List of denied MAC addresses

Contents <value>—List of denied MAC addresses

<mac-limit> configuration/ethernet-switching-options/secure-access-port/interface

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <interface>
    <mac-limit>
     <limit>limit</limit> <!-- mandatory -->
     <action>action</action>
    </mac-limit>
   </interface>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Number of MAC addresses allowed on this interface

Contents <limit>—Number of MAC addresses allowed on this interface

- none - Take no action
- drop - Drop the packet and log it

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- log - Log a message
- shutdown - Shut down the interface

<action>—Action to take if limit is exceeded

- none - Take no action
- drop - Drop the packet and log it
- log - Log a message
- shutdown - Shut down the interface

<mac-limit> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <mac-limit>
    <limit>limit</limit> <!-- mandatory -->
    <action>action</action>
   </mac-limit>
  </vlan>
 </vlans>
</configuration>
```

Description Number of MAC addresses allowed on this VLAN

Contents <limit>—Number of MAC addresses allowed on this VLAN

- log - Log a message

<action>—Action to take if limit is exceeded

- log - Log a message

<mac-move-limit> configuration/ethernet-switching-options/secure-access-port/vlan

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <mac-move-limit>
     <limit>limit</limit> <!-- mandatory -->
     <action>action</action>
    </mac-move-limit>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
```


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```
</configuration>
```

Description Number of MAC movements allowed on this VLAN

Contents <limit>—Number of MAC movements allowed on this VLAN

- none - Take no action
- drop - Drop the packet and log it
- log - Log a message
- shutdown - Shut down the interface
- drop-no-log - Drop but no log

<action>—Action to be taken in case the MAC movement limit is exceeded

- none - Take no action
- drop - Drop the packet and log it
- log - Log a message
- shutdown - Shut down the interface
- drop-no-log - Drop but no log

<mac-notification> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <mac-notification>
   <notification-interval>notification-interval</notification-interval>
  </mac-notification>
 </ethernet-switching-options>
</configuration>
```

Description MAC notification options

Contents <notification-interval>—Interval for sending MAC notifications

<mac-radius> configuration/protocols/dot1x/authenticator/interface

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <authenticator>
    <interface>
     <mac-radius>
```

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```
            <restrict/>
            <flap-on-disconnect/>
           </mac-radius>
          </interface>
         </authenticator>
        </dot1x>
       </protocols>
      </configuration>
```

Description Enable MAC-RADIUS

Contents <restrict>—Bypass dot1x authentication, use MAC RADIUS only

<flap-on-disconnect>—Reset an interface on receiving a disconnect request

<mac-table-aging-time> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <mac-table-aging-time>
   <time>time</time>
   <unlimited/>
  </mac-table-aging-time>
 </ethernet-switching-options>
</configuration>
```

Description MAC aging time configuration

Contents <time>—Time in seconds

<unlimited>—Disable MAC-aging

<mac-table-aging-time> configuration/vlans/vlan

Usage

```
<configuration>
 <vlans>
  <vlan>
   <mac-table-aging-time>
    <time>time</time>
    <unlimited/>
   </mac-table-aging-time>
  </vlan>
 </vlans>
</configuration>
```

Description MAC aging time configuration

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Contents <time>—Time in seconds

<unlimited>—Disable MAC-aging

<maintenance-association> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
       <ma-name>ma-name</ma-name> <!-- identifier -->
       <short-name-format>short-name-format</short-name-format>
       <continuity-check>...</continuity-check>
       <mep>...</mep>
      </maintenance-association>
     </maintenance-domain>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Maintenance association configuration

Contents <ma-name>—Name of maintenance association in IEEE compliant format

- 2octet - An integer in the range 0..65535
- rfc-2685-vpn-id - VPN identifier that complies with RFC 2685
- vlan - Primary VLAN identifier
- character-string - Character string
- icc - ITU Carrier Code

<short-name-format>—Format of Maintenance Association Name

- 2octet - An integer in the range 0..65535
- rfc-2685-vpn-id - VPN identifier that complies with RFC 2685
- vlan - Primary VLAN identifier
- character-string - Character string
- icc - ITU Carrier Code

<continuity-check>—Continuity check configuration

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<mep>—Maintenance association endpoint configuration

<maintenance-domain> configuration/protocols/oam/ethernet/connectivity-fault-management

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <default-0/>
      <default-1/>
      <default-2/>
      <default-3/>
      <default-4/>
      <default-5/>
      <default-6/>
      <default-7/>
      <md-name/>
      <vlan-name>...</vlan-name>
      <level>level</level>
      <name-format>name-format</name-format>
      <mip-half-function>mip-half-function</mip-half-function>
      <maintenance-association>...</maintenance-association>
     </maintenance-domain>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Maintenance domain configuration

Contents <default-0>—Default domain at level 0

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-1>—Default domain at level 1

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- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-2>—Default domain at level 2

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-3>—Default domain at level 3

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-4>—Default domain at level 4

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-5>—Default domain at level 5

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- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-6>—Default domain at level 6

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<default-7>—Default domain at level 7

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<md-name>—Name of maintenance domain in IEEE compliant format

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<vlan-name>—Name of VLAN for the default maintenance domain

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- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<level>—Level value for maintenance domain

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<name-format>—Format of maintenance domain name

- none - No format specified
- dns - Character string similar to Domain Name System name
- mac+2oct - MAC address with 2 octet integer (xx:xx:xx:xx:xx:xx.Y format)
- character-string - Character string
- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<mip-half-function>—Half function to be implemented by MIP

- none - No MHFs should be created
- default - Create MHF as per IEEE 802.1ag specifications for defMHFDefault
- explicit - Create MHF as per IEEE 802.1ag specifications for defMHFExplicit

<maintenance-association>—Maintenance association configuration

<management> configuration/security/zones/functional-zone

Usage

<configuration>

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```
<security>
 <zones>
  <functional-zone>
   <management>
    <interfaces>...</interfaces>
    <screen>screen</screen>
    <host-inbound-traffic>...</host-inbound-traffic>
    <description>description</description>
   </management>
  </functional-zone>
 </zones>
</security>
</configuration>
```

Description Host for out of band management interfaces

Contents <interfaces>—Interfaces that are part of this zone

<screen>—Name of ids option object applied to the zone

<host-inbound-traffic>—Allowed system services & protocols

<description>—Text description of zone

<manual> configuration/security/ipsec/internal/security-association

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>
    <security-association>
     <manual>
      <encryption>...</encryption>
     </manual>
    </security-association>
   </internal>
  </ipsec>
 </security>
</configuration>
```

Description Define a manual security association

Contents <encryption>—Define encryption parameters

<manual> configuration/security/ipsec/vpn

Usage

```
<configuration>
 <security>
```


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```
<ipsec>
 <vpn>
  <manual>
   <gateway>gateway</gateway>
   <external-interface>external-interface</external-interface> <!-- mandatory -->

   <protocol>protocol</protocol> <!-- mandatory -->
   <spi>spi</spi> <!-- mandatory -->
   <authentication>...</authentication>
   <encryption>...</encryption>
  </manual>
 </vpn>
</ipsec>
</security>
</configuration>
```

Description Define a manual security association

Contents <gateway>—Define the IPSec peer

- ah - Authentication header
- esp - Encapsulated Security Payload header

<external-interface>—External interface for the security association

- ah - Authentication header
- esp - Encapsulated Security Payload header

<protocol>—Define an IPSec protocol for the security association

- ah - Authentication header
- esp - Encapsulated Security Payload header

<spi>—Define security parameter index

<authentication>—Define authentication parameters

<encryption>—Define encryption parameters

<mapping> configuration/vlans/vlan/interface

Usage

```
<configuration>
 <vlans>
  <vlan>
   <interface>
    <mapping>
     <mapping-data>...</mapping-data>
     <policy/>
    </mapping>
   </interface>
```

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```
  </vlan>
 </vlans>
</configuration>
```

Description Mapping rules for the interface

Contents <mapping-data>—

<policy>—Mapping rule for policy based VLAN assignment

<mapping-data> configuration/vlans/vlan/interface/mapping

Usage

```
<configuration>
 <vlans>
  <vlan>
   <interface>
    <mapping>
     <mapping-data>
      <native/>
      <tag/>
      <push/>
      <swap/>
     </mapping-data>
    </mapping>
   </interface>
  </vlan>
 </vlans>
</configuration>
```

Description

Contents <native>—Mapping rule for untagged and priority tagged packet

<tag>—Mapping rule for a VLAN tag

<push>—Push additional tag on packet

<swap>—Translate VLAN tag for the packet

<match> configuration/security/application-firewall/rule-sets/rule

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <rule>
     <match>
      <dynamic-application>...</dynamic-application>
      <dynamic-application-group>...</dynamic-application-group>
```


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```
        </match>
       </rule>
      </rule-sets>
     </application-firewall>
    </security>
   </configuration>
```

Description Specify security rule match-criteria

Contents <dynamic-application>—Dynamic application

<dynamic-application-group>—Dynamic application group

<match> configuration/security/nat/source/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <source-address>...</source-address>
       <source-address-name>...</source-address-name>
       <destination-address>...</destination-address>
       <destination-address-name>...</destination-address-name>
       <destination-port>...</destination-port>
       <protocol>...</protocol>
      </match>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Specify Source NAT rule match criteria

Contents <source-address>—Source address

<source-address-name>—Address/address-set from address book

<destination-address>—Destination address

<destination-address-name>—Address/address-set from address book

<destination-port>—Destination port

<protocol>—IP Protocol

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<match> configuration/security/nat/destination/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
       <source-address>...</source-address>
       <source-address-name>...</source-address-name>
       <destination-address>...</destination-address>
       <destination-address-name>...</destination-address-name>
       <destination-port>...</destination-port>
       <protocol>...</protocol>
      </match>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Specify Destination NAT rule match criteria

Contents <source-address>—Source address

<source-address-name>—Address/address-set from address book

<destination-address>—Destination address

<destination-address-name>—Address from address book

<destination-port>—Destination port

<protocol>—IP Protocol

<match> configuration/security/nat/static/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <match>
       <destination-address>...</destination-address>
       <destination-address-name>...</destination-address-name>
      </match>
     </rule>
```


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```
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Specify Static NAT rule match criteria

Contents <destination-address>—Destination address

<destination-address-name>—Address from address book

<match> configuration/services/ip-monitoring/policy

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <match>
     <rpm-probe>...</rpm-probe>
    </match>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Matching probing condition

Contents <rpm-probe>—RPM probe name

<match-policy> configuration/security/group-vpn/server/group/ipsec-sa

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <group>
     <ipsec-sa>
      <match-policy>
       <name>name</name> <!-- identifier -->
       <source>source</source> <!-- mandatory -->
       <destination>destination</destination> <!-- mandatory -->
       <source-port>source-port</source-port> <!-- mandatory -->
       <destination-port>destination-port</destination-port> <!-- mandatory -->
       <protocol>protocol</protocol> <!-- mandatory -->
      </match-policy>
     </ipsec-sa>
    </group>
```

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```
    </server>
   </group-vpn>
  </security>
</configuration>
```

Description Configure a Group VPN group SA

Contents <name>—Name of the policy

<source>—Specify the source IP address to be matched (0.0.0.0/0 for any)

<destination>—Specify the destination IP address to be matched (0.0.0.0/0 for any)

<source-port>—Specify the source port to be matched (0 for any)

<destination-port>—Specify the destination port to be matched (0 for any)

<protocol>—Specify the protocol number to be matched (0 for any)

<maximize-cp-sessions> configuration/security/forwarding-process/application-services

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>
    <maximize-cp-sessions>
    </maximize-cp-sessions>
   </application-services>
  </forwarding-process>
 </security>
</configuration>
```

Description Maximize CP session capacity

Contents

<maximize-idp-sessions> configuration/security/forwarding-process/application-services

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>
    <maximize-idp-sessions>
     <weight>...</weight>
     <inline-tap/>
    </maximize-idp-sessions>
   </application-services>
```


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```
  </forwarding-process>
 </security>
</configuration>
```

Description Run security services in dedicated processes to maximize IDP session capacity

Contents <weight>—Adjust the weighting of the resources available for idp

<inline-tap>—Configure IDP in inline tap mode

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/voice-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <voice-queue>
       <maximum-contention-window>
        <window-size>window-size</window-size>
       </maximum-contention-window>
      </voice-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/video-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <video-queue>
       <maximum-contention-window>
        <window-size>window-size</window-size>
       </maximum-contention-window>
```

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```
      </video-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/best-effort-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <best-effort-queue>
       <maximum-contention-window>
        <window-size>window-size</window-size>
       </maximum-contention-window>
      </best-effort-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/background-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <background-queue>
       <maximum-contention-window>
```


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```
            <window-size>window-size</window-size>
           </maximum-contention-window>
          </background-queue>
         </access-point-queues>
        </quality-of-service>
       </radio>
      </access-point>
     </wlan>
    </configuration>
```

Description Maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/voice-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <voice-queue>
       <maximum-contention-window>
        <window-size>window-size</window-size>
       </maximum-contention-window>
      </voice-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Specify maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/video-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
```

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```
        <video-queue>
         <maximum-contention-window>
          <window-size>window-size</window-size>
         </maximum-contention-window>
        </video-queue>
       </station-queues>
      </quality-of-service>
     </radio>
    </access-point>
   </wlan>
</configuration>
```

Description Specify maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/best-effort-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <best-effort-queue>
       <maximum-contention-window>
        <window-size>window-size</window-size>
       </maximum-contention-window>
      </best-effort-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Specify maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<maximum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/background-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
```


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```
<quality-of-service>
 <station-queues>
  <background-queue>
   <maximum-contention-window>
    <window-size>window-size</window-size>
   </maximum-contention-window>
  </background-queue>
 </station-queues>
</quality-of-service>
</radio>
</access-point>
</wlan>
</configuration>
```

Description Specify maximum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<member> configuration/security/group-vpn

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>...</ike>
    <ipsec>...</ipsec>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Group VPN member configuration

Contents <ike>—Group VPN IKE configuration

<ipsec>—Group VPN IPsec configuration

<mep> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain/maintenance-association

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
       <mep>
```

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```
            <mep-id>mep-id</mep-id> <!-- identifier -->
            <interface>...</interface> <!-- mandatory -->
            <direction>direction</direction>
            <priority>priority</priority>
            <auto-discovery/>
            <remote-mep>...</remote-mep>
           </mep>
          </maintenance-association>
         </maintenance-domain>
        </connectivity-fault-management>
       </ethernet>
      </oam>
     </protocols>
    </configuration>
```

Description Maintenance association endpoint configuration

Contents <mep-id>—Identifier for maintenance association endpoint

- down -

<interface>—Name of interface

- down -

<direction>—Direction of maintenance endpoint

- down -

<priority>—802.1p priority of continuity-check and link-trace packet

<auto-discovery>—Accept continuity-check messages from all remote MEPs

<remote-mep>—Remote maintenance association endpoint configuration

<message-flood> configuration/security/alg/h323/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <application-screen>
     <message-flood>
      <gatekeeper>...</gatekeeper>
     </message-flood>
    </application-screen>
   </h323>
  </alg>
 </security>
</configuration>
```


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Description Configure Message flood ALG options

Contents <gatekeeper>—Set options for gatekeeper messages

<message-flood> configuration/security/alg/mgcp/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <application-screen>
     <message-flood>
      <threshold>threshold</threshold>
     </message-flood>
    </application-screen>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description Set message flood ALG options

Contents <threshold>—Message flood threshold

<mgcp> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <disable/>
    <inactive-media-timeout>inactive-media-timeout</inactive-media-timeout>
    <transaction-timeout>transaction-timeout</transaction-timeout>
    <maximum-call-duration>maximum-call-duration</maximum-call-duration>
    <application-screen>...</application-screen>
    <dscp-rewrite>...</dscp-rewrite>
    <traceoptions>...</traceoptions>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description Configure MGCP ALG

Contents <disable>—Disable MGCP ALG

<inactive-media-timeout>—Set inactive media timeout

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<transaction-timeout>—Set transaction timeout

<maximum-call-duration>—Set maximum call duration

<application-screen>—Configure application screens

<dscp-rewrite>—DSCP code rewrite

<traceoptions>—MGCP ALG trace options

<mime-pattern> configuration/security/utm/custom-objects

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <mime-pattern>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <value>...</value>
    </mime-pattern>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure mime-list object

Contents <name>—Configure name of mime-list object

<value>—Configure MIME value

<mime-whitelist> configuration/security/utm/feature-profile/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <mime-whitelist>
      <list>list</list>
      <exception>exception</exception>
     </mime-whitelist>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```


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Description Anti-virus MIME whitelist

Contents <list>—MIME list

<exception>—Exception settings for MIME white list

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/voice-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <voice-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </voice-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/video-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <video-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </video-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
```

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```
 </wlan>
</configuration>
```

Description Minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/best-effort-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <best-effort-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </best-effort-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/access-point-queues/background-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <background-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </background-queue>
     </access-point-queues>
    </quality-of-service>
```


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```
    </radio>
   </access-point>
  </wlan>
</configuration>
```

Description Minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/voice-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <voice-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </voice-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Specify minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/video-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <video-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </video-queue>
```

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```
        </station-queues>
       </quality-of-service>
      </radio>
     </access-point>
    </wlan>
</configuration>
```

Description Specify minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/best-effort-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <best-effort-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
       </minimum-contention-window>
      </best-effort-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Specify minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<minimum-contention-window> configuration/wlan/access-point/radio/quality-of-service/station-queues/background-queue

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <background-queue>
       <minimum-contention-window>
        <window-size>window-size</window-size>
```


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```
        </minimum-contention-window>
       </background-queue>
      </station-queues>
     </quality-of-service>
    </radio>
   </access-point>
  </wlan>
</configuration>
```

Description Specify minimum contention window size

Contents <window-size>—Values are 1,3,7,15,31,63,127,255,511 and 1023

<mld-snooping> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <traceoptions>...</traceoptions>
   <vlan>...</vlan>
  </mld-snooping>
 </protocols>
</configuration>
```

Description MLD Snooping configuration

Contents <traceoptions>—Trace options for MLD Snooping

<vlan>—VLAN options

<modem-options> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <modem-options>
    <init-command-string>init-command-string</init-command-string>
    <dialin>dialin</dialin>
   </modem-options>
  </interface>
 </interfaces>
</configuration>
```

Description MODEM interface-specific options

Contents <init-command-string>—AT command string to initialize modem

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- console - Management console access
- routable - Routable access

<dialin>—

- console - Management console access
- routable - Routable access

<module> configuration/security/datapath-debug/action-profile

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <action-profile>
    <module>
     <flow/>
     <flag>...</flag>
    </module>
   </action-profile>
  </datapath-debug>
 </security>
</configuration>
```

Description

Contents <flow>—Flow module

<flag>—Events and other information to include in trace output

<monday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <monday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </monday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Monday

Contents <start-time>—Time range for day

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<exclude>—Exclude day from week

<all-day>—Include complete day

<mpls> configuration/security/forwarding-options/family

Usage

```
<configuration>
 <security>
  <forwarding-options>
   <family>
    <mpls>
     <mode>mode</mode>
    </mpls>
   </family>
  </forwarding-options>
 </security>
</configuration>
```

Description Family MPLS

Contents <mode>—Forwarding mode

- packet-based - Enable packet-based forwarding

<mpls> configuration/interfaces/interface/unit/family

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <family>
     <mpls>
      <filter>...</filter>
     </mpls>
    </family>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <filter>—

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<msrpc> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <msrpc>
    <disable/>
    <traceoptions>...</traceoptions>
   </msrpc>
  </alg>
 </security>
</configuration>
```

Description Configure MSRPC ALG

Contents <disable>—Disable MSRPC ALG

<traceoptions>—MSRPC ALG trace options

<msti> configuration/protocols/mstp

Usage

```
<configuration>
 <protocols>
  <mstp>
   <msti>
    <id>id</id> <!-- identifier -->
    <bridge-priority>bridge-priority</bridge-priority>
    <vlan>...</vlan> <!-- mandatory -->
    <interface>...</interface>
   </msti>
  </mstp>
 </protocols>
</configuration>
```

Description Per-MSTI options

Contents <id>—

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<vlan>—VLAN ID or VLAN ID range [1..4094]

<interface>—

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<mstp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <mstp>
   <disable/>
   <configuration-name>configuration-name</configuration-name>
   <revision-level>revision-level</revision-level>
   <max-hops>max-hops</max-hops>
   <max-age>max-age</max-age>
   <hello-time>hello-time</hello-time>
   <forward-delay>forward-delay</forward-delay>
   <traceoptions>...</traceoptions>
   <bridge-priority>bridge-priority</bridge-priority>
   <interface>...</interface>
   <msti>...</msti>
   <bpdu-block-on-edge/>
  </mstp>
 </protocols>
</configuration>
```

Description Multiple Spanning Tree Protocol options

Contents <disable>—Disable MSTP

<configuration-name>—Configuration name (part of MST configuration identifier)

<revision-level>—Revision level (part of MST configuration identifier)

<max-hops>—Maximum number of hops

<max-age>—Maximum age of received protocol bpdu

<hello-time>—Time interval between configuration BPDUs

<forward-delay>—Time spent in listening or learning state

<traceoptions>—Tracing options for debugging protocol operation

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<interface>—

<msti>—Per-MSTI options

<bpdu-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect)

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<multicast-outgoing-interface> configuration/security/group-vpn/server/group/server-member-communication

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <group>
     <server-member-communication>
      <multicast-outgoing-interface>
       <multicast-ifname>multicast-ifname</multicast-ifname> <!-- identifier -->
      </multicast-outgoing-interface>
     </server-member-communication>
    </group>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Name of the multicast outgoing interface

Contents <multicast-ifname>—Name of the interface

<mvrp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <mvrp>
   <disable/>
   <no-dynamic-vlan/>
   <add-attribute-length-in-pdu/>
   <interface>...</interface>
   <traceoptions>...</traceoptions>
  </mvrp>
 </protocols>
</configuration>
```

Description MVRP configuration

Contents <disable>—Disable MVRP

<no-dynamic-vlan>—Disable dynamic VLAN creation

<add-attribute-length-in-pdu>—Add attribute length while sending pdu

<interface>—Configure interface options

<traceoptions>—Tracing options for MVRP protocol

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CHAPTER 40

Tag Elements Beginning with N

This chapter lists the configuration tag elements that have names beginning with the letter *n*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<name-server> configuration/wlan/access-point/external/system/ports/ethernet

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <ports>
      <ethernet>
       <name-server>
        <value>value</value> <!-- mandatory -->
       </name-server>
      </ethernet>
     </ports>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description Domain name server IP address

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Contents <value>—Domain name server IP address

<nat> configuration/security

Usage

```
<configuration>
 <security>
  <nat>
   <traceoptions>...</traceoptions>
   <source>...</source>
   <destination>...</destination>
   <static>...</static>
   <proxy-arp>...</proxy-arp>
   <proxy-ndp>...</proxy-ndp>
  </nat>
 </security>
</configuration>
```

Description Configure Network Address Translation

Contents <traceoptions>—NAT trace options

<source>—Configure Source NAT

<destination>—Configure Destination NAT

<static>—Configure Static NAT

<proxy-arp>—Configure Proxy ARP

<proxy-ndp>—Configure Proxy NDP

<next-hop> configuration/services/ip-monitoring/policy/then/preferred-route/routing-instances/route

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>
      <routing-instances>
       <route>
        <next-hop>
         <value>value</value> <!-- mandatory -->
        </next-hop>
       </route>
      </routing-instances>
     </preferred-route>
    </then>
   </policy>
```


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```
  </ip-monitoring>
 </services>
</configuration>
```

Description Next hop to destination of route-action

Contents <value>—Next hop to destination of route-action

<next-hop> configuration/services/ip-monitoring/policy/then/preferred-route/route

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>
      <route>
       <next-hop>
        <value>value</value> <!-- mandatory -->
       </next-hop>
      </route>
     </preferred-route>
    </then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Next hop to destination of route-action

Contents <value>—Next hop to destination of route-action

<no-packet-flooding> configuration/security/flow/bridge

Usage

```
<configuration>
 <security>
  <flow>
   <bridge>
    <no-packet-flooding>
     <no-trace-route/>
    </no-packet-flooding>
   </bridge>
  </flow>
 </security>
</configuration>
```

Description Stop IP flooding, send ARP/ICMP to trigger MAC learning

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Contents <no-trace-route>—Don't send ICMP to trigger MAC learning

<notification-control> configuration/poe

Usage

```
<configuration>
 <poe>
  <notification-control>
   <fpc>...</fpc>
  </notification-control>
 </poe>
</configuration>
```

Description Notification control for Power over Ethernet traps

Contents <fpc>—FPC slot number

<notification-options> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <notification-options>
        <virus-detection>...</virus-detection>
        <fallback-block>...</fallback-block>
        <fallback-non-block>...</fallback-non-block>
       </notification-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus notification options

Contents <virus-detection>—Virus detection notification

<fallback-block>—Fallback block notification

<fallback-non-block>—Fallback non block notification

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<notification-options> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <notification-options>
        <virus-detection>...</virus-detection>
        <fallback-block>...</fallback-block>
        <fallback-non-block>...</fallback-non-block>
       </notification-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus notification options

Contents <virus-detection>—Virus detection notification

<fallback-block>—Fallback block notification

<fallback-non-block>—Fallback non block notification

<notification-options> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <notification-options>
        <virus-detection>...</virus-detection>
        <fallback-block>...</fallback-block>
        <fallback-non-block>...</fallback-non-block>
       </notification-options>
      </profile>
     </sophos-engine>
    </anti-virus>
```

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```
    </feature-profile>
   </utm>
  </security>
</configuration>
```

Description Anti-virus notification options

Contents <virus-detection>—Virus detection notification

<fallback-block>—Fallback block notification

<fallback-non-block>—Fallback non block notification

<notification-options> configuration/security/utm/feature-profile/content-filtering/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <profile>
      <notification-options>
       <type>type</type>
       <notify-mail-sender/>
       <custom-message>custom-message</custom-message>
      </notification-options>
     </profile>
    </content-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Notification options

Contents <type>—Notification options type

- protocol-only - Notification in protocol level
- message - Notification in message

<notify-mail-sender>—Notifiy mail sender

<custom-message>—Custom notification message

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<number> configuration/security/gprs/gtp/profile/remove-ie/version

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <remove-ie>
      <version>
       <number>
        <ie-number>ie-number</ie-number>
       </number>
      </version>
     </remove-ie>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Remove information elements by number

Contents <ie-number>—

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CHAPTER 41

Tag Elements Beginning with O

This chapter lists the configuration tag elements that have names beginning with the letter *o*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<oam> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>...</ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Operation, Administration, and Management configuration

Contents <ethernet>—OAM configuration for ethernet

<ospf> configuration/protocols

Description

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<output> configuration/ethernet-switching-options/analyzer

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <output>
    <interface>...</interface>
    <vlan>...</vlan>
   </output>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Outgoing port or VLAN for mirrored packets

Contents <interface>—Outgoing port for mirrored packets

<vlan>—Outgoing VLAN for mirrored packets

<output-vlan-map> configuration/interfaces/interface/unit

Description VLAN map operation on output

<overflow-pool> configuration/security/nat/source/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <overflow-pool>
      <pool-name>pool-name</pool-name>
      <interface/>
     </overflow-pool>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```

Description Specify an overflow pool

Contents <pool-name>—Name of source address pool

<interface>—Allow interface pool to support overflow

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CHAPTER 42

Tag Elements Beginning with P

This chapter lists the configuration tag elements that have names beginning with the letter *p*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<packet-filter> configuration/security/flow/traceoptions

Usage

```
<configuration>
 <security>
  <flow>
   <traceoptions>
    <packet-filter>
     <filter-name>filter-name</filter-name> <!-- identifier -->
     <protocol>protocol</protocol>
     <source-prefix>source-prefix</source-prefix>
     <destination-prefix>destination-prefix</destination-prefix>
     <logical-system>logical-system</logical-system>
     <source-port>source-port</source-port>
     <destination-port>destination-port</destination-port>
     <interface>interface</interface>
    </packet-filter>
   </traceoptions>
  </flow>
 </security>
</configuration>
```

Description Flow packet debug filters

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Contents <filter-name>—Name of the filter

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call

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- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update

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- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident

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- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd

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- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values

<protocol>—Match IP protocol type

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell

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- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec

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- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet

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- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
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- login - UNIX rlogin

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- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
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- cvspserver - CVS pserver
- range - Range of values

<source-prefix>—Source IP address prefix

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- ftp - FTP
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- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin

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<interface>—Logical interface

<packet-filter> configuration/security/datapath-debug

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <packet-filter>
    <filter-name>filter-name</filter-name> <!-- identifier -->
    <action-profile>action-profile</action-profile> <!-- mandatory -->
    <protocol>protocol</protocol>
    <source-prefix>source-prefix</source-prefix>
```


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```
      <destination-prefix>destination-prefix</destination-prefix>
      <source-port>source-port</source-port>
      <destination-port>destination-port</destination-port>
      <interface>interface</interface>
     </packet-filter>
    </datapath-debug>
   </security>
  </configuration>
```

Description Packet filter configuration

Contents <filter-name>—Name of the filter

- default - Default actions
- profile - Action profile name
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
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- ntalk - New Talk
- rip - Routing Information Protocol
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- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values

<action-profile>—Actions to take with this filter

- default - Default actions
- profile - Action profile name
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol

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- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol

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- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
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- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection

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- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
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- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
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- ftp - FTP
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- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
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- tacacs-ds - TACACS-DS
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- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
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<protocol>—Match IP protocol type

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- ipip - IP in IP
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- bootpc - Bootstrap protocol client

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- range - Range of values

<source-prefix>—Source IPv4/IPv6 address prefix

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- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
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- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol

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- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values

<interface>—Logical interface

<pattern-update> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <pattern-update>
       <email-notify>...</email-notify>
       <proxy>...</proxy>
       <url>url</url>
       <interval>interval</interval>
       <no-autoupdate/>
      </pattern-update>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
```


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```
</configuration>
```

Description Anti-virus kaspersky-lab-engine pattern update

Contents <email-notify>—Virus pattern file updated notification

<proxy>—Pattern update proxy server.

<url>—Server URL

<interval>—Interval to check the update

<no-autoupdate>—Don't automatically update anti-virus pattern

<pattern-update> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <pattern-update>
       <email-notify>...</email-notify>
       <proxy>...</proxy>
       <url>url</url>
       <interval>interval</interval>
       <no-autoupdate/>
      </pattern-update>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus juniper-express-engine pattern update

Contents <email-notify>—Virus pattern file updated notification

<proxy>—Pattern update proxy server.

<url>—Server URL

<interval>—Interval to check the update

<no-autoupdate>—Don't automatically update anti-virus pattern

<pattern-update> configuration/security/utm/feature-profile/anti-virus/sophos-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <pattern-update>
       <email-notify>...</email-notify>
       <proxy>...</proxy>
       <url>url</url>
       <interval>interval</interval>
       <no-autoupdate/>
      </pattern-update>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus sophos-engine pattern update

Contents <email-notify>—Virus pattern file updated notification

<proxy>—Pattern update proxy server.

<url>—Server URL

<interval>—Interval to check the update

<no-autoupdate>—Don't automatically update anti-virus pattern

<payload-protocol> configuration/security/gprs/sctp/profile/drop

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <drop>
      <payload-protocol>
       <reserved/>
       <iua/>
       <m2ua/>
       <m3ua/>
       <sua/>
```


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```
            <m2pa/>
            <v5ua/>
            <h248/>
            <bicc/>
            <tali/>
            <dua/>
            <asap/>
            <enrp/>
            <h323/>
            <qipc/>
            <simco/>
            <ddp-segment/>
            <ddp-stream/>
            <all/>
           </payload-protocol>
          </drop>
         </profile>
        </sctp>
       </gprs>
      </security>
     </configuration>
```

Description SCTP payload protocol identifier

Contents <reserved>—Reserved by SCTP

<iua>—ISDN user adaptation layer

<m2ua>—MTP2 user adaptation layer

<m3ua>—MTP3 user adaptation layer

<sua>—SCCP user adaptation layer

<m2pa>—MTP2 user peer-to-peer adaptation layer

<v5ua>—V5.2 user adaptation layer

<h248>—H.248 protocol

<bicc>—Bearer independent call control

<tali>—Transport adapter layer interface

<dua>—DPNSS/DASS 2 extensions to IUA protocol

<asap>—Aggregate server access protocol

<enrp>—Endpoint handlespace redundancy protocol

<h323>—H.323 protocol

<qipc>—Q.IPC

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<simco>—Simple middlebox configuration

<ddp-segment>—Direct data placement segment chunk

<ddp-stream>—Direct data placement stream session control

<all>—All sctp payload protocol identifiers

<perfect-forward-secrecy> configuration/security/ipsec/policy

Usage

```
<configuration>
 <security>
  <ipsec>
   <policy>
    <perfect-forward-secrecy>
     <keys>keys</keys>
    </perfect-forward-secrecy>
   </policy>
  </ipsec>
 </security>
</configuration>
```

Description Define perfect forward secrecy

Contents <keys>—Define Diffie-Hellman group

- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14

<performance-monitoring> configuration/protocols/oam/ethernet/connectivity-fault-management

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <performance-monitoring>
      <no-delegate-processing/>
      <sla-iterator-profiles>...</sla-iterator-profiles>
     </performance-monitoring>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
```


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```
</configuration>
```

Description Configurations related to ethernet performance monitoring

Contents <no-delegate-processing>—Do not delegate performance measurement request handling to PFE

<sla-iterator-profiles>—Configuration related to an SLA monitoring iterator

<permit> configuration/security/nat/source/rule-set/rule/then/source-nat/pool/persistent-nat

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <pool>
         <persistent-nat>
          <permit>
           <any-remote-host/>
           <target-host/>
           <target-host-port/>
          </permit>
         </persistent-nat>
        </pool>
       </source-nat>
      </then>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Persistent NAT permit configure

Contents <any-remote-host>—Permit any remote host

<target-host>—Permit target host

<target-host-port>—Permit target host port

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<permit> configuration/security/nat/source/rule-set/rule/then/source-nat/interface/persistent-nat

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <interface>
         <persistent-nat>
          <permit>
           <any-remote-host/>
           <target-host/>
           <target-host-port/>
          </permit>
         </persistent-nat>
        </interface>
       </source-nat>
      </then>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Persistent NAT permit configure

Contents <any-remote-host>—Permit any remote host

<target-host>—Permit target host

<target-host-port>—Permit target host port

<persistent-nat> configuration/security/nat/source/rule-set/rule/then/source-nat/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <pool>
```


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```
<persistent-nat>
 <permit>...</permit> <!-- mandatory -->
 <address-mapping/>
 <inactivity-timeout>inactivity-timeout</inactivity-timeout>
 <max-session-number>max-session-number</max-session-number>
</persistent-nat>
</pool>
</source-nat>
</then>
</rule>
</rule-set>
</source>
</nat>
</security>
</configuration>
```

Description Persistent NAT info

Contents <permit>—Persistent NAT permit configure

<address-mapping>—Address-to-address mapping

<inactivity-timeout>—Inactivity timeout value

<max-session-number>—The maximum session number value

<persistent-nat> configuration/security/nat/source/rule-set/rule/then/source-nat/interface

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <interface>
         <persistent-nat>
          <permit>...</permit> <!-- mandatory -->
          <address-mapping/>
          <inactivity-timeout>inactivity-timeout</inactivity-timeout>
          <max-session-number>max-session-number</max-session-number>
         </persistent-nat>
        </interface>
       </source-nat>
      </then>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
```

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```
</configuration>
```

Description Persistent NAT info

Contents <permit>—Persistent NAT permit configure

<address-mapping>—Address-to-address mapping

<inactivity-timeout>—Inactivity timeout value

<max-session-number>—The maximum session number value

<pki> configuration/security

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>...</ca-profile>
   <auto-re-enrollment>...</auto-re-enrollment>
   <traceoptions>...</traceoptions>
  </pki>
 </security>
</configuration>
```

Description PKI service configuration

Contents <ca-profile>—Certificate authority profile configuration

<auto-re-enrollment>—Auto re-enroll of certificate

<traceoptions>—PKI trace options

<poe> configuration

Usage

```
<configuration>
 <poe>
  <management>management</management>
  <guard-band>guard-band</guard-band>
  <notification-control>...</notification-control>
  <interface>...</interface>
  <fpc>...</fpc>
 </poe>
</configuration>
```

Description Power over Ethernet options

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Contents <management>—Power management mode for Power over Ethernet

- static - Static power allocation method
- class - Class based power allocation method

<guard-band>—Guard band for Power over Ethernet

<notification-control>—Notification control for Power over Ethernet traps

<interface>—Interface configuration for Power over Ethernet

<fpc>—FPC configuration for power over ethernet

<policy> configuration/security/ike

Usage

```
<configuration>
 <security>
  <ike>
   <policy>
    <name>name</name> <!-- identifier -->
    <mode>mode</mode>
    <description>description</description>
    <proposals>...</proposals>
    <certificate>...</certificate>
    <proposal-set>proposal-set</proposal-set>
    <pre-shared-key>...</pre-shared-key>
   </policy>
  </ike>
 </security>
</configuration>
```

Description Define an IKE policy

Contents <name>—Name of policy

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<mode>—Define the IKE mode for Phase 1

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic

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- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<description>—Text description of IKE policy

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<proposals>—Define the set of IKE proposals

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<certificate>—Certificate configuration

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<proposal-set>—Types of default IKE proposal-set

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<pre-shared-key>—Define a preshared key

<policy> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <policy>
    <name>name</name> <!-- identifier -->
    <description>description</description>
    <perfect-forward-secrecy>...</perfect-forward-secrecy>
    <proposals>...</proposals>
    <proposal-set>proposal-set</proposal-set>
   </policy>
  </ipsec>
 </security>
</configuration>
```


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Description Define an IPSec policy

Contents <name>—Name of the IPSec policy

- basic - IPSEC basic proposal-set
- compatible - IPSEC compatible proposal-set
- standard - IPSEC standard proposal-set

<description>—Text description of IPSec policy

- basic - IPSEC basic proposal-set
- compatible - IPSEC compatible proposal-set
- standard - IPSEC standard proposal-set

<perfect-forward-secrecy>—Define perfect forward secrecy

- basic - IPSEC basic proposal-set
- compatible - IPSEC compatible proposal-set
- standard - IPSEC standard proposal-set

<proposals>—Define the set of IPSec proposals

- basic - IPSEC basic proposal-set
- compatible - IPSEC compatible proposal-set
- standard - IPSEC standard proposal-set

<proposal-set>—Types of default IPSEC proposal-set

- basic - IPSEC basic proposal-set
- compatible - IPSEC compatible proposal-set
- standard - IPSEC standard proposal-set

<policy> configuration/security/group-vpn/member/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <policy>
      <name>name</name> <!-- identifier -->
      <mode>mode</mode>
      <description>description</description>
      <proposals>...</proposals>
      <certificate>...</certificate>
      <proposal-set>proposal-set</proposal-set>
```

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```
            <pre-shared-key>...</pre-shared-key>
          </policy>
        </ike>
      </member>
    </group-vpn>
  </security>
</configuration>
```

Description Define an IKE policy

Contents <name>—Name of policy

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<mode>—Define the IKE mode for Phase 1

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<description>—Text description of IKE policy

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<proposals>—Define the set of IKE proposals

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<certificate>—Certificate configuration

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

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<proposal-set>—Types of default IKE proposal-set

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<pre-shared-key>—Define a preshared key

<policy> configuration/security/group-vpn/server/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <policy>
      <name>name</name> <!-- identifier -->
      <mode>mode</mode>
      <description>description</description>
      <proposals>...</proposals>
      <certificate>...</certificate>
      <proposal-set>proposal-set</proposal-set>
      <pre-shared-key>...</pre-shared-key>
     </policy>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IKE policy

Contents <name>—Name of policy

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<mode>—Define the IKE mode for Phase 1

- main - Main mode
- aggressive - Aggressive mode
- basic - IKE proposal-set for basic

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- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<description>—Text description of IKE policy

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<proposals>—Define the set of IKE proposals

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<certificate>—Certificate configuration

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<proposal-set>—Types of default IKE proposal-set

- basic - IKE proposal-set for basic
- compatible - IKE proposal-set for compatible
- standard - IKE proposal-set for standard

<pre-shared-key>—Define a preshared key

<policy> configuration/security/alarms/potential-violation

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <policy>
     <source-ip>...</source-ip>
     <destination-ip>...</destination-ip>
     <application>...</application>
     <policy-match>...</policy-match>
    </policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```


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Description Raise alarm for flow policy violations

Contents <source-ip>—Configure source address type of policy violation

<destination-ip>—Configure destination address type of policy violation

<application>—Configure application type of policy violation

<policy-match>—Configure policy type of policy violation

<policy> configuration/services/ip-monitoring

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <policy-name>policy-name</policy-name> <!-- identifier -->
    <match>...</match>
    <then>...</then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Policy for route action

Contents <policy-name>—Policy name

<match>—Matching probing condition

<then>—Action to be taken

<policy> configuration/services/server-load-balance/virtual-server

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <virtual-server>
    <policy>
     <default>...</default> <!-- mandatory -->
    </policy>
   </virtual-server>
  </server-load-balance>
 </services>
</configuration>
```

Description Content based policy

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Contents <default>—Default rule

<policy-match> configuration/security/alarms/potential-violation/policy

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <policy>
     <policy-match>
      <threshold>threshold</threshold>
      <duration>duration</duration>
      <size>size</size>
     </policy-match>
    </policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure policy type of policy violation

Contents <threshold>—Number of policy matches to raise alarm

<duration>—Time window matches must occur within

<size>—Total concurrent number of policy check violations

<pool> configuration/security/nat/source

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <pool-name>pool-name</pool-name> <!-- identifier -->
     <description>description</description>
     <routing-instance>...</routing-instance>
     <address>...</address> <!-- mandatory -->
     <host-address-base>...</host-address-base>
     <port>...</port>
     <overflow-pool>...</overflow-pool>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```


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Description Define a source address pool

Contents <pool-name>—Pool name

<description>—Text description of pool

<routing-instance>—Routing instance

<address>—Add address to pool

<host-address-base>—The base of host address

<port>—Config port attribute to pool

<overflow-pool>—Specify an overflow pool

<pool> configuration/security/nat/source/rule-set/rule/then/source-nat

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
       <source-nat>
        <pool>
         <pool-name>pool-name</pool-name>
         <persistent-nat>...</persistent-nat>
        </pool>
       </source-nat>
      </then>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Use Source NAT pool

Contents <pool-name>—Name of Source NAT pool

<persistent-nat>—Persistent NAT info

<pool> configuration/security/nat/destination

Usage

```
<configuration>
 <security>
```

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```
<nat>
 <destination>
  <pool>
   <pool-name>pool-name</pool-name> <!-- identifier -->
   <description>description</description>
   <routing-instance>...</routing-instance>
   <address>...</address> <!-- mandatory -->
  </pool>
 </destination>
</nat>
</security>
</configuration>
```

Description Define a destination address pool

Contents <pool-name>—Pool name

<description>—Text description of pool

<routing-instance>—Routing instance

<address>—Add address or address range to pool

<pool> configuration/security/nat/destination/rule-set/rule/then/destination-nat

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <then>
       <destination-nat>
        <pool>
         <pool-name>pool-name</pool-name>
        </pool>
       </destination-nat>
      </then>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Use Destination NAT pool

Contents <pool-name>—Name of Destination NAT pool

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<pool> configuration/interfaces/interface/dialer-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <dialer-options>
    <pool>
     <pool-identifier>pool-identifier</pool-identifier> <!-- identifier -->
     <priority>priority</priority>
    </pool>
   </dialer-options>
  </interface>
 </interfaces>
</configuration>
```

Description Dialer pool

Contents <pool-identifier>—Dialer pool identifier

<priority>—Dialer pool priority

<pool-default-port-range> configuration/security/nat/source

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool-default-port-range>
     <low>low</low> <!-- mandatory -->
     <to>...</to> <!-- mandatory -->
    </pool-default-port-range>
   </source>
  </nat>
 </security>
</configuration>
```

Description Configure Source NAT default port range

Contents <low>—Lower limit of port range

<to>—Port range upper limit

<pool-utilization-alarm> configuration/security/nat/source

Usage

```
<configuration>
 <security>
```

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```
<nat>
 <source>
  <pool-utilization-alarm>
   <raise-threshold>raise-threshold</raise-threshold> <!-- mandatory -->
   <clear-threshold>clear-threshold</clear-threshold>
  </pool-utilization-alarm>
 </source>
</nat>
</security>
</configuration>
```

Description Configure pool utilization alarm

Contents <raise-threshold>—Raise threshold for pool utilization alarm

<clear-threshold>—Clear threshold for pool utilization alarm

<port> configuration/security/nat/source/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <port>
      <no-translation/>
      <range>...</range>
      <port-overloading-factor>port-overloading-factor</port-overloading-factor>
     </port>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```

Description Config port attribute to pool

Contents <no-translation>—Do not perform port translation

<range>—Port range

<port-overloading-factor>—Port overloading factor for each IP

<port-error-disable> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <port-error-disable>
```


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```
    <disable-timeout>disable-timeout</disable-timeout>
   </port-error-disable>
  </ethernet-switching-options>
 </configuration>
```

Description Port error disable options

Contents <disable-timeout>—Timeout for which the port is disabled

<port-overloading> configuration/security/nat/source/interface

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <interface>
     <port-overloading>
      <off/>
     </port-overloading>
    </interface>
   </source>
  </nat>
 </security>
</configuration>
```

Description Configure port overloading

Contents <off>—Turn off interface port over-loading

<port-randomization> configuration/security/nat/source

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <port-randomization>
     <disable/>
    </port-randomization>
   </source>
  </nat>
 </security>
</configuration>
```

Description Configure Source NAT port randomization

Contents <disable>—Disable Source NAT port randomization

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<port-scan> configuration/security/screen/ids-option/tcp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <port-scan>
      <threshold>threshold</threshold>
     </port-scan>
    </tcp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure port scan ids option

Contents <threshold>—Threshold

<ports> configuration/wlan/access-point/external/system

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <ports>
      <ethernet>...</ethernet>
     </ports>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description Port configuration

Contents <ethernet>—Ethernet settings

<potential-violation> configuration/security/alarms

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
```


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```
    <decryption-failures>...</decryption-failures>
    <encryption-failures>...</encryption-failures>
    <ike-phase1-failures>...</ike-phase1-failures>
    <ike-phase2-failures>...</ike-phase2-failures>
    <policy>...</policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure potential security violations

Contents <decryption-failures>—No. of decryption failures before which an alarm needs to be raised

<encryption-failures>—No. of encryption failures before which an alarm needs to be raised

<ike-phase1-failures>—No. of IKE Phase-1 failures before which an alarm needs to be raised

<ike-phase2-failures>—No. of IKE Phase-2 failures before which an alarm needs to be raised

<policy>—Raise alarm for flow policy violations

<pptp> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <pptp>
    <disable/>
    <traceoptions>...</traceoptions>
   </pptp>
  </alg>
 </security>
</configuration>
```

Description Configure PPTP ALG

Contents <disable>—Disable PPTP ALG

<traceoptions>—PPTP ALG trace options

<pre-shared-key> configuration/security/ike/policy

Usage

```
<configuration>
 <security>
  <ike>
```

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```
<policy>
 <pre-shared-key>
  <ascii-text>ascii-text</ascii-text>
  <hexadecimal>hexadecimal</hexadecimal>
 </pre-shared-key>
</policy>
</ike>
</security>
</configuration>
```

Description Define a preshared key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

<pre-shared-key> configuration/security/group-vpn/member/ike/policy

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <policy>
      <pre-shared-key>
       <ascii-text>ascii-text</ascii-text>
       <hexadecimal>hexadecimal</hexadecimal>
      </pre-shared-key>
     </policy>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Define a preshared key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

<pre-shared-key> configuration/security/group-vpn/server/ike/policy

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
```


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```
      <policy>
       <pre-shared-key>
        <ascii-text>ascii-text</ascii-text>
        <hexadecimal>hexadecimal</hexadecimal>
       </pre-shared-key>
      </policy>
     </ike>
    </server>
   </group-vpn>
  </security>
</configuration>
```

Description Define a preshared key

Contents <ascii-text>—Format as text

<hexadecimal>—Format as hexadecimal

<preferred-route> configuration/services/ip-monitoring/policy/then

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>
      <routing-instances>...</routing-instances>
      <route>...</route>
     </preferred-route>
    </then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Preferred route action

Contents <routing-instances>—Routing-instance

<route>—Route

<prefix> configuration/security/nat/static/rule-set/rule/then/static-nat

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
```

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```
<rule>
 <then>
  <static-nat>
   <prefix>
    <addr-prefix>addr-prefix</addr-prefix>
    <routing-instance>routing-instance</routing-instance>
   </prefix>
  </static-nat>
 </then>
</rule>
</rule-set>
</static>
</nat>
</security>
</configuration>
```

Description Address prefix

Contents <addr-prefix>—IPv4 or IPv6 address prefix value

- default - Default routing-instance
- routing-instance - Routing-instance name

<routing-instance>—Routing instance

- default - Default routing-instance
- routing-instance - Routing-instance name

<prefix-name> configuration/security/nat/static/rule-set/rule/then/static-nat

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <then>
       <static-nat>
        <prefix-name>
         <addr-prefix-name>addr-prefix-name</addr-prefix-name>
         <routing-instance>routing-instance</routing-instance>
        </prefix-name>
       </static-nat>
      </then>
     </rule>
    </rule-set>
   </static>
  </nat>
 </security>
```


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```
</configuration>
```

Description Address from address book

Contents <addr-prefix-name>—Address from address book

- default - Default routing-instance
- routing-instance - Routing-instance name

<routing-instance>—Routing instance

- default - Default routing-instance
- routing-instance - Routing-instance name

<primary-server> configuration/smtp

Usage

```
<configuration>
 <smtp>
  <primary-server>
   <address>address</address> <!-- mandatory -->
   <login>...</login>
  </primary-server>
 </smtp>
</configuration>
```

Description SMTP primary server configuration

Contents <address>—SMTP server's IPv4 address

<login>—Configure a mail sender account to the server

<priority-flow-control> configuration/protocols/dcbx/interface

Usage

```
<configuration>
 <protocols>
  <dcbx>
   <interface>
    <priority-flow-control>
     <no-auto-negotiation/>
    </priority-flow-control>
   </interface>
  </dcbx>
 </protocols>
</configuration>
```

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Description Configure priority flow control feature

Contents <no-auto-negotiation>—Enable PFC manually

<probe-server> configuration/services/rpm

Description

<processes> configuration/security/idp

Usage

```
<configuration>
 <security>
  <idp>
   <processes>
   </processes>
  </idp>
 </security>
</configuration>
```

Description Configure IDP Processes

Contents

<profile> configuration/security/gprs/gtp

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <name>name</name> <!-- identifier -->
     <min-message-length>min-message-length</min-message-length>
     <max-message-length>max-message-length</max-message-length>
     <timeout>timeout</timeout>
     <rate-limit>rate-limit</rate-limit>
     <log>...</log>
     <remove-ie>...</remove-ie>
     <drop>...</drop>
     <apn>...</apn>
     <restart-path>restart-path</restart-path>
     <seq-number-validated/>
     <gtp-in-gtp-denied/>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```


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Description Configure GTP Profile

Contents <name>—GTP profile name

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<min-message-length>—Minimum message length, from 0 to 65535

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<max-message-length>—Maximum message length, from 1 to 65535

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<timeout>—Tunnel idle timeout

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<rate-limit>—Limit messages per second

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

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<log>—GPRS tunneling protocol logs

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<remove-ie>—Remove information elements

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<drop>—Drop certain type of messages

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<apn>—GTP Access Point Name (APN) filter

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<restart-path>—Restart GTP paths

- echo - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Echo messages
- create - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in the Create-Session messages
- all - Restart GTP paths by detecting the change of restart number obtained from the Recovery IE in all type of messages

<seq-number-validated>—Sequence number validated

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<gtp-in-gtp-denied>—Deny nested GTP

<profile> configuration/security/gprs/sctp

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <name>name</name> <!-- identifier -->
     <association-timeout>association-timeout</association-timeout>
     <handshake-timeout>handshake-timeout</handshake-timeout>
     <drop>...</drop>
     <limit>...</limit>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Configure stream transmission protocol

Contents <name>—SCTP configuration name

<association-timeout>—SCTP association timeout length, in minutes

<handshake-timeout>—SCTP handshake timeout, in seconds

<drop>—Disallowed sctp payload message

<limit>—Packet limits

<profile> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <name>name</name> <!-- identifier -->
       <fallback-options>...</fallback-options>
       <scan-options>...</scan-options>
       <trickling>...</trickling>
       <notification-options>...</notification-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
```

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```
    </utm>
   </security>
  </configuration>
```

Description Anti-virus kaspersky-lab-engine profile

Contents <name>—Anti-virus kaspersky-lab-engine profile name

<fallback-options>—Anti-virus fallback options

<scan-options>—Anti-virus scan options

<trickling>—Anti-virus trickling

<notification-options>—Anti-virus notification options

<profile> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <name>name</name> <!-- identifier -->
       <fallback-options>...</fallback-options>
       <scan-options>...</scan-options>
       <trickling>...</trickling>
       <notification-options>...</notification-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus juniper-express-engine profile

Contents <name>—Anti-virus juniper-express-engine profile name

<fallback-options>—Anti-virus juniper-express-engine fallback options

<scan-options>—Anti-virus juniper-express-engine scan options

<trickling>—Anti-virus trickling

<notification-options>—Anti-virus notification options

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<profile> configuration/security/utm/feature-profile/anti-virus/sophos-engine

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <name>name</name> <!-- identifier -->
       <fallback-options>...</fallback-options>
       <scan-options>...</scan-options>
       <trickling>...</trickling>
       <notification-options>...</notification-options>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus sophos-engine profile

Contents <name>—Anti-virus sophos-engine profile name

<fallback-options>—Anti-virus sophos-engine fallback options

<scan-options>—Anti-virus sophos-engine scan options

<trickling>—Anti-virus trickling

<notification-options>—Anti-virus notification options

<profile> configuration/security/utm/feature-profile/web-filtering/surf-control-integrated

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <profile>
       <name>name</name> <!-- identifier -->
       <category>...</category>
       <default>default</default>
       <custom-block-message>custom-block-message</custom-block-message>
```

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```
            <fallback-settings>...</fallback-settings>
            <timeout>timeout</timeout>
           </profile>
          </surf-control-integrated>
         </web-filtering>
        </feature-profile>
       </utm>
      </security>
     </configuration>
```

Description Surf control integrated profile

Contents <name>—Surf control integrated profile name

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<category>—Surf control integrated category

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<default>—Surf control integrated profile default

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<custom-block-message>—Surf control integrated custom block message

<fallback-settings>—Surf control integrated fallback settings

<timeout>—Surf control integrated timeout

<profile> configuration/security/utm/feature-profile/web-filtering/websense-redirect

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <websense-redirect>
      <profile>
       <name>name</name> <!-- identifier -->
       <server>...</server>
       <custom-block-message>custom-block-message</custom-block-message>
```


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```
        <fallback-settings>...</fallback-settings>
        <timeout>timeout</timeout>
        <sockets>sockets</sockets>
        <account>account</account>
       </profile>
      </websense-redirect>
     </web-filtering>
    </feature-profile>
   </utm>
  </security>
</configuration>
```

Description Websense redirect profile

Contents <name>—Websense redirect profile name

<server>—Websense redirect server

<custom-block-message>—Websense redirect custom block message

<fallback-settings>—Websense redirect fallback settings

<timeout>—Websense redirect timeout

<sockets>—Websense redirect sockets number

<account>—Websense redirect account

<profile> configuration/security/utm/feature-profile/web-filtering/juniper-local

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-local>
      <profile>
       <name>name</name> <!-- identifier -->
       <default>default</default>
       <custom-block-message>custom-block-message</custom-block-message>

       <fallback-settings>...</fallback-settings>
       <timeout>timeout</timeout>
      </profile>
     </juniper-local>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

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Description Juniper local profile

Contents <name>—Juniper local profile name

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<default>—Juniper local profile default

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<custom-block-message>—Juniper local custom block message

<fallback-settings>—Juniper local fallback settings

<timeout>—Juniper local timeout

<profile> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <profile>
       <name>name</name> <!-- identifier -->
       <category>...</category>
       <site-reputation-action>...</site-reputation-action>
       <default>default</default>
       <custom-block-message>custom-block-message</custom-block-message>

       <fallback-settings>...</fallback-settings>
       <timeout>timeout</timeout>
       <no-safe-search/>
       <block-message>...</block-message>
      </profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Juniper enhanced profile

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Contents <name>—Juniper enhanced profile name

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<category>—Juniper enhanced category

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<site-reputation-action>—Juniper enhanced site reputation action

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<default>—Juniper enhanced profile default

- permit - Permit action
- block - Block action
- log-and-permit - Log and permit action

<custom-block-message>—Juniper enhanced custom block message sent to HTTP client

<fallback-settings>—Juniper enhanced fallback settings

<timeout>—Juniper enhanced timeout

<no-safe-search>—Do not perform safe-search for Juniper enhanced protocol

<block-message>—Juniper enhanced block message settings

<profile> configuration/security/utm/feature-profile/anti-spam/sbl

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-spam>
     <sbl>
      <profile>
       <name>name</name> <!-- identifier -->
       <sbl-default-server/>
       <spam-action>spam-action</spam-action>
       <custom-tag-string>custom-tag-string</custom-tag-string>
      </profile>
```

```
        </sbl>
       </anti-spam>
      </feature-profile>
     </utm>
    </security>
   </configuration>
```

Description SBL profile

Contents <name>—SBL profile name

- block - Block e-mail
- tag-header - Tag header of e-mail
- tag-subject - Tag subject of e-mail

<sbl-default-server>—Default SBL server

- block - Block e-mail
- tag-header - Tag header of e-mail
- tag-subject - Tag subject of e-mail

<spam-action>—Anti-spam actions

- block - Block e-mail
- tag-header - Tag header of e-mail
- tag-subject - Tag subject of e-mail

<custom-tag-string>—Custom tag string

<profile> configuration/security/utm/feature-profile/content-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <profile>
      <name>name</name> <!-- identifier -->
      <permit-command>permit-command</permit-command>
      <block-command>block-command</block-command>
      <block-extension>block-extension</block-extension>
      <block-mime>...</block-mime>
      <block-content-type>...</block-content-type>
      <notification-options>...</notification-options>
     </profile>
    </content-filtering>
   </feature-profile>
  </utm>
```


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```
 </security>
</configuration>
```

Description Content filtering profile

Contents <name>—Content-filtering feature profile name

<permit-command>—Permit command list

<block-command>—Block command list

<block-extension>—Block extension list

<block-mime>—Content-filtering feature block MIME

<block-content-type>—Content-filtering feature block content type

<notification-options>—Notification options

<proposal> configuration/security/ike

Usage

```
<configuration>
 <security>
  <ike>
   <proposal>
    <name>name</name> <!-- identifier -->
    <description>description</description>
    <authentication-method>authentication-method</authentication-method> <!--
mandatory -->
    <dh-group>dh-group</dh-group>
   <authentication-algorithm>authentication-algorithm</authentication-algorithm>

    <encryption-algorithm>encryption-algorithm</encryption-algorithm>
    <lifetime-seconds>lifetime-seconds</lifetime-seconds>
   </proposal>
  </ike>
 </security>
</configuration>
```

Description Define an IKE proposal

Contents <name>—Name of the IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2

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- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<description>—Text description of IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-method>—Define authentication method

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2

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- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<dh-group>—Define Diffie-Hellman group

- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-algorithm>—Define authentication algorithm

- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

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<encryption-algorithm>—Define encryption algorithm

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<lifetime-seconds>—Lifetime, in seconds

<proposal> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <proposal>
    <name>name</name> <!-- identifier -->
    <description>description</description>
    <protocol>protocol</protocol>
   <authentication-algorithm>authentication-algorithm</authentication-algorithm>

    <encryption-algorithm>encryption-algorithm</encryption-algorithm>
    <lifetime-seconds>lifetime-seconds</lifetime-seconds>
    <lifetime-kilobytes>lifetime-kilobytes</lifetime-kilobytes>
   </proposal>
  </ipsec>
 </security>
</configuration>
```

Description Define an IPSec proposal

Contents <name>—Name of the IPSec proposal

- ah - Authentication header
- esp - Encapsulated Security Payload header
- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

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<description>—Text description of IPSec proposal

- ah - Authentication header
- esp - Encapsulated Security Payload header
- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<protocol>—Define an IPSec protocol for the proposal

- ah - Authentication header
- esp - Encapsulated Security Payload header
- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-algorithm>—Define authentication algorithm

- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<encryption-algorithm>—Define encryption algorithm

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- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<lifetime-seconds>—Lifetime, in seconds

<lifetime-kilobytes>—Lifetime, in kilobytes

<proposal> configuration/security/group-vpn/member/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <proposal>
      <name>name</name> <!-- identifier -->
      <description>description</description>
      <authentication-method>authentication-method</authentication-method>
<!-- mandatory -->
      <dh-group>dh-group</dh-group>
     <authentication-algorithm>authentication-algorithm</authentication-algorithm>

      <encryption-algorithm>encryption-algorithm</encryption-algorithm>
      <lifetime-seconds>lifetime-seconds</lifetime-seconds>
     </proposal>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IKE proposal

Contents <name>—Name of the IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14

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- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<description>—Text description of IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-method>—Define authentication method

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14

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- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<dh-group>—Define Diffie-Hellman group

- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-algorithm>—Define authentication algorithm

- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<encryption-algorithm>—Define encryption algorithm

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- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<lifetime-seconds>—Lifetime, in seconds

<proposal> configuration/security/group-vpn/server/ike

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <proposal>
      <name>name</name> <!-- identifier -->
      <description>description</description>
      <authentication-method>authentication-method</authentication-method>
<!-- mandatory -->
      <dh-group>dh-group</dh-group>
     <authentication-algorithm>authentication-algorithm</authentication-algorithm>

      <encryption-algorithm>encryption-algorithm</encryption-algorithm>
     </proposal>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IKE proposal

Contents <name>—Name of the IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm

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- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<description>—Text description of IKE proposal

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-method>—Define authentication method

- pre-shared-keys - Preshared keys
- rsa-signatures - RSA signatures
- dsa-signatures - DSA signatures
- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm

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- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<dh-group>—Define Diffie-Hellman group

- group1 - Diffie-Hellman Group 1
- group2 - Diffie-Hellman Group 2
- group5 - Diffie-Hellman Group 5
- group14 - Diffie-Hellman Group 14
- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-algorithm>—Define authentication algorithm

- md5 - MD5 authentication algorithm
- sha1 - SHA1 authentication algorithm
- sha-256 - SHA 256-bit authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<encryption-algorithm>—Define encryption algorithm

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm

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- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<proposal> configuration/security/group-vpn/server/ipsec

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ipsec>
     <proposal>
      <name>name</name> <!-- identifier -->
      <description>description</description>
     <authentication-algorithm>authentication-algorithm</authentication-algorithm>

      <encryption-algorithm>encryption-algorithm</encryption-algorithm>
      <lifetime-seconds>lifetime-seconds</lifetime-seconds>
     </proposal>
    </ipsec>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IPSec proposal

Contents <name>—Name of the IPSec proposal

- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<description>—Text description of IPSec proposal

- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm

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- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<authentication-algorithm>—Define authentication algorithm

- hmac-md5-96 - HMAC-MD5-96 authentication algorithm
- hmac-sha1-96 - HMAC-SHA1-96 authentication algorithm
- hmac-sha-256-128 - HMAC-SHA-256-128 authentication algorithm
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<encryption-algorithm>—Define encryption algorithm

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm

<lifetime-seconds>—Lifetime, in seconds

<proposals> configuration/security/ike/policy

Usage

```
<configuration>
 <security>
  <ike>
   <policy>
    <proposals>
     <value_keyword>value_keyword</value_keyword> <!-- identifier -->
    </proposals>
   </policy>
  </ike>
 </security>
</configuration>
```

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Description Define the set of IKE proposals

Contents <value_keyword>—Name of the proposal

<proposals> configuration/security/ipsec/policy

Usage

```
<configuration>
 <security>
  <ipsec>
   <policy>
    <proposals>
     <value_keyword>value_keyword</value_keyword> <!-- identifier -->
    </proposals>
   </policy>
  </ipsec>
 </security>
</configuration>
```

Description Define the set of IPSec proposals

Contents <value_keyword>—Name of the proposal

<proposals> configuration/security/group-vpn/member/ike/policy

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ike>
     <policy>
      <proposals>
       <value_keyword>value_keyword</value_keyword> <!-- identifier -->
      </proposals>
     </policy>
    </ike>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Define the set of IKE proposals

Contents <value_keyword>—Name of the proposal

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<proposals> configuration/security/group-vpn/server/ike/policy

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <policy>
      <proposals>
       <value_keyword>value_keyword</value_keyword> <!-- identifier -->
      </proposals>
     </policy>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Define the set of IKE proposals

Contents <value_keyword>—Name of the proposal

<protect> configuration/security/alg/sip/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <application-screen>
     <protect>
      <deny>...</deny>
     </protect>
    </application-screen>
   </sip>
  </alg>
 </security>
</configuration>
```

Description Configure Protect options

Contents <deny>—Protect deny options

<protection-group> configuration/protocols

Usage

```
<configuration>
 <protocols>
```

```
<protection-group>
 <traceoptions>...</traceoptions>
 <restore-interval>restore-interval</restore-interval>
 <guard-interval>guard-interval</guard-interval>
 <ethernet-ring>...</ethernet-ring>
 <hold-interval>hold-interval</hold-interval>
</protection-group>
</protocols>
</configuration>
```

Description Protection group

Contents <traceoptions>—Tracing options for debugging protocol operation

<restore-interval>—Wait to restore interval

<guard-interval>—Guard timer interval in 10ms steps

<ethernet-ring>—Ethernet ring

<hold-interval>—Hold off timer interval in 100ms steps

<protocol> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <protocol>
        <icmp/>
        <igmp/>
        <ipip/>
        <tcp/>
        <egp/>
        <udp/>
        <rsvp/>
        <gre/>
        <esp/>
        <ah/>
        <icmp6/>
        <ospf/>
        <pim/>
        <sctp/>
        <number/>
       </protocol>
      </match>
     </rule>
    </rule-set>
   </source>
```


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```
    </nat>
   </security>
  </configuration>
```

Description IP Protocol

Contents <icmp>—Internet Control Message Protocol

<igmp>—Internet Group Management Protocol

<ipip>—IP in IP

<tcp>—Transmission Control Protocol

<egp>—Exterior gateway protocol

<udp>—User Datagram Protocol

<rsvp>—Resource Reservation Protocol

<gre>—Generic routing encapsulation

<esp>—IPSec Encapsulating Security Payload

<ah>—IP Security authentication header

<icmp6>—Internet Control Message Protocol Version 6

<ospf>—Open Shortest Path First

<pim>—Protocol Independent Multicast

<sctp>—Stream Control Transmission Protocol

<number>—Numeric protocol value (0 .. 255)

<protocol> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
       <protocol>
        <icmp/>
        <igmp/>
        <ipip/>
        <tcp/>
        <egp/>
        <udp/>
```

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```
                <rsvp/>
                <gre/>
                <esp/>
                <ah/>
                <icmp6/>
                <ospf/>
                <pim/>
                <sctp/>
                <number/>
              </protocol>
            </match>
          </rule>
        </rule-set>
      </destination>
    </nat>
  </security>
</configuration>
```

Description IP Protocol

Contents <icmp>—Internet Control Message Protocol

<igmp>—Internet Group Management Protocol

<ipip>—IP in IP

<tcp>—Transmission Control Protocol

<egp>—Exterior gateway protocol

<udp>—User Datagram Protocol

<rsvp>—Resource Reservation Protocol

<gre>—Generic routing encapsulation

<esp>—IPSec Encapsulating Security Payload

<ah>—IP Security authentication header

<icmp6>—Internet Control Message Protocol Version 6

<ospf>—Open Shortest Path First

<pim>—Protocol Independent Multicast

<sctp>—Stream Control Transmission Protocol

<number>—Numeric protocol value (0 .. 255)

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<protocol-command> configuration/security/utm/custom-objects

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <protocol-command>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <value>...</value>
    </protocol-command>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure command-list object

Contents <name>—Configure name of command-list object

<value>—Configure value of command-list object

<protocols> configuration/security/zones/functional-zone/management/interfaces/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <interfaces>
      <host-inbound-traffic>
       <protocols>
        <all/>
        <bfd/>
        <bgp/>
        <dvmrp/>
        <igmp/>
        <ldp/>
        <msdp/>
        <nhrp/>
        <ospf/>
        <ospf3/>
        <pgm/>
        <pim/>
        <rip/>
        <ripng/>
        <router-discovery/>
        <rsvp/>
        <sap/>
```

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```
            <vrrp/>
            <except/>
           </protocols>
          </host-inbound-traffic>
         </interfaces>
        </management>
       </functional-zone>
      </zones>
     </security>
    </configuration>
```

Description Protocol type of incoming traffic to accept

Contents <all>—All protocols

<bfd>—Bidirectional Forwarding Detection

<bgp>—Border Gateway Protocol

<dvmrp>—Distance Vector Multicast Routing Protocol

<igmp>—Internet Group Management Protocol

<ldp>—Label Distribution Protocol

<msdp>—Multicast Source Discovery Protocol

<nhrp>—Next Hop Resolution Protocol

<ospf>—Open Shortest Path First

<ospf3>—Open Shortest Path First version 3

<pgm>—Pragmatic General Multicast

<pim>—Protocol Independent Multicast

<rip>—Routing Information Protocol

<ripng>—Routing Information Protocol next generation

<router-discovery>—Router Discovery

<rsvp>—Resource Reservation Protocol

<sap>—Session Announcement Protocol

<vrrp>—Virtual Router Redundancy Protocol

<except>—Protocol type of incoming traffic to disallow

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<protocols> configuration/security/zones/functional-zone/management/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <host-inbound-traffic>
      <protocols>
       <all/>
       <bfd/>
       <bgp/>
       <dvmrp/>
       <igmp/>
       <ldp/>
       <msdp/>
       <nhrp/>
       <ospf/>
       <ospf3/>
       <pgm/>
       <pim/>
       <rip/>
       <ripng/>
       <router-discovery/>
       <rsvp/>
       <sap/>
       <vrrp/>
       <except/>
      </protocols>
     </host-inbound-traffic>
    </management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description Protocol type of incoming traffic to accept

Contents <all>—All protocols

<bfd>—Bidirectional Forwarding Detection

<bgp>—Border Gateway Protocol

<dvmrp>—Distance Vector Multicast Routing Protocol

<igmp>—Internet Group Management Protocol

<ldp>—Label Distribution Protocol

<msdp>—Multicast Source Discovery Protocol

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<nhrp>—Next Hop Resolution Protocol

<ospf>—Open Shortest Path First

<ospf3>—Open Shortest Path First version 3

<pgm>—Pragmatic General Multicast

<pim>—Protocol Independent Multicast

<rip>—Routing Information Protocol

<ripng>—Routing Information Protocol next generation

<router-discovery>—Router Discovery

<rsvp>—Resource Reservation Protocol

<sap>—Session Announcement Protocol

<vrrp>—Virtual Router Redundancy Protocol

<except>—Protocol type of incoming traffic to disallow

<protocols> configuration/security/zones/security-zone/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <host-inbound-traffic>
     <protocols>
      <all/>
      <bfd/>
      <bgp/>
      <dvmrp/>
      <igmp/>
      <ldp/>
      <msdp/>
      <nhrp/>
      <ospf/>
      <ospf3/>
      <pgm/>
      <pim/>
      <rip/>
      <ripng/>
      <router-discovery/>
      <rsvp/>
      <sap/>
      <vrrp/>
      <except/>
     </protocols>
    </host-inbound-traffic>
   </security-zone>
```


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```
    </zones>
   </security>
  </configuration>
```

Description Protocol type of incoming traffic to accept

Contents <all>—All protocols

<bfd>—Bidirectional Forwarding Detection

<bgp>—Border Gateway Protocol

<dvmrp>—Distance Vector Multicast Routing Protocol

<igmp>—Internet Group Management Protocol

<ldp>—Label Distribution Protocol

<msdp>—Multicast Source Discovery Protocol

<nhrp>—Next Hop Resolution Protocol

<ospf>—Open Shortest Path First

<ospf3>—Open Shortest Path First version 3

<pgm>—Pragmatic General Multicast

<pim>—Protocol Independent Multicast

<rip>—Routing Information Protocol

<ripng>—Routing Information Protocol next generation

<router-discovery>—Router Discovery

<rsvp>—Resource Reservation Protocol

<sap>—Session Announcement Protocol

<vrrp>—Virtual Router Redundancy Protocol

<except>—Protocol type of incoming traffic to disallow

<protocols> configuration/security/zones/security-zone/interfaces/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <interfaces>
```

```
<host-inbound-traffic>
 <protocols>
  <all/>
  <bfd/>
  <bgp/>
  <dvmrp/>
  <igmp/>
  <ldp/>
  <msdp/>
  <nhrp/>
  <ospf/>
  <ospf3/>
  <pgm/>
  <pim/>
  <rip/>
  <ripng/>
  <router-discovery/>
  <rsvp/>
  <sap/>
  <vrrp/>
  <except/>
 </protocols>
</host-inbound-traffic>
</interfaces>
</security-zone>
</zones>
</security>
</configuration>
```

Description Protocol type of incoming traffic to accept

Contents <all>—All protocols

<bfd>—Bidirectional Forwarding Detection

<bgp>—Border Gateway Protocol

<dvmrp>—Distance Vector Multicast Routing Protocol

<igmp>—Internet Group Management Protocol

<ldp>—Label Distribution Protocol

<msdp>—Multicast Source Discovery Protocol

<nhrp>—Next Hop Resolution Protocol

<ospf>—Open Shortest Path First

<ospf3>—Open Shortest Path First version 3

<pgm>—Pragmatic General Multicast

<pim>—Protocol Independent Multicast

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<rip>—Routing Information Protocol

<ripng>—Routing Information Protocol next generation

<router-discovery>—Router Discovery

<rsvp>—Resource Reservation Protocol

<sap>—Session Announcement Protocol

<vrrp>—Virtual Router Redundancy Protocol

<except>—Protocol type of incoming traffic to disallow

<protocols> configuration

Usage

```
<configuration>
 <protocols>
  <ospf/>
  <oam>...</oam>
  <dcbx>...</dcbx>
  <lldp>...</lldp>
  <lldp-med>...</lldp-med>
  <dot1x>...</dot1x>
  <gvrp>...</gvrp>
  <mvrp>...</mvrp>
  <protection-group>...</protection-group>
  <stp>...</stp>
  <rstp>...</rstp>
  <mstp>...</mstp>
  <vstp>...</vstp>
  <edge-virtual-bridging>...</edge-virtual-bridging>
  <igmp-snooping>...</igmp-snooping>
  <mld-snooping>...</mld-snooping>
 </protocols>
</configuration>
```

Description

Contents <ospf>—

<oam>—Operation, Administration, and Management configuration

<dcbx>—DCBX Protocol

<lldp>—Link Layer Detection Protocol

<lldp-med>—LLDP Media Endpoint Discovery

<dot1x>—802.1X options

<gvrp>—GVRP configuration

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<mvrp>—MVRP configuration

<protection-group>—Protection group

<stp>—Spanning Tree Protocol options

<rstp>—Rapid Spanning Tree Protocol options

<mstp>—Multiple Spanning Tree Protocol options

<vstp>—VLAN Spanning Tree Protocol options

<edge-virtual-bridging>—Edge Virtual Bridging options

<igmp-snooping>—IGMP Snooping Configuration

<mld-snooping>—MLD Snooping configuration

<proxy> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <pattern-update>
       <proxy>
        <server>server</server> <!-- mandatory -->
        <port>port</port>
        <username>username</username>
        <password>password</password>
       </proxy>
      </pattern-update>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Pattern update proxy server.

Contents <server>—URL or IP address of the proxy server host

<port>—Proxy server port

<username>—Username for proxy server

<password>—Proxy server password

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<proxy> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <pattern-update>
       <proxy>
        <server>server</server> <!-- mandatory -->
        <port>port</port>
        <username>username</username>
        <password>password</password>
       </proxy>
      </pattern-update>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Pattern update proxy server.

Contents <server>—URL or IP address of the proxy server host

<port>—Proxy server port

<username>—Username for proxy server

<password>—Proxy server password

<proxy> configuration/security/utm/feature-profile/anti-virus/sophos-engine/pattern-update

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <pattern-update>
       <proxy>
        <server>server</server> <!-- mandatory -->
        <port>port</port>
        <username>username</username>
        <password>password</password>
```

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```
            </proxy>
           </pattern-update>
          </sophos-engine>
         </anti-virus>
        </feature-profile>
       </utm>
      </security>
     </configuration>
```

Description Pattern update proxy server.

Contents <server>—URL or IP address of the proxy server host

<port>—Proxy server port

<username>—Username for proxy server

<password>—Proxy server password

<proxy> configuration/protocols/igmp-snooping/vlan

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <proxy>
     <source-address>source-address</source-address>
    </proxy>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Enable proxy mode

Contents <source-address>—Source IP address to use for proxy

<proxy-arp> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-arp>
    <interface>...</interface>
   </proxy-arp>
  </nat>
 </security>
```


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```
</configuration>
```

Description Configure Proxy ARP

Contents <interface>—Interface with proxy arp configured

<proxy-identity> configuration/security/ipsec/vpn/ike

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <ike>
     <proxy-identity>
      <local>local</local>
      <remote>remote</remote>
      <service>service</service>
     </proxy-identity>
    </ike>
   </vpn>
  </ipsec>
 </security>
</configuration>
```

Description IPSec proxy-id to use in IKE negotiations

Contents <local>—Local IP address/prefix length

<remote>—Remote IP address/prefix length

<service>—Name of serivce that passes through, any enables all services

<proxy-ndp> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-ndp>
    <interface>...</interface>
   </proxy-ndp>
  </nat>
 </security>
</configuration>
```

Description Configure Proxy NDP

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Contents <interface>—Interface with proxy arp configured

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CHAPTER 43

Tag Elements Beginning with Q

This chapter lists the configuration tag elements that have names beginning with the letter *q*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<quality-of-service> configuration/wlan/access-point/radio

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <no-wifi-multimedia/>
     <no-acknowledgement/>
     <no-auto-power-save/>
     <access-point-queues>...</access-point-queues>
     <station-queues>...</station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Wireless quality of service configuration

Contents <no-wifi-multimedia>—Disable WIFI multimedia

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<no-acknowledgement>—Disable acknowledgement

<no-auto-power-save>—Disable auto power save delivery

<access-point-queues>—Configure the access point queues

<station-queues>—Configure the station queues

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CHAPTER 44

Tag Elements Beginning with R

This chapter lists the configuration tag elements that have names beginning with the letter *r*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<radio> configuration/wlan/access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
   <radio-identifier>radio-identifier</radio-identifier> <!-- mandatory --> <!-- identifier
-->
    <radio-options>...</radio-options>
    <station-isolation/>
    <virtual-access-point>...</virtual-access-point>
    <quality-of-service>...</quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Access point radio settings

Contents <radio-identifier>—Specify radio identifier value

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<radio-options>—Configure radio options

<station-isolation>—Isolate the clients connected to the same VAP within a radio

<virtual-access-point>—Virtual access point configuration

<quality-of-service>—Wireless quality of service configuration

<radio-options> configuration/wlan/access-point/radio

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <radio-options>
     <radio-off/>
     <disable-dot11d/>
     <mode>mode</mode>
     <channel>...</channel>
     <space-time-block-coding/>
     <protection>protection</protection>
     <beacon-interval>beacon-interval</beacon-interval>
     <dtim-period>dtim-period</dtim-period>
     <rts-threshold>rts-threshold</rts-threshold>
     <no-short-guard-interval/>
     <fragmentation-threshold>fragmentation-threshold</fragmentation-threshold>

     <maximum-stations>maximum-stations</maximum-stations>
     <transmit-power>transmit-power</transmit-power>
     <fixed-multicast-rate>fixed-multicast-rate</fixed-multicast-rate>
     <transmit-rate-sets>...</transmit-rate-sets>
     <broadcast-multicast-rate-limit>...</broadcast-multicast-rate-limit>
    </radio-options>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure radio options

Contents <radio-off>—Radio is off

- a - Radio Frequency -a
- bg - Radio Frequency -bg
- an - Radio Frequency -an
- bgn - Radio Frequency -bgn
- 5GHz - Radio Frequency -5GHz-n
- 2.4GHz - Radio Frequency -2.4GHz-n

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- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<disable-dot11d>—Disable dot11d regulatory domain support

- a - Radio Frequency -a
- bg - Radio Frequency -bg
- an - Radio Frequency -an
- bgn - Radio Frequency -bgn
- 5GHz - Radio Frequency -5GHz-n
- 2.4GHz - Radio Frequency -2.4GHz-n
- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps

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- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<mode>—Mode for radio operation

- a - Radio Frequency -a
- bg - Radio Frequency -bg
- an - Radio Frequency -an
- bgn - Radio Frequency -bgn
- 5GHz - Radio Frequency -5GHz-n
- 2.4GHz - Radio Frequency -2.4GHz-n
- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<channel>—Configure channel settings

- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps

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- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<space-time-block-coding>—Enable space time block coding

- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<protection>—Select protection mode

- auto - Protection mode- AUTO
- off - Protection mode- OFF
- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps

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- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<beacon-interval>—Set the beacon interval

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<dtim-period>—Set delivery traffic indication message period (beacon count)

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps

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- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<rts-threshold>—Set RTS- threshold

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<no-short-guard-interval>—Disable 802.11n short inter-symbol guard interval

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps

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- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<fragmentation-threshold>—Packet fragment size(even numbers)

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<maximum-stations>—Set limit on maximum supported stations

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<transmit-power>—Set transmit power

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- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<fixed-multicast-rate>—Provide multicast rate

- auto - Auto rate selection
- 1 - Rate-1Mbps
- 2 - Rate-2Mbps
- 5.5 - Rate-5.5Mbps
- 6 - Rate-6Mbps
- 9 - Rate-9Mbps
- 11 - Rate-11Mbps
- 12 - Rate-12Mbps
- 18 - Rate-18Mbps
- 24 - Rate-24Mbps
- 36 - Rate-36Mbps
- 48 - Rate-48Mbps
- 54 - Rate-54Mbps

<transmit-rate-sets>—Specify the transmit rate sets

<broadcast-multicast-rate-limit>—Configure rate limit for broadcast and multicast traffic

<range> configuration/security/nat/source/pool/port

Usage

<configuration>

```
<security>
 <nat>
  <source>
   <pool>
    <port>
     <range>
      <low>low</low> <!-- mandatory -->
      <to>...</to> <!-- mandatory -->
     </range>
    </port>
   </pool>
  </source>
 </nat>
</security>
</configuration>
```

Description Port range

Contents <low>—Lower limit of port range

<to>—Port range upper limit

<range-address> configuration/security/address-book/address

Usage

```
<configuration>
 <security>
  <address-book>
   <address>
    <range-address>
     <range-low>range-low</range-low> <!-- mandatory --> <!-- identifier -->
     <to>...</to>
    </range-address>
   </address>
  </address-book>
 </security>
</configuration>
```

Description Address range

Contents <range-low>—Lower limit of address range

<to>—Port range upper limit

<range-address> configuration/security/zones/security-zone/address-book/address

Usage

```
<configuration>
 <security>
  <zones>
```


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```
<security-zone>
 <address-book>
  <address>
   <range-address>
    <range-low>range-low</range-low> <!-- mandatory --> <!-- identifier -->
    <to>...</to>
   </range-address>
  </address>
 </address-book>
</security-zone>
</zones>
</security>
</configuration>
```

Description Address range

Contents <range-low>—Lower limit of address range

<to>—Port range upper limit

<rate> configuration/security/gprs/sctp/profile/limit

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>
     <limit>
      <rate>
       <sccp>sccp</sccp>
       <ssp>ssp</ssp>
       <sst>sst</sst>
       <address>...</address>
      </rate>
     </limit>
    </profile>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Rate limit

Contents <sccp>—Global SCCP messages rate limit

<ssp>—Global SSP messages rate limit

<sst>—Global SST messages rate limit

<address>—Rate limit for a list of IP addresses

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<rate-limited> configuration/security/gprs/gtp/profile/log

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <log>
      <rate-limited>
       <basic/>
       <detail/>
       <frequency-number>frequency-number</frequency-number>
      </rate-limited>
     </log>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Dropped for rate-limit

Contents <basic>—Basic logs

<detail>—Detailed logs

<frequency-number>—Logging frequency over threshold, set by rate-limit

<real> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <real>
    <disable/>
    <traceoptions>...</traceoptions>
   </real>
  </alg>
 </security>
</configuration>
```

Description Configure Real Audio/Video ALG

Contents <disable>—Disable Real Audio/Video ALG

<traceoptions>—REAL ALG trace options

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<real-server> configuration/services/server-load-balance

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <real-server>
    <real-server-name>real-server-name</real-server-name> <!-- identifier -->
    <disable/>
    <pause/>
    <allow-sticky-only/>
   </real-server>
  </server-load-balance>
 </services>
</configuration>
```

Description Configure real server

Contents <real-server-name>—Name of the server

<disable>—Disable new requests and terminate existing sessions

<pause>—Disable new requests and keep existing sessions

<allow-sticky-only>—Disable new requests except those finding match in sticky table

<real-server> configuration/services/server-load-balance/real-server-group

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <real-server-group>
    <real-server>
     <real-server-name>real-server-name</real-server-name> <!-- identifier -->
    </real-server>
   </real-server-group>
  </server-load-balance>
 </services>
</configuration>
```

Description List of real servers

Contents <real-server-name>—Real server name

<real-server-group> configuration/services/server-load-balance

Usage

```
<configuration>
```

```
<services>
 <server-load-balance>
  <real-server-group>
   <real-server-group-name>real-server-group-name</real-server-group-name>
<!-- identifier -->
   <real-server>...</real-server> <!-- mandatory -->
   <health-monitor>health-monitor</health-monitor>
   <external-manager>external-manager</external-manager>
  </real-server-group>
 </server-load-balance>
</services>
</configuration>
```

Description Configure real server group

Contents <real-server-group-name>—Name of the real server group

<real-server>—List of real servers

<health-monitor>—Name of the health monitor rule

<external-manager>—Name of the external manager

<receiver> configuration/protocols/igmp-snooping/vlan/data-forwarding

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <data-forwarding>
     <receiver>
      <source-vlans>...</source-vlans>
      <install/>
     </receiver>
    </data-forwarding>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Receiver

Contents <source-vlans>—Source VLANs

<install>—Install forwarded bridging entires

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<redundant-trunk-group> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <redundant-trunk-group>
   <group>...</group>
  </redundant-trunk-group>
 </ethernet-switching-options>
</configuration>
```

Description Redundant trunk group

Contents <group>—Name of Redundant trunk group

<release> configuration/security/gprs/gtp/profile/remove-ie/version

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <remove-ie>
      <version>
       <release>
        <R6/>
        <R7/>
        <R8/>
        <R9/>
       </release>
      </version>
     </remove-ie>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Remove information elements by release

Contents <R6>—Release 6

<R7>—Release 7

<R8>—Release 8

<R9>—Release 9

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<remote-exceptions> configuration/security/dynamic-vpn/clients

Usage

```
<configuration>
 <security>
  <dynamic-vpn>
   <clients>
    <remote-exceptions>
     <exception-ip>exception-ip</exception-ip>
    </remote-exceptions>
   </clients>
  </dynamic-vpn>
 </security>
</configuration>
```

Description Ip/mask of exceptions being passthru

Contents <exception-ip>—Ip/mask of exceptions being passthru

<remote-id> configuration/ethernet-switching-options/secure-access-port/vlan/dhcp-option82

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <dhcp-option82>
     <remote-id>
      <prefix>prefix</prefix>
      <use-interface-description/>
      <use-string>use-string</use-string>
     </remote-id>
    </dhcp-option82>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Configure DHCP option 82 remote id

Contents <prefix>—Configure DHCP option 82 remote id prefix

- none - Set no prefix
- hostname - Set hostname as the prefix
- mac - Set chassis MAC as the prefix

<use-interface-description>—Use interface description instead of name

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<use-string>—Use raw string instead of the default remote id

<remote-identity> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <inet>...</inet>
     <inet6>...</inet6>
     <hostname>...</hostname>
     <user-at-hostname>...</user-at-hostname>
     <distinguished-name>...</distinguished-name>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Set the remote IKE identity

Contents <inet>—Use an IPv4 address

<inet6>—Use an IPv6 address

<hostname>—Use a fully-qualified domain name

<user-at-hostname>—Use an e-mail address

<distinguished-name>—Use a distinguished name:

<remote-mep> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain/maintenance-association/mep

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
       <mep>
        <remote-mep>
         <mep-id>mep-id</mep-id> <!-- identifier -->
         <action-profile>action-profile</action-profile>
         <sla-iterator-profile>...</sla-iterator-profile>
        </remote-mep>
       </mep>
```

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```
        </maintenance-association>
       </maintenance-domain>
      </connectivity-fault-management>
     </ethernet>
    </oam>
   </protocols>
  </configuration>
```

Description Remote maintenance association endpoint configuration

Contents <mep-id>—Identifier for remote maintenance association endpoint

<action-profile>—Name of the action profile

<sla-iterator-profile>—Name of the iterator profile

<remote-protected-resources> configuration/security/dynamic-vpn/clients

Usage

```
<configuration>
 <security>
  <dynamic-vpn>
   <clients>
    <remote-protected-resources>
     <resource-ip>resource-ip</resource-ip>
    </remote-protected-resources>
   </clients>
  </dynamic-vpn>
 </security>
</configuration>
```

Description IP/mask of remote protected resources

Contents <resource-ip>—IP/mask of remote protected resources

<remove-ie> configuration/security/gprs/gtp/profile

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <remove-ie>
      <version>...</version>
     </remove-ie>
    </profile>
   </gtp>
  </gprs>
 </security>
```


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```
</configuration>
```

Description Remove information elements

Contents <version>—GTP version

<resource-manager> configuration/security

Usage

```
<configuration>
 <security>
  <resource-manager>
   <traceoptions>...</traceoptions>
  </resource-manager>
 </security>
</configuration>
```

Description Configure resource manager security options

Contents <traceoptions>—Traceoptions for resource manager

<respond-bad-spi> configuration/security/ike

Usage

```
<configuration>
 <security>
  <ike>
   <respond-bad-spi>
    <max-responses>max-responses</max-responses>
   </respond-bad-spi>
  </ike>
 </security>
</configuration>
```

Description Respond to IPSec packets with bad SPI values

Contents <max-responses>—Maximum number of times to respond

<revocation-check> configuration/security/pki/ca-profile

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <revocation-check>
     <disable/>
```

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```
        <crl>...</crl>
       </revocation-check>
      </ca-profile>
     </pki>
    </security>
   </configuration>
```

Description Method for checking certificate revocations

Contents <disable>—Disable revocation check

<crl>—Certificate revocation list configuration

<route> configuration/services/ip-monitoring/policy/then/preferred-route/routing-instances

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>
      <routing-instances>
       <route>
        <destination>destination</destination> <!-- mandatory --> <!-- identifier -->

        <next-hop>...</next-hop> <!-- mandatory -->
       </route>
      </routing-instances>
     </preferred-route>
    </then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Route

Contents <destination>—

<next-hop>—Next hop to destination of route-action

<route> configuration/services/ip-monitoring/policy/then/preferred-route

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
```


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```
      <then>
       <preferred-route>
        <route>
         <destination>destination</destination> <!-- mandatory --> <!-- identifier -->
         <next-hop>...</next-hop> <!-- mandatory -->
        </route>
       </preferred-route>
      </then>
     </policy>
    </ip-monitoring>
   </services>
</configuration>
```

Description Route

Contents <destination>—

<next-hop>—Next hop to destination of route-action

<routing-instance> configuration/security/nat/source/pool

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <routing-instance>
      <ri-name>ri-name</ri-name>
     </routing-instance>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```

Description Routing instance

Contents <ri-name>—Routing instance name

<routing-instance> configuration/security/nat/source/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <from>
      <routing-instance>
```

```
            <default/>
            <ri-name/>
           </routing-instance>
          </from>
         </rule-set>
        </source>
       </nat>
      </security>
     </configuration>
```

Description Source routing instance list

Contents <default>—Default routing-instance

<ri-name>—Routing-instance name

<routing-instance> configuration/security/nat/source/rule-set/to

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <to>
      <routing-instance>
       <default/>
       <ri-name/>
      </routing-instance>
     </to>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Destination routing instance list

Contents <default>—Default routing-instance

<ri-name>—Routing-instance name

<routing-instance> configuration/security/nat/destination/pool

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <pool>
```


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```
            <routing-instance>
             <default/>
             <ri-name/>
            </routing-instance>
           </pool>
          </destination>
         </nat>
        </security>
       </configuration>
```

Description Routing instance

Contents <default>—Default routing-instance

<ri-name>—Routing-instance name

<routing-instance> configuration/security/nat/destination/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <from>
      <routing-instance>
       <default/>
       <ri-name/>
      </routing-instance>
     </from>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Source routing instance list

Contents <default>—Default routing-instance

<ri-name>—Routing-instance name

<routing-instance> configuration/security/nat/static/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
```

```
            <from>
             <routing-instance>
              <default/>
              <ri-name/>
             </routing-instance>
            </from>
           </rule-set>
          </static>
         </nat>
        </security>
       </configuration>
```

Description Source routing instance list

Contents <default>—Default routing-instance

<ri-name>—Routing-instance name

<routing-instances> configuration/services/ip-monitoring/policy/then/preferred-route

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>
      <routing-instances>
       <instance-name>instance-name</instance-name> <!-- mandatory --> <!--
identifier -->
        <route>...</route> <!-- mandatory -->
      </routing-instances>
     </preferred-route>
    </then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Routing-instance

Contents <instance-name>—

<route>—Route

<routing-instances> configuration

Description

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<rpm> configuration/services

Usage

```
<configuration>
 <services>
  <rpm>
   <probe-server/>
  </rpm>
 </services>
</configuration>
```

Description

Contents <probe-server>—

<rpm-probe> configuration/services/ip-monitoring/policy/match

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <match>
     <rpm-probe>
      <name>name</name> <!-- identifier -->
     </rpm-probe>
    </match>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description RPM probe name

Contents <name>—RPM probe name

<rsh> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <rsh>
    <disable/>
    <traceoptions>...</traceoptions>
   </rsh>
  </alg>
 </security>
```

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```
</configuration>
```

Description Configure RSH ALG

Contents <disable>—Disable RSH ALG

<traceoptions>—RSH ALG trace options

<rstp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <rstp>
   <disable/>
   <bridge-priority>bridge-priority</bridge-priority>
   <max-age>max-age</max-age>
   <hello-time>hello-time</hello-time>
   <forward-delay>forward-delay</forward-delay>
   <traceoptions>...</traceoptions>
   <interface>...</interface>
   <bpdu-block-on-edge/>
  </rstp>
 </protocols>
</configuration>
```

Description Rapid Spanning Tree Protocol options

Contents <disable>—Disable STP

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<max-age>—Maximum age of received protocol bpdu

<hello-time>—Time interval between configuration BPDUs

<forward-delay>—Time spent in listening or learning state

<traceoptions>—Tracing options for debugging protocol operation

<interface>—

<bpdu-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect)

<rtsp> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
```


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```
    <rtsp>
     <disable/>
     <traceoptions>...</traceoptions>
    </rtsp>
   </alg>
  </security>
 </configuration>
```

Description Configure RTSP ALG

Contents <disable>—Disable RTSP ALG

<traceoptions>—RTSP ALG trace options

<rule> configuration/security/application-firewall/rule-sets

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <rule>
     <rule-name>rule-name</rule-name> <!-- identifier -->
     <match>...</match> <!-- mandatory -->
     <then>...</then> <!-- mandatory -->
    </rule>
   </rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Rule

Contents <rule-name>—Rule name

<match>—Specify security rule match-criteria

<then>—Specify rule action to take when packet match criteria

<rule> configuration/security/nat/source/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <rule-name>rule-name</rule-name> <!-- identifier -->
      <description>description</description>
```

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```
        <match>...</match> <!-- mandatory -->
        <then>...</then> <!-- mandatory -->
       </rule>
      </rule-set>
     </source>
    </nat>
   </security>
  </configuration>
```

Description Source NAT rule

Contents <rule-name>—Source NAT Rule name

<description>—Text description of rule

<src-nat-rule-match>—Specify Source NAT rule match criteria

<then>—Then action

<rule> configuration/security/nat/destination/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <rule-name>rule-name</rule-name> <!-- identifier -->
      <description>description</description>
      <match>...</match> <!-- mandatory -->
      <then>...</then> <!-- mandatory -->
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Destination NAT rule

Contents <rule-name>—Rule name

<description>—Text description of rule

<dest-nat-rule-match>—Specify Destination NAT rule match criteria

<then>—Then action

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<rule> configuration/security/nat/static/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <rule-name>rule-name</rule-name> <!-- identifier -->
      <description>description</description>
      <match>...</match> <!-- mandatory -->
      <then>...</then> <!-- mandatory -->
     </rule>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Static NAT rule

Contents <rule-name>—Rule name

<description>—Text description of rule

<static-nat-rule-match>—Specify Static NAT rule match criteria

<then>—Then action

<rule-set> configuration/security/nat/source

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule-set-name>rule-set-name</rule-set-name> <!-- identifier -->
     <description>description</description>
     <from>...</from> <!-- mandatory -->
     <to>...</to> <!-- mandatory -->
     <rule>...</rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Configurate a set of rules

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Contents <rule-set-name>—Rule-set name

<description>—Text description of rule set

<from>—Where is the traffic from

<to>—Where is the traffic to

<rule>—Source NAT rule

<rule-set> configuration/security/nat/destination

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule-set-name>rule-set-name</rule-set-name> <!-- identifier -->
     <description>description</description>
     <from>...</from> <!-- mandatory -->
     <rule>...</rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Configurate a set of rules

Contents <rule-set-name>—Rule-set name

<description>—Text description of rule set

<from>—Where is the traffic from

<rule>—Destination NAT rule

<rule-set> configuration/security/nat/static

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule-set-name>rule-set-name</rule-set-name> <!-- identifier -->
     <description>description</description>
     <from>...</from> <!-- mandatory -->
     <rule>...</rule>
    </rule-set>
   </static>
```

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```
  </nat>
 </security>
</configuration>
```

Description Configurate a set of rules

Contents <rule-set-name>—Rule-set name

<description>—Text description of rule set

<from>—Where is the traffic from

<rule>—Static NAT rule

<rule-sets> configuration/security/application-firewall

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <ruleset-name>ruleset-name</ruleset-name> <!-- identifier -->
    <rule>...</rule> <!-- mandatory -->
    <default-rule>...</default-rule> <!-- mandatory -->
   </rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Configure application-firewall rule-sets

Contents <ruleset-name>—Application firewall rule-set name

<rule>—Rule

<default-rule>—Specify default rule for a rule-set

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CHAPTER 45

Tag Elements Beginning with S

This chapter lists the configuration tag elements that have names beginning with the letter *s*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<saturday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <saturday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </saturday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Saturday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

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<sbl> configuration/security/utm/feature-profile/anti-spam

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-spam>
     <sbl>
      <profile>...</profile>
     </sbl>
    </anti-spam>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description SBL settings

Contents <profile>—SBL profile

<scan-options> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <scan-options>
        <intelligent-prescreening/>
        <scan-mode>scan-mode</scan-mode>
        <scan-extension>scan-extension</scan-extension>
        <content-size-limit>content-size-limit</content-size-limit>
        <timeout>timeout</timeout>
        <decompress-layer-limit>decompress-layer-limit</decompress-layer-limit>
       </scan-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus scan options

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Contents <intelligent-prescreening>—Anti-virus intelligent pre-screening

- all - Scan all files
- by-extension - Scan files with specified extension

<scan-mode>—Anti-virus scan mode

- all - Scan all files
- by-extension - Scan files with specified extension

<scan-extension>—Scan engine filename extension

<content-size-limit>—Content size limit

<timeout>—Scan engine timeout

<decompress-layer-limit>—Decompress layer limit

<scan-options> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <scan-options>
        <intelligent-prescreening/>
        <content-size-limit>content-size-limit</content-size-limit>
        <timeout>timeout</timeout>
       </scan-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus juniper-express-engine scan options

Contents <intelligent-prescreening>—Anti-virus intelligent pre-screening

<content-size-limit>—Content size limit

<timeout>—Scan engine timeout

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<scan-options> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <scan-options>
        <uri-check/>
        <content-size-limit>content-size-limit</content-size-limit>
        <timeout>timeout</timeout>
       </scan-options>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus sophos-engine scan options

Contents <uri-check>—Anti-virus uri-check

<content-size-limit>—Content size limit

<timeout>—Scan engine timeout

<sccp> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <disable/>
    <inactive-media-timeout>inactive-media-timeout</inactive-media-timeout>
    <application-screen>...</application-screen>
    <dscp-rewrite>...</dscp-rewrite>
    <traceoptions>...</traceoptions>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description Configure SCCP ALG

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Contents <disable>—Disable SCCP ALG

<inactive-media-timeout>—Set inactive media timeout

<application-screen>—Configure application screens

<dscp-rewrite>—DSCP code rewrite

<traceoptions>—SCCP ALG trace options

<scheduler> configuration/schedulers

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <scheduler-name>scheduler-name</scheduler-name> <!-- identifier -->
   <description>description</description>
   <start-date>...</start-date>
   <daily>...</daily>
   <sunday>...</sunday>
   <monday>...</monday>
   <tuesday>...</tuesday>
   <wednesday>...</wednesday>
   <thursday>...</thursday>
   <friday>...</friday>
   <saturday>...</saturday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Scheduler configuration

Contents <scheduler-name>—Name of security scheduler

<description>—Text description of scheduler

<start-date>—Start date and time ([YYYY-]MM-DD.hh:mm)

<daily>—Everyday; can be overwritten by specific weekday

<sunday>—Every Sunday

<monday>—Every Monday

<tuesday>—Every Tuesday

<wednesday>—Every Wednesday

<thursday>—Every Thursday

<friday>—Every Friday

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<saturday>—Every Saturday

<schedulers> configuration

Usage

```
<configuration>
 <schedulers>
  <scheduler>...</scheduler>
 </schedulers>
</configuration>
```

Description Security scheduler

Contents <scheduler>—Scheduler configuration

<screen> configuration/security

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>...</ids-option>
   <traceoptions>...</traceoptions>
  </screen>
 </security>
</configuration>
```

Description Configure screen feature

Contents <ids-option>—Configure ids-option

<traceoptions>—Trace options for Network Security Screen

<sctp> configuration/security/gprs

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <profile>...</profile>
    <log>...</log>
    <traceoptions>...</traceoptions>
   </sctp>
  </gprs>
 </security>
</configuration>
```


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Description GPRS stream control transmission protocol configuration

Contents <profile>—Configure stream transmission protocol

<log>—GPRS stream control transmission protocol logs

<traceoptions>—Trace options for GPRS stream control transmission protocol

<secondary-server> configuration/smtp

Usage

```
<configuration>
 <smtp>
  <secondary-server>
   <address>address</address> <!-- mandatory -->
   <login>...</login>
  </secondary-server>
 </smtp>
</configuration>
```

Description SMTP secondary server configuration

Contents <address>—SMTP server's IPv4 address

<login>—Configure a mail sender account to the server

<secure-access-port> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <interface>...</interface>
   <vlan>...</vlan>
   <dhcp-snooping-file>...</dhcp-snooping-file>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Access port security options

Contents <interface>—Configure access port security for this interface

<vlan>—Configure access port security for this VLAN

<dhcp-snooping-file>—Configure DHCP snooping persistence file, write-interval and timeout

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<security> configuration

Usage

```
<configuration>
 <security>
  <ike>...</ike>
  <ipsec>...</ipsec>
  <group-vpn>...</group-vpn>
  <alarms>...</alarms>
  <key-protection/>
  <pki>...</pki>
  <gprs>...</gprs>
  <address-book>...</address-book>
  <alg>...</alg>
  <application-firewall>...</application-firewall>
  <application-tracking>...</application-tracking>
  <utm>...</utm>
  <dynamic-vpn>...</dynamic-vpn>
  <softwires>...</softwires>
  <forwarding-options>...</forwarding-options>
  <flow>...</flow>
  <firewall-authentication>...</firewall-authentication>
  <screen>...</screen>
  <nat>...</nat>
  <forwarding-process>...</forwarding-process>
  <resource-manager>...</resource-manager>
  <analysis>...</analysis>
  <log>...</log>
  <traceoptions>...</traceoptions>
  <datapath-debug>...</datapath-debug>
  <user-identification>...</user-identification>
  <zones>...</zones>
  <idp>...</idp>
 </security>
</configuration>
```

Description Security configuration

Contents <ike>—IKE configuration

<ipsec>—IPSec configuration

<group-vpn>—Group VPN configuration

<alarms>—Configure security alarms

<key-protection>—Common-Criteria key-protection configuration

<pki>—PKI service configuration

<gprs>—GPRS configuration

<address-book>—Security address book

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<alg>—Configure ALG security options

<application-firewall>—Configure application-firewall rule-sets

<application-tracking>—Application tracking configuration

<utm>—Content security service configuration

<dynamic-vpn>—Configure dynamic VPN

<softwires>—Configure softwire feature

<forwarding-options>—Security-forwarding-options configuration

<flow>—FLOW configuration

<firewall-authentication>—Firewall authentication parameters

<screen>—Configure screen feature

<nat>—Configure Network Address Translation

<forwarding-process>—Configure security forwarding-process options

<resource-manager>—Configure resource manager security options

<analysis>—Configure security analysis

<log>—Configure security log

<traceoptions>—Network security daemon tracing options

<datapath-debug>—Datapath debug options

<user-identification>—Configure user-identification

<zones>—Zone configuration

<idp>—Configure IDP

<security> configuration/wlan/access-point/radio/virtual-access-point

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
    <mac-authentication-type>mac-authentication-type</mac-authentication-type>

      <static-wep>...</static-wep>
      <dot1x>...</dot1x>
      <wpa-personal>...</wpa-personal>
      <wpa-enterprise>...</wpa-enterprise>
```

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```
        <none/>
       </security>
      </virtual-access-point>
     </radio>
    </access-point>
   </wlan>
  </configuration>
```

Description Configure security settings for the VAP

Contents <mac-authentication-type>—Select MAC authentication type

- disabled - Disable MAC authentication
- local - Select local MAC authentication
- radius - Select RADIUS server authentication

<static-wep>—Static WEP configuration

<dot1x>—Dot1x configuration

<wpa-personal>—Set WPA personal settings

<wpa-enterprise>—Set WAP enterprise settings

<none>—Unsecure plain-text communication

<security-association> configuration/security/ipsec/internal

Usage

```
<configuration>
 <security>
  <ipsec>
   <internal>
    <security-association>
     <manual>...</manual>
    </security-association>
   </internal>
  </ipsec>
 </security>
</configuration>
```

Description Define an IPsec security association

Contents <manual>—Define a manual security association

<security-zone> configuration/security/zones

Usage

```
<configuration>
```


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```
<security>
 <zones>
  <security-zone>
   <name>name</name> <!-- identifier -->
   <description>description</description>
   <tcp-rst/>
   <address-book>...</address-book>
   <screen>screen</screen>
   <host-inbound-traffic>...</host-inbound-traffic>
   <interfaces>...</interfaces>
   <application-tracking/>
  </security-zone>
 </zones>
</security>
</configuration>
```

Description Security zones

Contents <name>—Name of the zone

<description>—Text description of zone

<tcp-rst>—Send RST for NON-SYN packet not matching TCP session

<address-book>—Address book entries

<screen>—Name of ids option object applied to the zone

<host-inbound-traffic>—Allowed system services & protocols

<interfaces>—Interfaces that are part of this zone

<application-tracking>—Enable Application tracking support for this zone

<select-profile> configuration/interfaces/interface/cellular-options/gsm-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <cellular-options>
    <gsm-options>
     <select-profile>
      <profile-id>profile-id</profile-id> <!-- mandatory -->
     </select-profile>
    </gsm-options>
   </cellular-options>
  </interface>
 </interfaces>
</configuration>
```

Description Profile to be applied

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Contents <profile-id>—Profile to be used for data calls

<selection> configuration/security/gprs/gtp/profile/apn/imsi-prefix/action

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <apn>
      <imsi-prefix>
       <action>
        <selection>
         <ms/>
         <net/>
         <vrf/>
        </selection>
       </action>
      </imsi-prefix>
     </apn>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Allowed selection modes for this APN

Contents <ms>—Mobile Station selection mode

<net>—Network selection mode

<vrf>—Subscriber verified mode

<server> configuration/security/group-vpn

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <traceoptions>...</traceoptions>
    <ike>...</ike>
    <ipsec>...</ipsec>
    <group>...</group>
   </server>
  </group-vpn>
 </security>
</configuration>
```


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Description Group VPN server configuration

Contents <traceoptions>—Trace options for Group VPN debug

<ike>—Group VPN IKE configuration

<ipsec>—Group VPN IPsec configuration

<group>—Define a Group VPN group

<server> configuration/security/utm/feature-profile/web-filtering/surf-control-integrated

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <server>
       <host>host</host>
       <port>port</port>
      </server>
     </surf-control-integrated>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Surf control server

Contents <host>—Server host IP address or string host name

<port>—Server port

<server> configuration/security/utm/feature-profile/web-filtering/websense-redirect/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <websense-redirect>
      <profile>
       <server>
        <host>host</host>
        <port>port</port>
```

```
        </server>
       </profile>
      </websense-redirect>
     </web-filtering>
    </feature-profile>
   </utm>
  </security>
</configuration>
```

Description Websense redirect server

Contents <host>—Server host IP address or string host name

<port>—Server port

<server> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <server>
       <host>host</host>
       <port>port</port>
      </server>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Juniper enhanced server

Contents <host>—Server host IP address or string host name

<port>—Server port

<server-fail> configuration/protocols/dot1x/authenticator/interface

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <authenticator>
    <interface>
     <server-fail>
```


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```
        <deny/>
        <permit/>
        <vlan-name>vlan-name</vlan-name>
        <use-cache/>
       </server-fail>
      </interface>
     </authenticator>
    </dot1x>
   </protocols>
  </configuration>
```

Description Action to be taken when server is inaccessible

Contents <deny>—Force client authentication to fail

<permit>—Force client authentication to succeed

<vlan-name>—VLAN name or 802.1q tag for unreachable servers

<use-cache>—Use the previous state of the client

<server-load-balance> configuration/services

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <real-server>...</real-server>
   <real-server-group>...</real-server-group>
   <virtual-server>...</virtual-server>
   <traceoptions>...</traceoptions>
   <external-manager>...</external-manager>
  </server-load-balance>
 </services>
</configuration>
```

Description Configure server load balancing

Contents <real-server>—Configure real server

<real-server-group>—Configure real server group

<virtual-server>—Configure virtual server

<traceoptions>—Configure server load balance traceoptions

<external-manager>—Configure external manager

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<server-member-communication> configuration/security/group-vpn/server/group

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <group>
     <server-member-communication>
      <communication-type>communication-type</communication-type> <!--
mandatory -->
      <multicast-group>multicast-group</multicast-group>
      <multicast-outgoing-interface>...</multicast-outgoing-interface>
      <lifetime-seconds>lifetime-seconds</lifetime-seconds>
      <retransmission-period>retransmission-period</retransmission-period>

<number-of-retransmission>number-of-retransmission</number-of-retransmission>
      <heartbeat>heartbeat</heartbeat>
      <encryption-algorithm>encryption-algorithm</encryption-algorithm> <!--
mandatory -->
      <sig-hash-algorithm>sig-hash-algorithm</sig-hash-algorithm> <!-- mandatory
-->
      <certificate>certificate</certificate>
     </server-member-communication>
    </group>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Configure Server to Member communication parameters

Contents <communication-type>—Define type of server member communication

- unicast - Unicast
- multicast - Multicast
- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<multicast-group>—Specify the Multicast group address

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- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<multicast-outgoing-interface>—Name of the multicast outgoing interface

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<lifetime-seconds>—Configure lifetime in seconds

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<retransmission-period>—Configure retransmission period in seconds

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<number-of-retransmission>—Configure maximum number of retransmission attempts

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- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<heartbeat>—Configure heartbeat period in seconds

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<encryption-algorithm>—Define encryption algorithm

- des-cbc - DES-CBC encryption algorithm
- 3des-cbc - 3DES-CBC encryption algorithm
- aes-128-cbc - AES-CBC 128-bit encryption algorithm
- aes-192-cbc - AES-CBC 192-bit encryption algorithm
- aes-256-cbc - AES-CBC 256-bit encryption algorithm
- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<sig-hash-algorithm>—Define sig-hash algorithm

- md5 - MD5 sig-hash algorithm
- sha1 - SHA1 sig-hash algorithm

<certificate>—Certificate identifier

<server-reject-vlan> configuration/protocols/dot1x/authenticator/interface

Usage

```
<configuration>
 <protocols>
  <dot1x>
```


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```
<authenticator>
 <interface>
  <server-reject-vlan>
   <vlan-name>vlan-name</vlan-name> <!-- mandatory -->
   <block-interval>block-interval</block-interval>
   <eapol-block/>
  </server-reject-vlan>
 </interface>
</authenticator>
</dot1x>
</protocols>
</configuration>
```

Description VLAN name or 802.1q tag for authentication rejected clients

Contents <vlan-name>—VLAN name or VLAN Tag (1..4095)

<block-interval>—Interval for authenticator to ignore the EAP-Start packets.

<eapol-block>—Force the authenticator to ignore EAPOL-Start packets.

<service-layer-card> configuration/services/traffic-distribution

Usage

```
<configuration>
 <services>
  <traffic-distribution>
   <service-layer-card>
    <slot>slot</slot> <!-- identifier -->
    <placement>placement</placement> <!-- mandatory -->
    <mode>mode</mode> <!-- mandatory -->
   </service-layer-card>
  </traffic-distribution>
 </services>
</configuration>
```

Description Service layer card configuration

Contents <slot>—FPC slot number

- internal -
- external -
- bridge -
- server-load-balance -

<placement>—Card placement: internal or external

- internal -
- external -

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- bridge -
- server-load-balance -

<mode>—Card operation mode

- bridge -
- server-load-balance -

<services> configuration

Usage

```
<configuration>
 <services>
  <application-identification/>
  <rpm>...</rpm>
  <ip-monitoring>...</ip-monitoring>
  <unified-access-control>...</unified-access-control>
  <traffic-distribution>...</traffic-distribution>
  <server-load-balance>...</server-load-balance>
  <captive-portal>...</captive-portal>
 </services>
</configuration>
```

Description Set services parameters

Contents <application-identification>—

<rpm>—

<ip-monitoring>—IP monitoring for route action

<unified-access-control>—Configure Unified Access Control

<traffic-distribution>—JunOS MAG SLC traffic distribution configuration

<server-load-balance>—Configure server load balancing

<captive-portal>—Captive Portal options

<services> configuration/wlan/access-point/external/system

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <services>
      <ssh/>
     </services>
```


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```
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description System services configuration

Contents <ssh>—Enable SSH service on the access point

<sessions-per-client> configuration/security/utm/utm-policy/traffic-options

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <traffic-options>
     <sessions-per-client>
      <limit>limit</limit>
      <over-limit>over-limit</over-limit>
     </sessions-per-client>
    </traffic-options>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description Sessions per client

Contents <limit>—Sessions limit

- log-and-permit -
- block -

<over-limit>—Over limit number

- log-and-permit -
- block -

<shdsl-options> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <shdsl-options>
    <line-rate>line-rate</line-rate>
```

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```
    </shdsl-options>
   </interface>
  </interfaces>
</configuration>
```

Description

Contents <line-rate>—SHDSL line rate

- value - Enter Line Rate from 192 to 22784 in Kbps

<sip> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <disable/>
    <inactive-media-timeout>inactive-media-timeout</inactive-media-timeout>
    <maximum-call-duration>maximum-call-duration</maximum-call-duration>
    <t1-interval>t1-interval</t1-interval>
    <t4-interval>t4-interval</t4-interval>
    <c-timeout>c-timeout</c-timeout>
    <retain-hold-resource/>
    <application-screen>...</application-screen>
    <dscp-rewrite>...</dscp-rewrite>
    <traceoptions>...</traceoptions>
   </sip>
  </alg>
 </security>
</configuration>
```

Description Configure SIP ALG

Contents <disable>—Disable SIP ALG

<inactive-media-timeout>—Set inactive media timeout

<maximum-call-duration>—Set maximum call duration

<t1-interval>—Set T1 interval

<t4-interval>—Set T4 interval

<c-timeout>—Set C timeout

<retain-hold-resource>—Retain SDP resources during call hold

<application-screen>—Configure application screens

<dscp-rewrite>—DSCP code rewrite

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<traceoptions>—SIP ALG trace options

<site-reputation-action> configuration/security/utm/feature-profile/web-filtering/juniper-enhanced/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <juniper-enhanced>
      <profile>
       <site-reputation-action>
        <very-safe>very-safe</very-safe>
        <moderately-safe>moderately-safe</moderately-safe>
        <fairly-safe>fairly-safe</fairly-safe>
        <suspicious>suspicious</suspicious>
        <harmful>harmful</harmful>
       </site-reputation-action>
      </profile>
     </juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Juniper enhanced site reputation action

Contents <very-safe>—Action when site reputation is very safe

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -

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- log-and-permit -
- block -

<moderately-safe>—Action when site reputation is moderately safe

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<fairly-safe>—Action when site reputation is fairly safe

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

<suspicious>—Action when site reputation is suspicious

- permit -
- log-and-permit -
- block -
- permit -
- log-and-permit -
- block -

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<harmful>—Action when site reputation is harmful

- permit -
- log-and-permit -
- block -

<sla-iterator-profile> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain/maintenance-association/mep/remote-mep

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <maintenance-association>
       <mep>
        <remote-mep>
         <sla-iterator-profile>
          <profile-name>profile-name</profile-name> <!-- identifier -->
          <iteration-count>iteration-count</iteration-count>
          <priority>priority</priority>
          <data-tlv-size>data-tlv-size</data-tlv-size>
         </sla-iterator-profile>
        </remote-mep>
       </mep>
      </maintenance-association>
     </maintenance-domain>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Name of the iterator profile

Contents <profile-name>—

<iteration-count>—SLA frames sent for this RMEP for this iterator

<priority>—The VLAN priority value to be sent in the Y.1731 frame

<data-tlv-size>—Size of the data TLV portion of Y.1731 frame

<sla-iterator-profiles> configuration/protocols/oam/ethernet/connectivity-fault-management/performance-monitoring

Usage

```
<configuration>
```

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```
<protocols>
 <oam>
  <ethernet>
   <connectivity-fault-management>
    <performance-monitoring>
     <sla-iterator-profiles>
      <iterator-name>iterator-name</iterator-name> <!-- identifier -->
      <passive/>
     <measurement-type>measurement-type</measurement-type> <!-- mandatory
-->
      <cycle-time>cycle-time</cycle-time>
      <iteration-period>iteration-period</iteration-period>
      <calculation-weight>...</calculation-weight>
     </sla-iterator-profiles>
    </performance-monitoring>
   </connectivity-fault-management>
  </ethernet>
 </oam>
</protocols>
</configuration>
```

Description Configuration related to an SLA monitoring iterator

Contents <iterator-name>—

- two-way-delay - Y.1731 2-way DM frames are sent for this profile

<passive>—Stop sending pdu out from iterator

- two-way-delay - Y.1731 2-way DM frames are sent for this profile

<measurement-type>—Choice of the type of Y.1731(SLA measurement) frame to be sent

- two-way-delay - Y.1731 2-way DM frames are sent for this profile

<cycle-time>—Time period of an iterator profile

<iteration-period>—Maximum services under this iterator profile

<calculation-weight>—Configure delay and delay variation calculation weight

<smtp> configuration

Usage

```
<configuration>
 <smtp>
  <primary-server>...</primary-server>
  <secondary-server>...</secondary-server>
  <traceoptions>...</traceoptions>
 </smtp>
</configuration>
```


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Description Simple Mail Transfer Protocol service configuration

Contents <primary-server>—SMTP primary server configuration

<secondary-server>—SMTP secondary server configuration

<traceoptions>—Trace options for SMTP client service

<softwire-name> configuration/security/softwires

Usage

```
<configuration>
 <security>
  <softwires>
   <softwire-name>
    <name>name</name> <!-- identifier -->
    <softwire-concentrator>softwire-concentrator</softwire-concentrator> <!--
mandatory -->
    <softwire-type>softwire-type</softwire-type>
   </softwire-name>
  </softwires>
 </security>
</configuration>
```

Description Configure softwire object

Contents <name>—DS-Lite object name

- IPv4-in-IPv6 - Ipv4-in-IPv6

<softwire-concentrator>—Concentrator ipv6 address

- IPv4-in-IPv6 - Ipv4-in-IPv6

<softwire-type>—Softwire-type

- IPv4-in-IPv6 - Ipv4-in-IPv6

<softwires> configuration/security

Usage

```
<configuration>
 <security>
  <softwires>
   <softwire-name>...</softwire-name>
   <traceoptions>...</traceoptions>
  </softwires>
 </security>
</configuration>
```

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Description Configure softwire feature

Contents <softwire-name>—Configure softwire object

<traceoptions>—Trace options for Network Security DS-Lite

<sophos-engine> configuration/security/utm/feature-profile/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <sxl-timeout>sxl-timeout</sxl-timeout>
      <sxl-retry>sxl-retry</sxl-retry>
      <pattern-update>...</pattern-update>
      <profile>...</profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus sophos-engine

Contents <sxl-timeout>—Sxl sophos anti-virus engine timeout

<sxl-retry>—Sxl sophos anti-virus engine query retry (number of times)

<pattern-update>—Anti-virus sophos-engine pattern update

<profile>—Anti-virus sophos-engine profile

<source> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>...</pool>
    <address-persistent/>
    <pool-utilization-alarm>...</pool-utilization-alarm>
    <port-randomization>...</port-randomization>
    <pool-default-port-range>...</pool-default-port-range>
    <interface>...</interface>
    <rule-set>...</rule-set>
   </source>
```


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```
  </nat>
 </security>
</configuration>
```

Description Configure Source NAT

Contents <pool>—Define a source address pool

<address-persistent>—Allow source address to maintain same translation

<pool-utilization-alarm>—Configure pool utilization alarm

<port-randomization>—Configure Source NAT port randomization

<pool-default-port-range>—Configure Source NAT default port range

<interface>—Configure interface port overloading for persistent NAT

<rule-set>—Configurate a set of rules

<source> configuration/protocols/igmp-snooping/vlan/data-forwarding

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <data-forwarding>
     <source>
     </source>
    </data-forwarding>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Source

Contents

<source-address> configuration/security/screen/ids-option/tcp/syn-flood/white-list

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-flood>
      <white-list>
```

```
            <source-address>
             <address>address</address> <!-- identifier -->
            </source-address>
           </white-list>
          </syn-flood>
         </tcp>
        </ids-option>
       </screen>
      </security>
     </configuration>
```

Description Source address

Contents <address>—IPv4 or IPv6 source address

<source-address> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <source-address>
        <src-addr>src-addr</src-addr> <!-- identifier -->
       </source-address>
      </match>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Source address

Contents <src-addr>—IPv4 or IPv6 source address

<source-address> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
```


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```
            <source-address>
             <src-addr>src-addr</src-addr> <!-- identifier -->
            </source-address>
           </match>
          </rule>
         </rule-set>
        </destination>
       </nat>
      </security>
     </configuration>
```

Description Source address

Contents <src-addr>—IPv4 or IPv6 source address

<source-address-name> configuration/security/nat/source/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <match>
       <source-address-name>
        <src-addr-name>src-addr-name</src-addr-name> <!-- identifier -->
       </source-address-name>
      </match>
     </rule>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Address/address-set from address book

Contents <src-addr-name>—Address/address-set from address book

<source-address-name> configuration/security/nat/destination/rule-set/rule/match

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <match>
```

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```
            <source-address-name>
             <src-addr-name>src-addr-name</src-addr-name> <!-- identifier -->
            </source-address-name>
           </match>
          </rule>
         </rule-set>
        </destination>
       </nat>
      </security>
     </configuration>
```

Description Address/address-set from address book

Contents <src-addr-name>—Address/address-set from address book

<source-ip> configuration/security/alarms/potential-violation/policy

Usage

```
<configuration>
 <security>
  <alarms>
   <potential-violation>
    <policy>
     <source-ip>
      <threshold>threshold</threshold>
      <duration>duration</duration>
      <size>size</size>
     </source-ip>
    </policy>
   </potential-violation>
  </alarms>
 </security>
</configuration>
```

Description Configure source address type of policy violation

Contents <threshold>—Number of source IP address matches to raise alarm

<duration>—Time window matches must occur within

<size>—Total source IP address number that can be done policy violation check concurrently

<source-nat> configuration/security/nat/source/rule-set/rule/then

Usage

```
<configuration>
 <security>
  <nat>
   <source>
```


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```
<rule-set>
 <rule>
  <then>
   <source-nat>
    <off/>
    <pool>...</pool>
    <interface>...</interface>
   </source-nat>
  </then>
 </rule>
</rule-set>
</source>
</nat>
</security>
</configuration>
```

Description Source NAT action

Contents <off>—No action

<pool>—Use Source NAT pool

<interface>—Use egress interface address

<source-vlans> configuration/protocols/igmp-snooping/vlan/data-forwarding/receiver

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <data-forwarding>
     <receiver>
      <source-vlans>
       <vlan-name>vlan-name</vlan-name> <!-- identifier -->
      </source-vlans>
     </receiver>
    </data-forwarding>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Source VLANs

Contents <vlan-name>—VLAN name

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<sql> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <sql>
    <disable/>
    <traceoptions>...</traceoptions>
   </sql>
  </alg>
 </security>
</configuration>
```

Description Configure SQL ALG

Contents <disable>—Disable SQL ALG

<traceoptions>—SQL ALG trace options

<start-date> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <start-date>
    <start-date>start-date</start-date> <!-- identifier -->
    <stop-date>stop-date</stop-date> <!-- identifier -->
   </start-date>
  </scheduler>
 </schedulers>
</configuration>
```

Description Start date and time ([YYYY-]MM-DD.hh:mm)

Contents <start-date>—Start date and time ([YYYY-]MM-DD.hh:mm)

<stop-date>—Stop date and time ([YYYY-]MM-DD.hh:mm)

<start-time> configuration/schedulers/scheduler/daily

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <daily>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
```


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```
      <stop-time>stop-time</stop-time> <!-- identifier -->
     </start-time>
    </daily>
   </scheduler>
  </schedulers>
 </configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/sunday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <sunday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </sunday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/monday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <monday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </monday>
  </scheduler>
 </schedulers>
```

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```
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/tuesday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <tuesday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </tuesday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/wednesday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <wednesday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </wednesday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

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Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/thursday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <thursday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </thursday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<start-time> configuration/schedulers/scheduler/friday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <friday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </friday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

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<start-time> configuration/schedulers/scheduler/saturday

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <saturday>
    <start-time>
     <start-time-value>start-time-value</start-time-value> <!-- identifier -->
     <stop-time>stop-time</stop-time> <!-- identifier -->
    </start-time>
   </saturday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Time range for day

Contents <start-time-value>—Start time for day (hh:mm:ss)

<stop-time>—Stop time for day (hh:mm:ss)

<static> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>...</rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Configure Static NAT

Contents <rule-set>—Configurate a set of rules

<static> configuration/protocols/dot1x/authenticator

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <authenticator>
    <static>
     <mac>mac</mac> <!-- mandatory --> <!-- identifier -->
     <vlan-assignment>vlan-assignment</vlan-assignment>
```


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```
      <interface>interface</interface>
     </static>
    </authenticator>
   </dot1x>
  </protocols>
 </configuration>
```

Description Static MAC configuration needed to bypass 802.1X

Contents <mac>—MAC addresses to bypass authentication

<vlan-assignment>—VLAN name or 802.1q tag for the MAC address

<interface>—Interface on which authentication is bypassed

<static> configuration/protocols/igmp-snooping/vlan/interface

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <interface>
     <static>
      <group>...</group>
     </static>
    </interface>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Static group or source membership

Contents <group>—IP multicast group address

<static> configuration/protocols/mld-snooping/vlan/interface

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <vlan>
    <interface>
     <static>
      <group>...</group>
     </static>
    </interface>
   </vlan>
  </mld-snooping>
```

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```
 </protocols>
</configuration>
```

Description Static group or source membership

Contents <group>—IP multicast group address

<static> configuration/wlan/access-point/external/system/ports/ethernet

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <ports>
      <ethernet>
       <static>
        <address>address</address> <!-- mandatory -->
        <default-gateway>default-gateway</default-gateway> <!-- mandatory -->
       </static>
      </ethernet>
     </ports>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description Specify static parameters

Contents <address>—Static IP address

<default-gateway>—Default gateway IP

<static> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <static>
   <vlan>...</vlan>
  </static>
 </ethernet-switching-options>
</configuration>
```

Description Static forwarding entries

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Contents <vlan>—VLAN static MAC entries

<static-ip> configuration/ethernet-switching-options/secure-access-port/interface

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <interface>
    <static-ip>
     <ip>ip</ip> <!-- identifier -->
     <vlan>vlan</vlan> <!-- mandatory -->
     <mac>mac</mac> <!-- mandatory -->
    </static-ip>
   </interface>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Static IP address configuration

Contents <ip>—IP address

<vlan>—VLAN name or VLAN Tag (1..4095)

<mac>—MAC address

<static-nat> configuration/security/nat/static/rule-set/rule/then

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <then>
       <static-nat>
        <inet>...</inet>
        <prefix>...</prefix>
        <prefix-name>...</prefix-name>
       </static-nat>
      </then>
     </rule>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

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Description Static NAT action

Contents <inet>—Translated to IPv4 address

<prefix>—Address prefix

<prefix-name>—Address from address book

<static-wep> configuration/wlan/access-point/radio/virtual-access-point/security

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <static-wep>
       <authentication-type>authentication-type</authentication-type>
       <key-length>key-length</key-length>
       <key-type>key-type</key-type>
       <transfer-key-index>transfer-key-index</transfer-key-index>
       <wep-key-1>wep-key-1</wep-key-1>
       <wep-key-2>wep-key-2</wep-key-2>
       <wep-key-3>wep-key-3</wep-key-3>
       <wep-key-4>wep-key-4</wep-key-4>
      </static-wep>
     </security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Static WEP configuration

Contents <authentication-type>—Select Static WEP authentication type

- open - Open type
- shared - Shared type
- both - Both open and shared authentication
- 64bits - Use 64 bit key (ASCII:5 chars, HEX:10 chars)
- 128bits - Use 128 bit key (ASCII:13 chars, HEX:26 chars)
- ascii - ASCII key (default key-length is 64 bits)
- hex - HEX key (default key-length is 64 bits)

<key-length>—Specify key length (defaults to 64 bits)

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- 64bits - Use 64 bit key (ASCII:5 chars, HEX:10 chars)
- 128bits - Use 128 bit key (ASCII:13 chars, HEX:26 chars)
- ascii - ASCII key (default key-length is 64 bits)
- hex - HEX key (default key-length is 64 bits)

<key-type>—Specify key type (defaults to ASCII)

- ascii - ASCII key (default key-length is 64 bits)
- hex - HEX key (default key-length is 64 bits)

<transfer-key-index>—Specify transfer key index (1-4)

<wep-key-1>—Specify WEP key (defaults to ASCII 64 bits, 5 chars long)

<wep-key-2>—Specify WEP key (defaults to ASCII 64 bits, 5 chars long)

<wep-key-3>—Specify WEP key (defaults to ASCII 64 bits, 5 chars long)

<wep-key-4>—Specify WEP key (defaults to ASCII 64 bits, 5 chars long)

<station-mac-filter> configuration/wlan/access-point/access-point-options

Usage

```
<configuration>
 <wlan>
  <access-point>
   <access-point-options>
    <station-mac-filter>
     <allow-list>...</allow-list>
     <deny-list>...</deny-list>
    </station-mac-filter>
   </access-point-options>
  </access-point>
 </wlan>
</configuration>
```

Description

Contents <allow-list>—Allow the MAC addresseses

<deny-list>—Deny the MAC addresseses

<station-queues> configuration/wlan/access-point/radio/quality-of-service

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
```

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```
<quality-of-service>
 <station-queues>
  <voice-queue>...</voice-queue>
  <video-queue>...</video-queue>
  <best-effort-queue>...</best-effort-queue>
  <background-queue>...</background-queue>
 </station-queues>
</quality-of-service>
</radio>
</access-point>
</wlan>
</configuration>
```

Description Configure the station queues

Contents <voice-queue>—Configure voice queue

<video-queue>—Configure video queue

<best-effort-queue>—Configure best effort queue

<background-queue>—Configure background queue

<storm-control> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <storm-control>
   <action-shutdown/>
   <interface>...</interface>
  </storm-control>
 </ethernet-switching-options>
</configuration>
```

Description Storm control configuration

Contents <action-shutdown>—Port is disabled for excessive storm control errors

<interface>—Configure storm control for this interface

<stp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <stp>
   <disable/>
   <bridge-priority>bridge-priority</bridge-priority>
   <max-age>max-age</max-age>
```

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```
    <hello-time>hello-time</hello-time>
    <forward-delay>forward-delay</forward-delay>
    <traceoptions>...</traceoptions>
    <interface>...</interface>
    <bpdu-block-on-edge/>
   </stp>
  </protocols>
 </configuration>
```

Description Spanning Tree Protocol options

Contents <disable>—Disable STP

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<max-age>—Maximum age of received protocol bpdu

<hello-time>—Time interval between configuration BPDUs

<forward-delay>—Time spent in listening or learning state

<traceoptions>—Tracing options for debugging protocol operation

<interface>—

<bpdu-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect)

<stream> configuration/security/log

Usage

```
<configuration>
 <security>
  <log>
   <stream>
    <name>name</name> <!-- mandatory --> <!-- identifier -->
    <severity>severity</severity>
    <format>format</format>
    <category>category</category>
    <host>...</host>
   </stream>
  </log>
 </security>
</configuration>
```

Description Set security log stream settings (maximum 3 streams)

Contents <name>—Name of security log stream

- emergency - Conditions that cause security functions to stop
- alert - Conditions that require immediate attention

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- critical - Critical conditions
- error - General error conditions
- warning - General warning conditions
- notice - Non-error conditions that are of interest
- info - Information about normal security operations
- debug - Information normally used in debugging
- syslog - Traditional syslog
- sd-syslog - Structured syslog
- welf - Web Trends Extended Log Format
- binary - Binary log
- all - All events are logged
- content-security - Only content security events are logged

<severity>—Severity threshold for security logs

- emergency - Conditions that cause security functions to stop
- alert - Conditions that require immediate attention
- critical - Critical conditions
- error - General error conditions
- warning - General warning conditions
- notice - Non-error conditions that are of interest
- info - Information about normal security operations
- debug - Information normally used in debugging
- syslog - Traditional syslog
- sd-syslog - Structured syslog
- welf - Web Trends Extended Log Format
- binary - Binary log
- all - All events are logged
- content-security - Only content security events are logged

<format>—Specify the log stream format

- syslog - Traditional syslog
- sd-syslog - Structured syslog
- welf - Web Trends Extended Log Format
- binary - Binary log

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- all - All events are logged
- content-security - Only content security events are logged

<category>—Selects the type of events that may be logged

- all - All events are logged
- content-security - Only content security events are logged

<host>—Destination to send security logs to

<sunday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <sunday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </sunday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Sunday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

<sunrpc> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <sunrpc>
    <disable/>
    <traceoptions>...</traceoptions>
   </sunrpc>
  </alg>
 </security>
</configuration>
```

Description Configure SUNRPC ALG

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Contents <disable>—Disable SUNRPC ALG

<traceoptions>—SUNRPC ALG trace options

<supported-basic-rates> configuration/wlan/access-point/radio/radio-options/transmit-rate-sets

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <radio-options>
     <transmit-rate-sets>
      <supported-basic-rates>
       <1/>
       <2/>
       <5.5/>
       <6/>
       <9/>
       <11/>
       <12/>
       <18/>
       <24/>
       <36/>
       <48/>
       <54/>
      </supported-basic-rates>
     </transmit-rate-sets>
    </radio-options>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description List of supported basic rates in Mbps

Contents <1>—Rate-1Mbps

<2>—Rate-2Mbps

<5.5>—Rate-5.5Mbps

<6>—Rate-6Mbps

<9>—Rate-9Mbps

<11>—Rate-11Mbps

<12>—Rate-12Mbps

<18>—Rate-18Mbps

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<24>—Rate-24Mbps

<36>—Rate-36Mbps

<48>—Rate-48Mbps

<54>—Rate-54Mbps

<supported-rates> configuration/wlan/access-point/radio/radio-options/transmit-rate-sets

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <radio-options>
     <transmit-rate-sets>
      <supported-rates>
       <1/>
       <2/>
       <5.5/>
       <6/>
       <9/>
       <11/>
       <12/>
       <18/>
       <24/>
       <36/>
       <48/>
       <54/>
      </supported-rates>
     </transmit-rate-sets>
    </radio-options>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description List of supported rates in Mbps

Contents <1>—Rate-1Mbps

<2>—Rate-2Mbps

<5.5>—Rate-5.5Mbps

<6>—Rate-6Mbps

<9>—Rate-9Mbps

<11>—Rate-11Mbps

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<12>—Rate-12Mbps

<18>—Rate-18Mbps

<24>—Rate-24Mbps

<36>—Rate-36Mbps

<48>—Rate-48Mbps

<54>—Rate-54Mbps

<surf-control-integrated> configuration/security/utm/feature-profile/web-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <surf-control-integrated>
      <cache>...</cache>
      <server>...</server>
      <profile>...</profile>
     </surf-control-integrated>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure web-filtering surf-control integrated engine

Contents <cache>—

<server>—Surf control server

<profile>—Surf control integrated profile

<syn-ack-ack-proxy> configuration/security/screen/ids-option/tcp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-ack-ack-proxy>
      <threshold>threshold</threshold>
     </syn-ack-ack-proxy>
    </tcp>
   </ids-option>
```


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```
  </screen>
 </security>
</configuration>
```

Description Enable syn-ack-ack proxy ids option

Contents <threshold>—Threshold

<syn-flood> configuration/security/screen/ids-option/tcp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-flood>
      <alarm-threshold>alarm-threshold</alarm-threshold>
      <attack-threshold>attack-threshold</attack-threshold>
      <source-threshold>source-threshold</source-threshold>
      <destination-threshold>destination-threshold</destination-threshold>
      <timeout>timeout</timeout>
      <white-list>...</white-list>
     </syn-flood>
    </tcp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Enable SYN flood ids option

Contents <alarm-threshold>—Alarm threshold

<attack-threshold>—Attack threshold

<source-threshold>—Source threshold

<destination-threshold>—Destination threshold

<timeout>—SYN flood ager timeout

<white-list>—Set of IP addresses that will not trigger a screen

<syslog-options> configuration/wlan

Usage

```
<configuration>
 <wlan>
  <syslog-options>
```

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```
    <log-size>log-size</log-size>
    <period>period</period>
   </syslog-options>
  </wlan>
</configuration>
```

Description Configure Access Point Logging options

Contents <log-size>—Configure Max log file size

<period>—Configure log fetch interval

<system> configuration/wlan/access-point/external

Usage

```
<configuration>
 <wlan>
  <access-point>
   <external>
    <system>
     <ports>...</ports>
     <console>...</console>
     <services>...</services>
    </system>
   </external>
  </access-point>
 </wlan>
</configuration>
```

Description System information

Contents <ports>—Port configuration

<console>—

<services>—System services configuration

<system-services> configuration/security/zones/functional-zone/management/interfaces/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <interfaces>
      <host-inbound-traffic>
       <system-services>
        <all/>
```


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```
            <bootp/>
            <dhcp/>
            <dhcpv6/>
            <dns/>
            <finger/>
            <ftp/>
            <ident-reset/>
            <http/>
            <https/>
            <ike/>
            <netconf/>
            <ping/>
            <rlogin/>
            <reverse-telnet/>
            <reverse-ssh/>
            <rpm/>
            <rsh/>
            <snmp/>
            <snmp-trap/>
            <ssh/>
            <telnet/>
            <traceroute/>
            <xnm-ssl/>
            <xnm-clear-text/>
            <tftp/>
            <lsping/>
            <ntp/>
            <sip/>
            <r2cp/>
            <any-service/>
            <except/>
          </system-services>
        </host-inbound-traffic>
      </interfaces>
    </management>
  </functional-zone>
 </zones>
</security>
</configuration>
```

Description Type of incoming system-service traffic to accept

Contents <all>—All system services

<bootp>—Bootp and dhcp relay-agent service

<dhcp>—Dynamic Host Configuration Protocol

<dhcpv6>—Enable Dynamic Host Configuration Protocol for IPv6

<dns>—DNS service

<finger>—Finger service

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<ftp>—FTP

<ident-reset>—Send back TCP RST to IDENT request for port 113

<http>—Web management service using HTTP

<https>—Web management service using HTTP secured by SSL

<ike>—Internet Key Exchange

<netconf>—NETCONF service

<ping>—Internet Control Message Protocol echo requests

<rlogin>—Rlogin service

<reverse-telnet>—Reverse telnet service

<reverse-ssh>—Reverse SSH service

<rpm>—Real-time performance monitoring

<rsh>—Rsh service

<snmp>—Simple Network Management Protocol service

<snmp-trap>—Simple Network Management Protocol traps

<ssh>—SSH service

<telnet>—Telnet service

<traceroute>—Traceroute service

<xnm-ssl>—Junos XML management protocol service over SSL

<xnm-clear-text>—Junos XML management protocol for unencrypted traffic over TCP

<tftp>—TFTP

<lsping>—Label Switched Path ping service

<ntp>—Network Time Protocol service

<sip>—Enable Session Initiation Protocol service

<r2cp>—Enable Radio-Router Control Protocol service

<any-service>—Enable services on entire port range

<except>—Type of incoming system-service traffic to disallow

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<system-services> configuration/security/zones/functional-zone/management/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>
    <management>
     <host-inbound-traffic>
      <system-services>
       <all/>
       <dns/>
       <finger/>
       <ftp/>
       <ident-reset/>
       <http/>
       <https/>
       <ike/>
       <netconf/>
       <ping/>
       <rlogin/>
       <reverse-telnet/>
       <reverse-ssh/>
       <rpm/>
       <rsh/>
       <snmp/>
       <snmp-trap/>
       <ssh/>
       <telnet/>
       <traceroute/>
       <xnm-ssl/>
       <xnm-clear-text/>
       <tftp/>
       <lsping/>
       <ntp/>
       <sip/>
       <r2cp/>
       <any-service/>
       <except/>
      </system-services>
     </host-inbound-traffic>
    </management>
   </functional-zone>
  </zones>
 </security>
</configuration>
```

Description Type of incoming system-service traffic to accept

Contents <all>—All system services

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<dns>—DNS service

<finger>—Finger service

<ftp>—FTP

<ident-reset>—Send back TCP RST to IDENT request for port 113

<http>—Web management service using HTTP

<https>—Web management service using HTTP secured by SSL

<ike>—Internet Key Exchange

<netconf>—NETCONF service

<ping>—Internet Control Message Protocol echo requests

<rlogin>—Rlogin service

<reverse-telnet>—Reverse telnet service

<reverse-ssh>—Reverse SSH service

<rpm>—Real-time performance monitoring

<rsh>—Rsh service

<snmp>—Simple Network Management Protocol service

<snmp-trap>—Simple Network Management Protocol traps

<ssh>—SSH service

<telnet>—Telnet service

<traceroute>—Traceroute service

<xnm-ssl>—Junos XML management protocol service over SSL

<xnm-clear-text>—Junos XML management protocol for unencrypted traffic over TCP

<tftp>—TFTP

<lsping>—Label Switched Path ping service

<ntp>—Network Time Protocol service

<sip>—Enable Session Initiation Protocol service

<r2cp>—Enable Radio-Router Control Protocol service

<any-service>—Enable services on entire port range

<except>—Type of incoming system-service traffic to disallow

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<system-services> configuration/security/zones/security-zone/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <host-inbound-traffic>
     <system-services>
      <all/>
      <dns/>
      <finger/>
      <ftp/>
      <ident-reset/>
      <http/>
      <https/>
      <ike/>
      <netconf/>
      <ping/>
      <rlogin/>
      <reverse-telnet/>
      <reverse-ssh/>
      <rpm/>
      <rsh/>
      <snmp/>
      <snmp-trap/>
      <ssh/>
      <telnet/>
      <traceroute/>
      <xnm-ssl/>
      <xnm-clear-text/>
      <tftp/>
      <lsping/>
      <ntp/>
      <sip/>
      <r2cp/>
      <any-service/>
      <except/>
     </system-services>
    </host-inbound-traffic>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Type of incoming system-service traffic to accept

Contents <all>—All system services

<dns>—DNS service

<finger>—Finger service

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<ftp>—FTP

<ident-reset>—Send back TCP RST to IDENT request for port 113

<http>—Web management service using HTTP

<https>—Web management service using HTTP secured by SSL

<ike>—Internet Key Exchange

<netconf>—NETCONF service

<ping>—Internet Control Message Protocol echo requests

<rlogin>—Rlogin service

<reverse-telnet>—Reverse telnet service

<reverse-ssh>—Reverse SSH service

<rpm>—Real-time performance monitoring

<rsh>—Rsh service

<snmp>—Simple Network Management Protocol service

<snmp-trap>—Simple Network Management Protocol traps

<ssh>—SSH service

<telnet>—Telnet service

<traceroute>—Traceroute service

<xnm-ssl>—Junos XML management protocol service over SSL

<xnm-clear-text>—Junos XML management protocol for unencrypted traffic over TCP

<tftp>—TFTP

<lsping>—Label Switched Path ping service

<ntp>—Network Time Protocol service

<sip>—Enable Session Initiation Protocol service

<r2cp>—Enable Radio-Router Control Protocol service

<any-service>—Enable services on entire port range

<except>—Type of incoming system-service traffic to disallow

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<system-services> configuration/security/zones/security-zone/interfaces/host-inbound-traffic

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <interfaces>
     <host-inbound-traffic>
      <system-services>
       <all/>
       <bootp/>
       <dhcp/>
       <dhcpv6/>
       <dns/>
       <finger/>
       <ftp/>
       <ident-reset/>
       <http/>
       <https/>
       <ike/>
       <netconf/>
       <ping/>
       <rlogin/>
       <reverse-telnet/>
       <reverse-ssh/>
       <rpm/>
       <rsh/>
       <snmp/>
       <snmp-trap/>
       <ssh/>
       <telnet/>
       <traceroute/>
       <xnm-ssl/>
       <xnm-clear-text/>
       <tftp/>
       <lsping/>
       <ntp/>
       <sip/>
       <r2cp/>
       <any-service/>
       <except/>
      </system-services>
     </host-inbound-traffic>
    </interfaces>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Type of incoming system-service traffic to accept

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Contents

<all>—All system services

<bootp>—Bootp and dhcp relay-agent service

<dhcp>—Dynamic Host Configuration Protocol

<dhcpv6>—Enable Dynamic Host Configuration Protocol for IPv6

<dns>—DNS service

<finger>—Finger service

<ftp>—FTP

<ident-reset>—Send back TCP RST to IDENT request for port 113

<http>—Web management service using HTTP

<https>—Web management service using HTTP secured by SSL

<ike>—Internet Key Exchange

<netconf>—NETCONF service

<ping>—Internet Control Message Protocol echo requests

<rlogin>—Rlogin service

<reverse-telnet>—Reverse telnet service

<reverse-ssh>—Reverse SSH service

<rpm>—Real-time performance monitoring

<rsh>—Rsh service

<snmp>—Simple Network Management Protocol service

<snmp-trap>—Simple Network Management Protocol traps

<ssh>—SSH service

<telnet>—Telnet service

<traceroute>—Traceroute service

<xnm-ssl>—Junos XML management protocol service over SSL

<xnm-clear-text>—Junos XML management protocol for unencrypted traffic over TCP

<tftp>—TFTP

<lsping>—Label Switched Path ping service

<ntp>—Network Time Protocol service

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<sip>—Enable Session Initiation Protocol service

<r2cp>—Enable Radio-Router Control Protocol service

<any-service>—Enable services on entire port range

<except>—Type of incoming system-service traffic to disallow

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CHAPTER 46

Tag Elements Beginning with T

This chapter lists the configuration tag elements that have names beginning with the letter *t*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<talk> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <talk>
    <disable/>
    <traceoptions>...</traceoptions>
   </talk>
  </alg>
 </security>
</configuration>
```

Description Configure Talk ALG

Contents <disable>—Disable Talk ALG

<traceoptions>—TALK ALG trace options

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<tcp> configuration/security/screen/ids-option

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-fin/>
     <fin-no-ack/>
     <tcp-no-flag/>
     <syn-frag/>
     <port-scan>...</port-scan>
     <syn-ack-ack-proxy>...</syn-ack-ack-proxy>
     <syn-flood>...</syn-flood>
     <land/>
     <winnuke/>
     <tcp-sweep>...</tcp-sweep>
    </tcp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure TCP Layer ids options

Contents <syn-fin>—Enable SYN and FIN bits set attack ids option

<fin-no-ack>—Enable Fin bit with no ACK bit ids option

<tcp-no-flag>—Enable TCP packet without flag ids option

<syn-frag>—Enable SYN fragment ids option

<port-scan>—Configure port scan ids option

<syn-ack-ack-proxy>—Enable syn-ack-ack proxy ids option

<syn-flood>—Enable SYN flood ids option

<land>—Enable land attack ids option

<winnuke>—Enable winnuke attack ids option

<tcp-sweep>—Configure TCP sweep ids option

<tcp-mss> configuration/security/flow

Usage

```
<configuration>
 <security>
  <flow>
```


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```
    <tcp-mss>
     <all-tcp>...</all-tcp>
     <ipsec-vpn>...</ipsec-vpn>
     <gre-in>...</gre-in>
     <gre-out>...</gre-out>
    </tcp-mss>
   </flow>
  </security>
</configuration>
```

Description TCP maximum segment size configuration

Contents <all-tcp>—Enable MSS override for all packets

<ipsec-vpn>—Enable MSS override for all packets entering IPSec tunnel

<gre-in>—Enable MSS override for all GRE packets coming out of an IPSec tunnel

<gre-out>—Enable MSS override for all GRE packets entering an IPsec tunnel

<tcp-session> configuration/security/flow

Usage

```
<configuration>
 <security>
  <flow>
   <tcp-session>
    <rst-invalidate-session/>
    <rst-sequence-check/>
    <no-syn-check/>
    <strict-syn-check/>
    <no-syn-check-in-tunnel/>
    <no-sequence-check/>
    <tcp-initial-timeout>tcp-initial-timeout</tcp-initial-timeout>
    <time-wait-state>...</time-wait-state>
   </tcp-session>
  </flow>
 </security>
</configuration>
```

Description Transmission Control Protocol session configuration

Contents <rst-invalidate-session>—Immediately end session on receipt of reset (RST) segment

<rst-sequence-check>—Check sequence number in reset (RST) segment

<no-syn-check>—Disable creation-time SYN-flag check

<strict-syn-check>—Enable strict syn check

<no-syn-check-in-tunnel>—Disable creation-time SYN-flag check for tunnel packets

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<no-sequence-check>—Disable sequence-number checking

<tcp-initial-timeout>—Timeout for TCP session when initialization fails

<time-wait-state>—Session timeout value in time-wait state, default 150 seconds

<tcp-sweep> configuration/security/screen/ids-option/tcp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <tcp-sweep>
      <threshold>threshold</threshold>
     </tcp-sweep>
    </tcp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure TCP sweep ids option

Contents <threshold>—Threshold which specifies the minimum time per TCP packets

<telemetries> configuration/poe/interface

Usage

```
<configuration>
 <poe>
  <interface>
   <telemetries>
    <disable/>
    <interval>interval</interval>
    <duration>duration</duration>
   </telemetries>
  </interface>
 </poe>
</configuration>
```

Description Telemetries settings

Contents <disable>—Disable telemetries

<interval>—Interval at which data should be recorded

<duration>—Duration to continue recording of data

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<term> configuration/applications/application

Usage

```
<configuration>
 <applications>
  <application>
   <term>
    <term-name>term-name</term-name> <!-- identifier -->
    <alg>alg</alg>
    <protocol>protocol</protocol>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <icmp-type>icmp-type</icmp-type>
    <icmp-code>icmp-code</icmp-code>
    <icmp6-type>icmp6-type</icmp6-type>
    <icmp6-code>icmp6-code</icmp6-code>
    <rpc-program-number>rpc-program-number</rpc-program-number>
    <uuid>uuid</uuid>
    <inactivity-timeout>inactivity-timeout</inactivity-timeout>
   </term>
  </application>
 </applications>
</configuration>
```

Description Define individual application protocols

Contents <term-name>—Term name

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio

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- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol

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- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho

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- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+

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- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
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- who - UNIX rwho
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- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- echo-request - Echo request
- echo-reply - Echo reply
- unreachable - Unreachable
- source-quench - Source quench
- redirect - Redirect
- router-advertisement - Router advertisement
- router-solicit - Router solicit

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- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- timestamp - Timestamp
- timestamp-reply - Timestamp reply
- info-request - Informational request
- info-reply - Informational reply
- mask-request - Mask request
- mask-reply - Mask reply
- number - Numeric type value (0 .. 255)
- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
- redirect-for-network - Redirect for network
- redirect-for-host - Redirect for host
- redirect-for-tos-and-net - Redirect for ToS and net
- redirect-for-tos-and-host - Redirect for ToS and host
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing

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- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<alg>—Application Layer Gateway

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- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol

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- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service

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- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
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- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting

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- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
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- imap - Internet Message Access Protocol

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- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
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- radius - RADIUS authentication
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- zephyr-srv - Zephyr server

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- eklogin - Encrypted Kerberos rlogin
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- range - Range of values
- echo-request - Echo request
- echo-reply - Echo reply
- unreachable - Unreachable
- source-quench - Source quench
- redirect - Redirect
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- timestamp - Timestamp
- timestamp-reply - Timestamp reply
- info-request - Informational request
- info-reply - Informational reply
- mask-request - Mask request
- mask-reply - Mask reply
- number - Numeric type value (0 .. 255)
- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated

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- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
- redirect-for-network - Redirect for network
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- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
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- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
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- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<protocol>—Match IP protocol type

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- number - Numeric protocol value (0 .. 255)
- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell

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- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
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- bootps - Bootstrap protocol server
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- tftp - Trivial FTP
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- biff - Biff/Comsat
- exec - UNIX rexec

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- who - UNIX rwho
- cmd - UNIX rsh
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- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
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- router-advertisement - Router advertisement
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- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
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- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
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- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly

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- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
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- address-unreachable - Problem with resolving address or other link-specific problem
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- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

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<source-port>—Match TCP/UDP source port

- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
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- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values

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- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol
- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP

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- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin
- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- echo-request - Echo request

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- echo-reply - Echo reply
- unreachable - Unreachable
- source-quench - Source quench
- redirect - Redirect
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- timestamp - Timestamp
- timestamp-reply - Timestamp reply
- info-request - Informational request
- info-reply - Informational reply
- mask-request - Mask request
- mask-reply - Mask reply
- number - Numeric type value (0 .. 255)
- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
- redirect-for-network - Redirect for network
- redirect-for-host - Redirect for host

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- redirect-for-tos-and-net - Redirect for ToS and net
- redirect-for-tos-and-host - Redirect for ToS and host
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered

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- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<destination-port>—Match TCP/UDP destination port

- ftp-data - FTP data
- ftp - FTP
- ssh - Secure shell
- telnet - Telnet
- smtp - Simple Mail Transfer Protocol
- tacacs - TACACS or TACACS+
- tacacs-ds - TACACS-DS
- domain - Domain Name System (DNS)
- dhcp - Dynamic Host Configuration Protocol
- bootps - Bootstrap protocol server
- bootpc - Bootstrap protocol client
- tftp - Trivial FTP
- finger - Finger
- http - Hypertext Transfer Protocol
- kerberos-sec - Kerberos Security
- pop3 - Post Office Protocol 3
- sunrpc - Sun Microsystems remote procedure call
- ident - Ident
- nntp - Network News Transport Protocol
- ntp - Network Time Protocol
- netbios-ns - NetBIOS name service
- netbios-dgm - NetBIOS DGM
- netbios-ssn - NetBIOS session service
- imap - Internet Message Access Protocol
- snmp - Simple Network Management Protocol
- snmptrap - SNMP traps
- xdmcp - X Display Manager Control Protocol
- bgp - Border Gateway Protocol

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- ldap - Lightweight Directory Access Protocol
- mobileip-agent - Mobile IP agent
- mobilip-mn - Mobile IP MN
- msdp - Multicast Source Discovery Protocol
- https - Secure HTTP
- snpp - Simple paging protocol
- biff - Biff/Comsat
- exec - UNIX rexec
- login - UNIX rlogin
- who - UNIX rwho
- cmd - UNIX rsh
- syslog - System log
- printer - Printer
- talk - UNIX Talk
- ntalk - New Talk
- rip - Routing Information Protocol
- timed - UNIX time daemon
- klogin - Kerberos rlogin
- kshell - Kerberos rsh
- ldp - Label Distribution Protocol
- krb-prop - Kerberos database propagation
- krbupdate - Kerberos database update
- kpasswd - Kerberos passwd
- socks - Socks
- afs - AFS
- pptp - Point-to-Point Tunneling Protocol
- radius - RADIUS authentication
- radacct - RADIUS accounting
- zephyr-srv - Zephyr server
- zephyr-clt - Zephyr serv-hm connection
- zephyr-hm - Zephyr hostmanager
- nfsd - Network File System
- eklogin - Encrypted Kerberos rlogin

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- ekshell - Encrypted Kerberos rsh
- rkinit - Kerberos remote kinit
- cvspserver - CVS pserver
- range - Range of values
- echo-request - Echo request
- echo-reply - Echo reply
- unreachable - Unreachable
- source-quench - Source quench
- redirect - Redirect
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- timestamp - Timestamp
- timestamp-reply - Timestamp reply
- info-request - Informational request
- info-reply - Informational reply
- mask-request - Mask request
- mask-reply - Mask reply
- number - Numeric type value (0 .. 255)
- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS

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- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
- redirect-for-network - Redirect for network
- redirect-for-host - Redirect for host
- redirect-for-tos-and-net - Redirect for ToS and net
- redirect-for-tos-and-host - Redirect for ToS and host
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem

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- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<icmp-type>—Match ICMP message type

- echo-request - Echo request
- echo-reply - Echo reply
- unreachable - Unreachable
- source-quench - Source quench
- redirect - Redirect
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- timestamp - Timestamp
- timestamp-reply - Timestamp reply
- info-request - Informational request
- info-reply - Informational reply
- mask-request - Mask request
- mask-reply - Mask reply
- number - Numeric type value (0 .. 255)
- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown

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- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect
- redirect-for-network - Redirect for network
- redirect-for-host - Redirect for host
- redirect-for-tos-and-net - Redirect for ToS and net
- redirect-for-tos-and-host - Redirect for ToS and host
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command

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- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<icmp-code>—Match ICMP message code

- network-unreachable - Network unreachable
- host-unreachable - Host unreachable
- protocol-unreachable - Protocol unreachable
- port-unreachable - Port unreachable
- fragmentation-needed - Fragmentation needed
- source-route-failed - Source route failed
- destination-network-unknown - Destination network unknown
- destination-host-unknown - Destination host unknown
- source-host-isolated - Source host isolated
- destination-network-prohibited - Destination network prohibited
- destination-host-prohibited - Destination host prohibited
- network-unreachable-for-tos - Network unreachable for ToS
- host-unreachable-for-tos - Host unreachable for ToS
- communication-prohibited-by-filtering - Communication prohibited by filtering
- host-precedence-violation - Host precedence violation
- precedence-cutoff-in-effect - Precedence cutoff in effect

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- redirect-for-network - Redirect for network
- redirect-for-host - Redirect for host
- redirect-for-tos-and-net - Redirect for ToS and net
- redirect-for-tos-and-host - Redirect for ToS and host
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip-header-bad - IP header bad
- required-option-missing - Required option missing
- number - Numeric code value (0 .. 255)
- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly

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- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<icmp6-type>—Match ICMP6 message type

- echo-request - Echo request
- echo-reply - Echo reply
- destination-unreachable - Unreachable
- router-advertisement - Router advertisement
- router-solicit - Router solicit
- time-exceeded - Time exceeded
- parameter-problem - Parameter problem
- packet-too-big - Packet too big
- membership-query - Query for multicast listener
- membership-report - Report for multicast listener
- membership-termination - Terminate multicast listener
- redirect - Router informs host of a better first hop for a destination
- neighbor-solicit - Request link-layer address of neighbor
- neighbor-advertisement - Provide link-layer address to neighbor
- router-renumbering - Router renumbering command
- node-information-request - Query for information on address or name
- node-information-reply - Reply to node information request
- number - Numeric type value (0 .. 255)
- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad

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- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<icmp6-code>—Match ICMP6 message code

- no-route-to-destination - Route to destination not found
- administratively-prohibited - Communication with destination prohibited by filter
- address-unreachable - Problem with resolving address or other link-specific problem
- port-unreachable - Port unreachable
- ttl-eq-zero-during-transit - TTL eq zero during transit
- ttl-eq-zero-during-reassembly - TTL eq zero during reassembly
- ip6-header-bad - IP header bad
- unrecognized-next-header - Unrecognized next header type encountered
- unrecognized-option - Unrecogzined IPv6 option
- number - Numeric code value (0 .. 255)
- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<rpc-program-number>—Match range of RPC program numbers

- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<uuid>—Match universal unique identifier for DCE RPC objects

- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<inactivity-timeout>—Application-specific inactivity timeout

- never - Disables inactivity timeout
- timeout - Number of seconds (4 .. 129600)

<tftp> configuration/security/alg

Usage

<configuration>

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```
<security>
 <alg>
  <tftp>
   <disable/>
   <traceoptions>...</traceoptions>
  </tftp>
 </alg>
</security>
</configuration>
```

Description Configure TFTP ALG

Contents <disable>—Disable TFTP ALG

<traceoptions>—TFTP ALG trace options

<then> configuration/security/application-firewall/rule-sets/rule

Usage

```
<configuration>
 <security>
  <application-firewall>
   <rule-sets>
    <rule>
     <then>
      <permit/>
      <deny/>
     </then>
    </rule>
   </rule-sets>
  </application-firewall>
 </security>
</configuration>
```

Description Specify rule action to take when packet match criteria

Contents <permit>—Permit packets

<deny>—Deny packets

<then> configuration/security/nat/source/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <rule>
      <then>
```

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```
            <source-nat>...</source-nat>
           </then>
          </rule>
         </rule-set>
        </source>
       </nat>
      </security>
     </configuration>
```

Description Then action

Contents <source-nat>—Source NAT action

<then> configuration/security/nat/destination/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <rule>
      <then>
       <destination-nat>...</destination-nat>
      </then>
     </rule>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Then action

Contents <destination-nat>—Destination NAT action

<then> configuration/security/nat/static/rule-set/rule

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <rule>
      <then>
       <static-nat>...</static-nat>
      </then>
     </rule>
    </rule-set>
```


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```
    </static>
   </nat>
  </security>
</configuration>
```

Description Then action

Contents <static-nat>—Static NAT action

<then> configuration/services/ip-monitoring/policy

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <policy>
    <then>
     <preferred-route>...</preferred-route>
    </then>
   </policy>
  </ip-monitoring>
 </services>
</configuration>
```

Description Action to be taken

Contents <preferred-route>—Preferred route action

<thursday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <thursday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </thursday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Thursday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

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<all-day>—Include complete day

<time-wait-state> configuration/security/flow/tcp-session

Usage

```
<configuration>
 <security>
  <flow>
   <tcp-session>
    <time-wait-state>
     <session-ageout/>
     <session-timeout>session-timeout</session-timeout>
    </time-wait-state>
   </tcp-session>
  </flow>
 </security>
</configuration>
```

Description Session timeout value in time-wait state, default 150 seconds

Contents <session-ageout>—Allow session to ageout using service based timeout values

<session-timeout>—Configure session timeout value for time-wait state

<to> configuration/security/address-book/address/range-address

Usage

```
<configuration>
 <security>
  <address-book>
   <address>
    <range-address>
     <to>
      <range-high>range-high</range-high> <!-- mandatory -->
     </to>
    </range-address>
   </address>
  </address-book>
 </security>
</configuration>
```

Description Port range upper limit

Contents <range-high>—Upper limit of address range

<to> configuration/security/nat/source/pool/address

Usage

```
<configuration>
```


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```
<security>
 <nat>
  <source>
   <pool>
    <address>
     <to>
      <ipaddr>ipaddr</ipaddr>
     </to>
    </address>
   </pool>
  </source>
 </nat>
</security>
</configuration>
```

Description Upper limit of address range

Contents <ipaddr>—IPv4 or IPv6 upper limit of address range

<to> configuration/security/nat/source/pool/port/range

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <pool>
     <port>
      <range>
       <to>
        <high>high</high> <!-- mandatory -->
       </to>
      </range>
     </port>
    </pool>
   </source>
  </nat>
 </security>
</configuration>
```

Description Port range upper limit

Contents <high>—Upper limit of port range

<to> configuration/security/nat/source/pool-default-port-range

Usage

```
<configuration>
 <security>
  <nat>
```

```
    <source>
     <pool-default-port-range>
      <to>
       <high>high</high> <!-- mandatory -->
      </to>
     </pool-default-port-range>
    </source>
   </nat>
  </security>
</configuration>
```

Description Port range upper limit

Contents <high>—Upper limit of port range

<to> configuration/security/nat/source/rule-set

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <to>
      <routing-instance>...</routing-instance>
      <zone>...</zone>
      <interface>...</interface>
     </to>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Where is the traffic to

Contents <routing-instance>—Destination routing instance list

<zone>—Destination zone list

<interface>—Destination interface list

<to> configuration/security/nat/source/rule-set/rule/match/destination-port

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
```


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```
      <rule>
       <match>
        <destination-port>
         <to>
          <high>high</high> <!-- mandatory -->
         </to>
        </destination-port>
       </match>
      </rule>
     </rule-set>
    </source>
   </nat>
  </security>
</configuration>
```

Description Port range upper limit

Contents <high>—Upper limit of port range

<to> configuration/security/nat/destination/pool/address

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <pool>
     <address>
      <to>
       <ipaddr>ipaddr</ipaddr>
      </to>
     </address>
    </pool>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Upper limit of address range

Contents <ipaddr>—IPv4 or IPv6 upper limit of address range

<to> configuration/security/nat/proxy-arp/interface/address

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-arp>
    <interface>
```

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```
            <address>
             <to>
              <ipaddr>ipaddr</ipaddr>
             </to>
            </address>
           </interface>
          </proxy-arp>
         </nat>
        </security>
       </configuration>
```

Description Upper limit of address range

Contents <ipaddr>—Upper limit of address range

<to> configuration/security/nat/proxy-ndp/interface/address

Usage

```
<configuration>
 <security>
  <nat>
   <proxy-ndp>
    <interface>
     <address>
      <to>
       <ipv6addr>ipv6addr</ipv6addr>
      </to>
     </address>
    </interface>
   </proxy-ndp>
  </nat>
 </security>
</configuration>
```

Description Upper limit of address range

Contents <ipv6addr>—Upper limit of address range

<to> configuration/security/zones/security-zone/address-book/address/range-address

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address>
      <range-address>
       <to>
```


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```
            <range-high>range-high</range-high> <!-- mandatory -->
           </to>
          </range-address>
         </address>
        </address-book>
       </security-zone>
      </zones>
     </security>
    </configuration>
```

Description Port range upper limit

Contents <range-high>—Upper limit of address range

<traceoptions> configuration/security/ike

Usage

```
<configuration>
 <security>
  <ike>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <rate-limit>rate-limit</rate-limit>
    <flag>...</flag>
   </traceoptions>
  </ike>
 </security>
</configuration>
```

Description Trace options for IPSec key management

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<rate-limit>—Limit the incoming rate of trace messages

<flag>—Tracing parameters for IKE

<traceoptions> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <traceoptions>
    <flag>...</flag>
   </traceoptions>
  </ipsec>
```

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```
 </security>
</configuration>
```

Description Trace options for IPSec data-plane debug

Contents <flag>—Events to include in data-plane IPSec trace output

<traceoptions> configuration/security/group-vpn/server

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <traceoptions>
     <no-remote-trace/>
     <file>...</file>
     <flag>...</flag>
    </traceoptions>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Trace options for Group VPN debug

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters for GKSD

<traceoptions> configuration/security/pki

Usage

```
<configuration>
 <security>
  <pki>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </pki>
 </security>
</configuration>
```

Description PKI trace options

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Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/security/gprs/gtp

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <traceoptions>
     <no-remote-trace/>
     <file>...</file>
     <flag>...</flag>
    </traceoptions>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description Trace options for GPRS tunneling protocol

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/security/gprs/sctp

Usage

```
<configuration>
 <security>
  <gprs>
   <sctp>
    <traceoptions>
     <no-remote-trace/>
     <file>...</file>
     <flag>...</flag>
    </traceoptions>
   </sctp>
  </gprs>
 </security>
</configuration>
```

Description Trace options for GPRS stream control transmission protocol

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Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/security/alg

Usage

```
<configuration>
 <security>
  <alg>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <level>level</level>
   </traceoptions>
  </alg>
 </security>
</configuration>
```

Description ALG trace options

Contents <no-remote-trace>—Disable remote tracing

- brief - Brief messages
- detail - Detail messages
- extensive - Extensive messages
- verbose - Verbose messages

<file>—Trace file information

- brief - Brief messages
- detail - Detail messages
- extensive - Extensive messages
- verbose - Verbose messages

<level>—Set level of tracing output

- brief - Brief messages
- detail - Detail messages
- extensive - Extensive messages
- verbose - Verbose messages

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<traceoptions> configuration/security/alg/alg-manager

Usage

```
<configuration>
 <security>
  <alg>
   <alg-manager>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </alg-manager>
  </alg>
 </security>
</configuration>
```

Description ALG-MANAGER trace options

Contents <flag>—ALG-MANAGER trace flags

<traceoptions> configuration/security/alg/alg-support-lib

Usage

```
<configuration>
 <security>
  <alg>
   <alg-support-lib>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </alg-support-lib>
  </alg>
 </security>
</configuration>
```

Description ALG-SUPPORT-LIB trace options

Contents <flag>—ALG-SUPPORT-LIB trace flags

<traceoptions> configuration/security/alg/dns

Usage

```
<configuration>
 <security>
  <alg>
   <dns>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </dns>
```

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```
  </alg>
 </security>
</configuration>
```

Description DNS ALG trace options

Contents <flag>—DNS ALG trace flags

<traceoptions> configuration/security/alg/ftp

Usage

```
<configuration>
 <security>
  <alg>
   <ftp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </ftp>
  </alg>
 </security>
</configuration>
```

Description FTP ALG trace options

Contents <flag>—FTP ALG trace flags

<traceoptions> configuration/security/alg/h323

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </h323>
  </alg>
 </security>
</configuration>
```

Description H.323 ALG trace options

Contents <flag>—H.323 ALG trace flags

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<traceoptions> configuration/security/alg/mgcp

Usage

```
<configuration>
 <security>
  <alg>
   <mgcp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </mgcp>
  </alg>
 </security>
</configuration>
```

Description MGCP ALG trace options

Contents <flag>—MGCP ALG trace flags

<traceoptions> configuration/security/alg/msrpc

Usage

```
<configuration>
 <security>
  <alg>
   <msrpc>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </msrpc>
  </alg>
 </security>
</configuration>
```

Description MSRPC ALG trace options

Contents <flag>—MSRPC ALG trace flags

<traceoptions> configuration/security/alg/sunrpc

Usage

```
<configuration>
 <security>
  <alg>
   <sunrpc>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </sunrpc>
```

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```
    </alg>
   </security>
  </configuration>
```

Description SUNRPC ALG trace options

Contents <flag>—SUNRPC ALG trace flags

<traceoptions> configuration/security/alg/real

Usage

```
<configuration>
 <security>
  <alg>
   <real>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </real>
  </alg>
 </security>
</configuration>
```

Description REAL ALG trace options

Contents <flag>—REAL ALG trace flags

<traceoptions> configuration/security/alg/rsh

Usage

```
<configuration>
 <security>
  <alg>
   <rsh>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </rsh>
  </alg>
 </security>
</configuration>
```

Description RSH ALG trace options

Contents <flag>—RSH ALG trace flags

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<traceoptions> configuration/security/alg/rtsp

Usage

```
<configuration>
 <security>
  <alg>
   <rtsp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </rtsp>
  </alg>
 </security>
</configuration>
```

Description RTSP ALG trace options

Contents <flag>—RTSP ALG trace flags

<traceoptions> configuration/security/alg/sccp

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description SCCP ALG trace options

Contents <flag>—SCCP ALG trace flags

<traceoptions> configuration/security/alg/sip

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </sip>
```

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```
    </alg>
   </security>
  </configuration>
```

Description SIP ALG trace options

Contents <flag>—SIP ALG trace flags

<traceoptions> configuration/security/alg/sql

Usage

```
<configuration>
 <security>
  <alg>
   <sql>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </sql>
  </alg>
 </security>
</configuration>
```

Description SQL ALG trace options

Contents <flag>—SQL ALG trace flags

<traceoptions> configuration/security/alg/talk

Usage

```
<configuration>
 <security>
  <alg>
   <talk>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </talk>
  </alg>
 </security>
</configuration>
```

Description TALK ALG trace options

Contents <flag>—TALK ALG trace flags

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<traceoptions> configuration/security/alg/tftp

Usage

```
<configuration>
 <security>
  <alg>
   <tftp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </tftp>
  </alg>
 </security>
</configuration>
```

Description TFTP ALG trace options

Contents <flag>—TFTP ALG trace flags

<traceoptions> configuration/security/alg/pptp

Usage

```
<configuration>
 <security>
  <alg>
   <pptp>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </pptp>
  </alg>
 </security>
</configuration>
```

Description PPTP ALG trace options

Contents <flag>—PPTP ALG trace flags

<traceoptions> configuration/security/alg/ike-esp-nat

Usage

```
<configuration>
 <security>
  <alg>
   <ike-esp-nat>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </ike-esp-nat>
```

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```
    </alg>
   </security>
  </configuration>
```

Description IKE-ESP ALG trace options

Contents <flag>—IKE-ESP ALG trace flags

<traceoptions> configuration/security/application-firewall

Usage

```
<configuration>
 <security>
  <application-firewall>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </application-firewall>
 </security>
</configuration>
```

Description Rule-sets Tracing Options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
   <traceoptions>
    <flag>...</flag>
   </traceoptions>
  </utm>
 </security>
</configuration>
```

Description Trace options for utm

Contents <flag>—Tracing UTM information

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<traceoptions> configuration/security/utm/application-proxy

Usage

```
<configuration>
 <security>
  <utm>
   <application-proxy>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </application-proxy>
  </utm>
 </security>
</configuration>
```

Description Trace options for application proxy

Contents <flag>—Tracing parameters for utm application proxy

<traceoptions> configuration/security/utm/ipc

Usage

```
<configuration>
 <security>
  <utm>
   <ipc>
    <traceoptions>
     <flag>...</flag>
    </traceoptions>
   </ipc>
  </utm>
 </security>
</configuration>
```

Description Trace options for IPC

Contents <flag>—Traceoptions for utm IPC flag

<traceoptions> configuration/security/utm/feature-profile/anti-virus

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <traceoptions>
      <flag>...</flag>
     </traceoptions>
```

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```
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for anti-virus feature

Contents <flag>—Trace options for anti-virus feature flag

<traceoptions> configuration/security/utm/feature-profile/web-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <traceoptions>
      <flag>...</flag>
     </traceoptions>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for web-filtering feature

Contents <flag>—Trace options for web-filtering feature trace flag

<traceoptions> configuration/security/utm/feature-profile/anti-spam

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-spam>
     <traceoptions>
      <flag>...</flag>
     </traceoptions>
    </anti-spam>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for anti-spam feature

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Contents <flag>—Trace options for anti-spam feature flag

<traceoptions> configuration/security/utm/feature-profile/content-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <content-filtering>
     <traceoptions>
      <flag>...</flag>
     </traceoptions>
    </content-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Trace options for content-filtering feature

Contents <flag>—Trace options for content-filtering feature flag

<traceoptions> configuration/security/softwires

Usage

```
<configuration>
 <security>
  <softwires>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </softwires>
 </security>
</configuration>
```

Description Trace options for Network Security DS-Lite

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

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<traceoptions> configuration/security/flow

Usage

```
<configuration>
 <security>
  <flow>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
    <rate-limit>rate-limit</rate-limit>
    <packet-filter>...</packet-filter>
   </traceoptions>
  </flow>
 </security>
</configuration>
```

Description Trace options for flow services

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Events and other information to include in trace output

<rate-limit>—Limit the incoming rate of trace messages

<packet-filter>—Flow packet debug filters

<traceoptions> configuration/security/firewall-authentication

Usage

```
<configuration>
 <security>
  <firewall-authentication>
   <traceoptions>
    <flag>...</flag>
   </traceoptions>
  </firewall-authentication>
 </security>
</configuration>
```

Description Data-plane firewall authentication tracing options

Contents <flag>—Events to include in trace output

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<traceoptions> configuration/security/screen

Usage

```
<configuration>
 <security>
  <screen>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </screen>
 </security>
</configuration>
```

Description Trace options for Network Security Screen

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/security/nat

Usage

```
<configuration>
 <security>
  <nat>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </nat>
 </security>
</configuration>
```

Description NAT trace options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

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<traceoptions> configuration/security/resource-manager

Usage

```
<configuration>
 <security>
  <resource-manager>
   <traceoptions>
    <flag>...</flag>
   </traceoptions>
  </resource-manager>
 </security>
</configuration>
```

Description Traceoptions for resource manager

Contents <flag>—Resource manager objects and events to include in trace

<traceoptions> configuration/security/log

Usage

```
<configuration>
 <security>
  <log>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </log>
 </security>
</configuration>
```

Description Security log daemon trace options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—List of things to include in trace

<traceoptions> configuration/security

Usage

```
<configuration>
 <security>
  <traceoptions>
   <no-remote-trace/>
   <file>...</file>
   <flag>...</flag>
```


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```
    <rate-limit>rate-limit</rate-limit>
   </traceoptions>
  </security>
</configuration>
```

Description Network security daemon tracing options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<rate-limit>—Limit the incoming rate of trace messages

<traceoptions> configuration/security/datapath-debug

Usage

```
<configuration>
 <security>
  <datapath-debug>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
   </traceoptions>
  </datapath-debug>
 </security>
</configuration>
```

Description End to end debug trace options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<traceoptions> configuration/security/user-identification

Usage

```
<configuration>
 <security>
  <user-identification>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </user-identification>
 </security>
</configuration>
```

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Description User-identification Tracing Options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/services/ip-monitoring

Usage

```
<configuration>
 <services>
  <ip-monitoring>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </ip-monitoring>
 </services>
</configuration>
```

Description IP-Monitoring trace options

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/services/unified-access-control

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </unified-access-control>
 </services>
</configuration>
```

Description UAC trace options

Contents <no-remote-trace>—Disable remote tracing

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<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/services/server-load-balance

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <traceoptions>
    <no-remote-trace/>
    <file>...</file>
    <flag>...</flag>
    <level>level</level>
   </traceoptions>
  </server-load-balance>
 </services>
</configuration>
```

Description Configure server load balance traceoptions

Contents <no-remote-trace>—Disable remote tracing

- brief - Brief debugging output
- detail - Detailed debugging output
- extensive - Extensive debugging output
- verbose - Verbose debugging output

<file>—Trace file information

- brief - Brief debugging output
- detail - Detailed debugging output
- extensive - Extensive debugging output
- verbose - Verbose debugging output

<flag>—Tracing parameters

- brief - Brief debugging output
- detail - Detailed debugging output
- extensive - Extensive debugging output
- verbose - Verbose debugging output

<level>—Set level of tracing

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- brief - Brief debugging output
- detail - Detailed debugging output
- extensive - Extensive debugging output
- verbose - Verbose debugging output

<traceoptions> configuration/services/captive-portal

Usage

```
<configuration>
 <services>
  <captive-portal>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </captive-portal>
 </services>
</configuration>
```

Description Trace options for CAPTIVE PORTAL

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <traceoptions>
    <flag>...</flag>
    <file>...</file>
   </traceoptions>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <flag>—

<file>—Trace file information for ISDN decoded frames

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<traceoptions> configuration/protocols/oam/ethernet/connectivity-fault-management

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <traceoptions>
      <no-remote-trace/>
      <file>...</file>
      <flag>...</flag>
     </traceoptions>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Trace options for connectivity fault management

Contents <no-remote-trace>—Disable remote tracing

<file>—Trace file information

<flag>—Tracing parameters

<traceoptions> configuration/protocols/lldp

Usage

```
<configuration>
 <protocols>
  <lldp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </lldp>
 </protocols>
</configuration>
```

Description Trace options for LLDP

Contents <file>—Trace file options

<flag>—Tracing parameters

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<traceoptions> configuration/protocols/dot1x

Usage

```
<configuration>
 <protocols>
  <dot1x>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </dot1x>
 </protocols>
</configuration>
```

Description Trace options for 802.1X

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/gvrp

Usage

```
<configuration>
 <protocols>
  <gvrp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </gvrp>
 </protocols>
</configuration>
```

Description Tracing options for GVRP protocol

Contents <file>—Trace file options

<flag>—Tracing parameters for GVRP protocol

<traceoptions> configuration/protocols/mvrp

Usage

```
<configuration>
 <protocols>
  <mvrp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
```


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```
    </traceoptions>
   </mvrp>
  </protocols>
</configuration>
```

Description Tracing options for MVRP protocol

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/protection-group

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </protection-group>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/stp

Usage

```
<configuration>
 <protocols>
  <stp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </stp>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

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<flag>—Tracing parameters

<traceoptions> configuration/protocols/rstp

Usage

```
<configuration>
 <protocols>
  <rstp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </rstp>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/mstp

Usage

```
<configuration>
 <protocols>
  <mstp>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </mstp>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/vstp/vlan-group/group

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
```


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```
    <group>
     <traceoptions>
      <file>...</file>
      <flag>...</flag>
     </traceoptions>
    </group>
   </vlan-group>
  </vstp>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/vstp/vlan

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
    <traceoptions>
     <file>...</file>
     <flag>...</flag>
    </traceoptions>
   </vlan>
  </vstp>
 </protocols>
</configuration>
```

Description Tracing options for debugging protocol operation

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/edge-virtual-bridging

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </edge-virtual-bridging>
```

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```
 </protocols>
</configuration>
```

Description Trace options for Edge Virtual Bridging

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/igmp-snooping

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description Trace options for IGMP Snooping

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/protocols/mld-snooping

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <traceoptions>
    <file>...</file>
    <flag>...</flag>
   </traceoptions>
  </mld-snooping>
 </protocols>
</configuration>
```

Description Trace options for MLD Snooping

Contents <file>—Trace file options

<flag>—Tracing parameters

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<traceoptions> configuration/smtp

Usage

```
<configuration>
 <smtp>
  <traceoptions>
   <flag>...</flag>
  </traceoptions>
 </smtp>
</configuration>
```

Description Trace options for SMTP client service

Contents <flag>—Tracing parameters

<traceoptions> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <traceoptions>
   <file>...</file>
   <flag>...</flag>
  </traceoptions>
 </ethernet-switching-options>
</configuration>
```

Description Global tracing options for access security

Contents <file>—Trace file options

<flag>—Tracing parameters

<traceoptions> configuration/vlans

Usage

```
<configuration>
 <vlans>
  <traceoptions>
   <flag>...</flag>
  </traceoptions>
 </vlans>
</configuration>
```

Description VLAN trace options

Contents <flag>—Tracing parameters

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<traffic-distribution> configuration/services

Usage

```
<configuration>
 <services>
  <traffic-distribution>
   <service-layer-card>...</service-layer-card>
  </traffic-distribution>
 </services>
</configuration>
```

Description JunOS MAG SLC traffic distribution configuration

Contents <service-layer-card>—Service layer card configuration

<traffic-options> configuration/security/utm/utm-policy

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <traffic-options>
     <sessions-per-client>...</sessions-per-client>
    </traffic-options>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description Traffic options

Contents <sessions-per-client>—Sessions per client

<transmit-rate-sets> configuration/wlan/access-point/radio/radio-options

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <radio-options>
     <transmit-rate-sets>
      <supported-rates>...</supported-rates>
      <supported-basic-rates>...</supported-basic-rates>
     </transmit-rate-sets>
    </radio-options>
   </radio>
  </access-point>
```


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```
 </wlan>
</configuration>
```

Description Specify the transmit rate sets

Contents <supported-rates>—List of supported rates in Mbps

<supported-basic-rates>—List of supported basic rates in Mbps

<trickling> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <trickling>
        <timeout>timeout</timeout> <!-- mandatory -->
       </trickling>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus trickling

Contents <timeout>—Trickling timeout

<trickling> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <trickling>
        <timeout>timeout</timeout> <!-- mandatory -->
       </trickling>
      </profile>
```

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```
        </juniper-express-engine>
       </anti-virus>
      </feature-profile>
     </utm>
    </security>
   </configuration>
```

Description Anti-virus trickling

Contents <timeout>—Trickling timeout

<trickling> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <trickling>
        <timeout>timeout</timeout> <!-- mandatory -->
       </trickling>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Anti-virus trickling

Contents <timeout>—Trickling timeout

<tuesday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <tuesday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </tuesday>
  </scheduler>
 </schedulers>
```


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```
</configuration>
```

Description Every Tuesday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

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CHAPTER 47

Tag Elements Beginning with U

This chapter lists the configuration tag elements that have names beginning with the letter *u*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<udp> configuration/security/screen/ids-option

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <udp>
     <flood>...</flood>
     <udp-sweep>...</udp-sweep>
    </udp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure UDP layer ids options

Contents <flood>—Configure UDP flood ids option

<udp-sweep>—Configure UDP sweep ids option

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<udp-sweep> configuration/security/screen/ids-option/udp

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <udp>
     <udp-sweep>
      <threshold>threshold</threshold>
     </udp-sweep>
    </udp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Configure UDP sweep ids option

Contents <threshold>—Threshold which specifies the minimum time per UDP packets

<unified-access-control> configuration/services

Usage

```
<configuration>
 <services>
  <unified-access-control>
   <infranet-controller>...</infranet-controller>
   <certificate-verification>certificate-verification</certificate-verification>
   <timeout>timeout</timeout>
   <interval>interval</interval>
   <timeout-action>timeout-action</timeout-action>
   <test-only-mode/>
   <traceoptions>...</traceoptions>
   <captive-portal>...</captive-portal>
  </unified-access-control>
 </services>
</configuration>
```

Description Configure Unified Access Control

Contents <infranet-controller>—Configure infranet controller

- warning - Warn if certificate is not being verified
- required - Require certificate verification. Most secure
- optional - Make verification optional, no warnings. Least secure
- close - Remove existing sessions and block further traffic

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- no-change - Preserve existing connections; block new sessions
- open - Allow traffic for new and existing sessions to go through

<certificate-verification>—Specify certificate verification requirement

- warning - Warn if certificate is not being verified
- required - Require certificate verification. Most secure
- optional - Make verification optional, no warnings. Least secure
- close - Remove existing sessions and block further traffic
- no-change - Preserve existing connections; block new sessions
- open - Allow traffic for new and existing sessions to go through

<timeout>—Timeout for idle infranet controller link in seconds

- close - Remove existing sessions and block further traffic
- no-change - Preserve existing connections; block new sessions
- open - Allow traffic for new and existing sessions to go through

<interval>—Heartbeat interval from infranet controller in seconds

- close - Remove existing sessions and block further traffic
- no-change - Preserve existing connections; block new sessions
- open - Allow traffic for new and existing sessions to go through

<timeout-action>—Specify action when infranet controller timeout occurs

- close - Remove existing sessions and block further traffic
- no-change - Preserve existing connections; block new sessions
- open - Allow traffic for new and existing sessions to go through

<test-only-mode>—Allow all traffic and only log enforcement result

<traceoptions>—UAC trace options

<captive-portal>—Unauthenticated HTTP redirect

<unit> configuration/interfaces/interface

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>...</dialer-options>
    <backup-options>...</backup-options>
    <family>...</family>
```

```
    <dynamic-call-admission-control>...</dynamic-call-admission-control>
    <input-vlan-map/>
    <output-vlan-map/>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description

Contents <dialer-options>—Dialer options

<backup-options>—Backup interface configuration options

<family>—

<dynamic-call-admission-control>—Dynamic call admission control configuration

<input-vlan-map>—VLAN map operation on input

<output-vlan-map>—VLAN map operation on output

<unknown-message> configuration/security/alg/h323/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <h323>
    <application-screen>
     <unknown-message>
      <permit-nat-applied/>
      <permit-routed/>
     </unknown-message>
    </application-screen>
   </h323>
  </alg>
 </security>
</configuration>
```

Description Configure ALG action on receiving an unknown message

Contents <permit-nat-applied>—Permit unknown messages on packets that are NATed

<permit-routed>—Permit unknown messages on routed packets

<unknown-message> configuration/security/alg/mgcp/application-screen

Usage

```
<configuration>
 <security>
```


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```
<alg>
 <mgcp>
  <application-screen>
   <unknown-message>
    <permit-nat-applied/>
    <permit-routed/>
   </unknown-message>
  </application-screen>
 </mgcp>
</alg>
</security>
</configuration>
```

Description Configure ALG action on receiving an unknown message

Contents <permit-nat-applied>—Permit unknown messages on packets that are NATed

<permit-routed>—Permit unknown messages on routed packets

<unknown-message> configuration/security/alg/sccp/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <sccp>
    <application-screen>
     <unknown-message>
      <permit-nat-applied/>
      <permit-routed/>
     </unknown-message>
    </application-screen>
   </sccp>
  </alg>
 </security>
</configuration>
```

Description Configure ALG action on receiving an unknown message

Contents <permit-nat-applied>—Permit unknown messages on packets that are NATed

<permit-routed>—Permit unknown messages on routed packets

<unknown-message> configuration/security/alg/sip/application-screen

Usage

```
<configuration>
 <security>
  <alg>
   <sip>
```

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```
    <application-screen>
     <unknown-message>
      <permit-nat-applied/>
      <permit-routed/>
     </unknown-message>
    </application-screen>
   </sip>
  </alg>
 </security>
</configuration>
```

Description Configure ALG action on receiving an unknown message

Contents <permit-nat-applied>—Permit unknown messages on packets that are NATed

<permit-routed>—Permit unknown messages on routed packets

<unknown-unicast-forwarding> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <unknown-unicast-forwarding>
   <vlan>...</vlan>
  </unknown-unicast-forwarding>
 </ethernet-switching-options>
</configuration>
```

Description Set interface for forwarding of unknown unicast packets

Contents <vlan>—VLAN for the unknown unicast packets

<url> configuration/security/pki/ca-profile/revocation-check/crl

Usage

```
<configuration>
 <security>
  <pki>
   <ca-profile>
    <revocation-check>
     <crl>
      <url>
       <url-string>url-string</url-string> <!-- identifier -->
       <password>password</password>
      </url>
     </crl>
    </revocation-check>
   </ca-profile>
  </pki>
 </security>
```


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```
</configuration>
```

Description

Contents <url-string>—URL of CRL distribution point for certificate authority

<password>—Password for authentication with the server

<url-pattern> configuration/security/utm/custom-objects

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <url-pattern>
     <name>name</name> <!-- mandatory --> <!-- identifier -->
     <value>...</value>
    </url-pattern>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure url-list object

Contents <name>—Configure name of url-list object

<value>—Configure value of url-list object

<user> configuration/security/dynamic-vpn/clients

Usage

```
<configuration>
 <security>
  <dynamic-vpn>
   <clients>
    <user>
     <name>name</name>
    </user>
   </clients>
  </dynamic-vpn>
 </security>
</configuration>
```

Description Remote IPSec VPN users

Contents <name>—User name

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<user-at-hostname> configuration/security/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <local-identity>
     <user-at-hostname>
      <identity-user>identity-user</identity-user>
     </user-at-hostname>
    </local-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an e-mail address

Contents <identity-user>—The local user-FQDN

<user-at-hostname> configuration/security/ike/gateway/remote-identity

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <remote-identity>
     <user-at-hostname>
      <identity-user>identity-user</identity-user>
     </user-at-hostname>
    </remote-identity>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use an e-mail address

Contents <identity-user>—The remote user-FQDN

<user-at-hostname> configuration/security/group-vpn/member/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
```


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```
<group-vpn>
 <member>
  <ike>
   <gateway>
    <local-identity>
     <user-at-hostname>
      <identity-user>identity-user</identity-user>
     </user-at-hostname>
    </local-identity>
   </gateway>
  </ike>
 </member>
</group-vpn>
</security>
</configuration>
```

Description Use an e-mail address

Contents <identity-user>—The local user-FQDN

<user-at-hostname> configuration/security/group-vpn/server/ike/gateway/local-identity

Usage

```
<configuration>
 <security>
  <group-vpn>
   <server>
    <ike>
     <gateway>
      <local-identity>
       <user-at-hostname>
        <identity-user>identity-user</identity-user>
       </user-at-hostname>
      </local-identity>
     </gateway>
    </ike>
   </server>
  </group-vpn>
 </security>
</configuration>
```

Description Use an e-mail address

Contents <identity-user>—The local user-FQDN

<user-identification> configuration/security

Usage

```
<configuration>
```

```
<security>
 <user-identification>
  <traceoptions>...</traceoptions>
  <authentication-source>...</authentication-source>
 </user-identification>
</security>
</configuration>
```

Description Configure user-identification

Contents <traceoptions>—User-identification Tracing Options

<authentication-source>—Configure user-identification authentication-source

<utm> configuration/security

Usage

```
<configuration>
 <security>
  <utm>
   <traceoptions>...</traceoptions>
   <application-proxy>...</application-proxy>
   <ipc>...</ipc>
   <custom-objects>...</custom-objects>
   <feature-profile>...</feature-profile>
   <utm-policy>...</utm-policy>
  </utm>
 </security>
</configuration>
```

Description Content security service configuration

Contents <traceoptions>—Trace options for utm

<application-proxy>—Trace options for application proxy

<ipc>—Trace options for IPC

<custom-objects>—Trace options for custom-objects

<feature-profile>—Feature-profile settings

<utm-policy>—Configure profile

<utm-policy> configuration/security/utm

Usage

```
<configuration>
 <security>
  <utm>
```


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```
    <utm-policy>
     <name>name</name> <!-- identifier -->
     <anti-virus>...</anti-virus>
     <content-filtering>...</content-filtering>
     <web-filtering>...</web-filtering>
     <anti-spam>...</anti-spam>
     <traffic-options>...</traffic-options>
    </utm-policy>
   </utm>
  </security>
 </configuration>
```

Description Configure profile

Contents <name>—UTM policy name

<anti-virus>—UTM policy anti-virus profile

<content-filtering>—Content-filtering profile

<web-filtering>—Web-filtering profile

<anti-spam>—Anti-spam profile

<traffic-options>—Traffic options

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CHAPTER 48

Tag Elements Beginning with V

This chapter lists the configuration tag elements that have names beginning with the letter *v*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<value> configuration/security/utm/custom-objects/mime-pattern

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <mime-pattern>
     <value>
      <value>value</value>
     </value>
    </mime-pattern>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure MIME value

Contents <value>—Configure MIME value

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<value> configuration/security/utm/custom-objects/filename-extension

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <filename-extension>
     <value>
      <value>value</value>
     </value>
    </filename-extension>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure value of extension-list object

Contents <value>—Configure value of extension-list object

<value> configuration/security/utm/custom-objects/url-pattern

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <url-pattern>
     <value>
      <value>value</value>
     </value>
    </url-pattern>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure value of url-list object

Contents <value>—Configure value of url-list object

<value> configuration/security/utm/custom-objects/custom-url-category

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
```


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```
    <custom-url-category>
     <value>
      <value>value</value>
     </value>
    </custom-url-category>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure value of category-list object

Contents <value>—Configure value of category-list object

<value> configuration/security/utm/custom-objects/protocol-command

Usage

```
<configuration>
 <security>
  <utm>
   <custom-objects>
    <protocol-command>
     <value>
      <value>value</value>
     </value>
    </protocol-command>
   </custom-objects>
  </utm>
 </security>
</configuration>
```

Description Configure value of command-list object

Contents <value>—Configure value of command-list object

<vendor-id> configuration/ethernet-switching-options/secure-access-port/vlan/dhcp-option82

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <dhcp-option82>
     <vendor-id>
      <use-string>use-string</use-string>
     </vendor-id>
    </dhcp-option82>
   </vlan>
  </secure-access-port>
```

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```
 </ethernet-switching-options>
</configuration>
```

Description Configure DHCP option 82 vendor id

Contents <use-string>—Use raw string instead of the default vendor id

<version> configuration/security/gprs/gtp/profile/remove-ie

Usage

```
<configuration>
 <security>
  <gprs>
   <gtp>
    <profile>
     <remove-ie>
      <version>
       <v1/>
       <release>...</release>
       <number>...</number>
      </version>
     </remove-ie>
    </profile>
   </gtp>
  </gprs>
 </security>
</configuration>
```

Description GTP version

Contents <v1>—GTP v1

<release>—Remove information elements by release

<number>—Remove information elements by number

<video-queue> configuration/wlan/access-point/radio/quality-of-service/access-point-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <video-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>
```


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```
            <minimum-contention-window>...</minimum-contention-window>
            <maximum-contention-window>...</maximum-contention-window>
            <maximum-burst>maximum-burst</maximum-burst>
           </video-queue>
          </access-point-queues>
         </quality-of-service>
        </radio>
       </access-point>
      </wlan>
     </configuration>
```

Description Configure video queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Minimum contention window size

<maximum-contention-window>—Maximum contention window size

<maximum-burst>—Specify maximum burst

<video-queue> configuration/wlan/access-point/radio/quality-of-service/station-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <video-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

      <minimum-contention-window>...</minimum-contention-window>
      <maximum-contention-window>...</maximum-contention-window>

<transmit-opportunity-limit>transmit-opportunity-limit</transmit-opportunity-limit>
      </video-queue>
     </station-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure video queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

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<minimum-contention-window>—Specify minimum contention window size

<maximum-contention-window>—Specify maximum contention window size

<transmit-opportunity-limit>—Specify transmission opportunity limit

<virtual-access-point> configuration/wlan/access-point/radio

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <identifier>identifier</identifier> <!-- mandatory --> <!-- identifier -->
     <description>description</description>
     <ssid>ssid</ssid>
     <vlan>vlan</vlan>
     <no-broadcast-ssid/>
     <http-redirect>...</http-redirect>
     <security>...</security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Virtual access point configuration

Contents <identifier>—Specify VAP identifier value

<description>—Specify the virtual access point description

<ssid>—SSID value for the virtual access point

<vlan>—VLAN id for the virtual access point

<no-broadcast-ssid>—Disable broadcast SSID

<http-redirect>—Configure HTTP redirect setting

<security>—Configure security settings for the VAP

<virtual-server> configuration/services/server-load-balance

Usage

```
<configuration>
 <services>
  <server-load-balance>
   <virtual-server>
    <virtual-server-name>virtual-server-name</virtual-server-name> <!-- identifier
-->
```


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```
    <destination-address>destination-address</destination-address> <!-- mandatory
-->
     <policy>...</policy> <!-- mandatory -->
     <disable/>
    </virtual-server>
   </server-load-balance>
  </services>
 </configuration>
```

Description Configure virtual server

Contents <virtual-server-name>—Name of the virtual server

<destination-address>—Virtual server IP address

<policy>—Content based policy

<disable>—Disable virtual server

<virus-detection> configuration/security/utm/feature-profile/anti-virus/kaspersky-lab-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <kaspersky-lab-engine>
      <profile>
       <notification-options>
        <virus-detection>
         <type>type</type>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </virus-detection>
       </notification-options>
      </profile>
     </kaspersky-lab-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Virus detection notification

Contents <type>—Virus detection notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<virus-detection> configuration/security/utm/feature-profile/anti-virus/juniper-express-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <juniper-express-engine>
      <profile>
       <notification-options>
        <virus-detection>
         <type>type</type>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </virus-detection>
       </notification-options>
      </profile>
     </juniper-express-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Virus detection notification

Contents <type>—Virus detection notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

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<virus-detection> configuration/security/utm/feature-profile/anti-virus/sophos-engine/profile/notification-options

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <anti-virus>
     <sophos-engine>
      <profile>
       <notification-options>
        <virus-detection>
         <type>type</type>
         <notify-mail-sender/>
         <custom-message>custom-message</custom-message>

<custom-message-subject>custom-message-subject</custom-message-subject>
        </virus-detection>
       </notification-options>
      </profile>
     </sophos-engine>
    </anti-virus>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Virus detection notification

Contents <type>—Virus detection notification type

- protocol-only - Notification in protocol level only
- message - Notification in message

<notify-mail-sender>—Notify mail sender

<custom-message>—Custom message for notification

<custom-message-subject>—Custom message subject for notification

<vlan> configuration/protocols/protection-group/ethernet-ring/data-channel

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <data-channel>
     <vlan>
      <value>value</value> <!-- mandatory -->
```

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```
        </vlan>
       </data-channel>
      </ethernet-ring>
     </protection-group>
    </protocols>
   </configuration>
```

Description VLAN ID or VLAN ID range [1..4094]

Contents <value>—VLAN ID or VLAN ID range [1..4094]

<vlan> configuration/protocols/mstp/msti

Usage

```
<configuration>
 <protocols>
  <mstp>
   <msti>
    <vlan>
     <value>value</value> <!-- mandatory -->
    </vlan>
   </msti>
  </mstp>
 </protocols>
</configuration>
```

Description VLAN ID or VLAN ID range [1..4094]

Contents <value>—VLAN ID or VLAN ID range [1..4094]

<vlan> configuration/protocols/vstp/vlan-group/group

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>
     <vlan>
      <value>value</value> <!-- mandatory -->
     </vlan>
    </group>
   </vlan-group>
  </vstp>
 </protocols>
</configuration>
```

Description VLAN ID or VLAN ID range [1..4094]

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Contents <value>—VLAN ID or VLAN ID range [1..4094]

<vlan> configuration/protocols/vstp

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan>
    <id-name/>
    <all/>
    <bridge-priority>bridge-priority</bridge-priority>
    <max-age>max-age</max-age>
    <hello-time>hello-time</hello-time>
    <forward-delay>forward-delay</forward-delay>
    <traceoptions>...</traceoptions>
    <interface>...</interface>
   </vlan>
  </vstp>
 </protocols>
</configuration>
```

Description VLAN spanning tree options

Contents <id-name>—VLAN id or name

<all>—All VLANs

<bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k)

<max-age>—Maximum age of received protocol bpdu

<hello-time>—Time interval between configuration BPDUs

<forward-delay>—Time spent in listening or learning state

<traceoptions>—Tracing options for debugging protocol operation

<interface>—

<vlan> configuration/protocols/igmp-snooping

Usage

```
<configuration>
 <protocols>
  <igmp-snooping>
   <vlan>
    <all/>
    <vlan-name/>
    <disable/>
    <version>version</version>
    <query-interval>query-interval</query-interval>
```

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```
<query-last-member-interval>query-last-member-interval</query-last-member-interval>

    <query-response-interval>query-response-interval</query-response-interval>
    <robust-count>robust-count</robust-count>
    <immediate-leave/>
    <no-default-flooding/>
    <proxy>...</proxy>
    <data-forwarding>...</data-forwarding>
    <interface>...</interface>
   </vlan>
  </igmp-snooping>
 </protocols>
</configuration>
```

Description VLAN options

Contents <all>—All configured VLANs

<vlan-name>—VLAN name

<disable>—Disable IGMP snooping on this VLAN

<version>—Set IGMP version number on this VLAN

<query-interval>—Query interval

<query-last-member-interval>—Query last member interval

<query-response-interval>—Query response interval

<robust-count>—Robust count

<immediate-leave>—Immediate leave

<no-default-flooding>—No default flooding

<proxy>—Enable proxy mode

<data-forwarding>—Data forwarding

<interface>—Interface options

<vlan> configuration/protocols/mld-snooping

Usage

```
<configuration>
 <protocols>
  <mld-snooping>
   <vlan>
    <all/>
    <vlan-name/>
    <disable/>
```


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```
        <version>version</version>
        <query-interval>query-interval</query-interval>

<query-last-member-interval>query-last-member-interval</query-last-member-interval>

        <query-response-interval>query-response-interval</query-response-interval>
        <robust-count>robust-count</robust-count>
        <immediate-leave/>
        <interface>...</interface>
       </vlan>
      </mld-snooping>
     </protocols>
    </configuration>
```

Description VLAN options

Contents <all>—All configured VLANs

<vlan-name>—VLAN name

<disable>—Disable MLD snooping on this VLAN

<version>—Set MLD version number on this VLAN

<query-interval>—Query interval

<query-last-member-interval>—Query last member interval

<query-response-interval>—Query response interval

<robust-count>—Robust count

<immediate-leave>—Immediate leave

<interface>—Interface options

<vlan> configuration/ethernet-switching-options/unknown-unicast-forwarding

Usage

```
<configuration>
 <ethernet-switching-options>
  <unknown-unicast-forwarding>
   <vlan>
    <vlan-name>vlan-name</vlan-name> <!-- identifier -->
    <interface>interface</interface>
   </vlan>
  </unknown-unicast-forwarding>
 </ethernet-switching-options>
</configuration>
```

Description VLAN for the unknown unicast packets

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Contents <vlan-name>—VLAN name or VLAN Tag (1..4095)

<interface>—Interface to send unknown unicast packets for the VLAN

<vlan> configuration/ethernet-switching-options/static

Usage

```
<configuration>
 <ethernet-switching-options>
  <static>
   <vlan>
    <vlan_name>vlan_name</vlan_name> <!-- identifier -->
    <mac>...</mac> <!-- mandatory -->
   </vlan>
  </static>
 </ethernet-switching-options>
</configuration>
```

Description VLAN static MAC entries

Contents <vlan_name>—VLAN name

<mac>—Static MAC

<vlan> configuration/ethernet-switching-options/secure-access-port

Usage

```
<configuration>
 <ethernet-switching-options>
  <secure-access-port>
   <vlan>
    <all/>
    <vlan-name/>
    <arp-inspection>...</arp-inspection>
    <no-arp-inspection/>
    <examine-dhcp>...</examine-dhcp>
    <no-examine-dhcp/>
    <examine-fip>...</examine-fip>
    <mac-move-limit>...</mac-move-limit>
    <ip-source-guard/>
    <dhcp-option82>...</dhcp-option82>
   </vlan>
  </secure-access-port>
 </ethernet-switching-options>
</configuration>
```

Description Configure access port security for this VLAN

Contents <all>—All configured VLANs

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<vlan-name>—VLAN name or VLAN Tag (1..4095)

<arp-inspection>—Enable Dynamic ARP inspection on this VLAN

<no-arp-inspection>—Disable Dynamic ARP inspection on this VLAN

<examine-dhcp>—Enable DHCP snooping on this VLAN

<no-examine-dhcp>—Disable DHCP snooping on this VLAN

<examine-fip>—Enable FIP snooping on this VLAN

<mac-move-limit>—Number of MAC movements allowed on this VLAN

<ip-source-guard>—Enable IP source guard on this VLAN

<dhcp-option82>—Configure DHCP option 82 on this VLAN

<vlan> configuration/ethernet-switching-options/analyzer/input/ingress

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <ingress>
     <vlan>
      <vlan-name>vlan-name</vlan-name> <!-- identifier -->
     </vlan>
    </ingress>
   </input>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description VLAN to monitor incoming traffic

Contents <vlan-name>—VLAN name, VLAN id or VLAN range string

<vlan> configuration/ethernet-switching-options/analyzer/input/egress

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <input>
    <egress>
     <vlan>
      <vlan-name>vlan-name</vlan-name> <!-- identifier -->
     </vlan>
    </egress>
   </input>
```

```
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description VLAN to monitor outgoing traffic

Contents <vlan-name>—VLAN name, VLAN id or VLAN range string

<vlan> configuration/ethernet-switching-options/analyzer/output

Usage

```
<configuration>
 <ethernet-switching-options>
  <analyzer>
   <output>
    <vlan>
     <vlan_name>vlan_name</vlan_name> <!-- identifier -->
     <no-tag/>
    </vlan>
   </output>
  </analyzer>
 </ethernet-switching-options>
</configuration>
```

Description Outgoing VLAN for mirrored packets

Contents <vlan_name>—VLAN name or VLAN id

<no-tag>—Removes extra RSAPN tag from mirrored packets

<vlan> configuration/vlans

Usage

```
<configuration>
 <vlans>
  <vlan>
   <vlan-name>vlan-name</vlan-name> <!-- identifier -->
   <description>description</description>
   <vlan-id>vlan-id</vlan-id>
   <vlan-range>vlan-range</vlan-range>
   <global-layer2-domainid>global-layer2-domainid</global-layer2-domainid>
   <global-layer2-domainid-range>...</global-layer2-domainid-range>
   <interface>...</interface>
   <filter>...</filter>
   <l3-interface>l3-interface</l3-interface>
   <l3-interface-ingress-counting/>
   <mac-table-aging-time>...</mac-table-aging-time>
   <mac-limit>...</mac-limit>
   <dot1q-tunneling>...</dot1q-tunneling>
   <no-local-switching/>
```


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```
    <isolation-id>isolation-id</isolation-id>
    <primary-vlan>primary-vlan</primary-vlan>
    <no-mac-learning/>
   </vlan>
  </vlans>
 </configuration>
```

Description Virtual LAN

Contents <vlan-name>—VLAN name

<description>—Text description of the VLAN

<vlan-id>—802.1q tag

<vlan-range>—VLAN range in the form '<vlan-id-low>-<vlan-id-high>'

<global-layer2-domainid>—Global layer2 domain ID

<global-layer2-domainid-range>—Global layer2 domain ID range

<interface>—Name of interface that uses this VLAN

<filter>—Packet filtering

<l3-interface>—Layer 3 interface for this VLAN

<l3-interface-ingress-counting>—Enable ingress counting on layer 3 interface for this VLAN

<mac-table-aging-time>—MAC aging time configuration

<mac-limit>—Number of MAC addresses allowed on this VLAN

<dot1q-tunneling>—Dot1q-tunneling parameters

<no-local-switching>—Disable local switching

<isolation-id>—Isolation VLAN tag

<primary-vlan>—Primary VLAN for this community VLAN

<no-mac-learning>—Disable mac learning

<vlan-group> configuration/protocols/vstp

Usage

```
<configuration>
 <protocols>
  <vstp>
   <vlan-group>
    <group>...</group>
   </vlan-group>
```

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```
  </vstp>
 </protocols>
</configuration>
```

Description Spanning tree options for group of VLANs

Contents <group>—Name of VLAN group

<vlan-name> configuration/protocols/oam/ethernet/connectivity-fault-management/maintenance-domain

Usage

```
<configuration>
 <protocols>
  <oam>
   <ethernet>
    <connectivity-fault-management>
     <maintenance-domain>
      <vlan-name>
       <value>value</value>
      </vlan-name>
     </maintenance-domain>
    </connectivity-fault-management>
   </ethernet>
  </oam>
 </protocols>
</configuration>
```

Description Name of VLAN for the default maintenance domain

Contents <value>—Name of VLAN for the default maintenance domain

<vlans> configuration

Usage

```
<configuration>
 <vlans>
  <traceoptions>...</traceoptions>
  <vlan>...</vlan>
 </vlans>
</configuration>
```

Description VLAN configuration

Contents <traceoptions>—VLAN trace options

<vlan>—Virtual LAN

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<voice-queue> configuration/wlan/access-point/radio/quality-of-service/access-point-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <access-point-queues>
      <voice-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

       <minimum-contention-window>...</minimum-contention-window>
       <maximum-contention-window>...</maximum-contention-window>
       <maximum-burst>maximum-burst</maximum-burst>
      </voice-queue>
     </access-point-queues>
    </quality-of-service>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Configure voice queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Minimum contention window size

<maximum-contention-window>—Maximum contention window size

<maximum-burst>—Specify maximum burst

<voice-queue> configuration/wlan/access-point/radio/quality-of-service/station-queues

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <quality-of-service>
     <station-queues>
      <voice-queue>

<arbitration-inter-frame-space>arbitration-inter-frame-space</arbitration-inter-frame-space>

       <minimum-contention-window>...</minimum-contention-window>
       <maximum-contention-window>...</maximum-contention-window>
```

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```
<transmit-opportunity-limit>transmit-opportunity-limit</transmit-opportunity-limit>
          </voice-queue>
         </station-queues>
        </quality-of-service>
       </radio>
      </access-point>
     </wlan>
    </configuration>
```

Description Configure voice queue

Contents <arbitration-inter-frame-space>—Arbitration space between frames

<minimum-contention-window>—Specify minimum contention window size

<maximum-contention-window>—Specify maximum contention window size

<transmit-opportunity-limit>—Specify transmission opportunity limit

<voip> configuration/ethernet-switching-options

Usage

```
<configuration>
 <ethernet-switching-options>
  <voip>
   <interface>...</interface>
  </voip>
 </ethernet-switching-options>
</configuration>
```

Description Voice-over-IP configuration

Contents <interface>—Enable voice over IP on this port

<vpn> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <name>name</name> <!-- identifier -->
    <bind-interface>bind-interface</bind-interface>
    <df-bit>df-bit</df-bit>
    <vpn-monitor>...</vpn-monitor>
    <manual>...</manual>
    <ike>...</ike>
    <establish-tunnels>establish-tunnels</establish-tunnels>
   </vpn>
```


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```
        </ipsec>
      </security>
    </configuration>
```

Description Define an IPSec VPN

Contents <name>—Name of the VPN

- clear - Clear DF bit of outer header
- set - Set DF bit of outer header
- copy - Copy DF bit from inner header
- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<bind-interface>—Bind to tunnel interface (route-based VPN)

- clear - Clear DF bit of outer header
- set - Set DF bit of outer header
- copy - Copy DF bit from inner header
- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<df-bit>—Specifies how to handle the Don't Fragment bit

- clear - Clear DF bit of outer header
- set - Set DF bit of outer header
- copy - Copy DF bit from inner header
- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<vpn-monitor>—Monitor VPN liveliness

- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<manual>—Define a manual security association

- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<ike>—Define an IKE-keyed IPSec vpn

- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

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<establish-tunnels>—Define the criteria to establish tunnels

- immediately - Establish tunnels immediately
- on-traffic - Establish tunnels on traffic

<vpn> configuration/security/group-vpn/member/ipsec

Usage

```
<configuration>
 <security>
  <group-vpn>
   <member>
    <ipsec>
     <vpn>
      <name>name</name> <!-- identifier -->
      <ike-gateway>ike-gateway</ike-gateway> <!-- mandatory -->

<group-vpn-external-interface>group-vpn-external-interface</group-vpn-external-interface>
<!-- mandatory -->
      <group>group</group> <!-- mandatory -->
      <heartbeat-threshold>heartbeat-threshold</heartbeat-threshold>
     </vpn>
    </ipsec>
   </member>
  </group-vpn>
 </security>
</configuration>
```

Description Define an IPSec VPN

Contents <name>—Name of the VPN

<ike-gateway>—Name of IKE gateway

<group-vpn-external-interface>—MPLS-facing interface used for Group VPN

<group>—Enable Group VPN by defining group id

<heartbeat-threshold>—Define heartbeat threshold for Group VPN

<vpn-monitor> configuration/security/ipsec/vpn

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn>
    <vpn-monitor>
     <optimized/>
     <source-interface>source-interface</source-interface>
     <destination-ip>destination-ip</destination-ip>
```


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```
      </vpn-monitor>
     </vpn>
    </ipsec>
   </security>
  </configuration>
```

Description Monitor VPN liveliness

Contents <optimized>—Optimize for scalability

<source-interface>—Source interface for monitor message

<destination-ip>—Destination IP addres for monitor message

<vpn-monitor-options> configuration/security/ipsec

Usage

```
<configuration>
 <security>
  <ipsec>
   <vpn-monitor-options>
    <interval>interval</interval>
    <threshold>threshold</threshold>
   </vpn-monitor-options>
  </ipsec>
 </security>
</configuration>
```

Description Global options for VPN liveliness monitoring

Contents <interval>—Monitor interval in seconds

<threshold>—Number of consecutive failures to determine connectivity

<vsi-discovery> configuration/protocols/edge-virtual-bridging

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <vsi-discovery>
    <interface>...</interface>
    <vsi-policy>...</vsi-policy>
   </vsi-discovery>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description

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Contents <interface>—Configure VSI Discovery Protocol on this interface

<vsi-policy>—Apply VSI policy

<vsi-policy> configuration/protocols/edge-virtual-bridging/vsi-discovery

Usage

```
<configuration>
 <protocols>
  <edge-virtual-bridging>
   <vsi-discovery>
    <vsi-policy>
     <vsi-policy-name>vsi-policy-name</vsi-policy-name> <!-- identifier -->
    </vsi-policy>
   </vsi-discovery>
  </edge-virtual-bridging>
 </protocols>
</configuration>
```

Description Apply VSI policy

Contents <vsi-policy-name>—Name of the VSI policy

<vstp> configuration/protocols

Usage

```
<configuration>
 <protocols>
  <vstp>
   <disable/>
   <force-version>force-version</force-version>
   <bpdu-block-on-edge/>
   <vlan-group>...</vlan-group>
   <vlan>...</vlan>
  </vstp>
 </protocols>
</configuration>
```

Description VLAN Spanning Tree Protocol options

Contents <disable>—Disable VSTP

- stp - Spanning tree protocol
- rstp - Rapid spanning tree protocol

<force-version>—Force protocol version

- stp - Spanning tree protocol
- rstp - Rapid spanning tree protocol

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<bpdu-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect)

<vlan-group>—Spanning tree options for group of VLANs

<vlan>—VLAN spanning tree options

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CHAPTER 49

Tag Elements Beginning with W

This chapter lists the configuration tag elements that have names beginning with the letter *w*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<watch-list> configuration/interfaces/interface/unit/dialer-options

Usage

```
<configuration>
 <interfaces>
  <interface>
   <unit>
    <dialer-options>
     <watch-list>
      <prefix>prefix</prefix> <!-- identifier -->
     </watch-list>
    </dialer-options>
   </unit>
  </interface>
 </interfaces>
</configuration>
```

Description Dialer watch list

Contents <prefix>—Address prefix

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<web-filtering> configuration/security/utm/feature-profile

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <url-whitelist>url-whitelist</url-whitelist>
     <url-blacklist>url-blacklist</url-blacklist>
     <type>type</type>
     <traceoptions>...</traceoptions>
     <surf-control-integrated>...</surf-control-integrated>
     <websense-redirect>...</websense-redirect>
     <juniper-local>...</juniper-local>
     <juniper-enhanced>...</juniper-enhanced>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure web-filtering feature

Contents <url-whitelist>—Configure custom URL for whitelist category

- surf-control-integrated -
- websense-redirect -
- juniper-local -
- juniper-enhanced -

<url-blacklist>—Configure custom URL for blacklist category

- surf-control-integrated -
- websense-redirect -
- juniper-local -
- juniper-enhanced -

<type>—Configure web-filtering engine type

- surf-control-integrated -
- websense-redirect -
- juniper-local -
- juniper-enhanced -

<traceoptions>—Trace options for web-filtering feature

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<surf-control-integrated>—Configure web-filtering surf-control integrated engine

<websense-redirect>—Configure web-filtering websense redirect engine

<juniper-local>—Configure web-filtering juniper local engine

<juniper-enhanced>—Configure web-filtering juniper enhanced engine

<web-filtering> configuration/security/utm/utm-policy

Usage

```
<configuration>
 <security>
  <utm>
   <utm-policy>
    <web-filtering>
     <http-profile>http-profile</http-profile>
    </web-filtering>
   </utm-policy>
  </utm>
 </security>
</configuration>
```

Description Web-filtering profile

Contents <http-profile>—Web-filtering HTTP profile

<websense-redirect> configuration/security/utm/feature-profile/web-filtering

Usage

```
<configuration>
 <security>
  <utm>
   <feature-profile>
    <web-filtering>
     <websense-redirect>
      <profile>...</profile>
     </websense-redirect>
    </web-filtering>
   </feature-profile>
  </utm>
 </security>
</configuration>
```

Description Configure web-filtering websense redirect engine

Contents <profile>—Websense redirect profile

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<wednesday> configuration/schedulers/scheduler

Usage

```
<configuration>
 <schedulers>
  <scheduler>
   <wednesday>
    <start-time>...</start-time>
    <exclude/>
    <all-day/>
   </wednesday>
  </scheduler>
 </schedulers>
</configuration>
```

Description Every Wednesday

Contents <start-time>—Time range for day

<exclude>—Exclude day from week

<all-day>—Include complete day

<weight> configuration/security/forwarding-process/application-services/maximize-idp-sessions

Usage

```
<configuration>
 <security>
  <forwarding-process>
   <application-services>
    <maximize-idp-sessions>
     <weight>
      <equal/>
      <idp>...</idp>
      <firewall/>
     </weight>
    </maximize-idp-sessions>
   </application-services>
  </forwarding-process>
 </security>
</configuration>
```

Description Adjust the weighting of the resources available for idp

Contents <equal>—Equal resources to IDP and firewall

<idp>—IDP has more resources than firewall

<firewall>—Firewall has more resources than IDP

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<west-interface> configuration/protocols/protection-group/ethernet-ring

Usage

```
<configuration>
 <protocols>
  <protection-group>
   <ethernet-ring>
    <west-interface>
     <control-channel>...</control-channel> <!-- mandatory -->
     <ring-protection-link-end/>
     <interface-none/>
    </west-interface>
   </ethernet-ring>
  </protection-group>
 </protocols>
</configuration>
```

Description West interface configuration

Contents <control-channel>—Contro channel of ring port

<ring-protection-link-end>—Port is connecting to ring protection link

<interface-none>—Port is not used

<white-list> configuration/security/screen/ids-option/tcp/syn-flood

Usage

```
<configuration>
 <security>
  <screen>
   <ids-option>
    <tcp>
     <syn-flood>
      <white-list>
       <name>name</name> <!-- identifier -->
       <source-address>...</source-address>
       <destination-address>...</destination-address>
      </white-list>
     </syn-flood>
    </tcp>
   </ids-option>
  </screen>
 </security>
</configuration>
```

Description Set of IP addresses that will not trigger a screen

Contents <name>—White-list name

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<source-address>—Source address

<destination-address>—Destination address

<wildcard-address> configuration/security/address-book/address

Usage

```
<configuration>
 <security>
  <address-book>
   <address>
    <wildcard-address>
     <wildcard-prefix-mask>wildcard-prefix-mask</wildcard-prefix-mask> <!--
identifier -->
    </wildcard-address>
   </address>
  </address-book>
 </security>
</configuration>
```

Description Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

Contents <wildcard-prefix-mask>—Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

<wildcard-address> configuration/security/zones/security-zone/address-book/address

Usage

```
<configuration>
 <security>
  <zones>
   <security-zone>
    <address-book>
     <address>
      <wildcard-address>
       <wildcard-prefix-mask>wildcard-prefix-mask</wildcard-prefix-mask> <!--
identifier -->
      </wildcard-address>
     </address>
    </address-book>
   </security-zone>
  </zones>
 </security>
</configuration>
```

Description Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

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Contents <wildcard-prefix-mask>—Numeric IPv4 wildcard address with in the form of a.d.d.r/netmask

<wlan> configuration

Usage

```
<configuration>
 <wlan>
  <admin-authentication>...</admin-authentication>
  <access-point>...</access-point>
  <syslog-options>...</syslog-options>
 </wlan>
</configuration>
```

Description Wireless access point configuration

Contents <admin-authentication>—Authentication information for WLAN access points

<access-point>—WLAN access point configuration

<syslog-options>—Configure Access Point Logging options

<wpa-enterprise> configuration/wlan/access-point/radio/virtual-access-point/security

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-enterprise>
       <wpa-version>...</wpa-version>
       <cipher-suites>...</cipher-suites>
       <pre-authenticate/>
       <radius-server>radius-server</radius-server>
       <radius-key>radius-key</radius-key>

<broadcast-key-refresh-rate>broadcast-key-refresh-rate</broadcast-key-refresh-rate>

       <session-key-refresh-rate>session-key-refresh-rate</session-key-refresh-rate>

      </wpa-enterprise>
     </security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

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Description Set WAP enterprise settings

Contents <wpa-version>—Set WPA version

<cipher-suites>—Select the WPA cipher algorithm

<pre-authenticate>—Enable pre-authentication

<radius-server>—Set RADIUS server IP address

<radius-key>—Secret RADIUS key

<broadcast-key-refresh-rate>—Broadcast key refresh rate

<session-key-refresh-rate>—Session key refresh rate

<wpa-personal> configuration/wlan/access-point/radio/virtual-access-point/security

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-personal>
       <wpa-version>...</wpa-version>
       <cipher-suites>...</cipher-suites>
       <key>key</key>

<broadcast-key-refresh-rate>broadcast-key-refresh-rate</broadcast-key-refresh-rate>

      </wpa-personal>
     </security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Set WPA personal settings

Contents <wpa-version>—Set WPA version

<cipher-suites>—Select the WPA cipher algorithm

<key>—WPA shared key

<broadcast-key-refresh-rate>—Broadcast key refresh rate

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<wpa-version> configuration/wlan/access-point/radio/virtual-access-point/security/wpa-personal

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-personal>
       <wpa-version>
        <v1/>
        <v2/>
        <both/>
       </wpa-version>
      </wpa-personal>
     </security>
    </virtual-access-point>
   </radio>
  </access-point>
 </wlan>
</configuration>
```

Description Set WPA version

Contents <v1>—WPA Version 1

<v2>—WPA Version 2

<both>—Use both 1 and 2 versions

<wpa-version> configuration/wlan/access-point/radio/virtual-access-point/security/wpa-enterprise

Usage

```
<configuration>
 <wlan>
  <access-point>
   <radio>
    <virtual-access-point>
     <security>
      <wpa-enterprise>
       <wpa-version>
        <v1/>
        <v2/>
        <both/>
       </wpa-version>
      </wpa-enterprise>
     </security>
    </virtual-access-point>
```

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```
        </radio>
      </access-point>
    </wlan>
  </configuration>
```

Description Set WPA version

Contents <v1>—WPA Version 1

<v2>—WPA Version 2

<both>—Use both 1 and 2 versions

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CHAPTER 50

Tag Elements Beginning with X

This chapter lists the configuration tag elements that have names beginning with the letter *x*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<xauth> configuration/security/ike/gateway

Usage

```
<configuration>
 <security>
  <ike>
   <gateway>
    <xauth>
     <access-profile>access-profile</access-profile> <!-- mandatory -->
    </xauth>
   </gateway>
  </ike>
 </security>
</configuration>
```

Description Use extended authentication

Contents <access-profile>—Access profile that contains authentication information

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CHAPTER 51

Tag Elements Beginning with Z

This chapter lists the configuration tag elements that have names beginning with the letter *z*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the Junos XML Management Protocol Guide and NETCONF XML Management Protocol Guide.

NOTE: Every tag element in this chapter optionally accepts the <apply-groups> or <apply-groups-except> tag element and the <apply-macro> tag element as children (the only exceptions are <apply-groups>, <apply-groups-except> and <apply-macro> themselves). For brevity, the reference entries do not list these tag elements as children.

<zone> configuration/security/address-book/attach

Usage

```
<configuration>
 <security>
  <address-book>
   <attach>
    <zone>
     <zone-name>zone-name</zone-name> <!-- identifier -->
    </zone>
   </attach>
  </address-book>
 </security>
</configuration>
```

Description Define a zone to be attached

Contents <zone-name>—Security zone name

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<zone> configuration/security/nat/source/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <from>
      <zone>
       <zone-name>zone-name</zone-name> <!-- identifier -->
      </zone>
     </from>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Source zone list

Contents <zone-name>—Zone name

<zone> configuration/security/nat/source/rule-set/to

Usage

```
<configuration>
 <security>
  <nat>
   <source>
    <rule-set>
     <to>
      <zone>
       <zone-name>zone-name</zone-name> <!-- identifier -->
      </zone>
     </to>
    </rule-set>
   </source>
  </nat>
 </security>
</configuration>
```

Description Destination zone list

Contents <zone-name>—Zone name

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<zone> configuration/security/nat/destination/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <destination>
    <rule-set>
     <from>
      <zone>
       <zone-name>zone-name</zone-name> <!-- identifier -->
      </zone>
     </from>
    </rule-set>
   </destination>
  </nat>
 </security>
</configuration>
```

Description Source zone list

Contents <zone-name>—Zone name

<zone> configuration/security/nat/static/rule-set/from

Usage

```
<configuration>
 <security>
  <nat>
   <static>
    <rule-set>
     <from>
      <zone>
       <zone-name>zone-name</zone-name> <!-- identifier -->
      </zone>
     </from>
    </rule-set>
   </static>
  </nat>
 </security>
</configuration>
```

Description Source zone list

Contents <zone-name>—Zone name

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<zones> configuration/security

Usage

```
<configuration>
 <security>
  <zones>
   <functional-zone>...</functional-zone>
   <security-zone>...</security-zone>
  </zones>
 </security>
</configuration>
```

Description Zone configuration

Contents <functional-zone>—Functional zone

<security-zone>—Security zones

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PART 6

Junos XML API Operational Reference for Security Devices

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CHAPTER 52

Mapping Between Operational Tag Elements, Perl Methods, and CLI Commands for SRX Series

Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series)

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear arp inspection statistics	<clear-arp-inspection-statistics>	<none>
clear bridge rewrite statistics	<clear-retag-statistics>	<clear-vlan-retag-statistics-information>
clear chassis cluster control-plane statistics	<clear-chassis-cluster-control-plane-statistics>	<none>
clear chassis cluster control-plane statistics	<clear-chassis-cluster-control-plane-statistics>	<none>
clear chassis cluster data-plane statistics	<clear-chassis-cluster-data-plane-statistics>	<none>
clear chassis cluster data-plane statistics	<clear-chassis-cluster-data-plane-statistics>	<none>
clear chassis cluster ethernet-switching statistics	<clear-chassis-cluster-switch-fabric-probe-statistics>	<none>
clear chassis cluster ethernet-switching statistics	<clear-chassis-cluster-switch-fabric-probe-statistics>	<none>
clear chassis cluster failover-count	<clear-chassis-cluster-failover-count>	<none>
clear chassis cluster failover-count	<clear-chassis-cluster-failover-count>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear chassis cluster information	<clear-chassis-cluster-information>	<none>
clear chassis cluster information	<clear-chassis-cluster-information>	<none>
clear chassis cluster ip-monitoring failure-count	<clear-chassis-cluster-ip-monitoring-failure-count>	<none>
clear chassis cluster ip-monitoring failure-count	<clear-chassis-cluster-ip-monitoring-failure-count>	<none>
clear chassis cluster ip-monitoring failure-count ip-address	<clear-chassis-cluster-ip-monitoring-failure-count-ip-address>	<none>
clear chassis cluster ip-monitoring failure-count ip-address	<clear-chassis-cluster-ip-monitoring-failure-count-ip-address>	<none>
clear chassis cluster statistics	<clear-chassis-cluster-statistics>	<none>
clear chassis cluster statistics	<clear-chassis-cluster-statistics>	<none>
clear dhcp snooping binding	<clear-dhcp-snooping>	<none>
clear dhcp snooping statistics	<clear-dhcp-snooping-statistics>	<none>
clear dot1x firewall	<clear-dot1x-firewall>	<dot1x-firewall>
clear dot1x firewall interface	<clear-dot1x-firewall-interface>	<dot1x-firewall-interface>
clear dot1x interface	<clear-dot1x-interface-session>	<dot1x-interface-session>
clear dot1x mac-address	<clear-dot1x-mac-session>	<dot1x-mac-session>
clear dot1x statistics	<clear-dot1x-statistics>	<dot1x-statistics>
clear dot1x statistics interface	<clear-dot1x-statistics-interface>	<dot1x-statistics-interface>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear edge-virtual-bridging	<clear-edge-virtual-bridging>	<none>
clear edge-virtual-bridging edge-control-protocol statistics	<clear-edge-virtual-bridging-ecp-statistics>	<none>
clear edge-virtual-bridging firewall	<clear-edge-virtual-bridging-firewall-information>	<none>
clear edge-virtual-bridging firewall interface	<clear-edge-virtual-bridging-firewall-interface>	<none>
clear edge-virtual-bridging vsi-profiles	<clear-edge-virtual-bridging-vsi-profiles>	<none>
clear edge-virtual-bridging vsi-profiles interface	<clear-edge-virtual-bridging-vsi-profiles-interface>	<none>
clear ethernet-switching bpdu-error	<clear-ethernet-switching-bpdu-error>	<none>
clear ethernet-switching layer2-protocol-tunneling error	<clear-l2pt-error>	<none>
clear ethernet-switching layer2-protocol-tunneling statistics	<clear-l2pt-statistics>	<none>
clear ethernet-switching layer2-protocol-tunneling statistics interface	<clear-l2pt-interface-statistics>	<none>
clear ethernet-switching layer2-protocol-tunneling statistics vlan	<clear-l2pt-vlan-statistics>	<none>
clear ethernet-switching mac-learning-log	<clear-ethernet-switching-mac-learning-log>	<none>
clear ethernet-switching port-error	<clear-ethernet-switching-port-error>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear ethernet-switching statistics aging	<clear-ethernet-switching-statistics-aging>	<none>
clear ethernet-switching statistics mac-learning	<clear-ethernet-switching-mac-learning-statistics>	<none>
clear ethernet-switching table	<clear-ethernet-switching-table>	<none>
clear ethernet-switching table management-vlan	<clear-ethernet-switching-table-management-vlan>	<none>
clear ethernet-switching table persistent-mac	<clear-ethernet-switching-table-persistent-mac>	<none>
clear fip snooping enode	<clear-fip-snooping-enode>	<none>
clear fip snooping statistics	<clear-fip-snooping-statistics>	<none>
clear fip snooping vlan	<clear-fip-snooping-vlan>	<none>
clear gvrp statistics	<clear-gvrp-statistics>	<none>
clear igmp-snooping	<clear-igmp-snooping>	<none>
clear igmp-snooping membership	<clear-igmp-snooping-membership>	<none>
clear igmp-snooping statistics	<clear-igmp-snooping-statistics>	<none>
clear isdn q921 statistics	<clear-isdn-q921-statistics>	<none>
clear isdn q931 statistics	<clear-isdn-q931-statistics>	<none>
clear lldp neighbors	<clear-lldp-neighbors>	<none>
clear lldp neighbors interface	<clear-lldp-interface-neighbors>	<none>
clear lldp statistics	<clear-lldp-statistics>	<none>
clear lldp statistics interface	<clear-lldp-interface-statistics>	<none>
clear mld-snooping	<clear-mld-snooping>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear mld-snooping membership	<clear-mld-snooping-membership>	<none>
clear mld-snooping statistics	<clear-mld-snooping-statistics>	<none>
clear multicast route counter	<clear-multicast-route-counter>	<none>
clear mvrp statistics	<clear-mvrp-statistics>	<mvrp-statistics>
clear mvrp statistics interface	<clear-mvrp-statistics-interface>	<mvrp-statistics-interface>
clear protection-group	<clear-protection-group-information>	<none>
clear protection-group ethernet-ring	<clear-ethernet-ring-information>	<none>
clear protection-group ethernet-ring statistics	<clear-ethernet-ring-statistics>	<none>
clear security alg h323 counters	<clear-alg-h323-counters>	<none>
clear security alg ike-esp-nat	<clear-alg-ike-esp-state>	<alg-ike-esp-clear>
clear security alg mgcp calls	<clear-alg-mgcp-calls-information>	<none>
clear security alg mgcp counters	<clear-alg-mgcp-counter-information>	<none>
clear security alg sccp calls	<clear-alg-sccp-calls-information>	<none>
clear security alg sccp counters	<clear-alg-sccp-counters>	<none>
clear security alg sip calls	<clear-alg-sip-calls>	<none>
clear security alg sip counters	<clear-alg-sip-counters>	<none>
clear security application-firewall rule-set statistics	<clear-application-firewall-statistics>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear security application-tracking counters	<clear-avt-counters>	<none>
clear security datapath-debug counters	<clear-eedebug-counters>	<clear-eedebug-counters-result>
clear security dynamic-policies statistics	<clear-security-dynamic-policies-statistics>	<none>
clear security dynamic-vpn all	<clear-all-dvpn-user-connections>	<clear-all-dvpn-user-connection-information>
clear security dynamic-vpn user	<clear-dvpn-user-connection-by-username>	<clear-dvpn-user-connection-information>
clear security firewall-authentication history	<clear-security-firewall-authentication-history>	<none>
clear security firewall-authentication users	<clear-security-firewall-authentication-users>	<none>
clear security flow ip-action	<clear-security-flow-ip-action>	<none>
clear security flow ip-action all	<clear-flow-ipaction-all>	<clear-flow-ipaction-information>
clear security flow session	<clear-flow-session>	<clear-flow-session-information>
clear security flow session all	<clear-flow-session-all>	<clear-flow-session-information>
clear security flow session session-identifier	<clear-flow-session-by-session-identifier>	<clear-flow-session-information>
clear security flow statistics	<clear-security-flow-statistics>	<none>
clear security gprs gtp tunnel	<clear-security-gprs-gtp-tunnel>	<gtp-clear-tunnel>
clear security group-vpn member ike security-associations	<clear-group-vpn-ike-security-associations>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear security group-vpn member ipsec security-associations	<clear-gvpn-ipsec-security-association>	<none>
clear security group-vpn member ipsec statistics	<clear-gvpn-ipsec-statistics>	<none>
clear security group-vpn member kek security-associations	<clear-group-vpn-kek-security-associations>	<none>
clear security group-vpn server	<clear-security-group-vpn-server>	<none>
clear security ike respond-bad-spi-count	<clear-ike-respond-bad-spi-count>	<none>
clear security ike security-associations	<clear-ike-security-association>	<none>
clear security ipsec security-associations	<clear-ipsec-security-association>	<none>
clear security ipsec statistics	<clear-ipsec-statistics>	<none>
clear security log file	<clear-security-log-hpl-information>	<clear>
clear security nat incoming-table	<clear-incoming-table-information>	<incoming-table-information>
clear security nat incoming-table	<clear-incoming-table-information>	<incoming-table-information>
clear security nat source persistent-nat-table all	<clear-persist-nat-all>	<persist-nat-all>
clear security nat source persistent-nat-table all	<clear-persist-nat-all>	<persist-nat-all>
clear security nat source persistent-nat-table interface	<clear-persist-nat-interface-information>	<persist-nat-interface-information>
clear security nat source persistent-nat-table interface	<clear-persist-nat-interface-information>	<persist-nat-interface-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear security nat source persistent-nat-table internal-ip	<clear-persist-nat-ip-port-information>	<persist-nat-ip-port-information>
clear security nat source persistent-nat-table internal-ip	<clear-persist-nat-ip-port-information>	<persist-nat-ip-port-information>
clear security nat source persistent-nat-table pool	<clear-persist-nat-pool-information>	<persist-nat-pool-information>
clear security nat source persistent-nat-table pool	<clear-persist-nat-pool-information>	<persist-nat-pool-information>
clear security nat statistics destination pool	<clear-destination-nat-pool-information>	<destination-nat-pool-information>
clear security nat statistics destination pool	<clear-destination-nat-pool-information>	<destination-nat-pool-information>
clear security nat statistics destination rule	<clear-destination-nat-rule-sets-information>	<Clear_destination-nat-rule-sets-information>
clear security nat statistics destination rule	<clear-destination-nat-rule-sets-information>	<Clear_destination-nat-rule-sets-information>
clear security nat statistics source pool	<clear-source-nat-pool-information>	<source-nat-pool-information>
clear security nat statistics source pool	<clear-source-nat-pool-information>	<source-nat-pool-information>
clear security nat statistics source rule	<clear-source-nat-rule-sets-information>	<Clear_source-nat-rule-sets-information>
clear security nat statistics source rule	<clear-source-nat-rule-sets-information>	<Clear_source-nat-rule-sets-information>
clear security nat statistics static rule	<clear-static-nat-rule-sets-information>	<Clear_static-nat-rule-sets-information>
clear security nat statistics static rule	<clear-static-nat-rule-sets-information>	<Clear_static-nat-rule-sets-information>
clear security policies hit-count	<clear-security-policies-hit-count>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
clear security policies statistics	<clear-security-policies-statistics>	<none>
clear security screen statistics	<clear-screen-statistics>	<clear-ids-statistics-information>
clear security user-identification local-authentication-table	<clear-userfw-local-auth-table>	<none>
clear security utm anti-spam statistics	<clear-anti-spam-clear>	<none>
clear security utm anti-virus statistics	<clear-anti-virus>	<none>
clear security utm content-filtering statistics	<clear-content-filter>	<none>
clear security utm web-filtering statistics	<clear-web-filter-clear>	<none>
clear services ssl proxy statistics	<clear-ssl-proxy-statistics>	<none>
clear spanning-tree statistics interface	<clear-stp-statistics-interface>	<none>
clear system services dhcp binding	<clear-dhcp-binding-information>	<none>
clear system services dhcp conflict	<clear-dhcp-conflict-information>	<none>
clear system services dhcp statistics	<clear-dhcp-statistics-information>	<none>
clear tgm fpc	<clear-tgm-media-gateway-controller>	<none>
clear wlan access-point neighbors	<clear-wlan-access-points-neighbors>	<none>
load dhcp-snooping	<load-dhcp-snooping>	<none>
request chassis cluster failover	<request-chassis-cluster-failover>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
request chassis cluster failover	<request-chassis-cluster-failover>	<none>
request chassis cluster failover reset	<request-chassis-cluster-failover-reset>	<none>
request chassis cluster failover reset	<request-chassis-cluster-failover-reset>	<none>
request chassis cluster in-service-upgrade	<request-chassis-cluster-in-service-upgrade>	<none>
request chassis cluster in-service-upgrade	<request-chassis-cluster-in-service-upgrade>	<none>
request edge-virtual-bridging firewall-refresh	<refresh-edge-virtual-bridging-firewall>	<none>
request edge-virtual-bridging firewall-refresh interface	<refresh-edge-virtual-bridging-firewall-interface>	<none>
request modem wireless activate	<activate-wireless-modem>	<none>
request modem wireless activate iota	<request-modem-wireless-activate-iota>	<none>
request modem wireless activate manual	<request-modem-wireless-activate-manual>	<none>
request modem wireless activate otasp	<request-modem-wireless-activate-otasp>	<none>
request modem wireless gsm change-pin	<request-gsm-change-pin>	<none>
request modem wireless gsm create-profile	<request-gsm-create-profile>	<none>
request modem wireless gsm delete-profile	<request-gsm-delete-profile>	<none>
request modem wireless gsm sim-lock	<request-gsm-sim-lock>	<none>
request modem wireless gsm sim-unblock	<request-gsm-sim-unblock>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
request modem wireless gsm sim-unlock	<request-gsm-sim-unlock>	<none>
request multicast route counter	<request-multicast-route-counter>	<none>
request security datapath-debug capture start	<request-eedebug-capture-start>	<request-eedebug-capture-start-result>
request security datapath-debug capture stop	<request-eedebug-capture-stop>	<request-eedebug-capture-stop-result>
request security user-identification local-authentication-table add	<request-userfw-local-auth-table-add>	<userfw-local-auth-table>
request security user-identification local-authentication-table delete ip-address	<request-userfw-local-auth-table-delete-ip>	<none>
request security user-identification local-authentication-table delete user	<request-userfw-local-auth-table-delete-user>	<none>
request security utm anti-virus juniper-express-engine	<request-anti-virus-request-update-express>	<anti-virus-request-update>
request security utm anti-virus kaspersky-lab-engine	<request-anti-virus-request-update-kaspersky>	<anti-virus-request-update>
request security utm anti-virus sophos-engine	<request-anti-virus-update-sophos-patterns>	<anti-virus-request-update>
request system autorecovery	<request-system-autorecovery>	<autorecovery>
request system autorecovery state clear	<request-system-autorecovery-state-clear>	<autorecovery>
request system autorecovery state recover	<request-system-autorecovery-state-recover>	<autorecovery>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
request system autorecovery state save	<request-system-autorecovery-state-save>	<autorecovery>
request system download abort	<request-system-download-abort>	<download-information>
request system download clear	<request-system-download-clear>	<download-information>
request system download pause	<request-system-download-pause>	<download-information>
request system download resume	<request-system-download-resume>	<download-information>
request system download start	<request-system-download-start>	<download-information>
request system services dhcp release	<release-dhcp-client>	<none>
request system services dhcp renew	<renew-dhcp-client>	<none>
request tgm login fpc	<request-tgm-login-fpc>	<none>
request wan-acceleration login fpc	<request-wan-acceleration-login-fpc>	<none>
request wlan access-point firmware switch-image	<request-wlan-access-point-firmware-switch>	<none>
request wlan access-point firmware upgrade	<request-wlan-access-point-firmware-upgrade>	<none>
request wlan access-point packet-capture start	<request-wlan-access-point-packet-capture-start>	<wlan-access-point-packet-capture-start>
request wlan access-point packet-capture stop	<request-wlan-access-point-packet-capture-stop>	<wlan-access-point-packet-capture-stop>
request wlan access-point restart	<request-wlan-access-point-restart>	<none>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
save dhcp-snooping	<save-dhcp-snooping>	<none>
set chassis cluster	<set-chassis-cluster>	<none>
set chassis cluster	<set-chassis-cluster>	<none>
set chassis cluster cluster-id	<set-chassis-cluster-enable>	<none>
set chassis cluster cluster-id	<set-chassis-cluster-enable>	<none>
set chassis cluster disable	<set-chassis-cluster-disable>	<none>
set chassis cluster disable	<set-chassis-cluster-disable>	<none>
set tgm fpc	<set-tgm-media-gateway-controller>	<none>
show analyzer	<get-analyzer-information>	<analyzer-information>
show arp inspection statistics	<get-arp-inspection-statistics>	<arp-inspection>
show authentication-whitelist	<get-ethernet-switching-authentication-whitelist-mac>	<ethernet-switching-authentication-whitelist-mac>
show authentication-whitelist authentication-bypassed-users	<get-authentication-whitelist-mac-bypassed-users>	<dot1x-authentication-whitelist-mac-bypassed-users>
show authentication-whitelist interface	<get-ethernet-switching-interface-mac-addresses>	<ethernet-switching-interface-mac-addresses>
show bridge rewrite statistics	<get-retag-statistics>	<show-retag-statistics-information>
show chassis cluster control-plane statistics	<get-chassis-cluster-control-plane-statistics>	<chassis-cluster-statistics>
show chassis cluster control-plane statistics	<get-chassis-cluster-control-plane-statistics>	<chassis-cluster-statistics>
show chassis cluster data-plane interfaces	<get-chassis-cluster-data-plane-interfaces>	<chassis-cluster-dataplane-interfaces>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show chassis cluster data-plane interfaces	<get-chassis-cluster-data-plane-interfaces>	<chassis-cluster-dataplane-interfaces>
show chassis cluster data-plane statistics	<get-chassis-cluster-data-plane-statistics>	<services-synchronized>
show chassis cluster data-plane statistics	<get-chassis-cluster-data-plane-statistics>	<services-synchronized>
show chassis cluster ethernet-switching interfaces	<get-chassis-cluster-switch-fabric-link-interfaces>	<chassis-cluster-switch-switching-interfaces>
show chassis cluster ethernet-switching interfaces	<get-chassis-cluster-switch-fabric-link-interfaces>	<chassis-cluster-switch-switching-interfaces>
show chassis cluster ethernet-switching statistics	<get-chassis-cluster-switch-fabric-probe-statistics>	<chassis-cluster-switch-switching-statistics>
show chassis cluster ethernet-switching statistics	<get-chassis-cluster-switch-fabric-probe-statistics>	<chassis-cluster-switch-switching-statistics>
show chassis cluster ethernet-switching status	<get-chassis-cluster-ethernet-switching-status>	<chassis-cluster-ethernet-switching-status>
show chassis cluster ethernet-switching status	<get-chassis-cluster-ethernet-switching-status>	<chassis-cluster-ethernet-switching-status>
show chassis cluster interfaces	<get-chassis-cluster-interfaces>	<chassis-cluster-interface-statistics>
show chassis cluster interfaces	<get-chassis-cluster-interfaces>	<chassis-cluster-interface-statistics>
show chassis cluster ip-monitoring status	<get-chassis-cluster-ip-monitoring-status>	<chassis-cluster-ip-monitoring>
show chassis cluster ip-monitoring status	<get-chassis-cluster-ip-monitoring-status>	<chassis-cluster-ip-monitoring>
show chassis cluster ip-monitoring status redundancy-group	<get-chassis-cluster-ip-monitoring-status-redundancy-group>	<chassis-cluster-ip-monitoring>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show chassis cluster ip-monitoring status redundancy-group	<get-chassis-cluster-ip-monitoring-status-redundancy-group>	<chassis-cluster-ip-monitoring>
show chassis cluster statistics	<get-chassis-cluster-statistics>	<chassis-cluster-statistics>
show chassis cluster statistics	<get-chassis-cluster-statistics>	<chassis-cluster-statistics>
show chassis cluster status	<get-chassis-cluster-status>	<chassis-cluster-status>
show chassis cluster status	<get-chassis-cluster-status>	<chassis-cluster-status>
show dcbx	<get-dcbx-information>	<dcbx-information>
show dcbx neighbors	<get-dcbx-neighbor-information>	<dcbx-neighbor-information>
show dcbx neighbors interface	<get-dcbx-neighbor-interface-information>	<dcbx-neighbor-interface-information>
show dcbx neighbors terse	<get-dcbx-neighbor-information-terse>	<dcbx-neighbor-information-terse>
show dhcp snooping binding	<get-dhcp-snoop-binding>	<dhcp-snooping>
show dhcp snooping statistics	<get-dhcp-snooping-statistics>	<dhcp-snooping>
show dialer defaults	<get-dialer-defaults-information>	<dialer-defaults-information>
show dialer interfaces	<get-dialer-interface-information>	<dialer-interface-information>
show dialer pools	<get-dialer-pool-information>	<dialer-pool-information>
show dot1x authentication-bypassed-users	<get-static-mac-bypassed-users>	<dot1x-static-mac-bypassed-users>
show dot1x authentication-failed-users	<get-dot1x-authentication-failed-users>	<dot1x-authentication-failed-users>
show dot1x firewall	<get-dot1x-firewall-interface>	<dot1x-firewall-interface>
show dot1x interface	<get-dot1x-interface-information>	<dot1x-interface-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show dot1x static-mac-address	<get-dot1x-static-mac-addresess>	<dot1x-static-mac-addresses>
show dot1x static-mac-address interface	<get-dot1x-interface-mac-addresses>	<dot1x-interface-mac-addresses>
show dot1x statistics	<get-dot1x-statistics>	<dot1x-statistics>
show dot1x statistics interface	<get-dot1x-statistics-interface>	<dot1x-statistics-interface>
show edge-virtual-bridging	<get-edge-virtual-bridging-information>	<edge-virtual-bridging-information>
show edge-virtual-bridging edge-control-protocol statistics	<get-edge-virtual-bridging-ecp-statistics>	<edge-control-protocol-statistics>
show edge-virtual-bridging edge-control-protocol statistics interface	<get-edge-virtual-bridging-ecp-interface-statistics>	<edge-control-protocol-interface-statistics>
show edge-virtual-bridging firewall	<get-edge-virtual-bridging-firewall-information>	<edge-virtual-bridging-firewall-information>
show edge-virtual-bridging firewall interface	<get-edge-virtual-bridging-interface-firewall-information>	<edge-virtual-bridging-firewall-information>
show edge-virtual-bridging interface	<get-edge-virtual-bridging-interface-information>	<edge-virtual-bridging-interface-information>
show edge-virtual-bridging vsi-profiles	<get-edge-virtual-bridging-vsi-profiles>	<NONE>
show edge-virtual-bridging vsi-profiles interface	<get-edge-virtual-bridging-vsi-interface-profiles>	<edge-virtual-bridging-interface-vsi-profiles-information>
show ethernet-switching interfaces	<get-ethernet-switching-interface-information>	<switching-interface-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show ethernet-switching layer2-protocol-tunneling interface	<get-l2pt-interface-information>	<layer2-protocol-tunneling-interface-information>
show ethernet-switching layer2-protocol-tunneling statistics	<get-l2pt-statistics>	<layer2-protocol-tunneling-statistics>
show ethernet-switching layer2-protocol-tunneling statistics interface	<get-l2pt-interface-statistics>	<layer2-protocol-tunneling-statistics>
show ethernet-switching layer2-protocol-tunneling statistics vlan	<get-l2pt-vlan-statistics>	<layer2-protocol-tunneling-statistics>
show ethernet-switching layer2-protocol-tunneling vlan	<get-l2pt-vlan-information>	<layer2-protocol-tunneling-vlan-information>
show ethernet-switching mac-learning-log	<get-ethernet-switching-log-information>	<ethernet-switching-mac-log-information>
show ethernet-switching mac-notification	<get-ethernet-switching-mac-notification-information>	<ethernet-switching-mac-notification-information>
show ethernet-switching next-hops	<get-ethernet-switching-next-hop-information>	<ethernet-switching-next-hop-information>
show ethernet-switching statistics aging	<get-ethernet-switching-aging-statistics>	<ethernet-switching-statistics>
show ethernet-switching statistics mac-learning	<get-ethernet-switching-mac-learning-statistics>	<ethernet-switching-statistics>
show ethernet-switching table	<get-ethernet-switching-table-information>	<ethernet-switching-table-information>
show ethernet-switching table interface	<get-interface-ethernet-switching-table>	<ethernet-switching-table-information>
show ethernet-switching table management-vlan	<get-management-vlan-ethernet-switching-table>	<ethernet-switching-table-information>
show ethernet-switching table persistent-mac	<get-ethernet-switching-persistent-information>	<ethernet-switching-persistent-information>
show ethernet-switching table vlan	<get-vlan-ethernet-switching-table>	<ethernet-switching-table-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show fip snooping	<get-fip-snooping>	<fip-snooping-information>
show fip snooping enode	<get-fip-snooping-enode>	<fip-snooping-enode-information>
show fip snooping fcf	<get-fip-snooping-fcf>	<fip-snooping-fcf-information>
show fip snooping statistics	<get-fip-snooping-statistics>	<fip-snooping-statistics>
show fip snooping vlan	<get-fip-snooping-vlan>	<fip-snooping-information>
show gvrp	<get-gvrp-information>	<gvrp-information>
show gvrp statistics	<get-gvrp-statistics>	<gvrp-statistics>
show gvrp timers	<get-gvrp-timers>	<gvrp-timers>
show igmp-snooping flows	<get-igmp-snooping-flow-information>	<igmp-snooping-flow-information>
show igmp-snooping membership	<get-igmp-snooping-membership-information>	<igmp-snooping-membership-information>
show igmp-snooping route	<get-igmp-snooping-routing-information>	<igmp-snooping-routing-information>
show igmp-snooping statistics	<get-igmp-snooping-statistics-information>	<igmp-snooping-statistics-information>
show igmp-snooping task	<get-igmp-snooping-task-information>	<task-summary-information>
show igmp-snooping task accounting	<get-igmp-snooping-task-accounting>	<task-accounting-information>
show igmp-snooping task io	<get-igmp-snooping-task-io>	<task-io-information>
show igmp-snooping task jobs	<get-igmp-snooping-task-jobs>	<task-jobs-information>
show igmp-snooping task memory	<get-igmp-snooping-task-memory>	<task-memory-information>
show igmp-snooping task statistics	<get-igmp-snooping-task-statistics>	<task-statistics-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show igmp-snooping task timers	<get-igmp-snooping-task-timers>	<task-timer-information>
show igmp-snooping vlans	<get-igmp-snooping-vlan-information>	<igmp-snooping-vlan-information>
show interfaces flow-statistics	<get-interface-flow-statistics>	<interface-information>
show ip-source-guard	<get-ip-source-guard-information>	<ip-source-guard>
show isdn calls	<get-isdn-calls>	<isdn-calls>
show isdn history	<get-isdn-call-history>	<isdn-call-history>
show isdn q921 statistics	<get-isdn-q921-statistics>	<q921-statistics>
show isdn q931 statistics	<get-isdn-q931-statistics>	<q931-statistics>
show isdn status	<get-isdn-status>	<isdn-status>
show llc2 redundancy	<get-llc2-redundancy>	<llc2-redundancy>
show llc2 redundancy interface statistics	<get-llc2-redundancy-interface-statistics>	<llc2-redundancy-interface-statistics>
show llc2 redundancy mac-translation	<get-llc2-redundancy-mac-translation-list>	<llc2-redundancy-mac-translation-list>
show llc2 redundancy track	<get-llc2-redundancy-track-information>	<llc2-redundancy-track-information>
show lldp	<get-lldp-information>	<lldp-information>
show lldp detail	<get-lldp-information-detail>	<lldp-information-detail>
show lldp local-information	<get-lldp-local-info>	<lldp-local-info>
show lldp neighbors	<get-lldp-neighbors-information>	<lldp-neighbors-information>
show lldp neighbors interface	<get-lldp-interface-neighbors-information>	<lldp-neighbors-information>
show lldp remote-global-statistics	<get-lldp-remote-global-statistics>	<lldp-remote-global-statistics>
show lldp statistics	<get-lldp-statistics-information>	<lldp-statistics-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show lldp statistics interface	<get-lldp-interface-statistics>	<lldp-stats>
show mld-snooping membership	<get-mld-snooping-membership-information>	<mld-snooping-membership-information>
show mld-snooping route	<get-mld-snooping-routing-information>	<mld-snooping-routing-information>
show mld-snooping statistics	<get-mld-snooping-statistics>	<mld-snooping-statistics>
show mld-snooping vlans	<get-mld-snooping-vlan-information>	<mld-snooping-vlan-information>
show modem wireless interface	<get-modem-wireless-interface>	<wwand-modem-wireless-interface>
show mvrp	<get-mvrp-information>	<mvrp-information>
show mvrp dynamic-vlan-memberships	<get-mvrp-dynamic-vlan-memberships>	<mvrp-dynamic-vlan-memberships>
show mvrp statistics	<get-mvrp-stats>	<mvrp-stats>
show mvrp statistics interface	<get-mvrp-stats-intf>	<mvrp-stats-intf>
show poe controller	<get-poe-controller-information>	<poe-controller-information>
show poe fpc	<get-poe-fpc-information>	<poe-fpc-information>
show poe interface	<get-poe-interface-information>	<interface-information>
show poe notification-control	<get-poe-notifications>	<poe-notification-information>
show poe telemetries interface	<get-telemetries-information>	<telemetries-information>
show protection-group ethernet-ring aps	<get-raps-pdu-information>	<erp-rpdu-information>
show protection-group ethernet-ring configuration	<get-ring-configuration>	<erp-pg-configuration>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show protection-group ethernet-ring data-channel	<get-ring-data-channel-information>	<erp-data-channel-information>
show protection-group ethernet-ring interface	<get-ring-interface-information>	<erp-interface-information>
show protection-group ethernet-ring node-state	<get-raps-state-machine-information>	<erp-raps-information>
show protection-group ethernet-ring statistics	<get-ring-tatistics>	<ethernet-ring-statistics>
show protection-group ethernet-ring statistics interface	<get-erp-statistics-interface-information>	<erp-statistics-interface-information>
show protection-group ethernet-ring vlan	<get-ring-vlan-information>	<erp-ifbd-information>
show redundant-trunk-group	<get-rtg-information>	<rtg-information>
show redundant-trunk-group group-name	<get-rtg-information-pergrp>	<rtg-information-pergrp>
show schedulers	<get-schedulers>	<schedulers>
show schedulers	<get-schedulers>	<schedulers>
show security alg h323 counters	<get-alg-h323-counters>	<alg-h323-counters>
show security alg ike-esp-nat	<show-alg-ike-esp-state>	<alg-ike-esp-show>
show security alg ike-esp-nat summary	<show-alg-ike-esp-summary>	<alg-ike-esp-show-summary>
show security alg mgcp calls	<get-alg-mgcp-call-information>	<alg-mgcp-call-information>
show security alg mgcp counters	<get-alg-mgcp-counter-information>	<alg-mgcp-counter-information>
show security alg mgcp endpoints	<get-alg-mgcp-endpoint-information>	<alg-mgcp-endpoint-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security alg msrpc object-id-map	<get-alg-msrpc-uuid2oid-table>	<alg-msrpc-uuid2oid-table>
show security alg sccp calls	<get-alg-sccp-calls>	<alg-sccp-calls>
show security alg sccp counters	<get-alg-sccp-counters>	<alg-sccp-counters>
show security alg sip calls	<get-alg-sip-call-information>	<alg-sip-call-information>
show security alg sip counters	<get-alg-sip-counter-information>	<alg-sip-counter-information>
show security alg sip rate	<get-alg-sip-rate-information>	<alg-sip-rate-information>
show security alg status	<get-alg-status>	<alg-status>
show security application-firewall rule-set	<get-appfw-rule-set>	<security-appfw-rule-set>
show security application-tracking counters	<get-avt-counters>	<avt-counters>
show security datapath-debug action-profile	<get-eedebug-action-profile>	<eedebug-all-action-profile>
show security datapath-debug capture	<show-eedebug-capture>	<eedebug-capture-output>
show security datapath-debug counters	<get-eedebug-counters>	<eedebug-all-counters>
show security datapath-debug events	<get-eedebug-events>	<eedebug-all-events>
show security dynamic-policies	<get-firewall-dynamic-policies>	<security-dynamic-policies>
show security dynamic-vpn client version	<get-client-version>	<dvpn-client-version>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security dynamic-vpn users	<get-user-connection>	<dvpn-users-information>
show security firewall-authentication history	<get-firewall-authentication-history>	<firewall-authentication-history>
show security firewall-authentication users	<get-firewall-authentication-users>	<firewall-authentication-users>
show security flow cp-session	<get-flow-cp-session>	<flow-cp-session>
show security flow gate	<get-flow-gate-information>	<flow-gate-information>
show security flow ip-action	<get-flow-ipaction-information>	<flow-ipaction-information>
show security flow ip-action all	<get-flow-ipaction-information-all>	<flow-ipaction-information>
show security flow session	<get-flow-session-information>	<flow-session-information>
show security flow session session-identifier	<get-flow-session-by-identifier>	<flow-session-information>
show security flow statistics	<get-flow-statistics-all>	<flow-statistics-all>
show security flow status	<get-flow-status-all>	<flow-status-all>
show security gprs gtp tunnels	<get-security-gprs-gtp-tunnels>	<gtp-show-tunnel>
show security group-vpn member ike security-associations	<get-gvpn-ike-security-associations-information>	<ike-security-associations-information>
show security group-vpn member ipsec security-associations	<get-gvpn-security-associations-information>	<security-associations-information>
show security group-vpn member ipsec statistics	<get-gvpn-ipsec-statistics-information>	<usp-ipsec-total-statistics-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security group-vpn member kek security-associations	<get-gvpn-kek-security-associations-information>	<ike-security-associations-information>
show security group-vpn server ike security-associations	<get-security-group-vpn-server-ike-security-associations-information>	<security-group-vpn-server-ike-security-associations-information>
show security group-vpn server ipsec security-associations	<get-security-group-vpn-server-security-information>	<security-group-vpn-server-security-information>
show security group-vpn server kek security-associations	<get-security-group-vpn-server-kek-sa>	<security-group-vpn-server-kek-sa>
show security group-vpn server registered-members	<get-security-group-vpn-server-registered-members>	<security-group-vpn-server-registered-members>
show security ike active-peer	<get-ike-active-peers-information>	<ike-active-peers-information>
show security ike pre-shared-key	<get-pre-shared-key>	<ike-show-pre-shared-key-information>
show security ike security-associations	<get-ike-security-associations-information>	<ike-security-associations-information>
show security ipsec next-hop-tunnels	<get-ipsec-next-hop-tunnel-information>	<usp-ipsec-next-hop-tunnel-information>
show security ipsec security-associations	<get-security-associations-information>	<security-associations-information>
show security ipsec statistics	<get-ipsec-statistics-information>	<usp-ipsec-total-statistics-information>
show security log file	<show-security-hpl-infile>	<show-hpl-infile>
show security log file last	<show-security-hpl-infile-last>	<show-hpl-infile>
show security match-policies	<match-firewall-policies>	<security-policy-match>
show security match-policies global	<match-global-policies>	<global-policy-match>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security monitoring fpc	<get-spu-monitoring-information>	<spu-monitoring-information>
show security monitoring performance session	<get-performance-session-information>	<performance-session-information>
show security monitoring performance spu	<get-performance-spu-information>	<performance-spu-information>
show security nat destination pool	<get-destination-nat-pool-information>	<destination-nat-pool-information>
show security nat destination rule	<get-destination-nat-rule-sets-information>	<destination-nat-rule-sets>
show security nat destination summary	<retrieve-destination-nat-summary-information>	<destination-nat-summary-information>
show security nat interface-nat-ports	<get-interface-nat-ports-information>	<interface-nat-ports-information>
show security nat source persistent-nat-table all	<get-persist-nat-all>	<persist-nat-all>
show security nat source persistent-nat-table interface	<get-persist-nat-interface-information>	<source-nat-summary>
show security nat source persistent-nat-table internal-ip	<retrieve-persist-nat-ip-port-information>	<persist-nat-ip-port-information>
show security nat source persistent-nat-table pool	<retrieve-persist-nat-pool-information>	<persist-nat-pool-information>
show security nat source persistent-nat-table summary	<get-persist-nat-sum>	<persist-nat-sum>
show security nat source pool	<retrieve-source-nat-pool-information>	<source-nat-pool-information>
show security nat source rule	<get-source-nat-rule-sets-information>	<source-nat-rule-sets-information>
show security nat source summary	<retrieve-source-nat-summary>	<source-nat-summary>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security nat static rule	<get-static-nat-rule-information>	<static-nat-rule-information>
show security policies	<get-firewall-policies>	<security-policies>
show security policies global	<get-global-firewall-policies>	<security-global-policies>
show security policies hit-count	<get-security-policies-hit-count>	<policy-hit-count>
show security resource-manager group active	<get-resmgr-group-active>	<resmgr-group-active>
show security resource-manager resource active	<get-resmgr-resource-active>	<resmgr-resource-active>
show security resource-manager settings	<get-resmgr-settings>	<resmgr-settings>
show security resource-manager summary	<get-resource-manager-summary>	<resource-manager-summary-information>
show security screen ids-option	<get-security-screen-ids-status>	<show-ids-status>
show security screen statistics	<get-ids-statistics>	<ids-statistics>
show security softwires	<show-ds-lite-softwire-sc-infomation>	<ds-lite-softwire-sc-information>
show security softwires softwire-name	<show-ds-lite-softwire-one-sc-information>	<ds-lite-softwire-one-sc-information>
show security user-identification local-authentication-table all	<get-userfw-local-auth-table-all>	<user-identification>
show security user-identification local-authentication-table ip-address	<get-userfw-local-auth-table-ip>	<user-identification>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security user-identification local-authentication-table role	<get-userfw-local-auth-table-role>	<user-identification>
show security user-identification local-authentication-table start	<get-userfw-local-auth-table-start>	<user-identification>
show security user-identification local-authentication-table user	<get-userfw-local-auth-table-user>	<user-identification>
show security user-identification role-provision	<get-userfw-role-info>	<userfw-role-info>
show security utm anti-spam	<show-anti-spam>	<NONE>
show security utm anti-spam statistics	<show-anti-spam-statistics>	<anti-spam-statistics>
show security utm anti-spam status	<show-anti-spam-status>	<anti-spam-status>
show security utm anti-virus	<show-anti-virus>	<NONE>
show security utm anti-virus statistics	<show-anti-virus-statistics>	<anti-virus-statistics>
show security utm anti-virus status	<show-anti-virus-status>	<anti-virus-status>
show security utm anti-virus status detail	<show-anti-virus-status-detail>	<anti-virus-status-detail>
show security utm content-filtering	<show-content-filtering>	<NONE>
show security utm content-filtering statistics	<show-content-filtering-statistics>	<show-content-filtering-statistics>
show security utm session	<show-utmd-session>	<utmd-session>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show security utm status	<show-utmd-status>	<utmd-status>
show security utm web-filtering	<show-web-filtering>	<NONE>
show security utm web-filtering statistics	<show-web-filtering-statistics>	<web-filtering-statistics>
show security utm web-filtering status	<show-web-filtering-status>	<web-filtering-status>
show security zones	<get-zones-information>	<zones-information>
show security zones	<get-zones-information>	<zones-information>
show services ip-monitoring status	<get-ip-monitoring-status>	<ip-monitoring>
show services ssl proxy statistics	<get-ssl-proxy-statistics>	<sslproxy-statistics-information>
show services unified-access-control authentication-table	<get-uac-auth-table>	<uac-auth-table>
show services unified-access-control policies	<get-uac-policies>	<uac-policies>
show services unified-access-control roles	<get-uac-role-entries>	<uac-role-entries>
show services unified-access-control status	<get-uac-status>	<uac-status>
show smtp servers	<get-smtp-configuration>	<smtp-configuration>
show smtp servers	<get-smtp-configuration>	<smtp-configuration>
show smtp statistics	<get-smtp-statistics>	<smtp-statistics>
show smtp statistics	<get-smtp-statistics>	<smtp-statistics>
show spanning-tree bridge	<get-stp-bridge-information>	<stp-bridge-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show spanning-tree interface	<get-stp-bridge-interface-information>	<stp-bridge-interface-information>
show spanning-tree mstp configuration	<get-mstp-bridge-configuration-information>	<mstp-bridge-configuration-information>
show spanning-tree statistics interface	<get-stp-statistics-interface-information>	<stp-statistics-interface-information>
show spanning-tree statistics vlan	<get-stp-vlan-interface-statistics>	<stp-vlan-interface-statistics>
show system autoinstallation status	<get-autoinstallation-status-information>	<autoinstallation-status-information>
show system autorecovery	<get-system-autorecovery>	<autorecovery-information>
show system autorecovery state	<get-system-autorecovery-state>	<autorecovery>
show system download	<get-download-information>	<download-information>
show system license status	<get-lsys-license-status>	<lsys-license-status>
show system security-profile address-book	<get-security-profile-address-book-information>	<security-profile-address-book-information>
show system security-profile address-book	<get-security-profile-address-book-information>	<security-profile-address-book-information>
show system security-profile all-resource	<get-security-profile-all-resource-information>	<security-profile-all-resource-information>
show system security-profile all-resource	<get-security-profile-all-resource-information>	<security-profile-all-resource-information>
show system security-profile appfw-rule	<get-security-profile-appfw-rule-information>	<security-profile-appfw-rule-information>
show system security-profile appfw-rule	<get-security-profile-appfw-rule-information>	<security-profile-appfw-rule-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show system security-profile appfw-rule-set	<get-security-profile-appfw-rule-set-information>	<security-profile-appfw-rule-set-information>
show system security-profile appfw-rule-set	<get-security-profile-appfw-rule-set-information>	<security-profile-appfw-rule-set-information>
show system security-profile auth-entry	<get-security-profile-auth-entry-information>	<security-profile-auth-entry-information>
show system security-profile auth-entry	<get-security-profile-auth-entry-information>	<security-profile-auth-entry-information>
show system security-profile cpu	<get-security-profile-cpu-information>	<security-profile-cpu-information>
show system security-profile cpu	<get-security-profile-cpu-information>	<security-profile-cpu-information>
show system security-profile dslite-softwire-initiator	<get-security-profile-dslite-softwire-initiator-information>	<security-profile-dslite-softwire-initiator-information>
show system security-profile dslite-softwire-initiator	<get-security-profile-dslite-softwire-initiator-information>	<security-profile-dslite-softwire-initiator-information>
show system security-profile flow-gate	<get-security-profile-flow-gate-information>	<security-profile-flow-gate-information>
show system security-profile flow-gate	<get-security-profile-flow-gate-information>	<security-profile-flow-gate-information>
show system security-profile flow-session	<get-security-profile-flow-session-information>	<security-profile-flow-session-information>
show system security-profile flow-session	<get-security-profile-flow-session-information>	<security-profile-flow-session-information>
show system security-profile nat-cone-binding	<get-security-profile-nat-cone-binding-information>	<security-profile-nat-cone-binding-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show system security-profile nat-cone-binding	<get-security-profile-nat-cone-binding-information>	<security-profile-nat-cone-binding-information>
show system security-profile nat-destination-pool	<get-security-profile-nat-destination-pool-information>	<security-profile-nat-destination-pool-information>
show system security-profile nat-destination-pool	<get-security-profile-nat-destination-pool-information>	<security-profile-nat-destination-pool-information>
show system security-profile nat-destination-rule	<get-security-profile-nat-destination-rule-information>	<security-profile-nat-destination-rule-information>
show system security-profile nat-destination-rule	<get-security-profile-nat-destination-rule-information>	<security-profile-nat-destination-rule-information>
show system security-profile nat-nopat-address	<get-security-profile-nat-nopat-address-information>	<security-profile-nat-nopat-address-information>
show system security-profile nat-nopat-address	<get-security-profile-nat-nopat-address-information>	<security-profile-nat-nopat-address-information>
show system security-profile nat-pat-address	<get-security-profile-nat-pat-address-information>	<security-profile-nat-pat-address-information>
show system security-profile nat-pat-address	<get-security-profile-nat-pat-address-information>	<security-profile-nat-pat-address-information>
show system security-profile nat-pat-portnum	<get-security-profile-nat-pat-portnum-information>	<security-profile-nat-pat-portnum-information>
show system security-profile nat-pat-portnum	<get-security-profile-nat-pat-portnum-information>	<security-profile-nat-pat-portnum-information>
show system security-profile nat-port-ol-ipnumber	<get-security-profile-nat-port-ol-ipnumber-information>	<security-profile-nat-port-ol-ipnumber-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show system security-profile nat-port-ol-ipnumber	<get-security-profile-nat-port-ol-ipnumber-information>	<security-profile-nat-port-ol-ipnumber-information>
show system security-profile nat-rule-referenced-prefix	<get-security-profile-nat-rule-referenced-prefix-information>	<security-profile-nat-rule-referenced-prefix-information>
show system security-profile nat-rule-referenced-prefix	<get-security-profile-nat-rule-referenced-prefix-information>	<security-profile-nat-rule-referenced-prefix-information>
show system security-profile nat-source-pool	<get-security-profile-nat-source-pool-information>	<security-profile-nat-source-pool-information>
show system security-profile nat-source-pool	<get-security-profile-nat-source-pool-information>	<security-profile-nat-source-pool-information>
show system security-profile nat-source-rule	<get-security-profile-nat-source-rule-information>	<security-profile-nat-source-rule-information>
show system security-profile nat-source-rule	<get-security-profile-nat-source-rule-information>	<security-profile-nat-source-rule-information>
show system security-profile nat-static-rule	<get-security-profile-nat-static-rule-information>	<security-profile-nat-static-rule-information>
show system security-profile nat-static-rule	<get-security-profile-nat-static-rule-information>	<security-profile-nat-static-rule-information>
show system security-profile policy	<get-security-profile-policy-information>	<security-profile-policy-information>
show system security-profile policy	<get-security-profile-policy-information>	<security-profile-policy-information>
show system security-profile policy-with-count	<get-security-profile-policy-with-count-information>	<security-profile-policy-with-count-information>
show system security-profile policy-with-count	<get-security-profile-policy-with-count-information>	<security-profile-policy-with-count-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show system security-profile scheduler	<get-security-profile-scheduler-information>	<security-profile-scheduler-information>
show system security-profile scheduler	<get-security-profile-scheduler-information>	<security-profile-scheduler-information>
show system security-profile zone	<get-security-profile-zone-information>	<security-profile-zone-information>
show system security-profile zone	<get-security-profile-zone-information>	<security-profile-zone-information>
show system services dhcp binding	<get-dhcp-binding-information>	<dhcp-binding-information>
show system services dhcp client	<get-dhcp-client-information>	<dhcp-client-information>
show system services dhcp conflict	<get-dhcp-conflict-information>	<dhcp-conflict-information>
show system services dhcp global	<get-dhcp-global-information>	<dhcp-global-information>
show system services dhcp pool	<get-dhcp-pool-information>	<dhcp-pool-information>
show system services dhcp relay-statistics	<get-dhcp-helper-statistics>	<dhcp-helper-statistics>
show system services dhcp statistics	<get-dhcp-statistics-information>	<dhcp-statistics-information>
show tgm dynamic-call-admission-control	<get-tgm-dynamic-cac-information>	<tgm-dynamic-cac-information>
show tgm fpc	<get-tgm-information>	<tgm-information>
show tgm telephony-interface-module	<get-tgm-telephony-interface-module-status>	<telephony-interface-module-status-information>
show vlans	<get-vlan-information>	<vlan-information>
show vlans dot1q-tunneling	<get-vlans-dot1q-tunneling-information>	<vlan-information>

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Table 39: Mapping of CLI Commands to Junos XML Operational Tag Elements and Perl Methods (SRX Series) *(continued)*

CLI Command	Request Tag Element and Perl Method	Response Tag Element
show vlans management-vlan	<get-management-vlan-information>	<vlan-information>
show wan-acceleration status	<get-wx-status>	<wx-status>
show wlan access-points	<get-wlan-access-points-list>	<wlan-access-points-list>
test security utm anti-spam	<test-anti-spam-profile>	<anti-spam-test>
test security utm anti-virus	<test-anti-virus-profile>	<anti-virus-test>
test security utm web-filtering	<test-web-filtering-profile>	<web-filtering-test>

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CHAPTER 53

Operational Request Tag Elements Applicable to All Platforms

This chapter lists the Junos Extensible Markup Language (XML) tag elements that a client of the Junos XML protocol or NETCONF server uses to request operational information. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

The tags listed in this chapter are applicable to devices belonging to:

- EX Series
- M Series
- MX Series
- T Series
- QFX Series
- SRX Series

<clear-dhcp-binding-information>

Usage

```
<rpc>
 <clear-dhcp-binding-information>
  <address>address</address>
 </clear-dhcp-binding-information>
</rpc>
```

Description Clear DHCP client binding information

Contents <address>—Address of DHCP client binding

<clear-dhcp-conflict-information>

Usage

```
<rpc>
 <clear-dhcp-conflict-information>
```

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```
  <address>address</address>
 </clear-dhcp-conflict-information>
</rpc>
```

Description Clear DHCP address conflict

Contents <address>—DHCP conflict address

<clear-dhcp-statistics-information>

Usage

```
<rpc>
 <clear-dhcp-statistics-information/>
</rpc>
```

Description Clear DHCP statistics

<clear-dot1x-mac-session>

Usage

```
<rpc>
 <clear-dot1x-mac-session>
  <static-mac-addr>static-mac-addr</static-mac-addr>
 </clear-dot1x-mac-session>
</rpc>
```

Description Clear 802.1X session on a MAC address

Contents <static-mac-addr>—MAC address to clear

<clear-ethernet-ring-information>

Usage

```
<rpc>
 <clear-ethernet-ring-information>
 </clear-ethernet-ring-information>
</rpc>
```

Description Clear ethernet ring information

Contents <clear-ethernet-ring-statistics>—Clear ethernet ring statistics

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<clear-ethernet-ring-statistics>

Usage

```
<rpc>
 <clear-ethernet-ring-statistics>
  <group-name>group-name</group-name>
 </clear-ethernet-ring-statistics>
</rpc>
```

Description Clear ethernet ring statistics

Contents <group-name>—Name of protection group

<clear-lldp-neighbors>

Usage

```
<rpc>
 <clear-lldp-neighbors>
 </clear-lldp-neighbors>
</rpc>
```

Description Clear LLDP neighbor information

Contents <clear-lldp-interface-neighbors>—Clear LLDP interface statistics

<clear-lldp-statistics>

Usage

```
<rpc>
 <clear-lldp-statistics>
 </clear-lldp-statistics>
</rpc>
```

Description Clear LLDP statistics

Contents <clear-lldp-interface-statistics>—Clear LLDP interface statistics

<clear-protection-group-information>

Usage

```
<rpc>
 <clear-protection-group-information>
 </clear-protection-group-information>
</rpc>
```

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Description Clear protection group information

Contents <clear-ethernet-ring-information>—Clear ethernet ring information

<get-dhcp-binding-information>

Usage

```
<rpc>
 <get-dhcp-binding-information>
  <detail/>
  <address>address</address>
 </get-dhcp-binding-information>
</rpc>
```

Description Show DHCP client binding information

Contents <detail>—Display detailed information

<address>—Address of DHCP client binding

<get-dhcp-conflict-information>

Usage

```
<rpc>
 <get-dhcp-conflict-information/>
</rpc>
```

Description Show DHCP address conflict

<get-dhcp-global-information>

Usage

```
<rpc>
 <get-dhcp-global-information/>
</rpc>
```

Description Show DHCP global scope information

<get-dhcp-pool-information>

Usage

```
<rpc>
 <get-dhcp-pool-information>
  <detail/>
  <subnet-address>subnet-address</subnet-address>
 </get-dhcp-pool-information>
```


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```
</rpc>
```

Description Show DHCP address pool information

Contents <detail>—Display detailed information

<subnet-address>—Logical subnet of address pool

<get-dhcp-statistics-information>

Usage

```
<rpc>
 <get-dhcp-statistics-information/>
</rpc>
```

Description Show DHCP statistics

<get-dot1x-authentication-failed-users>

Usage

```
<rpc>
 <get-dot1x-authentication-failed-users/>
</rpc>
```

Description List users who have failed 802.1X authentication

<get-dot1x-interface-information>

Usage

```
<rpc>
 <get-dot1x-interface-information>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
 </get-dot1x-interface-information>
</rpc>
```

Description Show 802.1X interface information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

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<get-dot1x-interface-mac-addresses>

Usage

```
<rpc>
 <get-dot1x-interface-mac-addresses>
  <interface-name>interface-name</interface-name>
 </get-dot1x-interface-mac-addresses>
</rpc>
```

Description Show 802.1X static MAC addresses on this interface

Contents <interface-name>—Show static MAC addresses of interface

<get-dot1x-static-mac-addresess>

Usage

```
<rpc>
 <get-dot1x-static-mac-addresess>
 </get-dot1x-static-mac-addresess>
</rpc>
```

Description Show 802.1X static MAC addresses

Contents <get-dot1x-interface-mac-addresses>—Show 802.1X static MAC addresses on this interface

<get-lldp-information>

Usage

```
<rpc>
 <get-lldp-information>
 </get-lldp-information>
</rpc>
```

Description Show Link Layer Discovery Protocol information

Contents <get-lldp-information-detail>—Show detailed LLDP information

<get-lldp-neighbors-information>—Show LLDP neighbor information

<get-lldp-statistics-information>—Show LLDP statistics

<get-lldp-local-info>—Show LLDP information of local device

<get-lldp-remote-global-statistics>—Show LLDP remote global statistics information

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<get-lldp-information-detail>

Usage

```
<rpc>
 <get-lldp-information-detail/>
</rpc>
```

Description Show detailed LLDP information

<get-lldp-local-info>

Usage

```
<rpc>
 <get-lldp-local-info/>
</rpc>
```

Description Show LLDP information of local device

<get-lldp-remote-global-statistics>

Usage

```
<rpc>
 <get-lldp-remote-global-statistics/>
</rpc>
```

Description Show LLDP remote global statistics information

<get-lldp-statistics-information>

Usage

```
<rpc>
 <get-lldp-statistics-information>
 </get-lldp-statistics-information>
</rpc>
```

Description Show LLDP statistics

Contents <get-lldp-interface-statistics>—Show LLDP statistics for this interface

<get-raps-pdu-information>

Usage

```
<rpc>
 <get-raps-pdu-information>
```

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```
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-raps-pdu-information>
</rpc>
```

Description Show RAPS PDU information for ethernet ring

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

<get-raps-state-machine-information>

Usage

```
<rpc>
 <get-raps-state-machine-information>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-raps-state-machine-information>
</rpc>
```

Description Show RAPS state machine information for ethernet ring

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

<get-ring-data-channel-information>

Usage

```
<rpc>
 <get-ring-data-channel-information>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-ring-data-channel-information>
</rpc>
```

Description Show data channel for ethernet ring

Contents <brief>—Display brief output (default)

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<detail>—Display detailed output

<group-name>—Name of protection group

<get-ring-interface-information>

Usage

```
<rpc>
 <get-ring-interface-information>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-ring-interface-information>
</rpc>
```

Description Show interface information for ethernet ring

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

<get-ring-vlan-information>

Usage

```
<rpc>
 <get-ring-vlan-information>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-ring-vlan-information>
</rpc>
```

Description Show VLAN information for ethernet ring data channel

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

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CHAPTER 54

Operational Request Tag Elements Common to EX Series, QFX Series, and SRX Series

This chapter lists the Junos Extensible Markup Language (XML) tag elements that a client of the Junos XML protocol or NETCONF server uses to request operational information. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

The tags listed in this chapter are common to devices belonging to:

- EX Series
- M Series
- MX Series
- T Series
- QFX Series

<clear-arp-inspection-statistics>

Usage

```
<rpc>
 <clear-arp-inspection-statistics>
  <interface>interface</interface>
 </clear-arp-inspection-statistics>
</rpc>
```

Description Clear ARP inspection statistics

Contents <interface>—Interface for which statistics are to be cleared

<clear-dhcp-snooping>

Usage

```
<rpc>
```

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```
<clear-dhcp-snooping>
 <vlan>vlan</vlan>
 <mac>mac</mac>
</clear-dhcp-snooping>
</rpc>
```

Description Clear DHCP snooping database

Contents <vlan>—Name of VLAN

<mac>—MAC address

<clear-dhcp-snooping-statistics>

Usage

```
<rpc>
 <clear-dhcp-snooping-statistics/>
</rpc>
```

Description Clear DHCP snooping statistics

<clear-dot1x-firewall>

Usage

```
<rpc>
 <clear-dot1x-firewall>
  <counter-name>counter-name</counter-name>
 </clear-dot1x-firewall>
</rpc>
```

Description Clear dot1x firewall statistics for a counter

Contents <clear-dot1x-firewall-interface>—Clear firewall statistics on this interface

<counter-name>—Clear firewall statistics for this counter

<clear-dot1x-firewall-interface>

Usage

```
<rpc>
 <clear-dot1x-firewall-interface>
  <interface-name>interface-name</interface-name>
 </clear-dot1x-firewall-interface>
</rpc>
```

Description Clear firewall statistics on this interface

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Contents <interface-name>—Name of interface

<clear-dot1x-interface-session>

Usage

```
<rpc>
 <clear-dot1x-interface-session>
  <interface-name>interface-name</interface-name>
 </clear-dot1x-interface-session>
</rpc>
```

Description Clear 802.1X session on an interface

Contents <interface-name>—Name of interface

<clear-dot1x-statistics>

Usage

```
<rpc>
 <clear-dot1x-statistics>
 </clear-dot1x-statistics>
</rpc>
```

Description Clear 802.1X statistics on an interface

Contents <clear-dot1x-statistics-interface>—Clear 802.1X statistics on this interface

<clear-dot1x-statistics-interface>

Usage

```
<rpc>
 <clear-dot1x-statistics-interface>
  <interface-name>interface-name</interface-name>
 </clear-dot1x-statistics-interface>
</rpc>
```

Description Clear 802.1X statistics on this interface

Contents <interface-name>—Name of interface

<clear-edge-virtual-bridging>

Usage

```
<rpc>
 <clear-edge-virtual-bridging>
  <interface-name>interface-name</interface-name>
```

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```
 </clear-edge-virtual-bridging>
</rpc>
```

Description Clear Edge Virtual Bridging information

Contents <interface-name>—Name of interface

<clear-edge-virtual-bridging-vsi-profiles>—Clear Edge Virtual Bridging VSI profiles information

<edge-control-protocol>—Clear Edge Control Protocol information

<clear-edge-virtual-bridging-firewall-information>—Clear Edge Virtual Bridging firewall information

<clear-edge-virtual-bridging-ecp-statistics>

Usage

```
<rpc>
 <clear-edge-virtual-bridging-ecp-statistics>
  <interface-name>interface-name</interface-name>
 </clear-edge-virtual-bridging-ecp-statistics>
</rpc>
```

Description Clear Edge Control Protocol ECP statistics

Contents <interface-name>—Name of interface

<clear-edge-virtual-bridging-firewall-information>

Usage

```
<rpc>
 <clear-edge-virtual-bridging-firewall-information>
 </clear-edge-virtual-bridging-firewall-information>
</rpc>
```

Description Clear Edge Virtual Bridging firewall information

Contents <clear-edge-virtual-bridging-firewall-interface>—Clear Edge Virtual Bridging firewall counters on this interface

<clear-edge-virtual-bridging-firewall-interface>

Usage

```
<rpc>
 <clear-edge-virtual-bridging-firewall-interface>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
```


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```
 </clear-edge-virtual-bridging-firewall-interface>
</rpc>
```

Description Clear Edge Virtual Bridging firewall counters on this interface

Contents <interface-name>—Name of interface

<clear-edge-virtual-bridging-vsi-profiles>

Usage

```
<rpc>
 <clear-edge-virtual-bridging-vsi-profiles>
 </clear-edge-virtual-bridging-vsi-profiles>
</rpc>
```

Description Clear Edge Virtual Bridging VSI profiles information

Contents <clear-edge-virtual-bridging-vsi-profiles-interface>—Clear Edge Virtual Bridging VSI profiles on this interface

<clear-edge-virtual-bridging-vsi-profiles-interface>

Usage

```
<rpc>
 <clear-edge-virtual-bridging-vsi-profiles-interface>
  <summary/>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </clear-edge-virtual-bridging-vsi-profiles-interface>
</rpc>
```

Description Clear Edge Virtual Bridging VSI profiles on this interface

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

<clear-ethernet-switching-bpdu-error>

Usage

```
<rpc>
 <clear-ethernet-switching-bpdu-error>
```

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```
  <interface>interface</interface>
 </clear-ethernet-switching-bpdu-error>
</rpc>
```

Description Clear BPDU error (BPDU Protect)

Contents <interface>—Clear BPDU error on an interface (BPDU Protect)

<clear-ethernet-switching-mac-learning-log>

Usage

```
<rpc>
 <clear-ethernet-switching-mac-learning-log/>
</rpc>
```

Description Clear all MAC address learning log

<clear-ethernet-switching-mac-learning-statistics>

Usage

```
<rpc>
 <clear-ethernet-switching-mac-learning-statistics>
  <interface>interface</interface>
 </clear-ethernet-switching-mac-learning-statistics>
</rpc>
```

Description Clear media access control learning statistics

Contents <interface>—Clear MAC learning statistics for a specified interface

<clear-ethernet-switching-port-error>

Usage

```
<rpc>
 <clear-ethernet-switching-port-error>
  <interface>interface</interface>
 </clear-ethernet-switching-port-error>
</rpc>
```

Description Clear port errors

Contents <interface>—Clear port errors on an interface

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<clear-ethernet-switching-statistics-aging>

Usage

```
<rpc>
 <clear-ethernet-switching-statistics-aging/>
</rpc>
```

Description Clear media access control aging statistics

<clear-ethernet-switching-table>

Usage

```
<rpc>
 <clear-ethernet-switching-table>
  <interface>interface</interface>
  <vlan>vlan</vlan>
  <mac>mac</mac>
 </clear-ethernet-switching-table>
</rpc>
```

Description Clear all learned MAC addresses

Contents <interface>—Name of interface

<vlan>—Name of VLAN

<mac>—MAC address

<clear-ethernet-switching-table-persistent-mac>—Clear persistent MAC

<clear-ethernet-switching-table-management-vlan>—Management VLAN

<clear-ethernet-switching-table-management-vlan>

Usage

```
<rpc>
 <clear-ethernet-switching-table-management-vlan/>
</rpc>
```

Description Management VLAN

<clear-ethernet-switching-table-persistent-mac>

Usage

```
<rpc>
 <clear-ethernet-switching-table-persistent-mac>
  <interface>interface</interface>
```

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```
  <mac>mac</mac>
 </clear-ethernet-switching-table-persistent-mac>
</rpc>
```

Description Clear persistent MAC

Contents <interface>—Name of interface

<mac>—MAC address

<clear-fip-snooping-enode>

Usage

```
<rpc>
 <clear-fip-snooping-enode>
  <mac>mac</mac> <!-- mandatory -->
  <vlan>vlan</vlan>
 </clear-fip-snooping-enode>
</rpc>
```

Description Clear all FIP snooping session for this Enode

Contents <mac>—Enode MAC address

<vlan>—Name of VLAN

<clear-fip-snooping-statistics>

Usage

```
<rpc>
 <clear-fip-snooping-statistics>
  <vlan>vlan</vlan>
 </clear-fip-snooping-statistics>
</rpc>
```

Description Clear FIP snooping statistics

Contents <vlan>—Name of VLAN

<clear-fip-snooping-vlan>

Usage

```
<rpc>
 <clear-fip-snooping-vlan>
  <vlan>vlan</vlan> <!-- mandatory -->
 </clear-fip-snooping-vlan>
```


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```
</rpc>
```

Description Clear FIP snooping database for this VLAN

Contents <vlan>—Name of VLAN

<clear-igmp-snooping>

Usage

```
<rpc>
 <clear-igmp-snooping>
 </clear-igmp-snooping>
</rpc>
```

Description Clear IGMP snooping information

Contents <clear-igmp-snooping-membership>—Clear IGMP snooping database

<clear-igmp-snooping-statistics>—Clear IGMP snooping statistics

<clear-igmp-snooping-membership>

Usage

```
<rpc>
 <clear-igmp-snooping-membership>
  <vlan>vlan</vlan>
 </clear-igmp-snooping-membership>
</rpc>
```

Description Clear IGMP snooping database

Contents <vlan>—Name of VLAN

<clear-igmp-snooping-statistics>

Usage

```
<rpc>
 <clear-igmp-snooping-statistics/>
</rpc>
```

Description Clear IGMP snooping statistics

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<clear-l2pt-error>

Usage

```
<rpc>
 <clear-l2pt-error>
  <interface>interface</interface>
 </clear-l2pt-error>
</rpc>
```

Description Clear layer2 protocol tunneling errors

Contents <interface>—Name of interface

<clear-l2pt-interface-statistics>

Usage

```
<rpc>
 <clear-l2pt-interface-statistics>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </clear-l2pt-interface-statistics>
</rpc>
```

Description Clear Layer2 protocol tunneling statistics for interface

Contents <interface-name>—Name of interface

<clear-l2pt-statistics>

Usage

```
<rpc>
 <clear-l2pt-statistics>
 </clear-l2pt-statistics>
</rpc>
```

Description Clear layer2 protocol tunneling statistics

Contents <clear-l2pt-interface-statistics>—Clear Layer2 protocol tunneling statistics for interface

<clear-l2pt-vlan-statistics>—Clear Layer2 protocol tunneling statistics for vlans

<clear-l2pt-vlan-statistics>

Usage

```
<rpc>
 <clear-l2pt-vlan-statistics>
  <vlan-name>vlan-name</vlan-name> <!-- mandatory -->
```


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```
 </clear-l2pt-vlan-statistics>
</rpc>
```

Description Clear Layer2 protocol tunneling statistics for vlans

Contents <vlan-name>—Name of VLAN

<clear-lldp-interface-neighbors>

Usage

```
<rpc>
 <clear-lldp-interface-neighbors>
  <interface-name>interface-name</interface-name>
 </clear-lldp-interface-neighbors>
</rpc>
```

Description Clear LLDP interface statistics

Contents <interface-name>—Name of interface

<clear-lldp-interface-statistics>

Usage

```
<rpc>
 <clear-lldp-interface-statistics>
  <interface-name>interface-name</interface-name>
 </clear-lldp-interface-statistics>
</rpc>
```

Description Clear LLDP interface statistics

Contents <interface-name>—Name of interface

<clear-mld-snooping>

Usage

```
<rpc>
 <clear-mld-snooping>
 </clear-mld-snooping>
</rpc>
```

Description Clear MLD snooping information

Contents <clear-mld-snooping-membership>—Clear MLD snooping database

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<clear-mld-snooping-statistics>—Clear MLD snooping statistics

<clear-mld-snooping-membership>

Usage

```
<rpc>
 <clear-mld-snooping-membership>
  <vlan>vlan</vlan>
 </clear-mld-snooping-membership>
</rpc>
```

Description Clear MLD snooping database

Contents <vlan>—Name of VLAN

<clear-mld-snooping-statistics>

Usage

```
<rpc>
 <clear-mld-snooping-statistics/>
</rpc>
```

Description Clear MLD snooping statistics

<clear-multicast-route-counter>

Usage

```
<rpc>
 <clear-multicast-route-counter/>
</rpc>
```

Description Unbind route from counter

<clear-mvrp-statistics>

Usage

```
<rpc>
 <clear-mvrp-statistics>
 </clear-mvrp-statistics>
</rpc>
```

Description Clear MVRP statistics on an interface

Contents <clear-mvrp-statistics-interface>—Clear MVRP statistics on this interface

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<clear-mvrp-statistics-interface>

Usage

```
<rpc>
 <clear-mvrp-statistics-interface>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </clear-mvrp-statistics-interface>
</rpc>
```

Description Clear MVRP statistics on this interface

Contents <interface-name>—Name of interface

<clear-stp-statistics-interface>

Usage

```
<rpc>
 <clear-stp-statistics-interface>
  <interface-name>interface-name</interface-name>
 </clear-stp-statistics-interface>
</rpc>
```

Description Clear STP interface statistics

Contents <interface-name>—Name of interface

<get-analyzer-information>

Usage

```
<rpc>
 <get-analyzer-information>
  <analyzer-name>analyzer-name</analyzer-name>
 </get-analyzer-information>
</rpc>
```

Description Show analyzer information

Contents <analyzer-name>—Name of analyzer

<get-arp-inspection-statistics>

Usage

```
<rpc>
 <get-arp-inspection-statistics/>
</rpc>
```

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Description Show ARP inspection statistics

<get-authentication-whitelist-mac-bypassed-users>

Usage

```
<rpc>
 <get-authentication-whitelist-mac-bypassed-users/>
</rpc>
```

Description List users who have bypassed 802.1X authentication

<get-autoinstallation-status-information>

Usage

```
<rpc>
 <get-autoinstallation-status-information/>
</rpc>
```

Description Show autoinstallation status

<get-dcbx-information>

Usage

```
<rpc>
 <get-dcbx-information>
 </get-dcbx-information>
</rpc>
```

Description Show DCBX protocol information

Contents <get-dcbx-neighbor-information>—Show DCBX neighbor information

<get-dcbx-neighbor-information>

Usage

```
<rpc>
 <get-dcbx-neighbor-information>
 </get-dcbx-neighbor-information>
</rpc>
```

Description Show DCBX neighbor information

Contents <get-dcbx-neighbor-interface-information>—Show DCBX information for this interface

<get-dcbx-neighbor-information-terse>—Show DCBX neighbor information

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<get-dcbx-neighbor-information-terse>

Usage

```
<rpc>
 <get-dcbx-neighbor-information-terse/>
</rpc>
```

Description Show DCBX neighbor information

<get-dcbx-neighbor-interface-information>

Usage

```
<rpc>
 <get-dcbx-neighbor-interface-information>
  <interface-name>interface-name</interface-name>
 </get-dcbx-neighbor-interface-information>
</rpc>
```

Description Show DCBX information for this interface

Contents <interface-name>—Show DCBX information for this interface

<get-dhcp-client-information>

Usage

```
<rpc>
 <get-dhcp-client-information>
  <statistics/>
  <interface-name>interface-name</interface-name>
 </get-dhcp-client-information>
</rpc>
```

Description Show DHCP client information

Contents <statistics>—Show DHCP client statistics

<interface-name>—Interface name of DHCP client

<get-dhcp-helper-statistics>

Usage

```
<rpc>
 <get-dhcp-helper-statistics/>
</rpc>
```

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Description Show DHCP relay statistics information

<get-dhcp-snoop-binding>

Usage

```
<rpc>
 <get-dhcp-snoop-binding>
  <interface>interface</interface>
  <vlan>vlan</vlan>
 </get-dhcp-snoop-binding>
</rpc>
```

Description Show DHCP snooping database

Contents <interface>—Name of interface for which to display the entries

<vlan>—Name of VLAN for which to display the entries

<get-dhcp-snooping-statistics>

Usage

```
<rpc>
 <get-dhcp-snooping-statistics/>
</rpc>
```

Description Show DHCP snooping statistics

<get-dot1x-firewall-interface>

Usage

```
<rpc>
 <get-dot1x-firewall-interface>
  <interface-name>interface-name</interface-name>
 </get-dot1x-firewall-interface>
</rpc>
```

Description Show dot1x firewall statistics for an interface

Contents <interface-name>—Show firewall statistics for this interface

<get-dot1x-statistics>

Usage

```
<rpc>
 <get-dot1x-statistics>
 </get-dot1x-statistics>
```


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```
</rpc>
```

Description Show 802.1X statistics

Contents <get-dot1x-statistics-interface>—Show 802.1X statistics on this interface

<get-dot1x-statistics-interface>

Usage

```
<rpc>
 <get-dot1x-statistics-interface>
  <interface-name>interface-name</interface-name>
 </get-dot1x-statistics-interface>
</rpc>
```

Description Show 802.1X statistics on this interface

Contents <interface-name>—Show statistics for this interface

<get-edge-virtual-bridging-ecp-interface-statistics>

Usage

```
<rpc>
 <get-edge-virtual-bridging-ecp-interface-statistics>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-edge-virtual-bridging-ecp-interface-statistics>
</rpc>
```

Description Show Edge Virtual Bridging ECP statistics for interface

Contents <interface-name>—Name of interface

<get-edge-virtual-bridging-ecp-statistics>

Usage

```
<rpc>
 <get-edge-virtual-bridging-ecp-statistics>
 </get-edge-virtual-bridging-ecp-statistics>
</rpc>
```

Description Show Edge Virtual Bridging ECP statistics

Contents <get-edge-virtual-bridging-ecp-interface-statistics>—Show Edge Virtual Bridging ECP statistics for interface

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<get-edge-virtual-bridging-firewall-information>

Usage

```
<rpc>
 <get-edge-virtual-bridging-firewall-information>
 </get-edge-virtual-bridging-firewall-information>
</rpc>
```

Description Show Edge Virtual Bridging firewall information

Contents <get-edge-virtual-bridging-interface-firewall-information>—Edge Virtual Bridging firewall information for interface

<get-edge-virtual-bridging-information>

Usage

```
<rpc>
 <get-edge-virtual-bridging-information>
  <summary/>
  <brief/>
  <detail/>
 </get-edge-virtual-bridging-information>
</rpc>
```

Description Show Edge Virtual Bridging Protocol information

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<get-edge-virtual-bridging-interface-information>—Show Edge Virtual Bridging interface information

<edge-control-protocol>—Show Edge Control Protocol information

<get-edge-virtual-bridging-vsi-profiles>—Show Edge Virtual Bridging VSI profiles

<get-edge-virtual-bridging-firewall-information>—Show Edge Virtual Bridging firewall information

<get-edge-virtual-bridging-interface-firewall-information>

Usage

```
<rpc>
 <get-edge-virtual-bridging-interface-firewall-information>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
```

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```
 </get-edge-virtual-bridging-interface-firewall-information>
</rpc>
```

Description Edge Virtual Bridging firewall information for interface

Contents <interface-name>—Name of interface

<get-edge-virtual-bridging-interface-information>

Usage

```
<rpc>
 <get-edge-virtual-bridging-interface-information>
  <summary/>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-edge-virtual-bridging-interface-information>
</rpc>
```

Description Show Edge Virtual Bridging interface information

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

<get-edge-virtual-bridging-vsi-interface-profiles>

Usage

```
<rpc>
 <get-edge-virtual-bridging-vsi-interface-profiles>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-edge-virtual-bridging-vsi-interface-profiles>
</rpc>
```

Description Show VSI profiles for interface

Contents <interface-name>—Name of interface

<get-edge-virtual-bridging-vsi-profiles>

Usage

```
<rpc>
 <get-edge-virtual-bridging-vsi-profiles>
```

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```
 </get-edge-virtual-bridging-vsi-profiles>
</rpc>
```

Description Show Edge Virtual Bridging VSI profiles

Contents <get-edge-virtual-bridging-vsi-interface-profiles>—Show VSI profiles for interface

<get-erp-statistics-interface-information>

Usage

```
<rpc>
 <get-erp-statistics-interface-information>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
  <group-name>group-name</group-name>
 </get-erp-statistics-interface-information>
</rpc>
```

Description Show ERP interface statistics

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

<group-name>—Name of protection group

<get-ethernet-switching-aging-statistics>

Usage

```
<rpc>
 <get-ethernet-switching-aging-statistics>
  <brief/>
  <detail/>
 </get-ethernet-switching-aging-statistics>
</rpc>
```

Description Show media access control aging statistics

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

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<get-ethernet-switching-authentication-whitelist-mac>

Usage

```
<rpc>
 <get-ethernet-switching-authentication-whitelist-mac>
 </get-ethernet-switching-authentication-whitelist-mac>
</rpc>
```

Description Show 802.1X White List MAC addresses

Contents <get-ethernet-switching-interface-mac-addresses>—Show 802.1X White List MAC addresses on this interface

<get-authentication-whitelist-mac-bypassed-users>—List users who have bypassed 802.1X authentication

<get-ethernet-switching-interface-information>

Usage

```
<rpc>
 <get-ethernet-switching-interface-information>
  <summary/>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
 </get-ethernet-switching-interface-information>
</rpc>
```

Description Display Ethernet-switching interface information

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

<get-ethernet-switching-interface-mac-addresses>

Usage

```
<rpc>
 <get-ethernet-switching-interface-mac-addresses>
  <interface-name>interface-name</interface-name>
 </get-ethernet-switching-interface-mac-addresses>
</rpc>
```

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Description Show 802.1X White List MAC addresses on this interface

Contents <interface-name>—Show White List MAC addresses of interface

<get-ethernet-switching-log-information>

Usage

```
<rpc>
 <get-ethernet-switching-log-information/>
</rpc>
```

Description Show MAC address learning log

<get-ethernet-switching-mac-learning-statistics>

Usage

```
<rpc>
 <get-ethernet-switching-mac-learning-statistics>
  <brief/>
  <detail/>
  <interface>interface</interface>
 </get-ethernet-switching-mac-learning-statistics>
</rpc>
```

Description Show media access control learning statistics

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<interface>—Display MAC learning statistics for a specified interface

<get-ethernet-switching-mac-notification-information>

Usage

```
<rpc>
 <get-ethernet-switching-mac-notification-information/>
</rpc>
```

Description Display MAC notification information

<get-ethernet-switching-next-hop-information>

Usage

```
<rpc>
 <get-ethernet-switching-next-hop-information>
```


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```
  <summary/>
  <brief/>
  <detail/>
  <interface-index>interface-index</interface-index>
 </get-ethernet-switching-next-hop-information>
</rpc>
```

Description Show next hop information

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<interface-index>—Interface index

<get-ethernet-switching-persistent-information>

Usage

```
<rpc>
 <get-ethernet-switching-persistent-information>
  <interface>interface</interface>
 </get-ethernet-switching-persistent-information>
</rpc>
```

Description Show media access control persistent database

Contents <interface>—Name of interface for which to display the database

<get-ethernet-switching-table-information>

Usage

```
<rpc>
 <get-ethernet-switching-table-information>
  <summary/>
  <brief/>
  <detail/>
  <extensive/>
  <sort-by>sort-by</sort-by>
 </get-ethernet-switching-table-information>
</rpc>
```

Description Show media access control table

Contents <summary>—Display summary output

- name - Sort display by VLAN name

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- tag - Sort display by VLAN id

<brief>—Display brief output (default)

- name - Sort display by VLAN name
- tag - Sort display by VLAN id

<detail>—Display detailed output

- name - Sort display by VLAN name
- tag - Sort display by VLAN id

<extensive>—Display extensive output

- name - Sort display by VLAN name
- tag - Sort display by VLAN id

<sort-by>—Specify display order

- name - Sort display by VLAN name
- tag - Sort display by VLAN id

<get-interface-ethernet-switching-table>—Display MAC table for a specified interface

<get-vlan-ethernet-switching-table>—Display MAC table for a specified VLAN

<get-ethernet-switching-persistent-information>—Show media access control persistent database

<get-management-vlan-ethernet-switching-table>—Display MAC table for a Management VLAN

<get-fip-snooping>

Usage

```
<rpc>
 <get-fip-snooping>
  <brief/>
  <detail/>
 </get-fip-snooping>
</rpc>
```

Description Show FIP snooping information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<get-fip-snooping-vlan>—Show per VLAN information

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<get-fip-snooping-fcf>—Show fibre-channel forwarder information

<get-fip-snooping-enode>—Show per enode information

<get-fip-snooping-statistics>—Show FIP snooping statistics

<get-fip-snooping-enode>

Usage

```
<rpc>
 <get-fip-snooping-enode>
  <brief/>
  <detail/>
  <mac>mac</mac> <!-- mandatory -->
  <vlan>vlan</vlan>
 </get-fip-snooping-enode>
</rpc>
```

Description Show per enode information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<mac>—MAC address of Enode

<vlan>—Name of VLAN

<get-fip-snooping-fcf>

Usage

```
<rpc>
 <get-fip-snooping-fcf>
  <brief/>
  <detail/>
  <mac>mac</mac> <!-- mandatory -->
  <vlan>vlan</vlan>
 </get-fip-snooping-fcf>
</rpc>
```

Description Show fibre-channel forwarder information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<mac>—MAC address of FCF

<vlan>—Name of VLAN

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<get-fip-snooping-statistics>

Usage

```
<rpc>
 <get-fip-snooping-statistics>
  <vlan>vlan</vlan>
 </get-fip-snooping-statistics>
</rpc>
```

Description Show FIP snooping statistics

Contents <vlan>—Name of VLAN

<get-fip-snooping-vlan>

Usage

```
<rpc>
 <get-fip-snooping-vlan>
  <brief/>
  <detail/>
  <vlan-name>vlan-name</vlan-name> <!-- mandatory -->
 </get-fip-snooping-vlan>
</rpc>
```

Description Show per VLAN information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan-name>—Name of VLAN

<get-igmp-snooping-flow-information>

Usage

```
<rpc>
 <get-igmp-snooping-flow-information>
  <brief/>
  <detail/>
 </get-igmp-snooping-flow-information>
</rpc>
```

Description Show igmp-snooping flows

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

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<get-igmp-snooping-membership-information>

Usage

```
<rpc>
 <get-igmp-snooping-membership-information>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
  <interface>interface</interface>
 </get-igmp-snooping-membership-information>
</rpc>
```

Description Show igmp-snooping membership

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—Groups on specified VLAN

<interface>—Groups with membership on interface

<get-igmp-snooping-routing-information>

Usage

```
<rpc>
 <get-igmp-snooping-routing-information>
  <ethernet-switching/>
  <inet/>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
 </get-igmp-snooping-routing-information>
</rpc>
```

Description Show routing information

Contents <ethernet-switching>—Ethernet-switching multicast routes

<inet>—Family inet multicast routes

<brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—Show entries for a specific VLAN

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<get-igmp-snooping-statistics-information>

Usage

```
<rpc>
 <get-igmp-snooping-statistics-information/>
</rpc>
```

Description Show igmp-snooping statistics

<get-igmp-snooping-task-accounting>

Usage

```
<rpc>
 <get-igmp-snooping-task-accounting>
  <brief/>
  <detail/>
 </get-igmp-snooping-task-accounting>
</rpc>
```

Description Per-task CPU accounting

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<get-igmp-snooping-task-information>

Usage

```
<rpc>
 <get-igmp-snooping-task-information>
  <summary/>
 </get-igmp-snooping-task-information>
</rpc>
```

Description Show IGMP snooping task information

Contents <get-igmp-snooping-task-accounting>—Per-task CPU accounting

<get-igmp-snooping-task-io>—Show task I/O statistics

<get-igmp-snooping-task-jobs>—Show scheduled jobs

<get-igmp-snooping-task-timers>—Task timers

<get-igmp-snooping-task-statistics>—Task statistics

<get-igmp-snooping-task-memory>—Show memory utilization of IGMP snooping tasks

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<summary>—Display summary output (default)

<get-igmp-snooping-task-io>

Usage

```
<rpc>
 <get-igmp-snooping-task-io/>
</rpc>
```

Description Show task I/O statistics

<get-igmp-snooping-task-jobs>

Usage

```
<rpc>
 <get-igmp-snooping-task-jobs/>
</rpc>
```

Description Show scheduled jobs

<get-igmp-snooping-task-memory>

Usage

```
<rpc>
 <get-igmp-snooping-task-memory>
  <summary/>
  <brief/>
  <detail/>
  <history/>
  <fragmentation/>
 </get-igmp-snooping-task-memory>
</rpc>
```

Description Show memory utilization of IGMP snooping tasks

Contents <summary>—Display current and maximum memory usage

<brief>—Display current/maximum/available memory

<detail>—Display memory usage by individual users

<history>—Display memory usage in the recent past

<fragmentation>—Display memory allocator fragmentation

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<get-igmp-snooping-task-statistics>

Usage

```
<rpc>
 <get-igmp-snooping-task-statistics/>
</rpc>
```

Description Task statistics

<get-igmp-snooping-task-timers>

Usage

```
<rpc>
 <get-igmp-snooping-task-timers>
  <brief/>
  <expired/>
  <detail/>
 </get-igmp-snooping-task-timers>
</rpc>
```

Description Task timers

Contents <brief>—Display brief output (default)

<expired>—Display expired timers

<detail>—Display timer detail

<get-igmp-snooping-vlan-information>

Usage

```
<rpc>
 <get-igmp-snooping-vlan-information>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
 </get-igmp-snooping-vlan-information>
</rpc>
```

Description VLAN information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—VLAN name

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<get-interface-ethernet-switching-table>

Usage

```
<rpc>
 <get-interface-ethernet-switching-table>
  <interface-name>interface-name</interface-name>
 </get-interface-ethernet-switching-table>
</rpc>
```

Description Display MAC table for a specified interface

Contents <interface-name>—Name of interface for which to display the table

<get-ip-source-guard-information>

Usage

```
<rpc>
 <get-ip-source-guard-information/>
</rpc>
```

Description Show IP source guard information

<get-l2pt-interface-information>

Usage

```
<rpc>
 <get-l2pt-interface-information>
  <interface-name>interface-name</interface-name>
 </get-l2pt-interface-information>
</rpc>
```

Description Show Layer2 protocol tunneling state for interfaces

Contents <interface-name>—Name of interface

<get-l2pt-interface-statistics>

Usage

```
<rpc>
 <get-l2pt-interface-statistics>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-l2pt-interface-statistics>
</rpc>
```

Description Show Layer2 protocol tunneling statistics for interfaces

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Contents <interface-name>—Name of interface

<get-l2pt-statistics>

Usage

```
<rpc>
 <get-l2pt-statistics>
 </get-l2pt-statistics>
</rpc>
```

Description Show Layer2 protocol tunneling statistics

Contents <get-l2pt-interface-statistics>—Show Layer2 protocol tunneling statistics for interfaces

<get-l2pt-vlan-statistics>—Show Layer2 protocol tunneling statistics for vlans

<get-l2pt-vlan-information>

Usage

```
<rpc>
 <get-l2pt-vlan-information>
  <vlan-name>vlan-name</vlan-name>
 </get-l2pt-vlan-information>
</rpc>
```

Description Show Layer2 protocol tunneling state for vlans

Contents <vlan-name>—Name of VLAN

<get-l2pt-vlan-statistics>

Usage

```
<rpc>
 <get-l2pt-vlan-statistics>
  <vlan-name>vlan-name</vlan-name> <!-- mandatory -->
 </get-l2pt-vlan-statistics>
</rpc>
```

Description Show Layer2 protocol tunneling statistics for vlans

Contents <vlan-name>—Name of VLAN

<get-lldp-interface-neighbors-information>

Usage

```
<rpc>
```


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```
<get-lldp-interface-neighbors-information>
 <interface-name>interface-name</interface-name>
</get-lldp-interface-neighbors-information>
</rpc>
```

Description Show LLDP neighbors on this interface

Contents <interface-name>—Name of interface

<get-lldp-interface-statistics>

Usage

```
<rpc>
 <get-lldp-interface-statistics>
  <interface-name>interface-name</interface-name>
 </get-lldp-interface-statistics>
</rpc>
```

Description Show LLDP statistics for this interface

Contents <interface-name>—Show LLDP statistics for this interface

<get-lldp-neighbors-information>

Usage

```
<rpc>
 <get-lldp-neighbors-information>
 </get-lldp-neighbors-information>
</rpc>
```

Description Show LLDP neighbor information

Contents <get-lldp-interface-neighbors-information>—Show LLDP neighbors on this interface

<get-management-vlan-ethernet-switching-table>

Usage

```
<rpc>
 <get-management-vlan-ethernet-switching-table/>
</rpc>
```

Description Display MAC table for a Management VLAN

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<get-management-vlan-information>

Usage

```
<rpc>
 <get-management-vlan-information>
  <brief/>
  <detail/>
  <extensive/>
  <summary/>
 </get-management-vlan-information>
</rpc>
```

Description Show management vlan information

Contents <brief>—Display brief output

<detail>—Display detailed output

<extensive>—Display extensive output

<summary>—Display summary output

<get-mld-snooping-membership-information>

Usage

```
<rpc>
 <get-mld-snooping-membership-information>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
  <interface>interface</interface>
 </get-mld-snooping-membership-information>
</rpc>
```

Description Show mld-snooping membership

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—Groups on specified VLAN

<interface>—Groups with membership on interface

<get-mld-snooping-routing-information>

Usage

```
<rpc>
 <get-mld-snooping-routing-information>
```


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```
  <ethernet-switching/>
  <inet6/>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
 </get-mld-snooping-routing-information>
</rpc>
```

Description Show routing information

Contents <ethernet-switching>—Ethernet-switching multicast routes

<inet6>—Family inet6 multicast routes

<brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—Show entries for a specific VLAN

<get-mld-snooping-statistics>

Usage

```
<rpc>
 <get-mld-snooping-statistics/>
</rpc>
```

Description Show mld-snooping statistics

<get-mld-snooping-vlan-information>

Usage

```
<rpc>
 <get-mld-snooping-vlan-information>
  <brief/>
  <detail/>
  <vlan>vlan</vlan>
 </get-mld-snooping-vlan-information>
</rpc>
```

Description VLAN information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan>—VLAN name

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<get-mstp-bridge-configuration-information>

Usage

```
<rpc>
 <get-mstp-bridge-configuration-information>
  <brief/>
  <detail/>
 </get-mstp-bridge-configuration-information>
</rpc>
```

Description Show MSTP configuration

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<get-mvrp-dynamic-vlan-memberships>

Usage

```
<rpc>
 <get-mvrp-dynamic-vlan-memberships/>
</rpc>
```

Description Show MVRP dynamic VLAN memberships

<get-mvrp-information>

Usage

```
<rpc>
 <get-mvrp-information>
 </get-mvrp-information>
</rpc>
```

Description Show Multiple VLAN Registration Protocol information

Contents <get-mvrp-stats>—Show MVRP statistics

<get-mvrp-dynamic-vlan-memberships>—Show MVRP dynamic VLAN memberships

<get-mvrp-stats>

Usage

```
<rpc>
 <get-mvrp-stats>
 </get-mvrp-stats>
```


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```
</rpc>
```

Description Show MVRP statistics

Contents <get-mvrp-stats-intf>—Show MVRP statistics on this interface

<get-mvrp-stats-intf>

Usage

```
<rpc>
 <get-mvrp-stats-intf>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-mvrp-stats-intf>
</rpc>
```

Description Show MVRP statistics on this interface

Contents <interface-name>—Show statistics for this interface

<get-ring-configuration>

Usage

```
<rpc>
 <get-ring-configuration>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-ring-configuration>
</rpc>
```

Description Show configuration of ethernet ring protection group

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

<get-rtg-information>

Usage

```
<rpc>
 <get-rtg-information>
 </get-rtg-information>
</rpc>
```

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Description Show redundant trunk group information

Contents <get-rtg-information-pergrp>—Show information for a particular redundant trunk group

<get-rtg-information-pergrp>

Usage

```
<rpc>
 <get-rtg-information-pergrp>
  <rtg-name>rtg-name</rtg-name> <!-- mandatory -->
 </get-rtg-information-pergrp>
</rpc>
```

Description Show information for a particular redundant trunk group

Contents <rtg-name>—Name of group

<get-static-mac-bypassed-users>

Usage

```
<rpc>
 <get-static-mac-bypassed-users/>
</rpc>
```

Description List users who have bypassed 802.1X authentication

<get-stp-bridge-information>

Usage

```
<rpc>
 <get-stp-bridge-information>
  <brief/>
  <detail/>
  <msti-vlan>msti-vlan</msti-vlan>
  <msti>msti</msti>
  <vlan-id>vlan-id</vlan-id>
 </get-stp-bridge-information>
</rpc>
```

Description Show STP bridge parameters

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<msti>—MSTP instance ID (0 for CIST; 1..4094 for MSTIs)

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<vlan-id>—VLAN ID

<get-stp-bridge-interface-information>

Usage

```
<rpc>
 <get-stp-bridge-interface-information>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
  <msti-vlan>msti-vlan</msti-vlan>
  <msti>msti</msti>
  <vlan-id>vlan-id</vlan-id>
 </get-stp-bridge-interface-information>
</rpc>
```

Description Show STP interface parameters

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

<msti>—MSTP instance ID (0 for CIST; 1..4094 for MSTIs)

<vlan-id>—VLAN ID

<get-stp-statistics-interface-information>

Usage

```
<rpc>
 <get-stp-statistics-interface-information>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
 </get-stp-statistics-interface-information>
</rpc>
```

Description Show STP interface statistics

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<interface-name>—Name of interface

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<get-stp-vlan-interface-statistics>

Usage

```
<rpc>
 <get-stp-vlan-interface-statistics>
  <brief/>
  <detail/>
  <vlan-id>vlan-id</vlan-id> <!-- mandatory -->
 </get-stp-vlan-interface-statistics>
</rpc>
```

Description Show STP VLAN interface statistics

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

<vlan-id>—VLAN ID

<get-vlan-ethernet-switching-table>

Usage

```
<rpc>
 <get-vlan-ethernet-switching-table>
  <summary/>
  <brief/>
  <detail/>
  <vlan-name>vlan-name</vlan-name>
 </get-vlan-ethernet-switching-table>
</rpc>
```

Description Display MAC table for a specified VLAN

Contents <summary>—Display summary output

<brief>—Display brief output (default)

<detail>—Display detailed output

<vlan-name>—Name of VLAN for which to display the table

<get-vlan-information>

Usage

```
<rpc>
 <get-vlan-information>
  <brief/>
  <detail/>
  <extensive/>
```


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```
    <summary/>
    <sort-by>sort-by</sort-by>
    <vlan-name>vlan-name</vlan-name>
   </get-vlan-information>
  </rpc>
```

Description Show VLAN information

Contents <brief>—Display brief output

- name - Sort display by name
- tag - Sort display by tag

<detail>—Display detailed output

- name - Sort display by name
- tag - Sort display by tag

<extensive>—Display extensive output

- name - Sort display by name
- tag - Sort display by tag

<summary>—Display summary output

- name - Sort display by name
- tag - Sort display by tag

<get-management-vlan-information>—Show management vlan information

- name - Sort display by name
- tag - Sort display by tag

<get-vlans-dot1q-tunneling-information>—Show dot1q-tunneling vlan information

- name - Sort display by name
- tag - Sort display by tag

<sort-by>—Specify display order

- name - Sort display by name
- tag - Sort display by tag

<vlan-name>—Show information for a particular VLAN

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<get-vlans-dot1q-tunneling-information>

Usage

```
<rpc>
 <get-vlans-dot1q-tunneling-information>
  <brief/>
  <detail/>
  <extensive/>
  <summary/>
  <sort-by>sort-by</sort-by>
 </get-vlans-dot1q-tunneling-information>
</rpc>
```

Description Show dot1q-tunneling vlan information

Contents <brief>—Display brief output

- name - Sort display by name
- tag - Sort display by tag

<detail>—Display detailed output

- name - Sort display by name
- tag - Sort display by tag

<extensive>—Display extensive output

- name - Sort display by name
- tag - Sort display by tag

<summary>—Display summary output

- name - Sort display by name
- tag - Sort display by tag

<sort-by>—Specify display order

- name - Sort display by name
- tag - Sort display by tag

<load-dhcp-snooping>

Usage

```
<rpc>
 <load-dhcp-snooping>
  <filename>filename</filename> <!-- mandatory -->
 </load-dhcp-snooping>
```


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```
</rpc>
```

Description Load DHCP snooping entries

Contents <filename>—Filename (URL, local, remote)

<refresh-edge-virtual-bridging-firewall>

Usage

```
<rpc>
 <refresh-edge-virtual-bridging-firewall>
 </refresh-edge-virtual-bridging-firewall>
</rpc>
```

Description Request Edge Virtual Bridging firewall refresh

Contents <refresh-edge-virtual-bridging-firewall-interface>—Request Edge Virtual Bridging refresh on this interface

<refresh-edge-virtual-bridging-firewall-interface>

Usage

```
<rpc>
 <refresh-edge-virtual-bridging-firewall-interface>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </refresh-edge-virtual-bridging-firewall-interface>
</rpc>
```

Description Request Edge Virtual Bridging refresh on this interface

Contents <interface-name>—Name of interface

<release-dhcp-client>

Usage

```
<rpc>
 <release-dhcp-client>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </release-dhcp-client>
</rpc>
```

Description Request DHCP client release

Contents <interface-name>—Interface name of DHCP client

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<renew-dhcp-client>

Usage

```
<rpc>
 <renew-dhcp-client>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </renew-dhcp-client>
</rpc>
```

Description Request DHCP client renew

Contents <interface-name>—Interface name of DHCP client

<request-multicast-route-counter>

Usage

```
<rpc>
 <request-multicast-route-counter>
  <source>source</source>
  <group>group</group>
  <instance>instance</instance>
 </request-multicast-route-counter>
</rpc>
```

Description Bind route to counter

Contents <source>—IP address of source

<group>—IP address of group

<instance>—Name of instance

<save-dhcp-snooping>

Usage

```
<rpc>
 <save-dhcp-snooping>
  <filename>filename</filename> <!-- mandatory -->
 </save-dhcp-snooping>
</rpc>
```

Description Save DHCP snooping entries

Contents <filename>—Filename (URL, local, remote)

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CHAPTER 55

Operational Request Tag Elements Specific to SRX Series

This chapter lists the Junos Extensible Markup Language (XML) tag elements that a client of the Junos XML protocol or NETCONF server uses to request operational information. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page ccxciii.

The tags listed in this chapter are specific to devices belonging to:

- SRX Series

<activate-wireless-modem>

Usage

```
<rpc>
 <activate-wireless-modem>
 </activate-wireless-modem>
</rpc>
```

Description Activate the modem

Contents <request-modem-wireless-activate-iota>—Internet Over The Air Activation

<request-modem-wireless-activate-otasp>—Over The Air Service Provisioning

<request-modem-wireless-activate-manual>—Manual Activation

<clear-alg-h323-counters>

Usage

```
<rpc>
 <clear-alg-h323-counters/>
</rpc>
```

Description Clear H323 counters

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<clear-alg-ike-esp-state>

Usage

```
<rpc>
 <clear-alg-ike-esp-state/>
</rpc>
```

Description Clear all IKE-ESP ALG state information

<clear-alg-mgcp-calls-information>

Usage

```
<rpc>
 <clear-alg-mgcp-calls-information/>
</rpc>
```

Description Clear MGCP calls

<clear-alg-mgcp-counter-information>

Usage

```
<rpc>
 <clear-alg-mgcp-counter-information/>
</rpc>
```

Description Clear MGCP counters

<clear-alg-sccp-calls-information>

Usage

```
<rpc>
 <clear-alg-sccp-calls-information/>
</rpc>
```

Description Clear SCCP calls

<clear-alg-sccp-counters>

Usage

```
<rpc>
 <clear-alg-sccp-counters/>
</rpc>
```

Description Clear SCCP counters

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<clear-alg-sip-calls>

Usage

```
<rpc>
 <clear-alg-sip-calls/>
</rpc>
```

Description Clear SIP calls

<clear-alg-sip-counters>

Usage

```
<rpc>
 <clear-alg-sip-counters/>
</rpc>
```

Description Clear SIP counters

<clear-all-dvpn-user-connections>

Usage

```
<rpc>
 <clear-all-dvpn-user-connections/>
</rpc>
```

Description Clear all dynamic VPN user connections

<clear-anti-spam-clear>

Usage

```
<rpc>
 <clear-anti-spam-clear/>
</rpc>
```

Description Clear anti-spam statistics information

<clear-anti-virus>

Usage

```
<rpc>
 <clear-anti-virus/>
</rpc>
```

Description Clear anti-virus statistics information

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<clear-application-firewall-statistics>

Usage

```
<rpc>
 <clear-application-firewall-statistics>
  <logical-system>logical-system</logical-system>
 </clear-application-firewall-statistics>
</rpc>
```

Description Clear statistics of the application-firewall

Contents <logical-system>—Flow information of logical systems

- all - All logical systems (default)
- root-logical-system - Root logical system
- logical-system-name - Name of a logical system

<clear-avt-counters>

Usage

```
<rpc>
 <clear-avt-counters/>
</rpc>
```

Description Clear Application tracking counters

<clear-chassis-cluster-control-plane-statistics>

Usage

```
<rpc>
 <clear-chassis-cluster-control-plane-statistics/>
</rpc>
```

Description Clear control-plane statistics

<clear-chassis-cluster-data-plane-statistics>

Usage

```
<rpc>
 <clear-chassis-cluster-data-plane-statistics/>
</rpc>
```

Description Clear data-plane statistics

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<clear-chassis-cluster-failover-count>

Usage

```
<rpc>
 <clear-chassis-cluster-failover-count/>
</rpc>
```

Description Clear failover-count for all redundancy-groups

<clear-chassis-cluster-information>

Usage

```
<rpc>
 <clear-chassis-cluster-information/>
</rpc>
```

Description Clear debug information

<clear-chassis-cluster-ip-monitoring-failure-count>

Usage

```
<rpc>
 <clear-chassis-cluster-ip-monitoring-failure-count>
 </clear-chassis-cluster-ip-monitoring-failure-count>
</rpc>
```

Description Clear IP monitoring failure-count

Contents <clear-chassis-cluster-ip-monitoring-failure-count-ip-address>—Clear IP monitoring failure-count for a specific IP address

<clear-chassis-cluster-ip-monitoring-failure-count-ip-address>

Usage

```
<rpc>
  <clear-chassis-cluster-ip-monitoring-failure-count-ip-address>
  <ip-address-identifier>ip-address-identifier</ip-address-identifier> <!-- mandatory
-->
  </clear-chassis-cluster-ip-monitoring-failure-count-ip-address>
</rpc>
```

Description Clear IP monitoring failure-count for a specific IP address

Contents <ip-address-identifier>—Clear failure-count of an IP address

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<clear-chassis-cluster-statistics>

Usage

```
<rpc>
 <clear-chassis-cluster-statistics/>
</rpc>
```

Description Clear all statistics

<clear-chassis-cluster-switch-fabric-probe-statistics>

Usage

```
<rpc>
 <clear-chassis-cluster-switch-fabric-probe-statistics/>
</rpc>
```

Description Clear chassis cluster switch fabric probe statistics

<clear-content-filter>

Usage

```
<rpc>
 <clear-content-filter/>
</rpc>
```

Description Clear content-filtering statistics information

<clear-destination-nat-pool-information>

Usage

```
<rpc>
 <clear-destination-nat-pool-information>
  <pool-choice>pool-choice</pool-choice> <!-- mandatory -->
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <all/>
 </clear-destination-nat-pool-information>
</rpc>
```

Description Clear destination NAT information of this pool

Contents <pool-name>—Address-pool name

<all>—Clear all destination NAT pool information

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<clear-destination-nat-rule-sets-information>

Usage

```
<rpc>
 <clear-destination-nat-rule-sets-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
 </clear-destination-nat-rule-sets-information>
</rpc>
```

Description Clear destination NAT rule-set information

Contents <rule-name>—The name of the destination NAT rule-set

<all>—Clear all destination NAT rule-sets information

<clear-dvpn-user-connection-by-username>

Usage

```
<rpc>
 <clear-dvpn-user-connection-by-username>
  <username>username</username> <!-- mandatory -->
  <ike-id>ike-id</ike-id> <!-- mandatory -->
 </clear-dvpn-user-connection-by-username>
</rpc>
```

Description Clear Dynamic VPN user connection with specified username

Contents <username>—Name of user for the connection

<ike-id>—The IKE ID of this user connection

<clear-eedebug-counters>

Usage

```
<rpc>
 <clear-eedebug-counters/>
</rpc>
```

Description Clear datapath debug counters

<clear-flow-ipaction-all>

Usage

```
<rpc>
```

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```
<clear-flow-ipaction-all>
 <lsys>lsys</lsys>
 <logical-system>logical-system</logical-system>
 <root-logical-system/>
</clear-flow-ipaction-all>
</rpc>
```

Description Clear all ip-action entries

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-flow-session>

Usage

```
<rpc>
 <clear-flow-session>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-prefix>source-prefix</source-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <application>application</application>
  <idp/>
  <tunnel/>
  <nat/>
  <services-offload/>
  <resource-manager/>
  <application-firewall/>
  <application-traffic-control/>
  <interface>interface</interface>
  <family>family</family>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-flow-session>
</rpc>
```

Description Clear session table

Contents <destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP

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- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<source-prefix>—Source IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol

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- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<source-port>—Source port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol

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- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol

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- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA

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- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload

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- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell

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- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<application>—Application protocol name

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell

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- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<idp>—IDP sessions

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<tunnel>—Tunnel sessions

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<nat>—Sessions with network address translation

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<services-offload>—Services-offload sessions

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<resource-manager>—Sessions with resource manager

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<application-firewall>—Show application-firewall sessions

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- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<application-traffic-control>—Show application-traffic-control sessions

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<interface>—Name of incoming or outgoing interface

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-flow-session-all>—Clear all sessions

<clear-flow-session-by-session-identifier>—Clear session with specified session identifier

<clear-flow-session-all>

Usage

```
<rpc>
 <clear-flow-session-all>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
```


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```
 </clear-flow-session-all>
</rpc>
```

Description Clear all sessions

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-flow-session-by-session-identifier>

Usage

```
<rpc>
 <clear-flow-session-by-session-identifier>
  <session-identifier>session-identifier</session-identifier> <!-- mandatory -->
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-flow-session-by-session-identifier>
</rpc>
```

Description Clear session with specified session identifier

Contents <session-identifier>—Session identifier

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-group-vpn-ike-security-associations>

Usage

```
<rpc>
 <clear-group-vpn-ike-security-associations>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <peer-address>peer-address</peer-address>
  <index>index</index>
```

```
 </clear-group-vpn-ike-security-associations>
</rpc>
```

Description Clear group VPN IKE security associations

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<peer-address>—IP address of the peer

<index>—Index of security association

<clear-group-vpn-kek-security-associations>

Usage

```
<rpc>
 <clear-group-vpn-kek-security-associations>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <index>index</index>
 </clear-group-vpn-kek-security-associations>
</rpc>
```

Description Clear group VPN KEK security associations

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<index>—Index of security association

<clear-gvpn-ipsec-security-association>

Usage

```
<rpc>
 <clear-gvpn-ipsec-security-association>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <index>index</index>
 </clear-gvpn-ipsec-security-association>
</rpc>
```


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Description Clear IPSec dynamic security associations

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<index>—Index of security association

<clear-gvpn-ipsec-statistics>

Usage

```
<rpc>
 <clear-gvpn-ipsec-statistics>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <index>index</index>
 </clear-gvpn-ipsec-statistics>
</rpc>
```

Description Clear Group VPN IPSec statistics

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<index>—Index of security association

<clear-gvrp-statistics>

Usage

```
<rpc>
 <clear-gvrp-statistics/>
</rpc>
```

Description Clear GVRP statistics

<clear-ike-respond-bad-spi-count>

Usage

```
<rpc>
 <clear-ike-respond-bad-spi-count>
  <gw-name>gw-name</gw-name>
 </clear-ike-respond-bad-spi-count>
</rpc>
```

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Description Clear IKE bad SPI count

Contents <gw-name>—Name of the gateway

<clear-ike-security-association>

Usage

```
<rpc>
 <clear-ike-security-association>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <peer-address>peer-address</peer-address>
  <index>index</index>
  <port>port</port>
 </clear-ike-security-association>
</rpc>
```

Description Clear IKE security associations

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<peer-address>—Name of security association

<index>—Index of security association

<port>—Port number of security association

<clear-incoming-table-information>

Usage

```
<rpc>
 <clear-incoming-table-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-incoming-table-information>
</rpc>
```

Description Clear incoming table information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

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<root-logical-system>—Root logical-system (default)

<clear-ipsec-security-association>

Usage

```
<rpc>
 <clear-ipsec-security-association>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <index>index</index>
 </clear-ipsec-security-association>
</rpc>
```

Description Clear IPSec dynamic security associations

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<index>—Index of security association

<clear-ipsec-statistics>

Usage

```
<rpc>
 <clear-ipsec-statistics>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <index>index</index>
 </clear-ipsec-statistics>
</rpc>
```

Description Clear IPSec statistics

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<index>—Index of security association

<clear-isdn-q921-statistics>

Usage

```
<rpc>
 <clear-isdn-q921-statistics>
  <interface>interface</interface>
```

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```
 </clear-isdn-q921-statistics>
</rpc>
```

Description Clear Q.921 layer statistics

Contents <interface>—Interface name

<clear-isdn-q931-statistics>

Usage

```
<rpc>
 <clear-isdn-q931-statistics>
  <interface>interface</interface>
 </clear-isdn-q931-statistics>
</rpc>
```

Description Clear Q.931 layer statistics

Contents <interface>—Interface name

<clear-persist-nat-all>

Usage

```
<rpc>
 <clear-persist-nat-all>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-persist-nat-all>
</rpc>
```

Description Clear all persistent NAT information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-persist-nat-interface-information>

Usage

```
<rpc>
 <clear-persist-nat-interface-information>
  <lsys>lsys</lsys>
```


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```
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-persist-nat-interface-information>
</rpc>
```

Description Clear persistent NAT information of this interface

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-persist-nat-ip-port-information>

Usage

```
<rpc>
 <clear-persist-nat-ip-port-information>
  <ip>ip</ip> <!-- mandatory -->
  <internal-port>internal-port</internal-port>
  <internal-protocol>internal-protocol</internal-protocol>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-persist-nat-ip-port-information>
</rpc>
```

Description Clear persistent NAT information of internal IP and port

Contents <ip>—Internal IP address

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol
- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)
- all - All logical systems
- logical-system-name - Logical system name

<internal-port>—Internal port

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol

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- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)
- all - All logical systems
- logical-system-name - Logical system name

<internal-protocol>—Internal protocol

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol
- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)
- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-persist-nat-pool-information>

Usage

```
<rpc>
 <clear-persist-nat-pool-information>
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-persist-nat-pool-information>
</rpc>
```

Description Clear persistent NAT information of this pool

Contents <pool-name>—Source NAT pool name

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems

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- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-retag-statistics>

Usage

```
<rpc>
 <clear-retag-statistics>
  <filter>filter</filter> <!-- mandatory -->
  <interface>interface</interface>
  <vlan-id>vlan-id</vlan-id>
  <clear-all/>
 </clear-retag-statistics>
</rpc>
```

Description Clear L2 vlan rewrite statistics information

Contents <interface>—Rewrite statistics interface

<vlan-id>—Rewrite statistics on vlan-id

<clear-all>—Clear all statistics

<clear-screen-statistics>

Usage

```
<rpc>
 <clear-screen-statistics>
  <filter>filter</filter> <!-- mandatory -->
  <zone>zone</zone>
  <interface>interface</interface>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-screen-statistics>
</rpc>
```

Description Clear screen attack statistics information

Contents <zone>—IDS statistics zone

- all - All logical systems
- logical-system-name - Logical system name

<interface>—IDS statistics interface

- all - All logical systems

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- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-security-dynamic-policies-statistics>

Usage

```
<rpc>
 <clear-security-dynamic-policies-statistics/>
</rpc>
```

Description Clear statistics about the dynamic policies

<clear-security-firewall-authentication-history>

Usage

```
<rpc>
 <clear-security-firewall-authentication-history>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <filter>filter</filter>
  <identifier>identifier</identifier>
  <address>address</address>
 </clear-security-firewall-authentication-history>
</rpc>
```

Description Clear firewall authentication history

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<identifier>—Clear authentication history by id

<address>—Clear authentication history by ip address

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<clear-security-firewall-authentication-users>

Usage

```
<rpc>
 <clear-security-firewall-authentication-users>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <filter>filter</filter>
  <identifier>identifier</identifier>
  <address>address</address>
 </clear-security-firewall-authentication-users>
</rpc>
```

Description Clear current firewall authentication user data

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<identifier>—Clear authentication entry by id

<address>—Clear authentication entry by ip address

<clear-security-flow-ip-action>

Usage

```
<rpc>
 <clear-security-flow-ip-action>
  <source-prefix>source-prefix</source-prefix>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <family>family</family>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-security-flow-ip-action>
</rpc>
```

Description Clear ip-action table

Contents <source-prefix>—Source IP prefix or address

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast

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- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<source-port>—Source port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol

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- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT

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- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-flow-ipaction-all>—Clear all ip-action entries

<clear-security-flow-statistics>

Usage

```
<rpc>
 <clear-security-flow-statistics>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-security-flow-statistics>
</rpc>
```

Description Clear flow statistics

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-security-gprs-gtp-tunnel>

Usage

```
<rpc>
 <clear-security-gprs-gtp-tunnel>
  <tunnel-identifier>tunnel-identifier</tunnel-identifier> <!-- mandatory -->
  <identifier>identifier</identifier>
  <all/>
```

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```
 </clear-security-gprs-gtp-tunnel>
</rpc>
```

Description Clear gtp tunnels

Contents <identifier>—GTP clear tunnel with specified identifier number

<all>—GTP clear all tunnels

<clear-security-group-vpn-server>

Usage

```
<rpc>
 <clear-security-group-vpn-server>
  <group_choice>group_choice</group_choice>

<clear-security-group-vpn-server-group-name>clear-security-group-vpn-server-group-name</clear-security-group-vpn-server-group-name>


<clear-security-group-vpn-server-group-id>clear-security-group-vpn-server-group-id</clear-security-group-vpn-server-group-id>

   <clear-security-group-vpn-server-now/>
 </clear-security-group-vpn-server>
</rpc>
```

Description Clear group VPN server security information

Contents <clear-security-group-vpn-server-group-name>—Clear specified group name

<clear-security-group-vpn-server-group-id>—Clear specified group id

<clear-security-group-vpn-server-now>—Clear group immediately

<clear-security-log-hpl-information>

Usage

```
<rpc>
 <clear-security-log-hpl-information/>
</rpc>
```

Description Clear security logs in binary format

<clear-security-policies-hit-count>

Usage

```
<rpc>
 <clear-security-policies-hit-count>
  <from-zone>from-zone</from-zone>
```

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```
  <to-zone>to-zone</to-zone>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-security-policies-hit-count>
</rpc>
```

Description Clear hit-count about the policies

Contents <from-zone>—Clear the policy hit-count matching the given source zone

- logical-system-name - Logical system name

<to-zone>—Clear the policy hit-count matching the given destination zone

- logical-system-name - Logical system name

<logical-system>—Logical-system name

- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-security-policies-statistics>

Usage

```
<rpc>
 <clear-security-policies-statistics>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </clear-security-policies-statistics>
</rpc>
```

Description Clear statistics about the policies

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<clear-source-nat-pool-information>

Usage

```
<rpc>
 <clear-source-nat-pool-information>
  <pool-choice>pool-choice</pool-choice> <!-- mandatory -->
```

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```
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <all/>
 </clear-source-nat-pool-information>
</rpc>
```

Description Clear source NAT information of this pool

Contents <pool-name>—Address-pool name

<all>—Clear all source NAT pool information

<clear-source-nat-rule-sets-information>

Usage

```
<rpc>
 <clear-source-nat-rule-sets-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
 </clear-source-nat-rule-sets-information>
</rpc>
```

Description Clear source NAT rule-set information

Contents <rule-name>—The name of the source NAT rule-set

<all>—Clear all source NAT rule-sets information

<clear-ssl-proxy-statistics>

Usage

```
<rpc>
 <clear-ssl-proxy-statistics/>
</rpc>
```

Description Clear ssl proxy statistics

<clear-static-nat-rule-sets-information>

Usage

```
<rpc>
 <clear-static-nat-rule-sets-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
 </clear-static-nat-rule-sets-information>
</rpc>
```


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Description Clear static NAT rule-set information

Contents <rule-name>—The name of the static NAT rule-set

<all>—Clear all static NAT rule-sets information

<clear-tgm-media-gateway-controller>

Usage

```
<rpc>
 <clear-tgm-media-gateway-controller>
  <slot>slot</slot> <!-- mandatory -->
  <media-gateway-controller/>
 </clear-tgm-media-gateway-controller>
</rpc>
```

Description Clear TGM information for this FPC

Contents <slot>—FPC slot number

<media-gateway-controller>—Name of one or more media gateway controllers

<clear-userfw-local-auth-table>

Usage

```
<rpc>
 <clear-userfw-local-auth-table/>
</rpc>
```

Description Clear local user authentication table information

<clear-web-filter-clear>

Usage

```
<rpc>
 <clear-web-filter-clear/>
</rpc>
```

Description Clear web-filtering statistics information

<clear-wlan-access-points-neighbors>

Usage

```
<rpc>
 <clear-wlan-access-points-neighbors>
  <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>
```

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```
<!-- mandatory -->
  </clear-wlan-access-points-neighbors>
 </rpc>
```

Description Clear access point neighbor information

Contents <wlan-access-point-name>—Name of the access point

<get-alg-h323-counters>

Usage

```
<rpc>
 <get-alg-h323-counters/>
</rpc>
```

Description Show H323 counters

<get-alg-mgcp-call-information>

Usage

```
<rpc>
 <get-alg-mgcp-call-information>
  <endpoint>endpoint</endpoint>
 </get-alg-mgcp-call-information>
</rpc>
```

Description Show MGCP calls

Contents <endpoint>—Show MGCP call endpoint

<get-alg-mgcp-counter-information>

Usage

```
<rpc>
 <get-alg-mgcp-counter-information/>
</rpc>
```

Description Show MGCP counters

<get-alg-mgcp-endpoint-information>

Usage

```
<rpc>
 <get-alg-mgcp-endpoint-information>
  <endpoint-name>endpoint-name</endpoint-name>
```


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```
 </get-alg-mgcp-endpoint-information>
</rpc>
```

Description Show MGCP endpoints

Contents <endpoint-name>—Show MGCP endpoint with identifier

<get-alg-msrpc-uuid2oid-table>

Usage

```
<rpc>
 <get-alg-msrpc-uuid2oid-table/>
</rpc>
```

Description Show MSRPC UUID to OID table

<get-alg-sccp-calls>

Usage

```
<rpc>
 <get-alg-sccp-calls>
  <detail/>
  <brief/>
 </get-alg-sccp-calls>
</rpc>
```

Description Show SCCP calls

Contents <detail>—Display detailed call information

<brief>—Display brief call information (default)

<get-alg-sccp-counters>

Usage

```
<rpc>
 <get-alg-sccp-counters/>
</rpc>
```

Description Show SCCP counters

<get-alg-sip-call-information>

Usage

```
<rpc>
```

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```
<get-alg-sip-call-information>
 <detail/>
 <brief/>
</get-alg-sip-call-information>
</rpc>
```

Description Show SIP calls

Contents <detail>—Display detailed call information

<brief>—Display brief call information (default)

<get-alg-sip-counter-information>

Usage

```
<rpc>
 <get-alg-sip-counter-information/>
</rpc>
```

Description Show SIP counters

<get-alg-sip-rate-information>

Usage

```
<rpc>
 <get-alg-sip-rate-information/>
</rpc>
```

Description Show SIP rate

<get-alg-status>

Usage

```
<rpc>
 <get-alg-status/>
</rpc>
```

Description Show ALG status

<get-appfw-rule-set>

Usage

```
<rpc>
 <get-appfw-rule-set>
  <rule-set-choice>rule-set-choice</rule-set-choice> <!-- mandatory -->
  <rule-set-name>rule-set-name</rule-set-name> <!-- mandatory -->
```


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```
  <all/>
  <logical-system>logical-system</logical-system>
 </get-appfw-rule-set>
</rpc>
```

Description Show security application firewall rule-set

Contents <rule-set-name>—Show the rule-set information matching the given rule-set name

- all - All logical systems (default)
- root-logical-system - Root logical system
- logical-system-name - Name of a logical system

<all>—Show all rule-sets information

- all - All logical systems (default)
- root-logical-system - Root logical system
- logical-system-name - Name of a logical system

<logical-system>—Flow information of logical systems

- all - All logical systems (default)
- root-logical-system - Root logical system
- logical-system-name - Name of a logical system

<get-avt-counters>

Usage

```
<rpc>
 <get-avt-counters/>
</rpc>
```

Description Show Application tracking counters

<get-chassis-cluster-control-plane-statistics>

Usage

```
<rpc>
 <get-chassis-cluster-control-plane-statistics/>
</rpc>
```

Description Display control-plane statistics

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<get-chassis-cluster-data-plane-interfaces>

Usage

```
<rpc>
 <get-chassis-cluster-data-plane-interfaces/>
</rpc>
```

Description Display data-plane interfaces

<get-chassis-cluster-data-plane-statistics>

Usage

```
<rpc>
 <get-chassis-cluster-data-plane-statistics/>
</rpc>
```

Description Display data-plane statistics

<get-chassis-cluster-ethernet-switching-status>

Usage

```
<rpc>
 <get-chassis-cluster-ethernet-switching-status/>
</rpc>
```

Description Display chassis cluster ethernet switching status

<get-chassis-cluster-interfaces>

Usage

```
<rpc>
 <get-chassis-cluster-interfaces/>
</rpc>
```

Description Display chassis cluster interfaces

<get-chassis-cluster-ip-monitoring-status>

Usage

```
<rpc>
 <get-chassis-cluster-ip-monitoring-status>
 </get-chassis-cluster-ip-monitoring-status>
</rpc>
```


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Description Display IP monitoring status

Contents <get-chassis-cluster-ip-monitoring-status-redundancy-group>—Display IP monitoring status for a specific redundancy-group

<get-chassis-cluster-ip-monitoring-status-redundancy-group>

Usage

```
<rpc>
 <get-chassis-cluster-ip-monitoring-status-redundancy-group>

<redundancy-group-identifier>redundancy-group-identifier</redundancy-group-identifier>
<!-- mandatory -->
 </get-chassis-cluster-ip-monitoring-status-redundancy-group>
</rpc>
```

Description Display IP monitoring status for a specific redundancy-group

Contents <redundancy-group-identifier>—Redundancy-group identifier

<get-chassis-cluster-statistics>

Usage

```
<rpc>
 <get-chassis-cluster-statistics/>
</rpc>
```

Description Display chassis cluster statistics

<get-chassis-cluster-status>

Usage

```
<rpc>
 <get-chassis-cluster-status>
  <redundancy-group>redundancy-group</redundancy-group>
 </get-chassis-cluster-status>
</rpc>
```

Description Display chassis cluster status

Contents <redundancy-group>—Display chassis cluster status per redundancy-group

<get-chassis-cluster-switch-fabric-link-interfaces>

Usage

```
<rpc>
```

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```
 <get-chassis-cluster-switch-fabric-link-interfaces/>
</rpc>
```

Description Display chassis cluster switch fabric link interfaces

<get-chassis-cluster-switch-fabric-probe-statistics>

Usage

```
<rpc>
 <get-chassis-cluster-switch-fabric-probe-statistics/>
</rpc>
```

Description Display chassis cluster switch fabric probe statistics

<get-client-version>

Usage

```
<rpc>
 <get-client-version/>
</rpc>
```

Description Show Dynamic VPN client version

<get-destination-nat-pool-information>

Usage

```
<rpc>
 <get-destination-nat-pool-information>
  <pool-choice>pool-choice</pool-choice> <!-- mandatory -->
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <all/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-destination-nat-pool-information>
</rpc>
```

Description Show destination NAT address-pool information

Contents <pool-name>—The name of the address-pool

- all - All logical systems
- logical-system-name - Logical system name

<all>—Display all destination NAT address-pool information

- all - All logical systems

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- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-destination-nat-rule-sets-information>

Usage

```
<rpc>
 <get-destination-nat-rule-sets-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-destination-nat-rule-sets-information>
</rpc>
```

Description Show destination NAT rule-set information

Contents <rule-name>—The name of the rule-set

- all - All logical systems
- logical-system-name - Logical system name

<all>—Display all destination NAT rule-sets information

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-dialer-defaults-information>

Usage

```
<rpc>
 <get-dialer-defaults-information/>
```

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```
</rpc>
```

Description Show dialer services software defaults

<get-dialer-interface-information>

Usage

```
<rpc>
 <get-dialer-interface-information>
  <brief/>
  <detail/>
  <interface-name>interface-name</interface-name>
 </get-dialer-interface-information>
</rpc>
```

Description Show interface information

Contents <brief>—Display brief output

<detail>—Display detailed output

<interface-name>—Name of dialer logical interface

<get-dialer-pool-information>

Usage

```
<rpc>
 <get-dialer-pool-information>
  <brief/>
  <detail/>
  <pool-name>pool-name</pool-name>
 </get-dialer-pool-information>
</rpc>
```

Description Show pool information

Contents <brief>—Display brief output

<detail>—Display detailed output

<pool-name>—Dialer pool identifier

<get-download-information>

Usage

```
<rpc>
 <get-download-information>
  <download-id>download-id</download-id>
```


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```
 </get-download-information>
</rpc>
```

Description Show status of downloads

Contents <download-id>—ID of the download whose status is to be shown

<get-eedebug-action-profile>

Usage

```
<rpc>
 <get-eedebug-action-profile/>
</rpc>
```

Description Show current datapath-debug action profile

<get-eedebug-counters>

Usage

```
<rpc>
 <get-eedebug-counters/>
</rpc>
```

Description Show datapath counters

<get-eedebug-events>

Usage

```
<rpc>
 <get-eedebug-events/>
</rpc>
```

Description Show current registered data path events

<get-firewall-authentication-history>

Usage

```
<rpc>
 <get-firewall-authentication-history>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <filter>filter</filter>

<get-firewall-authentication-history-specific>get-firewall-authentication-history-specific</get-firewall-authentication-history-specific>
```

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```
<get-firewall-authentication-history-specific>get-firewall-authentication-history-specific</get-firewall-authentication-history-specific>

    <from-zone>from-zone</from-zone>
    <to-zone>to-zone</to-zone>
  </get-firewall-authentication-history>
</rpc>
```

Description Show firewall authentication history

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-firewall-authentication-history-specific>—Locate authentication history by id

<get-firewall-authentication-history-specific>—Locate authentication history by ip address

<from-zone>—Show authentication history matching the given source zone, null for web-auth

<to-zone>—Show authentication history matching the given destination zone, null for web-auth

<get-firewall-authentication-users>

Usage

```
<rpc>
  <get-firewall-authentication-users>
    <lsys>lsys</lsys>
    <logical-system>logical-system</logical-system>
    <root-logical-system/>
    <filter>filter</filter>

<get-firewall-authentication-users-specific>get-firewall-authentication-users-specific</get-firewall-authentication-users-specific>


<get-firewall-authentication-users-specific>get-firewall-authentication-users-specific</get-firewall-authentication-users-specific>

    <from-zone>from-zone</from-zone>
    <to-zone>to-zone</to-zone>
  </get-firewall-authentication-users>
</rpc>
```

Description Show current firewall authentication users

Contents <logical-system>—Logical-system name

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- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-firewall-authentication-users-specific>—Locate authentication entry by id

<get-firewall-authentication-users-specific>—Locate authentication entry by ip address

<from-zone>—Show authentication entry matching the given source zone, null for web-auth

<to-zone>—Show authentication entry matching the given destination zone, null for web-auth

<get-firewall-dynamic-policies>

Usage

```
<rpc>
 <get-firewall-dynamic-policies>
  <from-zone>from-zone</from-zone>
  <to-zone>to-zone</to-zone>
  <detail/>
  <scope-id>scope-id</scope-id>
 </get-firewall-dynamic-policies>
</rpc>
```

Description Show security firewall dynamic policies

Contents <from-zone>—Show the policy information matching the given source zone

<to-zone>—Show the policy information matching the given destination zone

<detail>—Show the detailed dynamic policy information

<scope-id>—Show the policy information matching the given scope policy id [4...MAX_POLICIES]

<get-firewall-policies>

Usage

```
<rpc>
 <get-firewall-policies>
  <from-zone>from-zone</from-zone>
  <to-zone>to-zone</to-zone>
  <policy-name>policy-name</policy-name>
  <detail/>
  <zone-context/>
  <start>start</start>
  <count>count</count>
```

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```
    <application-firewall/>
    <lsys>lsys</lsys>
    <logical-system>logical-system</logical-system>
    <root-logical-system/>
   </get-firewall-policies>
  </rpc>
```

Description Show security firewall policies

Contents <from-zone>—Show the policy information matching the given source zone

- all - All logical systems
- logical-system-name - Logical system name

<to-zone>—Show the policy information matching the given destination zone

- all - All logical systems
- logical-system-name - Logical system name

<get-security-policies-hit-count>—Show the hit count of policies

- all - All logical systems
- logical-system-name - Logical system name

<get-global-firewall-policies>—Show the policy information of global policies

- all - All logical systems
- logical-system-name - Logical system name

<policy-name>—Show the policy information matching the given policy name

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Show the detailed information

- all - All logical systems
- logical-system-name - Logical system name

<zone-context>—Show the count of policies in each context (from-zone and to-zone)

- all - All logical systems
- logical-system-name - Logical system name

<start>—Show the policies from a given position

- all - All logical systems
- logical-system-name - Logical system name

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<count>—Number of policies to show

- all - All logical systems
- logical-system-name - Logical system name

<application-firewall>—Show the information of application-firewall

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-cp-session>

Usage

```
<rpc>
 <get-flow-cp-session>
  <source-prefix>source-prefix</source-prefix>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <family>family</family>
  <summary/>
  <terse/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-flow-cp-session>
</rpc>
```

Description Show CP sessions

Contents <source-prefix>—Source IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol

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- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<source-port>—Source port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First

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- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<summary>—Show output summary

- all - All logical systems
- logical-system-name - Logical system name

<terse>—Show terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-gate-information>

Usage

```
<rpc>
 <get-flow-gate-information>
  <source-prefix>source-prefix</source-prefix>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <family>family</family>
  <summary/>
  <brief/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-flow-gate-information>
</rpc>
```

Description Show gate information

Contents <source-prefix>—Source IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol

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- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<source-port>—Source port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First

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- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<summary>—Show output summary

- all - All logical systems
- logical-system-name - Logical system name

<brief>—Show brief output (default)

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-ipaction-information>

Usage

```
<rpc>
 <get-flow-ipaction-information>
  <source-prefix>source-prefix</source-prefix>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <family>family</family>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
  <brief/>
 </get-flow-ipaction-information>
</rpc>
```

Description Show ip-action table

Contents <source-prefix>—Source IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol

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- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<source-port>—Source port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First

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- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

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<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<summary>—Show output summary

<brief>—Show brief output (default)

<get-flow-ipaction-information-all>—Show all ip-action entries

<get-flow-ipaction-information-all>

Usage

```
<rpc>
 <get-flow-ipaction-information-all>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-flow-ipaction-information-all>
</rpc>
```

Description Show all ip-action entries

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-session-by-identifier>

Usage

```
<rpc>
 <get-flow-session-by-identifier>
  <session-identifier>session-identifier</session-identifier> <!-- mandatory -->
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-flow-session-by-identifier>
</rpc>
```

Description Show session with specified session identifier

Contents <session-identifier>—Session identifier

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- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-session-information>

Usage

```
<rpc>
 <get-flow-session-information>
  <source-prefix>source-prefix</source-prefix>
  <destination-prefix>destination-prefix</destination-prefix>
  <source-port>source-port</source-port>
  <destination-port>destination-port</destination-port>
  <protocol>protocol</protocol>
  <summary/>
  <brief/>
  <extensive/>
  <encrypted/>
  <idp/>
  <tunnel/>
  <nat/>
  <services-offload/>
  <resource-manager/>
  <application-firewall/>
  <application-traffic-control/>
  <application>application</application>
  <family>family</family>
  <interface>interface</interface>

<application-firewall-rule-set>application-firewall-rule-set</application-firewall-rule-set>


<application-traffic-control-rule-set>application-traffic-control-rule-set</application-traffic-control-rule-set>

    <dynamic-application>dynamic-application</dynamic-application>

<dynamic-application-group>dynamic-application-group</dynamic-application-group>

    <start-identifier>start-identifier</start-identifier>
    <count>count</count>
    <lsys>lsys</lsys>
    <logical-system>logical-system</logical-system>
    <root-logical-system/>
  </get-flow-session-information>
</rpc>
```


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Description Show session table

Contents <source-prefix>—Source IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell

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- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-prefix>—Destination IP prefix or address

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service

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- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
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- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
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- q931 - Q.931
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- realaudio - RealAudio
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- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<source-port>—Source port

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
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- sccp - Skinny Client Control Protocol

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- sip - Session Initiation Protocol
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- talk - Talk program
- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
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- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<destination-port>—Destination port

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane

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- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
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- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<protocol>—IP protocol number

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP

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- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)
- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
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- sccp - Skinny Client Control Protocol
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- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<summary>—Show output summary

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<brief>—Show brief output (default)

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<extensive>—Show detailed output

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<encrypted>—Show encrypted traffic

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- tftp - Trivial File Transfer Protocol
- http - Hyper Text transfer protocol
- https - Secure HyperText Transfer Protocol
- smtp - Simple Mail Transfer Protocol
- imap - Internet Message Access Protocol
- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<idp>—IDP sessions

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
- rtsp - Real Time Streaming Protocol
- sccp - Skinny Client Control Protocol
- sip - Session Initiation Protocol
- sqlnet-v2 - Oracle SQL*Net Version 2
- talk - Talk program

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- tftp - Trivial File Transfer Protocol
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- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<tunnel>—Tunnel sessions

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
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<nat>—Sessions with network address translation

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
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<services-offload>—Services-offload sessions

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
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- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<resource-manager>—Sessions with resource manager

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
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<application-firewall>—Show application-firewall sessions

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
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- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<application-traffic-control>—Show application-traffic-control sessions

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
- ignore - Ignore application type
- mgcp-ca - MGCP-CA
- mgcp-ua - MGCP-UA
- ms-rpc - Microsoft RPC
- pptp - Point-to-Point Tunneling Protocol
- sun-rpc - Sun Microsystems RPC
- q931 - Q.931
- ras - RAS
- realaudio - RealAudio
- rsh - Remote Shell
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- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<application>—Application protocol name

- dns - Domain Name Service
- ftp - File Transfer Protocol
- gprs-gtp-c - GPRS Tunneling Control Plane
- gprs-gtp-u - GPRS Tunneling User Plane
- gprs-gtp-v0 - GPRS Tunneling Version 0
- gprs-sctp - GPRS Stream Control Protocol
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- ssh - Secure Shell
- telnet - Telnet Terminal Emulation Protocol
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATPT
- all - All logical systems
- logical-system-name - Logical system name

<interface>—Name of incoming or outgoing interface

- all - All logical systems
- logical-system-name - Logical system name

<application-firewall-rule-set>—Show application-firewall session by rule-set

- all - All logical systems
- logical-system-name - Logical system name

<application-traffic-control-rule-set>—Show application-traffic-control session by rule-set

- all - All logical systems
- logical-system-name - Logical system name

<dynamic-application>—Dynamic application name

- all - All logical systems
- logical-system-name - Logical system name

<dynamic-application-group>—Dynamic application group name

- all - All logical systems
- logical-system-name - Logical system name

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<start-identifier>—Show sessions from this start identifier

- all - All logical systems
- logical-system-name - Logical system name

<count>—Number of entries to show

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-session-by-identifier>—Show session with specified session identifier

<get-flow-statistics-all>

Usage

```
<rpc>
 <get-flow-statistics-all>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-flow-statistics-all>
</rpc>
```

Description Show flow statistics

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-flow-status-all>

Usage

```
<rpc>
 <get-flow-status-all/>
</rpc>
```

Description Show flow status

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<get-global-firewall-policies>

Usage

```
<rpc>
 <get-global-firewall-policies>
  <policy-name>policy-name</policy-name>
  <detail/>
  <zone-context/>
  <start>start</start>
  <count>count</count>
  <application-firewall/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-global-firewall-policies>
</rpc>
```

Description Show the policy information of global policies

Contents <policy-name>—Show the policy information matching the given policy name

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Show the detailed information

- all - All logical systems
- logical-system-name - Logical system name

<zone-context>—Show the count of policies in each context (from-zone and to-zone)

- all - All logical systems
- logical-system-name - Logical system name

<start>—Show the policies from a given position

- all - All logical systems
- logical-system-name - Logical system name

<count>—Number of policies to show

- all - All logical systems
- logical-system-name - Logical system name

<application-firewall>—Show the information of application-firewall

- all - All logical systems
- logical-system-name - Logical system name

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<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-gvpn-ike-security-associations-information>

Usage

```
<rpc>
 <get-gvpn-ike-security-associations-information>
  <brief/>
  <detail/>
  <peer-address>peer-address</peer-address>
  <index>index</index>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-gvpn-ike-security-associations-information>
</rpc>
```

Description Show IKE security association information

Contents <brief>—Show brief output (default)

<detail>—Show detailed output

<peer-address>—IP address of the peer

<index>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-gvpn-ipsec-statistics-information>

Usage

```
<rpc>
 <get-gvpn-ipsec-statistics-information>
  <fpc>fpc</fpc>
  <pic>pic</pic>

<show-gvpn-index-ipsec-statistics>show-gvpn-index-ipsec-statistics</show-gvpn-index-ipsec-statistics>

 </get-gvpn-ipsec-statistics-information>
</rpc>
```

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Description Show IPSec statistics

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<show-gvpn-index-ipsec-statistics>—Index of Security Association

<get-gvpn-kek-security-associations-information>

Usage

```
<rpc>
 <get-gvpn-kek-security-associations-information>
  <brief/>
  <detail/>
  <peer-address>peer-address</peer-address>
  <index>index</index>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-gvpn-kek-security-associations-information>
</rpc>
```

Description Show KEK security association information

Contents <brief>—Show brief output (default)

<detail>—Show detailed output

<peer-address>—IP address of the peer

<index>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-gvpn-security-associations-information>

Usage

```
<rpc>
 <get-gvpn-security-associations-information>
  <brief/>
  <detail/>
<show-gvpn-index-ipsec-security-association>show-gvpn-index-ipsec-security-association</show-gvpn-index-ipsec-security-association>
  <fpc>fpc</fpc>
  <pic>pic</pic>
```


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```
  <kmd-instance>kmd-instance</kmd-instance>
 </get-gvpn-security-associations-information>
</rpc>
```

Description Show IPSec security association information

Contents <brief>—Display brief output

<detail>—Display detailed output

<show-gvpn-index-ipsec-security-association>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-gvrp-information>

Usage

```
<rpc>
 <get-gvrp-information>
 </get-gvrp-information>
</rpc>
```

Description Show Generic VLAN Registration Protocol information

Contents <get-gvrp-timers>—Show GVRP protocol timers

<get-gvrp-statistics>—Show GVRP statistics

<get-gvrp-statistics>

Usage

```
<rpc>
 <get-gvrp-statistics/>
</rpc>
```

Description Show GVRP statistics

<get-gvrp-timers>

Usage

```
<rpc>
 <get-gvrp-timers/>
</rpc>
```

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Description Show GVRP protocol timers

<get-ids-statistics>

Usage

```
<rpc>
 <get-ids-statistics>
  <filter>filter</filter> <!-- mandatory -->
  <zone>zone</zone>
  <interface>interface</interface>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-ids-statistics>
</rpc>
```

Description Show screen attack statistics information

Contents <zone>—IDS statistics zone

- all - All logical systems
- logical-system-name - Logical system name

<interface>—IDS statistics interface

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-ike-active-peers-information>

Usage

```
<rpc>
 <get-ike-active-peers-information>
  <brief/>
  <detail/>
  <peer-address>peer-address</peer-address>
  <port>port</port>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-ike-active-peers-information>
```


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```
</rpc>
```

Description Show IKE active peers

Contents <brief>—Display brief output

<detail>—Display detailed output

<peer-address>—IP od peer

<port>—Port number of peer

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-ike-security-associations-information>

Usage

```
<rpc>
 <get-ike-security-associations-information>
  <brief/>
  <detail/>
  <peer-address>peer-address</peer-address>
  <index>index</index>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
  <family>family</family>
 </get-ike-security-associations-information>
</rpc>
```

Description Show IKE security association information

Contents <brief>—Show brief output (default)

- inet - Show IPv4
- inet6 - Show IPv6

<detail>—Show detailed output

- inet - Show IPv4
- inet6 - Show IPv6

<peer-address>—IP address of the peer

- inet - Show IPv4
- inet6 - Show IPv6

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<index>—Index of security association

- inet - Show IPv4
- inet6 - Show IPv6

<fpc>—FPC slot number

- inet - Show IPv4
- inet6 - Show IPv6

<pic>—PIC slot number

- inet - Show IPv4
- inet6 - Show IPv6

<kmd-instance>—Name of KMD instance or 'all'

- inet - Show IPv4
- inet6 - Show IPv6

<family>—Show IKE security association by family

- inet - Show IPv4
- inet6 - Show IPv6

<get-interface-flow-statistics>

Usage

```
<rpc>
 <get-interface-flow-statistics>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-interface-flow-statistics>
</rpc>
```

Description Show security flow counters and errors

Contents <interface-name>—Name of physical or logical interface

<get-interface-nat-ports-information>

Usage

```
<rpc>
 <get-interface-nat-ports-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-interface-nat-ports-information>
```

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```
</rpc>
```

Description Show interface nat ports information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-ip-monitoring-status>

Usage

```
<rpc>
 <get-ip-monitoring-status>
  <policy>policy</policy>
 </get-ip-monitoring-status>
</rpc>
```

Description Ip monitoring status

Contents <policy>—Policy name

<get-ipsec-next-hop-tunnel-information>

Usage

```
<rpc>
 <get-ipsec-next-hop-tunnel-information>
  <interface-name>interface-name</interface-name>
 </get-ipsec-next-hop-tunnel-information>
</rpc>
```

Description Show manual and auto next-hop-tunnel entries

Contents <interface-name>—Name of secure tunnel logical interface

<get-ipsec-statistics-information>

Usage

```
<rpc>
 <get-ipsec-statistics-information>
  <fpc>fpc</fpc>
  <pic>pic</pic>

<show-index-ipsec-statistics>show-index-ipsec-statistics</show-index-ipsec-statistics>
```

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```
 </get-ipsec-statistics-information>
</rpc>
```

Description Show IPSec statistics

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<show-index-ipsec-statistics>—Index of Security Association

<get-isdn-call-history>

Usage

```
<rpc>
 <get-isdn-call-history/>
</rpc>
```

Description History of calls

<get-isdn-calls>

Usage

```
<rpc>
 <get-isdn-calls/>
</rpc>
```

Description Information about calls

<get-isdn-q921-statistics>

Usage

```
<rpc>
 <get-isdn-q921-statistics>
  <interface>interface</interface> <!-- mandatory -->
 </get-isdn-q921-statistics>
</rpc>
```

Description Show Q.921 layer statistics

Contents <interface>—Interface name

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<get-isdn-q931-statistics>

Usage

```
<rpc>
 <get-isdn-q931-statistics>
  <interface>interface</interface> <!-- mandatory -->
 </get-isdn-q931-statistics>
</rpc>
```

Description Show Q.931 layer statistics

Contents <interface>—Interface name

<get-isdn-status>

Usage

```
<rpc>
 <get-isdn-status>
  <brief/>
  <detail/>
  <interface>interface</interface>
 </get-isdn-status>
</rpc>
```

Description Show isdn information

Contents <brief>—Display brief output

<detail>—Display detailed output

<interface>—Interface name

<get-llc2-redundancy>

Usage

```
<rpc>
 <get-llc2-redundancy>
  <brief/>
  <detail/>
 </get-llc2-redundancy>
</rpc>
```

Description Show LLC2 redundancy related information

Contents <brief>—Display brief output (default)

<detail>—Display detailed output

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<get-llc2-redundancy-mac-translation-list>—Show LLC2 redundancy mac translation

<get-llc2-redundancy-track-information>—Show LLC2 redundancy tracking information

<interface>—Show LLC2 redundancy related information

<get-llc2-redundancy-interface-statistics>

Usage

```
<rpc>
 <get-llc2-redundancy-interface-statistics/>
</rpc>
```

Description Show LLC2 redundancy interface statistics

<get-llc2-redundancy-mac-translation-list>

Usage

```
<rpc>
 <get-llc2-redundancy-mac-translation-list/>
</rpc>
```

Description Show LLC2 redundancy mac translation

<get-llc2-redundancy-track-information>

Usage

```
<rpc>
 <get-llc2-redundancy-track-information>
  <interfaces/>
  <dlsw-remote-peer/>
  <dlsw-remote-destination/>
 </get-llc2-redundancy-track-information>
</rpc>
```

Description Show LLC2 redundancy tracking information

Contents <interfaces>—Show all LLC2 track interfaces

<dlsw-remote-peer>—Show all LLC2 track remote peers

<dlsw-remote-destination>—Show all LLC2 track remote destinations

<get-lsys-license-status>

Usage

```
<rpc>
```


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```
<get-lsys-license-status>
 <lsys>lsys</lsys>
 <logical-system>logical-system</logical-system>
 <root-logical-system/>
</get-lsys-license-status>
</rpc>
```

Description Show logical system status

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-modem-wireless-interface>

Usage

```
<rpc>
 <get-modem-wireless-interface>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <firmware/>
  <network/>
  <rssi/>
  <profiles/>
 </get-modem-wireless-interface>
</rpc>
```

Description Show wireless interface information

Contents <interface-name>—Name of physical interface

<firmware>—Show wireless interface firmware details

<network>—Show wireless Network statistics

<rssi>—Show Received Signal Strength

<profiles>—Show profile details

<get-performance-session-information>

Usage

```
<rpc>
 <get-performance-session-information>
  <fpc>fpc</fpc>
  <pic>pic</pic>
 </get-performance-session-information>
```

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```
</rpc>
```

Description Show security performance session information

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<get-performance-spu-information>

Usage

```
<rpc>
 <get-performance-spu-information>
  <fpc>fpc</fpc>
  <pic>pic</pic>
 </get-performance-spu-information>
</rpc>
```

Description Show security performance SPU information

Contents <fpc>—FPC slot number

<pic>—PIC slot number

<get-persist-nat-all>

Usage

```
<rpc>
 <get-persist-nat-all>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <family>family</family>
 </get-persist-nat-all>
</rpc>
```

Description Show all persistent NAT information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name
- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATV6V4

<root-logical-system>—Root logical-system (default)

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- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATV6V4

<family>—Protocol family

- inet - Show IPv4
- inet6 - Show IPv6/IPv6-NATV6V4

<get-persist-nat-interface-information>

Usage

```
<rpc>
 <get-persist-nat-interface-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-persist-nat-interface-information>
</rpc>
```

Description Show persistent NAT information of this interface

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-persist-nat-sum>

Usage

```
<rpc>
 <get-persist-nat-sum>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-persist-nat-sum>
</rpc>
```

Description Show persistent NAT summary information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

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<root-logical-system>—Root logical-system (default)

<get-poe-controller-information>

Usage

```
<rpc>
 <get-poe-controller-information/>
</rpc>
```

Description Show Power over Ethernet system information

<get-poe-fpc-information>

Usage

```
<rpc>
 <get-poe-fpc-information>
  <fpc-slot>fpc-slot</fpc-slot>
 </get-poe-fpc-information>
</rpc>
```

Description Show power over ethernet fpc information

Contents <fpc-slot>—FPC slot number

<get-poe-interface-information>

Usage

```
<rpc>
 <get-poe-interface-information>
  <ifname>ifname</ifname>
 </get-poe-interface-information>
</rpc>
```

Description Show Power over Ethernet interfaces

Contents <ifname>—Name of interface

<get-poe-notifications>

Usage

```
<rpc>
 <get-poe-notifications/>
</rpc>
```

Description Show Power over Ethernet notification information

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<get-pre-shared-key>

Usage

```
<rpc>
 <get-pre-shared-key>
  <user-id>user-id</user-id>
  <master-key>master-key</master-key> <!-- mandatory -->
 </get-pre-shared-key>
</rpc>
```

Description Show IKE pre-shared key information for a particular group-ike-id user

Contents <user-id>—IKE user-id value

<master-key>—Master pre-shared key

<get-resmgr-group-active>

Usage

```
<rpc>
 <get-resmgr-group-active>
  <group-number>group-number</group-number>
 </get-resmgr-group-active>
</rpc>
```

Description Show active resource manager group service information

Contents <group-number>—Show active resource manager group

<get-resmgr-resource-active>

Usage

```
<rpc>
 <get-resmgr-resource-active>
  <resource-number>resource-number</resource-number>
 </get-resmgr-resource-active>
</rpc>
```

Description Show active resource manager resource service information

Contents <resource-number>—Show active resource manager resource

<get-resmgr-settings>

Usage

```
<rpc>
```

```
<get-resmgr-settings/>
</rpc>
```

Description Show resource manager settings information

<get-resource-manager-summary>

Usage

```
<rpc>
 <get-resource-manager-summary/>
</rpc>
```

Description Show resource manager summary information

<get-retag-statistics>

Usage

```
<rpc>
 <get-retag-statistics>
  <filter>filter</filter> <!-- mandatory -->
  <interface>interface</interface>
  <vlan-id>vlan-id</vlan-id>
 </get-retag-statistics>
</rpc>
```

Description Show vlan rewrite statistics information

Contents <interface>—Rewrite statistics interface

<vlan-id>—Rewrite statistics on vlan-id

<get-ring-tatistics>

Usage

```
<rpc>
 <get-ring-tatistics>
  <brief/>
  <detail/>
  <group-name>group-name</group-name>
 </get-ring-tatistics>
</rpc>
```

Description Show statistics for ethernet ring

Contents <get-erp-statistics-interface-information>—Show ERP interface statistics

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<brief>—Display brief output (default)

<detail>—Display detailed output

<group-name>—Name of protection group

<get-schedulers>

Usage

```
<rpc>
 <get-schedulers>
  <scheduler-name>scheduler-name</scheduler-name>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-schedulers>
</rpc>
```

Description Show the information on one or more schedulers

Contents <scheduler-name>—Name of the scheduler

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-security-associations-information>

Usage

```
<rpc>
 <get-security-associations-information>
  <brief/>
  <detail/>
  <family>family</family>

<show-index-ipsec-security-association>show-index-ipsec-security-association</show-index-ipsec-security-association>

  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-security-associations-information>
</rpc>
```

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Description Show IPSec security association information

Contents <brief>—Display brief output

- inet - Show IPv4
- inet6 - Show IPv6

<detail>—Display detailed output

- inet - Show IPv4
- inet6 - Show IPv6

<family>—Show IPSec security association information by family

- inet - Show IPv4
- inet6 - Show IPv6

<show-index-ipsec-security-association>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-security-gprs-gtp-tunnels>

Usage

```
<rpc>
 <get-security-gprs-gtp-tunnels>
  <summary/>
  <brief/>
 </get-security-gprs-gtp-tunnels>
</rpc>
```

Description Show security gtp tunnels

Contents <summary>—Show the summary of GTP tunnels

<brief>—Show a brief of each GTP tunnel (default)

<get-security-group-vpn-server-ike-security-associations-information>

Usage

```
<rpc>
 <get-security-group-vpn-server-ike-security-associations-information>
  <brief/>
  <detail/>
  <group_index_choice>group_index_choice</group_index_choice>
```


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```
  <group>group</group>
  <group-id>group-id</group-id>
  <index>index</index>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-security-group-vpn-server-ike-security-associations-information>
</rpc>
```

Description Show IKE security association information

Contents <brief>—Show brief output (default)

<detail>—Show detailed output

<group>—Show specified group

<group-id>—Show specified group id

<index>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-security-group-vpn-server-kek-sa>

Usage

```
<rpc>
 <get-security-group-vpn-server-kek-sa>
  <brief/>
  <detail/>
  <group_index_choice>group_index_choice</group_index_choice>
  <group>group</group>
  <group-id>group-id</group-id>
  <index>index</index>
  <fpc>fpc</fpc>
  <pic>pic</pic>
  <kmd-instance>kmd-instance</kmd-instance>
 </get-security-group-vpn-server-kek-sa>
</rpc>
```

Description Show KEK security association information

Contents <brief>—Show brief output (default)

<detail>—Show detailed output

<group>—Show specified group

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<group-id>—Show specified group id

<index>—Index of security association

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-security-group-vpn-server-registered-members>

Usage

```
<rpc>
 <get-security-group-vpn-server-registered-members>
  <group_choice>group_choice</group_choice>

<show-security-group-vpn-server-reg-group-name>show-security-group-vpn-server-reg-group-name</show-security-group-vpn-server-reg-group-name>


<show-security-group-vpn-server-reg-group-id>show-security-group-vpn-server-reg-group-id</show-security-group-vpn-server-reg-group-id>

   <fpc>fpc</fpc>
   <pic>pic</pic>
   <kmd-instance>kmd-instance</kmd-instance>
  </get-security-group-vpn-server-registered-members>
</rpc>
```

Description Show group VPN registered members for group VPN server

Contents <show-security-group-vpn-server-reg-group-name>—Show specified group

<show-security-group-vpn-server-reg-group-id>—Show specified group id

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-security-group-vpn-server-security-information>

Usage

```
<rpc>
 <get-security-group-vpn-server-security-information>
  <brief/>
  <detail/>
  <group_choice>group_choice</group_choice>
  <group>group</group>
  <group-id>group-id</group-id>
  <fpc>fpc</fpc>
  <pic>pic</pic>
```


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```
    <kmd-instance>kmd-instance</kmd-instance>
   </get-security-group-vpn-server-security-information>
  </rpc>
```

Description Show IPsec security association information for group VPN server

Contents <brief>—Show brief output (default)

<detail>—Show detailed output

<group>—Show specified group

<group-id>—Show specified group id

<fpc>—FPC slot number

<pic>—PIC slot number

<kmd-instance>—Name of KMD instance or 'all'

<get-security-policies-hit-count>

Usage

```
<rpc>
 <get-security-policies-hit-count>
  <from-zone>from-zone</from-zone>
  <to-zone>to-zone</to-zone>
  <ascending/>
  <descending/>
  <less-than>less-than</less-than>
  <greater-than>greater-than</greater-than>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-security-policies-hit-count>
</rpc>
```

Description Show the hit count of policies

Contents <from-zone>—Show the policy hit-count matching the given source zone

- all - All logical systems
- logical-system-name - Logical system name

<to-zone>—Show the policy hit-count matching the given destination zone

- all - All logical systems
- logical-system-name - Logical system name

<ascending>—Ascending order

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- all - All logical systems
- logical-system-name - Logical system name

<descending>—Descending order

- all - All logical systems
- logical-system-name - Logical system name

<less-than>—Maximum hit-count

- all - All logical systems
- logical-system-name - Logical system name

<greater-than>—Minimum hit-count

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-security-profile-address-book-information>

Usage

```
<rpc>
 <get-security-profile-address-book-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-address-book-information>
</rpc>
```

Description Show address-book resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

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- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-all-resource-information>

Usage

```
<rpc>
 <get-security-profile-all-resource-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-all-resource-information>
</rpc>
```

Description Show all resources information per logical system

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

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<get-security-profile-appfw-rule-information>

Usage

```
<rpc>
 <get-security-profile-appfw-rule-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
  <terse/>
  <detail/>
 </get-security-profile-appfw-rule-information>
</rpc>
```

Description Show appfw rule resource information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<terse>—Display terse output (default)

<detail>—Display detailed output

<get-security-profile-appfw-rule-set-information>

Usage

```
<rpc>
 <get-security-profile-appfw-rule-set-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
  <terse/>
  <detail/>
 </get-security-profile-appfw-rule-set-information>
</rpc>
```

Description Show appfw rule-set resource information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

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<root-logical-system>—Root logical-system

<summary>—Display summary output

<terse>—Display terse output (default)

<detail>—Display detailed output

<get-security-profile-auth-entry-information>

Usage

```
<rpc>
 <get-security-profile-auth-entry-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-auth-entry-information>
</rpc>
```

Description Show authentication resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-cpu-information>

Usage

```
<rpc>
 <get-security-profile-cpu-information>
  <terse/>
  <detail/>
```

```
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-cpu-information>
</rpc>
```

Description Show CPU utilization information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-dslite-softwire-initiator-information>

Usage

```
<rpc>
 <get-security-profile-dslite-softwire-initiator-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-dslite-softwire-initiator-information>
</rpc>
```

Description Show security dslite softwire initiator resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

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<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-flow-gate-information>

Usage

```
<rpc>
 <get-security-profile-flow-gate-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-flow-gate-information>
</rpc>
```

Description Show flow gate resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-flow-session-information>

Usage

```
<rpc>
 <get-security-profile-flow-session-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-flow-session-information>
</rpc>
```

Description Show flow session resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-cone-binding-information>

Usage

```
<rpc>
 <get-security-profile-nat-cone-binding-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-cone-binding-information>
</rpc>
```


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Description Show nat cone binding resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-destination-pool-information>

Usage

```
<rpc>
 <get-security-profile-nat-destination-pool-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-destination-pool-information>
</rpc>
```

Description Show nat destination pool resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

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- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-destination-rule-information>

Usage

```
<rpc>
 <get-security-profile-nat-destination-rule-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-destination-rule-information>
</rpc>
```

Description Show nat destination rule resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-nopat-address-information>

Usage

```
<rpc>
 <get-security-profile-nat-nopat-address-information>
  <terse/>
```


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```
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-nopat-address-information>
</rpc>
```

Description Show nat source nopat address resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-pat-address-information>

Usage

```
<rpc>
 <get-security-profile-nat-pat-address-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-pat-address-information>
</rpc>
```

Description Show nat source pat address resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-pat-portnum-information>

Usage

```
<rpc>
 <get-security-profile-nat-pat-portnum-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-pat-portnum-information>
</rpc>
```

Description Show nat source pat port number resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

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<get-security-profile-nat-port-ol-ipnumber-information>

Usage

```
<rpc>
 <get-security-profile-nat-port-ol-ipnumber-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-port-ol-ipnumber-information>
</rpc>
```

Description Show nat port overloading resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-rule-referenced-prefix-information>

Usage

```
<rpc>
 <get-security-profile-nat-rule-referenced-prefix-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-rule-referenced-prefix-information>
</rpc>
```

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Description Show nat rule referenced IP-prefix information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-source-pool-information>

Usage

```
<rpc>
 <get-security-profile-nat-source-pool-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-source-pool-information>
</rpc>
```

Description Show nat source pool resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

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- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-source-rule-information>

Usage

```
<rpc>
 <get-security-profile-nat-source-rule-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-nat-source-rule-information>
</rpc>
```

Description Show nat source rule resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-nat-static-rule-information>

Usage

```
<rpc>
 <get-security-profile-nat-static-rule-information>
  <terse/>
```

```
    <detail/>
    <lsys>lsys</lsys>
    <logical-system>logical-system</logical-system>
    <root-logical-system/>
    <summary/>
   </get-security-profile-nat-static-rule-information>
  </rpc>
```

Description Show nat static rule resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-policy-information>

Usage

```
  <rpc>
   <get-security-profile-policy-information>
    <terse/>
    <detail/>
    <lsys>lsys</lsys>
    <logical-system>logical-system</logical-system>
    <root-logical-system/>
    <summary/>
   </get-security-profile-policy-information>
  </rpc>
```

Description Show policy resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

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<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-policy-with-count-information>

Usage

```
<rpc>
 <get-security-profile-policy-with-count-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-policy-with-count-information>
</rpc>
```

Description Show resource information of policy with count

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-scheduler-information>

Usage

```
<rpc>
 <get-security-profile-scheduler-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-scheduler-information>
</rpc>
```

Description Show scheduler resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-profile-zone-information>

Usage

```
<rpc>
 <get-security-profile-zone-information>
  <terse/>
  <detail/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <summary/>
 </get-security-profile-zone-information>
</rpc>
```


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Description Show zone resource information

Contents <terse>—Display terse output (default)

- all - All logical systems
- logical-system-name - Logical system name

<detail>—Display detailed output

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system

<summary>—Display summary output

<get-security-report-threats-recent-activity>

Usage

```
<rpc>
 <get-security-report-threats-recent-activity/>
</rpc>
```

Description Show the most recent threat activities

<get-security-report-threats-statistics>

Usage

```
<rpc>
 <get-security-report-threats-statistics/>
</rpc>
```

Description Show the threat statistics

<get-security-report-threats-summary>

Usage

```
<rpc>
 <get-security-report-threats-summary/>
</rpc>
```

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Description Show threat indicator summary

<get-security-report-traffic-statistics>

Usage

```
<rpc>
 <get-security-report-traffic-statistics/>
</rpc>
```

Description Show the traffic statistics

<get-security-screen-ids-status>

Usage

```
<rpc>
 <get-security-screen-ids-status>
  <screen-name>screen-name</screen-name> <!-- mandatory -->
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-security-screen-ids-status>
</rpc>
```

Description Show status of screen object

Contents <screen-name>—Screen name

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-smtp-configuration>

Usage

```
<rpc>
 <get-smtp-configuration/>
</rpc>
```

Description Show SMTP server configuration information

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<get-smtp-statistics>

Usage

```
<rpc>
 <get-smtp-statistics/>
</rpc>
```

Description Show SMTP client service statistics

<get-source-nat-rule-sets-information>

Usage

```
<rpc>
 <get-source-nat-rule-sets-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-source-nat-rule-sets-information>
</rpc>
```

Description Show source NAT rule-set information

Contents <rule-name>—The name of the source NAT rule-set

- all - All logical systems
- logical-system-name - Logical system name

<all>—Display all source NAT rule-sets information

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<get-spu-monitoring-information>

Usage

```
<rpc>
 <get-spu-monitoring-information>
```

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```
  <fpc-slot>fpc-slot</fpc-slot> <!-- mandatory -->
 </get-spu-monitoring-information>
</rpc>
```

Description Show the FPC slot security monitoring information

Contents <fpc-slot>—FPC slot number

<get-ssl-proxy-statistics>

Usage

```
<rpc>
 <get-ssl-proxy-statistics/>
</rpc>
```

Description Show ssl proxy statistics

<get-static-nat-rule-information>

Usage

```
<rpc>
 <get-static-nat-rule-information>
  <rule-choice>rule-choice</rule-choice> <!-- mandatory -->
  <rule-name>rule-name</rule-name> <!-- mandatory -->
  <all/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </get-static-nat-rule-information>
</rpc>
```

Description Show static NAT rule information

Contents <rule-name>—The name of the rule

- all - All logical systems
- logical-system-name - Logical system name

<all>—Display all static NAT rule information

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

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<root-logical-system>—Root logical-system (default)

<get-system-autorecovery>

Usage

```
<rpc>
 <get-system-autorecovery>
 </get-system-autorecovery>
</rpc>
```

Description Show autorecovery information

Contents <get-system-autorecovery-state>—Show saved autorecovery information

<get-system-autorecovery-state>

Usage

```
<rpc>
 <get-system-autorecovery-state/>
</rpc>
```

Description Show saved autorecovery information

<get-telemetries-information>

Usage

```
<rpc>
 <get-telemetries-information>
  <ifname>ifname</ifname> <!-- mandatory -->
  <all/>
  <entries/>
 </get-telemetries-information>
</rpc>
```

Description Show telemetries for an interface

Contents <ifname>—Name of interface

<all>—Show all entries

<entries>—Number of entries

<get-tgm-dynamic-cac-information>

Usage

```
<rpc>
```

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```
 <get-tgm-dynamic-cac-information/>
</rpc>
```

Description Show dynamic call admission control information

<get-tgm-information>

Usage

```
<rpc>
 <get-tgm-information>
  <slot>slot</slot> <!-- mandatory -->
  <media-gateway-controller/>
  <dsp-capacity/>
 </get-tgm-information>
</rpc>
```

Description Show Flexible PIC Concentrator information

Contents <slot>—FPC slot number

<media-gateway-controller>—Show TGM media gateway controller configuration

<dsp-capacity>—Show TGM DSP resources

<get-tgm-telephony-interface-module-status>

Usage

```
<rpc>
 <get-tgm-telephony-interface-module-status>
  <status/>
 </get-tgm-telephony-interface-module-status>
</rpc>
```

Description Show telephony interface module information

Contents <status>—Status of telephony interface modules

<get-uac-auth-table>

Usage

```
<rpc>
 <get-uac-auth-table>
  <detail/>
  <identifier>identifier</identifier>
  <extended/>
  <role>role</role>
  <ip>ip</ip>
  <user>user</user>
```


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```
 </get-uac-auth-table>
</rpc>
```

Description Show authentication table configured from infranet controller

Contents <detail>—Display detail output

<identifier>—Show specified authentication entry

<extended>—Show authentication entries with all roles

<role>—Show authentication entries matching the role

<ip>—Show authentication entries matching the ip

<user>—Show authentication entries matching the user

<get-uac-policies>

Usage

```
<rpc>
 <get-uac-policies>
  <detail/>
  <identifier>identifier</identifier>
 </get-uac-policies>
</rpc>
```

Description Access policies from infranet controller

Contents <detail>—Display detail output

<identifier>—Show specified policy information

<get-uac-role-entries>

Usage

```
<rpc>
 <get-uac-role-entries/>
</rpc>
```

Description Show list of available roles

<get-uac-status>

Usage

```
<rpc>
 <get-uac-status/>
```

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```
</rpc>
```

Description Show connection status with infranet controller

<get-user-connection>

Usage

```
<rpc>
 <get-user-connection>
  <terse/>
  <detail/>
 </get-user-connection>
</rpc>
```

Description Show Dynamic VPN user connection information

Contents <terse>—Display terse output

<detail>—Display detailed user connection information (default)

<get-userfw-local-auth-table-all>

Usage

```
<rpc>
 <get-userfw-local-auth-table-all>
  <brief/>
  <extensive/>
 </get-userfw-local-auth-table-all>
</rpc>
```

Description Show the entire local user authentication table

Contents <brief>—Show brief output (default)

<extensive>—Show extensive output

<get-userfw-local-auth-table-ip>

Usage

```
<rpc>
 <get-userfw-local-auth-table-ip>
  <ip-address>ip-address</ip-address> <!-- mandatory -->
 </get-userfw-local-auth-table-ip>
</rpc>
```

Description Show local user authentication information for the specified ip-address

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Contents <ip-address>—IP address

<get-userfw-local-auth-table-role>

Usage

```
<rpc>
 <get-userfw-local-auth-table-role>
  <role-name>role-name</role-name> <!-- mandatory -->
 </get-userfw-local-auth-table-role>
</rpc>
```

Description Show local user authentication information for the specified role

Contents <role-name>—Role name

<get-userfw-local-auth-table-start>

Usage

```
<rpc>
 <get-userfw-local-auth-table-start>
  <start>start</start> <!-- mandatory -->
  <count>count</count> <!-- mandatory -->
 </get-userfw-local-auth-table-start>
</rpc>
```

Description Show local user authentication table information from a given position

Contents <start>—

<count>—Number of local user authentication table entries to show

<get-userfw-local-auth-table-user>

Usage

```
<rpc>
 <get-userfw-local-auth-table-user>
  <user-name>user-name</user-name> <!-- mandatory -->
 </get-userfw-local-auth-table-user>
</rpc>
```

Description Show local user authentication information for the specified user

Contents <user-name>—User name

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<get-userfw-role-info>

Usage

```
<rpc>
 <get-userfw-role-info>
  <all/> <!-- mandatory -->
 </get-userfw-role-info>
</rpc>
```

Description Show user-identification role information

Contents <all>—Show all user-identification role information

<get-wlan-access-points-list>

Usage

```
<rpc>
 <get-wlan-access-points-list>
  <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>

  <client-associations/>
  <neighbors/>
  <virtual-access-points/>
  <detail/>
 </get-wlan-access-points-list>
</rpc>
```

Description Show Wireless LAN access points information

Contents <wlan-access-point-name>—Name of the access point

<client-associations>—Show access point client associations

<neighbors>—Show access point neighbors

<virtual-access-points>—Show virtual access points

<detail>—Show detailed output

<get-wx-status>

Usage

```
<rpc>
 <get-wx-status>
 </get-wx-status>
</rpc>
```


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Description Show WAN acceleration status

Contents

<get-zones-information>

Usage

```
<rpc>
 <get-zones-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <filter>filter</filter>

<get-zones-named-information>get-zones-named-information</get-zones-named-information>

  <type>type</type>
  <terse/>
  <detail/>
 </get-zones-information>
</rpc>
```

Description Show security zone information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name
- functional - Show information for functional zones
- security - Show information for security zones

<root-logical-system>—Root logical-system (default)

- functional - Show information for functional zones
- security - Show information for security zones

<get-zones-named-information>—Show information for a specified zone

- functional - Show information for functional zones
- security - Show information for security zones

<type>—Show information for zones of a specified type

- functional - Show information for functional zones
- security - Show information for security zones

<terse>—Display terse output

<detail>—Display detailed output (default)

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<match-firewall-policies>

Usage

```
<rpc>
 <match-firewall-policies>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <from-zone>from-zone</from-zone> <!-- mandatory -->
  <to-zone>to-zone</to-zone> <!-- mandatory -->
  <source-identity>source-identity</source-identity>
  <source-ip>source-ip</source-ip> <!-- mandatory -->
  <destination-ip>destination-ip</destination-ip> <!-- mandatory -->
  <source-port>source-port</source-port> <!-- mandatory -->
  <destination-port>destination-port</destination-port> <!-- mandatory -->
  <protocol>protocol</protocol> <!-- mandatory -->
  <result-count>result-count</result-count>
 </match-firewall-policies>
</rpc>
```

Description Show security match policies

Contents <logical-system>—Logical-system name

- logical-system-name - Logical system name
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<root-logical-system>—Root logical-system (default)

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<from-zone>—Match policy for the given source zone

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<to-zone>—Match policy for the given destination zone

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<match-global-policies>—Match global policy

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<source-identity>—Match policy for the given roles (optional)

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<source-ip>—Match policy for the given source IP

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<destination-ip>—Match policy for the given destination IP

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<source-port>—Match policy for the given source port)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<destination-port>—Match policy for the given destination port)

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- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<protocol>—Match policy for the given protocol)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<result-count>—Expected results count (optional)

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<match-global-policies>

Usage

```
<rpc>
 <match-global-policies>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
  <source-ip>source-ip</source-ip> <!-- mandatory -->
  <destination-ip>destination-ip</destination-ip> <!-- mandatory -->
  <source-port>source-port</source-port> <!-- mandatory -->
  <destination-port>destination-port</destination-port> <!-- mandatory -->
  <protocol>protocol</protocol> <!-- mandatory -->
  <result-count>result-count</result-count>
 </match-global-policies>
</rpc>
```

Description Match global policy

Contents <logical-system>—Logical-system name

- logical-system-name - Logical system name
- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<root-logical-system>—Root logical-system (default)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol

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- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<source-ip>—Match policy for the given source IP

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<destination-ip>—Match policy for the given destination IP

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol

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- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<source-port>—Match policy for the given source port)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<destination-port>—Match policy for the given destination port)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol

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- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<protocol>—Match policy for the given protocol)

- icmp - Internet Control Message Protocol
- igmp - Internet Group Management Protocol
- ipip - IP in IP
- tcp - Transmission Control Protocol
- egp - Exterior gateway protocol
- udp - User Datagram Protocol
- rsvp - Resource Reservation Protocol
- gre - Generic routing encapsulation
- esp - IPSec Encapsulating Security Payload
- ah - IP Security authentication header
- icmp6 - Internet Control Message Protocol Version 6
- ospf - Open Shortest Path First
- pim - Protocol Independent Multicast
- sctp - Stream Control Transmission Protocol
- protocol-number - Numeric protocol value (0 .. 255)

<result-count>—Expected results count (optional)

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<request-anti-virus-request-update-express>

Usage

```
<rpc>
 <request-anti-virus-request-update-express>
  <pattern-update/>
  <pattern-reload/>
  <pattern-delete/>
 </request-anti-virus-request-update-express>
</rpc>
```

Description Request update of anti-virus pattern for juniper-express-engine

Contents <pattern-update>—Update juniper-express-engine pattern

<pattern-reload>—Reload juniper-express-engine pattern

<pattern-delete>—Delete juniper-express-engine pattern

<request-anti-virus-request-update-kaspersky>

Usage

```
<rpc>
 <request-anti-virus-request-update-kaspersky>
  <pattern-update/>
  <pattern-reload/>
  <pattern-delete/>
 </request-anti-virus-request-update-kaspersky>
</rpc>
```

Description Request update of anti-virus pattern for kaspersky-lab-engine

Contents <pattern-update>—Update kaspersky-lab-engine pattern

<pattern-reload>—Reload kaspersky-lab-engine pattern

<pattern-delete>—Delete kaspersky-lab-engine pattern

<request-anti-virus-update-sophos-patterns>

Usage

```
<rpc>
 <request-anti-virus-update-sophos-patterns>
  <pattern-update/>
  <pattern-reload/>
  <pattern-delete/>
 </request-anti-virus-update-sophos-patterns>
</rpc>
```


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Description Request update of anti-virus pattern for sophos-engine

Contents <pattern-update>—Update sophos-engine pattern

<pattern-reload>—Reload sophos-engine pattern

<pattern-delete>—Delete sophos-engine pattern

<request-chassis-cluster-failover>

Usage

```
<rpc>
 <request-chassis-cluster-failover>
 <redundancy-group-id>redundancy-group-id</redundancy-group-id> <!-- mandatory
-->
  <redundancy-group>redundancy-group</redundancy-group> <!-- mandatory -->
  <node>node</node> <!-- mandatory -->
 </request-chassis-cluster-failover>
</rpc>
```

Description Trigger a manual failover for one redundancy-group or all redundancy-groups (1+)

Contents <redundancy-group>—Redundancy-group identifier

<node>—Node identifier of the new primary

<request-chassis-cluster-failover-reset>—Undo the previous failover command

<request-chassis-cluster-failover-reset>

Usage

```
<rpc>
 <request-chassis-cluster-failover-reset>
 <redundancy-group-id>redundancy-group-id</redundancy-group-id> <!-- mandatory
-->
  <redundancy-group>redundancy-group</redundancy-group> <!-- mandatory -->
 </request-chassis-cluster-failover-reset>
</rpc>
```

Description Undo the previous failover command

Contents <redundancy-group>—Redundancy-group identifier

<request-chassis-cluster-in-service-upgrade>

Usage

```
<rpc>
 <request-chassis-cluster-in-service-upgrade>
```

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```
  <abort/>
 </request-chassis-cluster-in-service-upgrade>
</rpc>
```

Description Initiate in-service-upgrade

Contents <abort>—Abort in-service-upgrade

<failover>—Initiate failover for a redundancy-group

<request-eedebug-capture-start>

Usage

```
<rpc>
 <request-eedebug-capture-start/>
</rpc>
```

Description Start datapath debug packet capture

<request-eedebug-capture-stop>

Usage

```
<rpc>
 <request-eedebug-capture-stop/>
</rpc>
```

Description Stop datapath debug packet capture

<request-gsm-change-pin>

Usage

```
<rpc>
 <request-gsm-change-pin>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <old-pin>old-pin</old-pin> <!-- mandatory -->
  <new-pin>new-pin</new-pin> <!-- mandatory -->
 </request-gsm-change-pin>
</rpc>
```

Description Unblock SIM

Contents <interface-name>—Name of physical interface

<old-pin>—Current SIM unlock code (PIN)

<new-pin>—New SIM unlock code (PIN) to be set

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<request-gsm-create-profile>

Usage

```
<rpc>
 <request-gsm-create-profile>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <profile-id>profile-id</profile-id> <!-- mandatory -->
  <sip-user-id>sip-user-id</sip-user-id>
  <sip-password>sip-password</sip-password>
  <access-point-name>access-point-name</access-point-name> <!-- mandatory
-->
  <authentication-method>authentication-method</authentication-method>
 </request-gsm-create-profile>
</rpc>
```

Description Create GSM profile

Contents <interface-name>—Name of physical interface

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

<profile-id>—Profile Id

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

<sip-user-id>—SIP User ID

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

<sip-password>—SIP Password

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

<access-point-name>—Access Point Name (APN)

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

<authentication-method>—Authentication method

- pap - Password Authentication Protocol
- chap - Challenge Handshake Authentication Protocol

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<request-gsm-delete-profile>

Usage

```
<rpc>
 <request-gsm-delete-profile>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <profile-id>profile-id</profile-id> <!-- mandatory -->
 </request-gsm-delete-profile>
</rpc>
```

Description Create GSM profile

Contents <interface-name>—Name of physical interface

<profile-id>—Profile Id

<request-gsm-sim-lock>

Usage

```
<rpc>
 <request-gsm-sim-lock>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <pin>pin</pin> <!-- mandatory -->
  <enable/>
  <disable/>
 </request-gsm-sim-lock>
</rpc>
```

Description Enable or disable SIM lock

Contents <interface-name>—Name of physical interface

<pin>—SIM unlock code (PIN)

<enable>—Enable SIM lock

<disable>—Disable SIM lock

<request-gsm-sim-unblock>

Usage

```
<rpc>
 <request-gsm-sim-unblock>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <puk>puk</puk> <!-- mandatory -->
  <pin>pin</pin> <!-- mandatory -->
 </request-gsm-sim-unblock>
</rpc>
```


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Description Unblock SIM

Contents <interface-name>—Name of physical interface

<puk>—SIM unblock code (PUK)

<pin>—New SIM unlock code (PIN) to be set

<request-gsm-sim-unlock>

Usage

```
<rpc>
 <request-gsm-sim-unlock>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <pin>pin</pin> <!-- mandatory -->
 </request-gsm-sim-unlock>
</rpc>
```

Description Unlock SIM

Contents <interface-name>—Name of physical interface

<pin>—SIM unlock code (PIN)

<request-modem-wireless-activate-iota>

Usage

```
<rpc>
 <request-modem-wireless-activate-iota>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
 </request-modem-wireless-activate-iota>
</rpc>
```

Description Internet Over The Air Activation

Contents <interface-name>—Name of physical interface

<request-modem-wireless-activate-manual>

Usage

```
<rpc>
 <request-modem-wireless-activate-manual>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <msl>msl</msl> <!-- mandatory -->
  <mdn>mdn</mdn> <!-- mandatory -->
  <imsi>imsi</imsi> <!-- mandatory -->
  <sid>sid</sid>
  <nid>nid</nid>
```

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```
    <sip-user-id>sip-user-id</sip-user-id>
    <sip-password>sip-password</sip-password>
   </request-modem-wireless-activate-manual>
  </rpc>
```

Description Manual Activation

Contents <interface-name>—Name of physical interface

<msl>—Master Subsidy Lock

<mdn>—Mobile Dictonary Number

<imsi>—International Mobile Station Identity

<sid>—System identification

<nid>—Network identification

<sip-user-id>—SIP user ID

<sip-password>—SIP password

<request-modem-wireless-activate-otasp>

Usage

```
<rpc>
 <request-modem-wireless-activate-otasp>
  <interface-name>interface-name</interface-name> <!-- mandatory -->
  <dial-string>dial-string</dial-string> <!-- mandatory -->
 </request-modem-wireless-activate-otasp>
</rpc>
```

Description Over The Air Service Provisioning

Contents <interface-name>—Name of physical interface

<dial-string>—

<request-system-autorecovery>

Usage

```
<rpc>
 <request-system-autorecovery>
 </request-system-autorecovery>
</rpc>
```

Description Manage autorecovery information

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Contents <state>—Manage autorecovery state information

<request-system-autorecovery-state-clear>

Usage

```
<rpc>
 <request-system-autorecovery-state-clear/>
</rpc>
```

Description Delete previously saved autorecovery state

<request-system-autorecovery-state-recover>

Usage

```
<rpc>
 <request-system-autorecovery-state-recover/>
</rpc>
```

Description Check for problems and recover state if needed

<request-system-autorecovery-state-save>

Usage

```
<rpc>
 <request-system-autorecovery-state-save/>
</rpc>
```

Description Save autorecovery state

<request-system-download-abort>

Usage

```
<rpc>
 <request-system-download-abort>
  <download-id>download-id</download-id> <!-- mandatory -->
 </request-system-download-abort>
</rpc>
```

Description Abort a download and delete the local file

Contents <download-id>—ID of the download to be aborted

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<request-system-download-clear>

Usage

```
<rpc>
 <request-system-download-clear/>
</rpc>
```

Description Clear records of completed and aborted downloads

<request-system-download-pause>

Usage

```
<rpc>
 <request-system-download-pause>
  <download-id>download-id</download-id> <!-- mandatory -->
 </request-system-download-pause>
</rpc>
```

Description Pause an active download

Contents <download-id>—ID of the download to be paused

<request-system-download-resume>

Usage

```
<rpc>
 <request-system-download-resume>
  <download-id>download-id</download-id> <!-- mandatory -->
  <max-rate>max-rate</max-rate>
 </request-system-download-resume>
</rpc>
```

Description Resume a paused download

Contents <download-id>—ID of the download to be resumed

<max-rate>—Maximum bandwidth for the download

<request-system-download-start>

Usage

```
<rpc>
 <request-system-download-start>
  <url>url</url> <!-- mandatory -->
  <max-rate>max-rate</max-rate>
  <save-as>save-as</save-as>
```


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```
  <login>login</login>
  <delay>delay</delay>
 </request-system-download-start>
</rpc>
```

Description Start a new download

Contents <url>—URL of file

<max-rate>—Maximum bandwidth for the download

<save-as>—Rename file when saving to local file system

<login>—Login credentials (username:password)

<delay>—Delay the start of the download

<request-tgm-login-fpc>

Usage

```
<rpc>
 <request-tgm-login-fpc>
  <slot>slot</slot> <!-- mandatory -->
  <user>user</user> <!-- mandatory -->
 </request-tgm-login-fpc>
</rpc>
```

Description Login to Flexible PIC Concentrator

Contents <slot>—FPC slot number

<user>—User on the Telephony Gateway Module

<request-userfw-local-auth-table-add>

Usage

```
<rpc>
 <request-userfw-local-auth-table-add>
  <user-name>user-name</user-name> <!-- mandatory -->
  <ip-address>ip-address</ip-address> <!-- mandatory -->
  <value/>
 </request-userfw-local-auth-table-add>
</rpc>
```

Description

Contents <user-name>—Add user name to local authentication table

<ip-address>—Add ip-address to local authentication table

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<value>—Add role name to local authentication table

<request-userfw-local-auth-table-delete-ip>

Usage

```
<rpc>
 <request-userfw-local-auth-table-delete-ip>
  <ip-address>ip-address</ip-address> <!-- mandatory -->
 </request-userfw-local-auth-table-delete-ip>
</rpc>
```

Description Delete local user authentication table entry by ip-address

Contents <ip-address>—IP address

<request-userfw-local-auth-table-delete-user>

Usage

```
<rpc>
 <request-userfw-local-auth-table-delete-user>
  <user-name>user-name</user-name> <!-- mandatory -->
 </request-userfw-local-auth-table-delete-user>
</rpc>
```

Description Delete local user authentication table entry by user name

Contents <user-name>—User name

<request-wan-acceleration-login-fpc>

Usage

```
<rpc>
 <request-wan-acceleration-login-fpc>
  <slot>slot</slot> <!-- mandatory -->
 </request-wan-acceleration-login-fpc>
</rpc>
```

Description Login to Flexible PIC Concentrator

Contents <slot>—FPC slot number

<request-wlan-access-point-firmware-switch>

Usage

```
<rpc>
 <request-wlan-access-point-firmware-switch>
```


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```
    <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>
<!-- mandatory -->
   </request-wlan-access-point-firmware-switch>
  </rpc>
```

Description Switch to alternate firmware image on the access point

Contents <wlan-access-point-name>—Name of the access point

<request-wlan-access-point-firmware-upgrade>

Usage

```
<rpc>
 <request-wlan-access-point-firmware-upgrade>
  <name/>
  <all/>
  <file>file</file> <!-- mandatory -->
 </request-wlan-access-point-firmware-upgrade>
</rpc>
```

Description Upgrade the firmware

Contents <name>—Name of the access point

<all>—All access points

<file>—Manually specified firmware file

<request-wlan-access-point-packet-capture-start>

Usage

```
<rpc>
 <request-wlan-access-point-packet-capture-start>
  <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>
<!-- mandatory -->
  <interface>interface</interface> <!-- mandatory -->
  <duration>duration</duration>
  <filename>filename</filename>
  <size>size</size>
  <promiscuous/>
  <disable-beacons/>
  <filter-mac>filter-mac</filter-mac>
 </request-wlan-access-point-packet-capture-start>
</rpc>
```

Description Start the packet capture

Contents <wlan-access-point-name>—Name of the access point

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- Bridge - Bridge interface on the access point
- Ethernet - Ethernet interface on the access point
- Radio1 - Radio 1 interface on the access point
- Radio2 - Radio 2 interface on the access point
- Radio1VAP0 - Radio 1 VAP 0 interface on the access point
- Radio1VAP1 - Radio 1 VAP 1 interface on the access point
- Radio1VAP2 - Radio 1 VAP 2 interface on the access point
- Radio1VAP3 - Radio 1 VAP 3 interface on the access point
- Radio1VAP4 - Radio 1 VAP 4 interface on the access point
- Radio1VAP5 - Radio 1 VAP 5 interface on the access point
- Radio1VAP6 - Radio 1 VAP 6 interface on the access point
- Radio1VAP7 - Radio 1 VAP 7 interface on the access point
- Radio1VAP8 - Radio 1 VAP 8 interface on the access point
- Radio1VAP9 - Radio 1 VAP 9 interface on the access point
- Radio1VAP10 - Radio 1 VAP 10 interface on the access point
- Radio1VAP11 - Radio 1 VAP 11 interface on the access point
- Radio1VAP12 - Radio 1 VAP 12 interface on the access point
- Radio1VAP13 - Radio 1 VAP 13 interface on the access point
- Radio1VAP14 - Radio 1 VAP 14 interface on the access point
- Radio1VAP15 - Radio 1 VAP 15 interface on the access point
- Radio2VAP0 - Radio 2 VAP 0 interface on the access point
- Radio2VAP1 - Radio 2 VAP 1 interface on the access point
- Radio2VAP2 - Radio 2 VAP 2 interface on the access point
- Radio2VAP3 - Radio 2 VAP 3 interface on the access point
- Radio2VAP4 - Radio 2 VAP 4 interface on the access point
- Radio2VAP5 - Radio 2 VAP 5 interface on the access point
- Radio2VAP6 - Radio 2 VAP 6 interface on the access point
- Radio2VAP7 - Radio 2 VAP 7 interface on the access point
- Radio2VAP8 - Radio 2 VAP 8 interface on the access point
- Radio2VAP9 - Radio 2 VAP 9 interface on the access point
- Radio2VAP10 - Radio 2 VAP 10 interface on the access point
- Radio2VAP11 - Radio 2 VAP 11 interface on the access point
- Radio2VAP12 - Radio 2 VAP 12 interface on the access point

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- Radio2VAP13 - Radio 2 VAP 13 interface on the access point
- Radio2VAP14 - Radio 2 VAP 14 interface on the access point
- Radio2VAP15 - Radio 2 VAP 15 interface on the access point

<interface>—Name of the interface

- Bridge - Bridge interface on the access point
- Ethernet - Ethernet interface on the access point
- Radio1 - Radio 1 interface on the access point
- Radio2 - Radio 2 interface on the access point
- Radio1VAP0 - Radio 1 VAP 0 interface on the access point
- Radio1VAP1 - Radio 1 VAP 1 interface on the access point
- Radio1VAP2 - Radio 1 VAP 2 interface on the access point
- Radio1VAP3 - Radio 1 VAP 3 interface on the access point
- Radio1VAP4 - Radio 1 VAP 4 interface on the access point
- Radio1VAP5 - Radio 1 VAP 5 interface on the access point
- Radio1VAP6 - Radio 1 VAP 6 interface on the access point
- Radio1VAP7 - Radio 1 VAP 7 interface on the access point
- Radio1VAP8 - Radio 1 VAP 8 interface on the access point
- Radio1VAP9 - Radio 1 VAP 9 interface on the access point
- Radio1VAP10 - Radio 1 VAP 10 interface on the access point
- Radio1VAP11 - Radio 1 VAP 11 interface on the access point
- Radio1VAP12 - Radio 1 VAP 12 interface on the access point
- Radio1VAP13 - Radio 1 VAP 13 interface on the access point
- Radio1VAP14 - Radio 1 VAP 14 interface on the access point
- Radio1VAP15 - Radio 1 VAP 15 interface on the access point
- Radio2VAP0 - Radio 2 VAP 0 interface on the access point
- Radio2VAP1 - Radio 2 VAP 1 interface on the access point
- Radio2VAP2 - Radio 2 VAP 2 interface on the access point
- Radio2VAP3 - Radio 2 VAP 3 interface on the access point
- Radio2VAP4 - Radio 2 VAP 4 interface on the access point
- Radio2VAP5 - Radio 2 VAP 5 interface on the access point
- Radio2VAP6 - Radio 2 VAP 6 interface on the access point
- Radio2VAP7 - Radio 2 VAP 7 interface on the access point
- Radio2VAP8 - Radio 2 VAP 8 interface on the access point

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- Radio2VAP9 - Radio 2 VAP 9 interface on the access point
- Radio2VAP10 - Radio 2 VAP 10 interface on the access point
- Radio2VAP11 - Radio 2 VAP 11 interface on the access point
- Radio2VAP12 - Radio 2 VAP 12 interface on the access point
- Radio2VAP13 - Radio 2 VAP 13 interface on the access point
- Radio2VAP14 - Radio 2 VAP 14 interface on the access point
- Radio2VAP15 - Radio 2 VAP 15 interface on the access point

<duration>—Capture duration

<filename>—Name of the captured file

<size>—Maximum file size

<promiscuous>—Enable promiscuous mode

<disable-beacons>—Disable capture of beacons

<filter-mac>—MAC address of the interface

<request-wlan-access-point-packet-capture-stop>

Usage

```
<rpc>
 <request-wlan-access-point-packet-capture-stop>
  <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>
<!-- mandatory -->
 </request-wlan-access-point-packet-capture-stop>
</rpc>
```

Description Stop the packet capture

Contents <wlan-access-point-name>—Name of the access point

<request-wlan-access-point-restart>

Usage

```
<rpc>
 <request-wlan-access-point-restart>
  <wlan-access-point-name>wlan-access-point-name</wlan-access-point-name>
<!-- mandatory -->
 </request-wlan-access-point-restart>
</rpc>
```

Description Restart operation

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Contents <wlan-access-point-name>—Name of the access point

<retrieve-destination-nat-summary-information>

Usage

```
<rpc>
 <retrieve-destination-nat-summary-information>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </retrieve-destination-nat-summary-information>
</rpc>
```

Description Show destination NAT summary information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<retrieve-persist-nat-ip-port-information>

Usage

```
<rpc>
 <retrieve-persist-nat-ip-port-information>
  <ip>ip</ip> <!-- mandatory -->
  <internal-port>internal-port</internal-port>
  <internal-protocol>internal-protocol</internal-protocol>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </retrieve-persist-nat-ip-port-information>
</rpc>
```

Description Show persistent NAT information of internal IP and port

Contents <ip>—Internal IP address

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol
- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)

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- all - All logical systems
- logical-system-name - Logical system name

<internal-port>—Internal port

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol
- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)
- all - All logical systems
- logical-system-name - Logical system name

<internal-protocol>—Internal protocol

- tcp - Transmission Control Protocol
- udp - User Datagram Protocol
- icmp - Internet Control Message Protocol
- icmp6 - Internet Control Message Protocol Version 6
- protocol-number - Numeric protocol value (0 .. 255)
- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<retrieve-persist-nat-pool-information>

Usage

```
<rpc>
 <retrieve-persist-nat-pool-information>
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </retrieve-persist-nat-pool-information>
</rpc>
```

Description Show persistent NAT information of this pool

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Contents <pool-name>—Source NAT pool name

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<retrieve-source-nat-pool-information>

Usage

```
<rpc>
 <retrieve-source-nat-pool-information>
  <pool-choice>pool-choice</pool-choice> <!-- mandatory -->
  <pool-name>pool-name</pool-name> <!-- mandatory -->
  <all/>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </retrieve-source-nat-pool-information>
</rpc>
```

Description Show source NAT information of this pool

Contents <pool-name>—Address-pool name

- all - All logical systems
- logical-system-name - Logical system name

<all>—Display all source NAT pool information

- all - All logical systems
- logical-system-name - Logical system name

<logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

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<retrieve-source-nat-summary>

Usage

```
<rpc>
 <retrieve-source-nat-summary>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </retrieve-source-nat-summary>
</rpc>
```

Description Show source NAT summary information

Contents <logical-system>—Logical-system name

- all - All logical systems
- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<set-chassis-cluster>

Usage

```
<rpc>
 <set-chassis-cluster>
 </set-chassis-cluster>
</rpc>
```

Description

Contents <set-chassis-cluster-enable>—Set cluster identifier

<set-chassis-cluster-disable>—Disable the chassis cluster

<set-chassis-cluster-disable>

Usage

```
<rpc>
 <set-chassis-cluster-disable>
  <reboot/>
 </set-chassis-cluster-disable>
</rpc>
```

Description Disable the chassis cluster

Contents <reboot>—Reboot the system after disabling the cluster

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<set-chassis-cluster-enable>

Usage

```
<rpc>
 <set-chassis-cluster-enable>
  <cluster-id>cluster-id</cluster-id> <!-- mandatory -->
  <node>node</node> <!-- mandatory -->
  <reboot/>
 </set-chassis-cluster-enable>
</rpc>
```

Description Set cluster identifier

Contents <cluster-id>—Cluster identifier

<node>—Node identifier

<reboot>—Reboot the system after setting the identifiers

<set-tgm-media-gateway-controller>

Usage

```
<rpc>
 <set-tgm-media-gateway-controller>
  <slot>slot</slot> <!-- mandatory -->
 <media-gateway-controller>media-gateway-controller</media-gateway-controller>
<!-- mandatory -->
 </set-tgm-media-gateway-controller>
</rpc>
```

Description Change TGM information for this FPC

Contents <slot>—FPC slot number

<media-gateway-controller>—IPv4 address of one or more media gateway controllers

<show-alg-ike-esp-state>

Usage

```
<rpc>
 <show-alg-ike-esp-state>
 </show-alg-ike-esp-state>
</rpc>
```

Description Show all IKE-ESP ALG state information

Contents <show-alg-ike-esp-summary>—Show IKE-ESP ALG summary

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<show-alg-ike-esp-summary>

Usage

```
<rpc>
 <show-alg-ike-esp-summary/>
</rpc>
```

Description Show IKE-ESP ALG summary

<show-anti-spam>

Usage

```
<rpc>
 <show-anti-spam>
 </show-anti-spam>
</rpc>
```

Description Show anti-spam information

Contents <show-anti-spam-statistics>—Show anti-spam statistics

<show-anti-spam-status>—Show anti-spam status

<show-anti-spam-statistics>

Usage

```
<rpc>
 <show-anti-spam-statistics/>
</rpc>
```

Description Show anti-spam statistics

<show-anti-spam-status>

Usage

```
<rpc>
 <show-anti-spam-status/>
</rpc>
```

Description Show anti-spam status

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<show-anti-virus>

Usage

```
<rpc>
 <show-anti-virus>
 </show-anti-virus>
</rpc>
```

Description Show anti-virus information

Contents <show-anti-virus-statistics>—Show anti-virus statistics

<show-anti-virus-status>—Show anti-virus status

<show-anti-virus-statistics>

Usage

```
<rpc>
 <show-anti-virus-statistics/>
</rpc>
```

Description Show anti-virus statistics

<show-anti-virus-status>

Usage

```
<rpc>
 <show-anti-virus-status>
 </show-anti-virus-status>
</rpc>
```

Description Show anti-virus status

Contents <show-anti-virus-status-detail>—Show anti-virus detailed status

<show-anti-virus-status-detail>

Usage

```
<rpc>
 <show-anti-virus-status-detail/>
</rpc>
```

Description Show anti-virus detailed status

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<show-content-filtering>

Usage

```
<rpc>
 <show-content-filtering>
 </show-content-filtering>
</rpc>
```

Description Show content-filtering information

Contents <show-content-filtering-statistics>—Show content-filtering statistics

<show-content-filtering-statistics>

Usage

```
<rpc>
 <show-content-filtering-statistics/>
</rpc>
```

Description Show content-filtering statistics

<show-ds-lite-softwire-one-sc-information>

Usage

```
<rpc>
 <show-ds-lite-softwire-one-sc-information>
  <softwire-name-str>softwire-name-str</softwire-name-str> <!-- mandatory -->
  <start-id>start-id</start-id>
  <count>count</count>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </show-ds-lite-softwire-one-sc-information>
</rpc>
```

Description Show Softwire Concentrator object

Contents <softwire-name-str>—Softwire Name

- logical-system-name - Logical system name

<start-id>—Show softwire initiator info from start identifier

- logical-system-name - Logical system name

<count>—Number of softwire initiator entries

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- logical-system-name - Logical system name

<logical-system>—Logical-system name

- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<show-ds-lite-softwire-sc-infomation>

Usage

```
<rpc>
 <show-ds-lite-softwire-sc-infomation>
  <lsys>lsys</lsys>
  <logical-system>logical-system</logical-system>
  <root-logical-system/>
 </show-ds-lite-softwire-sc-infomation>
</rpc>
```

Description Show softwire information

Contents <logical-system>—Logical-system name

- logical-system-name - Logical system name

<root-logical-system>—Root logical-system (default)

<show-ds-lite-softwire-one-sc-information>—Show Softwire Concentrator object

<show-eedebug-capture>

Usage

```
<rpc>
 <show-eedebug-capture/>
</rpc>
```

Description Show datapath debug capture file

<show-security-hpl-infile>

Usage

```
<rpc>
 <show-security-hpl-infile>
  <file_name>file_name</file_name>
 </show-security-hpl-infile>
</rpc>
```

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Description Show security logs in binary format

Contents <file_name>—Name of the binary log file to be displayed

<show-security-hpl-infile-last>—Show recent security logs in binary format

<show-security-hpl-infile-last>

Usage

```
<rpc>
 <show-security-hpl-infile-last>
  <seconds>seconds</seconds>
 </show-security-hpl-infile-last>
</rpc>
```

Description Show recent security logs in binary format

Contents <seconds>—Number of seconds of binary logs to display

<show-utmd-session>

Usage

```
<rpc>
 <show-utmd-session/>
</rpc>
```

Description Show security utm session

<show-utmd-status>

Usage

```
<rpc>
 <show-utmd-status/>
</rpc>
```

Description Show security utm status

<show-web-filtering>

Usage

```
<rpc>
 <show-web-filtering>
 </show-web-filtering>
</rpc>
```


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Description Show web-filtering information

Contents <show-web-filtering-statistics>—Show web-filtering statistics

<show-web-filtering-status>—Show web-filtering status

<show-web-filtering-statistics>

Usage

```
<rpc>
 <show-web-filtering-statistics/>
</rpc>
```

Description Show web-filtering statistics

<show-web-filtering-status>

Usage

```
<rpc>
 <show-web-filtering-status/>
</rpc>
```

Description Show web-filtering status

<test-anti-spam-profile>

Usage

```
<rpc>
 <test-anti-spam-profile>
  <profile>profile</profile>
  <test-string>test-string</test-string>
 </test-anti-spam-profile>
</rpc>
```

Description Test anti-spam profile

Contents <profile>—Anti-spam profile name

<test-string>—Anti-spam test string

<test-anti-virus-profile>

Usage

```
<rpc>
 <test-anti-virus-profile>
  <profile>profile</profile>
```

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```
  <test-string>test-string</test-string>
 </test-anti-virus-profile>
</rpc>
```

Description Test anti-virus profile

Contents <profile>—Anti-virus profile name

<test-string>—Anti-virus test string

<test-web-filtering-profile>

Usage

```
<rpc>
 <test-web-filtering-profile>
  <profile>profile</profile>
  <test-string>test-string</test-string>
 </test-web-filtering-profile>
</rpc>
```

Description Test web-filtering profile

Contents <profile>—Web-filtering profile name

<test-string>—Web-filtering test string

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CHAPTER 56

Operational Response Tag Elements Applicable to All Platforms

This chapter lists the Extensible Markup Language (XML) tag elements in the Junos XML application programming interface (API) that contain operational information. The Junos XML protocol and NETCONF servers return them in response to requests from client applications.

The tags listed in this chapter are common to devices belonging to the following platforms:

- EX Series
- M Series
- MX Series
- T Series
- QFX Series
- SRX Series

The tags are divided into the following sections and listed in alphabetical order within each section.

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- Summary of Ethernet Virtual Circuit Response Tags on page 2193
- Summary of Accounting Response Tags on page 2196
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Summary of Captive Portal Content Delivery Tags

<cpcd-pic-information>

Usage

```
<cpcd-pic-information>
  <cpcd-pic-table>....</cpcd-pic-table>
</cpcd-pic-information>
```

Description Cpcd pic name and index

<cpcd-pic-statistics>

Usage

```
<cpcd-pic-statistics>
  <statistics-header>....</statistics-header>
  <statistics>....</statistics>
</cpcd-pic-statistics>
```

Description Captive portal and content delivery statistics per PIC

<cpcd-pic-statistics-cleared>

Usage

```
<cpcd-pic-statistics-cleared>
  <statistics-cleared-header>....</statistics-cleared-header>
</cpcd-pic-statistics-cleared>
```

Description Captive portal and content delivery statistics per PIC cleared

<cpcd-pic-table>

Usage

```
<cpcd-pic-information>
  <cpcd-pic-table>
    <cpcd-pic-table-entry>....</cpcd-pic-table-entry>
  </cpcd-pic-table>
</cpcd-pic-information>
```

Description

<cpcd-pic-table-entry>

Usage

```
<cpcd-pic-information>
```


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```
<cpcd-pic-table>
  <cpcd-pic-table-entry>
    <pic-name>
      pic-name
    </pic-name>
    <pic-index>
      pic-index
    </pic-index>
  </cpcd-pic-table-entry>
 </cpcd-pic-table>
</cpcd-pic-information>
```

Description

<cpcd-profile>

Usage

```
<cpcd-profile>
  <cpcd-profile-table>....</cpcd-profile-table>
</cpcd-profile>
```

Description Cpcd profile name and number of rules or rulesets

<cpcd-profile-table>

Usage

```
<cpcd-profile>
  <cpcd-profile-table>
    <cpcd-profile-table-entry>....</cpcd-profile-table-entry>
  </cpcd-profile-table>
</cpcd-profile>
```

Description

<cpcd-profile-table-entry>

Usage

```
<cpcd-profile>
  <cpcd-profile-table>
    <cpcd-profile-table-entry>
      <profile-name>
        profile-name
      </profile-name>
      <num-rules>
        num-rules
      </num-rules>
    </cpcd-profile-table-entry>
  </cpcd-profile-table>
</cpcd-profile>
```

Description

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<cpcd-rule>

Usage

```
<cpcd-rule>
  <cpcd-rule-table>....</cpcd-rule-table>
</cpcd-rule>
```

Description Cpcd rule name and number of terms

<cpcd-rule-set-table>

Usage

```
<cpcd-ruleset>
  <cpcd-rule-set-table>
    <cpcd-rule-set-table-entry>....</cpcd-rule-set-table-entry>
  </cpcd-rule-set-table>
</cpcd-ruleset>
```

Description

<cpcd-rule-set-table-entry>

Usage

```
<cpcd-ruleset>
  <cpcd-rule-set-table>
    <cpcd-rule-set-table-entry>
      <ruleset-name>
        ruleset-name
      </ruleset-name>
      <rule-name>
        rule-name
      </rule-name>
    </cpcd-rule-set-table-entry>
  </cpcd-rule-set-table>
</cpcd-ruleset>
```

Description

<cpcd-rule-table>

Usage

```
<cpcd-rule>
  <cpcd-rule-table>
    <cpcd-rule-table-entry>....</cpcd-rule-table-entry>
  </cpcd-rule-table>
</cpcd-rule>
```

Description

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<cpcd-rule-table-entry>

Usage

```
<cpcd-rule>
  <cpcd-rule-table>
    <cpcd-rule-table-entry>
      <rule-name>
        rule-name
      </rule-name>
      <term-name>
        term-name
      </term-name>
    </cpcd-rule-table-entry>
  </cpcd-rule-table>
</cpcd-rule>
```

Description

<cpcd-rule-term>

Usage

```
<cpcd-rule-term>
  <cpcd-term-table>....</cpcd-term-table>
</cpcd-rule-term>
```

Description Cpcd terms within a rule

<cpcd-ruleset>

Usage

```
<cpcd-ruleset>
  <cpcd-rule-set-table>....</cpcd-rule-set-table>
</cpcd-ruleset>
```

Description Cpcd rule sets

<cpcd-service-set-brief>

Usage

```
<cpcd-service-set-brief>
  <cpcd-sset-brief-table>....</cpcd-sset-brief-table>
</cpcd-service-set-brief>
```

Description Service set with cpcd profile name

<cpcd-service-set-detail>

Usage

```
<cpcd-service-set-detail>
```

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```
  <cpcd-sset-detail-table>....</cpcd-sset-detail-table>
</cpcd-service-set-detail>
```

Description Service set with cpcd profile name and number of compiled rules

<cpcd-service-set-summary>

Usage

```
<cpcd-service-set-summary>
  <num-sset>
    num-sset
  </num-sset>
</cpcd-service-set-summary>
```

Description Service set summary

<cpcd-sset-brief-table>

Usage

```
<cpcd-service-set-brief>
  <cpcd-sset-brief-table>
    <cpcd-sset-brief-table-entry>....</cpcd-sset-brief-table-entry>
  </cpcd-sset-brief-table>
</cpcd-service-set-brief>
```

Description

<cpcd-sset-brief-table-entry>

Usage

```
<cpcd-service-set-brief>
  <cpcd-sset-brief-table>
    <cpcd-sset-brief-table-entry>
      <sset-name>
        sset-name
      </sset-name>
      <profile-name>
        profile-name
      </profile-name>
    </cpcd-sset-brief-table-entry>
  </cpcd-sset-brief-table>
</cpcd-service-set-brief>
```

Description

<cpcd-sset-detail-table>

Usage

```
<cpcd-service-set-detail>
  <cpcd-sset-detail-table>
    <cpcd-sset-detail-table-entry>....</cpcd-sset-detail-table-entry>
```


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```
  </cpcd-sset-detail-table>
</cpcd-service-set-detail>
```

Description

<cpcd-sset-detail-table-entry>

Usage

```
<cpcd-service-set-detail>
  <cpcd-sset-detail-table>
    <cpcd-sset-detail-table-entry>
      <sset-name>
        sset-name
      </sset-name>
      <sset-id>
        sset-id
      </sset-id>
      <profile-name>
        profile-name
      </profile-name>
      <num-compiled-rules>
        num-compiled-rules
      </num-compiled-rules>
    </cpcd-sset-detail-table-entry>
  </cpcd-sset-detail-table>
</cpcd-service-set-detail>
```

Description

<cpcd-term>

Usage

```
<cpcd-term>
  <term-header>....</term-header>
  <term-application>....</term-application>
  <term-address-range>....</term-address-range>
  <no-term-found>....</no-term-found>
</cpcd-term>
```

Description Cpcd term within a rule

<cpcd-term-table>

Usage

```
<cpcd-rule-term>
  <cpcd-term-table>
    <cpcd-term-table-entry>....</cpcd-term-table-entry>
  </cpcd-term-table>
</cpcd-rule-term>
```

Description

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<cpcd-term-table-entry>

Usage

```
<cpcd-rule-term>
  <cpcd-term-table>
    <cpcd-term-table-entry>
      <term-name>
        term-name
      </term-name>
      <term-action>
        term-action
      </term-action>
      <term-action-option>
        term-action-option
      </term-action-option>
    </cpcd-term-table-entry>
  </cpcd-term-table>
</cpcd-rule-term>
```

Description

<no-cpcd-statistics>

Usage

```
<no-cpcd-statistics>
  <service-set-interface>
    service-set-interface
  </service-set-interface>
</no-cpcd-statistics>
```

Description

<no-term-found>

Usage

```
<cpcd-term>
  <no-term-found>
    <rule-name>
      rule-name
    </rule-name>
    <term-name>
      term-name
    </term-name>
  </no-term-found>
</cpcd-term>
```

Description

<statistics>

Usage

```
<cpcd-pic-statistics>
```


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```
<statistics>
  <packets-received>
    packets-received
  </packets-received>
  <packets-altered>
    packets-altered
  </packets-altered>
</statistics>
</cpcd-pic-statistics>
```

Description Statistics

<statistics-cleared-header>

Usage

```
<cpcd-pic-statistics-cleared>
  <statistics-cleared-header>
    <service-set-interface>
      service-set-interface
    </service-set-interface>
  </statistics-cleared-header>
</cpcd-pic-statistics-cleared>
```

Description

<statistics-header>

Usage

```
<cpcd-pic-statistics>
  <statistics-header>
    <service-set-interface>
      service-set-interface
    </service-set-interface>
  </statistics-header>
</cpcd-pic-statistics>
```

Description

<term-address-range>

Usage

```
<cpcd-term>
  <term-address-range>
    <term-address-range-low>
      term-address-range-low
    </term-address-range-low>
    <term-address-range-high>
      term-address-range-high
    </term-address-range-high>
    <term-address-range-mask>
      term-address-range-mask
    </term-address-range-mask>
```

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```
    <term-address-range-except>
     term-address-range-except
    </term-address-range-except>
   </term-address-range>
</cpcd-term>
```

Description

<term-application>

Usage

```
<cpcd-term>
 <term-application>
  <term-application-name>
   term-application-name
  </term-application-name>
  <term-application-protocol>
   term-application-protocol
  </term-application-protocol>
  <term-application-ip-protocol>
   term-application-ip-protocol
  </term-application-ip-protocol>
  <term-application-src-ports>
   term-application-src-ports
  </term-application-src-ports>
  <term-application-dst-ports>
   term-application-dst-ports
  </term-application-dst-ports>
 </term-application>
</cpcd-term>
```

Description

<term-header>

Usage

```
<cpcd-term>
 <term-header>
  <rule-name-term>
   rule-name-term
  </rule-name-term>
  <rule-match-direction>
   rule-match-direction
  </rule-match-direction>
  <term-name-term>
   term-name-term
  </term-name-term>
  <term-action>
   term-action
  </term-action>
  <term-action-option>
   term-action-option
  </term-action-option>
 </term-header>
```


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```
</cpcd-term>
```

Description

Summary of Ethernet Virtual Circuit Response Tags

<elmi-evc-entry>

Usage

```
<elmi-evc-information>
  <elmi-evc-entry>
    <elmi-evc-id>
      elmi-evc-id
    </elmi-evc-id>
    <elmi-evc-status>
      elmi-evc-status
    </elmi-evc-status>
    <elmi-evc-reference-id>
      elmi-evc-reference-id
    </elmi-evc-reference-id>
    <elmi-evc-type>
      elmi-evc-type
    </elmi-evc-type>
    <elmi-evc-configured-remote-uni-count>
      elmi-evc-configured-remote-uni-count
    </elmi-evc-configured-remote-uni-count>
    <elmi-evc-active-uni-count>
      elmi-evc-active-uni-count
    </elmi-evc-active-uni-count>
    <elmi-evc-protocol>
      elmi-evc-protocol
    </elmi-evc-protocol>
    <elmi-cfm-maintenance-domain>
      elmi-cfm-maintenance-domain
    </elmi-cfm-maintenance-domain>
    <elmi-cfm-maintenance-association>
      elmi-cfm-maintenance-association
    </elmi-cfm-maintenance-association>
    <elmi-vpls-routing-instance>
      elmi-vpls-routing-instance
    </elmi-vpls-routing-instance>
    <elmi-evc-uni>....</elmi-evc-uni>
  </elmi-evc-entry>
</elmi-evc-information>
```

Description

<elmi-evc-information>

Usage

```
<elmi-evc-information>
  <elmi-evc-entry>....</elmi-evc-entry>
</elmi-evc-information>
```

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Description

<elmi-evc-uni>

Usage

```
<elmi-evc-information>
  <elmi-evc-entry>
    <elmi-evc-uni>
      <elmi-uni-id>
        elmi-uni-id
      </elmi-uni-id>
      <elmi-interface-name>
        elmi-interface-name
      </elmi-interface-name>
      <elmi-operational-state>
        elmi-operational-state
      </elmi-operational-state>
    </elmi-evc-uni>
  </elmi-evc-entry>
</elmi-evc-information>
```

Description

<elmi-interface-entry>

Usage

```
<elmi-interface-information>
  <elmi-interface-entry>
    <elmi-interface-name>
      elmi-interface-name
    </elmi-interface-name>
    <elmi-interface-status>
      elmi-interface-status
    </elmi-interface-status>
    <elmi-uni-id>
      elmi-uni-id
    </elmi-uni-id>
    <elmi-evc-map-type>
      elmi-evc-map-type
    </elmi-evc-map-type>
    <elmi-polling-verification-timer>
      elmi-polling-verification-timer
    </elmi-polling-verification-timer>
    <elmi-operational-state>
      elmi-operational-state
    </elmi-operational-state>
    <elmi-untagged-vlan-id>
      elmi-untagged-vlan-id
    </elmi-untagged-vlan-id>
    <elmi-default-evc>
      elmi-default-evc
    </elmi-default-evc>
    <elmi-uni-evc>....</elmi-uni-evc>
  </elmi-interface-entry>
```


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```
</elmi-interface-information>
```

Description

<elmi-interface-information>

Usage

```
<elmi-interface-information>
  <elmi-interface-entry>....</elmi-interface-entry>
</elmi-interface-information>
```

Description

<elmi-interface-statistics>

Usage

```
<elmi-interface-statistics>
  <elmi-interface-statistics-entry>....</elmi-interface-statistics-entry>
</elmi-interface-statistics>
```

Description

<elmi-interface-statistics-entry>

Usage

```
<elmi-interface-statistics>
  <elmi-interface-statistics-entry>
    <elmi-interface-name>
      elmi-interface-name
    </elmi-interface-name>
    <elmi-check-messages-sent>
      elmi-check-messages-sent
    </elmi-check-messages-sent>
    <elmi-check-messages-received>
      elmi-check-messages-received
    </elmi-check-messages-received>
    <elmi-full-status-messages-sent>
      elmi-full-status-messages-sent
    </elmi-full-status-messages-sent>
    <elmi-full-status-messages-received>
      elmi-full-status-messages-received
    </elmi-full-status-messages-received>
    <elmi-full-status-continued-messages-sent>
      elmi-full-status-continued-messages-sent
    </elmi-full-status-continued-messages-sent>
    <elmi-full-status-continued-messages-received>
      elmi-full-status-continued-messages-received
    </elmi-full-status-continued-messages-received>
    <elmi-async-evc-status-messages-sent>
      elmi-async-evc-status-messages-sent
    </elmi-async-evc-status-messages-sent>
    <elmi-reliability-errors>
      elmi-reliability-errors
```

```
    </elmi-reliability-errors>
    <elmi-protocol-errors>
      elmi-protocol-errors
    </elmi-protocol-errors>
  </elmi-interface-statistics-entry>
</elmi-interface-statistics>
```

Description

<elmi-uni-evc>

Usage

```
<elmi-interface-information>
  <elmi-interface-entry>
    <elmi-uni-evc>
      <elmi-evc-reference-id>
        elmi-evc-reference-id
      </elmi-evc-reference-id>
      <elmi-evc-id>
        elmi-evc-id
      </elmi-evc-id>
      <elmi-evc-status>
        elmi-evc-status
      </elmi-evc-status>
      <elmi-ce-vlan-ids>
        elmi-ce-vlan-ids
      </elmi-ce-vlan-ids>
    </elmi-uni-evc>
  </elmi-interface-entry>
</elmi-interface-information>
```

Description

Summary of Accounting Response Tags

<accounting-profile-columns>

Usage

```
<accounting-profile-information>
  <accounting-profile-columns>
    <column-label>
      column-label
    </column-label>
  </accounting-profile-columns>
</accounting-profile-information>
```

Description Name of each Junos XML protocol output tag that is included in records generated based on the profile

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<accounting-profile-filter>

Usage

```
<accounting-profile-information>
  <accounting-profile-filter>
    <filter-name>
      filter-name
    </filter-name>
    <next-scheduled-collection>
      next-scheduled-collection
    </next-scheduled-collection>
  </accounting-profile-filter>
</accounting-profile-information>
```

Description Name of each filter to which the profile is applied

<accounting-profile-header>

Usage

```
<accounting-profile-information>
  <accounting-profile-header>
    <profile-name>
      profile-name
    </profile-name>
    <profile-type>
      profile-type
    </profile-type>
    <profile-interval>
      profile-interval
    </profile-interval>
    <profile-use-count>
      profile-use-count
    </profile-use-count>
    <filename>
      filename
    </filename>
    <filesize>
      filesize
    </filesize>
    <filenumber>
      filenumber
    </filenumber>
    <bytes-written>
      bytes-written
    </bytes-written>
    <transfer-interval>
      transfer-interval
    </transfer-interval>
    <next-transfer-time>
      next-transfer-time
    </next-transfer-time>
  </accounting-profile-header>
```

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```
</accounting-profile-information>
```

Description Information from the accounting profile header

<accounting-profile-information>

Usage

```
<accounting-profile-information>
  <accounting-profile-header>....</accounting-profile-header>
  <accounting-profile-columns>....</accounting-profile-columns>
  <accounting-profile-interfaces>....</accounting-profile-interfaces>
  <accounting-profile-mib>....</accounting-profile-mib>
  <accounting-profile-filter>....</accounting-profile-filter>
</accounting-profile-information>
```

Description Information about an accounting profile

<accounting-profile-interfaces>

Usage

```
<accounting-profile-information>
  <accounting-profile-interfaces>
    <interface-name>
      interface-name
    </interface-name>
    <next-scheduled-collection>
      next-scheduled-collection
    </next-scheduled-collection>
  </accounting-profile-interfaces>
</accounting-profile-information>
```

Description Name of each interface to which the profile is applied

<accounting-profile-mib>

Usage

```
<accounting-profile-information>
  <accounting-profile-mib>
    <mib-name>
      mib-name
    </mib-name>
    <next-scheduled-collection>
      next-scheduled-collection
    </next-scheduled-collection>
  </accounting-profile-mib>
</accounting-profile-information>
```

Description Name of each Management Information Base to which the profile is applied

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<accounting-record-information>

Usage

```
<accounting-record-information>
  <interface-accounting-statistics>....</interface-accounting-statistics>
 <routing-engine-accounting-statistics>....</routing-engine-accounting-statistics>

  <filter-accounting-statistics>....</filter-accounting-statistics>
  <cu-accounting-statistics>....</cu-accounting-statistics>
  <mib-accounting-statistics>....</mib-accounting-statistics>
  <file-accounting-records>....</file-accounting-records>
</accounting-record-information>
```

Description Information in a record that was generated based on an accounting profile

<accounting-server-interim-buckets>

Usage

```
<accounting-server-interim-buckets>
  <interim-interval>
    interim-interval
  </interim-interval>
  <interim-granularity>
    interim-granularity
  </interim-granularity>
  <interim-slot>
    interim-slot
  </interim-slot>
  <interim-device>
    interim-device
  </interim-device>
  <interim-num-subscribers>
    interim-num-subscribers
  </interim-num-subscribers>
  <interim-num-services>
    interim-num-services
  </interim-num-services>
  <interim-subscriber-sent>
    interim-subscriber-sent
  </interim-subscriber-sent>
  <interim-subscriber-sent-err>
    interim-subscriber-sent-err
  </interim-subscriber-sent-err>
  <interim-subscriber-rcvd>
    interim-subscriber-rcvd
  </interim-subscriber-rcvd>
  <interim-subscriber-rcvd-err>
    interim-subscriber-rcvd-err
  </interim-subscriber-rcvd-err>
  <interim-service-sent>
    interim-service-sent
  </interim-service-sent>
  <interim-service-sent-err>
```

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```
    interim-service-sent-err
  </interim-service-sent-err>
  <interim-service-rcvd>
    interim-service-rcvd
  </interim-service-rcvd>
  <interim-service-rcvd-err>
    interim-service-rcvd-err
  </interim-service-rcvd-err>
</accounting-server-interim-buckets>
```

Description

<accounting-server-statistics>

Usage

```
<accounting-server-statistics>
  <statistics_connection_header>....</statistics_connection_header>
  <statistics_pfe_header>....</statistics_pfe_header>
  <statistics_pfed_header>....</statistics_pfed_header>
  <statistics_libstat_header>....</statistics_libstat_header>
</accounting-server-statistics>
```

Description

<cu-accounting-record>

Usage

```
<accounting-record-information>
  <cu-accounting-statistics>
    <cu-accounting-record>
      <profile-layout>
        profile-layout
      </profile-layout>
      <epoch-timestamp>
        epoch-timestamp
      </epoch-timestamp>
      <utc-timestamp>
        utc-timestamp
      </utc-timestamp>
      <interface-name>
        interface-name
      </interface-name>
      <address-family>
        address-family
      </address-family>
      <destination-class-name>
        destination-class-name
      </destination-class-name>
      <source-class-name>
        source-class-name
      </source-class-name>
      <counter-name>
        counter-name
      </counter-name>
```


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```
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </cu-accounting-record>
  </cu-accounting-statistics>
</accounting-record-information>
```

Description Information in a record that was generated based on a destination class usage or source class usage profile

<cu-accounting-statistics>

Usage

```
<accounting-record-information>
  <cu-accounting-statistics>
    <cu-accounting-record>....</cu-accounting-record>
  </cu-accounting-statistics>
</accounting-record-information>
```

Description Information from one or more records that were generated based on a destination class usage or source class usage profile

<file-accounting-record>

Usage

```
<accounting-record-information>
  <file-accounting-records>
    <file-accounting-record>
      <profile-layout>
        profile-layout
      </profile-layout>
      <epoch-timestamp>
        epoch-timestamp
      </epoch-timestamp>
    </file-accounting-record>
  </file-accounting-records>
</accounting-record-information>
```

Description Record from an accounting file

<file-accounting-records>

Usage

```
<accounting-record-information>
  <file-accounting-records>
    <file-accounting-record>....</file-accounting-record>
  </file-accounting-records>
```

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```
</accounting-record-information>
```

Description Records from an accounting file

<filter-accounting-record>

Usage

```
<accounting-record-information>
  <filter-accounting-statistics>
    <filter-accounting-record>
      <profile-layout>
        profile-layout
      </profile-layout>
      <epoch-timestamp>
        epoch-timestamp
      </epoch-timestamp>
      <utc-timestamp>
        utc-timestamp
      </utc-timestamp>
      <interfaces>
        interfaces
      </interfaces>
      <filter-name>
        filter-name
      </filter-name>
      <counter-name>
        counter-name
      </counter-name>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </filter-accounting-record>
  </filter-accounting-statistics>
</accounting-record-information>
```

Description Information in a record that was generated based on a filter profile

<filter-accounting-statistics>

Usage

```
<accounting-record-information>
  <filter-accounting-statistics>
    <filter-accounting-record>....</filter-accounting-record>
  </filter-accounting-statistics>
</accounting-record-information>
```

Description Information from one or more records that were generated based on a filter profile

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<index>

Usage

```
<snmp-object-information>
  <snmp-object>
    <index>
      <index-name>
        index-name
      </index-name>
      <index-value>
        index-value
      </index-value>
    </index>
  </snmp-object>
</snmp-object-information>
```

Description

<interface-accounting-record>

Usage

```
<accounting-record-information>
  <interface-accounting-statistics>
    <interface-accounting-record>
      <profile-layout>
        profile-layout
      </profile-layout>
      <epoch-timestamp>
        epoch-timestamp
      </epoch-timestamp>
      <utc-timestamp>
        utc-timestamp
      </utc-timestamp>
      <interface-name>
        interface-name
      </interface-name>
      <snmp-index>
        snmp-index
      </snmp-index>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-unicast>
        input-unicast
      </input-unicast>
```

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```
<output-unicast>
  output-unicast
</output-unicast>
<input-multicast>
  input-multicast
</input-multicast>
<output-multicast>
  output-multicast
</output-multicast>
<input-errors>
  input-errors
</input-errors>
<output-errors>
  output-errors
</output-errors>
<no-proto>
  no-proto
</no-proto>
<rpf-check-bytes>
  rpf-check-bytes
</rpf-check-bytes>
<rpf-check-packets>
  rpf-check-packets
</rpf-check-packets>
<rpf-check6-bytes>
  rpf-check6-bytes
</rpf-check6-bytes>
<rpf-check6-packets>
  rpf-check6-packets
</rpf-check6-packets>
</interface-accounting-record>
</interface-accounting-statistics>
</accounting-record-information>
```

Description Information in a record that was generated based on an interface profile

<interface-accounting-statistics>

Usage

```
<accounting-record-information>
  <interface-accounting-statistics>
    <interface-accounting-record>....</interface-accounting-record>
  </interface-accounting-statistics>
</accounting-record-information>
```

Description Information from one or more records that were generated based on an interface profile

<mib-accounting-record>

Usage

```
<accounting-record-information>
  <mib-accounting-statistics>
```


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```
<mib-accounting-record>
  <profile>
    profile
  </profile>
  <epoch-timestamp>
    epoch-timestamp
  </epoch-timestamp>
  <utc-timestamp>
    utc-timestamp
  </utc-timestamp>
  <name>
    name
  </name>
  <object-value>
    object-value
  </object-value>
</mib-accounting-record>
</mib-accounting-statistics>
</accounting-record-information>
```

Description Information in a record that was generated based on a Management Information Base profile

<mib-accounting-statistics>

Usage

```
<accounting-record-information>
  <mib-accounting-statistics>
    <mib-accounting-record>....</mib-accounting-record>
  </mib-accounting-statistics>
</accounting-record-information>
```

Description Information from one or more records that were generated based on a Management Information Base profile

<pfe>

Usage

```
<pfe-information>
  <pfe>
    <slot-index>
      slot-index
    </slot-index>
    <slot-type>
      slot-type
    </slot-type>
    <slot-state>
      slot-state
    </slot-state>
    <mgmt-state>
      mgmt-state
    </mgmt-state>
```

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```
      <up-time>
       up-time
      </up-time>
     </pfe>
    </pfe-information>
```

Description

<pfe-bfd-statistics-detail>

Usage

```
    <pfe-statistics>
     <pfe-bfd-statistics-detail>
      <bfd-invalid-iif>
       bfd-invalid-iif
      </bfd-invalid-iif>
      <bfd-invalid-iff>
       bfd-invalid-iff
      </bfd-invalid-iff>
      <bfd-bad-checksum>
       bfd-bad-checksum
      </bfd-bad-checksum>
      <bfd-bad-options>
       bfd-bad-options
      </bfd-bad-options>
      <bfd-bad-length>
       bfd-bad-length
      </bfd-bad-length>
      <bfd-bad-udp-checksum>
       bfd-bad-udp-checksum
      </bfd-bad-udp-checksum>
      <bfd-bad-udp-length>
       bfd-bad-udp-length
      </bfd-bad-udp-length>
      <bfd-bad-udp-ports>
       bfd-bad-udp-ports
      </bfd-bad-udp-ports>
      <bfd-no-local-ifl>
       bfd-no-local-ifl
      </bfd-no-local-ifl>
      <bfd-bad-ifl-prefix-length>
       bfd-bad-ifl-prefix-length
      </bfd-bad-ifl-prefix-length>
      <bfd-rx-queue-overflow>
       bfd-rx-queue-overflow
      </bfd-rx-queue-overflow>
      <bfd-out-of-packets>
       bfd-out-of-packets
      </bfd-out-of-packets>
      <bfd-total-packets>
       bfd-total-packets
      </bfd-total-packets>
      <bfd-total-absorbed>
       bfd-total-absorbed
      </bfd-total-absorbed>
```


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```
    <bfd-transmit-errors>
     bfd-transmit-errors
    </bfd-transmit-errors>
   </pfe-bfd-statistics-detail>
</pfe-statistics>
```

Description

<pfe-cfm-statistics-detail>

Usage

```
<pfe-statistics>
 <pfe-cfm-statistics-detail>
  <cfm-packets-received>
   cfm-packets-received
  </cfm-packets-received>
  <cfm-packets-sent-to-re>
   cfm-packets-sent-to-re
  </cfm-packets-sent-to-re>
  <cfm-packets-absorbed>
   cfm-packets-absorbed
  </cfm-packets-absorbed>
  <cfm-packets-received-with-sequence-number>
   cfm-packets-received-with-sequence-number
  </cfm-packets-received-with-sequence-number>
  <cfm-packets-received-invalid-length>
   cfm-packets-received-invalid-length
  </cfm-packets-received-invalid-length>
  <cfm-packets-transmitted>
   cfm-packets-transmitted
  </cfm-packets-transmitted>
  <cfm-packets-transmit-error>
   cfm-packets-transmit-error
  </cfm-packets-transmit-error>
  <cfm-packets-dropped>
   cfm-packets-dropped
  </cfm-packets-dropped>
 </pfe-cfm-statistics-detail>
</pfe-statistics>
```

Description

<pfe-chip-statistics>

Usage

```
<pfe-statistics>
 <pfe-chip-statistics>
  <input-checksum>
   input-checksum
  </input-checksum>
  <output-mtu>
   output-mtu
  </output-mtu>
 </pfe-chip-statistics>
```

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```
</pfe-statistics>
```

Description

<pfe-cpu-stats>

Usage

```
<pfe-statistics>
  <pfe-cpu-stats>
    <pfe-queue-counters>....</pfe-queue-counters>
  </pfe-cpu-stats>
</pfe-statistics>
```

Description

<pfe-fabric-statistics>

Usage

```
<pfe-statistics>
  <pfe-fabric-statistics>
    <pfe-fabric-prefix>
      pfe-fabric-prefix
    </pfe-fabric-prefix>
    <pfe-fabric-packets>
      pfe-fabric-packets
    </pfe-fabric-packets>
    <pfe-fabric-bytes>
      pfe-fabric-bytes
    </pfe-fabric-bytes>
  </pfe-fabric-statistics>
</pfe-statistics>
```

Description

<pfe-hardware-discard-statistics>

Usage

```
<pfe-statistics>
  <pfe-hardware-discard-statistics>
    <timeout-discard>
      timeout-discard
    </timeout-discard>
    <truncated-key-discard>
      truncated-key-discard
    </truncated-key-discard>
    <bits-to-test-discard>
      bits-to-test-discard
    </bits-to-test-discard>
    <data-error-discard>
      data-error-discard
    </data-error-discard>
    <stack-underflow-discard>
      stack-underflow-discard
```


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```
    </stack-underflow-discard>
    <stack-overflow-discard>
      stack-overflow-discard
    </stack-overflow-discard>
    <bad-route-discard>
      bad-route-discard
    </bad-route-discard>
    <nexthop-discard>
      nexthop-discard
    </nexthop-discard>
    <invalid-iif-discard>
      invalid-iif-discard
    </invalid-iif-discard>
    <info-cell-discard>
      info-cell-discard
    </info-cell-discard>
    <fabric-discard>
      fabric-discard
    </fabric-discard>
  </pfe-hardware-discard-statistics>
</pfe-statistics>
```

Description

<pfe-information>

Usage

```
<pfe-information>
  <pfe>....</pfe>
</pfe-information>
```

Description

<pfe-lfm-statistics-detail>

Usage

```
<pfe-statistics>
  <pfe-lfm-statistics-detail>
    <lfm-packets-received>
      lfm-packets-received
    </lfm-packets-received>
    <lfm-packets-sent-to-re>
      lfm-packets-sent-to-re
    </lfm-packets-sent-to-re>
    <lfm-packets-absorbed>
      lfm-packets-absorbed
    </lfm-packets-absorbed>
    <lfm-packets-transmitted>
      lfm-packets-transmitted
    </lfm-packets-transmitted>
    <lfm-packets-transmit-error>
      lfm-packets-transmit-error
    </lfm-packets-transmit-error>
    <lfm-packets-dropped>
```

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```
      lfm-packets-dropped
    </lfm-packets-dropped>
  </pfe-lfm-statistics-detail>
</pfe-statistics>
```

Description

<pfe-local-protocol-statistics>

Usage

```
<pfe-statistics>
  <pfe-local-protocol-statistics>
    <hdlc-keepalive-count>
      hdlc-keepalive-count
    </hdlc-keepalive-count>
    <atm-oam-count>
      atm-oam-count
    </atm-oam-count>
    <fr-lmi-count>
      fr-lmi-count
    </fr-lmi-count>
    <ppp-lcp-ncp-count>
      ppp-lcp-ncp-count
    </ppp-lcp-ncp-count>
    <ospf-hello-count>
      ospf-hello-count
    </ospf-hello-count>
    <ospf3-hello-count>
      ospf3-hello-count
    </ospf3-hello-count>
    <rsvp-hello-count>
      rsvp-hello-count
    </rsvp-hello-count>
    <ldp-hello-count>
      ldp-hello-count
    </ldp-hello-count>
    <bfd-count>
      bfd-count
    </bfd-count>
    <isis-iih-count>
      isis-iih-count
    </isis-iih-count>
    <lacp-count>
      lacp-count
    </lacp-count>
    <arp-count>
      arp-count
    </arp-count>
    <ether-oam-count>
      ether-oam-count
    </ether-oam-count>
    <unknown-count>
      unknown-count
    </unknown-count>
  </pfe-local-protocol-statistics>
```


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```
</pfe-statistics>
```

Description

<pfe-local-traffic-statistics>

Usage

```
<pfe-statistics>
  <pfe-local-traffic-statistics>
    <pfe-input-packets>
      pfe-input-packets
    </pfe-input-packets>
    <pfe-output-packets>
      pfe-output-packets
    </pfe-output-packets>
    <software-input-control-drops>
      software-input-control-drops
    </software-input-control-drops>
    <software-input-high-drops>
      software-input-high-drops
    </software-input-high-drops>
    <software-input-medium-drops>
      software-input-medium-drops
    </software-input-medium-drops>
    <software-input-low-drops>
      software-input-low-drops
    </software-input-low-drops>
    <software-output-low-drops>
      software-output-low-drops
    </software-output-low-drops>
    <hardware-input-drops>
      hardware-input-drops
    </hardware-input-drops>
  </pfe-local-traffic-statistics>
</pfe-statistics>
```

Description

<pfe-multicast-stats>

Usage

```
<pfe-statistics>
  <pfe-multicast-stats>
    <pfe-queue-counters>....</pfe-queue-counters>
  </pfe-multicast-stats>
</pfe-statistics>
```

Description

<pfe-queue>

Usage

```
<pfe-queue-counters>
```

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```
<pfe-queue>
  <number>
    number
  </number>
  <forwarding-class-name>
    forwarding-class-name
  </forwarding-class-name>
  <queued-packets>
    queued-packets
  </queued-packets>
  <queued-packets-na>
    queued-packets-na
  </queued-packets-na>
  <queued-bytes-na>
    queued-bytes-na
  </queued-bytes-na>
  <queued-bytes>
    queued-bytes
  </queued-bytes>
  <queued-packets-rate>
    queued-packets-rate
  </queued-packets-rate>
  <queued-bytes-rate>
    queued-bytes-rate
  </queued-bytes-rate>
  <trans-packets>
    trans-packets
  </trans-packets>
  <trans-bytes>
    trans-bytes
  </trans-bytes>
  <trans-packets-rate>
    trans-packets-rate
  </trans-packets-rate>
  <trans-bytes-rate>
    trans-bytes-rate
  </trans-bytes-rate>
  <tail-drop-packets>
    tail-drop-packets
  </tail-drop-packets>
  <tail-drop-packets-rate>
    tail-drop-packets-rate
  </tail-drop-packets-rate>
  <tail-drop-packets-na>
    tail-drop-packets-na
  </tail-drop-packets-na>
  <rate-limit-drop-packets>
    rate-limit-drop-packets
  </rate-limit-drop-packets>
  <rate-limit-drop-packets-rate>
    rate-limit-drop-packets-rate
  </rate-limit-drop-packets-rate>
  <rate-limit-drop-packets-na>
    rate-limit-drop-packets-na
  </rate-limit-drop-packets-na>
  <rate-limit-drop-bytes>
```


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```
  rate-limit-drop-bytes
</rate-limit-drop-bytes>
<rate-limit-drop-bytes-rate>
  rate-limit-drop-bytes-rate
</rate-limit-drop-bytes-rate>
<rate-limit-drop-bytes-na>
  rate-limit-drop-bytes-na
</rate-limit-drop-bytes-na>
<red-packets-na>
  red-packets-na
</red-packets-na>
<red-packets>
  red-packets
</red-packets>
<red-bytes-na>
  red-bytes-na
</red-bytes-na>
<red-bytes>
  red-bytes
</red-bytes>
<red-packets-rate>
  red-packets-rate
</red-packets-rate>
<red-bytes-rate>
  red-bytes-rate
</red-bytes-rate>
<red-packets-ln>
  red-packets-ln
</red-packets-ln>
<red-bytes-ln>
  red-bytes-ln
</red-bytes-ln>
<red-packets-rate-ln>
  red-packets-rate-ln
</red-packets-rate-ln>
<red-bytes-rate-ln>
  red-bytes-rate-ln
</red-bytes-rate-ln>
<red-packets-lt>
  red-packets-lt
</red-packets-lt>
<red-bytes-lt>
  red-bytes-lt
</red-bytes-lt>
<red-packets-rate-lt>
  red-packets-rate-lt
</red-packets-rate-lt>
<red-bytes-rate-lt>
  red-bytes-rate-lt
</red-bytes-rate-lt>
<red-packets-ht>
  red-packets-ht
</red-packets-ht>
<red-bytes-ht>
  red-bytes-ht
</red-bytes-ht>
```

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```
<red-packets-rate-ht>
  red-packets-rate-ht
</red-packets-rate-ht>
<red-bytes-rate-ht>
  red-bytes-rate-ht
</red-bytes-rate-ht>
<red-packets-hn>
  red-packets-hn
</red-packets-hn>
<red-bytes-hn>
  red-bytes-hn
</red-bytes-hn>
<red-packets-rate-hn>
  red-packets-rate-hn
</red-packets-rate-hn>
<red-bytes-rate-hn>
  red-bytes-rate-hn
</red-bytes-rate-hn>
<red-packets-low>
  red-packets-low
</red-packets-low>
<red-bytes-low>
  red-bytes-low
</red-bytes-low>
<red-packets-rate-low>
  red-packets-rate-low
</red-packets-rate-low>
<red-bytes-rate-low>
  red-bytes-rate-low
</red-bytes-rate-low>
<red-packets-medium-low>
  red-packets-medium-low
</red-packets-medium-low>
<red-bytes-medium-low>
  red-bytes-medium-low
</red-bytes-medium-low>
<red-packets-rate-medium-low>
  red-packets-rate-medium-low
</red-packets-rate-medium-low>
<red-bytes-rate-medium-low>
  red-bytes-rate-medium-low
</red-bytes-rate-medium-low>
<red-packets-medium-high>
  red-packets-medium-high
</red-packets-medium-high>
<red-bytes-medium-high>
  red-bytes-medium-high
</red-bytes-medium-high>
<red-packets-rate-medium-high>
  red-packets-rate-medium-high
</red-packets-rate-medium-high>
<red-bytes-rate-medium-high>
  red-bytes-rate-medium-high
</red-bytes-rate-medium-high>
<red-packets-medium>
  red-packets-medium
```


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```
    </red-packets-medium>
    <red-bytes-medium>
      red-bytes-medium
    </red-bytes-medium>
    <red-packets-rate-medium>
      red-packets-rate-medium
    </red-packets-rate-medium>
    <red-bytes-rate-medium>
      red-bytes-rate-medium
    </red-bytes-rate-medium>
    <red-packets-high>
      red-packets-high
    </red-packets-high>
    <red-bytes-high>
      red-bytes-high
    </red-bytes-high>
    <red-packets-rate-high>
      red-packets-rate-high
    </red-packets-rate-high>
    <red-bytes-rate-high>
      red-bytes-rate-high
    </red-bytes-rate-high>
  </pfe-queue>
</pfe-queue-counters>
```

Description Counters for a single queue

<pfe-queue>

Usage

```
<pfe-statistics>
  <pfe-multicast-stats>
    <pfe-queue-counters>
      <pfe-queue>
        <number>
          number
        </number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queued-packets>
          queued-packets
        </queued-packets>
        <queued-packets-na>
          queued-packets-na
        </queued-packets-na>
        <queued-bytes-na>
          queued-bytes-na
        </queued-bytes-na>
        <queued-bytes>
          queued-bytes
        </queued-bytes>
        <queued-packets-rate>
          queued-packets-rate
```

```
</queued-packets-rate>
<queued-bytes-rate>
  queued-bytes-rate
</queued-bytes-rate>
<trans-packets>
  trans-packets
</trans-packets>
<trans-bytes>
  trans-bytes
</trans-bytes>
<trans-packets-rate>
  trans-packets-rate
</trans-packets-rate>
<trans-bytes-rate>
  trans-bytes-rate
</trans-bytes-rate>
<tail-drop-packets>
  tail-drop-packets
</tail-drop-packets>
<tail-drop-packets-rate>
  tail-drop-packets-rate
</tail-drop-packets-rate>
<tail-drop-packets-na>
  tail-drop-packets-na
</tail-drop-packets-na>
<rate-limit-drop-packets>
  rate-limit-drop-packets
</rate-limit-drop-packets>
<rate-limit-drop-packets-rate>
  rate-limit-drop-packets-rate
</rate-limit-drop-packets-rate>
<rate-limit-drop-packets-na>
  rate-limit-drop-packets-na
</rate-limit-drop-packets-na>
<rate-limit-drop-bytes>
  rate-limit-drop-bytes
</rate-limit-drop-bytes>
<rate-limit-drop-bytes-rate>
  rate-limit-drop-bytes-rate
</rate-limit-drop-bytes-rate>
<rate-limit-drop-bytes-na>
  rate-limit-drop-bytes-na
</rate-limit-drop-bytes-na>
<red-packets-na>
  red-packets-na
</red-packets-na>
<red-packets>
  red-packets
</red-packets>
<red-bytes-na>
  red-bytes-na
</red-bytes-na>
<red-bytes>
  red-bytes
</red-bytes>
<red-packets-rate>
```


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```
  red-packets-rate
</red-packets-rate>
<red-bytes-rate>
  red-bytes-rate
</red-bytes-rate>
<red-packets-ln>
  red-packets-ln
</red-packets-ln>
<red-bytes-ln>
  red-bytes-ln
</red-bytes-ln>
<red-packets-rate-ln>
  red-packets-rate-ln
</red-packets-rate-ln>
<red-bytes-rate-ln>
  red-bytes-rate-ln
</red-bytes-rate-ln>
<red-packets-lt>
  red-packets-lt
</red-packets-lt>
<red-bytes-lt>
  red-bytes-lt
</red-bytes-lt>
<red-packets-rate-lt>
  red-packets-rate-lt
</red-packets-rate-lt>
<red-bytes-rate-lt>
  red-bytes-rate-lt
</red-bytes-rate-lt>
<red-packets-ht>
  red-packets-ht
</red-packets-ht>
<red-bytes-ht>
  red-bytes-ht
</red-bytes-ht>
<red-packets-rate-ht>
  red-packets-rate-ht
</red-packets-rate-ht>
<red-bytes-rate-ht>
  red-bytes-rate-ht
</red-bytes-rate-ht>
<red-packets-hn>
  red-packets-hn
</red-packets-hn>
<red-bytes-hn>
  red-bytes-hn
</red-bytes-hn>
<red-packets-rate-hn>
  red-packets-rate-hn
</red-packets-rate-hn>
<red-bytes-rate-hn>
  red-bytes-rate-hn
</red-bytes-rate-hn>
<red-packets-low>
  red-packets-low
</red-packets-low>
```

```
<red-bytes-low>
  red-bytes-low
</red-bytes-low>
<red-packets-rate-low>
  red-packets-rate-low
</red-packets-rate-low>
<red-bytes-rate-low>
  red-bytes-rate-low
</red-bytes-rate-low>
<red-packets-medium-low>
  red-packets-medium-low
</red-packets-medium-low>
<red-bytes-medium-low>
  red-bytes-medium-low
</red-bytes-medium-low>
<red-packets-rate-medium-low>
  red-packets-rate-medium-low
</red-packets-rate-medium-low>
<red-bytes-rate-medium-low>
  red-bytes-rate-medium-low
</red-bytes-rate-medium-low>
<red-packets-medium-high>
  red-packets-medium-high
</red-packets-medium-high>
<red-bytes-medium-high>
  red-bytes-medium-high
</red-bytes-medium-high>
<red-packets-rate-medium-high>
  red-packets-rate-medium-high
</red-packets-rate-medium-high>
<red-bytes-rate-medium-high>
  red-bytes-rate-medium-high
</red-bytes-rate-medium-high>
<red-packets-medium>
  red-packets-medium
</red-packets-medium>
<red-bytes-medium>
  red-bytes-medium
</red-bytes-medium>
<red-packets-rate-medium>
  red-packets-rate-medium
</red-packets-rate-medium>
<red-bytes-rate-medium>
  red-bytes-rate-medium
</red-bytes-rate-medium>
<red-packets-high>
  red-packets-high
</red-packets-high>
<red-bytes-high>
  red-bytes-high
</red-bytes-high>
<red-packets-rate-high>
  red-packets-rate-high
</red-packets-rate-high>
<red-bytes-rate-high>
  red-bytes-rate-high
```


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```
            </red-bytes-rate-high>
          </pfe-queue>
        </pfe-queue-counters>
      </pfe-multicast-stats>
    </pfe-statistics>
```

Description Counters for a single queue

<pfe-queue>

Usage

```
<pfe-statistics>
  <pfe-cpu-stats>
    <pfe-queue-counters>
      <pfe-queue>
        <number>
          number
        </number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queued-packets>
          queued-packets
        </queued-packets>
        <queued-packets-na>
          queued-packets-na
        </queued-packets-na>
        <queued-bytes-na>
          queued-bytes-na
        </queued-bytes-na>
        <queued-bytes>
          queued-bytes
        </queued-bytes>
        <queued-packets-rate>
          queued-packets-rate
        </queued-packets-rate>
        <queued-bytes-rate>
          queued-bytes-rate
        </queued-bytes-rate>
        <trans-packets>
          trans-packets
        </trans-packets>
        <trans-bytes>
          trans-bytes
        </trans-bytes>
        <trans-packets-rate>
          trans-packets-rate
        </trans-packets-rate>
        <trans-bytes-rate>
          trans-bytes-rate
        </trans-bytes-rate>
        <tail-drop-packets>
          tail-drop-packets
        </tail-drop-packets>
```

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```
<tail-drop-packets-rate>
  tail-drop-packets-rate
</tail-drop-packets-rate>
<tail-drop-packets-na>
  tail-drop-packets-na
</tail-drop-packets-na>
<rate-limit-drop-packets>
  rate-limit-drop-packets
</rate-limit-drop-packets>
<rate-limit-drop-packets-rate>
  rate-limit-drop-packets-rate
</rate-limit-drop-packets-rate>
<rate-limit-drop-packets-na>
  rate-limit-drop-packets-na
</rate-limit-drop-packets-na>
<rate-limit-drop-bytes>
  rate-limit-drop-bytes
</rate-limit-drop-bytes>
<rate-limit-drop-bytes-rate>
  rate-limit-drop-bytes-rate
</rate-limit-drop-bytes-rate>
<rate-limit-drop-bytes-na>
  rate-limit-drop-bytes-na
</rate-limit-drop-bytes-na>
<red-packets-na>
  red-packets-na
</red-packets-na>
<red-packets>
  red-packets
</red-packets>
<red-bytes-na>
  red-bytes-na
</red-bytes-na>
<red-bytes>
  red-bytes
</red-bytes>
<red-packets-rate>
  red-packets-rate
</red-packets-rate>
<red-bytes-rate>
  red-bytes-rate
</red-bytes-rate>
<red-packets-ln>
  red-packets-ln
</red-packets-ln>
<red-bytes-ln>
  red-bytes-ln
</red-bytes-ln>
<red-packets-rate-ln>
  red-packets-rate-ln
</red-packets-rate-ln>
<red-bytes-rate-ln>
  red-bytes-rate-ln
</red-bytes-rate-ln>
<red-packets-lt>
  red-packets-lt
```


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```
</red-packets-lt>
<red-bytes-lt>
  red-bytes-lt
</red-bytes-lt>
<red-packets-rate-lt>
  red-packets-rate-lt
</red-packets-rate-lt>
<red-bytes-rate-lt>
  red-bytes-rate-lt
</red-bytes-rate-lt>
<red-packets-ht>
  red-packets-ht
</red-packets-ht>
<red-bytes-ht>
  red-bytes-ht
</red-bytes-ht>
<red-packets-rate-ht>
  red-packets-rate-ht
</red-packets-rate-ht>
<red-bytes-rate-ht>
  red-bytes-rate-ht
</red-bytes-rate-ht>
<red-packets-hn>
  red-packets-hn
</red-packets-hn>
<red-bytes-hn>
  red-bytes-hn
</red-bytes-hn>
<red-packets-rate-hn>
  red-packets-rate-hn
</red-packets-rate-hn>
<red-bytes-rate-hn>
  red-bytes-rate-hn
</red-bytes-rate-hn>
<red-packets-low>
  red-packets-low
</red-packets-low>
<red-bytes-low>
  red-bytes-low
</red-bytes-low>
<red-packets-rate-low>
  red-packets-rate-low
</red-packets-rate-low>
<red-bytes-rate-low>
  red-bytes-rate-low
</red-bytes-rate-low>
<red-packets-medium-low>
  red-packets-medium-low
</red-packets-medium-low>
<red-bytes-medium-low>
  red-bytes-medium-low
</red-bytes-medium-low>
<red-packets-rate-medium-low>
  red-packets-rate-medium-low
</red-packets-rate-medium-low>
<red-bytes-rate-medium-low>
```

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```
            red-bytes-rate-medium-low
          </red-bytes-rate-medium-low>
          <red-packets-medium-high>
            red-packets-medium-high
          </red-packets-medium-high>
          <red-bytes-medium-high>
            red-bytes-medium-high
          </red-bytes-medium-high>
          <red-packets-rate-medium-high>
            red-packets-rate-medium-high
          </red-packets-rate-medium-high>
          <red-bytes-rate-medium-high>
            red-bytes-rate-medium-high
          </red-bytes-rate-medium-high>
          <red-packets-medium>
            red-packets-medium
          </red-packets-medium>
          <red-bytes-medium>
            red-bytes-medium
          </red-bytes-medium>
          <red-packets-rate-medium>
            red-packets-rate-medium
          </red-packets-rate-medium>
          <red-bytes-rate-medium>
            red-bytes-rate-medium
          </red-bytes-rate-medium>
          <red-packets-high>
            red-packets-high
          </red-packets-high>
          <red-bytes-high>
            red-bytes-high
          </red-bytes-high>
          <red-packets-rate-high>
            red-packets-rate-high
          </red-packets-rate-high>
          <red-bytes-rate-high>
            red-bytes-rate-high
          </red-bytes-rate-high>
        </pfe-queue>
      </pfe-queue-counters>
    </pfe-cpu-stats>
  </pfe-statistics>
```

Description Counters for a single queue

<pfe-queue>

Usage

```
<pfe-statistics>
  <pfe-tail-drop-statistics>
    <pfe-queue-counters>
      <pfe-queue>
        <number>
          number
```


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```
</number>
<forwarding-class-name>
  forwarding-class-name
</forwarding-class-name>
<queued-packets>
  queued-packets
</queued-packets>
<queued-packets-na>
  queued-packets-na
</queued-packets-na>
<queued-bytes-na>
  queued-bytes-na
</queued-bytes-na>
<queued-bytes>
  queued-bytes
</queued-bytes>
<queued-packets-rate>
  queued-packets-rate
</queued-packets-rate>
<queued-bytes-rate>
  queued-bytes-rate
</queued-bytes-rate>
<trans-packets>
  trans-packets
</trans-packets>
<trans-bytes>
  trans-bytes
</trans-bytes>
<trans-packets-rate>
  trans-packets-rate
</trans-packets-rate>
<trans-bytes-rate>
  trans-bytes-rate
</trans-bytes-rate>
<tail-drop-packets>
  tail-drop-packets
</tail-drop-packets>
<tail-drop-packets-rate>
  tail-drop-packets-rate
</tail-drop-packets-rate>
<tail-drop-packets-na>
  tail-drop-packets-na
</tail-drop-packets-na>
<rate-limit-drop-packets>
  rate-limit-drop-packets
</rate-limit-drop-packets>
<rate-limit-drop-packets-rate>
  rate-limit-drop-packets-rate
</rate-limit-drop-packets-rate>
<rate-limit-drop-packets-na>
  rate-limit-drop-packets-na
</rate-limit-drop-packets-na>
<rate-limit-drop-bytes>
  rate-limit-drop-bytes
</rate-limit-drop-bytes>
<rate-limit-drop-bytes-rate>
```

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```
  rate-limit-drop-bytes-rate
</rate-limit-drop-bytes-rate>
<rate-limit-drop-bytes-na>
  rate-limit-drop-bytes-na
</rate-limit-drop-bytes-na>
<red-packets-na>
  red-packets-na
</red-packets-na>
<red-packets>
  red-packets
</red-packets>
<red-bytes-na>
  red-bytes-na
</red-bytes-na>
<red-bytes>
  red-bytes
</red-bytes>
<red-packets-rate>
  red-packets-rate
</red-packets-rate>
<red-bytes-rate>
  red-bytes-rate
</red-bytes-rate>
<red-packets-ln>
  red-packets-ln
</red-packets-ln>
<red-bytes-ln>
  red-bytes-ln
</red-bytes-ln>
<red-packets-rate-ln>
  red-packets-rate-ln
</red-packets-rate-ln>
<red-bytes-rate-ln>
  red-bytes-rate-ln
</red-bytes-rate-ln>
<red-packets-lt>
  red-packets-lt
</red-packets-lt>
<red-bytes-lt>
  red-bytes-lt
</red-bytes-lt>
<red-packets-rate-lt>
  red-packets-rate-lt
</red-packets-rate-lt>
<red-bytes-rate-lt>
  red-bytes-rate-lt
</red-bytes-rate-lt>
<red-packets-ht>
  red-packets-ht
</red-packets-ht>
<red-bytes-ht>
  red-bytes-ht
</red-bytes-ht>
<red-packets-rate-ht>
  red-packets-rate-ht
</red-packets-rate-ht>
```


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```
<red-bytes-rate-ht>
  red-bytes-rate-ht
</red-bytes-rate-ht>
<red-packets-hn>
  red-packets-hn
</red-packets-hn>
<red-bytes-hn>
  red-bytes-hn
</red-bytes-hn>
<red-packets-rate-hn>
  red-packets-rate-hn
</red-packets-rate-hn>
<red-bytes-rate-hn>
  red-bytes-rate-hn
</red-bytes-rate-hn>
<red-packets-low>
  red-packets-low
</red-packets-low>
<red-bytes-low>
  red-bytes-low
</red-bytes-low>
<red-packets-rate-low>
  red-packets-rate-low
</red-packets-rate-low>
<red-bytes-rate-low>
  red-bytes-rate-low
</red-bytes-rate-low>
<red-packets-medium-low>
  red-packets-medium-low
</red-packets-medium-low>
<red-bytes-medium-low>
  red-bytes-medium-low
</red-bytes-medium-low>
<red-packets-rate-medium-low>
  red-packets-rate-medium-low
</red-packets-rate-medium-low>
<red-bytes-rate-medium-low>
  red-bytes-rate-medium-low
</red-bytes-rate-medium-low>
<red-packets-medium-high>
  red-packets-medium-high
</red-packets-medium-high>
<red-bytes-medium-high>
  red-bytes-medium-high
</red-bytes-medium-high>
<red-packets-rate-medium-high>
  red-packets-rate-medium-high
</red-packets-rate-medium-high>
<red-bytes-rate-medium-high>
  red-bytes-rate-medium-high
</red-bytes-rate-medium-high>
<red-packets-medium>
  red-packets-medium
</red-packets-medium>
<red-bytes-medium>
  red-bytes-medium
```

```
            </red-bytes-medium>
            <red-packets-rate-medium>
              red-packets-rate-medium
            </red-packets-rate-medium>
            <red-bytes-rate-medium>
              red-bytes-rate-medium
            </red-bytes-rate-medium>
            <red-packets-high>
              red-packets-high
            </red-packets-high>
            <red-bytes-high>
              red-bytes-high
            </red-bytes-high>
            <red-packets-rate-high>
              red-packets-rate-high
            </red-packets-rate-high>
            <red-bytes-rate-high>
              red-bytes-rate-high
            </red-bytes-rate-high>
          </pfe-queue>
        </pfe-queue-counters>
      </pfe-tail-drop-statistics>
    </pfe-statistics>
```

Description Counters for a single queue

<pfe-queue>

Usage

```
<pfe-statistics>
  <pfe-total-tail-drop>
    <pfe-queue-counters>
      <pfe-queue>
        <number>
          number
        </number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queued-packets>
          queued-packets
        </queued-packets>
        <queued-packets-na>
          queued-packets-na
        </queued-packets-na>
        <queued-bytes-na>
          queued-bytes-na
        </queued-bytes-na>
        <queued-bytes>
          queued-bytes
        </queued-bytes>
        <queued-packets-rate>
          queued-packets-rate
        </queued-packets-rate>
```


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```
<queued-bytes-rate>
  queued-bytes-rate
</queued-bytes-rate>
<trans-packets>
  trans-packets
</trans-packets>
<trans-bytes>
  trans-bytes
</trans-bytes>
<trans-packets-rate>
  trans-packets-rate
</trans-packets-rate>
<trans-bytes-rate>
  trans-bytes-rate
</trans-bytes-rate>
<tail-drop-packets>
  tail-drop-packets
</tail-drop-packets>
<tail-drop-packets-rate>
  tail-drop-packets-rate
</tail-drop-packets-rate>
<tail-drop-packets-na>
  tail-drop-packets-na
</tail-drop-packets-na>
<rate-limit-drop-packets>
  rate-limit-drop-packets
</rate-limit-drop-packets>
<rate-limit-drop-packets-rate>
  rate-limit-drop-packets-rate
</rate-limit-drop-packets-rate>
<rate-limit-drop-packets-na>
  rate-limit-drop-packets-na
</rate-limit-drop-packets-na>
<rate-limit-drop-bytes>
  rate-limit-drop-bytes
</rate-limit-drop-bytes>
<rate-limit-drop-bytes-rate>
  rate-limit-drop-bytes-rate
</rate-limit-drop-bytes-rate>
<rate-limit-drop-bytes-na>
  rate-limit-drop-bytes-na
</rate-limit-drop-bytes-na>
<red-packets-na>
  red-packets-na
</red-packets-na>
<red-packets>
  red-packets
</red-packets>
<red-bytes-na>
  red-bytes-na
</red-bytes-na>
<red-bytes>
  red-bytes
</red-bytes>
<red-packets-rate>
  red-packets-rate
```

```
</red-packets-rate>
<red-bytes-rate>
  red-bytes-rate
</red-bytes-rate>
<red-packets-ln>
  red-packets-ln
</red-packets-ln>
<red-bytes-ln>
  red-bytes-ln
</red-bytes-ln>
<red-packets-rate-ln>
  red-packets-rate-ln
</red-packets-rate-ln>
<red-bytes-rate-ln>
  red-bytes-rate-ln
</red-bytes-rate-ln>
<red-packets-lt>
  red-packets-lt
</red-packets-lt>
<red-bytes-lt>
  red-bytes-lt
</red-bytes-lt>
<red-packets-rate-lt>
  red-packets-rate-lt
</red-packets-rate-lt>
<red-bytes-rate-lt>
  red-bytes-rate-lt
</red-bytes-rate-lt>
<red-packets-ht>
  red-packets-ht
</red-packets-ht>
<red-bytes-ht>
  red-bytes-ht
</red-bytes-ht>
<red-packets-rate-ht>
  red-packets-rate-ht
</red-packets-rate-ht>
<red-bytes-rate-ht>
  red-bytes-rate-ht
</red-bytes-rate-ht>
<red-packets-hn>
  red-packets-hn
</red-packets-hn>
<red-bytes-hn>
  red-bytes-hn
</red-bytes-hn>
<red-packets-rate-hn>
  red-packets-rate-hn
</red-packets-rate-hn>
<red-bytes-rate-hn>
  red-bytes-rate-hn
</red-bytes-rate-hn>
<red-packets-low>
  red-packets-low
</red-packets-low>
<red-bytes-low>
```


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```
  red-bytes-low
</red-bytes-low>
<red-packets-rate-low>
  red-packets-rate-low
</red-packets-rate-low>
<red-bytes-rate-low>
  red-bytes-rate-low
</red-bytes-rate-low>
<red-packets-medium-low>
  red-packets-medium-low
</red-packets-medium-low>
<red-bytes-medium-low>
  red-bytes-medium-low
</red-bytes-medium-low>
<red-packets-rate-medium-low>
  red-packets-rate-medium-low
</red-packets-rate-medium-low>
<red-bytes-rate-medium-low>
  red-bytes-rate-medium-low
</red-bytes-rate-medium-low>
<red-packets-medium-high>
  red-packets-medium-high
</red-packets-medium-high>
<red-bytes-medium-high>
  red-bytes-medium-high
</red-bytes-medium-high>
<red-packets-rate-medium-high>
  red-packets-rate-medium-high
</red-packets-rate-medium-high>
<red-bytes-rate-medium-high>
  red-bytes-rate-medium-high
</red-bytes-rate-medium-high>
<red-packets-medium>
  red-packets-medium
</red-packets-medium>
<red-bytes-medium>
  red-bytes-medium
</red-bytes-medium>
<red-packets-rate-medium>
  red-packets-rate-medium
</red-packets-rate-medium>
<red-bytes-rate-medium>
  red-bytes-rate-medium
</red-bytes-rate-medium>
<red-packets-high>
  red-packets-high
</red-packets-high>
<red-bytes-high>
  red-bytes-high
</red-bytes-high>
<red-packets-rate-high>
  red-packets-rate-high
</red-packets-rate-high>
<red-bytes-rate-high>
  red-bytes-rate-high
</red-bytes-rate-high>
```

```
      </pfe-queue>
    </pfe-queue-counters>
  </pfe-total-tail-drop>
</pfe-statistics>
```

Description Counters for a single queue

<pfe-queue-counters>

Usage

```
<pfe-queue-counters>
  <pfe-queue>....</pfe-queue>
</pfe-queue-counters>
```

Description Queue counter statistics

<pfe-queue-counters>

Usage

```
<pfe-statistics>
  <pfe-multicast-stats>
    <pfe-queue-counters>
      <pfe-queue>....</pfe-queue>
    </pfe-queue-counters>
  </pfe-multicast-stats>
</pfe-statistics>
```

Description Queue counter statistics

<pfe-queue-counters>

Usage

```
<pfe-statistics>
  <pfe-cpu-stats>
    <pfe-queue-counters>
      <pfe-queue>....</pfe-queue>
    </pfe-queue-counters>
  </pfe-cpu-stats>
</pfe-statistics>
```

Description Queue counter statistics

<pfe-queue-counters>

Usage

```
<pfe-statistics>
  <pfe-tail-drop-statistics>
    <pfe-queue-counters>
      <pfe-queue>....</pfe-queue>
```


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```
    </pfe-queue-counters>
  </pfe-tail-drop-statistics>
</pfe-statistics>
```

Description Queue counter statistics

<pfe-queue-counters>

Usage

```
<pfe-statistics>
  <pfe-total-tail-drop>
    <pfe-queue-counters>
      <pfe-queue>....</pfe-queue>
    </pfe-queue-counters>
  </pfe-total-tail-drop>
</pfe-statistics>
```

Description Queue counter statistics

<pfe-resource>

Usage

```
<pfe-resource>
  <pfe-resource-usage>....</pfe-resource-usage>
</pfe-resource>
```

Description

<pfe-resource-general-information>

Usage

```
<pfe-resource>
  <pfe-resource-usage>
    <pfe-resource-general-information>
      <pfe-description>
        pfe-description
      </pfe-description>
      <pfe-instance>
        pfe-instance
      </pfe-instance>
      <pfe-forwarding-module-name>
        pfe-forwarding-module-name
      </pfe-forwarding-module-name>
      <pfe-forwarding-module-instance>
        pfe-forwarding-module-instance
      </pfe-forwarding-module-instance>
      <pfe-resource-usage-details>....</pfe-resource-usage-details>
    </pfe-resource-general-information>
  </pfe-resource-usage>
</pfe-resource>
```

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Description

<pfe-resource-usage>

Usage

```
<pfe-resource>
 <pfe-resource-usage>
  <pfe-fpc-instance>
   pfe-fpc-instance
  </pfe-fpc-instance>
  <pfe-resource-usage-legend>
   pfe-resource-usage-legend
  </pfe-resource-usage-legend>
  <pfe-resource-general-information>....</pfe-resource-general-information>
 </pfe-resource-usage>
</pfe-resource>
```

Description

<pfe-resource-usage-details>

Usage

```
<pfe-resource>
 <pfe-resource-usage>
  <pfe-resource-general-information>
   <pfe-resource-usage-details>
    <pfe-resource-total>
     pfe-resource-total
    </pfe-resource-total>
    <pfe-resource-units>
     pfe-resource-units
    </pfe-resource-units>
    <pfe-resource-free>
     pfe-resource-free
    </pfe-resource-free>
    <pfe-resource-inuse>
     pfe-resource-inuse
    </pfe-resource-inuse>
    <pfe-resource-name>
     pfe-resource-name
    </pfe-resource-name>
    <pfe-resource-inuse-percent>
     pfe-resource-inuse-percent
    </pfe-resource-inuse-percent>
    <pfe-resource-highlight>
     pfe-resource-highlight
    </pfe-resource-highlight>
   </pfe-resource-usage-details>
  </pfe-resource-general-information>
 </pfe-resource-usage>
</pfe-resource>
```

Description

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<pfe-statistics>

Usage

```
<pfe-statistics>
  <pfe-multicast-stats>....</pfe-multicast-stats>
  <pfe-cpu-stats>....</pfe-cpu-stats>
  <pfe-tail-drop-statistics>....</pfe-tail-drop-statistics>
  <pfe-total-tail-drop>....</pfe-total-tail-drop>
  <pfe-traffic-statistics>....</pfe-traffic-statistics>
  <pfe-fabric-statistics>....</pfe-fabric-statistics>
  <pfe-local-traffic-statistics>....</pfe-local-traffic-statistics>
  <pfe-local-protocol-statistics>....</pfe-local-protocol-statistics>
  <pfe-bfd-statistics-detail>....</pfe-bfd-statistics-detail>
  <pfe-cfm-statistics-detail>....</pfe-cfm-statistics-detail>
  <pfe-lfm-statistics-detail>....</pfe-lfm-statistics-detail>
  <pfe-vrrp-statistics-detail>....</pfe-vrrp-statistics-detail>
  <pfe-hardware-discard-statistics>....</pfe-hardware-discard-statistics>
  <pfe-chip-statistics>....</pfe-chip-statistics>
</pfe-statistics>
```

Description

<pfe-tail-drop-statistics>

Usage

```
<pfe-statistics>
  <pfe-tail-drop-statistics>
    <pfe-queue-counters>....</pfe-queue-counters>
  </pfe-tail-drop-statistics>
</pfe-statistics>
```

Description

<pfe-total-tail-drop>

Usage

```
<pfe-statistics>
  <pfe-total-tail-drop>
    <pfe-queue-counters>....</pfe-queue-counters>
  </pfe-total-tail-drop>
</pfe-statistics>
```

Description

<pfe-traffic-statistics>

Usage

```
<pfe-statistics>
  <pfe-traffic-statistics>
    <pfe-input-packets>
      pfe-input-packets
    </pfe-input-packets>
```

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```
    <pfe-output-packets>
      pfe-output-packets
    </pfe-output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
  </pfe-traffic-statistics>
</pfe-statistics>
```

Description

<pfe-vrrp-statistics-detail>

Usage

```
<pfe-statistics>
  <pfe-vrrp-statistics-detail>
    <vrrp-packets-received>
      vrrp-packets-received
    </vrrp-packets-received>
    <vrrp-packets-sent-to-re>
      vrrp-packets-sent-to-re
    </vrrp-packets-sent-to-re>
    <vrrp-packets-absorbed>
      vrrp-packets-absorbed
    </vrrp-packets-absorbed>
    <vrrp-packets-transmitted>
      vrrp-packets-transmitted
    </vrrp-packets-transmitted>
    <vrrp-packets-transmit-error>
      vrrp-packets-transmit-error
    </vrrp-packets-transmit-error>
    <vrrp-packets-dropped>
      vrrp-packets-dropped
    </vrrp-packets-dropped>
  </pfe-vrrp-statistics-detail>
</pfe-statistics>
```

Description

<routing-engine-accounting-record>

Usage

```
<accounting-record-information>
  <routing-engine-accounting-statistics>
    <routing-engine-accounting-record>
      <profile-layout>
        profile-layout
      </profile-layout>
      <epoch-timestamp>
        epoch-timestamp
      </epoch-timestamp>
```


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```
<utc-timestamp>
  utc-timestamp
</utc-timestamp>
<hostname>
  hostname
</hostname>
<date-yyyymmdd>
  date-yyyymmdd
</date-yyyymmdd>
<timeofday-hhmmss>
  timeofday-hhmmss
</timeofday-hhmmss>
<uptime>
  uptime
</uptime>
<cpu1min>
  cpu1min
</cpu1min>
<cpu5min>
  cpu5min
</cpu5min>
<cpu15min>
  cpu15min
</cpu15min>
<memory-usage>
  memory-usage
</memory-usage>
<total-cpu-usage>
  total-cpu-usage
</total-cpu-usage>
</routing-engine-accounting-record>
</routing-engine-accounting-statistics>
</accounting-record-information>
```

Description Information in a record that was generated based on a Routing Engine profile

<routing-engine-accounting-statistics>

Usage

```
<accounting-record-information>
  <routing-engine-accounting-statistics>
    <routing-engine-accounting-record>....</routing-engine-accounting-record>
  </routing-engine-accounting-statistics>
</accounting-record-information>
```

Description Information from one or more records that were generated based on a Routing Engine profile

<snmp-object>

Usage

```
<snmp-object-information>
```

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```
<snmp-object>
  <name>
    name
  </name>
  <index>....</index>
  <oid>
    oid
  </oid>
  <object-value>
    object-value
  </object-value>
  <object-value-type>
    object-value-type
  </object-value-type>
  <error>
    error
  </error>
</snmp-object>
</snmp-object-information>
```

Description

<snmp-object-information>

Usage

```
<snmp-object-information>
  <snmp-object>....</snmp-object>
  <snmp-request-error>....</snmp-request-error>
</snmp-object-information>
```

Description

<snmp-request-error>

Usage

```
<snmp-object-information>
  <snmp-request-error>
    <snmp-req-error-value>
      snmp-req-error-value
    </snmp-req-error-value>
  </snmp-request-error>
</snmp-object-information>
```

Description

<statistics_connection_header>

Usage

```
<accounting-server-statistics>
  <statistics_connection_header>
    <conn-name>
      conn-name
    </conn-name>
```


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```
  </statistics_connection_header>
</accounting-server-statistics>
```

Description

<statistics_libstat_header>

Usage

```
<accounting-server-statistics>
  <statistics_libstat_header>
    <libstat-counter-names>
      libstat-counter-names
    </libstat-counter-names>
    <to-libstat>
      to-libstat
    </to-libstat>
    <from-libstat>
      from-libstat
    </from-libstat>
  </statistics_libstat_header>
</accounting-server-statistics>
```

Description

<statistics_pfe_header>

Usage

```
<accounting-server-statistics>
  <statistics_pfe_header>
    <pfe-counter-names>
      pfe-counter-names
    </pfe-counter-names>
    <stats-to-pfe>
      stats-to-pfe
    </stats-to-pfe>
    <stats-from-pfe>
      stats-from-pfe
    </stats-from-pfe>
    <timeout-count>
      timeout-count
    </timeout-count>
  </statistics_pfe_header>
</accounting-server-statistics>
```

Description

<statistics_pfed_header>

Usage

```
<accounting-server-statistics>
  <statistics_pfed_header>
    <pfed-counter-names>
      pfed-counter-names
```

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```
    </pfed-counter-names>
    <stats-to-pfed>
      stats-to-pfed
    </stats-to-pfed>
  </statistics_pfed_header>
</accounting-server-statistics>
```

Description

Summary of Adaptive Services Response Tags

<address-mappingv2>

Usage

```
<address-mappingv2>
  <internal-ip>
    internal-ip
  </internal-ip>
  <external-ip>
    external-ip
  </external-ip>
  <b4-ip>
    b4-ip
  </b4-ip>
  <session-count>
    session-count
  </session-count>
  <ports-used>
    ports-used
  </ports-used>
  <internal-port>
    internal-port
  </internal-port>
  <external-port>
    external-port
  </external-port>
  <state>
    state
  </state>
</address-mappingv2>
```

Description NAT mapping

<address-mappingv2>

Usage

```
<service-nat-mapping-information>
  <address-mappingv2>
    <internal-ip>
      internal-ip
    </internal-ip>
    <external-ip>
      external-ip
```


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```
    </external-ip>
    <b4-ip>
      b4-ip
    </b4-ip>
    <session-count>
      session-count
    </session-count>
    <ports-used>
      ports-used
    </ports-used>
    <internal-port>
      internal-port
    </internal-port>
    <external-port>
      external-port
    </external-port>
    <state>
      state
    </state>
  </address-mappingv2>
</service-nat-mapping-information>
```

Description NAT mapping

<address-mappingv2>

Usage

```
<service-nat-mapping-information>
  <sfw-per-service-set-nat-mapping>
    <service-nat-pool-map>
      <address-mappingv2>
        <internal-ip>
          internal-ip
        </internal-ip>
        <external-ip>
          external-ip
        </external-ip>
        <b4-ip>
          b4-ip
        </b4-ip>
        <session-count>
          session-count
        </session-count>
        <ports-used>
          ports-used
        </ports-used>
        <internal-port>
          internal-port
        </internal-port>
        <external-port>
          external-port
        </external-port>
        <state>
          state
```

```
        </state>
       </address-mappingv2>
      </service-nat-pool-map>
     </sfw-per-service-set-nat-mapping>
    </service-nat-mapping-information>
```

Description NAT mapping

<alg-error-counters>

Usage

```
<sfw-stats-service-set-entry>
 <alg-error-counters>
  <alg-bootp-errors>
   alg-bootp-errors
  </alg-bootp-errors>
  <alg-dce-rpc-errors>
   alg-dce-rpc-errors
  </alg-dce-rpc-errors>
  <alg-dce-rpc-portmap-errors>
   alg-dce-rpc-portmap-errors
  </alg-dce-rpc-portmap-errors>
  <alg-dns-errors>
   alg-dns-errors
  </alg-dns-errors>
  <alg-exec-errors>
   alg-exec-errors
  </alg-exec-errors>
  <alg-ftp-errors>
   alg-ftp-errors
  </alg-ftp-errors>
  <alg-h323-errors>
   alg-h323-errors
  </alg-h323-errors>
  <alg-icmp-errors>
   alg-icmp-errors
  </alg-icmp-errors>
  <alg-iiop-errors>
   alg-iiop-errors
  </alg-iiop-errors>
  <alg-login-errors>
   alg-login-errors
  </alg-login-errors>
  <alg-netbios-errors>
   alg-netbios-errors
  </alg-netbios-errors>
  <alg-netshow-errors>
   alg-netshow-errors
  </alg-netshow-errors>
  <alg-realaudio-errors>
   alg-realaudio-errors
  </alg-realaudio-errors>
  <alg-rpc-errors>
   alg-rpc-errors
```


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```
    </alg-rpc-errors>
    <alg-rpc-portmap-errors>
      alg-rpc-portmap-errors
    </alg-rpc-portmap-errors>
    <alg-rtsp-errors>
      alg-rtsp-errors
    </alg-rtsp-errors>
    <alg-shell-errors>
      alg-shell-errors
    </alg-shell-errors>
    <alg-sip-errors>
      alg-sip-errors
    </alg-sip-errors>
    <alg-snmp-errors>
      alg-snmp-errors
    </alg-snmp-errors>
    <alg-sqlnet-errors>
      alg-sqlnet-errors
    </alg-sqlnet-errors>
    <alg-tftp-errors>
      alg-tftp-errors
    </alg-tftp-errors>
    <alg-traceroute-errors>
      alg-traceroute-errors
    </alg-traceroute-errors>
  </alg-error-counters>
</sfw-stats-service-set-entry>
```

Description Extensive output of ALG processing errors

<alg-error-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <alg-error-counters>
        <alg-bootp-errors>
          alg-bootp-errors
        </alg-bootp-errors>
        <alg-dce-rpc-errors>
          alg-dce-rpc-errors
        </alg-dce-rpc-errors>
        <alg-dce-rpc-portmap-errors>
          alg-dce-rpc-portmap-errors
        </alg-dce-rpc-portmap-errors>
        <alg-dns-errors>
          alg-dns-errors
        </alg-dns-errors>
        <alg-exec-errors>
          alg-exec-errors
        </alg-exec-errors>
        <alg-ftp-errors>
          alg-ftp-errors
```

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```
        </alg-ftp-errors>
        <alg-h323-errors>
          alg-h323-errors
        </alg-h323-errors>
        <alg-icmp-errors>
          alg-icmp-errors
        </alg-icmp-errors>
        <alg-iiop-errors>
          alg-iiop-errors
        </alg-iiop-errors>
        <alg-login-errors>
          alg-login-errors
        </alg-login-errors>
        <alg-netbios-errors>
          alg-netbios-errors
        </alg-netbios-errors>
        <alg-netshow-errors>
          alg-netshow-errors
        </alg-netshow-errors>
        <alg-realaudio-errors>
          alg-realaudio-errors
        </alg-realaudio-errors>
        <alg-rpc-errors>
          alg-rpc-errors
        </alg-rpc-errors>
        <alg-rpc-portmap-errors>
          alg-rpc-portmap-errors
        </alg-rpc-portmap-errors>
        <alg-rtsp-errors>
          alg-rtsp-errors
        </alg-rtsp-errors>
        <alg-shell-errors>
          alg-shell-errors
        </alg-shell-errors>
        <alg-sip-errors>
          alg-sip-errors
        </alg-sip-errors>
        <alg-snmp-errors>
          alg-snmp-errors
        </alg-snmp-errors>
        <alg-sqlnet-errors>
          alg-sqlnet-errors
        </alg-sqlnet-errors>
        <alg-tftp-errors>
          alg-tftp-errors
        </alg-tftp-errors>
        <alg-traceroute-errors>
          alg-traceroute-errors
        </alg-traceroute-errors>
      </alg-error-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```


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Description Extensive output of ALG processing errors

<base-root-entry>

Usage

```
<pgcpd-active-configuration>
  <base-root-entry>
    <brp_name>
      brp_name
    </brp_name>
    <brp_minimum>
      brp_minimum
    </brp_minimum>
    <brp_maximum>
      brp_maximum
    </brp_maximum>
    <brp_default>
      brp_default
    </brp_default>
  </base-root-entry>
</pgcpd-active-configuration>
```

Description Array of h248 base root properties

<base-root-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <base-root-entry>
      <brp_name>
        brp_name
      </brp_name>
      <brp_minimum>
        brp_minimum
      </brp_minimum>
      <brp_maximum>
        brp_maximum
      </brp_maximum>
      <brp_default>
        brp_default
      </brp_default>
    </base-root-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description Array of h248 base root properties

<base-root-entry>

Usage

```
<pgcpd-active-configuration>
```

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```
<pgcpd-config>
 <gateway-entry>
  <base-root-entry>
   <brp_name>
    brp_name
   </brp_name>
   <brp_minimum>
    brp_minimum
   </brp_minimum>
   <brp_maximum>
    brp_maximum
   </brp_maximum>
   <brp_default>
    brp_default
   </brp_default>
  </base-root-entry>
 </gateway-entry>
</pgcpd-config>
</pgcpd-active-configuration>
```

Description Array of h248 base root properties

<base-root-entry>

Usage

```
<service-pgcp-statistics-gateway>
 <gateway-entry>
  <base-root-entry>
   <brp_name>
    brp_name
   </brp_name>
   <brp_minimum>
    brp_minimum
   </brp_minimum>
   <brp_maximum>
    brp_maximum
   </brp_maximum>
   <brp_default>
    brp_default
   </brp_default>
  </base-root-entry>
 </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description Array of h248 base root properties

<base-root-entry>

Usage

```
<service-pgcp-terminations>
 <gateway-entry>
  <base-root-entry>
```


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```
        <brp_name>
          brp_name
        </brp_name>
        <brp_minimum>
          brp_minimum
        </brp_minimum>
        <brp_maximum>
          brp_maximum
        </brp_maximum>
        <brp_default>
          brp_default
        </brp_default>
      </base-root-entry>
    </gateway-entry>
  </service-pgcp-terminations>
```

Description Array of h248 base root properties

<base-root-entry>

Usage

```
  <service-pgcp-gates>
    <gateway-entry>
      <base-root-entry>
        <brp_name>
          brp_name
        </brp_name>
        <brp_minimum>
          brp_minimum
        </brp_minimum>
        <brp_maximum>
          brp_maximum
        </brp_maximum>
        <brp_default>
          brp_default
        </brp_default>
      </base-root-entry>
    </gateway-entry>
  </service-pgcp-gates>
```

Description Array of h248 base root properties

<bsg-address-of-record>

Usage

```
  <bsg-address-of-record>
    <bsg-aor-name>
      bsg-aor-name
    </bsg-aor-name>
    <bsg-aor-bindings-num-of-lu>
      bsg-aor-bindings-num-of-lu
    </bsg-aor-bindings-num-of-lu>
```

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```
  <bsg-address-of-record-bindings>....</bsg-address-of-record-bindings>
</bsg-address-of-record>
```

Description Address of record

<bsg-address-of-record>

Usage

```
<bsg-address-of-records>
  <bsg-address-of-record>
    <bsg-aor-name>
      bsg-aor-name
    </bsg-aor-name>
    <bsg-aor-bindings-num-of-lu>
      bsg-aor-bindings-num-of-lu
    </bsg-aor-bindings-num-of-lu>
    <bsg-address-of-record-bindings>....</bsg-address-of-record-bindings>
  </bsg-address-of-record>
</bsg-address-of-records>
```

Description Address of record

<bsg-address-of-record-binding>

Usage

```
<bsg-address-of-record-binding>
  <bsg-aor-bindings-uri>
    bsg-aor-bindings-uri
  </bsg-aor-bindings-uri>
  <bsg-aor-bindings-reg-realm>
    bsg-aor-bindings-reg-realm
  </bsg-aor-bindings-reg-realm>
  <bsg-aor-bindings-service-point>
    bsg-aor-bindings-service-point
  </bsg-aor-bindings-service-point>
  <bsg-aor-bindings-last-reg-time>
    bsg-aor-bindings-last-reg-time
  </bsg-aor-bindings-last-reg-time>
  <bsg-aor-bindings-first-reg-time>
    bsg-aor-bindings-first-reg-time
  </bsg-aor-bindings-first-reg-time>
  <bsg-aor-bindings-expiration-time>
    bsg-aor-bindings-expiration-time
  </bsg-aor-bindings-expiration-time>
  <bsg-aor-bindings-lu>
    bsg-aor-bindings-lu
  </bsg-aor-bindings-lu>
  <bsg-aor-bindings-fe-nat-used>
    bsg-aor-bindings-fe-nat-used
  </bsg-aor-bindings-fe-nat-used>
  <bsg-aor-bindings-fe-nat-method>
    bsg-aor-bindings-fe-nat-method
```


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```
  </bsg-aor-bindings-fe-nat-method>
  <bsg-aor-bindings-fe-nat-ka-interval>
   bsg-aor-bindings-fe-nat-ka-interval
  </bsg-aor-bindings-fe-nat-ka-interval>
</bsg-address-of-record-binding>
```

Description Binding URI's

<bsg-address-of-record-binding>

Usage

```
<bsg-address-of-record-bindings>
  <bsg-address-of-record-binding>
    <bsg-aor-bindings-uri>
      bsg-aor-bindings-uri
    </bsg-aor-bindings-uri>
    <bsg-aor-bindings-reg-realm>
      bsg-aor-bindings-reg-realm
    </bsg-aor-bindings-reg-realm>
    <bsg-aor-bindings-service-point>
      bsg-aor-bindings-service-point
    </bsg-aor-bindings-service-point>
    <bsg-aor-bindings-last-reg-time>
      bsg-aor-bindings-last-reg-time
    </bsg-aor-bindings-last-reg-time>
    <bsg-aor-bindings-first-reg-time>
      bsg-aor-bindings-first-reg-time
    </bsg-aor-bindings-first-reg-time>
    <bsg-aor-bindings-expiration-time>
      bsg-aor-bindings-expiration-time
    </bsg-aor-bindings-expiration-time>
    <bsg-aor-bindings-lu>
      bsg-aor-bindings-lu
    </bsg-aor-bindings-lu>
    <bsg-aor-bindings-fe-nat-used>
      bsg-aor-bindings-fe-nat-used
    </bsg-aor-bindings-fe-nat-used>
    <bsg-aor-bindings-fe-nat-method>
      bsg-aor-bindings-fe-nat-method
    </bsg-aor-bindings-fe-nat-method>
    <bsg-aor-bindings-fe-nat-ka-interval>
      bsg-aor-bindings-fe-nat-ka-interval
    </bsg-aor-bindings-fe-nat-ka-interval>
  </bsg-address-of-record-binding>
</bsg-address-of-record-bindings>
```

Description Binding URI's

<bsg-address-of-record-binding>

Usage

```
<bsg-address-of-record>
```

```
<bsg-address-of-record-bindings>
 <bsg-address-of-record-binding>
  <bsg-aor-bindings-uri>
   bsg-aor-bindings-uri
  </bsg-aor-bindings-uri>
  <bsg-aor-bindings-reg-realm>
   bsg-aor-bindings-reg-realm
  </bsg-aor-bindings-reg-realm>
  <bsg-aor-bindings-service-point>
   bsg-aor-bindings-service-point
  </bsg-aor-bindings-service-point>
  <bsg-aor-bindings-last-reg-time>
   bsg-aor-bindings-last-reg-time
  </bsg-aor-bindings-last-reg-time>
  <bsg-aor-bindings-first-reg-time>
   bsg-aor-bindings-first-reg-time
  </bsg-aor-bindings-first-reg-time>
  <bsg-aor-bindings-expiration-time>
   bsg-aor-bindings-expiration-time
  </bsg-aor-bindings-expiration-time>
  <bsg-aor-bindings-lu>
   bsg-aor-bindings-lu
  </bsg-aor-bindings-lu>
  <bsg-aor-bindings-fe-nat-used>
   bsg-aor-bindings-fe-nat-used
  </bsg-aor-bindings-fe-nat-used>
  <bsg-aor-bindings-fe-nat-method>
   bsg-aor-bindings-fe-nat-method
  </bsg-aor-bindings-fe-nat-method>
  <bsg-aor-bindings-fe-nat-ka-interval>
   bsg-aor-bindings-fe-nat-ka-interval
  </bsg-aor-bindings-fe-nat-ka-interval>
 </bsg-address-of-record-binding>
</bsg-address-of-record-bindings>
</bsg-address-of-record>
```

Description Binding URI's

<bsg-address-of-record-binding>

Usage

```
<bsg-address-of-records>
 <bsg-address-of-record>
  <bsg-address-of-record-bindings>
   <bsg-address-of-record-binding>
    <bsg-aor-bindings-uri>
     bsg-aor-bindings-uri
    </bsg-aor-bindings-uri>
    <bsg-aor-bindings-reg-realm>
     bsg-aor-bindings-reg-realm
    </bsg-aor-bindings-reg-realm>
    <bsg-aor-bindings-service-point>
     bsg-aor-bindings-service-point
    </bsg-aor-bindings-service-point>
```


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```
<bsg-aor-bindings-last-reg-time>
  bsg-aor-bindings-last-reg-time
</bsg-aor-bindings-last-reg-time>
<bsg-aor-bindings-first-reg-time>
  bsg-aor-bindings-first-reg-time
</bsg-aor-bindings-first-reg-time>
<bsg-aor-bindings-expiration-time>
  bsg-aor-bindings-expiration-time
</bsg-aor-bindings-expiration-time>
<bsg-aor-bindings-lu>
  bsg-aor-bindings-lu
</bsg-aor-bindings-lu>
<bsg-aor-bindings-fe-nat-used>
  bsg-aor-bindings-fe-nat-used
</bsg-aor-bindings-fe-nat-used>
<bsg-aor-bindings-fe-nat-method>
  bsg-aor-bindings-fe-nat-method
</bsg-aor-bindings-fe-nat-method>
<bsg-aor-bindings-fe-nat-ka-interval>
  bsg-aor-bindings-fe-nat-ka-interval
</bsg-aor-bindings-fe-nat-ka-interval>
</bsg-address-of-record-binding>
</bsg-address-of-record-bindings>
</bsg-address-of-record>
</bsg-address-of-records>
```

Description Binding URI's

<bsg-address-of-record-bindings>

Usage

```
<bsg-address-of-record-bindings>
  <bsg-address-of-record-binding>....</bsg-address-of-record-binding>
</bsg-address-of-record-bindings>
```

Description Binding URI's

<bsg-address-of-record-bindings>

Usage

```
<bsg-address-of-record>
  <bsg-address-of-record-bindings>
    <bsg-address-of-record-binding>....</bsg-address-of-record-binding>
  </bsg-address-of-record-bindings>
</bsg-address-of-record>
```

Description Binding URI's

<bsg-address-of-record-bindings>

Usage

```
<bsg-address-of-records>
  <bsg-address-of-record>
    <bsg-address-of-record-bindings>
      <bsg-address-of-record-binding>....</bsg-address-of-record-binding>
    </bsg-address-of-record-bindings>
  </bsg-address-of-record>
</bsg-address-of-records>
```

Description Binding URI's

<bsg-address-of-records>

Usage

```
<bsg-address-of-records>
  <bsg-address-of-record>....</bsg-address-of-record>
</bsg-address-of-records>
```

Description

<bsg-admission-control-details>

Usage

```
<bsg-admission-control-details>
  <bsg-cac-name>
    bsg-cac-name
  </bsg-cac-name>
  <bsg-admission-control-dialogs>....</bsg-admission-control-dialogs>
  <bsg-admission-control-transactions>....</bsg-admission-control-transactions>

</bsg-admission-control-details>
```

Description

<bsg-admission-control-details>

Usage

```
<bsg-statistics-admission-control-information>
  <bsg-statistics-admission-control>
    <bsg-admission-control-details>
      <bsg-cac-name>
        bsg-cac-name
      </bsg-cac-name>
      <bsg-admission-control-dialogs>....</bsg-admission-control-dialogs>
  <bsg-admission-control-transactions>....</bsg-admission-control-transactions>

    </bsg-admission-control-details>
  </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```


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Description

<bsg-admission-control-dialogs>

Usage

```
<bsg-admission-control-dialogs>
  <bsg-admission-control-dialog-title>
    bsg-admission-control-dialog-title
  </bsg-admission-control-dialog-title>
  <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
</bsg-admission-control-dialogs>
```

Description

<bsg-admission-control-dialogs>

Usage

```
<bsg-admission-control-details>
  <bsg-admission-control-dialogs>
    <bsg-admission-control-dialog-title>
      bsg-admission-control-dialog-title
    </bsg-admission-control-dialog-title>
    <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
  </bsg-admission-control-dialogs>
</bsg-admission-control-details>
```

Description

<bsg-admission-control-dialogs>

Usage

```
<bsg-statistics-admission-control-information>
  <bsg-statistics-admission-control>
    <bsg-admission-control-details>
      <bsg-admission-control-dialogs>
        <bsg-admission-control-dialog-title>
          bsg-admission-control-dialog-title
        </bsg-admission-control-dialog-title>
        <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
      </bsg-admission-control-dialogs>
    </bsg-admission-control-details>
  </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description

<bsg-admission-control-transactions>

Usage

```
<bsg-admission-control-transactions>
  <bsg-admission-control-transaction-title>
    bsg-admission-control-transaction-title
  </bsg-admission-control-transaction-title>
```

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```
  <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
</bsg-admission-control-transactions>
```

Description

<bsg-admission-control-transactions>

Usage

```
<bsg-admission-control-details>
  <bsg-admission-control-transactions>
    <bsg-admission-control-transaction-title>
      bsg-admission-control-transaction-title
    </bsg-admission-control-transaction-title>
    <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
  </bsg-admission-control-transactions>
</bsg-admission-control-details>
```

Description

<bsg-admission-control-transactions>

Usage

```
<bsg-statistics-admission-control-information>
  <bsg-statistics-admission-control>
    <bsg-admission-control-details>
      <bsg-admission-control-transactions>
        <bsg-admission-control-transaction-title>
          bsg-admission-control-transaction-title
        </bsg-admission-control-transaction-title>
        <bsg-admission-controlled-object>....</bsg-admission-controlled-object>
      </bsg-admission-control-transactions>
    </bsg-admission-control-details>
  </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-admission-controlled-object>
  <bsg-cac-active>
    bsg-cac-active
  </bsg-cac-active>
  <bsg-cac-attempts-handled>
    bsg-cac-attempts-handled
  </bsg-cac-attempts-handled>
  <bsg-cac-attempts-rejected-concurrent>
    bsg-cac-attempts-rejected-concurrent
  </bsg-cac-attempts-rejected-concurrent>
  <bsg-cac-attempts-rejected-rate>
    bsg-cac-attempts-rejected-rate
  </bsg-cac-attempts-rejected-rate>
```


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```
</bsg-admission-controlled-object>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-admission-control-dialogs>
  <bsg-admission-controlled-object>
    <bsg-cac-active>
      bsg-cac-active
    </bsg-cac-active>
    <bsg-cac-attempts-handled>
      bsg-cac-attempts-handled
    </bsg-cac-attempts-handled>
    <bsg-cac-attempts-rejected-concurrent>
      bsg-cac-attempts-rejected-concurrent
    </bsg-cac-attempts-rejected-concurrent>
    <bsg-cac-attempts-rejected-rate>
      bsg-cac-attempts-rejected-rate
    </bsg-cac-attempts-rejected-rate>
  </bsg-admission-controlled-object>
</bsg-admission-control-dialogs>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-admission-control-transactions>
  <bsg-admission-controlled-object>
    <bsg-cac-active>
      bsg-cac-active
    </bsg-cac-active>
    <bsg-cac-attempts-handled>
      bsg-cac-attempts-handled
    </bsg-cac-attempts-handled>
    <bsg-cac-attempts-rejected-concurrent>
      bsg-cac-attempts-rejected-concurrent
    </bsg-cac-attempts-rejected-concurrent>
    <bsg-cac-attempts-rejected-rate>
      bsg-cac-attempts-rejected-rate
    </bsg-cac-attempts-rejected-rate>
  </bsg-admission-controlled-object>
</bsg-admission-control-transactions>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-admission-control-details>
  <bsg-admission-control-dialogs>
```

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```
      <bsg-admission-controlled-object>
       <bsg-cac-active>
        bsg-cac-active
       </bsg-cac-active>
       <bsg-cac-attempts-handled>
        bsg-cac-attempts-handled
       </bsg-cac-attempts-handled>
       <bsg-cac-attempts-rejected-concurrent>
        bsg-cac-attempts-rejected-concurrent
       </bsg-cac-attempts-rejected-concurrent>
       <bsg-cac-attempts-rejected-rate>
        bsg-cac-attempts-rejected-rate
       </bsg-cac-attempts-rejected-rate>
      </bsg-admission-controlled-object>
     </bsg-admission-control-dialogs>
    </bsg-admission-control-details>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-admission-control-details>
 <bsg-admission-control-transactions>
  <bsg-admission-controlled-object>
   <bsg-cac-active>
    bsg-cac-active
   </bsg-cac-active>
   <bsg-cac-attempts-handled>
    bsg-cac-attempts-handled
   </bsg-cac-attempts-handled>
   <bsg-cac-attempts-rejected-concurrent>
    bsg-cac-attempts-rejected-concurrent
   </bsg-cac-attempts-rejected-concurrent>
   <bsg-cac-attempts-rejected-rate>
    bsg-cac-attempts-rejected-rate
   </bsg-cac-attempts-rejected-rate>
  </bsg-admission-controlled-object>
 </bsg-admission-control-transactions>
</bsg-admission-control-details>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-statistics-admission-control-information>
 <bsg-statistics-admission-control>
  <bsg-admission-control-details>
   <bsg-admission-control-dialogs>
    <bsg-admission-controlled-object>
     <bsg-cac-active>
      bsg-cac-active
     </bsg-cac-active>
```


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```
        <bsg-cac-attempts-handled>
          bsg-cac-attempts-handled
        </bsg-cac-attempts-handled>
        <bsg-cac-attempts-rejected-concurrent>
          bsg-cac-attempts-rejected-concurrent
        </bsg-cac-attempts-rejected-concurrent>
        <bsg-cac-attempts-rejected-rate>
          bsg-cac-attempts-rejected-rate
        </bsg-cac-attempts-rejected-rate>
      </bsg-admission-controlled-object>
    </bsg-admission-control-dialogs>
  </bsg-admission-control-details>
 </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description

<bsg-admission-controlled-object>

Usage

```
<bsg-statistics-admission-control-information>
 <bsg-statistics-admission-control>
  <bsg-admission-control-details>
   <bsg-admission-control-transactions>
    <bsg-admission-controlled-object>
     <bsg-cac-active>
      bsg-cac-active
     </bsg-cac-active>
     <bsg-cac-attempts-handled>
      bsg-cac-attempts-handled
     </bsg-cac-attempts-handled>
     <bsg-cac-attempts-rejected-concurrent>
      bsg-cac-attempts-rejected-concurrent
     </bsg-cac-attempts-rejected-concurrent>
     <bsg-cac-attempts-rejected-rate>
      bsg-cac-attempts-rejected-rate
     </bsg-cac-attempts-rejected-rate>
    </bsg-admission-controlled-object>
   </bsg-admission-control-transactions>
  </bsg-admission-control-details>
 </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description

<bsg-calls-duration>

Usage

```
<bsg-calls-duration>
 <bsg-calls-duration-details>....</bsg-calls-duration-details>
</bsg-calls-duration>
```

Description Show an histogram of calls-duration for each service point

<bsg-calls-duration-details>

Usage

```
<bsg-calls-duration>
  <bsg-calls-duration-details>
    <bsg-start-time>
      bsg-start-time
    </bsg-start-time>

<bsg-service-point-calls-duration-details>....</bsg-service-point-calls-duration-details>

  </bsg-calls-duration-details>
</bsg-calls-duration>
```

Description

<bsg-charging-statistics>

Usage

```
<bsg-charging-statistics>
  <number-of-ctf-messages>
    number-of-ctf-messages
  </number-of-ctf-messages>
  <number-of-ctf-retries-messages>
    number-of-ctf-retries-messages
  </number-of-ctf-retries-messages>
  <number-of-ctf-replied-messages>
    number-of-ctf-replied-messages
  </number-of-ctf-replied-messages>
  <number-of-ctf-error-replied-messages>
    number-of-ctf-error-replied-messages
  </number-of-ctf-error-replied-messages>
</bsg-charging-statistics>
```

Description

<bsg-charging-status>

Usage

```
<bsg-charging-status>
  <bsg-charging-name>
    bsg-charging-name
  </bsg-charging-name>
  <bsg-charging-release-number>
    bsg-charging-release-number
  </bsg-charging-release-number>
  <bsg-charging-operational-mode>
    bsg-charging-operational-mode
  </bsg-charging-operational-mode>
  <bsg-charging-status-cdf>....</bsg-charging-status-cdf>
</bsg-charging-status>
```


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Description

<bsg-charging-status-cdf>

Usage

```
<bsg-charging-status-cdf>
  <bsg-charging-cdf-name>
    bsg-charging-cdf-name
  </bsg-charging-cdf-name>
  <bsg-charging-cdf-realm>
    bsg-charging-cdf-realm
  </bsg-charging-cdf-realm>
  <bsg-charging-cdf-host>
    bsg-charging-cdf-host
  </bsg-charging-cdf-host>
  <bsg-charging-cdf-priority>
    bsg-charging-cdf-priority
  </bsg-charging-cdf-priority>
</bsg-charging-status-cdf>
```

Description Charging Trigger Function - CDF servers list

<bsg-charging-status-cdf>

Usage

```
<bsg-charging-status>
  <bsg-charging-status-cdf>
    <bsg-charging-cdf-name>
      bsg-charging-cdf-name
    </bsg-charging-cdf-name>
    <bsg-charging-cdf-realm>
      bsg-charging-cdf-realm
    </bsg-charging-cdf-realm>
    <bsg-charging-cdf-host>
      bsg-charging-cdf-host
    </bsg-charging-cdf-host>
    <bsg-charging-cdf-priority>
      bsg-charging-cdf-priority
    </bsg-charging-cdf-priority>
  </bsg-charging-status-cdf>
</bsg-charging-status>
```

Description Charging Trigger Function - CDF servers list

<bsg-database-size>

Usage

```
<bsg-database-size>
  <database-name>
    database-name
  </database-name>
  <database-size>
    database-size
```

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```
  </database-size>
</bsg-database-size>
```

Description Show border signaling gateway database size

<bsg-denied-messages-details>

Usage

```
<bsg-denied-messages-details>
  <bsg-denied-message>
    bsg-denied-message
  </bsg-denied-message>
</bsg-denied-messages-details>
```

Description

<bsg-denied-messages-details>

Usage

```
<bsg-statistics-denied-messages-details>
  <bsg-statistics-denied-messages>
    <bsg-denied-messages-details>
      <bsg-denied-message>
        bsg-denied-message
      </bsg-denied-message>
    </bsg-denied-messages-details>
  </bsg-statistics-denied-messages>
</bsg-statistics-denied-messages-details>
```

Description

<bsg-drain-name-resolution-details>

Usage

```
<bsg-drain-name-resolution-details>
</bsg-drain-name-resolution-details>
```

Description Name resolution cache contents cleared by border signaling gateway

<bsg-information-brief>

Usage

```
<bsg-information-brief>
  <bsg-information-brief-details>....</bsg-information-brief-details>
</bsg-information-brief>
```

Description

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<bsg-information-brief-details>

Usage

```
<bsg-information-brief-details>
  <bsg-call-context-id>
    bsg-call-context-id
  </bsg-call-context-id>
  <bsg-request-uri>
    bsg-request-uri
  </bsg-request-uri>
  <bsg-contact>
    bsg-contact
  </bsg-contact>
  <bsg-signaling-source-ip>
    bsg-signaling-source-ip
  </bsg-signaling-source-ip>
  <bsg-signaling-destination-ip>
    bsg-signaling-destination-ip
  </bsg-signaling-destination-ip>
  <bsg-dialog-information-call-id>
    bsg-dialog-information-call-id
  </bsg-dialog-information-call-id>
</bsg-information-brief-details>
```

Description

<bsg-information-brief-details>

Usage

```
<bsg-information-brief>
  <bsg-information-brief-details>
    <bsg-call-context-id>
      bsg-call-context-id
    </bsg-call-context-id>
    <bsg-request-uri>
      bsg-request-uri
    </bsg-request-uri>
    <bsg-contact>
      bsg-contact
    </bsg-contact>
    <bsg-signaling-source-ip>
      bsg-signaling-source-ip
    </bsg-signaling-source-ip>
    <bsg-signaling-destination-ip>
      bsg-signaling-destination-ip
    </bsg-signaling-destination-ip>
    <bsg-dialog-information-call-id>
      bsg-dialog-information-call-id
    </bsg-dialog-information-call-id>
  </bsg-information-brief-details>
</bsg-information-brief>
```

Description

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<bsg-information-details-detailed>

Usage

```
<bsg-information-details-detailed>
  <bsg-service-point-calls-information>....</bsg-service-point-calls-information>
</bsg-information-details-detailed>
```

Description Show border signaling gateway information

<bsg-information-summary>

Usage

```
<bsg-information-summary>
  <bsg-information-active-calls>
    bsg-information-active-calls
  </bsg-information-active-calls>
</bsg-information-summary>
```

Description

<bsg-media-details>

Usage

```
<bsg-media-details>
  <bsg-gate-id>
    bsg-gate-id
  </bsg-gate-id>
  <bsg-media-ip>
    bsg-media-ip
  </bsg-media-ip>
  <bsg-media-port>
    bsg-media-port
  </bsg-media-port>
  <bsg-media-status>
    bsg-media-status
  </bsg-media-status>
</bsg-media-details>
```

Description Media details

<bsg-media-details>

Usage

```
<bsg-service-point-calls-information>
  <bsg-media-details>
    <bsg-gate-id>
      bsg-gate-id
    </bsg-gate-id>
    <bsg-media-ip>
      bsg-media-ip
    </bsg-media-ip>
```


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```
    <bsg-media-port>
     bsg-media-port
    </bsg-media-port>
    <bsg-media-status>
     bsg-media-status
    </bsg-media-status>
   </bsg-media-details>
</bsg-service-point-calls-information>
```

Description Media details

<bsg-media-details>

Usage

```
<bsg-information-details-detailed>
 <bsg-service-point-calls-information>
  <bsg-media-details>
   <bsg-gate-id>
    bsg-gate-id
   </bsg-gate-id>
   <bsg-media-ip>
    bsg-media-ip
   </bsg-media-ip>
   <bsg-media-port>
    bsg-media-port
   </bsg-media-port>
   <bsg-media-status>
    bsg-media-status
   </bsg-media-status>
  </bsg-media-details>
 </bsg-service-point-calls-information>
</bsg-information-details-detailed>
```

Description Media details

<bsg-memory-pools>

Usage

```
<bsg-memory-pools>
 <memory-pool-name>
  memory-pool-name
 </memory-pool-name>
 <memory-pool-chunks-num>
  memory-pool-chunks-num
 </memory-pool-chunks-num>
 <memory-pool-free-chunks-num>
  memory-pool-free-chunks-num
 </memory-pool-free-chunks-num>
 <memory-pool-chunk-size>
  memory-pool-chunk-size
 </memory-pool-chunk-size>
 <memory-pool-chunk-used>
```

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```
    memory-pool-chunk-used
   </memory-pool-chunk-used>
</bsg-memory-pools>
```

Description Show border signaling gateway memory pools

<bsg-name-resolution-cache-information>

Usage

```
<bsg-name-resolution-cache-information>
  <bsg-nr-cache>....</bsg-nr-cache>
</bsg-name-resolution-cache-information>
```

Description Show name resolution cache content

<bsg-name-resolution-entry>

Usage

```
<bsg-name-resolution-entry>
  <bsg-nr-entry-fqdn>
    bsg-nr-entry-fqdn
  </bsg-nr-entry-fqdn>
  <bsg-nr-entry-type>
    bsg-nr-entry-type
  </bsg-nr-entry-type>
  <bsg-nr-entry-rdata>
    bsg-nr-entry-rdata
  </bsg-nr-entry-rdata>
  <bsg-nr-entry-ttl-expiry>
    bsg-nr-entry-ttl-expiry
  </bsg-nr-entry-ttl-expiry>
  <bsg-nr-entry-blacklist-expiry>
    bsg-nr-entry-blacklist-expiry
  </bsg-nr-entry-blacklist-expiry>
</bsg-name-resolution-entry>
```

Description

<bsg-name-resolution-entry>

Usage

```
<bsg-name-resolution-cache-information>
  <bsg-nr-cache>
    <bsg-name-resolution-entry>
      <bsg-nr-entry-fqdn>
        bsg-nr-entry-fqdn
      </bsg-nr-entry-fqdn>
      <bsg-nr-entry-type>
        bsg-nr-entry-type
      </bsg-nr-entry-type>
      <bsg-nr-entry-rdata>
```


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```
            bsg-nr-entry-rdata
           </bsg-nr-entry-rdata>
           <bsg-nr-entry-ttl-expiry>
            bsg-nr-entry-ttl-expiry
           </bsg-nr-entry-ttl-expiry>
           <bsg-nr-entry-blacklist-expiry>
            bsg-nr-entry-blacklist-expiry
           </bsg-nr-entry-blacklist-expiry>
          </bsg-name-resolution-entry>
         </bsg-nr-cache>
        </bsg-name-resolution-cache-information>
```

Description

<bsg-nr-cache>

Usage

```
<bsg-name-resolution-cache-information>
 <bsg-nr-cache>
  <bsg-name-resolution-entry>....</bsg-name-resolution-entry>
 </bsg-nr-cache>
</bsg-name-resolution-cache-information>
```

Description

<bsg-redundancy-connection-info>

Usage

```
<bsg-status-information>
 <bsg-redundancy-connection-info>
  <bsg-redundancy-conn-type>
   bsg-redundancy-conn-type
  </bsg-redundancy-conn-type>
  <bsg-redundancy-conn-details>
   bsg-redundancy-conn-details
  </bsg-redundancy-conn-details>
  <bsg-redundancy-conn-status>
   bsg-redundancy-conn-status
  </bsg-redundancy-conn-status>
  <bsg-redundancy-conn-messages>
   bsg-redundancy-conn-messages
  </bsg-redundancy-conn-messages>
 </bsg-redundancy-connection-info>
</bsg-status-information>
```

Description Shows the connection information

<bsg-redundancy-info>

Usage

```
<bsg-status-information>
 <bsg-redundancy-info>
```

```
</bsg-redundancy-info>
</bsg-status-information>
```

Description Shows bsg redundancy information

<bsg-redundancy-pic-info>

Usage

```
<bsg-status-information>
  <bsg-redundancy-pic-info>
    <bsg-redundancy-local-or-remote>
      bsg-redundancy-local-or-remote
    </bsg-redundancy-local-or-remote>
    <bsg-redundancy-pic-if-name>
      bsg-redundancy-pic-if-name
    </bsg-redundancy-pic-if-name>
    <bsg-redundancy-pic-ip>
      bsg-redundancy-pic-ip
    </bsg-redundancy-pic-ip>
    <bsg-redundancy-pic-rms-role>
      bsg-redundancy-pic-rms-role
    </bsg-redundancy-pic-rms-role>
  </bsg-redundancy-pic-info>
</bsg-status-information>
```

Description Shows PIC information

<bsg-registrations>

Usage

```
<bsg-registrations>
  <bsg-registrations-start-time>
    bsg-registrations-start-time
  </bsg-registrations-start-time>
  <bsg-registrations-active-registrations>
    bsg-registrations-active-registrations
  </bsg-registrations-active-registrations>
</bsg-registrations>
```

Description

<bsg-registrations-realm>

Usage

```
<bsg-registrations-realm>
  <bsg-registrations-realm-start-time>
    bsg-registrations-realm-start-time
  </bsg-registrations-realm-start-time>
  <bsg-registrations-realm-name>
    bsg-registrations-realm-name
  </bsg-registrations-realm-name>
```


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```
<bsg-registrations-realm-active-registrations>
  bsg-registrations-realm-active-registrations
</bsg-registrations-realm-active-registrations>
</bsg-registrations-realm>
```

Description

<bsg-routing-blacklist-actively-checked>

Usage

```
<bsg-routing-blacklist-actively-checked>
  <actively-checked-server-name>
    actively-checked-server-name
  </actively-checked-server-name>
  <actively-checked-server-address>
    actively-checked-server-address
  </actively-checked-server-address>
  <actively-checked-server-last-availability>
    actively-checked-server-last-availability
  </actively-checked-server-last-availability>
  <actively-checked-server-next-check>
    actively-checked-server-next-check
  </actively-checked-server-next-check>
</bsg-routing-blacklist-actively-checked>
```

Description Servers that were configured to be actively checked

<bsg-routing-blacklist-actively-checked>

Usage

```
<bsg-routing-blacklist-actively-checked-wrapper>
  <bsg-routing-blacklist-actively-checked>
    <actively-checked-server-name>
      actively-checked-server-name
    </actively-checked-server-name>
    <actively-checked-server-address>
      actively-checked-server-address
    </actively-checked-server-address>
    <actively-checked-server-last-availability>
      actively-checked-server-last-availability
    </actively-checked-server-last-availability>
    <actively-checked-server-next-check>
      actively-checked-server-next-check
    </actively-checked-server-next-check>
  </bsg-routing-blacklist-actively-checked>
</bsg-routing-blacklist-actively-checked-wrapper>
```

Description Servers that were configured to be actively checked

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<bsg-routing-blacklist-actively-checked>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>
    <bsg-routing-blacklist-actively-checked-wrapper>
      <bsg-routing-blacklist-actively-checked>
        <actively-checked-server-name>
          actively-checked-server-name
        </actively-checked-server-name>
        <actively-checked-server-address>
          actively-checked-server-address
        </actively-checked-server-address>
        <actively-checked-server-last-availability>
          actively-checked-server-last-availability
        </actively-checked-server-last-availability>
        <actively-checked-server-next-check>
          actively-checked-server-next-check
        </actively-checked-server-next-check>
      </bsg-routing-blacklist-actively-checked>
    </bsg-routing-blacklist-actively-checked-wrapper>
  </bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description Servers that were configured to be actively checked

<bsg-routing-blacklist-actively-checked-wrapper>

Usage

```
<bsg-routing-blacklist-actively-checked-wrapper>
  <bsg-routing-blacklist-actively-checked-title>
    bsg-routing-blacklist-actively-checked-title
  </bsg-routing-blacklist-actively-checked-title>

<bsg-routing-blacklist-actively-checked>....</bsg-routing-blacklist-actively-checked>

</bsg-routing-blacklist-actively-checked-wrapper>
```

Description Title for servers that are actively checked

<bsg-routing-blacklist-actively-checked-wrapper>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>
    <bsg-routing-blacklist-actively-checked-wrapper>
      <bsg-routing-blacklist-actively-checked-title>
        bsg-routing-blacklist-actively-checked-title
      </bsg-routing-blacklist-actively-checked-title>

<bsg-routing-blacklist-actively-checked>....</bsg-routing-blacklist-actively-checked>
```


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```
    </bsg-routing-blacklist-actively-checked-wrapper>
  </bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description Title for servers that are actively checked

<bsg-routing-blacklist-details>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>....</bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description Servers which are activly or not-activly checked status

<bsg-routing-blacklist-entry>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>
    <bsg-start-time>
      bsg-start-time
    </bsg-start-time>

<bsg-routing-blacklist-actively-checked-wrapper>....</bsg-routing-blacklist-actively-checked-wrapper>

<bsg-routing-blacklist-not-actively-checked-wrapper>....</bsg-routing-blacklist-not-actively-checked-wrapper>

    </bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description

<bsg-routing-blacklist-not-actively-checked>

Usage

```
<bsg-routing-blacklist-not-actively-checked>
  <not-actively-checked-server-name>
    not-actively-checked-server-name
  </not-actively-checked-server-name>
  <not-actively-checked-server-address>
    not-actively-checked-server-address
  </not-actively-checked-server-address>
  <not-actively-checked-server-next-availability>
    not-actively-checked-server-next-availability
  </not-actively-checked-server-next-availability>
</bsg-routing-blacklist-not-actively-checked>
```

Description Servers that were configured not to be actively check

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<bsg-routing-blacklist-not-actively-checked>

Usage

```
<bsg-routing-blacklist-not-actively-checked-wrapper>
  <bsg-routing-blacklist-not-actively-checked>
    <not-actively-checked-server-name>
      not-actively-checked-server-name
    </not-actively-checked-server-name>
    <not-actively-checked-server-address>
      not-actively-checked-server-address
    </not-actively-checked-server-address>
    <not-actively-checked-server-next-availability>
      not-actively-checked-server-next-availability
    </not-actively-checked-server-next-availability>
  </bsg-routing-blacklist-not-actively-checked>
</bsg-routing-blacklist-not-actively-checked-wrapper>
```

Description Servers that were configured not to be actively check

<bsg-routing-blacklist-not-actively-checked>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>
    <bsg-routing-blacklist-not-actively-checked-wrapper>
      <bsg-routing-blacklist-not-actively-checked>
        <not-actively-checked-server-name>
          not-actively-checked-server-name
        </not-actively-checked-server-name>
        <not-actively-checked-server-address>
          not-actively-checked-server-address
        </not-actively-checked-server-address>
        <not-actively-checked-server-next-availability>
          not-actively-checked-server-next-availability
        </not-actively-checked-server-next-availability>
      </bsg-routing-blacklist-not-actively-checked>
    </bsg-routing-blacklist-not-actively-checked-wrapper>
  </bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description Servers that were configured not to be actively check

<bsg-routing-blacklist-not-actively-checked-wrapper>

Usage

```
<bsg-routing-blacklist-not-actively-checked-wrapper>
  <bsg-routing-blacklist-not-actively-checked-title>
    bsg-routing-blacklist-not-actively-checked-title
  </bsg-routing-blacklist-not-actively-checked-title>

<bsg-routing-blacklist-not-actively-checked>....</bsg-routing-blacklist-not-actively-checked>
```


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```
</bsg-routing-blacklist-not-actively-checked-wrapper>
```

Description Title for servers that are not actively checked

<bsg-routing-blacklist-not-actively-checked-wrapper>

Usage

```
<bsg-routing-blacklist-details>
  <bsg-routing-blacklist-entry>
    <bsg-routing-blacklist-not-actively-checked-wrapper>
      <bsg-routing-blacklist-not-actively-checked-title>
        bsg-routing-blacklist-not-actively-checked-title
      </bsg-routing-blacklist-not-actively-checked-title>

<bsg-routing-blacklist-not-actively-checked>....</bsg-routing-blacklist-not-actively-checked>

    </bsg-routing-blacklist-not-actively-checked-wrapper>
  </bsg-routing-blacklist-entry>
</bsg-routing-blacklist-details>
```

Description Title for servers that are not actively checked

<bsg-service-point-calls-details>

Usage

```
<bsg-service-point-calls-details>
  <bsg-sp-name>
    bsg-sp-name
  </bsg-sp-name>
  <service-interface>
    service-interface
  </service-interface>
  <bsg-server-name>
    bsg-server-name
  </bsg-server-name>
  <bsg-sp-direction>
    bsg-sp-direction
  </bsg-sp-direction>
  <bsg-sp-failed-calls>
    bsg-sp-failed-calls
  </bsg-sp-failed-calls>
  <bsg-sp-completed-calls>
    bsg-sp-completed-calls
  </bsg-sp-completed-calls>
  <bsg-sp-active-calls>
    bsg-sp-active-calls
  </bsg-sp-active-calls>
</bsg-service-point-calls-details>
```

Description

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<bsg-service-point-calls-details>

Usage

```
<bsg-statistics-calls-details>
  <bsg-statistics-calls>
    <bsg-service-point-calls-details>
      <bsg-sp-name>
        bsg-sp-name
      </bsg-sp-name>
      <service-interface>
        service-interface
      </service-interface>
      <bsg-server-name>
        bsg-server-name
      </bsg-server-name>
      <bsg-sp-direction>
        bsg-sp-direction
      </bsg-sp-direction>
      <bsg-sp-failed-calls>
        bsg-sp-failed-calls
      </bsg-sp-failed-calls>
      <bsg-sp-completed-calls>
        bsg-sp-completed-calls
      </bsg-sp-completed-calls>
      <bsg-sp-active-calls>
        bsg-sp-active-calls
      </bsg-sp-active-calls>
    </bsg-service-point-calls-details>
  </bsg-statistics-calls>
</bsg-statistics-calls-details>
```

Description

<bsg-service-point-calls-duration-details>

Usage

```
<bsg-service-point-calls-duration-details>
  <bsg-sp-name>
    bsg-sp-name
  </bsg-sp-name>
  <service-interface>
    service-interface
  </service-interface>
  <bsg-server-name>
    bsg-server-name
  </bsg-server-name>
  <service-point-direction>
    service-point-direction
  </service-point-direction>
  <calls-duration-histogram>....</calls-duration-histogram>
</bsg-service-point-calls-duration-details>
```

Description Show an histogram of calls-duration for each service point

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<bsg-service-point-calls-duration-details>

Usage

```
<bsg-calls-duration>
  <bsg-calls-duration-details>
    <bsg-service-point-calls-duration-details>
      <bsg-sp-name>
        bsg-sp-name
      </bsg-sp-name>
      <service-interface>
        service-interface
      </service-interface>
      <bsg-server-name>
        bsg-server-name
      </bsg-server-name>
      <service-point-direction>
        service-point-direction
      </service-point-direction>
      <calls-duration-histogram>....</calls-duration-histogram>
    </bsg-service-point-calls-duration-details>
  </bsg-calls-duration-details>
</bsg-calls-duration>
```

Description Show an histogram of calls-duration for each service point

<bsg-service-point-calls-failed-details>

Usage

```
<bsg-service-point-calls-failed-details>
  <bsg-sp-name>
    bsg-sp-name
  </bsg-sp-name>
  <service-interface>
    service-interface
  </service-interface>
  <bsg-server-name>
    bsg-server-name
  </bsg-server-name>
  <bsg-sp-direction>
    bsg-sp-direction
  </bsg-sp-direction>
  <bsg-sp-error-response-code>
    bsg-sp-error-response-code
  </bsg-sp-error-response-code>
  <bsg-sp-internal-error>
    bsg-sp-internal-error
  </bsg-sp-internal-error>
  <bsg-sp-inactive-timeout>
    bsg-sp-inactive-timeout
  </bsg-sp-inactive-timeout>
  <bsg-sp-setup-media-failure>
    bsg-sp-setup-media-failure
  </bsg-sp-setup-media-failure>
```

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```
<bsg-sp-established-call-media-inactivity>
  bsg-sp-established-call-media-inactivity
</bsg-sp-established-call-media-inactivity>
<bsg-sp-cac-policy-rejection>
  bsg-sp-cac-policy-rejection
</bsg-sp-cac-policy-rejection>
<bsg-sp-default-behavior-policy-rejection>
  bsg-sp-default-behavior-policy-rejection
</bsg-sp-default-behavior-policy-rejection>
<bsg-sp-configured-behavior-policy-rejection>
  bsg-sp-configured-behavior-policy-rejection
</bsg-sp-configured-behavior-policy-rejection>
<bsg-sp-transport-conflict-policy-rejection>
  bsg-sp-transport-conflict-policy-rejection
</bsg-sp-transport-conflict-policy-rejection>
<bsg-sp-protocol-error>
  bsg-sp-protocol-error
</bsg-sp-protocol-error>
<bsg-sp-setup-timeout>
  bsg-sp-setup-timeout
</bsg-sp-setup-timeout>
<bsg-sp-transport-error>
  bsg-sp-transport-error
</bsg-sp-transport-error>
<bsg-sp-canceled-calls>
  bsg-sp-canceled-calls
</bsg-sp-canceled-calls>
<bsg-sp-media-abort>
  bsg-sp-media-abort
</bsg-sp-media-abort>
</bsg-service-point-calls-failed-details>
```

Description

<bsg-service-point-calls-failed-details>

Usage

```
<bsg-statistics-calls-failed-details>
  <bsg-statistics-calls-failed>
    <bsg-service-point-calls-failed-details>
      <bsg-sp-name>
        bsg-sp-name
      </bsg-sp-name>
      <service-interface>
        service-interface
      </service-interface>
      <bsg-server-name>
        bsg-server-name
      </bsg-server-name>
      <bsg-sp-direction>
        bsg-sp-direction
      </bsg-sp-direction>
      <bsg-sp-error-response-code>
        bsg-sp-error-response-code
      </bsg-sp-error-response-code>
```


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```
      <bsg-sp-internal-error>
        bsg-sp-internal-error
      </bsg-sp-internal-error>
      <bsg-sp-inactive-timeout>
        bsg-sp-inactive-timeout
      </bsg-sp-inactive-timeout>
      <bsg-sp-setup-media-failure>
        bsg-sp-setup-media-failure
      </bsg-sp-setup-media-failure>
      <bsg-sp-established-call-media-inactivity>
        bsg-sp-established-call-media-inactivity
      </bsg-sp-established-call-media-inactivity>
      <bsg-sp-cac-policy-rejection>
        bsg-sp-cac-policy-rejection
      </bsg-sp-cac-policy-rejection>
      <bsg-sp-default-behavior-policy-rejection>
        bsg-sp-default-behavior-policy-rejection
      </bsg-sp-default-behavior-policy-rejection>
      <bsg-sp-configured-behavior-policy-rejection>
        bsg-sp-configured-behavior-policy-rejection
      </bsg-sp-configured-behavior-policy-rejection>
      <bsg-sp-transport-conflict-policy-rejection>
        bsg-sp-transport-conflict-policy-rejection
      </bsg-sp-transport-conflict-policy-rejection>
      <bsg-sp-protocol-error>
        bsg-sp-protocol-error
      </bsg-sp-protocol-error>
      <bsg-sp-setup-timeout>
        bsg-sp-setup-timeout
      </bsg-sp-setup-timeout>
      <bsg-sp-transport-error>
        bsg-sp-transport-error
      </bsg-sp-transport-error>
      <bsg-sp-canceled-calls>
        bsg-sp-canceled-calls
      </bsg-sp-canceled-calls>
      <bsg-sp-media-abort>
        bsg-sp-media-abort
      </bsg-sp-media-abort>
    </bsg-service-point-calls-failed-details>
  </bsg-statistics-calls-failed>
</bsg-statistics-calls-failed-details>
```

Description

<bsg-service-point-calls-information>

Usage

```
<bsg-service-point-calls-information>
  <bsg-call-context-id>
    bsg-call-context-id
  </bsg-call-context-id>
  <bsg-request-uri>
    bsg-request-uri
  </bsg-request-uri>
```

```
<bsg-contact>
  bsg-contact
</bsg-contact>
<bsg-signaling-source-ip>
  bsg-signaling-source-ip
</bsg-signaling-source-ip>
<bsg-signaling-destination-ip>
  bsg-signaling-destination-ip
</bsg-signaling-destination-ip>
<bsg-dialog-information-call-id>
  bsg-dialog-information-call-id
</bsg-dialog-information-call-id>
<bsg-dialog-information-local-uri>
  bsg-dialog-information-local-uri
</bsg-dialog-information-local-uri>
<bsg-dialog-information-remote-uri>
  bsg-dialog-information-remote-uri
</bsg-dialog-information-remote-uri>
<bsg-dialog-information-local-tag>
  bsg-dialog-information-local-tag
</bsg-dialog-information-local-tag>
<bsg-dialog-information-remote-tag>
  bsg-dialog-information-remote-tag
</bsg-dialog-information-remote-tag>
<bsg-next-hop>
  bsg-next-hop
</bsg-next-hop>
<bsg-media-details>....</bsg-media-details>
<bsg-macthed-policies>
  bsg-macthed-policies
</bsg-macthed-policies>
<bsg-admission-controller>
  bsg-admission-controller
</bsg-admission-controller>
<bsg-manipulation-rules>
  bsg-manipulation-rules
</bsg-manipulation-rules>
</bsg-service-point-calls-information>
```

Description

<bsg-service-point-calls-information>

Usage

```
<bsg-information-details-detailed>
  <bsg-service-point-calls-information>
    <bsg-call-context-id>
      bsg-call-context-id
    </bsg-call-context-id>
    <bsg-request-uri>
      bsg-request-uri
    </bsg-request-uri>
    <bsg-contact>
      bsg-contact
    </bsg-contact>
```


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```
<bsg-signaling-source-ip>
  bsg-signaling-source-ip
</bsg-signaling-source-ip>
<bsg-signaling-destination-ip>
  bsg-signaling-destination-ip
</bsg-signaling-destination-ip>
<bsg-dialog-information-call-id>
  bsg-dialog-information-call-id
</bsg-dialog-information-call-id>
<bsg-dialog-information-local-uri>
  bsg-dialog-information-local-uri
</bsg-dialog-information-local-uri>
<bsg-dialog-information-remote-uri>
  bsg-dialog-information-remote-uri
</bsg-dialog-information-remote-uri>
<bsg-dialog-information-local-tag>
  bsg-dialog-information-local-tag
</bsg-dialog-information-local-tag>
<bsg-dialog-information-remote-tag>
  bsg-dialog-information-remote-tag
</bsg-dialog-information-remote-tag>
<bsg-next-hop>
  bsg-next-hop
</bsg-next-hop>
<bsg-media-details>....</bsg-media-details>
<bsg-macthed-policies>
  bsg-macthed-policies
</bsg-macthed-policies>
<bsg-admission-controller>
  bsg-admission-controller
</bsg-admission-controller>
<bsg-manipulation-rules>
  bsg-manipulation-rules
</bsg-manipulation-rules>
</bsg-service-point-calls-information>
</bsg-information-details-detailed>
```

Description

<bsg-statistics-admission-control>

Usage

```
<bsg-statistics-admission-control-information>
  <bsg-statistics-admission-control>
    <bsg-start-time>
      bsg-start-time
    </bsg-start-time>
    <bsg-admission-control-details>....</bsg-admission-control-details>
  </bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description

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<bsg-statistics-admission-control-information>

Usage

```
<bsg-statistics-admission-control-information>
  <bsg-statistics-admission-control>....</bsg-statistics-admission-control>
</bsg-statistics-admission-control-information>
```

Description Show admission control profiles status

<bsg-statistics-calls>

Usage

```
<bsg-statistics-calls-details>
  <bsg-statistics-calls>
    <bsg-start-time>
      bsg-start-time
    </bsg-start-time>
    <bsg-service-point-calls-details>....</bsg-service-point-calls-details>
  </bsg-statistics-calls>
</bsg-statistics-calls-details>
```

Description

<bsg-statistics-calls-details>

Usage

```
<bsg-statistics-calls-details>
  <bsg-statistics-calls>....</bsg-statistics-calls>
</bsg-statistics-calls-details>
```

Description Count of calls per service point

<bsg-statistics-calls-failed>

Usage

```
<bsg-statistics-calls-failed-details>
  <bsg-statistics-calls-failed>
    <bsg-start-time>
      bsg-start-time
    </bsg-start-time>
 <bsg-service-point-calls-failed-details>....</bsg-service-point-calls-failed-details>

  </bsg-statistics-calls-failed>
</bsg-statistics-calls-failed-details>
```

Description

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<bsg-statistics-calls-failed-details>

Usage

```
<bsg-statistics-calls-failed-details>
  <bsg-statistics-calls-failed>....</bsg-statistics-calls-failed>
</bsg-statistics-calls-failed-details>
```

Description Count of calls per service point

<bsg-statistics-clear-denied-messages>

Usage

```
<bsg-statistics-clear-denied-messages>
</bsg-statistics-clear-denied-messages>
```

Description Denied messages information cleared by border signaling gateway

<bsg-statistics-denied-messages>

Usage

```
<bsg-statistics-denied-messages-details>
  <bsg-statistics-denied-messages>
    <overload-last-reset-time>
     overload-last-reset-time
    </overload-last-reset-time>
    <bsg-denied-messages-details>....</bsg-denied-messages-details>
  </bsg-statistics-denied-messages>
</bsg-statistics-denied-messages-details>
```

Description

<bsg-statistics-denied-messages-details>

Usage

```
<bsg-statistics-denied-messages-details>
  <bsg-statistics-denied-messages>....</bsg-statistics-denied-messages>
</bsg-statistics-denied-messages-details>
```

Description Denied messages per gateway

<bsg-statistics-drain-information>

Usage

```
<bsg-statistics-drain-information>
</bsg-statistics-drain-information>
```

Description Statistics information cleared by border signaling gateway

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<bsg-status-information>

Usage

```
<bsg-status-information>
  <bsg-redundancy-pic-info>....</bsg-redundancy-pic-info>
  <bsg-redundancy-connection-info>....</bsg-redundancy-connection-info>
  <bsg-redundancy-state>
    bsg-redundancy-state
  </bsg-redundancy-state>
  <bsg-redundancy-info>....</bsg-redundancy-info>
</bsg-status-information>
```

Description Show bsg status information

<calls-duration-entry>

Usage

```
<calls-duration-histogram>
  <calls-duration-entry>
    <duration-start>
      duration-start
    </duration-start>
    <duration-end>
      duration-end
    </duration-end>
    <number-of-calls>
      number-of-calls
    </number-of-calls>
  </calls-duration-entry>
</calls-duration-histogram>
```

Description

<calls-duration-entry>

Usage

```
<bsg-service-point-calls-duration-details>
  <calls-duration-histogram>
    <calls-duration-entry>
      <duration-start>
        duration-start
      </duration-start>
      <duration-end>
        duration-end
      </duration-end>
      <number-of-calls>
        number-of-calls
      </number-of-calls>
    </calls-duration-entry>
  </calls-duration-histogram>
</bsg-service-point-calls-duration-details>
```


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Description

<calls-duration-entry>

Usage

```
<bsg-calls-duration>
  <bsg-calls-duration-details>
    <bsg-service-point-calls-duration-details>
      <calls-duration-histogram>
        <calls-duration-entry>
          <duration-start>
            duration-start
          </duration-start>
          <duration-end>
            duration-end
          </duration-end>
          <number-of-calls>
            number-of-calls
          </number-of-calls>
        </calls-duration-entry>
      </calls-duration-histogram>
    </bsg-service-point-calls-duration-details>
  </bsg-calls-duration-details>
</bsg-calls-duration>
```

Description

<calls-duration-histogram>

Usage

```
<calls-duration-histogram>
  <calls-duration-entry>....</calls-duration-entry>
</calls-duration-histogram>
```

Description Show an histogram of calls-duration for each service point

<calls-duration-histogram>

Usage

```
<bsg-service-point-calls-duration-details>
  <calls-duration-histogram>
    <calls-duration-entry>....</calls-duration-entry>
  </calls-duration-histogram>
</bsg-service-point-calls-duration-details>
```

Description Show an histogram of calls-duration for each service point

<calls-duration-histogram>

Usage

```
<bsg-calls-duration>
  <bsg-calls-duration-details>
```

```
<bsg-service-point-calls-duration-details>
  <calls-duration-histogram>
    <calls-duration-entry>....</calls-duration-entry>
  </calls-duration-histogram>
</bsg-service-point-calls-duration-details>
</bsg-calls-duration-details>
</bsg-calls-duration>
```

Description Show an histogram of calls-duration for each service point

<clear-service-bsg-registrations-statistics>

Usage

```
<clear-service-bsg-registrations-statistics>
</clear-service-bsg-registrations-statistics>
```

Description Clear bsg registration statistics

<clear-services-bsg-registrations-subscription>

Usage

```
<clear-services-bsg-registrations-subscription>
  <clear-services-bsg-registrations-subscription-result>
    clear-services-bsg-registrations-subscription-result
  </clear-services-bsg-registrations-subscription-result>
</clear-services-bsg-registrations-subscription>
```

Description Clear bsg registration subscription

<controller-entry>

Usage

```
<pgcpd-active-configuration>
  <controller-entry>
    <controller-name>
      controller-name
    </controller-name>
    <remote-ip-address>
      remote-ip-address
    </remote-ip-address>
    <remote-port>
      remote-port
    </remote-port>
  </controller-entry>
</pgcpd-active-configuration>
```

Description

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<controller-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <controller-entry>
      <controller-name>
        controller-name
      </controller-name>
      <remote-ip-address>
        remote-ip-address
      </remote-ip-address>
      <remote-port>
        remote-port
      </remote-port>
    </controller-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<controller-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <controller-entry>
        <controller-name>
          controller-name
        </controller-name>
        <remote-ip-address>
          remote-ip-address
        </remote-ip-address>
        <remote-port>
          remote-port
        </remote-port>
      </controller-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<controller-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <controller-entry>
      <controller-name>
        controller-name
      </controller-name>
```

```
      <remote-ip-address>
       remote-ip-address
      </remote-ip-address>
      <remote-port>
       remote-port
      </remote-port>
     </controller-entry>
    </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<controller-entry>

Usage

```
<service-pgcp-terminations>
 <gateway-entry>
  <controller-entry>
   <controller-name>
    controller-name
   </controller-name>
   <remote-ip-address>
    remote-ip-address
   </remote-ip-address>
   <remote-port>
    remote-port
   </remote-port>
  </controller-entry>
 </gateway-entry>
</service-pgcp-terminations>
```

Description

<controller-entry>

Usage

```
<service-pgcp-gates>
 <gateway-entry>
  <controller-entry>
   <controller-name>
    controller-name
   </controller-name>
   <remote-ip-address>
    remote-ip-address
   </remote-ip-address>
   <remote-port>
    remote-port
   </remote-port>
  </controller-entry>
 </gateway-entry>
</service-pgcp-gates>
```

Description

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<cos-stats-service-set-dscp-entry>

Usage

```
<cos-stats-service-set-dscp-entry>
  <received-dscp>
    received-dscp
  </received-dscp>
  <total-received-dscp-packets>
    total-received-dscp-packets
  </total-received-dscp-packets>
  <total-marked-dscp-packets>
    total-marked-dscp-packets
  </total-marked-dscp-packets>
</cos-stats-service-set-dscp-entry>
```

Description Class-of-service service set statistics entry

<cos-stats-service-set-dscp-entry>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>
    <cos-stats-service-set-dscp-information>
      <cos-stats-service-set-dscp-entry>
        <received-dscp>
          received-dscp
        </received-dscp>
        <total-received-dscp-packets>
          total-received-dscp-packets
        </total-received-dscp-packets>
        <total-marked-dscp-packets>
          total-marked-dscp-packets
        </total-marked-dscp-packets>
      </cos-stats-service-set-dscp-entry>
    </cos-stats-service-set-dscp-information>
  </service-cos-statistics-entry>
</service-cos-statistics-information>
```

Description Class-of-service service set statistics entry

<cos-stats-service-set-dscp-information>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>
    <cos-stats-service-set-dscp-information>
      <cos-stats-service-set-dscp-entry>....</cos-stats-service-set-dscp-entry>
    </cos-stats-service-set-dscp-information>
  </service-cos-statistics-entry>
</service-cos-statistics-information>
```

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Description

<cos-stats-service-set-forwarding-class-entry>

Usage

```
<cos-stats-service-set-forwarding-class-entry>
  <received-forwarding-class>
    received-forwarding-class
  </received-forwarding-class>
  <total-received-forwarding-class-packets>
    total-received-forwarding-class-packets
  </total-received-forwarding-class-packets>
  <total-assigned-forwarding-class-packets>
    total-assigned-forwarding-class-packets
  </total-assigned-forwarding-class-packets>
</cos-stats-service-set-forwarding-class-entry>
```

Description Class-of-service service set statistics entry

<cos-stats-service-set-forwarding-class-entry>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>
    <cos-stats-service-set-forwarding-class-information>
      <cos-stats-service-set-forwarding-class-entry>
        <received-forwarding-class>
          received-forwarding-class
        </received-forwarding-class>
        <total-received-forwarding-class-packets>
          total-received-forwarding-class-packets
        </total-received-forwarding-class-packets>
        <total-assigned-forwarding-class-packets>
          total-assigned-forwarding-class-packets
        </total-assigned-forwarding-class-packets>
      </cos-stats-service-set-forwarding-class-entry>
    </cos-stats-service-set-forwarding-class-information>
  </service-cos-statistics-entry>
</service-cos-statistics-information>
```

Description Class-of-service service set statistics entry

<cos-stats-service-set-forwarding-class-information>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>
    <cos-stats-service-set-forwarding-class-information>

<cos-stats-service-set-forwarding-class-entry>....</cos-stats-service-set-forwarding-class-entry>

    </cos-stats-service-set-forwarding-class-information>
  </service-cos-statistics-entry>
```


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```
</service-cos-statistics-information>
```

Description

<crtp-config-info-entry>

Usage

```
<crtp-config-info-entry>
  <interface-name>
    interface-name
  </interface-name>
  <crtp-port-min>
    crtp-port-min
  </crtp-port-min>
  <crtp-port-max>
    crtp-port-max
  </crtp-port-max>
  <crtp-tcp-space>
    crtp-tcp-space
  </crtp-tcp-space>
  <crtp-udp-space>
    crtp-udp-space
  </crtp-udp-space>
  <crtp-max-period>
    crtp-max-period
  </crtp-max-period>
  <crtp-max-time>
    crtp-max-time
  </crtp-max-time>
  <crtp-rtp-queues>
    crtp-rtp-queues
  </crtp-rtp-queues>
</crtp-config-info-entry>
```

Description Compressed Real-Time Protocol information

<crtp-counter-table>

Usage

```
<crtp-counter-table>
  <crtp-counter-name>
    crtp-counter-name
  </crtp-counter-name>
  <crtp-counter-received>
    crtp-counter-received
  </crtp-counter-received>
  <crtp-counter-transmit>
    crtp-counter-transmit
  </crtp-counter-transmit>
</crtp-counter-table>
```

Description

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<crtp-flow-entry>

Usage

```
<crtp-flow-entry>
  <crtp-flow-context-id>
    crtp-flow-context-id
  </crtp-flow-context-id>
  <crtp-flow-rtp-id>
    crtp-flow-rtp-id
  </crtp-flow-rtp-id>
  <crtp-flow-source-info>
    crtp-flow-source-info
  </crtp-flow-source-info>
  <crtp-flow-destination-info>
    crtp-flow-destination-info
  </crtp-flow-destination-info>
  <crtp-flow-type>
    crtp-flow-type
  </crtp-flow-type>
</crtp-flow-entry>
```

Description CRTP flow information

<crtp-flow-entry>

Usage

```
<crtp-per-interface-flow-table>
  <service-crtp-flow-table>
    <crtp-flow-entry>
      <crtp-flow-context-id>
        crtp-flow-context-id
      </crtp-flow-context-id>
      <crtp-flow-rtp-id>
        crtp-flow-rtp-id
      </crtp-flow-rtp-id>
      <crtp-flow-source-info>
        crtp-flow-source-info
      </crtp-flow-source-info>
      <crtp-flow-destination-info>
        crtp-flow-destination-info
      </crtp-flow-destination-info>
      <crtp-flow-type>
        crtp-flow-type
      </crtp-flow-type>
    </crtp-flow-entry>
  </service-crtp-flow-table>
</crtp-per-interface-flow-table>
```

Description CRTP flow information

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<crtp-flow-entry>

Usage

```
<service-crtp-flow-table-information>
  <crtp-per-interface-flow-table>
    <service-crtp-flow-table>
      <crtp-flow-entry>
        <crtp-flow-context-id>
          crtp-flow-context-id
        </crtp-flow-context-id>
        <crtp-flow-rtp-id>
          crtp-flow-rtp-id
        </crtp-flow-rtp-id>
        <crtp-flow-source-info>
          crtp-flow-source-info
        </crtp-flow-source-info>
        <crtp-flow-destination-info>
          crtp-flow-destination-info
        </crtp-flow-destination-info>
        <crtp-flow-type>
          crtp-flow-type
        </crtp-flow-type>
      </crtp-flow-entry>
    </service-crtp-flow-table>
  </crtp-per-interface-flow-table>
</service-crtp-flow-table-information>
```

Description CRTP flow information

<crtp-ip-counter-table>

Usage

```
<crtp-ip-counter-table>
  <crtp-ip-counter-name>
    crtp-ip-counter-name
  </crtp-ip-counter-name>
  <crtp-ip-counter-received>
    crtp-ip-counter-received
  </crtp-ip-counter-received>
  <crtp-ip-counter-transmit>
    crtp-ip-counter-transmit
  </crtp-ip-counter-transmit>
</crtp-ip-counter-table>
```

Description

<crtp-per-interface-flow-table>

Usage

```
<crtp-per-interface-flow-table>
  <interface-name>
    interface-name
  </interface-name>
```

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```
  <service-crtp-flow-table>....</service-crtp-flow-table>
</crtp-per-interface-flow-table>
```

Description CRTP flows sorted by interface

<crtp-per-interface-flow-table>

Usage

```
<service-crtp-flow-table-information>
  <crtp-per-interface-flow-table>
    <interface-name>
      interface-name
    </interface-name>
    <service-crtp-flow-table>....</service-crtp-flow-table>
  </crtp-per-interface-flow-table>
</service-crtp-flow-table-information>
```

Description CRTP flows sorted by interface

<crtp-stats-entry>

Usage

```
<crtp-stats-entry>
  <crtp-compression-ratio>
    crtp-compression-ratio
  </crtp-compression-ratio>
  <crtp-decompression-ratio>
    crtp-decompression-ratio
  </crtp-decompression-ratio>
  <crtp-sessions-rx>
    crtp-sessions-rx
  </crtp-sessions-rx>
  <crtp-sessions-tx>
    crtp-sessions-tx
  </crtp-sessions-tx>
  <crtp-compressed-rx>
    crtp-compressed-rx
  </crtp-compressed-rx>
  <crtp-compressed-tx>
    crtp-compressed-tx
  </crtp-compressed-tx>
  <crtp-discards>
    crtp-discards
  </crtp-discards>
</crtp-stats-entry>
```

Description CRTP statistics

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<drop_counters>

Usage

```
<sfw-stats-service-set-entry>
  <drop_counters>
    <ip-option>
      ip-option
    </ip-option>
    <syn-defense>
      syn-defense
    </syn-defense>
    <nat-ports-exhausted>
      nat-ports-exhausted
    </nat-ports-exhausted>
  </drop_counters>
</sfw-stats-service-set-entry>
```

Description Drop counters (rules or resource exhaustion)

<drop_counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <drop_counters>
        <ip-option>
          ip-option
        </ip-option>
        <syn-defense>
          syn-defense
        </syn-defense>
        <nat-ports-exhausted>
          nat-ports-exhausted
        </nat-ports-exhausted>
      </drop_counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Drop counters (rules or resource exhaustion)

<error-counters>

Usage

```
<sfw-stats-service-set-entry>
  <error-counters>
    <ip-errors>
      ip-errors
    </ip-errors>
    <tcp-errors>
      tcp-errors
```

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```
    </tcp-errors>
    <udp-errors>
     udp-errors
    </udp-errors>
    <icmp-errors>
     icmp-errors
    </icmp-errors>
    <non-ip-packets>
     non-ip-packets
    </non-ip-packets>
    <alg-errors>
     alg-errors
    </alg-errors>
   </error-counters>
  </sfw-stats-service-set-entry>
```

Description Summarized protocol processing errors

<error-counters>

Usage

```
<service-sfw-statistics-information>
 <service-sfw-statistics-entry>
  <sfw-stats-service-set-entry>
   <error-counters>
    <ip-errors>
     ip-errors
    </ip-errors>
    <tcp-errors>
     tcp-errors
    </tcp-errors>
    <udp-errors>
     udp-errors
    </udp-errors>
    <icmp-errors>
     icmp-errors
    </icmp-errors>
    <non-ip-packets>
     non-ip-packets
    </non-ip-packets>
    <alg-errors>
     alg-errors
    </alg-errors>
   </error-counters>
  </sfw-stats-service-set-entry>
 </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Summarized protocol processing errors

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<existing-flow-counters>

Usage

```
<sfw-stats-service-set-entry>
  <existing-flow-counters>
    <existing-flow-accepts>
      existing-flow-accepts
    </existing-flow-accepts>
    <existing-flow-discards>
      existing-flow-discards
    </existing-flow-discards>
    <existing-flow-rejects>
      existing-flow-rejects
    </existing-flow-rejects>
  </existing-flow-counters>
</sfw-stats-service-set-entry>
```

Description Existing flow counters

<existing-flow-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <existing-flow-counters>
        <existing-flow-accepts>
          existing-flow-accepts
        </existing-flow-accepts>
        <existing-flow-discards>
          existing-flow-discards
        </existing-flow-discards>
        <existing-flow-rejects>
          existing-flow-rejects
        </existing-flow-rejects>
      </existing-flow-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Existing flow counters

<fast-update-filters-entry>

Usage

```
<pgcpd-active-configuration>
  <fast-update-filters-entry>
    <max-terms>
      max-terms
    </max-terms>
    <max-term-percentage>
      max-term-percentage
```

```
    </max-term-percentage>
   </fast-update-filters-entry>
</pgcpd-active-configuration>
```

Description Firewall filters limitation

<fast-update-filters-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <fast-update-filters-entry>
      <max-terms>
        max-terms
      </max-terms>
      <max-term-percentage>
        max-term-percentage
      </max-term-percentage>
    </fast-update-filters-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description Firewall filters limitation

<fast-update-filters-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <fast-update-filters-entry>
        <max-terms>
          max-terms
        </max-terms>
        <max-term-percentage>
          max-term-percentage
        </max-term-percentage>
      </fast-update-filters-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description Firewall filters limitation

<fast-update-filters-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <fast-update-filters-entry>
      <max-terms>
```


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```
            max-terms
           </max-terms>
           <max-term-percentage>
            max-term-percentage
           </max-term-percentage>
          </fast-update-filters-entry>
         </gateway-entry>
        </service-pgcp-statistics-gateway>
```

Description Firewall filters limitation

<fast-update-filters-entry>

Usage

```
<service-pgcp-terminations>
 <gateway-entry>
  <fast-update-filters-entry>
   <max-terms>
    max-terms
   </max-terms>
   <max-term-percentage>
    max-term-percentage
   </max-term-percentage>
  </fast-update-filters-entry>
 </gateway-entry>
</service-pgcp-terminations>
```

Description Firewall filters limitation

<fast-update-filters-entry>

Usage

```
<service-pgcp-gates>
 <gateway-entry>
  <fast-update-filters-entry>
   <max-terms>
    max-terms
   </max-terms>
   <max-term-percentage>
    max-term-percentage
   </max-term-percentage>
  </fast-update-filters-entry>
 </gateway-entry>
</service-pgcp-gates>
```

Description Firewall filters limitation

<firewall-entry>

Usage

```
<pgcpd-active-configuration>
```

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```
<firewall-entry>
  <connection-status>
    connection-status
  </connection-status>
  <number-of-terms>
    number-of-terms
  </number-of-terms>
  <number-of-filters>
    number-of-filters
  </number-of-filters>
</firewall-entry>
</pgcpd-active-configuration>
```

Description

<firewall-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <firewall-entry>
      <connection-status>
        connection-status
      </connection-status>
      <number-of-terms>
        number-of-terms
      </number-of-terms>
      <number-of-filters>
        number-of-filters
      </number-of-filters>
    </firewall-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<flow-analysis-num-flows-sec-entry>

Usage

```
<flow-analysis-num-flows-sec-entry>
  <flow-operation>
    flow-operation
  </flow-operation>
  <num-flows-sec-50000-plus>
    num-flows-sec-50000-plus
  </num-flows-sec-50000-plus>
  <num-flows-sec-40000-50000>
    num-flows-sec-40000-50000
  </num-flows-sec-40000-50000>
  <num-flows-sec-30000-40000>
    num-flows-sec-30000-40000
  </num-flows-sec-30000-40000>
  <num-flows-sec-20000-30000>
    num-flows-sec-20000-30000
```


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```
</num-flows-sec-20000-30000>
<num-flows-sec-10000-20000>
  num-flows-sec-10000-20000
</num-flows-sec-10000-20000>
<num-flows-sec-1000-10000>
  num-flows-sec-1000-10000
</num-flows-sec-1000-10000>
<num-flows-sec-1000-minus>
  num-flows-sec-1000-minus
</num-flows-sec-1000-minus>
</flow-analysis-num-flows-sec-entry>
```

Description Flow Rate Statistics

<flow-analysis-num-flows-sec-entry>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-num-flows-sec-entry>
    <flow-operation>
      flow-operation
    </flow-operation>
    <num-flows-sec-50000-plus>
      num-flows-sec-50000-plus
    </num-flows-sec-50000-plus>
    <num-flows-sec-40000-50000>
      num-flows-sec-40000-50000
    </num-flows-sec-40000-50000>
    <num-flows-sec-30000-40000>
      num-flows-sec-30000-40000
    </num-flows-sec-30000-40000>
    <num-flows-sec-20000-30000>
      num-flows-sec-20000-30000
    </num-flows-sec-20000-30000>
    <num-flows-sec-10000-20000>
      num-flows-sec-10000-20000
    </num-flows-sec-10000-20000>
    <num-flows-sec-1000-10000>
      num-flows-sec-1000-10000
    </num-flows-sec-1000-10000>
    <num-flows-sec-1000-minus>
      num-flows-sec-1000-minus
    </num-flows-sec-1000-minus>
  </flow-analysis-num-flows-sec-entry>
</service-flow-analysis-information>
```

Description Flow Rate Statistics

<flow-analysis-num-flows-sec-samples-entry>

Usage

```
<flow-analysis-num-flows-sec-samples-entry>
```

```
<num-flows-sec-samples>
  num-flows-sec-samples
</num-flows-sec-samples>
</flow-analysis-num-flows-sec-samples-entry>
```

Description

<flow-analysis-num-flows-sec-samples-entry>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-num-flows-sec-samples-entry>
    <num-flows-sec-samples>
      num-flows-sec-samples
    </num-flows-sec-samples>
  </flow-analysis-num-flows-sec-samples-entry>
</service-flow-analysis-information>
```

Description

<flow-analysis-protocol-lifetime-entry>

Usage

```
<flow-analysis-protocol-lifetime-entry>
  <flow-lifetime-240s-plus>
    flow-lifetime-240s-plus
  </flow-lifetime-240s-plus>
  <udp-flow-lifetime-240s-plus>
    udp-flow-lifetime-240s-plus
  </udp-flow-lifetime-240s-plus>
  <http-flow-lifetime-240s-plus>
    http-flow-lifetime-240s-plus
  </http-flow-lifetime-240s-plus>
  <flow-lifetime-120s-240s>
    flow-lifetime-120s-240s
  </flow-lifetime-120s-240s>
  <udp-flow-lifetime-120s-240s>
    udp-flow-lifetime-120s-240s
  </udp-flow-lifetime-120s-240s>
  <flow-lifetime-60s-120s>
    flow-lifetime-60s-120s
  </flow-lifetime-60s-120s>
  <udp-flow-lifetime-60s-120s>
    udp-flow-lifetime-60s-120s
  </udp-flow-lifetime-60s-120s>
  <flow-lifetime-30s-60s>
    flow-lifetime-30s-60s
  </flow-lifetime-30s-60s>
  <udp-flow-lifetime-30s-60s>
    udp-flow-lifetime-30s-60s
  </udp-flow-lifetime-30s-60s>
  <flow-lifetime-15s-30s>
    flow-lifetime-15s-30s
  </flow-lifetime-15s-30s>
```


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```
<udp-flow-lifetime-15s-30s>
  udp-flow-lifetime-15s-30s
</udp-flow-lifetime-15s-30s>
<flow-lifetime-5s-15s>
  flow-lifetime-5s-15s
</flow-lifetime-5s-15s>
<udp-flow-lifetime-5s-15s>
  udp-flow-lifetime-5s-15s
</udp-flow-lifetime-5s-15s>
<flow-lifetime-1s-5s>
  flow-lifetime-1s-5s
</flow-lifetime-1s-5s>
<udp-flow-lifetime-1s-5s>
  udp-flow-lifetime-1s-5s
</udp-flow-lifetime-1s-5s>
<flow-lifetime-1s-minus>
  flow-lifetime-1s-minus
</flow-lifetime-1s-minus>
<udp-flow-lifetime-1s-minus>
  udp-flow-lifetime-1s-minus
</udp-flow-lifetime-1s-minus>
</flow-analysis-protocol-lifetime-entry>
```

Description Flow Analysis Protocol Lifetime Statistics

<flow-analysis-protocol-lifetime-entry>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-protocol-lifetime-entry>
    <flow-lifetime-240s-plus>
      flow-lifetime-240s-plus
    </flow-lifetime-240s-plus>
    <udp-flow-lifetime-240s-plus>
      udp-flow-lifetime-240s-plus
    </udp-flow-lifetime-240s-plus>
    <http-flow-lifetime-240s-plus>
      http-flow-lifetime-240s-plus
    </http-flow-lifetime-240s-plus>
    <flow-lifetime-120s-240s>
      flow-lifetime-120s-240s
    </flow-lifetime-120s-240s>
    <udp-flow-lifetime-120s-240s>
      udp-flow-lifetime-120s-240s
    </udp-flow-lifetime-120s-240s>
    <flow-lifetime-60s-120s>
      flow-lifetime-60s-120s
    </flow-lifetime-60s-120s>
    <udp-flow-lifetime-60s-120s>
      udp-flow-lifetime-60s-120s
    </udp-flow-lifetime-60s-120s>
    <flow-lifetime-30s-60s>
      flow-lifetime-30s-60s
    </flow-lifetime-30s-60s>
```

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```
<udp-flow-lifetime-30s-60s>
  udp-flow-lifetime-30s-60s
</udp-flow-lifetime-30s-60s>
<flow-lifetime-15s-30s>
  flow-lifetime-15s-30s
</flow-lifetime-15s-30s>
<udp-flow-lifetime-15s-30s>
  udp-flow-lifetime-15s-30s
</udp-flow-lifetime-15s-30s>
<flow-lifetime-5s-15s>
  flow-lifetime-5s-15s
</flow-lifetime-5s-15s>
<udp-flow-lifetime-5s-15s>
  udp-flow-lifetime-5s-15s
</udp-flow-lifetime-5s-15s>
<flow-lifetime-1s-5s>
  flow-lifetime-1s-5s
</flow-lifetime-1s-5s>
<udp-flow-lifetime-1s-5s>
  udp-flow-lifetime-1s-5s
</udp-flow-lifetime-1s-5s>
<flow-lifetime-1s-minus>
  flow-lifetime-1s-minus
</flow-lifetime-1s-minus>
<udp-flow-lifetime-1s-minus>
  udp-flow-lifetime-1s-minus
</udp-flow-lifetime-1s-minus>
</flow-analysis-protocol-lifetime-entry>
</service-flow-analysis-information>
```

Description Flow Analysis Protocol Lifetime Statistics

<flow-analysis-statistics-entry>

Usage

```
<flow-analysis-statistics-entry>
  <num-total-flows-active>
    num-total-flows-active
  </num-total-flows-active>
  <num-total-tcp-flows-active>
    num-total-tcp-flows-active
  </num-total-tcp-flows-active>
  <num-total-udp-flows-active>
    num-total-udp-flows-active
  </num-total-udp-flows-active>
  <num-total-other-flows-active>
    num-total-other-flows-active
  </num-total-other-flows-active>
  <num-created-flows-per-sec>
    num-created-flows-per-sec
  </num-created-flows-per-sec>
  <num-deleted-flows-per-sec>
    num-deleted-flows-per-sec
  </num-deleted-flows-per-sec>
```


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```
<peak-total-flows-active>
  peak-total-flows-active
</peak-total-flows-active>
<peak-total-tcp-flows-active>
  peak-total-tcp-flows-active
</peak-total-tcp-flows-active>
<peak-total-udp-flows-active>
  peak-total-udp-flows-active
</peak-total-udp-flows-active>
<peak-total-other-flows-active>
  peak-total-other-flows-active
</peak-total-other-flows-active>
<peak-created-flows-per-second>
  peak-created-flows-per-second
</peak-created-flows-per-second>
<peak-deleted-flows-per-second>
  peak-deleted-flows-per-second
</peak-deleted-flows-per-second>
<cul-mov-avg-http-flow-lifetime>
  cul-mov-avg-http-flow-lifetime
</cul-mov-avg-http-flow-lifetime>
<pkts-received>
  pkts-received
</pkts-received>
<pkts-transmitted>
  pkts-transmitted
</pkts-transmitted>
<slow-path-forward>
  slow-path-forward
</slow-path-forward>
<slow-path-discard>
  slow-path-discard
</slow-path-discard>
</flow-analysis-statistics-entry>
```

Description Flow Analysis Statistics

<flow-analysis-statistics-entry>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-statistics-entry>
    <num-total-flows-active>
      num-total-flows-active
    </num-total-flows-active>
    <num-total-tcp-flows-active>
      num-total-tcp-flows-active
    </num-total-tcp-flows-active>
    <num-total-udp-flows-active>
      num-total-udp-flows-active
    </num-total-udp-flows-active>
    <num-total-other-flows-active>
      num-total-other-flows-active
    </num-total-other-flows-active>
```

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```
<num-created-flows-per-sec>
  num-created-flows-per-sec
</num-created-flows-per-sec>
<num-deleted-flows-per-sec>
  num-deleted-flows-per-sec
</num-deleted-flows-per-sec>
<peak-total-flows-active>
  peak-total-flows-active
</peak-total-flows-active>
<peak-total-tcp-flows-active>
  peak-total-tcp-flows-active
</peak-total-tcp-flows-active>
<peak-total-udp-flows-active>
  peak-total-udp-flows-active
</peak-total-udp-flows-active>
<peak-total-other-flows-active>
  peak-total-other-flows-active
</peak-total-other-flows-active>
<peak-created-flows-per-second>
  peak-created-flows-per-second
</peak-created-flows-per-second>
<peak-deleted-flows-per-second>
  peak-deleted-flows-per-second
</peak-deleted-flows-per-second>
<cul-mov-avg-http-flow-lifetime>
  cul-mov-avg-http-flow-lifetime
</cul-mov-avg-http-flow-lifetime>
<pkts-received>
  pkts-received
</pkts-received>
<pkts-transmitted>
  pkts-transmitted
</pkts-transmitted>
<slow-path-forward>
  slow-path-forward
</slow-path-forward>
<slow-path-discard>
  slow-path-discard
</slow-path-discard>
</flow-analysis-statistics-entry>
</service-flow-analysis-information>
```

Description Flow Analysis Statistics

<flow-analysis-statistics-pic-info>

Usage

```
<flow-analysis-statistics-pic-info>
  <pic-name>
    pic-name
  </pic-name>
</flow-analysis-statistics-pic-info>
```


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Description

<flow-analysis-statistics-pic-info>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-statistics-pic-info>
    <pic-name>
      pic-name
    </pic-name>
  </flow-analysis-statistics-pic-info>
</service-flow-analysis-information>
```

Description

<flow-analysis-statistics-pic-info>

Usage

```
<service-softwire-6rd-statistics-information>
  <flow-analysis-statistics-pic-info>
    <pic-name>
      pic-name
    </pic-name>
  </flow-analysis-statistics-pic-info>
</service-softwire-6rd-statistics-information>
```

Description

<flow-analysis-statistics-pic-info>

Usage

```
<service-softwire-dslite-statistics-information>
  <flow-analysis-statistics-pic-info>
    <pic-name>
      pic-name
    </pic-name>
  </flow-analysis-statistics-pic-info>
</service-softwire-dslite-statistics-information>
```

Description

<flow-table-statistics>

Usage

```
<flow-table-statistics>
  <interface-name>
    interface-name
  </interface-name>
  <flow-tables>
    flow-tables
  </flow-tables>
  <flow>
    flow
```

```
</flow>
<flow-peak>
  flow-peak
</flow-peak>
<flow-tcp>
  flow-tcp
</flow-tcp>
<flow-tcp-peak>
  flow-tcp-peak
</flow-tcp-peak>
<flow-udp>
  flow-udp
</flow-udp>
<flow-udp-peak>
  flow-udp-peak
</flow-udp-peak>
<flow-created>
  flow-created
</flow-created>
<flow-freed>
  flow-freed
</flow-freed>
<flow-freed-idle>
  flow-freed-idle
</flow-freed-idle>
<flow-tcp-created>
  flow-tcp-created
</flow-tcp-created>
<flow-tcp-freed>
  flow-tcp-freed
</flow-tcp-freed>
<flow-tcp-freed-idle>
  flow-tcp-freed-idle
</flow-tcp-freed-idle>
<flow-udp-created>
  flow-udp-created
</flow-udp-created>
<flow-udp-freed>
  flow-udp-freed
</flow-udp-freed>
<flow-udp-freed-idle>
  flow-udp-freed-idle
</flow-udp-freed-idle>
<flow-packets-processed>
  flow-packets-processed
</flow-packets-processed>
<flow-packets-errored>
  flow-packets-errored
</flow-packets-errored>
<flow-bytes-processed>
  flow-bytes-processed
</flow-bytes-processed>
<flow-byte-errored>
  flow-byte-errored
</flow-byte-errored>
<flow-tcp-packets-processed>
```


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```
  flow-tcp-packets-processed
 </flow-tcp-packets-processed>
 <flow-tcp-packets-errored>
  flow-tcp-packets-errored
 </flow-tcp-packets-errored>
 <flow-tcp-packets-errored-bad-flow>
  flow-tcp-packets-errored-bad-flow
 </flow-tcp-packets-errored-bad-flow>
 <flow-tcp-bytes-processed>
  flow-tcp-bytes-processed
 </flow-tcp-bytes-processed>
 <flow-tcp-bytes-errored>
  flow-tcp-bytes-errored
 </flow-tcp-bytes-errored>
 <flow-udp-packets-processed>
  flow-udp-packets-processed
 </flow-udp-packets-processed>
 <flow-udp-packets-errored>
  flow-udp-packets-errored
 </flow-udp-packets-errored>
 <flow-udp-packets-errored-bad-flow>
  flow-udp-packets-errored-bad-flow
 </flow-udp-packets-errored-bad-flow>
 <flow-udp-bytes-processed>
  flow-udp-bytes-processed
 </flow-udp-bytes-processed>
 <flow-udp-bytes-errored>
  flow-udp-bytes-errored
 </flow-udp-bytes-errored>
 <flow-icmp-packets-processed>
  flow-icmp-packets-processed
 </flow-icmp-packets-processed>
 <flow-icmp-packets-errored>
  flow-icmp-packets-errored
 </flow-icmp-packets-errored>
 <flow-icmp-packets-errored-bad-flow>
  flow-icmp-packets-errored-bad-flow
 </flow-icmp-packets-errored-bad-flow>
 <flow-icmp-bytes-processed>
  flow-icmp-bytes-processed
 </flow-icmp-bytes-processed>
 <flow-icmp-bytes-errored>
  flow-icmp-bytes-errored
 </flow-icmp-bytes-errored>
</flow-table-statistics>
```

Description Statistics for one or more flow tables

<flow-table-statistics>

Usage

```
<flow-table-statistics-information>
 <flow-table-statistics>
  <interface-name>
```

```
  interface-name
</interface-name>
<flow-tables>
  flow-tables
</flow-tables>
<flow>
  flow
</flow>
<flow-peak>
  flow-peak
</flow-peak>
<flow-tcp>
  flow-tcp
</flow-tcp>
<flow-tcp-peak>
  flow-tcp-peak
</flow-tcp-peak>
<flow-udp>
  flow-udp
</flow-udp>
<flow-udp-peak>
  flow-udp-peak
</flow-udp-peak>
<flow-created>
  flow-created
</flow-created>
<flow-freed>
  flow-freed
</flow-freed>
<flow-freed-idle>
  flow-freed-idle
</flow-freed-idle>
<flow-tcp-created>
  flow-tcp-created
</flow-tcp-created>
<flow-tcp-freed>
  flow-tcp-freed
</flow-tcp-freed>
<flow-tcp-freed-idle>
  flow-tcp-freed-idle
</flow-tcp-freed-idle>
<flow-udp-created>
  flow-udp-created
</flow-udp-created>
<flow-udp-freed>
  flow-udp-freed
</flow-udp-freed>
<flow-udp-freed-idle>
  flow-udp-freed-idle
</flow-udp-freed-idle>
<flow-packets-processed>
  flow-packets-processed
</flow-packets-processed>
<flow-packets-errored>
  flow-packets-errored
</flow-packets-errored>
```


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```
    <flow-bytes-processed>
      flow-bytes-processed
    </flow-bytes-processed>
    <flow-byte-errored>
      flow-byte-errored
    </flow-byte-errored>
    <flow-tcp-packets-processed>
      flow-tcp-packets-processed
    </flow-tcp-packets-processed>
    <flow-tcp-packets-errored>
      flow-tcp-packets-errored
    </flow-tcp-packets-errored>
    <flow-tcp-packets-errored-bad-flow>
      flow-tcp-packets-errored-bad-flow
    </flow-tcp-packets-errored-bad-flow>
    <flow-tcp-bytes-processed>
      flow-tcp-bytes-processed
    </flow-tcp-bytes-processed>
    <flow-tcp-bytes-errored>
      flow-tcp-bytes-errored
    </flow-tcp-bytes-errored>
    <flow-udp-packets-processed>
      flow-udp-packets-processed
    </flow-udp-packets-processed>
    <flow-udp-packets-errored>
      flow-udp-packets-errored
    </flow-udp-packets-errored>
    <flow-udp-packets-errored-bad-flow>
      flow-udp-packets-errored-bad-flow
    </flow-udp-packets-errored-bad-flow>
    <flow-udp-bytes-processed>
      flow-udp-bytes-processed
    </flow-udp-bytes-processed>
    <flow-udp-bytes-errored>
      flow-udp-bytes-errored
    </flow-udp-bytes-errored>
    <flow-icmp-packets-processed>
      flow-icmp-packets-processed
    </flow-icmp-packets-processed>
    <flow-icmp-packets-errored>
      flow-icmp-packets-errored
    </flow-icmp-packets-errored>
    <flow-icmp-packets-errored-bad-flow>
      flow-icmp-packets-errored-bad-flow
    </flow-icmp-packets-errored-bad-flow>
    <flow-icmp-bytes-processed>
      flow-icmp-bytes-processed
    </flow-icmp-bytes-processed>
    <flow-icmp-bytes-errored>
      flow-icmp-bytes-errored
    </flow-icmp-bytes-errored>
  </flow-table-statistics>
</flow-table-statistics-information>
```

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Description Statistics for one or more flow tables

<flow-table-statistics-information>

Usage

```
<flow-table-statistics-information>
  <flow-table-statistics>....</flow-table-statistics>
</flow-table-statistics-information>
```

Description

<fragmenter-entries>

Usage

```
<lsqinfo-cpu-usage-information>
  <fragmenter-entries>
    <fragmenter-entry>....</fragmenter-entry>
  </fragmenter-entries>
</lsqinfo-cpu-usage-information>
```

Description

<fragmenter-entry>

Usage

```
<lsqinfo-cpu-usage-information>
  <fragmenter-entries>
    <fragmenter-entry>
      <cpu-name>
        cpu-name
      </cpu-name>
      <idle>
        idle
      </idle>
      <timer>
        timer
      </timer>
      <system>
        system
      </system>
      <freeback>
        freeback
      </freeback>
      <drop>
        drop
      </drop>
      <fragmentation>
        fragmentation
      </fragmentation>
      <reassembly>
        reassembly
      </reassembly>
    </fragmenter-entry>
```


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```
  </fragmenter-entries>
</lsqinfo-cpu-usage-information>
```

Description Fragmentation CPU usage information

<gate-fuf-statistics-information>

Usage

```
<gate-fuf-statistics-information>
  <gate-fuf-policer-drop-count>
    gate-fuf-policer-drop-count
  </gate-fuf-policer-drop-count>
</gate-fuf-statistics-information>
```

Description FUF statistics

<gate-fuf-statistics-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-fuf-statistics-information>
    <gate-fuf-policer-drop-count>
      gate-fuf-policer-drop-count
    </gate-fuf-policer-drop-count>
  </gate-fuf-statistics-information>
</service-pgcp-gate-entry-information>
```

Description FUF statistics

<gate-fuf-statistics-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-fuf-statistics-information>
      <gate-fuf-policer-drop-count>
        gate-fuf-policer-drop-count
      </gate-fuf-policer-drop-count>
    </gate-fuf-statistics-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description FUF statistics

<gate-rtcp-extended-burst-metrics-report>

Usage

```
<gate-rtcp-extended-information>
  <gate-rtcp-extended-burst-metrics-report>
```

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```
    <minimum-gap-threshold>
      minimum-gap-threshold
    </minimum-gap-threshold>
    <burst-loss-density>
      burst-loss-density
    </burst-loss-density>
    <burst-duration>
      burst-duration
    </burst-duration>
    <gap-loss-density>
      gap-loss-density
    </gap-loss-density>
    <gap-duration>
      gap-duration
    </gap-duration>
  </gate-rtcp-extended-burst-metrics-report>
</gate-rtcp-extended-information>
```

Description

<gate-rtcp-extended-burst-metrics-report>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-extended-information>
    <gate-rtcp-extended-burst-metrics-report>
      <minimum-gap-threshold>
        minimum-gap-threshold
      </minimum-gap-threshold>
      <burst-loss-density>
        burst-loss-density
      </burst-loss-density>
      <burst-duration>
        burst-duration
      </burst-duration>
      <gap-loss-density>
        gap-loss-density
      </gap-loss-density>
      <gap-duration>
        gap-duration
      </gap-duration>
    </gate-rtcp-extended-burst-metrics-report>
  </gate-rtcp-extended-information>
</gate-rtcp-information>
```

Description

<gate-rtcp-extended-burst-metrics-report>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-extended-information>
      <gate-rtcp-extended-burst-metrics-report>
```


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```
        <minimum-gap-threshold>
          minimum-gap-threshold
        </minimum-gap-threshold>
        <burst-loss-density>
          burst-loss-density
        </burst-loss-density>
        <burst-duration>
          burst-duration
        </burst-duration>
        <gap-loss-density>
          gap-loss-density
        </gap-loss-density>
        <gap-duration>
          gap-duration
        </gap-duration>
      </gate-rtcp-extended-burst-metrics-report>
    </gate-rtcp-extended-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description

<gate-rtcp-extended-burst-metrics-report>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-extended-information>
        <gate-rtcp-extended-burst-metrics-report>
          <minimum-gap-threshold>
            minimum-gap-threshold
          </minimum-gap-threshold>
          <burst-loss-density>
            burst-loss-density
          </burst-loss-density>
          <burst-duration>
            burst-duration
          </burst-duration>
          <gap-loss-density>
            gap-loss-density
          </gap-loss-density>
          <gap-duration>
            gap-duration
          </gap-duration>
        </gate-rtcp-extended-burst-metrics-report>
      </gate-rtcp-extended-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

<gate-rtcp-extended-information>

Usage

```
<gate-rtcp-extended-information>
  <gate-rtcp-extended-report>....</gate-rtcp-extended-report>

<gate-rtcp-extended-burst-metrics-report>....</gate-rtcp-extended-burst-metrics-report>

</gate-rtcp-extended-information>
```

Description RTCP extended report

<gate-rtcp-extended-information>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-extended-information>
    <gate-rtcp-extended-report>....</gate-rtcp-extended-report>

<gate-rtcp-extended-burst-metrics-report>....</gate-rtcp-extended-burst-metrics-report>

  </gate-rtcp-extended-information>
</gate-rtcp-information>
```

Description RTCP extended report

<gate-rtcp-extended-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-extended-information>
      <gate-rtcp-extended-report>....</gate-rtcp-extended-report>

<gate-rtcp-extended-burst-metrics-report>....</gate-rtcp-extended-burst-metrics-report>

    </gate-rtcp-extended-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description RTCP extended report

<gate-rtcp-extended-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-extended-information>
        <gate-rtcp-extended-report>....</gate-rtcp-extended-report>
```


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```
<gate-rtcp-extended-burst-metrics-report>....</gate-rtcp-extended-burst-metrics-report>

      </gate-rtcp-extended-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description RTCP extended report

<gate-rtcp-extended-report>

Usage

```
<gate-rtcp-extended-information>
  <gate-rtcp-extended-report>
    <rtcp-xr-ssrc>
      rtcp-xr-ssrc
    </rtcp-xr-ssrc>
    <packet-loss-concealment-type>
      packet-loss-concealment-type
    </packet-loss-concealment-type>
    <network-packet-loss-rate>
      network-packet-loss-rate
    </network-packet-loss-rate>
    <jitter-buffer-discard-rate>
      jitter-buffer-discard-rate
    </jitter-buffer-discard-rate>
    <rtcp-round-trip-delay>
      rtcp-round-trip-delay
    </rtcp-round-trip-delay>
    <end-system-delay>
      end-system-delay
    </end-system-delay>
    <signal-level>
      signal-level
    </signal-level>
    <noise-level>
      noise-level
    </noise-level>
    <residual-echo-return-loss>
      residual-echo-return-loss
    </residual-echo-return-loss>
    <r-factor>
      r-factor
    </r-factor>
    <external-r-factor>
      external-r-factor
    </external-r-factor>
    <estimated-moslq>
      estimated-moslq
    </estimated-moslq>
    <estimated-moscq>
      estimated-moscq
    </estimated-moscq>
```

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```
  </gate-rtcp-extended-report>
</gate-rtcp-extended-information>
```

Description

<gate-rtcp-extended-report>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-extended-information>
    <gate-rtcp-extended-report>
      <rtcp-xr-ssrc>
        rtcp-xr-ssrc
      </rtcp-xr-ssrc>
      <packet-loss-concealment-type>
        packet-loss-concealment-type
      </packet-loss-concealment-type>
      <network-packet-loss-rate>
        network-packet-loss-rate
      </network-packet-loss-rate>
      <jitter-buffer-discard-rate>
        jitter-buffer-discard-rate
      </jitter-buffer-discard-rate>
      <rtcp-round-trip-delay>
        rtcp-round-trip-delay
      </rtcp-round-trip-delay>
      <end-system-delay>
        end-system-delay
      </end-system-delay>
      <signal-level>
        signal-level
      </signal-level>
      <noise-level>
        noise-level
      </noise-level>
      <residual-echo-return-loss>
        residual-echo-return-loss
      </residual-echo-return-loss>
      <r-factor>
        r-factor
      </r-factor>
      <external-r-factor>
        external-r-factor
      </external-r-factor>
      <estimated-moslq>
        estimated-moslq
      </estimated-moslq>
      <estimated-moscq>
        estimated-moscq
      </estimated-moscq>
    </gate-rtcp-extended-report>
  </gate-rtcp-extended-information>
</gate-rtcp-information>
```


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Description

<gate-rtcp-extended-report>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-extended-information>
      <gate-rtcp-extended-report>
        <rtcp-xr-ssrc>
          rtcp-xr-ssrc
        </rtcp-xr-ssrc>
        <packet-loss-concealment-type>
          packet-loss-concealment-type
        </packet-loss-concealment-type>
        <network-packet-loss-rate>
          network-packet-loss-rate
        </network-packet-loss-rate>
        <jitter-buffer-discard-rate>
          jitter-buffer-discard-rate
        </jitter-buffer-discard-rate>
        <rtcp-round-trip-delay>
          rtcp-round-trip-delay
        </rtcp-round-trip-delay>
        <end-system-delay>
          end-system-delay
        </end-system-delay>
        <signal-level>
          signal-level
        </signal-level>
        <noise-level>
          noise-level
        </noise-level>
        <residual-echo-return-loss>
          residual-echo-return-loss
        </residual-echo-return-loss>
        <r-factor>
          r-factor
        </r-factor>
        <external-r-factor>
          external-r-factor
        </external-r-factor>
        <estimated-moslq>
          estimated-moslq
        </estimated-moslq>
        <estimated-moscq>
          estimated-moscq
        </estimated-moscq>
      </gate-rtcp-extended-report>
    </gate-rtcp-extended-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description

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<gate-rtcp-extended-report>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-extended-information>
        <gate-rtcp-extended-report>
          <rtcp-xr-ssrc>
            rtcp-xr-ssrc
          </rtcp-xr-ssrc>
          <packet-loss-concealment-type>
            packet-loss-concealment-type
          </packet-loss-concealment-type>
          <network-packet-loss-rate>
            network-packet-loss-rate
          </network-packet-loss-rate>
          <jitter-buffer-discard-rate>
            jitter-buffer-discard-rate
          </jitter-buffer-discard-rate>
          <rtcp-round-trip-delay>
            rtcp-round-trip-delay
          </rtcp-round-trip-delay>
          <end-system-delay>
            end-system-delay
          </end-system-delay>
          <signal-level>
            signal-level
          </signal-level>
          <noise-level>
            noise-level
          </noise-level>
          <residual-echo-return-loss>
            residual-echo-return-loss
          </residual-echo-return-loss>
          <r-factor>
            r-factor
          </r-factor>
          <external-r-factor>
            external-r-factor
          </external-r-factor>
          <estimated-moslq>
            estimated-moslq
          </estimated-moslq>
          <estimated-moscq>
            estimated-moscq
          </estimated-moscq>
        </gate-rtcp-extended-report>
      </gate-rtcp-extended-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

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<gate-rtcp-information>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-sender-information>....</gate-rtcp-sender-information>
  <gate-rtcp-receiver-information>....</gate-rtcp-receiver-information>
  <gate-rtcp-extended-information>....</gate-rtcp-extended-information>
</gate-rtcp-information>
```

Description

<gate-rtcp-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-sender-information>....</gate-rtcp-sender-information>
    <gate-rtcp-receiver-information>....</gate-rtcp-receiver-information>
    <gate-rtcp-extended-information>....</gate-rtcp-extended-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description

<gate-rtcp-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-sender-information>....</gate-rtcp-sender-information>
      <gate-rtcp-receiver-information>....</gate-rtcp-receiver-information>
      <gate-rtcp-extended-information>....</gate-rtcp-extended-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

<gate-rtcp-receiver-entry>

Usage

```
<gate-rtcp-receiver-information>
  <gate-rtcp-receiver-entry>
    <gate-rtcp-received-ssrc>
      gate-rtcp-received-ssrc
    </gate-rtcp-received-ssrc>
    <gate-rtcp-receiver-lost-pkts>
      gate-rtcp-receiver-lost-pkts
    </gate-rtcp-receiver-lost-pkts>
    <gate-rtcp-receiver-lost-pkt-fraction>
      gate-rtcp-receiver-lost-pkt-fraction
```

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```
    </gate-rtcp-receiver-lost-pkt-fraction>
    <gate-rtcp-receiver-jitter>
     gate-rtcp-receiver-jitter
    </gate-rtcp-receiver-jitter>
   </gate-rtcp-receiver-entry>
</gate-rtcp-receiver-information>
```

Description

<gate-rtcp-receiver-entry>

Usage

```
<gate-rtcp-information>
 <gate-rtcp-receiver-information>
  <gate-rtcp-receiver-entry>
   <gate-rtcp-received-ssrc>
    gate-rtcp-received-ssrc
   </gate-rtcp-received-ssrc>
   <gate-rtcp-receiver-lost-pkts>
    gate-rtcp-receiver-lost-pkts
   </gate-rtcp-receiver-lost-pkts>
   <gate-rtcp-receiver-lost-pkt-fraction>
    gate-rtcp-receiver-lost-pkt-fraction
   </gate-rtcp-receiver-lost-pkt-fraction>
   <gate-rtcp-receiver-jitter>
    gate-rtcp-receiver-jitter
   </gate-rtcp-receiver-jitter>
  </gate-rtcp-receiver-entry>
 </gate-rtcp-receiver-information>
</gate-rtcp-information>
```

Description

<gate-rtcp-receiver-entry>

Usage

```
<service-pgcp-gate-entry-information>
 <gate-rtcp-information>
  <gate-rtcp-receiver-information>
   <gate-rtcp-receiver-entry>
    <gate-rtcp-received-ssrc>
     gate-rtcp-received-ssrc
    </gate-rtcp-received-ssrc>
    <gate-rtcp-receiver-lost-pkts>
     gate-rtcp-receiver-lost-pkts
    </gate-rtcp-receiver-lost-pkts>
    <gate-rtcp-receiver-lost-pkt-fraction>
     gate-rtcp-receiver-lost-pkt-fraction
    </gate-rtcp-receiver-lost-pkt-fraction>
    <gate-rtcp-receiver-jitter>
     gate-rtcp-receiver-jitter
    </gate-rtcp-receiver-jitter>
   </gate-rtcp-receiver-entry>
  </gate-rtcp-receiver-information>
```


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```
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description

<gate-rtcp-receiver-entry>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-receiver-information>
        <gate-rtcp-receiver-entry>
          <gate-rtcp-received-ssrc>
            gate-rtcp-received-ssrc
          </gate-rtcp-received-ssrc>
          <gate-rtcp-receiver-lost-pkts>
            gate-rtcp-receiver-lost-pkts
          </gate-rtcp-receiver-lost-pkts>
          <gate-rtcp-receiver-lost-pkt-fraction>
            gate-rtcp-receiver-lost-pkt-fraction
          </gate-rtcp-receiver-lost-pkt-fraction>
          <gate-rtcp-receiver-jitter>
            gate-rtcp-receiver-jitter
          </gate-rtcp-receiver-jitter>
        </gate-rtcp-receiver-entry>
      </gate-rtcp-receiver-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

<gate-rtcp-receiver-information>

Usage

```
<gate-rtcp-receiver-information>
  <gate-rtcp-receiver-entry>....</gate-rtcp-receiver-entry>
</gate-rtcp-receiver-information>
```

Description RTCP receiver reports

<gate-rtcp-receiver-information>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-receiver-information>
    <gate-rtcp-receiver-entry>....</gate-rtcp-receiver-entry>
  </gate-rtcp-receiver-information>
</gate-rtcp-information>
```

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Description RTCP receiver reports

<gate-rtcp-receiver-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-receiver-information>
      <gate-rtcp-receiver-entry>....</gate-rtcp-receiver-entry>
    </gate-rtcp-receiver-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description RTCP receiver reports

<gate-rtcp-receiver-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
      <gate-rtcp-receiver-information>
        <gate-rtcp-receiver-entry>....</gate-rtcp-receiver-entry>
      </gate-rtcp-receiver-information>
    </gate-rtcp-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description RTCP receiver reports

<gate-rtcp-sender-information>

Usage

```
<gate-rtcp-sender-information>
  <gate-rtcp-sender-ssrc>
    gate-rtcp-sender-ssrc
  </gate-rtcp-sender-ssrc>
  <gate-rtcp-sender-octets>
    gate-rtcp-sender-octets
  </gate-rtcp-sender-octets>
  <gate-rtcp-sender-pkts>
    gate-rtcp-sender-pkts
  </gate-rtcp-sender-pkts>
  <gate-rtcp-invalid-pkts>
    gate-rtcp-invalid-pkts
  </gate-rtcp-invalid-pkts>
</gate-rtcp-sender-information>
```

Description RTCP statistcs

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<gate-rtcp-sender-information>

Usage

```
<gate-rtcp-information>
  <gate-rtcp-sender-information>
    <gate-rtcp-sender-ssrc>
      gate-rtcp-sender-ssrc
    </gate-rtcp-sender-ssrc>
    <gate-rtcp-sender-octets>
      gate-rtcp-sender-octets
    </gate-rtcp-sender-octets>
    <gate-rtcp-sender-pkts>
      gate-rtcp-sender-pkts
    </gate-rtcp-sender-pkts>
    <gate-rtcp-invalid-pkts>
      gate-rtcp-invalid-pkts
    </gate-rtcp-invalid-pkts>
  </gate-rtcp-sender-information>
</gate-rtcp-information>
```

Description RTCP statistcs

<gate-rtcp-sender-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-rtcp-information>
    <gate-rtcp-sender-information>
      <gate-rtcp-sender-ssrc>
        gate-rtcp-sender-ssrc
      </gate-rtcp-sender-ssrc>
      <gate-rtcp-sender-octets>
        gate-rtcp-sender-octets
      </gate-rtcp-sender-octets>
      <gate-rtcp-sender-pkts>
        gate-rtcp-sender-pkts
      </gate-rtcp-sender-pkts>
      <gate-rtcp-invalid-pkts>
        gate-rtcp-invalid-pkts
      </gate-rtcp-invalid-pkts>
    </gate-rtcp-sender-information>
  </gate-rtcp-information>
</service-pgcp-gate-entry-information>
```

Description RTCP statistcs

<gate-rtcp-sender-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <gate-rtcp-information>
```

```
<gate-rtcp-sender-information>
 <gate-rtcp-sender-ssrc>
  gate-rtcp-sender-ssrc
 </gate-rtcp-sender-ssrc>
 <gate-rtcp-sender-octets>
  gate-rtcp-sender-octets
 </gate-rtcp-sender-octets>
 <gate-rtcp-sender-pkts>
  gate-rtcp-sender-pkts
 </gate-rtcp-sender-pkts>
 <gate-rtcp-invalid-pkts>
  gate-rtcp-invalid-pkts
 </gate-rtcp-invalid-pkts>
</gate-rtcp-sender-information>
</gate-rtcp-information>
</service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description RTCP statistcs

<gateway-entry>

Usage

```
<pgcpd-active-configuration>
 <gateway-entry>
  <gateway-name>
   gateway-name
  </gateway-name>
  <local-ip-address>
   local-ip-address
  </local-ip-address>
  <gateway-vrf>
   gateway-vrf
  </gateway-vrf>
  <local-port>
   local-port
  </local-port>
  <platform>
   platform
  </platform>
  <service-state>
   service-state
  </service-state>
  <active-controller>
   active-controller
  </active-controller>
  <replication-socket>
   replication-socket
  </replication-socket>
  <synchronization-state>
   synchronization-state
  </synchronization-state>
  <up-time>
   up-time
```


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```
        </up-time>
        <load-status>
          load-status
        </load-status>
        <cleanup-timeout>
          cleanup-timeout
        </cleanup-timeout>
        <maximum-concurrent-calls>
          maximum-concurrent-calls
        </maximum-concurrent-calls>
        <inactivity-timeout-delay>
          inactivity-timeout-delay
        </inactivity-timeout-delay>
        <inactivity-timeout-duration>
          inactivity-timeout-duration
        </inactivity-timeout-duration>
        <latch-deadlock-duration>
          latch-deadlock-duration
        </latch-deadlock-duration>
        <h248-timers-entry>....</h248-timers-entry>
        <base-root-entry>....</base-root-entry>
        <h248-options-entry>....</h248-options-entry>
      <h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>

        <h248-diffserv-entry>....</h248-diffserv-entry>
        <h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>....</h248-application-data-inactivity-detection-entry>


<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

        <inactivity-timer-entry>....</inactivity-timer-entry>
        <fast-update-filters-entry>....</fast-update-filters-entry>
        <controller-entry>....</controller-entry>
        <overload-control-entry>....</overload-control-entry>
      </gateway-entry>
    </pgcpd-active-configuration>
```

Description

<gateway-entry>

Usage

```
    <pgcpd-active-configuration>
      <pgcpd-config>
        <gateway-entry>
          <gateway-name>
            gateway-name
          </gateway-name>
          <local-ip-address>
            local-ip-address
          </local-ip-address>
          <gateway-vrf>
            gateway-vrf
```

```
                </gateway-vrf>
                <local-port>
                  local-port
                </local-port>
                <platform>
                  platform
                </platform>
                <service-state>
                  service-state
                </service-state>
                <active-controller>
                  active-controller
                </active-controller>
                <replication-socket>
                  replication-socket
                </replication-socket>
                <synchronization-state>
                  synchronization-state
                </synchronization-state>
                <up-time>
                  up-time
                </up-time>
                <load-status>
                  load-status
                </load-status>
                <cleanup-timeout>
                  cleanup-timeout
                </cleanup-timeout>
                <maximum-concurrent-calls>
                  maximum-concurrent-calls
                </maximum-concurrent-calls>
                <inactivity-timeout-delay>
                  inactivity-timeout-delay
                </inactivity-timeout-delay>
                <inactivity-timeout-duration>
                  inactivity-timeout-duration
                </inactivity-timeout-duration>
                <latch-deadlock-duration>
                  latch-deadlock-duration
                </latch-deadlock-duration>
                <h248-timers-entry>....</h248-timers-entry>
                <base-root-entry>....</base-root-entry>
                <h248-options-entry>....</h248-options-entry>

<h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>
                <h248-diffserv-entry>....</h248-diffserv-entry>
                <h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>....</h248-application-data-inactivity-detection-entry>


<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

                <inactivity-timer-entry>....</inactivity-timer-entry>
                <fast-update-filters-entry>....</fast-update-filters-entry>
                <controller-entry>....</controller-entry>
```


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```
      <overload-control-entry>....</overload-control-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<gateway-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <gateway-name>
      gateway-name
    </gateway-name>
    <local-ip-address>
      local-ip-address
    </local-ip-address>
    <gateway-vrf>
      gateway-vrf
    </gateway-vrf>
    <local-port>
      local-port
    </local-port>
    <platform>
      platform
    </platform>
    <service-state>
      service-state
    </service-state>
    <active-controller>
      active-controller
    </active-controller>
    <replication-socket>
      replication-socket
    </replication-socket>
    <synchronization-state>
      synchronization-state
    </synchronization-state>
    <up-time>
      up-time
    </up-time>
    <load-status>
      load-status
    </load-status>
    <cleanup-timeout>
      cleanup-timeout
    </cleanup-timeout>
    <maximum-concurrent-calls>
      maximum-concurrent-calls
    </maximum-concurrent-calls>
    <inactivity-timeout-delay>
      inactivity-timeout-delay
    </inactivity-timeout-delay>
    <inactivity-timeout-duration>
```

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```
            inactivity-timeout-duration
          </inactivity-timeout-duration>
          <latch-deadlock-duration>
            latch-deadlock-duration
          </latch-deadlock-duration>
          <h248-timers-entry>....</h248-timers-entry>
          <base-root-entry>....</base-root-entry>
          <h248-options-entry>....</h248-options-entry>
        <h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>

          <h248-diffserv-entry>....</h248-diffserv-entry>
          <h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>....</h248-application-data-inactivity-detection-entry>


<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

          <inactivity-timer-entry>....</inactivity-timer-entry>
          <fast-update-filters-entry>....</fast-update-filters-entry>
          <controller-entry>....</controller-entry>
          <overload-control-entry>....</overload-control-entry>
        </gateway-entry>
      </service-pgcp-statistics-gateway>
```

Description

<gateway-entry>

Usage

```
      <service-pgcp-terminations>
        <gateway-entry>
          <gateway-name>
            gateway-name
          </gateway-name>
          <local-ip-address>
            local-ip-address
          </local-ip-address>
          <gateway-vrf>
            gateway-vrf
          </gateway-vrf>
          <local-port>
            local-port
          </local-port>
          <platform>
            platform
          </platform>
          <service-state>
            service-state
          </service-state>
          <active-controller>
            active-controller
          </active-controller>
          <replication-socket>
            replication-socket
```


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```
        </replication-socket>
        <synchronization-state>
          synchronization-state
        </synchronization-state>
        <up-time>
          up-time
        </up-time>
        <load-status>
          load-status
        </load-status>
        <cleanup-timeout>
          cleanup-timeout
        </cleanup-timeout>
        <maximum-concurrent-calls>
          maximum-concurrent-calls
        </maximum-concurrent-calls>
        <inactivity-timeout-delay>
          inactivity-timeout-delay
        </inactivity-timeout-delay>
        <inactivity-timeout-duration>
          inactivity-timeout-duration
        </inactivity-timeout-duration>
        <latch-deadlock-duration>
          latch-deadlock-duration
        </latch-deadlock-duration>
        <h248-timers-entry>....</h248-timers-entry>
        <base-root-entry>....</base-root-entry>
        <h248-options-entry>....</h248-options-entry>
      <h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>

        <h248-diffserv-entry>....</h248-diffserv-entry>
        <h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>....</h248-application-data-inactivity-detection-entry>


<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

        <inactivity-timer-entry>....</inactivity-timer-entry>
        <fast-update-filters-entry>....</fast-update-filters-entry>
        <controller-entry>....</controller-entry>
        <overload-control-entry>....</overload-control-entry>
      </gateway-entry>
    </service-pgcp-terminations>
```

Description

<gateway-entry>

Usage

```
    <service-pgcp-gates>
      <gateway-entry>
        <gateway-name>
          gateway-name
        </gateway-name>
```

```
<local-ip-address>
  local-ip-address
</local-ip-address>
<gateway-vrf>
  gateway-vrf
</gateway-vrf>
<local-port>
  local-port
</local-port>
<platform>
  platform
</platform>
<service-state>
  service-state
</service-state>
<active-controller>
  active-controller
</active-controller>
<replication-socket>
  replication-socket
</replication-socket>
<synchronization-state>
  synchronization-state
</synchronization-state>
<up-time>
  up-time
</up-time>
<load-status>
  load-status
</load-status>
<cleanup-timeout>
  cleanup-timeout
</cleanup-timeout>
<maximum-concurrent-calls>
  maximum-concurrent-calls
</maximum-concurrent-calls>
<inactivity-timeout-delay>
  inactivity-timeout-delay
</inactivity-timeout-delay>
<inactivity-timeout-duration>
  inactivity-timeout-duration
</inactivity-timeout-duration>
<latch-deadlock-duration>
  latch-deadlock-duration
</latch-deadlock-duration>
<h248-timers-entry>....</h248-timers-entry>
<base-root-entry>....</base-root-entry>
<h248-options-entry>....</h248-options-entry>
<h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>

<h248-diffserv-entry>....</h248-diffserv-entry>
<h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>...</h248-application-data-inactivity-detection-entry>
```


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```
<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

    <inactivity-timer-entry>....</inactivity-timer-entry>
    <fast-update-filters-entry>....</fast-update-filters-entry>
    <controller-entry>....</controller-entry>
    <overload-control-entry>....</overload-control-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<pgcpd-active-configuration>
  <h248-application-data-inactivity-detection-entry>
    <ip-flow-stop-detection>
      ip-flow-stop-detection
    </ip-flow-stop-detection>
  </h248-application-data-inactivity-detection-entry>
</pgcpd-active-configuration>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-application-data-inactivity-detection-entry>
      <ip-flow-stop-detection>
        ip-flow-stop-detection
      </ip-flow-stop-detection>
    </h248-application-data-inactivity-detection-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-application-data-inactivity-detection-entry>
        <ip-flow-stop-detection>
          ip-flow-stop-detection
        </ip-flow-stop-detection>
      </h248-application-data-inactivity-detection-entry>
    </gateway-entry>
  </pgcpd-config>
```

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```
</pgcpd-active-configuration>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-application-data-inactivity-detection-entry>
      <ip-flow-stop-detection>
        ip-flow-stop-detection
      </ip-flow-stop-detection>
    </h248-application-data-inactivity-detection-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <h248-application-data-inactivity-detection-entry>
      <ip-flow-stop-detection>
        ip-flow-stop-detection
      </ip-flow-stop-detection>
    </h248-application-data-inactivity-detection-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<h248-application-data-inactivity-detection-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <h248-application-data-inactivity-detection-entry>
      <ip-flow-stop-detection>
        ip-flow-stop-detection
      </ip-flow-stop-detection>
    </h248-application-data-inactivity-detection-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

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<h248-diffserv-entry>

Usage

```
<pgcpd-active-configuration>
  <h248-diffserv-entry>
    <dscp>
      dscp
    </dscp>
  </h248-diffserv-entry>
</pgcpd-active-configuration>
```

Description

<h248-diffserv-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-diffserv-entry>
      <dscp>
        dscp
      </dscp>
    </h248-diffserv-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<h248-diffserv-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-diffserv-entry>
        <dscp>
          dscp
        </dscp>
      </h248-diffserv-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<h248-diffserv-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-diffserv-entry>
      <dscp>
```

```
        dscp
       </dscp>
      </h248-diffserv-entry>
     </gateway-entry>
    </service-pgcp-statistics-gateway>
```

Description

<h248-diffserv-entry>

Usage

```
<service-pgcp-terminations>
 <gateway-entry>
  <h248-diffserv-entry>
   <dscp>
    dscp
   </dscp>
  </h248-diffserv-entry>
 </gateway-entry>
</service-pgcp-terminations>
```

Description

<h248-diffserv-entry>

Usage

```
<service-pgcp-gates>
 <gateway-entry>
  <h248-diffserv-entry>
   <dscp>
    dscp
   </dscp>
  </h248-diffserv-entry>
 </gateway-entry>
</service-pgcp-gates>
```

Description

<h248-event-timestamp-notification-entry>

Usage

```
<pgcpd-active-configuration>
 <h248-event-timestamp-notification-entry>
  <requested-timestamp>
   requested-timestamp
  </requested-timestamp>
 </h248-event-timestamp-notification-entry>
</pgcpd-active-configuration>
```

Description

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<h248-event-timestamp-notification-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-event-timestamp-notification-entry>
      <requested-timestamp>
        requested-timestamp
      </requested-timestamp>
    </h248-event-timestamp-notification-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<h248-event-timestamp-notification-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-event-timestamp-notification-entry>
        <requested-timestamp>
          requested-timestamp
        </requested-timestamp>
      </h248-event-timestamp-notification-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<h248-event-timestamp-notification-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-event-timestamp-notification-entry>
      <requested-timestamp>
        requested-timestamp
      </requested-timestamp>
    </h248-event-timestamp-notification-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<h248-event-timestamp-notification-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
```

```
      <h248-event-timestamp-notification-entry>
        <requested-timestamp>
          requested-timestamp
        </requested-timestamp>
      </h248-event-timestamp-notification-entry>
    </gateway-entry>
  </service-pgcp-terminations>
```

Description

<h248-event-timestamp-notification-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <h248-event-timestamp-notification-entry>
      <requested-timestamp>
        requested-timestamp
      </requested-timestamp>
    </h248-event-timestamp-notification-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<h248-notification-behavior-entry>

Usage

```
<pgcpd-active-configuration>
  <h248-notification-behavior-entry>
    <notification-regulation>
      notification-regulation
    </notification-regulation>
  </h248-notification-behavior-entry>
</pgcpd-active-configuration>
```

Description

<h248-notification-behavior-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-notification-behavior-entry>
      <notification-regulation>
        notification-regulation
      </notification-regulation>
    </h248-notification-behavior-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

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<h248-notification-behavior-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-notification-behavior-entry>
        <notification-regulation>
          notification-regulation
        </notification-regulation>
      </h248-notification-behavior-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<h248-notification-behavior-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-notification-behavior-entry>
      <notification-regulation>
        notification-regulation
      </notification-regulation>
    </h248-notification-behavior-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<h248-notification-behavior-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <h248-notification-behavior-entry>
      <notification-regulation>
        notification-regulation
      </notification-regulation>
    </h248-notification-behavior-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<h248-notification-behavior-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
```

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```
    <h248-notification-behavior-entry>
     <notification-regulation>
      notification-regulation
     </notification-regulation>
    </h248-notification-behavior-entry>
   </gateway-entry>
</service-pgcp-gates>
```

Description

<h248-options-entry>

Usage

```
<pgcpd-active-configuration>
 <h248-options-entry>
  <wildcard-response-service-change>
   wildcard-response-service-change
  </wildcard-response-service-change>
  <audit-observed-events-returns-history>
   audit-observed-events-returns-history
  </audit-observed-events-returns-history>
  <h248-profile>
   h248-profile
  </h248-profile>
 </h248-options-entry>
</pgcpd-active-configuration>
```

Description

<h248-options-entry>

Usage

```
<pgcpd-active-configuration>
 <gateway-entry>
  <h248-options-entry>
   <wildcard-response-service-change>
    wildcard-response-service-change
   </wildcard-response-service-change>
   <audit-observed-events-returns-history>
    audit-observed-events-returns-history
   </audit-observed-events-returns-history>
   <h248-profile>
    h248-profile
   </h248-profile>
  </h248-options-entry>
 </gateway-entry>
</pgcpd-active-configuration>
```

Description

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<h248-options-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-options-entry>
        <wildcard-response-service-change>
          wildcard-response-service-change
        </wildcard-response-service-change>
        <audit-observed-events-returns-history>
          audit-observed-events-returns-history
        </audit-observed-events-returns-history>
        <h248-profile>
          h248-profile
        </h248-profile>
      </h248-options-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<h248-options-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-options-entry>
      <wildcard-response-service-change>
        wildcard-response-service-change
      </wildcard-response-service-change>
      <audit-observed-events-returns-history>
        audit-observed-events-returns-history
      </audit-observed-events-returns-history>
      <h248-profile>
        h248-profile
      </h248-profile>
    </h248-options-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<h248-options-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <h248-options-entry>
      <wildcard-response-service-change>
        wildcard-response-service-change
      </wildcard-response-service-change>
```

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```
      <audit-observed-events-returns-history>
        audit-observed-events-returns-history
      </audit-observed-events-returns-history>
      <h248-profile>
        h248-profile
      </h248-profile>
    </h248-options-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<h248-options-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <h248-options-entry>
      <wildcard-response-service-change>
        wildcard-response-service-change
      </wildcard-response-service-change>
      <audit-observed-events-returns-history>
        audit-observed-events-returns-history
      </audit-observed-events-returns-history>
      <h248-profile>
        h248-profile
      </h248-profile>
    </h248-options-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<h248-segmentation-properties-entry>

Usage

```
<pgcpd-active-configuration>
  <h248-segmentation-properties-entry>
    <sgp_name>
      sgp_name
    </sgp_name>
    <sgp_minimum>
      sgp_minimum
    </sgp_minimum>
    <sgp_maximum>
      sgp_maximum
    </sgp_maximum>
    <sgp_default>
      sgp_default
    </sgp_default>
  </h248-segmentation-properties-entry>
</pgcpd-active-configuration>
```


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Description Array of h248 segmentation properties

<h248-segmentation-properties-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-segmentation-properties-entry>
      <sgp_name>
        sgp_name
      </sgp_name>
      <sgp_minimum>
        sgp_minimum
      </sgp_minimum>
      <sgp_maximum>
        sgp_maximum
      </sgp_maximum>
      <sgp_default>
        sgp_default
      </sgp_default>
    </h248-segmentation-properties-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description Array of h248 segmentation properties

<h248-segmentation-properties-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <h248-segmentation-properties-entry>
        <sgp_name>
          sgp_name
        </sgp_name>
        <sgp_minimum>
          sgp_minimum
        </sgp_minimum>
        <sgp_maximum>
          sgp_maximum
        </sgp_maximum>
        <sgp_default>
          sgp_default
        </sgp_default>
      </h248-segmentation-properties-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description Array of h248 segmentation properties

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<h248-segmentation-properties-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <h248-segmentation-properties-entry>
      <sgp_name>
        sgp_name
      </sgp_name>
      <sgp_minimum>
        sgp_minimum
      </sgp_minimum>
      <sgp_maximum>
        sgp_maximum
      </sgp_maximum>
      <sgp_default>
        sgp_default
      </sgp_default>
    </h248-segmentation-properties-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description Array of h248 segmentation properties

<h248-segmentation-properties-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <h248-segmentation-properties-entry>
      <sgp_name>
        sgp_name
      </sgp_name>
      <sgp_minimum>
        sgp_minimum
      </sgp_minimum>
      <sgp_maximum>
        sgp_maximum
      </sgp_maximum>
      <sgp_default>
        sgp_default
      </sgp_default>
    </h248-segmentation-properties-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description Array of h248 segmentation properties

<h248-segmentation-properties-entry>

Usage

```
<service-pgcp-gates>
```


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```
<gateway-entry>
  <h248-segmentation-properties-entry>
    <sgp_name>
      sgp_name
    </sgp_name>
    <sgp_minimum>
      sgp_minimum
    </sgp_minimum>
    <sgp_maximum>
      sgp_maximum
    </sgp_maximum>
    <sgp_default>
      sgp_default
    </sgp_default>
  </h248-segmentation-properties-entry>
</gateway-entry>
</service-pgcp-gates>
```

Description Array of h248 segmentation properties

<h248-timers-entry>

Usage

```
<pgcpd-active-configuration>
  <h248-timers-entry>
    <maximum-waiting-delay>
      maximum-waiting-delay
    </maximum-waiting-delay>
    <tmax-retransmission-delay>
      tmax-retransmission-delay
    </tmax-retransmission-delay>
    <initial-average-ack-delay>
      initial-average-ack-delay
    </initial-average-ack-delay>
    <maximum-net-propagation-delay>
      maximum-net-propagation-delay
    </maximum-net-propagation-delay>
  </h248-timers-entry>
</pgcpd-active-configuration>
```

Description

<h248-timers-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <h248-timers-entry>
      <maximum-waiting-delay>
        maximum-waiting-delay
      </maximum-waiting-delay>
      <tmax-retransmission-delay>
        tmax-retransmission-delay
```

```
      </tmax-retransmission-delay>
      <initial-average-ack-delay>
       initial-average-ack-delay
      </initial-average-ack-delay>
      <maximum-net-propagation-delay>
       maximum-net-propagation-delay
      </maximum-net-propagation-delay>
     </h248-timers-entry>
    </gateway-entry>
  </pgcpd-active-configuration>
```

Description

<h248-timers-entry>

Usage

```
<pgcpd-active-configuration>
 <pgcpd-config>
  <gateway-entry>
   <h248-timers-entry>
    <maximum-waiting-delay>
     maximum-waiting-delay
    </maximum-waiting-delay>
    <tmax-retransmission-delay>
     tmax-retransmission-delay
    </tmax-retransmission-delay>
    <initial-average-ack-delay>
     initial-average-ack-delay
    </initial-average-ack-delay>
    <maximum-net-propagation-delay>
     maximum-net-propagation-delay
    </maximum-net-propagation-delay>
   </h248-timers-entry>
  </gateway-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<h248-timers-entry>

Usage

```
<service-pgcp-statistics-gateway>
 <gateway-entry>
  <h248-timers-entry>
   <maximum-waiting-delay>
    maximum-waiting-delay
   </maximum-waiting-delay>
   <tmax-retransmission-delay>
    tmax-retransmission-delay
   </tmax-retransmission-delay>
   <initial-average-ack-delay>
    initial-average-ack-delay
   </initial-average-ack-delay>
```


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```
      <maximum-net-propagation-delay>
        maximum-net-propagation-delay
      </maximum-net-propagation-delay>
    </h248-timers-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<h248-timers-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <h248-timers-entry>
      <maximum-waiting-delay>
        maximum-waiting-delay
      </maximum-waiting-delay>
      <tmax-retransmission-delay>
        tmax-retransmission-delay
      </tmax-retransmission-delay>
      <initial-average-ack-delay>
        initial-average-ack-delay
      </initial-average-ack-delay>
      <maximum-net-propagation-delay>
        maximum-net-propagation-delay
      </maximum-net-propagation-delay>
    </h248-timers-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<h248-timers-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <h248-timers-entry>
      <maximum-waiting-delay>
        maximum-waiting-delay
      </maximum-waiting-delay>
      <tmax-retransmission-delay>
        tmax-retransmission-delay
      </tmax-retransmission-delay>
      <initial-average-ack-delay>
        initial-average-ack-delay
      </initial-average-ack-delay>
      <maximum-net-propagation-delay>
        maximum-net-propagation-delay
      </maximum-net-propagation-delay>
    </h248-timers-entry>
  </gateway-entry>
```

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```
</service-pgcp-gates>
```

Description

<hcm-stats-rule-entry>

Usage

```
<hcm-stats-rule-entry>
  <total-term-count>
    total-term-count
  </total-term-count>
  <term-number>
    term-number
  </term-number>
</hcm-stats-rule-entry>
```

Description HCM statistics entry

<hcm-stats-rule-entry>

Usage

```
<service-hcm-statistics-information>
  <service-hcm-statistics-entry>
    <hcm-stats-rule-information>
      <hcm-stats-rule-entry>
        <total-term-count>
          total-term-count
        </total-term-count>
        <term-number>
          term-number
        </term-number>
      </hcm-stats-rule-entry>
    </hcm-stats-rule-information>
  </service-hcm-statistics-entry>
</service-hcm-statistics-information>
```

Description HCM statistics entry

<hcm-stats-rule-information>

Usage

```
<service-hcm-statistics-information>
  <service-hcm-statistics-entry>
    <hcm-stats-rule-information>
      <hcm-stats-rule-entry>....</hcm-stats-rule-entry>
    </hcm-stats-rule-information>
  </service-hcm-statistics-entry>
</service-hcm-statistics-information>
```

Description

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<header-redirect-set-statistics>

Usage

```
<header-redirect-set-statistics>
  <header-redirect-set-name>
    header-redirect-set-name
  </header-redirect-set-name>
  <cause-roaming>
    cause-roaming
  </cause-roaming>
  <cause-time-of-day>
    cause-time-of-day
  </cause-time-of-day>
  <cause-quality-of-service>
    cause-quality-of-service
  </cause-quality-of-service>
  <cause-volume-expired>
    cause-volume-expired
  </cause-volume-expired>
  <cause-cost-warning>
    cause-cost-warning
  </cause-cost-warning>
  <cause-not-allowed>
    cause-not-allowed
  </cause-not-allowed>
  <cause-unsubscribed>
    cause-unsubscribed
  </cause-unsubscribed>
  <cause-credit-expiry>
    cause-credit-expiry
  </cause-credit-expiry>
  <cause-unknown>
    cause-unknown
  </cause-unknown>
  <cause-default>
    cause-default
  </cause-default>
</header-redirect-set-statistics>
```

Description Statistics for the header redirect sets

<header-redirect-set-statistics>

Usage

```
<header-redirect-set-statistics-information>
  <header-redirect-set-statistics>
    <header-redirect-set-name>
      header-redirect-set-name
    </header-redirect-set-name>
    <cause-roaming>
      cause-roaming
    </cause-roaming>
    <cause-time-of-day>
```

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```
            cause-time-of-day
          </cause-time-of-day>
          <cause-quality-of-service>
            cause-quality-of-service
          </cause-quality-of-service>
          <cause-volume-expired>
            cause-volume-expired
          </cause-volume-expired>
          <cause-cost-warning>
            cause-cost-warning
          </cause-cost-warning>
          <cause-not-allowed>
            cause-not-allowed
          </cause-not-allowed>
          <cause-unsubscribed>
            cause-unsubscribed
          </cause-unsubscribed>
          <cause-credit-expiry>
            cause-credit-expiry
          </cause-credit-expiry>
          <cause-unknown>
            cause-unknown
          </cause-unknown>
          <cause-default>
            cause-default
          </cause-default>
        </header-redirect-set-statistics>
      </header-redirect-set-statistics-information>
```

Description Statistics for the header redirect sets

<header-redirect-set-statistics-information>

Usage

```
<header-redirect-set-statistics-information>
  <interface-name>
    interface-name
  </interface-name>
  <interfaces>
    interfaces
  </interfaces>
  <header-redirect-set-statistics>....</header-redirect-set-statistics>
</header-redirect-set-statistics-information>
```

Description

<icmp-error-counters>

Usage

```
<sfw-stats-service-set-entry>
  <icmp-error-counters>
    <icmp-length-error>
      icmp-length-error
```


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```
    </icmp-length-error>
    <icmp-error-length-error>
     icmp-error-length-error
    </icmp-error-length-error>
    <ping-duplicate-sequence-number>
     ping-duplicate-sequence-number
    </ping-duplicate-sequence-number>
    <ping-mismatched-sequence-number>
     ping-mismatched-sequence-number
    </ping-mismatched-sequence-number>
    <icmp-error-no-matching-flow>
     icmp-error-no-matching-flow
    </icmp-error-no-matching-flow>
   </icmp-error-counters>
  </sfw-stats-service-set-entry>
```

Description Extensive output of ICMP processing errors

<icmp-error-counters>

Usage

```
<service-sfw-statistics-information>
 <service-sfw-statistics-entry>
  <sfw-stats-service-set-entry>
   <icmp-error-counters>
    <icmp-length-error>
     icmp-length-error
    </icmp-length-error>
    <icmp-error-length-error>
     icmp-error-length-error
    </icmp-error-length-error>
    <ping-duplicate-sequence-number>
     ping-duplicate-sequence-number
    </ping-duplicate-sequence-number>
    <ping-mismatched-sequence-number>
     ping-mismatched-sequence-number
    </ping-mismatched-sequence-number>
    <icmp-error-no-matching-flow>
     icmp-error-no-matching-flow
    </icmp-error-no-matching-flow>
   </icmp-error-counters>
  </sfw-stats-service-set-entry>
 </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Extensive output of ICMP processing errors

<ids-anomaly-entry>

Usage

```
<ids-anomaly-entry>
 <ids-anomaly-description>
```

```
    ids-anomaly-description
  </ids-anomaly-description>
  <ids-anomaly-count>
    ids-anomaly-count
  </ids-anomaly-count>
  <ids-anomaly-rate>
    ids-anomaly-rate
  </ids-anomaly-rate>
  <ids-anomaly-elapsed>
    ids-anomaly-elapsed
  </ids-anomaly-elapsed>
</ids-anomaly-entry>
```

Description IDS anomaly information

<ids-anomaly-entry>

Usage

```
<ids-flow-entry>
  <ids-anomaly-entry>
    <ids-anomaly-description>
      ids-anomaly-description
    </ids-anomaly-description>
    <ids-anomaly-count>
      ids-anomaly-count
    </ids-anomaly-count>
    <ids-anomaly-rate>
      ids-anomaly-rate
    </ids-anomaly-rate>
    <ids-anomaly-elapsed>
      ids-anomaly-elapsed
    </ids-anomaly-elapsed>
  </ids-anomaly-entry>
</ids-flow-entry>
```

Description IDS anomaly information

<ids-anomaly-entry>

Usage

```
<ids-flow-table>
  <ids-flow-entry>
    <ids-anomaly-entry>
      <ids-anomaly-description>
        ids-anomaly-description
      </ids-anomaly-description>
      <ids-anomaly-count>
        ids-anomaly-count
      </ids-anomaly-count>
      <ids-anomaly-rate>
        ids-anomaly-rate
      </ids-anomaly-rate>
```


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```
            <ids-anomaly-elapsed>
              ids-anomaly-elapsed
            </ids-anomaly-elapsed>
          </ids-anomaly-entry>
        </ids-flow-entry>
      </ids-flow-table>
```

Description IDS anomaly information

<ids-anomaly-entry>

Usage

```
<ids-per-service-set-flow-table>
  <ids-flow-table>
    <ids-flow-entry>
      <ids-anomaly-entry>
        <ids-anomaly-description>
          ids-anomaly-description
        </ids-anomaly-description>
        <ids-anomaly-count>
          ids-anomaly-count
        </ids-anomaly-count>
        <ids-anomaly-rate>
          ids-anomaly-rate
        </ids-anomaly-rate>
        <ids-anomaly-elapsed>
          ids-anomaly-elapsed
        </ids-anomaly-elapsed>
      </ids-anomaly-entry>
    </ids-flow-entry>
  </ids-flow-table>
</ids-per-service-set-flow-table>
```

Description IDS anomaly information

<ids-anomaly-entry>

Usage

```
<service-ids-flow-table-information>
  <ids-per-service-set-flow-table>
    <ids-flow-table>
      <ids-flow-entry>
        <ids-anomaly-entry>
          <ids-anomaly-description>
            ids-anomaly-description
          </ids-anomaly-description>
          <ids-anomaly-count>
            ids-anomaly-count
          </ids-anomaly-count>
          <ids-anomaly-rate>
            ids-anomaly-rate
          </ids-anomaly-rate>
```

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```
            <ids-anomaly-elapsed>
              ids-anomaly-elapsed
            </ids-anomaly-elapsed>
          </ids-anomaly-entry>
        </ids-flow-entry>
      </ids-flow-table>
    </ids-per-service-set-flow-table>
  </service-ids-flow-table-information>
```

Description IDS anomaly information

<ids-flow-entry>

Usage

```
<ids-flow-entry>
  <ids-flow-source-ip>
    ids-flow-source-ip
  </ids-flow-source-ip>
  <ids-flow-destination-ip>
    ids-flow-destination-ip
  </ids-flow-destination-ip>
  <ids-flow-time>
    ids-flow-time
  </ids-flow-time>
  <ids-flow-flags>
    ids-flow-flags
  </ids-flow-flags>
  <ids-flow-long-flags>
    ids-flow-long-flags
  </ids-flow-long-flags>
  <ids-flow-count>
    ids-flow-count
  </ids-flow-count>
  <ids-flow-application>
    ids-flow-application
  </ids-flow-application>
  <ids-bytes-count>
    ids-bytes-count
  </ids-bytes-count>
  <ids-packets-count>
    ids-packets-count
  </ids-packets-count>
  <ids-flows-count>
    ids-flows-count
  </ids-flows-count>
  <ids-anomalies-count>
    ids-anomalies-count
  </ids-anomalies-count>
  <ids-anomaly-entry>....</ids-anomaly-entry>
</ids-flow-entry>
```

Description IDS terse information

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<ids-flow-entry>

Usage

```
<ids-flow-table>
  <ids-flow-entry>
    <ids-flow-source-ip>
      ids-flow-source-ip
    </ids-flow-source-ip>
    <ids-flow-destination-ip>
      ids-flow-destination-ip
    </ids-flow-destination-ip>
    <ids-flow-time>
      ids-flow-time
    </ids-flow-time>
    <ids-flow-flags>
      ids-flow-flags
    </ids-flow-flags>
    <ids-flow-long-flags>
      ids-flow-long-flags
    </ids-flow-long-flags>
    <ids-flow-count>
      ids-flow-count
    </ids-flow-count>
    <ids-flow-application>
      ids-flow-application
    </ids-flow-application>
    <ids-bytes-count>
      ids-bytes-count
    </ids-bytes-count>
    <ids-packets-count>
      ids-packets-count
    </ids-packets-count>
    <ids-flows-count>
      ids-flows-count
    </ids-flows-count>
    <ids-anomalies-count>
      ids-anomalies-count
    </ids-anomalies-count>
    <ids-anomaly-entry>....</ids-anomaly-entry>
  </ids-flow-entry>
</ids-flow-table>
```

Description IDS terse information

<ids-flow-entry>

Usage

```
<ids-per-service-set-flow-table>
  <ids-flow-table>
    <ids-flow-entry>
      <ids-flow-source-ip>
        ids-flow-source-ip
      </ids-flow-source-ip>
```

```
<ids-flow-destination-ip>
  ids-flow-destination-ip
</ids-flow-destination-ip>
<ids-flow-time>
  ids-flow-time
</ids-flow-time>
<ids-flow-flags>
  ids-flow-flags
</ids-flow-flags>
<ids-flow-long-flags>
  ids-flow-long-flags
</ids-flow-long-flags>
<ids-flow-count>
  ids-flow-count
</ids-flow-count>
<ids-flow-application>
  ids-flow-application
</ids-flow-application>
<ids-bytes-count>
  ids-bytes-count
</ids-bytes-count>
<ids-packets-count>
  ids-packets-count
</ids-packets-count>
<ids-flows-count>
  ids-flows-count
</ids-flows-count>
<ids-anomalies-count>
  ids-anomalies-count
</ids-anomalies-count>
<ids-anomaly-entry>....</ids-anomaly-entry>
</ids-flow-entry>
</ids-flow-table>
</ids-per-service-set-flow-table>
```

Description IDS terse information

<ids-flow-entry>

Usage

```
<service-ids-flow-table-information>
  <ids-per-service-set-flow-table>
    <ids-flow-table>
      <ids-flow-entry>
        <ids-flow-source-ip>
          ids-flow-source-ip
        </ids-flow-source-ip>
        <ids-flow-destination-ip>
          ids-flow-destination-ip
        </ids-flow-destination-ip>
        <ids-flow-time>
          ids-flow-time
        </ids-flow-time>
        <ids-flow-flags>
```

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```
                ids-flow-flags
              </ids-flow-flags>
              <ids-flow-long-flags>
                ids-flow-long-flags
              </ids-flow-long-flags>
              <ids-flow-count>
                ids-flow-count
              </ids-flow-count>
              <ids-flow-application>
                ids-flow-application
              </ids-flow-application>
              <ids-bytes-count>
                ids-bytes-count
              </ids-bytes-count>
              <ids-packets-count>
                ids-packets-count
              </ids-packets-count>
              <ids-flows-count>
                ids-flows-count
              </ids-flows-count>
              <ids-anomalies-count>
                ids-anomalies-count
              </ids-anomalies-count>
              <ids-anomaly-entry>....</ids-anomaly-entry>
            </ids-flow-entry>
          </ids-flow-table>
        </ids-per-service-set-flow-table>
      </service-ids-flow-table-information>
```

Description IDS terse information

<ids-flow-table>

Usage

```
<ids-flow-table>
  <ids-flow-entry>....</ids-flow-entry>
</ids-flow-table>
```

Description IDS table sorted by service set

<ids-flow-table>

Usage

```
<ids-per-service-set-flow-table>
  <ids-flow-table>
    <ids-flow-entry>....</ids-flow-entry>
  </ids-flow-table>
</ids-per-service-set-flow-table>
```

Description IDS table sorted by service set

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<ids-flow-table>

Usage

```
<service-ids-flow-table-information>
  <ids-per-service-set-flow-table>
    <ids-flow-table>
      <ids-flow-entry>....</ids-flow-entry>
    </ids-flow-table>
  </ids-per-service-set-flow-table>
</service-ids-flow-table-information>
```

Description IDS table sorted by service set

<ids-per-service-set-flow-table>

Usage

```
<ids-per-service-set-flow-table>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <ids-sort-order>
    ids-sort-order
  </ids-sort-order>
  <ids-flow-table>....</ids-flow-table>
</ids-per-service-set-flow-table>
```

Description IDS table sorted by service set

<ids-per-service-set-flow-table>

Usage

```
<service-ids-flow-table-information>
  <ids-per-service-set-flow-table>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <ids-sort-order>
      ids-sort-order
    </ids-sort-order>
    <ids-flow-table>....</ids-flow-table>
  </ids-per-service-set-flow-table>
</service-ids-flow-table-information>
```

Description IDS table sorted by service set

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<ids-show-summary>

Usage

```
<ids-show-summary>
  <interface-name>
    interface-name
  </interface-name>
  <ids-total-entries>
    ids-total-entries
  </ids-total-entries>
  <ids-total-failed-insertions>
    ids-total-failed-insertions
  </ids-total-failed-insertions>
  <ids-total-events>
    ids-total-events
  </ids-total-events>
</ids-show-summary>
```

Description IDS table summary

<ids-show-summary>

Usage

```
<service-ids-flow-table-information>
  <ids-show-summary>
    <interface-name>
      interface-name
    </interface-name>
    <ids-total-entries>
      ids-total-entries
    </ids-total-entries>
    <ids-total-failed-insertions>
      ids-total-failed-insertions
    </ids-total-failed-insertions>
    <ids-total-events>
      ids-total-events
    </ids-total-events>
  </ids-show-summary>
</service-ids-flow-table-information>
```

Description IDS table summary

<inactivity-timer-entry>

Usage

```
<pgcpd-active-configuration>
  <inactivity-timer-entry>
    <detect>
      detect
    </detect>
    <maximum-inactivity-time>....</maximum-inactivity-time>
  </inactivity-timer-entry>
```

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```
</pgcpd-active-configuration>
```

Description

<inactivity-timer-entry>

Usage

```
<pgcpd-active-configuration>
 <gateway-entry>
  <inactivity-timer-entry>
   <detect>
    detect
   </detect>
   <maximum-inactivity-time>....</maximum-inactivity-time>
  </inactivity-timer-entry>
 </gateway-entry>
</pgcpd-active-configuration>
```

Description

<inactivity-timer-entry>

Usage

```
<pgcpd-active-configuration>
 <pgcpd-config>
  <gateway-entry>
   <inactivity-timer-entry>
    <detect>
     detect
    </detect>
    <maximum-inactivity-time>....</maximum-inactivity-time>
   </inactivity-timer-entry>
  </gateway-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<inactivity-timer-entry>

Usage

```
<service-pgcp-statistics-gateway>
 <gateway-entry>
  <inactivity-timer-entry>
   <detect>
    detect
   </detect>
   <maximum-inactivity-time>....</maximum-inactivity-time>
  </inactivity-timer-entry>
 </gateway-entry>
</service-pgcp-statistics-gateway>
```


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Description

<inactivity-timer-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <inactivity-timer-entry>
      <detect>
        detect
      </detect>
      <maximum-inactivity-time>....</maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<inactivity-timer-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <inactivity-timer-entry>
      <detect>
        detect
      </detect>
      <maximum-inactivity-time>....</maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<inline-nat-statistics-entry>

Usage

```
<inline-nat-statistics-entry>
  <srv-pic-name>
    srv-pic-name
  </srv-pic-name>
  <si-nat-slow-path-pkts-rcvd>
    si-nat-slow-path-pkts-rcvd
  </si-nat-slow-path-pkts-rcvd>
  <si-nat-slow-path-pkts-dropped>
    si-nat-slow-path-pkts-dropped
  </si-nat-slow-path-pkts-dropped>
</inline-nat-statistics-entry>
```

Description NAT statistics

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<inline-nat-statistics-entry>

Usage

```
<inline-nat-statistics-information>
  <inline-nat-statistics-entry>
    <srv-pic-name>
      srv-pic-name
    </srv-pic-name>
    <si-nat-slow-path-pkts-rcvd>
      si-nat-slow-path-pkts-rcvd
    </si-nat-slow-path-pkts-rcvd>
    <si-nat-slow-path-pkts-dropped>
      si-nat-slow-path-pkts-dropped
    </si-nat-slow-path-pkts-dropped>
  </inline-nat-statistics-entry>
</inline-nat-statistics-information>
```

Description NAT statistics

<inline-nat-statistics-information>

Usage

```
<inline-nat-statistics-information>
  <inline-nat-statistics-entry>....</inline-nat-statistics-entry>
</inline-nat-statistics-information>
```

Description NAT statistics information

<ip-error-counters>

Usage

```
<sfw-stats-service-set-entry>
  <ip-error-counters>
    <ip-length-error>
      ip-length-error
    </ip-length-error>
    <ip-header-length-error>
      ip-header-length-error
    </ip-header-length-error>
    <long-packet>
      long-packet
    </long-packet>
    <illegal-source-address>
      illegal-source-address
    </illegal-source-address>
    <illegal-destination-address>
      illegal-destination-address
    </illegal-destination-address>
    <ttl-zero>
      ttl-zero
    </ttl-zero>
    <illegal-ip-protocol>
```


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```
        illegal-ip-protocol
      </illegal-ip-protocol>
      <land-attack>
        land-attack
      </land-attack>
      <non-ipv4>
        non-ipv4
      </non-ipv4>
      <bad-checksum>
        bad-checksum
      </bad-checksum>
      <illegal-fragment-length>
        illegal-fragment-length
      </illegal-fragment-length>
      <fragment-overlap>
        fragment-overlap
      </fragment-overlap>
      <fragment-reassembly-timeout>
        fragment-reassembly-timeout
      </fragment-reassembly-timeout>
      <unknown>
        unknown
      </unknown>
    </ip-error-counters>
  </sfw-stats-service-set-entry>
```

Description Extensive output of IP processing errors

<ip-error-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <ip-error-counters>
        <ip-length-error>
          ip-length-error
        </ip-length-error>
        <ip-header-length-error>
          ip-header-length-error
        </ip-header-length-error>
        <long-packet>
          long-packet
        </long-packet>
        <illegal-source-address>
          illegal-source-address
        </illegal-source-address>
        <illegal-destination-address>
          illegal-destination-address
        </illegal-destination-address>
        <ttl-zero>
          ttl-zero
        </ttl-zero>
        <illegal-ip-protocol>
```

```
            illegal-ip-protocol
          </illegal-ip-protocol>
          <land-attack>
            land-attack
          </land-attack>
          <non-ipv4>
            non-ipv4
          </non-ipv4>
          <bad-checksum>
            bad-checksum
          </bad-checksum>
          <illegal-fragment-length>
            illegal-fragment-length
          </illegal-fragment-length>
          <fragment-overlap>
            fragment-overlap
          </fragment-overlap>
          <fragment-reassembly-timeout>
            fragment-reassembly-timeout
          </fragment-reassembly-timeout>
          <unknown>
            unknown
          </unknown>
        </ip-error-counters>
      </sfw-stats-service-set-entry>
    </service-sfw-statistics-entry>
  </service-sfw-statistics-information>
```

Description Extensive output of IP processing errors

<l2tp-destination-clear-entry>

Usage

```
<l2tp-destination-clear-entry>
  <l2tp-destination-local-name>
    l2tp-destination-local-name
  </l2tp-destination-local-name>
</l2tp-destination-clear-entry>
```

Description L2TP cleared destination information

<l2tp-destination-clear-entry>

Usage

```
<service-l2tp-destination-clear-information>
  <l2tp-destination-clear-entry>
    <l2tp-destination-local-name>
      l2tp-destination-local-name
    </l2tp-destination-local-name>
  </l2tp-destination-clear-entry>
</service-l2tp-destination-clear-information>
```


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Description L2TP cleared destination information

<l2tp-destination-entry>

Usage

```
<l2tp-destination-entry>
  <l2tp-destination-local-name>
    l2tp-destination-local-name
  </l2tp-destination-local-name>
  <l2tp-destination-remote-ip>
    l2tp-destination-remote-ip
  </l2tp-destination-remote-ip>
  <l2tp-destination-state>
    l2tp-destination-state
  </l2tp-destination-state>
  <l2tp-destination-tunnel-count>
    l2tp-destination-tunnel-count
  </l2tp-destination-tunnel-count>
  <l2tp-destination-tunnel-total>
    l2tp-destination-tunnel-total
  </l2tp-destination-tunnel-total>
  <l2tp-destination-tunnel-active>
    l2tp-destination-tunnel-active
  </l2tp-destination-tunnel-active>
  <l2tp-destination-tunnel-failed>
    l2tp-destination-tunnel-failed
  </l2tp-destination-tunnel-failed>
  <l2tp-destination-session-count>
    l2tp-destination-session-count
  </l2tp-destination-session-count>
  <l2tp-destination-session-total>
    l2tp-destination-session-total
  </l2tp-destination-session-total>
  <l2tp-destination-session-active>
    l2tp-destination-session-active
  </l2tp-destination-session-active>
  <l2tp-destination-session-failed>
    l2tp-destination-session-failed
  </l2tp-destination-session-failed>
  <l2tp-destination-local-ip>
    l2tp-destination-local-ip
  </l2tp-destination-local-ip>
  <l2tp-destination-maximum-tunnels>
    l2tp-destination-maximum-tunnels
  </l2tp-destination-maximum-tunnels>
  <l2tp-destination-transport>
    l2tp-destination-transport
  </l2tp-destination-transport>
  <l2tp-destination-router-instance>
    l2tp-destination-router-instance
  </l2tp-destination-router-instance>
  <l2tp-destination-logical-system>
    l2tp-destination-logical-system
  </l2tp-destination-logical-system>
  <l2tp-control-tx-packets>
```

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```
    l2tp-control-tx-packets
  </l2tp-control-tx-packets>
  <l2tp-control-rx-packets>
    l2tp-control-rx-packets
  </l2tp-control-rx-packets>
  <l2tp-data-tx-packets>
    l2tp-data-tx-packets
  </l2tp-data-tx-packets>
  <l2tp-data-rx-packets>
    l2tp-data-rx-packets
  </l2tp-data-rx-packets>
  <l2tp-control-tx-bytes>
    l2tp-control-tx-bytes
  </l2tp-control-tx-bytes>
  <l2tp-control-rx-bytes>
    l2tp-control-rx-bytes
  </l2tp-control-rx-bytes>
  <l2tp-data-tx-bytes>
    l2tp-data-tx-bytes
  </l2tp-data-tx-bytes>
  <l2tp-data-rx-bytes>
    l2tp-data-rx-bytes
  </l2tp-data-rx-bytes>
  <l2tp-error-tx-packets>
    l2tp-error-tx-packets
  </l2tp-error-tx-packets>
  <l2tp-error-rx-packets>
    l2tp-error-rx-packets
  </l2tp-error-rx-packets>
  <l2tp-destination-lockout-state>
    l2tp-destination-lockout-state
  </l2tp-destination-lockout-state>
</l2tp-destination-entry>
```

Description L2TP destination information

<l2tp-destination-entry>

Usage

```
<l2tp-destination-table>
  <l2tp-destination-entry>
    <l2tp-destination-local-name>
      l2tp-destination-local-name
    </l2tp-destination-local-name>
    <l2tp-destination-remote-ip>
      l2tp-destination-remote-ip
    </l2tp-destination-remote-ip>
    <l2tp-destination-state>
      l2tp-destination-state
    </l2tp-destination-state>
    <l2tp-destination-tunnel-count>
      l2tp-destination-tunnel-count
    </l2tp-destination-tunnel-count>
    <l2tp-destination-tunnel-total>
```


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```
  l2tp-destination-tunnel-total
</l2tp-destination-tunnel-total>
<l2tp-destination-tunnel-active>
  l2tp-destination-tunnel-active
</l2tp-destination-tunnel-active>
<l2tp-destination-tunnel-failed>
  l2tp-destination-tunnel-failed
</l2tp-destination-tunnel-failed>
<l2tp-destination-session-count>
  l2tp-destination-session-count
</l2tp-destination-session-count>
<l2tp-destination-session-total>
  l2tp-destination-session-total
</l2tp-destination-session-total>
<l2tp-destination-session-active>
  l2tp-destination-session-active
</l2tp-destination-session-active>
<l2tp-destination-session-failed>
  l2tp-destination-session-failed
</l2tp-destination-session-failed>
<l2tp-destination-local-ip>
  l2tp-destination-local-ip
</l2tp-destination-local-ip>
<l2tp-destination-maximum-tunnels>
  l2tp-destination-maximum-tunnels
</l2tp-destination-maximum-tunnels>
<l2tp-destination-transport>
  l2tp-destination-transport
</l2tp-destination-transport>
<l2tp-destination-router-instance>
  l2tp-destination-router-instance
</l2tp-destination-router-instance>
<l2tp-destination-logical-system>
  l2tp-destination-logical-system
</l2tp-destination-logical-system>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
```

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```
    <l2tp-data-rx-bytes>
      l2tp-data-rx-bytes
    </l2tp-data-rx-bytes>
    <l2tp-error-tx-packets>
      l2tp-error-tx-packets
    </l2tp-error-tx-packets>
    <l2tp-error-rx-packets>
      l2tp-error-rx-packets
    </l2tp-error-rx-packets>
    <l2tp-destination-lockout-state>
      l2tp-destination-lockout-state
    </l2tp-destination-lockout-state>
  </l2tp-destination-entry>
</l2tp-destination-table>
```

Description L2TP destination information

<l2tp-destination-entry>

Usage

```
<service-l2tp-destination-information>
  <l2tp-destination-table>
    <l2tp-destination-entry>
      <l2tp-destination-local-name>
        l2tp-destination-local-name
      </l2tp-destination-local-name>
      <l2tp-destination-remote-ip>
        l2tp-destination-remote-ip
      </l2tp-destination-remote-ip>
      <l2tp-destination-state>
        l2tp-destination-state
      </l2tp-destination-state>
      <l2tp-destination-tunnel-count>
        l2tp-destination-tunnel-count
      </l2tp-destination-tunnel-count>
      <l2tp-destination-tunnel-total>
        l2tp-destination-tunnel-total
      </l2tp-destination-tunnel-total>
      <l2tp-destination-tunnel-active>
        l2tp-destination-tunnel-active
      </l2tp-destination-tunnel-active>
      <l2tp-destination-tunnel-failed>
        l2tp-destination-tunnel-failed
      </l2tp-destination-tunnel-failed>
      <l2tp-destination-session-count>
        l2tp-destination-session-count
      </l2tp-destination-session-count>
      <l2tp-destination-session-total>
        l2tp-destination-session-total
      </l2tp-destination-session-total>
      <l2tp-destination-session-active>
        l2tp-destination-session-active
      </l2tp-destination-session-active>
      <l2tp-destination-session-failed>
```


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```
      l2tp-destination-session-failed
    </l2tp-destination-session-failed>
    <l2tp-destination-local-ip>
      l2tp-destination-local-ip
    </l2tp-destination-local-ip>
    <l2tp-destination-maximum-tunnels>
      l2tp-destination-maximum-tunnels
    </l2tp-destination-maximum-tunnels>
    <l2tp-destination-transport>
      l2tp-destination-transport
    </l2tp-destination-transport>
    <l2tp-destination-router-instance>
      l2tp-destination-router-instance
    </l2tp-destination-router-instance>
    <l2tp-destination-logical-system>
      l2tp-destination-logical-system
    </l2tp-destination-logical-system>
    <l2tp-control-tx-packets>
      l2tp-control-tx-packets
    </l2tp-control-tx-packets>
    <l2tp-control-rx-packets>
      l2tp-control-rx-packets
    </l2tp-control-rx-packets>
    <l2tp-data-tx-packets>
      l2tp-data-tx-packets
    </l2tp-data-tx-packets>
    <l2tp-data-rx-packets>
      l2tp-data-rx-packets
    </l2tp-data-rx-packets>
    <l2tp-control-tx-bytes>
      l2tp-control-tx-bytes
    </l2tp-control-tx-bytes>
    <l2tp-control-rx-bytes>
      l2tp-control-rx-bytes
    </l2tp-control-rx-bytes>
    <l2tp-data-tx-bytes>
      l2tp-data-tx-bytes
    </l2tp-data-tx-bytes>
    <l2tp-data-rx-bytes>
      l2tp-data-rx-bytes
    </l2tp-data-rx-bytes>
    <l2tp-error-tx-packets>
      l2tp-error-tx-packets
    </l2tp-error-tx-packets>
    <l2tp-error-rx-packets>
      l2tp-error-rx-packets
    </l2tp-error-rx-packets>
    <l2tp-destination-lockout-state>
      l2tp-destination-lockout-state
    </l2tp-destination-lockout-state>
  </l2tp-destination-entry>
 </l2tp-destination-table>
</service-l2tp-destination-information>
```

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Description L2TP destination information

<l2tp-destination-table>

Usage

```
<l2tp-destination-table>
  <l2tp-destination-entry>....</l2tp-destination-entry>
</l2tp-destination-table>
```

Description Destination table

<l2tp-destination-table>

Usage

```
<service-l2tp-destination-information>
  <l2tp-destination-table>
    <l2tp-destination-entry>....</l2tp-destination-entry>
  </l2tp-destination-table>
</service-l2tp-destination-information>
```

Description Destination table

<l2tp-lac-summary-table>

Usage

```
<service-l2tp-lac-summary-information>
  <l2tp-lac-summary-table>
</l2tp-lac-summary-table>
</service-l2tp-lac-summary-information>
```

Description

<l2tp-multilink-clear-entry>

Usage

```
<l2tp-multilink-clear-entry>
  <l2tp-multilink-bundle-id>
    l2tp-multilink-bundle-id
  </l2tp-multilink-bundle-id>
</l2tp-multilink-clear-entry>
```

Description Multilink information cleared by L2TP

<l2tp-multilink-clear-entry>

Usage

```
<service-l2tp-multilink-clear-information>
  <l2tp-multilink-clear-entry>
    <l2tp-multilink-bundle-id>
```


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```
                l2tp-multilink-bundle-id
              </l2tp-multilink-bundle-id>
            </l2tp-multilink-clear-entry>
          </service-l2tp-multilink-clear-information>
```

Description Multilink information cleared by L2TP

<l2tp-multilink-entry>

Usage

```
          <l2tp-multilink-entry>
            <l2tp-multilink-bundle-id>
              l2tp-multilink-bundle-id
            </l2tp-multilink-bundle-id>
            <l2tp-multilink-bundle-endpoint>
              l2tp-multilink-bundle-endpoint
            </l2tp-multilink-bundle-endpoint>
            <l2tp-multilink-bundle-num-links>
              l2tp-multilink-bundle-num-links
            </l2tp-multilink-bundle-num-links>
            <l2tp-multilink-bundle-mrru-input>
              l2tp-multilink-bundle-mrru-input
            </l2tp-multilink-bundle-mrru-input>
            <l2tp-multilink-bundle-mrru-output>
              l2tp-multilink-bundle-mrru-output
            </l2tp-multilink-bundle-mrru-output>
            <l2tp-statistics-since>
              l2tp-statistics-since
            </l2tp-statistics-since>
            <l2tp-control-tx-packets>
              l2tp-control-tx-packets
            </l2tp-control-tx-packets>
            <l2tp-control-rx-packets>
              l2tp-control-rx-packets
            </l2tp-control-rx-packets>
            <l2tp-data-tx-packets>
              l2tp-data-tx-packets
            </l2tp-data-tx-packets>
            <l2tp-data-rx-packets>
              l2tp-data-rx-packets
            </l2tp-data-rx-packets>
            <l2tp-control-tx-bytes>
              l2tp-control-tx-bytes
            </l2tp-control-tx-bytes>
            <l2tp-control-rx-bytes>
              l2tp-control-rx-bytes
            </l2tp-control-rx-bytes>
            <l2tp-data-tx-bytes>
              l2tp-data-tx-bytes
            </l2tp-data-tx-bytes>
            <l2tp-data-rx-bytes>
              l2tp-data-rx-bytes
            </l2tp-data-rx-bytes>
            <l2tp-error-tx-packets>
```

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```
    l2tp-error-tx-packets
   </l2tp-error-tx-packets>
   <l2tp-error-rx-packets>
    l2tp-error-rx-packets
   </l2tp-error-rx-packets>
   <l2tp-multilink-links>....</l2tp-multilink-links>
</l2tp-multilink-entry>
```

Description L2TP multilink information

<l2tp-multilink-entry>

Usage

```
<services-l2tp-multilink-information>
 <l2tp-multilink-entry>
  <l2tp-multilink-bundle-id>
   l2tp-multilink-bundle-id
  </l2tp-multilink-bundle-id>
  <l2tp-multilink-bundle-endpoint>
   l2tp-multilink-bundle-endpoint
  </l2tp-multilink-bundle-endpoint>
  <l2tp-multilink-bundle-num-links>
   l2tp-multilink-bundle-num-links
  </l2tp-multilink-bundle-num-links>
  <l2tp-multilink-bundle-mrru-input>
   l2tp-multilink-bundle-mrru-input
  </l2tp-multilink-bundle-mrru-input>
  <l2tp-multilink-bundle-mrru-output>
   l2tp-multilink-bundle-mrru-output
  </l2tp-multilink-bundle-mrru-output>
  <l2tp-statistics-since>
   l2tp-statistics-since
  </l2tp-statistics-since>
  <l2tp-control-tx-packets>
   l2tp-control-tx-packets
  </l2tp-control-tx-packets>
  <l2tp-control-rx-packets>
   l2tp-control-rx-packets
  </l2tp-control-rx-packets>
  <l2tp-data-tx-packets>
   l2tp-data-tx-packets
  </l2tp-data-tx-packets>
  <l2tp-data-rx-packets>
   l2tp-data-rx-packets
  </l2tp-data-rx-packets>
  <l2tp-control-tx-bytes>
   l2tp-control-tx-bytes
  </l2tp-control-tx-bytes>
  <l2tp-control-rx-bytes>
   l2tp-control-rx-bytes
  </l2tp-control-rx-bytes>
  <l2tp-data-tx-bytes>
   l2tp-data-tx-bytes
  </l2tp-data-tx-bytes>
```


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```
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-multilink-links>....</l2tp-multilink-links>
</l2tp-multilink-entry>
</services-l2tp-multilink-information>
```

Description L2TP multilink information

<l2tp-multilink-links>

Usage

```
<l2tp-multilink-links>
  <l2tp-session-entry>....</l2tp-session-entry>
</l2tp-multilink-links>
```

Description L2TP multilink bundle links

<l2tp-multilink-links>

Usage

```
<l2tp-multilink-entry>
  <l2tp-multilink-links>
    <l2tp-session-entry>....</l2tp-session-entry>
  </l2tp-multilink-links>
</l2tp-multilink-entry>
```

Description L2TP multilink bundle links

<l2tp-multilink-links>

Usage

```
<services-l2tp-multilink-information>
  <l2tp-multilink-entry>
    <l2tp-multilink-links>
      <l2tp-session-entry>....</l2tp-session-entry>
    </l2tp-multilink-links>
  </l2tp-multilink-entry>
</services-l2tp-multilink-information>
```

Description L2TP multilink bundle links

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<l2tp-per-tunnel-group-tunnel-table>

Usage

```
<l2tp-per-tunnel-group-tunnel-table>
  <tunnel-group-name>
    tunnel-group-name
  </tunnel-group-name>
  <interface-name>
    interface-name
  </interface-name>
  <l2tp-tunnel-table>....</l2tp-tunnel-table>
</l2tp-per-tunnel-group-tunnel-table>
```

Description Tunnel table sorted by tunnel group

<l2tp-per-tunnel-group-tunnel-table>

Usage

```
<service-l2tp-tunnel-information>
  <l2tp-per-tunnel-group-tunnel-table>
    <tunnel-group-name>
      tunnel-group-name
    </tunnel-group-name>
    <interface-name>
      interface-name
    </interface-name>
    <l2tp-tunnel-table>....</l2tp-tunnel-table>
  </l2tp-per-tunnel-group-tunnel-table>
</service-l2tp-tunnel-information>
```

Description Tunnel table sorted by tunnel group

<l2tp-per-tunnel-session-table>

Usage

```
<l2tp-per-tunnel-session-table>
  <tunnel-group-name>
    tunnel-group-name
  </tunnel-group-name>
  <interface-name>
    interface-name
  </interface-name>
  <l2tp-tunnel-local-id>
    l2tp-tunnel-local-id
  </l2tp-tunnel-local-id>
  <l2tp-session-table>....</l2tp-session-table>
</l2tp-per-tunnel-session-table>
```

Description Session table sorted by tunnel

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<l2tp-per-tunnel-session-table>

Usage

```
<service-l2tp-session-information>
  <l2tp-per-tunnel-session-table>
    <tunnel-group-name>
      tunnel-group-name
    </tunnel-group-name>
    <interface-name>
      interface-name
    </interface-name>
    <l2tp-tunnel-local-id>
      l2tp-tunnel-local-id
    </l2tp-tunnel-local-id>
    <l2tp-session-table>....</l2tp-session-table>
  </l2tp-per-tunnel-session-table>
</service-l2tp-session-information>
```

Description Session table sorted by tunnel

<l2tp-per-tunnel-user-table>

Usage

```
<service-l2tp-user-information>
  <l2tp-per-tunnel-user-table>
</l2tp-per-tunnel-user-table>
</service-l2tp-user-information>
```

Description

<l2tp-session-clear-entry>

Usage

```
<l2tp-session-clear-entry>
  <l2tp-session-local-id>
    l2tp-session-local-id
  </l2tp-session-local-id>
</l2tp-session-clear-entry>
```

Description L2TP cleared session information

<l2tp-session-clear-entry>

Usage

```
<service-l2tp-session-clear-information>
  <l2tp-session-clear-entry>
    <l2tp-session-local-id>
      l2tp-session-local-id
    </l2tp-session-local-id>
  </l2tp-session-clear-entry>
```

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```
</service-l2tp-session-clear-information>
```

Description L2TP cleared session information

<l2tp-session-entry>

Usage

```
<l2tp-session-entry>
  <l2tp-session-local-id>
    l2tp-session-local-id
  </l2tp-session-local-id>
  <l2tp-session-remote-id>
    l2tp-session-remote-id
  </l2tp-session-remote-id>
  <l2tp-session-remote-ip>
    l2tp-session-remote-ip
  </l2tp-session-remote-ip>
  <l2tp-session-local-ip>
    l2tp-session-local-ip
  </l2tp-session-local-ip>
  <l2tp-session-state>
    l2tp-session-state
  </l2tp-session-state>
  <l2tp-session-bundle-id>
    l2tp-session-bundle-id
  </l2tp-session-bundle-id>
  <l2tp-session-user-name>
    l2tp-session-user-name
  </l2tp-session-user-name>
  <l2tp-session-own-ip>
    l2tp-session-own-ip
  </l2tp-session-own-ip>
  <l2tp-session-peer-ip>
    l2tp-session-peer-ip
  </l2tp-session-peer-ip>
  <l2tp-session-local-name>
    l2tp-session-local-name
  </l2tp-session-local-name>
  <l2tp-session-remote-name>
    l2tp-session-remote-name
  </l2tp-session-remote-name>
  <l2tp-session-mode>
    l2tp-session-mode
  </l2tp-session-mode>
  <l2tp-session-local-mru>
    l2tp-session-local-mru
  </l2tp-session-local-mru>
  <l2tp-session-remote-mru>
    l2tp-session-remote-mru
  </l2tp-session-remote-mru>
  <l2tp-session-tx-speed>
    l2tp-session-tx-speed
  </l2tp-session-tx-speed>
  <l2tp-session-rx-speed>
```


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```
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
```

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```
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
</l2tp-session-entry>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<l2tp-session-table>
  <l2tp-session-entry>
    <l2tp-session-local-id>
      l2tp-session-local-id
    </l2tp-session-local-id>
    <l2tp-session-remote-id>
      l2tp-session-remote-id
    </l2tp-session-remote-id>
    <l2tp-session-remote-ip>
      l2tp-session-remote-ip
    </l2tp-session-remote-ip>
```


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```
<l2tp-session-local-ip>
  l2tp-session-local-ip
</l2tp-session-local-ip>
<l2tp-session-state>
  l2tp-session-state
</l2tp-session-state>
<l2tp-session-bundle-id>
  l2tp-session-bundle-id
</l2tp-session-bundle-id>
<l2tp-session-user-name>
  l2tp-session-user-name
</l2tp-session-user-name>
<l2tp-session-own-ip>
  l2tp-session-own-ip
</l2tp-session-own-ip>
<l2tp-session-peer-ip>
  l2tp-session-peer-ip
</l2tp-session-peer-ip>
<l2tp-session-local-name>
  l2tp-session-local-name
</l2tp-session-local-name>
<l2tp-session-remote-name>
  l2tp-session-remote-name
</l2tp-session-remote-name>
<l2tp-session-mode>
  l2tp-session-mode
</l2tp-session-mode>
<l2tp-session-local-mru>
  l2tp-session-local-mru
</l2tp-session-local-mru>
<l2tp-session-remote-mru>
  l2tp-session-remote-mru
</l2tp-session-remote-mru>
<l2tp-session-tx-speed>
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
```

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```
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
```


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```
        l2tp-data-rx-bytes
      </l2tp-data-rx-bytes>
      <l2tp-error-tx-packets>
        l2tp-error-tx-packets
      </l2tp-error-tx-packets>
      <l2tp-error-rx-packets>
        l2tp-error-rx-packets
      </l2tp-error-rx-packets>
      <l2tp-create-time>
        l2tp-create-time
      </l2tp-create-time>
      <l2tp-up-time>
        l2tp-up-time
      </l2tp-up-time>
      <l2tp-idle-time>
        l2tp-idle-time
      </l2tp-idle-time>
    </l2tp-session-entry>
  </l2tp-session-table>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<l2tp-per-tunnel-session-table>
  <l2tp-session-table>
    <l2tp-session-entry>
      <l2tp-session-local-id>
        l2tp-session-local-id
      </l2tp-session-local-id>
      <l2tp-session-remote-id>
        l2tp-session-remote-id
      </l2tp-session-remote-id>
      <l2tp-session-remote-ip>
        l2tp-session-remote-ip
      </l2tp-session-remote-ip>
      <l2tp-session-local-ip>
        l2tp-session-local-ip
      </l2tp-session-local-ip>
      <l2tp-session-state>
        l2tp-session-state
      </l2tp-session-state>
      <l2tp-session-bundle-id>
        l2tp-session-bundle-id
      </l2tp-session-bundle-id>
      <l2tp-session-user-name>
        l2tp-session-user-name
      </l2tp-session-user-name>
      <l2tp-session-own-ip>
        l2tp-session-own-ip
      </l2tp-session-own-ip>
      <l2tp-session-peer-ip>
        l2tp-session-peer-ip
```

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```
</l2tp-session-peer-ip>
<l2tp-session-local-name>
  l2tp-session-local-name
</l2tp-session-local-name>
<l2tp-session-remote-name>
  l2tp-session-remote-name
</l2tp-session-remote-name>
<l2tp-session-mode>
  l2tp-session-mode
</l2tp-session-mode>
<l2tp-session-local-mru>
  l2tp-session-local-mru
</l2tp-session-local-mru>
<l2tp-session-remote-mru>
  l2tp-session-remote-mru
</l2tp-session-remote-mru>
<l2tp-session-tx-speed>
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
```


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```
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
```

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```
      </l2tp-session-entry>
    </l2tp-session-table>
  </l2tp-per-tunnel-session-table>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<l2tp-multilink-links>
  <l2tp-session-entry>
    <l2tp-session-local-id>
      l2tp-session-local-id
    </l2tp-session-local-id>
    <l2tp-session-remote-id>
      l2tp-session-remote-id
    </l2tp-session-remote-id>
    <l2tp-session-remote-ip>
      l2tp-session-remote-ip
    </l2tp-session-remote-ip>
    <l2tp-session-local-ip>
      l2tp-session-local-ip
    </l2tp-session-local-ip>
    <l2tp-session-state>
      l2tp-session-state
    </l2tp-session-state>
    <l2tp-session-bundle-id>
      l2tp-session-bundle-id
    </l2tp-session-bundle-id>
    <l2tp-session-user-name>
      l2tp-session-user-name
    </l2tp-session-user-name>
    <l2tp-session-own-ip>
      l2tp-session-own-ip
    </l2tp-session-own-ip>
    <l2tp-session-peer-ip>
      l2tp-session-peer-ip
    </l2tp-session-peer-ip>
    <l2tp-session-local-name>
      l2tp-session-local-name
    </l2tp-session-local-name>
    <l2tp-session-remote-name>
      l2tp-session-remote-name
    </l2tp-session-remote-name>
    <l2tp-session-mode>
      l2tp-session-mode
    </l2tp-session-mode>
    <l2tp-session-local-mru>
      l2tp-session-local-mru
    </l2tp-session-local-mru>
    <l2tp-session-remote-mru>
      l2tp-session-remote-mru
    </l2tp-session-remote-mru>
    <l2tp-session-tx-speed>
```


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```
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
```

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```
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
</l2tp-session-entry>
</l2tp-multilink-links>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<l2tp-multilink-entry>
  <l2tp-multilink-links>
    <l2tp-session-entry>
      <l2tp-session-local-id>
        l2tp-session-local-id
      </l2tp-session-local-id>
      <l2tp-session-remote-id>
```


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```
  l2tp-session-remote-id
</l2tp-session-remote-id>
<l2tp-session-remote-ip>
  l2tp-session-remote-ip
</l2tp-session-remote-ip>
<l2tp-session-local-ip>
  l2tp-session-local-ip
</l2tp-session-local-ip>
<l2tp-session-state>
  l2tp-session-state
</l2tp-session-state>
<l2tp-session-bundle-id>
  l2tp-session-bundle-id
</l2tp-session-bundle-id>
<l2tp-session-user-name>
  l2tp-session-user-name
</l2tp-session-user-name>
<l2tp-session-own-ip>
  l2tp-session-own-ip
</l2tp-session-own-ip>
<l2tp-session-peer-ip>
  l2tp-session-peer-ip
</l2tp-session-peer-ip>
<l2tp-session-local-name>
  l2tp-session-local-name
</l2tp-session-local-name>
<l2tp-session-remote-name>
  l2tp-session-remote-name
</l2tp-session-remote-name>
<l2tp-session-mode>
  l2tp-session-mode
</l2tp-session-mode>
<l2tp-session-local-mru>
  l2tp-session-local-mru
</l2tp-session-local-mru>
<l2tp-session-remote-mru>
  l2tp-session-remote-mru
</l2tp-session-remote-mru>
<l2tp-session-tx-speed>
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
```

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<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes

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```
            </l2tp-control-rx-bytes>
            <l2tp-data-tx-bytes>
              l2tp-data-tx-bytes
            </l2tp-data-tx-bytes>
            <l2tp-data-rx-bytes>
              l2tp-data-rx-bytes
            </l2tp-data-rx-bytes>
            <l2tp-error-tx-packets>
              l2tp-error-tx-packets
            </l2tp-error-tx-packets>
            <l2tp-error-rx-packets>
              l2tp-error-rx-packets
            </l2tp-error-rx-packets>
            <l2tp-create-time>
              l2tp-create-time
            </l2tp-create-time>
            <l2tp-up-time>
              l2tp-up-time
            </l2tp-up-time>
            <l2tp-idle-time>
              l2tp-idle-time
            </l2tp-idle-time>
          </l2tp-session-entry>
        </l2tp-multilink-links>
      </l2tp-multilink-entry>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<service-l2tp-session-information>
  <l2tp-per-tunnel-session-table>
    <l2tp-session-table>
      <l2tp-session-entry>
        <l2tp-session-local-id>
          l2tp-session-local-id
        </l2tp-session-local-id>
        <l2tp-session-remote-id>
          l2tp-session-remote-id
        </l2tp-session-remote-id>
        <l2tp-session-remote-ip>
          l2tp-session-remote-ip
        </l2tp-session-remote-ip>
        <l2tp-session-local-ip>
          l2tp-session-local-ip
        </l2tp-session-local-ip>
        <l2tp-session-state>
          l2tp-session-state
        </l2tp-session-state>
        <l2tp-session-bundle-id>
          l2tp-session-bundle-id
        </l2tp-session-bundle-id>
        <l2tp-session-user-name>
```

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```
  l2tp-session-user-name
</l2tp-session-user-name>
<l2tp-session-own-ip>
  l2tp-session-own-ip
</l2tp-session-own-ip>
<l2tp-session-peer-ip>
  l2tp-session-peer-ip
</l2tp-session-peer-ip>
<l2tp-session-local-name>
  l2tp-session-local-name
</l2tp-session-local-name>
<l2tp-session-remote-name>
  l2tp-session-remote-name
</l2tp-session-remote-name>
<l2tp-session-mode>
  l2tp-session-mode
</l2tp-session-mode>
<l2tp-session-local-mru>
  l2tp-session-local-mru
</l2tp-session-local-mru>
<l2tp-session-remote-mru>
  l2tp-session-remote-mru
</l2tp-session-remote-mru>
<l2tp-session-tx-speed>
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
```


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```
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
</l2tp-session-create-time>
<l2tp-session-interface-name>
  l2tp-session-interface-name
</l2tp-session-interface-name>
<l2tp-session-tos-reflect>
  l2tp-session-tos-reflect
</l2tp-session-tos-reflect>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
```

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```
        </l2tp-create-time>
        <l2tp-up-time>
          l2tp-up-time
        </l2tp-up-time>
        <l2tp-idle-time>
          l2tp-idle-time
        </l2tp-idle-time>
      </l2tp-session-entry>
    </l2tp-session-table>
  </l2tp-per-tunnel-session-table>
</service-l2tp-session-information>
```

Description L2TP session information

<l2tp-session-entry>

Usage

```
<services-l2tp-multilink-information>
  <l2tp-multilink-entry>
    <l2tp-multilink-links>
      <l2tp-session-entry>
        <l2tp-session-local-id>
          l2tp-session-local-id
        </l2tp-session-local-id>
        <l2tp-session-remote-id>
          l2tp-session-remote-id
        </l2tp-session-remote-id>
        <l2tp-session-remote-ip>
          l2tp-session-remote-ip
        </l2tp-session-remote-ip>
        <l2tp-session-local-ip>
          l2tp-session-local-ip
        </l2tp-session-local-ip>
        <l2tp-session-state>
          l2tp-session-state
        </l2tp-session-state>
        <l2tp-session-bundle-id>
          l2tp-session-bundle-id
        </l2tp-session-bundle-id>
        <l2tp-session-user-name>
          l2tp-session-user-name
        </l2tp-session-user-name>
        <l2tp-session-own-ip>
          l2tp-session-own-ip
        </l2tp-session-own-ip>
        <l2tp-session-peer-ip>
          l2tp-session-peer-ip
        </l2tp-session-peer-ip>
        <l2tp-session-local-name>
          l2tp-session-local-name
        </l2tp-session-local-name>
        <l2tp-session-remote-name>
          l2tp-session-remote-name
        </l2tp-session-remote-name>
```


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```
<l2tp-session-mode>
  l2tp-session-mode
</l2tp-session-mode>
<l2tp-session-local-mru>
  l2tp-session-local-mru
</l2tp-session-local-mru>
<l2tp-session-remote-mru>
  l2tp-session-remote-mru
</l2tp-session-remote-mru>
<l2tp-session-tx-speed>
  l2tp-session-tx-speed
</l2tp-session-tx-speed>
<l2tp-session-rx-speed>
  l2tp-session-rx-speed
</l2tp-session-rx-speed>
<l2tp-session-bearer-type>
  l2tp-session-bearer-type
</l2tp-session-bearer-type>
<l2tp-session-framing-type>
  l2tp-session-framing-type
</l2tp-session-framing-type>
<l2tp-session-lcp-renegotiation>
  l2tp-session-lcp-renegotiation
</l2tp-session-lcp-renegotiation>
<l2tp-session-authentication>
  l2tp-session-authentication
</l2tp-session-authentication>
<l2tp-session-interface-id>
  l2tp-session-interface-id
</l2tp-session-interface-id>
<l2tp-session-interface-unit>
  l2tp-session-interface-unit
</l2tp-session-interface-unit>
<l2tp-session-call-serial-number>
  l2tp-session-call-serial-number
</l2tp-session-call-serial-number>
<l2tp-session-policer-bandwidth>
  l2tp-session-policer-bandwidth
</l2tp-session-policer-bandwidth>
<l2tp-session-policer-exclude-bandwidth>
  l2tp-session-policer-exclude-bandwidth
</l2tp-session-policer-exclude-bandwidth>
<l2tp-session-policer-burstsize>
  l2tp-session-policer-burstsize
</l2tp-session-policer-burstsize>
<l2tp-session-firewall-filter>
  l2tp-session-firewall-filter
</l2tp-session-firewall-filter>
<l2tp-session-encapsulation-overhead>
  l2tp-session-encapsulation-overhead
</l2tp-session-encapsulation-overhead>
<l2tp-session-cell-overhead>
  l2tp-session-cell-overhead
</l2tp-session-cell-overhead>
<l2tp-session-create-time>
  l2tp-session-create-time
```

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```
        </l2tp-session-create-time>
        <l2tp-session-interface-name>
          l2tp-session-interface-name
        </l2tp-session-interface-name>
        <l2tp-session-tos-reflect>
          l2tp-session-tos-reflect
        </l2tp-session-tos-reflect>
        <l2tp-statistics-since>
          l2tp-statistics-since
        </l2tp-statistics-since>
        <l2tp-control-tx-packets>
          l2tp-control-tx-packets
        </l2tp-control-tx-packets>
        <l2tp-control-rx-packets>
          l2tp-control-rx-packets
        </l2tp-control-rx-packets>
        <l2tp-data-tx-packets>
          l2tp-data-tx-packets
        </l2tp-data-tx-packets>
        <l2tp-data-rx-packets>
          l2tp-data-rx-packets
        </l2tp-data-rx-packets>
        <l2tp-control-tx-bytes>
          l2tp-control-tx-bytes
        </l2tp-control-tx-bytes>
        <l2tp-control-rx-bytes>
          l2tp-control-rx-bytes
        </l2tp-control-rx-bytes>
        <l2tp-data-tx-bytes>
          l2tp-data-tx-bytes
        </l2tp-data-tx-bytes>
        <l2tp-data-rx-bytes>
          l2tp-data-rx-bytes
        </l2tp-data-rx-bytes>
        <l2tp-error-tx-packets>
          l2tp-error-tx-packets
        </l2tp-error-tx-packets>
        <l2tp-error-rx-packets>
          l2tp-error-rx-packets
        </l2tp-error-rx-packets>
        <l2tp-create-time>
          l2tp-create-time
        </l2tp-create-time>
        <l2tp-up-time>
          l2tp-up-time
        </l2tp-up-time>
        <l2tp-idle-time>
          l2tp-idle-time
        </l2tp-idle-time>
      </l2tp-session-entry>
    </l2tp-multilink-links>
  </l2tp-multilink-entry>
</services-l2tp-multilink-information>
```


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Description L2TP session information

<l2tp-session-table>

Usage

```
<l2tp-session-table>
  <l2tp-session-entry>....</l2tp-session-entry>
</l2tp-session-table>
```

Description L2TP session table sorted by tunnel ID

<l2tp-session-table>

Usage

```
<l2tp-per-tunnel-session-table>
  <l2tp-session-table>
    <l2tp-session-entry>....</l2tp-session-entry>
  </l2tp-session-table>
</l2tp-per-tunnel-session-table>
```

Description L2TP session table sorted by tunnel ID

<l2tp-session-table>

Usage

```
<service-l2tp-session-information>
  <l2tp-per-tunnel-session-table>
    <l2tp-session-table>
      <l2tp-session-entry>....</l2tp-session-entry>
    </l2tp-session-table>
  </l2tp-per-tunnel-session-table>
</service-l2tp-session-information>
```

Description L2TP session table sorted by tunnel ID

<l2tp-summary-table>

Usage

```
<l2tp-summary-table>
  <l2tp-destinations>
    l2tp-destinations
  </l2tp-destinations>
  <l2tp-tunnels>
    l2tp-tunnels
  </l2tp-tunnels>
  <l2tp-sessions>
    l2tp-sessions
  </l2tp-sessions>
  <l2tp-error-tx-packets>
    l2tp-error-tx-packets
```

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```
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-interface-error-tx-packets>
  l2tp-interface-error-tx-packets
</l2tp-interface-error-tx-packets>
<l2tp-interface-error-rx-packets>
  l2tp-interface-error-rx-packets
</l2tp-interface-error-rx-packets>
<l2tp-interface-control-tx-packets>
  l2tp-interface-control-tx-packets
</l2tp-interface-control-tx-packets>
<l2tp-interface-control-rx-packets>
  l2tp-interface-control-rx-packets
</l2tp-interface-control-rx-packets>
<l2tp-control-memory-bytes>
  l2tp-control-memory-bytes
</l2tp-control-memory-bytes>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-interface-data-tx-packets>
  l2tp-interface-data-tx-packets
</l2tp-interface-data-tx-packets>
<l2tp-interface-data-rx-packets>
  l2tp-interface-data-rx-packets
</l2tp-interface-data-rx-packets>
<l2tp-data-memory-bytes>
  l2tp-data-memory-bytes
</l2tp-data-memory-bytes>
<l2tp-interface-name>
  l2tp-interface-name
</l2tp-interface-name>
<l2tp-failover-preference-level>
  l2tp-failover-preference-level
</l2tp-failover-preference-level>
<l2tp-weighted-load-balancing>
  l2tp-weighted-load-balancing
</l2tp-weighted-load-balancing>
<l2tp-tunnel-authentication-challenge>
  l2tp-tunnel-authentication-challenge
</l2tp-tunnel-authentication-challenge>
<l2tp-calling-number-avp>
  l2tp-calling-number-avp
</l2tp-calling-number-avp>
<l2tp-failover-protocol>
```


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```
    l2tp-failover-protocol
   </l2tp-failover-protocol>
   <l2tp-tx-connect-speed-method>
    l2tp-tx-connect-speed-method
   </l2tp-tx-connect-speed-method>
   <l2tp-tunnel-assignment-id-format>
    l2tp-tunnel-assignment-id-format
   </l2tp-tunnel-assignment-id-format>
  </l2tp-summary-table>
```

Description L2TP summary

<l2tp-summary-table>

Usage

```
<service-l2tp-summary-information>
 <l2tp-summary-table>
  <l2tp-destinations>
   l2tp-destinations
  </l2tp-destinations>
  <l2tp-tunnels>
   l2tp-tunnels
  </l2tp-tunnels>
  <l2tp-sessions>
   l2tp-sessions
  </l2tp-sessions>
  <l2tp-error-tx-packets>
   l2tp-error-tx-packets
  </l2tp-error-tx-packets>
  <l2tp-error-rx-packets>
   l2tp-error-rx-packets
  </l2tp-error-rx-packets>
  <l2tp-control-tx-packets>
   l2tp-control-tx-packets
  </l2tp-control-tx-packets>
  <l2tp-control-rx-packets>
   l2tp-control-rx-packets
  </l2tp-control-rx-packets>
  <l2tp-interface-error-tx-packets>
   l2tp-interface-error-tx-packets
  </l2tp-interface-error-tx-packets>
  <l2tp-interface-error-rx-packets>
   l2tp-interface-error-rx-packets
  </l2tp-interface-error-rx-packets>
  <l2tp-interface-control-tx-packets>
   l2tp-interface-control-tx-packets
  </l2tp-interface-control-tx-packets>
  <l2tp-interface-control-rx-packets>
   l2tp-interface-control-rx-packets
  </l2tp-interface-control-rx-packets>
  <l2tp-control-memory-bytes>
   l2tp-control-memory-bytes
  </l2tp-control-memory-bytes>
  <l2tp-data-tx-packets>
```

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```
    l2tp-data-tx-packets
   </l2tp-data-tx-packets>
   <l2tp-data-rx-packets>
    l2tp-data-rx-packets
   </l2tp-data-rx-packets>
   <l2tp-interface-data-tx-packets>
    l2tp-interface-data-tx-packets
   </l2tp-interface-data-tx-packets>
   <l2tp-interface-data-rx-packets>
    l2tp-interface-data-rx-packets
   </l2tp-interface-data-rx-packets>
   <l2tp-data-memory-bytes>
    l2tp-data-memory-bytes
   </l2tp-data-memory-bytes>
   <l2tp-interface-name>
    l2tp-interface-name
   </l2tp-interface-name>
   <l2tp-failover-preference-level>
    l2tp-failover-preference-level
   </l2tp-failover-preference-level>
   <l2tp-weighted-load-balancing>
    l2tp-weighted-load-balancing
   </l2tp-weighted-load-balancing>
   <l2tp-tunnel-authentication-challenge>
    l2tp-tunnel-authentication-challenge
   </l2tp-tunnel-authentication-challenge>
   <l2tp-calling-number-avp>
    l2tp-calling-number-avp
   </l2tp-calling-number-avp>
   <l2tp-failover-protocol>
    l2tp-failover-protocol
   </l2tp-failover-protocol>
   <l2tp-tx-connect-speed-method>
    l2tp-tx-connect-speed-method
   </l2tp-tx-connect-speed-method>
   <l2tp-tunnel-assignment-id-format>
    l2tp-tunnel-assignment-id-format
   </l2tp-tunnel-assignment-id-format>
  </l2tp-summary-table>
</service-l2tp-summary-information>
```

Description L2TP summary

<l2tp-tunnel-clear-entry>

Usage

```
<l2tp-tunnel-clear-entry>
  <l2tp-tunnel-local-id>
    l2tp-tunnel-local-id
  </l2tp-tunnel-local-id>
</l2tp-tunnel-clear-entry>
```

Description L2TP cleared tunnel information

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<l2tp-tunnel-clear-entry>

Usage

```
<service-l2tp-tunnel-clear-information>
  <l2tp-tunnel-clear-entry>
    <l2tp-tunnel-local-id>
      l2tp-tunnel-local-id
    </l2tp-tunnel-local-id>
  </l2tp-tunnel-clear-entry>
</service-l2tp-tunnel-clear-information>
```

Description L2TP cleared tunnel information

<l2tp-tunnel-entry>

Usage

```
<l2tp-tunnel-entry>
  <l2tp-tunnel-local-id>
    l2tp-tunnel-local-id
  </l2tp-tunnel-local-id>
  <l2tp-tunnel-name>
    l2tp-tunnel-name
  </l2tp-tunnel-name>
  <l2tp-tunnel-remote-id>
    l2tp-tunnel-remote-id
  </l2tp-tunnel-remote-id>
  <l2tp-tunnel-remote-ip>
    l2tp-tunnel-remote-ip
  </l2tp-tunnel-remote-ip>
  <l2tp-tunnel-state>
    l2tp-tunnel-state
  </l2tp-tunnel-state>
  <l2tp-tunnel-session-count>
    l2tp-tunnel-session-count
  </l2tp-tunnel-session-count>
  <l2tp-tunnel-local-ip>
    l2tp-tunnel-local-ip
  </l2tp-tunnel-local-ip>
  <l2tp-tunnel-remote-name>
    l2tp-tunnel-remote-name
  </l2tp-tunnel-remote-name>
  <l2tp-tunnel-local-name>
    l2tp-tunnel-local-name
  </l2tp-tunnel-local-name>
  <l2tp-tunnel-maximum-sessions>
    l2tp-tunnel-maximum-sessions
  </l2tp-tunnel-maximum-sessions>
  <l2tp-tunnel-window-size>
    l2tp-tunnel-window-size
  </l2tp-tunnel-window-size>
  <l2tp-tunnel-hello-interval>
    l2tp-tunnel-hello-interval
  </l2tp-tunnel-hello-interval>
```

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```
<l2tp-tunnel-tos-reflect>
  l2tp-tunnel-tos-reflect
</l2tp-tunnel-tos-reflect>
<l2tp-tunnel-interface-name>
  l2tp-tunnel-interface-name
</l2tp-tunnel-interface-name>
<l2tp-tunnel-group-name>
  l2tp-tunnel-group-name
</l2tp-tunnel-group-name>
<l2tp-tunnel-prm>
  l2tp-tunnel-prm
</l2tp-tunnel-prm>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
</l2tp-tunnel-entry>
```


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Description L2TP tunnel information

<l2tp-tunnel-entry>

Usage

```
<l2tp-tunnel-table>
  <l2tp-tunnel-entry>
    <l2tp-tunnel-local-id>
      l2tp-tunnel-local-id
    </l2tp-tunnel-local-id>
    <l2tp-tunnel-name>
      l2tp-tunnel-name
    </l2tp-tunnel-name>
    <l2tp-tunnel-remote-id>
      l2tp-tunnel-remote-id
    </l2tp-tunnel-remote-id>
    <l2tp-tunnel-remote-ip>
      l2tp-tunnel-remote-ip
    </l2tp-tunnel-remote-ip>
    <l2tp-tunnel-state>
      l2tp-tunnel-state
    </l2tp-tunnel-state>
    <l2tp-tunnel-session-count>
      l2tp-tunnel-session-count
    </l2tp-tunnel-session-count>
    <l2tp-tunnel-local-ip>
      l2tp-tunnel-local-ip
    </l2tp-tunnel-local-ip>
    <l2tp-tunnel-remote-name>
      l2tp-tunnel-remote-name
    </l2tp-tunnel-remote-name>
    <l2tp-tunnel-local-name>
      l2tp-tunnel-local-name
    </l2tp-tunnel-local-name>
    <l2tp-tunnel-maximum-sessions>
      l2tp-tunnel-maximum-sessions
    </l2tp-tunnel-maximum-sessions>
    <l2tp-tunnel-window-size>
      l2tp-tunnel-window-size
    </l2tp-tunnel-window-size>
    <l2tp-tunnel-hello-interval>
      l2tp-tunnel-hello-interval
    </l2tp-tunnel-hello-interval>
    <l2tp-tunnel-tos-reflect>
      l2tp-tunnel-tos-reflect
    </l2tp-tunnel-tos-reflect>
    <l2tp-tunnel-interface-name>
      l2tp-tunnel-interface-name
    </l2tp-tunnel-interface-name>
    <l2tp-tunnel-group-name>
      l2tp-tunnel-group-name
    </l2tp-tunnel-group-name>
    <l2tp-tunnel-prm>
      l2tp-tunnel-prm
    </l2tp-tunnel-prm>
```

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```
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
</l2tp-tunnel-entry>
</l2tp-tunnel-table>
```

Description L2TP tunnel information

<l2tp-tunnel-entry>

Usage

```
<l2tp-per-tunnel-group-tunnel-table>
  <l2tp-tunnel-table>
    <l2tp-tunnel-entry>
      <l2tp-tunnel-local-id>
```


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```
  l2tp-tunnel-local-id
</l2tp-tunnel-local-id>
<l2tp-tunnel-name>
  l2tp-tunnel-name
</l2tp-tunnel-name>
<l2tp-tunnel-remote-id>
  l2tp-tunnel-remote-id
</l2tp-tunnel-remote-id>
<l2tp-tunnel-remote-ip>
  l2tp-tunnel-remote-ip
</l2tp-tunnel-remote-ip>
<l2tp-tunnel-state>
  l2tp-tunnel-state
</l2tp-tunnel-state>
<l2tp-tunnel-session-count>
  l2tp-tunnel-session-count
</l2tp-tunnel-session-count>
<l2tp-tunnel-local-ip>
  l2tp-tunnel-local-ip
</l2tp-tunnel-local-ip>
<l2tp-tunnel-remote-name>
  l2tp-tunnel-remote-name
</l2tp-tunnel-remote-name>
<l2tp-tunnel-local-name>
  l2tp-tunnel-local-name
</l2tp-tunnel-local-name>
<l2tp-tunnel-maximum-sessions>
  l2tp-tunnel-maximum-sessions
</l2tp-tunnel-maximum-sessions>
<l2tp-tunnel-window-size>
  l2tp-tunnel-window-size
</l2tp-tunnel-window-size>
<l2tp-tunnel-hello-interval>
  l2tp-tunnel-hello-interval
</l2tp-tunnel-hello-interval>
<l2tp-tunnel-tos-reflect>
  l2tp-tunnel-tos-reflect
</l2tp-tunnel-tos-reflect>
<l2tp-tunnel-interface-name>
  l2tp-tunnel-interface-name
</l2tp-tunnel-interface-name>
<l2tp-tunnel-group-name>
  l2tp-tunnel-group-name
</l2tp-tunnel-group-name>
<l2tp-tunnel-prm>
  l2tp-tunnel-prm
</l2tp-tunnel-prm>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
```

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```
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
  l2tp-control-tx-bytes
</l2tp-control-tx-bytes>
<l2tp-control-rx-bytes>
  l2tp-control-rx-bytes
</l2tp-control-rx-bytes>
<l2tp-data-tx-bytes>
  l2tp-data-tx-bytes
</l2tp-data-tx-bytes>
<l2tp-data-rx-bytes>
  l2tp-data-rx-bytes
</l2tp-data-rx-bytes>
<l2tp-error-tx-packets>
  l2tp-error-tx-packets
</l2tp-error-tx-packets>
<l2tp-error-rx-packets>
  l2tp-error-rx-packets
</l2tp-error-rx-packets>
<l2tp-create-time>
  l2tp-create-time
</l2tp-create-time>
<l2tp-up-time>
  l2tp-up-time
</l2tp-up-time>
<l2tp-idle-time>
  l2tp-idle-time
</l2tp-idle-time>
</l2tp-tunnel-entry>
</l2tp-tunnel-table>
</l2tp-per-tunnel-group-tunnel-table>
```

Description L2TP tunnel information

<l2tp-tunnel-entry>

Usage

```
<service-l2tp-tunnel-information>
  <l2tp-per-tunnel-group-tunnel-table>
    <l2tp-tunnel-table>
      <l2tp-tunnel-entry>
        <l2tp-tunnel-local-id>
          l2tp-tunnel-local-id
        </l2tp-tunnel-local-id>
        <l2tp-tunnel-name>
          l2tp-tunnel-name
        </l2tp-tunnel-name>
        <l2tp-tunnel-remote-id>
          l2tp-tunnel-remote-id
```


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```
</l2tp-tunnel-remote-id>
<l2tp-tunnel-remote-ip>
  l2tp-tunnel-remote-ip
</l2tp-tunnel-remote-ip>
<l2tp-tunnel-state>
  l2tp-tunnel-state
</l2tp-tunnel-state>
<l2tp-tunnel-session-count>
  l2tp-tunnel-session-count
</l2tp-tunnel-session-count>
<l2tp-tunnel-local-ip>
  l2tp-tunnel-local-ip
</l2tp-tunnel-local-ip>
<l2tp-tunnel-remote-name>
  l2tp-tunnel-remote-name
</l2tp-tunnel-remote-name>
<l2tp-tunnel-local-name>
  l2tp-tunnel-local-name
</l2tp-tunnel-local-name>
<l2tp-tunnel-maximum-sessions>
  l2tp-tunnel-maximum-sessions
</l2tp-tunnel-maximum-sessions>
<l2tp-tunnel-window-size>
  l2tp-tunnel-window-size
</l2tp-tunnel-window-size>
<l2tp-tunnel-hello-interval>
  l2tp-tunnel-hello-interval
</l2tp-tunnel-hello-interval>
<l2tp-tunnel-tos-reflect>
  l2tp-tunnel-tos-reflect
</l2tp-tunnel-tos-reflect>
<l2tp-tunnel-interface-name>
  l2tp-tunnel-interface-name
</l2tp-tunnel-interface-name>
<l2tp-tunnel-group-name>
  l2tp-tunnel-group-name
</l2tp-tunnel-group-name>
<l2tp-tunnel-prm>
  l2tp-tunnel-prm
</l2tp-tunnel-prm>
<l2tp-statistics-since>
  l2tp-statistics-since
</l2tp-statistics-since>
<l2tp-control-tx-packets>
  l2tp-control-tx-packets
</l2tp-control-tx-packets>
<l2tp-control-rx-packets>
  l2tp-control-rx-packets
</l2tp-control-rx-packets>
<l2tp-data-tx-packets>
  l2tp-data-tx-packets
</l2tp-data-tx-packets>
<l2tp-data-rx-packets>
  l2tp-data-rx-packets
</l2tp-data-rx-packets>
<l2tp-control-tx-bytes>
```

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```
                l2tp-control-tx-bytes
               </l2tp-control-tx-bytes>
               <l2tp-control-rx-bytes>
                l2tp-control-rx-bytes
               </l2tp-control-rx-bytes>
               <l2tp-data-tx-bytes>
                l2tp-data-tx-bytes
               </l2tp-data-tx-bytes>
               <l2tp-data-rx-bytes>
                l2tp-data-rx-bytes
               </l2tp-data-rx-bytes>
               <l2tp-error-tx-packets>
                l2tp-error-tx-packets
               </l2tp-error-tx-packets>
               <l2tp-error-rx-packets>
                l2tp-error-rx-packets
               </l2tp-error-rx-packets>
               <l2tp-create-time>
                l2tp-create-time
               </l2tp-create-time>
               <l2tp-up-time>
                l2tp-up-time
               </l2tp-up-time>
               <l2tp-idle-time>
                l2tp-idle-time
               </l2tp-idle-time>
              </l2tp-tunnel-entry>
             </l2tp-tunnel-table>
            </l2tp-per-tunnel-group-tunnel-table>
           </service-l2tp-tunnel-information>
```

Description L2TP tunnel information

<l2tp-tunnel-table>

Usage

```
<l2tp-tunnel-table>
  <l2tp-tunnel-entry>....</l2tp-tunnel-entry>
</l2tp-tunnel-table>
```

Description L2TP tunnel table sorted by tunnel group

<l2tp-tunnel-table>

Usage

```
<l2tp-per-tunnel-group-tunnel-table>
  <l2tp-tunnel-table>
    <l2tp-tunnel-entry>....</l2tp-tunnel-entry>
  </l2tp-tunnel-table>
</l2tp-per-tunnel-group-tunnel-table>
```


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Description L2TP tunnel table sorted by tunnel group

<l2tp-tunnel-table>

Usage

```
<service-l2tp-tunnel-information>
  <l2tp-per-tunnel-group-tunnel-table>
    <l2tp-tunnel-table>
      <l2tp-tunnel-entry>....</l2tp-tunnel-entry>
    </l2tp-tunnel-table>
  </l2tp-per-tunnel-group-tunnel-table>
</service-l2tp-tunnel-information>
```

Description L2TP tunnel table sorted by tunnel group

<l2tp-tunnel-test-result-entry>

Usage

```
<l2tp-tunnel-test-result-entry>
  <tunnel-name>
    tunnel-name
  </tunnel-name>
  <tunnel-peer>
    tunnel-peer
  </tunnel-peer>
  <tunnel-logical-system>
    tunnel-logical-system
  </tunnel-logical-system>
  <tunnel-routing-instance>
    tunnel-routing-instance
  </tunnel-routing-instance>
  <tunnel-status>
    tunnel-status
  </tunnel-status>
</l2tp-tunnel-test-result-entry>
```

Description Result information for one tunnel's verification

<l2tp-tunnel-test-result-entry>

Usage

```
<l2tp-tunnel-test-result-table>
  <l2tp-tunnel-test-result-entry>
    <tunnel-name>
      tunnel-name
    </tunnel-name>
    <tunnel-peer>
      tunnel-peer
    </tunnel-peer>
    <tunnel-logical-system>
      tunnel-logical-system
    </tunnel-logical-system>
```

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```
      <tunnel-routing-instance>
       tunnel-routing-instance
      </tunnel-routing-instance>
      <tunnel-status>
       tunnel-status
      </tunnel-status>
     </l2tp-tunnel-test-result-entry>
    </l2tp-tunnel-test-result-table>
```

Description Result information for one tunnel's verification

<l2tp-tunnel-test-result-entry>

Usage

```
<test-services-l2tp-tunnel-result>
 <l2tp-tunnel-test-result-table>
  <l2tp-tunnel-test-result-entry>
   <tunnel-name>
    tunnel-name
   </tunnel-name>
   <tunnel-peer>
    tunnel-peer
   </tunnel-peer>
   <tunnel-logical-system>
    tunnel-logical-system
   </tunnel-logical-system>
   <tunnel-routing-instance>
    tunnel-routing-instance
   </tunnel-routing-instance>
   <tunnel-status>
    tunnel-status
   </tunnel-status>
  </l2tp-tunnel-test-result-entry>
 </l2tp-tunnel-test-result-table>
</test-services-l2tp-tunnel-result>
```

Description Result information for one tunnel's verification

<l2tp-tunnel-test-result-table>

Usage

```
<l2tp-tunnel-test-result-table>
 <l2tp-tunnel-test-result-entry>....</l2tp-tunnel-test-result-entry>
</l2tp-tunnel-test-result-table>
```

Description Table of tunnel verification result

<l2tp-tunnel-test-result-table>

Usage

```
<test-services-l2tp-tunnel-result>
```


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```
<l2tp-tunnel-test-result-table>
  <l2tp-tunnel-test-result-entry>....</l2tp-tunnel-test-result-entry>
 </l2tp-tunnel-test-result-table>
</test-services-l2tp-tunnel-result>
```

Description Table of tunnel verification result

<l2tp-tunnel-test-subscriber-information>

Usage

```
<l2tp-tunnel-test-subscriber-information>
 <subscriber-name>
  subscriber-name
 </subscriber-name>
 <subscriber-authentication-status>
  subscriber-authentication-status
 </subscriber-authentication-status>
 <subscriber-tunneling-status>
  subscriber-tunneling-status
 </subscriber-tunneling-status>
</l2tp-tunnel-test-subscriber-information>
```

Description Subscriber information obtained from tunnel verification

<l2tp-tunnel-test-subscriber-information>

Usage

```
<test-services-l2tp-tunnel-result>
 <l2tp-tunnel-test-subscriber-information>
  <subscriber-name>
   subscriber-name
  </subscriber-name>
  <subscriber-authentication-status>
   subscriber-authentication-status
  </subscriber-authentication-status>
  <subscriber-tunneling-status>
   subscriber-tunneling-status
  </subscriber-tunneling-status>
 </l2tp-tunnel-test-subscriber-information>
</test-services-l2tp-tunnel-result>
```

Description Subscriber information obtained from tunnel verification

<load-balancer-entries>

Usage

```
<lsqinfo-cpu-usage-information>
 <load-balancer-entries>
  <load-balancer-entry>....</load-balancer-entry>
 </load-balancer-entries>
```

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```
</lsqinfo-cpu-usage-information>
```

Description

<load-balancer-entry>

Usage

```
<lsqinfo-cpu-usage-information>
 <load-balancer-entries>
  <load-balancer-entry>
   <cpu-name>
    cpu-name
   </cpu-name>
   <idle>
    idle
   </idle>
   <system>
    system
   </system>
   <output>
    output
   </output>
   <freeback>
    freeback
   </freeback>
   <input-1>
    input-1
   </input-1>
   <input-2>
    input-2
   </input-2>
  </load-balancer-entry>
 </load-balancer-entries>
</lsqinfo-cpu-usage-information>
```

Description Load Balancer CPU usage information

<lsqinfo-cpu-usage-information>

Usage

```
<lsqinfo-cpu-usage-information>
 <cpu-role-name>
  cpu-role-name
 </cpu-role-name>
 <one-second-usage>
  one-second-usage
 </one-second-usage>
 <five-second-usage>
  five-second-usage
 </five-second-usage>
 <fragmenter-entries>....</fragmenter-entries>
 <quality-of-service-entries>....</quality-of-service-entries>
 <sequencer-entries>....</sequencer-entries>
```


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```
  <load-balancer-entries>....</load-balancer-entries>
</lsqinfo-cpu-usage-information>
```

Description

<maximum-inactivity-time>

Usage

```
<pgcpd-active-configuration>
  <inactivity-timer-entry>
    <maximum-inactivity-time>
      <minimum>
        minimum
      </minimum>
      <maximum>
        maximum
      </maximum>
      <default>
        default
      </default>
    </maximum-inactivity-time>
  </inactivity-timer-entry>
</pgcpd-active-configuration>
```

Description

<maximum-inactivity-time>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <inactivity-timer-entry>
      <maximum-inactivity-time>
        <minimum>
          minimum
        </minimum>
        <maximum>
          maximum
        </maximum>
        <default>
          default
        </default>
      </maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<maximum-inactivity-time>

Usage

```
<pgcpd-active-configuration>
```

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```
<pgcpd-config>
  <gateway-entry>
    <inactivity-timer-entry>
      <maximum-inactivity-time>
        <minimum>
          minimum
        </minimum>
        <maximum>
          maximum
        </maximum>
        <default>
          default
        </default>
      </maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<maximum-inactivity-time>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <inactivity-timer-entry>
      <maximum-inactivity-time>
        <minimum>
          minimum
        </minimum>
        <maximum>
          maximum
        </maximum>
        <default>
          default
        </default>
      </maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

<maximum-inactivity-time>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <inactivity-timer-entry>
      <maximum-inactivity-time>
        <minimum>
          minimum
        </minimum>
```


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```
        <maximum>
          maximum
        </maximum>
        <default>
          default
        </default>
      </maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<maximum-inactivity-time>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <inactivity-timer-entry>
      <maximum-inactivity-time>
        <minimum>
          minimum
        </minimum>
        <maximum>
          maximum
        </maximum>
        <default>
          default
        </default>
      </maximum-inactivity-time>
    </inactivity-timer-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<media-service-entry>

Usage

```
<media-service-entry>
  <media-service-name>
    media-service-name
  </media-service-name>
  <media-service-nat-pool>
    media-service-nat-pool
  </media-service-nat-pool>
</media-service-entry>
```

Description

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<media-service-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <media-service-entry>
      <media-service-name>
        media-service-name
      </media-service-name>
      <media-service-nat-pool>
        media-service-nat-pool
      </media-service-nat-pool>
    </media-service-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<media-service-ref-entry>

Usage

```
<media-service-ref-entry>
  <media-service-ref-name>
    media-service-ref-name
  </media-service-ref-name>
</media-service-ref-entry>
```

Description

<media-service-ref-entry>

Usage

```
<pgcpd-active-configuration>
  <virtual-interface-entry>
    <media-service-ref-entry>
      <media-service-ref-name>
        media-service-ref-name
      </media-service-ref-name>
    </media-service-ref-entry>
  </virtual-interface-entry>
</pgcpd-active-configuration>
```

Description

<media-service-ref-entry>

Usage

```
<pgcpd-active-configuration>
  <rule-entry>
    <media-service-ref-entry>
      <media-service-ref-name>
        media-service-ref-name
```


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```
      </media-service-ref-name>
     </media-service-ref-entry>
    </rule-entry>
</pgcpd-active-configuration>
```

Description

<media-service-ref-entry>

Usage

```
<pgcpd-active-configuration>
 <pgcpd-config>
  <virtual-interface-entry>
   <media-service-ref-entry>
    <media-service-ref-name>
     media-service-ref-name
    </media-service-ref-name>
   </media-service-ref-entry>
  </virtual-interface-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<media-service-ref-entry>

Usage

```
<pgcpd-active-configuration>
 <pgcpd-config>
  <rule-entry>
   <media-service-ref-entry>
    <media-service-ref-name>
     media-service-ref-name
    </media-service-ref-name>
   </media-service-ref-entry>
  </rule-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<message-counters>

Usage

```
<sfw-stats-service-set-entry>
 <sip-alg-counters>
  <message-counters>
   <register-new>
    register-new
   </register-new>
   <invite-new>
    invite-new
   </invite-new>
```

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```
<reinvites>
  reinvites
</reinvites>
<invite-retransmits>
  invite-retransmits
</invite-retransmits>
<response-provisional>
  response-provisional
</response-provisional>
<response-invite-ok>
  response-invite-ok
</response-invite-ok>
<response-non-invite-ok>
  response-non-invite-ok
</response-non-invite-ok>
<response-redir>
  response-redir
</response-redir>
<response-request-failure>
  response-request-failure
</response-request-failure>
<response-server-failure>
  response-server-failure
</response-server-failure>
<response-global-failure>
  response-global-failure
</response-global-failure>
<response-invalid>
  response-invalid
</response-invalid>
<response-retransmits>
  response-retransmits
</response-retransmits>
<ack-valid>
  ack-valid
</ack-valid>
<ack-invalid>
  ack-invalid
</ack-invalid>
<ack-retransmits>
  ack-retransmits
</ack-retransmits>
<bye-valid>
  bye-valid
</bye-valid>
<bye-invalid>
  bye-invalid
</bye-invalid>
<cancel-valid>
  cancel-valid
</cancel-valid>
<cancel-invalid>
  cancel-invalid
</cancel-invalid>
<subscribe-valid>
  subscribe-valid
```


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```
        </subscribe-valid>
        <subscribe-invalid>
          subscribe-invalid
        </subscribe-invalid>
        <notify-valid>
          notify-valid
        </notify-valid>
        <notify-invalid>
          notify-invalid
        </notify-invalid>
        <options-valid>
          options-valid
        </options-valid>
        <options-invalid>
          options-invalid
        </options-invalid>
        <info-valid>
          info-valid
        </info-valid>
        <info-invalid>
          info-invalid
        </info-invalid>
        <update-valid>
          update-valid
        </update-valid>
        <update-invalid>
          update-invalid
        </update-invalid>
        <refer-valid>
          refer-valid
        </refer-valid>
        <refer-invalid>
          refer-invalid
        </refer-invalid>
      </message-counters>
    </sip-alg-counters>
  </sfw-stats-service-set-entry>
```

Description SIP message counters

<message-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <sip-alg-counters>
        <message-counters>
          <register-new>
            register-new
          </register-new>
          <invite-new>
            invite-new
          </invite-new>
```

```
<reinvites>
  reinvites
</reinvites>
<invite-retransmits>
  invite-retransmits
</invite-retransmits>
<response-provisional>
  response-provisional
</response-provisional>
<response-invite-ok>
  response-invite-ok
</response-invite-ok>
<response-non-invite-ok>
  response-non-invite-ok
</response-non-invite-ok>
<response-redir>
  response-redir
</response-redir>
<response-request-failure>
  response-request-failure
</response-request-failure>
<response-server-failure>
  response-server-failure
</response-server-failure>
<response-global-failure>
  response-global-failure
</response-global-failure>
<response-invalid>
  response-invalid
</response-invalid>
<response-retransmits>
  response-retransmits
</response-retransmits>
<ack-valid>
  ack-valid
</ack-valid>
<ack-invalid>
  ack-invalid
</ack-invalid>
<ack-retransmits>
  ack-retransmits
</ack-retransmits>
<bye-valid>
  bye-valid
</bye-valid>
<bye-invalid>
  bye-invalid
</bye-invalid>
<cancel-valid>
  cancel-valid
</cancel-valid>
<cancel-invalid>
  cancel-invalid
</cancel-invalid>
<subscribe-valid>
  subscribe-valid
```


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```
</subscribe-valid>
<subscribe-invalid>
  subscribe-invalid
</subscribe-invalid>
<notify-valid>
  notify-valid
</notify-valid>
<notify-invalid>
  notify-invalid
</notify-invalid>
<options-valid>
  options-valid
</options-valid>
<options-invalid>
  options-invalid
</options-invalid>
<info-valid>
  info-valid
</info-valid>
<info-invalid>
  info-invalid
</info-invalid>
<update-valid>
  update-valid
</update-valid>
<update-invalid>
  update-invalid
</update-invalid>
<refer-valid>
  refer-valid
</refer-valid>
<refer-invalid>
  refer-invalid
</refer-invalid>
</message-counters>
</sip-alg-counters>
</sfw-stats-service-set-entry>
</service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description SIP message counters

<msp-alg-conv-all-entry>

Usage

```
<msp-alg-conv-all-entry>
  <client-name>
    client-name
  </client-name>
  <client-state>
    client-state
  </client-state>
  <num-groups>
    num-groups
```

```
</num-groups>
<parent-sess-state>
  parent-sess-state
</parent-sess-state>
<parent-sess-id>
  parent-sess-id
</parent-sess-id>
<parent-flow-protocol>
  parent-flow-protocol
</parent-flow-protocol>
<parent-fflow-src-ip>
  parent-fflow-src-ip
</parent-fflow-src-ip>
<parent-fflow-dst-ip>
  parent-fflow-dst-ip
</parent-fflow-dst-ip>
<parent-fflow-src-port>
  parent-fflow-src-port
</parent-fflow-src-port>
<parent-fflow-dst-port>
  parent-fflow-dst-port
</parent-fflow-dst-port>
<parent-rflow-src-ip>
  parent-rflow-src-ip
</parent-rflow-src-ip>
<parent-rflow-dst-ip>
  parent-rflow-dst-ip
</parent-rflow-dst-ip>
<parent-rflow-src-port>
  parent-rflow-src-port
</parent-rflow-src-port>
<parent-rflow-dst-port>
  parent-rflow-dst-port
</parent-rflow-dst-port>
<child-sess-id>
  child-sess-id
</child-sess-id>
<child-flow-protocol>
  child-flow-protocol
</child-flow-protocol>
<child-fflow-src-ip>
  child-fflow-src-ip
</child-fflow-src-ip>
<child-fflow-dst-ip>
  child-fflow-dst-ip
</child-fflow-dst-ip>
<child-fflow-src-port>
  child-fflow-src-port
</child-fflow-src-port>
<child-fflow-dst-port>
  child-fflow-dst-port
</child-fflow-dst-port>
<child-rflow-src-ip>
  child-rflow-src-ip
</child-rflow-src-ip>
<child-rflow-dst-ip>
```


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```
    child-rflow-dst-ip
   </child-rflow-dst-ip>
   <child-rflow-src-port>
    child-rflow-src-port
   </child-rflow-src-port>
   <child-rflow-dst-port>
    child-rflow-dst-port
   </child-rflow-dst-port>
  </msp-alg-conv-all-entry>
```

Description ALG conversations

<msp-alg-conv-all-entry>

Usage

```
<service-msp-alg-conversation-information>
 <msp-alg-conv-all-entry>
  <client-name>
   client-name
  </client-name>
  <client-state>
   client-state
  </client-state>
  <num-groups>
   num-groups
  </num-groups>
  <parent-sess-state>
   parent-sess-state
  </parent-sess-state>
  <parent-sess-id>
   parent-sess-id
  </parent-sess-id>
  <parent-flow-protocol>
   parent-flow-protocol
  </parent-flow-protocol>
  <parent-fflow-src-ip>
   parent-fflow-src-ip
  </parent-fflow-src-ip>
  <parent-fflow-dst-ip>
   parent-fflow-dst-ip
  </parent-fflow-dst-ip>
  <parent-fflow-src-port>
   parent-fflow-src-port
  </parent-fflow-src-port>
  <parent-fflow-dst-port>
   parent-fflow-dst-port
  </parent-fflow-dst-port>
  <parent-rflow-src-ip>
   parent-rflow-src-ip
  </parent-rflow-src-ip>
  <parent-rflow-dst-ip>
   parent-rflow-dst-ip
  </parent-rflow-dst-ip>
  <parent-rflow-src-port>
```

```
        parent-rflow-src-port
      </parent-rflow-src-port>
      <parent-rflow-dst-port>
        parent-rflow-dst-port
      </parent-rflow-dst-port>
      <child-sess-id>
        child-sess-id
      </child-sess-id>
      <child-flow-protocol>
        child-flow-protocol
      </child-flow-protocol>
      <child-fflow-src-ip>
        child-fflow-src-ip
      </child-fflow-src-ip>
      <child-fflow-dst-ip>
        child-fflow-dst-ip
      </child-fflow-dst-ip>
      <child-fflow-src-port>
        child-fflow-src-port
      </child-fflow-src-port>
      <child-fflow-dst-port>
        child-fflow-dst-port
      </child-fflow-dst-port>
      <child-rflow-src-ip>
        child-rflow-src-ip
      </child-rflow-src-ip>
      <child-rflow-dst-ip>
        child-rflow-dst-ip
      </child-rflow-dst-ip>
      <child-rflow-src-port>
        child-rflow-src-port
      </child-rflow-src-port>
      <child-rflow-dst-port>
        child-rflow-dst-port
      </child-rflow-dst-port>
    </msp-alg-conv-all-entry>
  </service-msp-alg-conversation-information>
```

Description ALG conversations

<msp-alg-conv-all-extensive-entry>

Usage

```
<msp-alg-conv-all-extensive-entry>
  <client-name>
    client-name
  </client-name>
  <client-state>
    client-state
  </client-state>
  <num-groups>
    num-groups
  </num-groups>
  <group-id>
```


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```
  group-id
</group-id>
<group-state>
  group-state
</group-state>
<parent-sess-state>
  parent-sess-state
</parent-sess-state>
<parent-sess-id>
  parent-sess-id
</parent-sess-id>
<parent-flow-protocol>
  parent-flow-protocol
</parent-flow-protocol>
<parent-fflow-src-ip>
  parent-fflow-src-ip
</parent-fflow-src-ip>
<parent-fflow-dst-ip>
  parent-fflow-dst-ip
</parent-fflow-dst-ip>
<parent-fflow-src-port>
  parent-fflow-src-port
</parent-fflow-src-port>
<parent-fflow-dst-port>
  parent-fflow-dst-port
</parent-fflow-dst-port>
<parent-rflow-src-ip>
  parent-rflow-src-ip
</parent-rflow-src-ip>
<parent-rflow-dst-ip>
  parent-rflow-dst-ip
</parent-rflow-dst-ip>
<parent-rflow-src-port>
  parent-rflow-src-port
</parent-rflow-src-port>
<parent-rflow-dst-port>
  parent-rflow-dst-port
</parent-rflow-dst-port>
<num-resources>
  num-resources
</num-resources>
<resource-id>
  resource-id
</resource-id>
<resource-state>
  resource-state
</resource-state>
<num-sessions>
  num-sessions
</num-sessions>
<child-sess-id>
  child-sess-id
</child-sess-id>
<child-flow-protocol>
  child-flow-protocol
</child-flow-protocol>
```

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```
<child-fflow-src-ip>
  child-fflow-src-ip
</child-fflow-src-ip>
<child-fflow-dst-ip>
  child-fflow-dst-ip
</child-fflow-dst-ip>
<child-fflow-src-port>
  child-fflow-src-port
</child-fflow-src-port>
<child-fflow-dst-port>
  child-fflow-dst-port
</child-fflow-dst-port>
<child-rflow-src-ip>
  child-rflow-src-ip
</child-rflow-src-ip>
<child-rflow-dst-ip>
  child-rflow-dst-ip
</child-rflow-dst-ip>
<child-rflow-src-port>
  child-rflow-src-port
</child-rflow-src-port>
<child-rflow-dst-port>
  child-rflow-dst-port
</child-rflow-dst-port>
</msp-alg-conv-all-extensive-entry>
```

Description ALG conversations extensive

<msp-alg-conv-all-extensive-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-all-extensive-entry>
    <client-name>
      client-name
    </client-name>
    <client-state>
      client-state
    </client-state>
    <num-groups>
      num-groups
    </num-groups>
    <group-id>
      group-id
    </group-id>
    <group-state>
      group-state
    </group-state>
    <parent-sess-state>
      parent-sess-state
    </parent-sess-state>
    <parent-sess-id>
      parent-sess-id
    </parent-sess-id>
```


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```
<parent-flow-protocol>
  parent-flow-protocol
</parent-flow-protocol>
<parent-fflow-src-ip>
  parent-fflow-src-ip
</parent-fflow-src-ip>
<parent-fflow-dst-ip>
  parent-fflow-dst-ip
</parent-fflow-dst-ip>
<parent-fflow-src-port>
  parent-fflow-src-port
</parent-fflow-src-port>
<parent-fflow-dst-port>
  parent-fflow-dst-port
</parent-fflow-dst-port>
<parent-rflow-src-ip>
  parent-rflow-src-ip
</parent-rflow-src-ip>
<parent-rflow-dst-ip>
  parent-rflow-dst-ip
</parent-rflow-dst-ip>
<parent-rflow-src-port>
  parent-rflow-src-port
</parent-rflow-src-port>
<parent-rflow-dst-port>
  parent-rflow-dst-port
</parent-rflow-dst-port>
<num-resources>
  num-resources
</num-resources>
<resource-id>
  resource-id
</resource-id>
<resource-state>
  resource-state
</resource-state>
<num-sessions>
  num-sessions
</num-sessions>
<child-sess-id>
  child-sess-id
</child-sess-id>
<child-flow-protocol>
  child-flow-protocol
</child-flow-protocol>
<child-fflow-src-ip>
  child-fflow-src-ip
</child-fflow-src-ip>
<child-fflow-dst-ip>
  child-fflow-dst-ip
</child-fflow-dst-ip>
<child-fflow-src-port>
  child-fflow-src-port
</child-fflow-src-port>
<child-fflow-dst-port>
  child-fflow-dst-port
```

```
    </child-fflow-dst-port>
    <child-rflow-src-ip>
      child-rflow-src-ip
    </child-rflow-src-ip>
    <child-rflow-dst-ip>
      child-rflow-dst-ip
    </child-rflow-dst-ip>
    <child-rflow-src-port>
      child-rflow-src-port
    </child-rflow-src-port>
    <child-rflow-dst-port>
      child-rflow-dst-port
    </child-rflow-dst-port>
  </msp-alg-conv-all-extensive-entry>
</service-msp-alg-conversation-information>
```

Description ALG conversations extensive

<msp-alg-conv-group-num-entry>

Usage

```
<msp-alg-conv-group-num-entry>
  <group-id>
    group-id
  </group-id>
  <group-is-active>
    group-is-active
  </group-is-active>
  <client-name>
    client-name
  </client-name>
  <parent-session-id>
    parent-session-id
  </parent-session-id>
  <group-timeout>
    group-timeout
  </group-timeout>
  <num-resources>
    num-resources
  </num-resources>
  <resource>
    resource
  </resource>
</msp-alg-conv-group-num-entry>
```

Description ALG group information

<msp-alg-conv-group-num-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-group-num-entry>
```


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```
      <group-id>
        group-id
      </group-id>
      <group-is-active>
        group-is-active
      </group-is-active>
      <client-name>
        client-name
      </client-name>
      <parent-session-id>
        parent-session-id
      </parent-session-id>
      <group-timeout>
        group-timeout
      </group-timeout>
      <num-resources>
        num-resources
      </num-resources>
      <resource>
        resource
      </resource>
    </msp-alg-conv-group-num-entry>
  </service-msp-alg-conversation-information>
```

Description ALG group information

<msp-alg-conv-groups-entry>

Usage

```
<msp-alg-conv-groups-entry>
  <group-id>
    group-id
  </group-id>
  <group-is-active>
    group-is-active
  </group-is-active>
  <client-name>
    client-name
  </client-name>
  <num-resources>
    num-resources
  </num-resources>
  <resource-id>
    resource-id
  </resource-id>
</msp-alg-conv-groups-entry>
```

Description ALG groups

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<msp-alg-conv-groups-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-groups-entry>
    <group-id>
      group-id
    </group-id>
    <group-is-active>
      group-is-active
    </group-is-active>
    <client-name>
      client-name
    </client-name>
    <num-resources>
      num-resources
    </num-resources>
    <resource-id>
      resource-id
    </resource-id>
  </msp-alg-conv-groups-entry>
</service-msp-alg-conversation-information>
```

Description ALG groups

<msp-alg-conv-resource-num-entry>

Usage

```
<msp-alg-conv-resource-num-entry>
  <resource-id>
    resource-id
  </resource-id>
  <resource-is-active>
    resource-is-active
  </resource-is-active>
  <num-sessions>
    num-sessions
  </num-sessions>
  <session-ids>
    session-ids
  </session-ids>
  <num-holes>
    num-holes
  </num-holes>
  <src-ip-low>
    src-ip-low
  </src-ip-low>
  <src-ip-high>
    src-ip-high
  </src-ip-high>
  <src-port-low>
    src-port-low
  </src-port-low>
```


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```
<src-port-high>
  src-port-high
</src-port-high>
<dst-ip-low>
  dst-ip-low
</dst-ip-low>
<dst-ip-high>
  dst-ip-high
</dst-ip-high>
<dst-port-low>
  dst-port-low
</dst-port-low>
<dst-port-high>
  dst-port-high
</dst-port-high>
<translated-src-ip>
  translated-src-ip
</translated-src-ip>
<translated-src-port>
  translated-src-port
</translated-src-port>
<translated-dst-ip>
  translated-dst-ip
</translated-dst-ip>
<translated-dst-port>
  translated-dst-port
</translated-dst-port>
<ref-count>
  ref-count
</ref-count>
<proto>
  proto
</proto>
</msp-alg-conv-resource-num-entry>
```

Description ALG resource information

<msp-alg-conv-resource-num-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-resource-num-entry>
    <resource-id>
      resource-id
    </resource-id>
    <resource-is-active>
      resource-is-active
    </resource-is-active>
    <num-sessions>
      num-sessions
    </num-sessions>
    <session-ids>
      session-ids
    </session-ids>
```

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```
<num-holes>
  num-holes
</num-holes>
<src-ip-low>
  src-ip-low
</src-ip-low>
<src-ip-high>
  src-ip-high
</src-ip-high>
<src-port-low>
  src-port-low
</src-port-low>
<src-port-high>
  src-port-high
</src-port-high>
<dst-ip-low>
  dst-ip-low
</dst-ip-low>
<dst-ip-high>
  dst-ip-high
</dst-ip-high>
<dst-port-low>
  dst-port-low
</dst-port-low>
<dst-port-high>
  dst-port-high
</dst-port-high>
<translated-src-ip>
  translated-src-ip
</translated-src-ip>
<translated-src-port>
  translated-src-port
</translated-src-port>
<translated-dst-ip>
  translated-dst-ip
</translated-dst-ip>
<translated-dst-port>
  translated-dst-port
</translated-dst-port>
<ref-count>
  ref-count
</ref-count>
<proto>
  proto
</proto>
</msp-alg-conv-resource-num-entry>
</service-msp-alg-conversation-information>
```

Description ALG resource information

<msp-alg-conv-resources-entry>

Usage

```
<msp-alg-conv-resources-entry>
```


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```
<resource-id>
  resource-id
</resource-id>
<resource-is-active>
  resource-is-active
</resource-is-active>
<group-id>
  group-id
</group-id>
<client-name>
  client-name
</client-name>
<num-sessions>
  num-sessions
</num-sessions>
<session-id>
  session-id
</session-id>
</msp-alg-conv-resources-entry>
```

Description ALG resources

<msp-alg-conv-resources-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-resources-entry>
    <resource-id>
      resource-id
    </resource-id>
    <resource-is-active>
      resource-is-active
    </resource-is-active>
    <group-id>
      group-id
    </group-id>
    <client-name>
      client-name
    </client-name>
    <num-sessions>
      num-sessions
    </num-sessions>
    <session-id>
      session-id
    </session-id>
  </msp-alg-conv-resources-entry>
</service-msp-alg-conversation-information>
```

Description ALG resources

<msp-alg-conv-summary-entry>

Usage

```
<msp-alg-conv-summary-entry>
  <clients-active>
    clients-active
  </clients-active>
  <groups-active>
    groups-active
  </groups-active>
  <resources-active>
    resources-active
  </resources-active>
  <sessions-active>
    sessions-active
  </sessions-active>
</msp-alg-conv-summary-entry>
```

Description ALG conversation summary

<msp-alg-conv-summary-entry>

Usage

```
<service-msp-alg-conversation-information>
  <msp-alg-conv-summary-entry>
    <clients-active>
      clients-active
    </clients-active>
    <groups-active>
      groups-active
    </groups-active>
    <resources-active>
      resources-active
    </resources-active>
    <sessions-active>
      sessions-active
    </sessions-active>
  </msp-alg-conv-summary-entry>
</service-msp-alg-conversation-information>
```

Description ALG conversation summary

<msp-alg-dce-rpc-entry>

Usage

```
<msp-alg-dce-rpc-entry>
  <dce-rpc-wrong-header>
    dce-rpc-wrong-header
  </dce-rpc-wrong-header>
  <dce-rpc-non-epm3>
    dce-rpc-non-epm3
  </dce-rpc-non-epm3>
```


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```
<dce-rpc-type-mismatch>
  dce-rpc-type-mismatch
</dce-rpc-type-mismatch>
<dce-rpc-id-mismatch>
  dce-rpc-id-mismatch
</dce-rpc-id-mismatch>
<dce-rpc-call-mismatch>
  dce-rpc-call-mismatch
</dce-rpc-call-mismatch>
<dce-rpc-fragment-pkts>
  dce-rpc-fragment-pkts
</dce-rpc-fragment-pkts>
<dce-rpc-queue-pkts>
  dce-rpc-queue-pkts
</dce-rpc-queue-pkts>
<dce-rpc-drop-pkts>
  dce-rpc-drop-pkts
</dce-rpc-drop-pkts>
<dce-rpc-released-pkts>
  dce-rpc-released-pkts
</dce-rpc-released-pkts>
</msp-alg-dce-rpc-entry>
```

Description DCE-RPC ALG stats

<msp-alg-dce-rpc-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-dce-rpc-entry>
    <dce-rpc-wrong-header>
      dce-rpc-wrong-header
    </dce-rpc-wrong-header>
    <dce-rpc-non-epm3>
      dce-rpc-non-epm3
    </dce-rpc-non-epm3>
    <dce-rpc-type-mismatch>
      dce-rpc-type-mismatch
    </dce-rpc-type-mismatch>
    <dce-rpc-id-mismatch>
      dce-rpc-id-mismatch
    </dce-rpc-id-mismatch>
    <dce-rpc-call-mismatch>
      dce-rpc-call-mismatch
    </dce-rpc-call-mismatch>
    <dce-rpc-fragment-pkts>
      dce-rpc-fragment-pkts
    </dce-rpc-fragment-pkts>
    <dce-rpc-queue-pkts>
      dce-rpc-queue-pkts
    </dce-rpc-queue-pkts>
    <dce-rpc-drop-pkts>
      dce-rpc-drop-pkts
    </dce-rpc-drop-pkts>
```

```
    <dce-rpc-released-pkts>
      dce-rpc-released-pkts
    </dce-rpc-released-pkts>
  </msp-alg-dce-rpc-entry>
</service-msp-alg-stats-information>
```

Description DCE-RPC ALG stats

<msp-alg-dce-rpc-portmap-entry>

Usage

```
<msp-alg-dce-rpc-portmap-entry>
  <dce-rpc-lookup-request>
    dce-rpc-lookup-request
  </dce-rpc-lookup-request>
  <dce-rpc-map-request>
    dce-rpc-map-request
  </dce-rpc-map-request>
  <dce-rpc-lookup-reply>
    dce-rpc-lookup-reply
  </dce-rpc-lookup-reply>
  <dce-rpc-map-reply>
    dce-rpc-map-reply
  </dce-rpc-map-reply>
  <dce-rpc-fail-reply>
    dce-rpc-fail-reply
  </dce-rpc-fail-reply>
</msp-alg-dce-rpc-portmap-entry>
```

Description DCE-RPC-PORTMAP ALG stats

<msp-alg-dce-rpc-portmap-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-dce-rpc-portmap-entry>
    <dce-rpc-lookup-request>
      dce-rpc-lookup-request
    </dce-rpc-lookup-request>
    <dce-rpc-map-request>
      dce-rpc-map-request
    </dce-rpc-map-request>
    <dce-rpc-lookup-reply>
      dce-rpc-lookup-reply
    </dce-rpc-lookup-reply>
    <dce-rpc-map-reply>
      dce-rpc-map-reply
    </dce-rpc-map-reply>
    <dce-rpc-fail-reply>
      dce-rpc-fail-reply
    </dce-rpc-fail-reply>
  </msp-alg-dce-rpc-portmap-entry>
```


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```
</service-msp-alg-stats-information>
```

Description DCE-RPC-PORTMAP ALG stats

<msp-alg-dns-entry>

Usage

```
<msp-alg-dns-entry>
  <dns-invalid-pkts>
    dns-invalid-pkts
  </dns-invalid-pkts>
  <dns-reply-pkts>
    dns-reply-pkts
  </dns-reply-pkts>
  <dns-oversize-pkts>
    dns-oversize-pkts
  </dns-oversize-pkts>
</msp-alg-dns-entry>
```

Description DNS ALG statistics

<msp-alg-dns-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-dns-entry>
    <dns-invalid-pkts>
      dns-invalid-pkts
    </dns-invalid-pkts>
    <dns-reply-pkts>
      dns-reply-pkts
    </dns-reply-pkts>
    <dns-oversize-pkts>
      dns-oversize-pkts
    </dns-oversize-pkts>
  </msp-alg-dns-entry>
</service-msp-alg-stats-information>
```

Description DNS ALG statistics

<msp-alg-ftp-entry>

Usage

```
<msp-alg-ftp-entry>
  <ftp-drop-pkts>
    ftp-drop-pkts
  </ftp-drop-pkts>
  <ftp-parse-fail-pkts>
    ftp-parse-fail-pkts
  </ftp-parse-fail-pkts>
  <ftp-translated-pkts>
```

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```
    ftp-translated-pkts
   </ftp-translated-pkts>
  </msp-alg-ftp-entry>
```

Description FTP ALG stats

<msp-alg-ftp-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-ftp-entry>
    <ftp-drop-pkts>
      ftp-drop-pkts
    </ftp-drop-pkts>
    <ftp-parse-fail-pkts>
      ftp-parse-fail-pkts
    </ftp-parse-fail-pkts>
    <ftp-translated-pkts>
      ftp-translated-pkts
    </ftp-translated-pkts>
  </msp-alg-ftp-entry>
</service-msp-alg-stats-information>
```

Description FTP ALG stats

<msp-alg-pptp-entry>

Usage

```
<msp-alg-pptp-entry>
  <pptp-objects-active>
    pptp-objects-active
  </pptp-objects-active>
  <pptp-objects-total>
    pptp-objects-total
  </pptp-objects-total>
  <pptp-objects-error>
    pptp-objects-error
  </pptp-objects-error>
  <pptp-group-active>
    pptp-group-active
  </pptp-group-active>
  <pptp-group-total>
    pptp-group-total
  </pptp-group-total>
  <pptp-group-error>
    pptp-group-error
  </pptp-group-error>
  <pptp-packets-received>
    pptp-packets-received
  </pptp-packets-received>
  <pptp-packets-discarded>
    pptp-packets-discarded
```


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```
</pptp-packets-discarded>
<pptp-packets-free>
  pptp-packets-free
</pptp-packets-free>
<pptp-ocrq-rcvd>
  pptp-ocrq-rcvd
</pptp-ocrq-rcvd>
<pptp-ocrq-discarded>
  pptp-ocrq-discarded
</pptp-ocrq-discarded>
<pptp-ocrp-rcvd>
  pptp-ocrp-rcvd
</pptp-ocrp-rcvd>
<pptp-ocrp-discarded>
  pptp-ocrp-discarded
</pptp-ocrp-discarded>
<pptp-wen-rcvd>
  pptp-wen-rcvd
</pptp-wen-rcvd>
<pptp-wen-discarded>
  pptp-wen-discarded
</pptp-wen-discarded>
<pptp-ccrq-rcvd>
  pptp-ccrq-rcvd
</pptp-ccrq-rcvd>
<pptp-cdsn-rcvd>
  pptp-cdsn-rcvd
</pptp-cdsn-rcvd>
<pptp-ccrq-discarded>
  pptp-ccrq-discarded
</pptp-ccrq-discarded>
<pptp-session-create>
  pptp-session-create
</pptp-session-create>
<pptp-session-destroy>
  pptp-session-destroy
</pptp-session-destroy>
<pptp-gate-create>
  pptp-gate-create
</pptp-gate-create>
<pptp-gate-hit>
  pptp-gate-hit
</pptp-gate-hit>
<pptp-gate-timeout>
  pptp-gate-timeout
</pptp-gate-timeout>
<pptp-nat-event>
  pptp-nat-event
</pptp-nat-event>
<pptp-nat-total>
  pptp-nat-total
</pptp-nat-total>
<pptp-nat-ok>
  pptp-nat-ok
</pptp-nat-ok>
<pptp-nat-pending>
```

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```
  pptp-nat-pending
</pptp-nat-pending>
<pptp-nat-fail>
  pptp-nat-fail
</pptp-nat-fail>
<pptp-rm-total>
  pptp-rm-total
</pptp-rm-total>
<pptp-rm-ok>
  pptp-rm-ok
</pptp-rm-ok>
<pptp-rm-pending>
  pptp-rm-pending
</pptp-rm-pending>
<pptp-rm-fail>
  pptp-rm-fail
</pptp-rm-fail>
<pptp-nat-async-total>
  pptp-nat-async-total
</pptp-nat-async-total>
<pptp-nat-async-invalid>
  pptp-nat-async-invalid
</pptp-nat-async-invalid>
<pptp-nat-async-error1>
  pptp-nat-async-error1
</pptp-nat-async-error1>
<pptp-nat-async-error2>
  pptp-nat-async-error2
</pptp-nat-async-error2>
<pptp-asl-hole-ok>
  pptp-asl-hole-ok
</pptp-asl-hole-ok>
<pptp-asl-hole-error>
  pptp-asl-hole-error
</pptp-asl-hole-error>
<pptp-asl-first-hit>
  pptp-asl-first-hit
</pptp-asl-first-hit>
<pptp-asl-hole-timeout>
  pptp-asl-hole-timeout
</pptp-asl-hole-timeout>
<pptp-asl-invalid>
  pptp-asl-invalid
</pptp-asl-invalid>
<pptp-nat-ctx-free>
  pptp-nat-ctx-free
</pptp-nat-ctx-free>
<pptp-create-resource-error>
  pptp-create-resource-error
</pptp-create-resource-error>
<pptp-s2c-hole-error>
  pptp-s2c-hole-error
</pptp-s2c-hole-error>
<pptp-c2s-hole-error>
  pptp-c2s-hole-error
</pptp-c2s-hole-error>
```


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```
<pptp-lnbrk-error>
  pptp-lnbrk-error
</pptp-lnbrk-error>
<pptp-mpool-error>
  pptp-mpool-error
</pptp-mpool-error>
<pptp-rm-client-error>
  pptp-rm-client-error
</pptp-rm-client-error>
</msp-alg-pptp-entry>
```

Description PPTP ALG statistics

<msp-alg-pptp-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-pptp-entry>
    <pptp-objects-active>
      pptp-objects-active
    </pptp-objects-active>
    <pptp-objects-total>
      pptp-objects-total
    </pptp-objects-total>
    <pptp-objects-error>
      pptp-objects-error
    </pptp-objects-error>
    <pptp-group-active>
      pptp-group-active
    </pptp-group-active>
    <pptp-group-total>
      pptp-group-total
    </pptp-group-total>
    <pptp-group-error>
      pptp-group-error
    </pptp-group-error>
    <pptp-packets-received>
      pptp-packets-received
    </pptp-packets-received>
    <pptp-packets-discarded>
      pptp-packets-discarded
    </pptp-packets-discarded>
    <pptp-packets-free>
      pptp-packets-free
    </pptp-packets-free>
    <pptp-ocrq-rcvd>
      pptp-ocrq-rcvd
    </pptp-ocrq-rcvd>
    <pptp-ocrq-discarded>
      pptp-ocrq-discarded
    </pptp-ocrq-discarded>
    <pptp-ocrp-rcvd>
      pptp-ocrp-rcvd
    </pptp-ocrp-rcvd>
```

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```
<pptp-ocrp-discarded>
  pptp-ocrp-discarded
</pptp-ocrp-discarded>
<pptp-wen-rcvd>
  pptp-wen-rcvd
</pptp-wen-rcvd>
<pptp-wen-discarded>
  pptp-wen-discarded
</pptp-wen-discarded>
<pptp-ccrq-rcvd>
  pptp-ccrq-rcvd
</pptp-ccrq-rcvd>
<pptp-cdsn-rcvd>
  pptp-cdsn-rcvd
</pptp-cdsn-rcvd>
<pptp-ccrq-discarded>
  pptp-ccrq-discarded
</pptp-ccrq-discarded>
<pptp-session-create>
  pptp-session-create
</pptp-session-create>
<pptp-session-destroy>
  pptp-session-destroy
</pptp-session-destroy>
<pptp-gate-create>
  pptp-gate-create
</pptp-gate-create>
<pptp-gate-hit>
  pptp-gate-hit
</pptp-gate-hit>
<pptp-gate-timeout>
  pptp-gate-timeout
</pptp-gate-timeout>
<pptp-nat-event>
  pptp-nat-event
</pptp-nat-event>
<pptp-nat-total>
  pptp-nat-total
</pptp-nat-total>
<pptp-nat-ok>
  pptp-nat-ok
</pptp-nat-ok>
<pptp-nat-pending>
  pptp-nat-pending
</pptp-nat-pending>
<pptp-nat-fail>
  pptp-nat-fail
</pptp-nat-fail>
<pptp-rm-total>
  pptp-rm-total
</pptp-rm-total>
<pptp-rm-ok>
  pptp-rm-ok
</pptp-rm-ok>
<pptp-rm-pending>
  pptp-rm-pending
```


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```
    </pptp-rm-pending>
    <pptp-rm-fail>
      pptp-rm-fail
    </pptp-rm-fail>
    <pptp-nat-async-total>
      pptp-nat-async-total
    </pptp-nat-async-total>
    <pptp-nat-async-invalid>
      pptp-nat-async-invalid
    </pptp-nat-async-invalid>
    <pptp-nat-async-error1>
      pptp-nat-async-error1
    </pptp-nat-async-error1>
    <pptp-nat-async-error2>
      pptp-nat-async-error2
    </pptp-nat-async-error2>
    <pptp-asl-hole-ok>
      pptp-asl-hole-ok
    </pptp-asl-hole-ok>
    <pptp-asl-hole-error>
      pptp-asl-hole-error
    </pptp-asl-hole-error>
    <pptp-asl-first-hit>
      pptp-asl-first-hit
    </pptp-asl-first-hit>
    <pptp-asl-hole-timeout>
      pptp-asl-hole-timeout
    </pptp-asl-hole-timeout>
    <pptp-asl-invalid>
      pptp-asl-invalid
    </pptp-asl-invalid>
    <pptp-nat-ctx-free>
      pptp-nat-ctx-free
    </pptp-nat-ctx-free>
    <pptp-create-resource-error>
      pptp-create-resource-error
    </pptp-create-resource-error>
    <pptp-s2c-hole-error>
      pptp-s2c-hole-error
    </pptp-s2c-hole-error>
    <pptp-c2s-hole-error>
      pptp-c2s-hole-error
    </pptp-c2s-hole-error>
    <pptp-lnbrk-error>
      pptp-lnbrk-error
    </pptp-lnbrk-error>
    <pptp-mpool-error>
      pptp-mpool-error
    </pptp-mpool-error>
    <pptp-rm-client-error>
      pptp-rm-client-error
    </pptp-rm-client-error>
  </msp-alg-pptp-entry>
</service-msp-alg-stats-information>
```

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Description PPTP ALG statistics

<msp-alg-rpc-entry>

Usage

```
<msp-alg-rpc-entry>
  <rpc-call-bind-version-2>
    rpc-call-bind-version-2
  </rpc-call-bind-version-2>
  <rpc-call-bind-version-3>
    rpc-call-bind-version-3
  </rpc-call-bind-version-3>
  <rpc-call-bind-version-4>
    rpc-call-bind-version-4
  </rpc-call-bind-version-4>
  <rpc-call-bind-version-error>
    rpc-call-bind-version-error
  </rpc-call-bind-version-error>
  <rpc-reply-bind-version-2>
    rpc-reply-bind-version-2
  </rpc-reply-bind-version-2>
  <rpc-reply-bind-version-3>
    rpc-reply-bind-version-3
  </rpc-reply-bind-version-3>
  <rpc-reply-bind-version-4>
    rpc-reply-bind-version-4
  </rpc-reply-bind-version-4>
  <rpc-reply-bind-version-error>
    rpc-reply-bind-version-error
  </rpc-reply-bind-version-error>
  <rpc-pkt-fragmented>
    rpc-pkt-fragmented
  </rpc-pkt-fragmented>
  <rpc-pkt-drop>
    rpc-pkt-drop
  </rpc-pkt-drop>
  <rpc-pkt-release>
    rpc-pkt-release
  </rpc-pkt-release>
</msp-alg-rpc-entry>
```

Description RPC ALG stats

<msp-alg-rpc-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-rpc-entry>
    <rpc-call-bind-version-2>
      rpc-call-bind-version-2
    </rpc-call-bind-version-2>
    <rpc-call-bind-version-3>
      rpc-call-bind-version-3
```


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```
    </rpc-call-bind-version-3>
    <rpc-call-bind-version-4>
      rpc-call-bind-version-4
    </rpc-call-bind-version-4>
    <rpc-call-bind-version-error>
      rpc-call-bind-version-error
    </rpc-call-bind-version-error>
    <rpc-reply-bind-version-2>
      rpc-reply-bind-version-2
    </rpc-reply-bind-version-2>
    <rpc-reply-bind-version-3>
      rpc-reply-bind-version-3
    </rpc-reply-bind-version-3>
    <rpc-reply-bind-version-4>
      rpc-reply-bind-version-4
    </rpc-reply-bind-version-4>
    <rpc-reply-bind-version-error>
      rpc-reply-bind-version-error
    </rpc-reply-bind-version-error>
    <rpc-pkt-fragmented>
      rpc-pkt-fragmented
    </rpc-pkt-fragmented>
    <rpc-pkt-drop>
      rpc-pkt-drop
    </rpc-pkt-drop>
    <rpc-pkt-release>
      rpc-pkt-release
    </rpc-pkt-release>
  </msp-alg-rpc-entry>
</service-msp-alg-stats-information>
```

Description RPC ALG stats

<msp-alg-rpc-portmap-entry>

Usage

```
<msp-alg-rpc-portmap-entry>
  <rpc-process-fail>
    rpc-process-fail
  </rpc-process-fail>
  <rpc-request>
    rpc-request
  </rpc-request>
  <rpc-call-dump>
    rpc-call-dump
  </rpc-call-dump>
  <rpc-call-callit>
    rpc-call-callit
  </rpc-call-callit>
  <rpc-reply-ok>
    rpc-reply-ok
  </rpc-reply-ok>
  <rpc-reply-dump>
    rpc-reply-dump
```

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```
</rpc-reply-dump>
<rpc-reply-callit>
  rpc-reply-callit
</rpc-reply-callit>
<rpc-process-reply-deny>
  rpc-process-reply-deny
</rpc-process-reply-deny>
<rpc-process-reply-xid-mismatch>
  rpc-process-reply-xid-mismatch
</rpc-process-reply-xid-mismatch>
<rpc-pkt-ver-error>
  rpc-pkt-ver-error
</rpc-pkt-ver-error>
<rpc-pkt-not-rpcbind>
  rpc-pkt-not-rpcbind
</rpc-pkt-not-rpcbind>
</msp-alg-rpc-portmap-entry>
```

Description RPC-PORTMAP ALG stats

<msp-alg-rpc-portmap-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-rpc-portmap-entry>
    <rpc-process-fail>
      rpc-process-fail
    </rpc-process-fail>
    <rpc-request>
      rpc-request
    </rpc-request>
    <rpc-call-dump>
      rpc-call-dump
    </rpc-call-dump>
    <rpc-call-callit>
      rpc-call-callit
    </rpc-call-callit>
    <rpc-reply-ok>
      rpc-reply-ok
    </rpc-reply-ok>
    <rpc-reply-dump>
      rpc-reply-dump
    </rpc-reply-dump>
    <rpc-reply-callit>
      rpc-reply-callit
    </rpc-reply-callit>
    <rpc-process-reply-deny>
      rpc-process-reply-deny
    </rpc-process-reply-deny>
    <rpc-process-reply-xid-mismatch>
      rpc-process-reply-xid-mismatch
    </rpc-process-reply-xid-mismatch>
    <rpc-pkt-ver-error>
      rpc-pkt-ver-error
```


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```
    </rpc-pkt-ver-error>
    <rpc-pkt-not-rpcbind>
      rpc-pkt-not-rpcbind
    </rpc-pkt-not-rpcbind>
  </msp-alg-rpc-portmap-entry>
</service-msp-alg-stats-information>
```

Description RPC-PORTMAP ALG stats

<msp-alg-rsh-entry>

Usage

```
<msp-alg-rsh-entry>
  <rsh-invalid-pkts>
    rsh-invalid-pkts
  </rsh-invalid-pkts>
  <rsh-drop-pkts>
    rsh-drop-pkts
  </rsh-drop-pkts>
  <rsh-parse-fail-pkts>
    rsh-parse-fail-pkts
  </rsh-parse-fail-pkts>
  <rsh-freed-pkts>
    rsh-freed-pkts
  </rsh-freed-pkts>
</msp-alg-rsh-entry>
```

Description RSH ALG stats

<msp-alg-rsh-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-rsh-entry>
    <rsh-invalid-pkts>
      rsh-invalid-pkts
    </rsh-invalid-pkts>
    <rsh-drop-pkts>
      rsh-drop-pkts
    </rsh-drop-pkts>
    <rsh-parse-fail-pkts>
      rsh-parse-fail-pkts
    </rsh-parse-fail-pkts>
    <rsh-freed-pkts>
      rsh-freed-pkts
    </rsh-freed-pkts>
  </msp-alg-rsh-entry>
</service-msp-alg-stats-information>
```

Description RSH ALG stats

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<msp-alg-rtsp-entry>

Usage

```
<msp-alg-rtsp-entry>
  <rtsp-exceed-max-data-len>
    rtsp-exceed-max-data-len
  </rtsp-exceed-max-data-len>
  <rtsp-drop-packets>
    rtsp-drop-packets
  </rtsp-drop-packets>
  <rtsp-describe-msg-cnt>
    rtsp-describe-msg-cnt
  </rtsp-describe-msg-cnt>
  <rtsp-setup-msg-cnt>
    rtsp-setup-msg-cnt
  </rtsp-setup-msg-cnt>
  <rtsp-teardown-msg-cnt>
    rtsp-teardown-msg-cnt
  </rtsp-teardown-msg-cnt>
</msp-alg-rtsp-entry>
```

Description RTSP ALG statistics

<msp-alg-rtsp-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-rtsp-entry>
    <rtsp-exceed-max-data-len>
      rtsp-exceed-max-data-len
    </rtsp-exceed-max-data-len>
    <rtsp-drop-packets>
      rtsp-drop-packets
    </rtsp-drop-packets>
    <rtsp-describe-msg-cnt>
      rtsp-describe-msg-cnt
    </rtsp-describe-msg-cnt>
    <rtsp-setup-msg-cnt>
      rtsp-setup-msg-cnt
    </rtsp-setup-msg-cnt>
    <rtsp-teardown-msg-cnt>
      rtsp-teardown-msg-cnt
    </rtsp-teardown-msg-cnt>
  </msp-alg-rtsp-entry>
</service-msp-alg-stats-information>
```

Description RTSP ALG statistics

<msp-alg-sip-entry>

Usage

```
<msp-alg-sip-entry>
```


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```
<sip-pkts-drop>
  sip-pkts-drop
</sip-pkts-drop>
<sip-unexpect-req-drop>
  sip-unexpect-req-drop
</sip-unexpect-req-drop>
<sip-unexpect-res-drop>
  sip-unexpect-res-drop
</sip-unexpect-res-drop>
<sip-dscp-marked>
  sip-dscp-marked
</sip-dscp-marked>
<sip-dscp-marked-err>
  sip-dscp-marked-err
</sip-dscp-marked-err>
<sip-nat-err>
  sip-nat-err
</sip-nat-err>
<sip-rr-hdr-exceed-max>
  sip-rr-hdr-exceed-max
</sip-rr-hdr-exceed-max>
<sip-contact-hdr-exceed-max>
  sip-contact-hdr-exceed-max
</sip-contact-hdr-exceed-max>
<sip-invite-drop-call-limit>
  sip-invite-drop-call-limit
</sip-invite-drop-call-limit>
<sip-msgs-not-processed>
  sip-msgs-not-processed
</sip-msgs-not-processed>
<sip-unknown-pkts-drop>
  sip-unknown-pkts-drop
</sip-unknown-pkts-drop>
<sip-decoding-error>
  sip-decoding-error
</sip-decoding-error>
<sip-out-of-state>
  sip-out-of-state
</sip-out-of-state>
</msp-alg-sip-entry>
```

Description SIP ALG stats

<msp-alg-sip-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-sip-entry>
    <sip-pkts-drop>
      sip-pkts-drop
    </sip-pkts-drop>
    <sip-unexpect-req-drop>
      sip-unexpect-req-drop
    </sip-unexpect-req-drop>
```

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```
<sip-unexpect-res-drop>
  sip-unexpect-res-drop
</sip-unexpect-res-drop>
<sip-dscp-marked>
  sip-dscp-marked
</sip-dscp-marked>
<sip-dscp-marked-err>
  sip-dscp-marked-err
</sip-dscp-marked-err>
<sip-nat-err>
  sip-nat-err
</sip-nat-err>
<sip-rr-hdr-exceed-max>
  sip-rr-hdr-exceed-max
</sip-rr-hdr-exceed-max>
<sip-contact-hdr-exceed-max>
  sip-contact-hdr-exceed-max
</sip-contact-hdr-exceed-max>
<sip-invite-drop-call-limit>
  sip-invite-drop-call-limit
</sip-invite-drop-call-limit>
<sip-msgs-not-processed>
  sip-msgs-not-processed
</sip-msgs-not-processed>
<sip-unknown-pkts-drop>
  sip-unknown-pkts-drop
</sip-unknown-pkts-drop>
<sip-decoding-error>
  sip-decoding-error
</sip-decoding-error>
<sip-out-of-state>
  sip-out-of-state
</sip-out-of-state>
</msp-alg-sip-entry>
</service-msp-alg-stats-information>
```

Description SIP ALG stats

<msp-alg-sql-entry>

Usage

```
<msp-alg-sql-entry>
  <sql-rcvd-pkts>
    sql-rcvd-pkts
  </sql-rcvd-pkts>
  <sql-parse-fail-pkts>
    sql-parse-fail-pkts
  </sql-parse-fail-pkts>
  <sql-freed-pkts>
    sql-freed-pkts
  </sql-freed-pkts>
  <sql-gate-fail-errs>
    sql-gate-fail-errs
  </sql-gate-fail-errs>
```


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```
</msp-alg-sql-entry>
```

Description SQLNET ALG statistics

<msp-alg-sql-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-sql-entry>
    <sql-rcvd-pkts>
      sql-rcvd-pkts
    </sql-rcvd-pkts>
    <sql-parse-fail-pkts>
      sql-parse-fail-pkts
    </sql-parse-fail-pkts>
    <sql-freed-pkts>
      sql-freed-pkts
    </sql-freed-pkts>
    <sql-gate-fail-errs>
      sql-gate-fail-errs
    </sql-gate-fail-errs>
  </msp-alg-sql-entry>
</service-msp-alg-stats-information>
```

Description SQLNET ALG statistics

<msp-alg-talk-entry>

Usage

```
<msp-alg-talk-entry>
  <talk-lookup-pkts>
    talk-lookup-pkts
  </talk-lookup-pkts>
  <talk-announce-pkts>
    talk-announce-pkts
  </talk-announce-pkts>
  <talk-delete-pkts>
    talk-delete-pkts
  </talk-delete-pkts>
</msp-alg-talk-entry>
```

Description TALK ALG stats

<msp-alg-talk-entry>

Usage

```
<service-msp-alg-stats-information>
  <msp-alg-talk-entry>
    <talk-lookup-pkts>
      talk-lookup-pkts
    </talk-lookup-pkts>
```

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```
    <talk-announce-pkts>
      talk-announce-pkts
    </talk-announce-pkts>
    <talk-delete-pkts>
      talk-delete-pkts
    </talk-delete-pkts>
  </msp-alg-talk-entry>
</service-msp-alg-stats-information>
```

Description TALK ALG stats

<msp-per-service-set-sess-table>

Usage

```
<service-msp-sess-table-information>
  <msp-per-service-set-sess-table>
    <msp-sess-entry>....</msp-sess-entry>
    <sfw-flow-entry>....</sfw-flow-entry>
    <nat-plugin-sess-entry>....</nat-plugin-sess-entry>
  </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description

<msp-sess-entry>

Usage

```
<msp-sess-entry>
  <msp-serv-set-name>
    msp-serv-set-name
  </msp-serv-set-name>
  <msp-sess-id>
    msp-sess-id
  </msp-sess-id>
  <msp-sess-alg-id>
    msp-sess-alg-id
  </msp-sess-alg-id>
  <msp-sess-flags>
    msp-sess-flags
  </msp-sess-flags>
  <msp-sess-ip-action>
    msp-sess-ip-action
  </msp-sess-ip-action>
  <msp-sess-offload>
    msp-sess-offload
  </msp-sess-offload>
  <msp-sess-asymmetric>
    msp-sess-asymmetric
  </msp-sess-asymmetric>
  <msp-sess-plugin-info>
    msp-sess-plugin-info
  </msp-sess-plugin-info>
```


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```
</msp-sess-entry>
```

Description MSP session entry

<msp-sess-entry>

Usage

```
<service-msp-sess-table-information>
  <msp-per-service-set-sess-table>
    <msp-sess-entry>
      <msp-serv-set-name>
        msp-serv-set-name
      </msp-serv-set-name>
      <msp-sess-id>
        msp-sess-id
      </msp-sess-id>
      <msp-sess-alg-id>
        msp-sess-alg-id
      </msp-sess-alg-id>
      <msp-sess-flags>
        msp-sess-flags
      </msp-sess-flags>
      <msp-sess-ip-action>
        msp-sess-ip-action
      </msp-sess-ip-action>
      <msp-sess-offload>
        msp-sess-offload
      </msp-sess-offload>
      <msp-sess-asymmetric>
        msp-sess-asymmetric
      </msp-sess-asymmetric>
      <msp-sess-plugin-info>
        msp-sess-plugin-info
      </msp-sess-plugin-info>
    </msp-sess-entry>
  </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description MSP session entry

<nat-plugin-sess-entry>

Usage

```
<nat-plugin-sess-entry>
  <nat-action>
    nat-action
  </nat-action>
  <sfw-flow-nat>....</sfw-flow-nat>
</nat-plugin-sess-entry>
```

Description NAT plugin session entry

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<nat-plugin-sess-entry>

Usage

```
<service-msp-sess-table-information>
  <msp-per-service-set-sess-table>
    <nat-plugin-sess-entry>
      <nat-action>
        nat-action
      </nat-action>
      <sfw-flow-nat>....</sfw-flow-nat>
    </nat-plugin-sess-entry>
  </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description NAT plugin session entry

<natmapping-address-mapping>

Usage

```
<natmapping-address-mapping>
  <natmapping-total-flow-count>
    natmapping-total-flow-count
  </natmapping-total-flow-count>
  <natmapping-source-ip>
    natmapping-source-ip
  </natmapping-source-ip>
  <natmapping-nat-ip>
    natmapping-nat-ip
  </natmapping-nat-ip>
  <natmapping-sw-ip>
    natmapping-sw-ip
  </natmapping-sw-ip>
  <natmapping-flow-count>
    natmapping-flow-count
  </natmapping-flow-count>
  <natmapping-source-port>
    natmapping-source-port
  </natmapping-source-port>
  <natmapping-nat-port>
    natmapping-nat-port
  </natmapping-nat-port>
  <natmapping-flow-count-per-port-map>
    natmapping-flow-count-per-port-map
  </natmapping-flow-count-per-port-map>
</natmapping-address-mapping>
```

Description Natmapping address mappings

<natmapping-address-mapping>

Usage

```
<service-nat-mapping-information>
```


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```
<natmapping-address-mapping>
  <natmapping-total-flow-count>
    natmapping-total-flow-count
  </natmapping-total-flow-count>
  <natmapping-source-ip>
    natmapping-source-ip
  </natmapping-source-ip>
  <natmapping-nat-ip>
    natmapping-nat-ip
  </natmapping-nat-ip>
  <natmapping-sw-ip>
    natmapping-sw-ip
  </natmapping-sw-ip>
  <natmapping-flow-count>
    natmapping-flow-count
  </natmapping-flow-count>
  <natmapping-source-port>
    natmapping-source-port
  </natmapping-source-port>
  <natmapping-nat-port>
    natmapping-nat-port
  </natmapping-nat-port>
  <natmapping-flow-count-per-port-map>
    natmapping-flow-count-per-port-map
  </natmapping-flow-count-per-port-map>
</natmapping-address-mapping>
</service-nat-mapping-information>
```

Description Natmapping address mappings

<natmapping-address-mapping>

Usage

```
<service-nat-mapping-information>
  <sfw-per-service-set-nat-mapping>
    <service-nat-pool-map>
      <natmapping-address-mapping>
        <natmapping-total-flow-count>
          natmapping-total-flow-count
        </natmapping-total-flow-count>
        <natmapping-source-ip>
          natmapping-source-ip
        </natmapping-source-ip>
        <natmapping-nat-ip>
          natmapping-nat-ip
        </natmapping-nat-ip>
        <natmapping-sw-ip>
          natmapping-sw-ip
        </natmapping-sw-ip>
        <natmapping-flow-count>
          natmapping-flow-count
        </natmapping-flow-count>
        <natmapping-source-port>
          natmapping-source-port
```

```
        </natmapping-source-port>
        <natmapping-nat-port>
          natmapping-nat-port
        </natmapping-nat-port>
        <natmapping-flow-count-per-port-map>
          natmapping-flow-count-per-port-map
        </natmapping-flow-count-per-port-map>
      </natmapping-address-mapping>
    </service-nat-pool-map>
  </sfw-per-service-set-nat-mapping>
</service-nat-mapping-information>
```

Description Natmapping address mappings

<natmapping-summary>

Usage

```
<service-nat-mapping-information>
  <natmapping-summary>
    <natmapping-total-address-mappings>
      natmapping-total-address-mappings
    </natmapping-total-address-mappings>
    <natmapping-total-port-mappings>
      natmapping-total-port-mappings
    </natmapping-total-port-mappings>
    <natmapping-total-filters>
      natmapping-total-filters
    </natmapping-total-filters>
  </natmapping-summary>
</service-nat-mapping-information>
```

Description Nat mapping summary

<new-flow-counters>

Usage

```
<sfw-stats-service-set-entry>
  <new-flow-counters>
    <new-flow-accepts>
      new-flow-accepts
    </new-flow-accepts>
    <new-flow-discards>
      new-flow-discards
    </new-flow-discards>
    <new-flow-rejects>
      new-flow-rejects
    </new-flow-rejects>
  </new-flow-counters>
</sfw-stats-service-set-entry>
```

Description New flow counters

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<new-flow-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <new-flow-counters>
        <new-flow-accepts>
          new-flow-accepts
        </new-flow-accepts>
        <new-flow-discards>
          new-flow-discards
        </new-flow-discards>
        <new-flow-rejects>
          new-flow-rejects
        </new-flow-rejects>
      </new-flow-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description New flow counters

<overload-control-entry>

Usage

```
<pgcpd-active-configuration>
  <overload-control-entry>
    <queue-limit-percentage>
      queue-limit-percentage
    </queue-limit-percentage>
    <reject-new-calls-threshold>
      reject-new-calls-threshold
    </reject-new-calls-threshold>
    <reject-all-commands-threshold>
      reject-all-commands-threshold
    </reject-all-commands-threshold>
  </overload-control-entry>
</pgcpd-active-configuration>
```

Description

<overload-control-entry>

Usage

```
<pgcpd-active-configuration>
  <gateway-entry>
    <overload-control-entry>
      <queue-limit-percentage>
        queue-limit-percentage
      </queue-limit-percentage>
      <reject-new-calls-threshold>
        reject-new-calls-threshold
```

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```
      </reject-new-calls-threshold>
      <reject-all-commands-threshold>
        reject-all-commands-threshold
      </reject-all-commands-threshold>
    </overload-control-entry>
  </gateway-entry>
</pgcpd-active-configuration>
```

Description

<overload-control-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <gateway-entry>
      <overload-control-entry>
        <queue-limit-percentage>
          queue-limit-percentage
        </queue-limit-percentage>
        <reject-new-calls-threshold>
          reject-new-calls-threshold
        </reject-new-calls-threshold>
        <reject-all-commands-threshold>
          reject-all-commands-threshold
        </reject-all-commands-threshold>
      </overload-control-entry>
    </gateway-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<overload-control-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <gateway-entry>
    <overload-control-entry>
      <queue-limit-percentage>
        queue-limit-percentage
      </queue-limit-percentage>
      <reject-new-calls-threshold>
        reject-new-calls-threshold
      </reject-new-calls-threshold>
      <reject-all-commands-threshold>
        reject-all-commands-threshold
      </reject-all-commands-threshold>
    </overload-control-entry>
  </gateway-entry>
</service-pgcp-statistics-gateway>
```

Description

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<overload-control-entry>

Usage

```
<service-pgcp-terminations>
  <gateway-entry>
    <overload-control-entry>
      <queue-limit-percentage>
        queue-limit-percentage
      </queue-limit-percentage>
      <reject-new-calls-threshold>
        reject-new-calls-threshold
      </reject-new-calls-threshold>
      <reject-all-commands-threshold>
        reject-all-commands-threshold
      </reject-all-commands-threshold>
    </overload-control-entry>
  </gateway-entry>
</service-pgcp-terminations>
```

Description

<overload-control-entry>

Usage

```
<service-pgcp-gates>
  <gateway-entry>
    <overload-control-entry>
      <queue-limit-percentage>
        queue-limit-percentage
      </queue-limit-percentage>
      <reject-new-calls-threshold>
        reject-new-calls-threshold
      </reject-new-calls-threshold>
      <reject-all-commands-threshold>
        reject-all-commands-threshold
      </reject-all-commands-threshold>
    </overload-control-entry>
  </gateway-entry>
</service-pgcp-gates>
```

Description

<parser-counters>

Usage

```
<sfw-stats-service-set-entry>
  <sip-alg-counters>
    <parser-counters>
      <syntax-errors>
        syntax-errors
      </syntax-errors>
      <content-errors>
        content-errors
```

```
        </content-errors>
        <unknown-methods>
          unknown-methods
        </unknown-methods>
      </parser-counters>
    </sip-alg-counters>
  </sfw-stats-service-set-entry>
```

Description Parser statistics

<parser-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <sip-alg-counters>
        <parser-counters>
          <syntax-errors>
            syntax-errors
          </syntax-errors>
          <content-errors>
            content-errors
          </content-errors>
          <unknown-methods>
            unknown-methods
          </unknown-methods>
        </parser-counters>
      </sip-alg-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Parser statistics

<pgcp-conversation>

Usage

```
<pgcp-per-service-set-conversation>
  <pgcp-conversation>
    <pgcp-flow-table-conv-initiator>
      pgcp-flow-table-conv-initiator
    </pgcp-flow-table-conv-initiator>
    <pgcp-flow-table-conv-responder>
      pgcp-flow-table-conv-responder
    </pgcp-flow-table-conv-responder>
    <service-pgcp-flow-table>....</service-pgcp-flow-table>
  </pgcp-conversation>
</pgcp-per-service-set-conversation>
```

Description Stateful firewall conversations

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<pgcp-conversation>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>
    <pgcp-conversation>
      <pgcp-flow-table-conv-initiator>
        pgcp-flow-table-conv-initiator
      </pgcp-flow-table-conv-initiator>
      <pgcp-flow-table-conv-responder>
        pgcp-flow-table-conv-responder
      </pgcp-flow-table-conv-responder>
      <service-pgcp-flow-table>....</service-pgcp-flow-table>
    </pgcp-conversation>
  </pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description Stateful firewall conversations

<pgcp-flow-entry>

Usage

```
<pgcp-flow-entry>
  <pgcp-flow-protocol>
    pgcp-flow-protocol
  </pgcp-flow-protocol>
  <pgcp-flow-source-ip>
    pgcp-flow-source-ip
  </pgcp-flow-source-ip>
  <pgcp-flow-source-port>
    pgcp-flow-source-port
  </pgcp-flow-source-port>
  <pgcp-flow-destination-ip>
    pgcp-flow-destination-ip
  </pgcp-flow-destination-ip>
  <pgcp-flow-destination-port>
    pgcp-flow-destination-port
  </pgcp-flow-destination-port>
  <pgcp-flow-state>
    pgcp-flow-state
  </pgcp-flow-state>
  <pgcp-flow-direction>
    pgcp-flow-direction
  </pgcp-flow-direction>
  <pgcp-flow-frame-counter>
    pgcp-flow-frame-counter
  </pgcp-flow-frame-counter>
  <pgcp-flow-gate-id>
    pgcp-flow-gate-id
  </pgcp-flow-gate-id>
  <pgcp-flow-nat>....</pgcp-flow-nat>
  <pgcp-flow-table-byte-count>
    pgcp-flow-table-byte-count
```

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```
</pgcp-flow-table-byte-count>
<source-routing-instance>
  source-routing-instance
</source-routing-instance>
<destination-routing-instance>
  destination-routing-instance
</destination-routing-instance>
<pgcp-flow-table-tcp-window-size>
  pgcp-flow-table-tcp-window-size
</pgcp-flow-table-tcp-window-size>
<pgcp-flow-table-tcp-acknowledge>
  pgcp-flow-table-tcp-acknowledge
</pgcp-flow-table-tcp-acknowledge>
<pgcp-flow-table-tcp-tickle>
  pgcp-flow-table-tcp-tickle
</pgcp-flow-table-tcp-tickle>
<pgcp-flow-table-role>
  pgcp-flow-table-role
</pgcp-flow-table-role>
<pgcp-flow-table-timeout>
  pgcp-flow-table-timeout
</pgcp-flow-table-timeout>
<pgcp-flow-table-protocol-detail>
  pgcp-flow-table-protocol-detail
</pgcp-flow-table-protocol-detail>
<flow-gate-tman-policing>
  flow-gate-tman-policing
</flow-gate-tman-policing>
<flow-gate-sdr>
  flow-gate-sdr
</flow-gate-sdr>
<flow-gate-sdr-mbs>
  flow-gate-sdr-mbs
</flow-gate-sdr-mbs>
<flow-gate-pdr>
  flow-gate-pdr
</flow-gate-pdr>
<flow-gate-pdr-mbs>
  flow-gate-pdr-mbs
</flow-gate-pdr-mbs>
<flow-replication-status>
  flow-replication-status
</flow-replication-status>
</pgcp-flow-entry>
```

Description Flow brief information

<pgcp-flow-entry>

Usage

```
<pgcp-per-service-set-flow-table>
  <service-pgcp-flow-table>
    <pgcp-flow-entry>
      <pgcp-flow-protocol>
```


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```
  pgcp-flow-protocol
</pgcp-flow-protocol>
<pgcp-flow-source-ip>
  pgcp-flow-source-ip
</pgcp-flow-source-ip>
<pgcp-flow-source-port>
  pgcp-flow-source-port
</pgcp-flow-source-port>
<pgcp-flow-destination-ip>
  pgcp-flow-destination-ip
</pgcp-flow-destination-ip>
<pgcp-flow-destination-port>
  pgcp-flow-destination-port
</pgcp-flow-destination-port>
<pgcp-flow-state>
  pgcp-flow-state
</pgcp-flow-state>
<pgcp-flow-direction>
  pgcp-flow-direction
</pgcp-flow-direction>
<pgcp-flow-frame-counter>
  pgcp-flow-frame-counter
</pgcp-flow-frame-counter>
<pgcp-flow-gate-id>
  pgcp-flow-gate-id
</pgcp-flow-gate-id>
<pgcp-flow-nat>....</pgcp-flow-nat>
<pgcp-flow-table-byte-count>
  pgcp-flow-table-byte-count
</pgcp-flow-table-byte-count>
<source-routing-instance>
  source-routing-instance
</source-routing-instance>
<destination-routing-instance>
  destination-routing-instance
</destination-routing-instance>
<pgcp-flow-table-tcp-window-size>
  pgcp-flow-table-tcp-window-size
</pgcp-flow-table-tcp-window-size>
<pgcp-flow-table-tcp-acknowledge>
  pgcp-flow-table-tcp-acknowledge
</pgcp-flow-table-tcp-acknowledge>
<pgcp-flow-table-tcp-tickle>
  pgcp-flow-table-tcp-tickle
</pgcp-flow-table-tcp-tickle>
<pgcp-flow-table-role>
  pgcp-flow-table-role
</pgcp-flow-table-role>
<pgcp-flow-table-timeout>
  pgcp-flow-table-timeout
</pgcp-flow-table-timeout>
<pgcp-flow-table-protocol-detail>
  pgcp-flow-table-protocol-detail
</pgcp-flow-table-protocol-detail>
<flow-gate-tman-policing>
  flow-gate-tman-policing
```

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```
        </flow-gate-tman-policing>
        <flow-gate-sdr>
          flow-gate-sdr
        </flow-gate-sdr>
        <flow-gate-sdr-mbs>
          flow-gate-sdr-mbs
        </flow-gate-sdr-mbs>
        <flow-gate-pdr>
          flow-gate-pdr
        </flow-gate-pdr>
        <flow-gate-pdr-mbs>
          flow-gate-pdr-mbs
        </flow-gate-pdr-mbs>
        <flow-replication-status>
          flow-replication-status
        </flow-replication-status>
      </pgcp-flow-entry>
    </service-pgcp-flow-table>
  </pgcp-per-service-set-flow-table>
```

Description Flow brief information

<pgcp-flow-entry>

Usage

```
<service-pgcp-flow-table-information>
  <pgcp-per-service-set-flow-table>
    <service-pgcp-flow-table>
      <pgcp-flow-entry>
        <pgcp-flow-protocol>
          pgcp-flow-protocol
        </pgcp-flow-protocol>
        <pgcp-flow-source-ip>
          pgcp-flow-source-ip
        </pgcp-flow-source-ip>
        <pgcp-flow-source-port>
          pgcp-flow-source-port
        </pgcp-flow-source-port>
        <pgcp-flow-destination-ip>
          pgcp-flow-destination-ip
        </pgcp-flow-destination-ip>
        <pgcp-flow-destination-port>
          pgcp-flow-destination-port
        </pgcp-flow-destination-port>
        <pgcp-flow-state>
          pgcp-flow-state
        </pgcp-flow-state>
        <pgcp-flow-direction>
          pgcp-flow-direction
        </pgcp-flow-direction>
        <pgcp-flow-frame-counter>
          pgcp-flow-frame-counter
        </pgcp-flow-frame-counter>
        <pgcp-flow-gate-id>
```


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```
      pgcp-flow-gate-id
    </pgcp-flow-gate-id>
    <pgcp-flow-nat>....</pgcp-flow-nat>
    <pgcp-flow-table-byte-count>
      pgcp-flow-table-byte-count
    </pgcp-flow-table-byte-count>
    <source-routing-instance>
      source-routing-instance
    </source-routing-instance>
    <destination-routing-instance>
      destination-routing-instance
    </destination-routing-instance>
    <pgcp-flow-table-tcp-window-size>
      pgcp-flow-table-tcp-window-size
    </pgcp-flow-table-tcp-window-size>
    <pgcp-flow-table-tcp-acknowledge>
      pgcp-flow-table-tcp-acknowledge
    </pgcp-flow-table-tcp-acknowledge>
    <pgcp-flow-table-tcp-tickle>
      pgcp-flow-table-tcp-tickle
    </pgcp-flow-table-tcp-tickle>
    <pgcp-flow-table-role>
      pgcp-flow-table-role
    </pgcp-flow-table-role>
    <pgcp-flow-table-timeout>
      pgcp-flow-table-timeout
    </pgcp-flow-table-timeout>
    <pgcp-flow-table-protocol-detail>
      pgcp-flow-table-protocol-detail
    </pgcp-flow-table-protocol-detail>
    <flow-gate-tman-policing>
      flow-gate-tman-policing
    </flow-gate-tman-policing>
    <flow-gate-sdr>
      flow-gate-sdr
    </flow-gate-sdr>
    <flow-gate-sdr-mbs>
      flow-gate-sdr-mbs
    </flow-gate-sdr-mbs>
    <flow-gate-pdr>
      flow-gate-pdr
    </flow-gate-pdr>
    <flow-gate-pdr-mbs>
      flow-gate-pdr-mbs
    </flow-gate-pdr-mbs>
    <flow-replication-status>
      flow-replication-status
    </flow-replication-status>
  </pgcp-flow-entry>
 </service-pgcp-flow-table>
</pgcp-per-service-set-flow-table>
</service-pgcp-flow-table-information>
```

Description Flow brief information

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<pgcp-flow-entry>

Usage

```
<pgcp-per-service-set-conversation>
  <pgcp-conversation>
    <service-pgcp-flow-table>
      <pgcp-flow-entry>
        <pgcp-flow-protocol>
          pgcp-flow-protocol
        </pgcp-flow-protocol>
        <pgcp-flow-source-ip>
          pgcp-flow-source-ip
        </pgcp-flow-source-ip>
        <pgcp-flow-source-port>
          pgcp-flow-source-port
        </pgcp-flow-source-port>
        <pgcp-flow-destination-ip>
          pgcp-flow-destination-ip
        </pgcp-flow-destination-ip>
        <pgcp-flow-destination-port>
          pgcp-flow-destination-port
        </pgcp-flow-destination-port>
        <pgcp-flow-state>
          pgcp-flow-state
        </pgcp-flow-state>
        <pgcp-flow-direction>
          pgcp-flow-direction
        </pgcp-flow-direction>
        <pgcp-flow-frame-counter>
          pgcp-flow-frame-counter
        </pgcp-flow-frame-counter>
        <pgcp-flow-gate-id>
          pgcp-flow-gate-id
        </pgcp-flow-gate-id>
        <pgcp-flow-nat>....</pgcp-flow-nat>
        <pgcp-flow-table-byte-count>
          pgcp-flow-table-byte-count
        </pgcp-flow-table-byte-count>
        <source-routing-instance>
          source-routing-instance
        </source-routing-instance>
        <destination-routing-instance>
          destination-routing-instance
        </destination-routing-instance>
        <pgcp-flow-table-tcp-window-size>
          pgcp-flow-table-tcp-window-size
        </pgcp-flow-table-tcp-window-size>
        <pgcp-flow-table-tcp-acknowledge>
          pgcp-flow-table-tcp-acknowledge
        </pgcp-flow-table-tcp-acknowledge>
        <pgcp-flow-table-tcp-tickle>
          pgcp-flow-table-tcp-tickle
        </pgcp-flow-table-tcp-tickle>
        <pgcp-flow-table-role>
          pgcp-flow-table-role
```


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```
        </pgcp-flow-table-role>
        <pgcp-flow-table-timeout>
          pgcp-flow-table-timeout
        </pgcp-flow-table-timeout>
        <pgcp-flow-table-protocol-detail>
          pgcp-flow-table-protocol-detail
        </pgcp-flow-table-protocol-detail>
        <flow-gate-tman-policing>
          flow-gate-tman-policing
        </flow-gate-tman-policing>
        <flow-gate-sdr>
          flow-gate-sdr
        </flow-gate-sdr>
        <flow-gate-sdr-mbs>
          flow-gate-sdr-mbs
        </flow-gate-sdr-mbs>
        <flow-gate-pdr>
          flow-gate-pdr
        </flow-gate-pdr>
        <flow-gate-pdr-mbs>
          flow-gate-pdr-mbs
        </flow-gate-pdr-mbs>
        <flow-replication-status>
          flow-replication-status
        </flow-replication-status>
      </pgcp-flow-entry>
    </service-pgcp-flow-table>
  </pgcp-conversation>
</pgcp-per-service-set-conversation>
```

Description Flow brief information

<pgcp-flow-entry>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>
    <pgcp-conversation>
      <service-pgcp-flow-table>
        <pgcp-flow-entry>
          <pgcp-flow-protocol>
            pgcp-flow-protocol
          </pgcp-flow-protocol>
          <pgcp-flow-source-ip>
            pgcp-flow-source-ip
          </pgcp-flow-source-ip>
          <pgcp-flow-source-port>
            pgcp-flow-source-port
          </pgcp-flow-source-port>
          <pgcp-flow-destination-ip>
            pgcp-flow-destination-ip
          </pgcp-flow-destination-ip>
          <pgcp-flow-destination-port>
            pgcp-flow-destination-port
```

```
</pgcp-flow-destination-port>
<pgcp-flow-state>
  pgcp-flow-state
</pgcp-flow-state>
<pgcp-flow-direction>
  pgcp-flow-direction
</pgcp-flow-direction>
<pgcp-flow-frame-counter>
  pgcp-flow-frame-counter
</pgcp-flow-frame-counter>
<pgcp-flow-gate-id>
  pgcp-flow-gate-id
</pgcp-flow-gate-id>
<pgcp-flow-nat>....</pgcp-flow-nat>
<pgcp-flow-table-byte-count>
  pgcp-flow-table-byte-count
</pgcp-flow-table-byte-count>
<source-routing-instance>
  source-routing-instance
</source-routing-instance>
<destination-routing-instance>
  destination-routing-instance
</destination-routing-instance>
<pgcp-flow-table-tcp-window-size>
  pgcp-flow-table-tcp-window-size
</pgcp-flow-table-tcp-window-size>
<pgcp-flow-table-tcp-acknowledge>
  pgcp-flow-table-tcp-acknowledge
</pgcp-flow-table-tcp-acknowledge>
<pgcp-flow-table-tcp-tickle>
  pgcp-flow-table-tcp-tickle
</pgcp-flow-table-tcp-tickle>
<pgcp-flow-table-role>
  pgcp-flow-table-role
</pgcp-flow-table-role>
<pgcp-flow-table-timeout>
  pgcp-flow-table-timeout
</pgcp-flow-table-timeout>
<pgcp-flow-table-protocol-detail>
  pgcp-flow-table-protocol-detail
</pgcp-flow-table-protocol-detail>
<flow-gate-tman-policing>
  flow-gate-tman-policing
</flow-gate-tman-policing>
<flow-gate-sdr>
  flow-gate-sdr
</flow-gate-sdr>
<flow-gate-sdr-mbs>
  flow-gate-sdr-mbs
</flow-gate-sdr-mbs>
<flow-gate-pdr>
  flow-gate-pdr
</flow-gate-pdr>
<flow-gate-pdr-mbs>
  flow-gate-pdr-mbs
</flow-gate-pdr-mbs>
```


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```
            <flow-replication-status>
              flow-replication-status
            </flow-replication-status>
          </pgcp-flow-entry>
        </service-pgcp-flow-table>
      </pgcp-conversation>
    </pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description Flow brief information

<pgcp-flow-nat>

Usage

```
<pgcp-flow-nat>
  <pgcp-flow-nat-ip>
    pgcp-flow-nat-ip
  </pgcp-flow-nat-ip>
  <pgcp-flow-nat-port>
    pgcp-flow-nat-port
  </pgcp-flow-nat-port>
  <pgcp-flow-translated-ip>
    pgcp-flow-translated-ip
  </pgcp-flow-translated-ip>
  <pgcp-flow-translated-port>
    pgcp-flow-translated-port
  </pgcp-flow-translated-port>
</pgcp-flow-nat>
```

Description NAT translation

<pgcp-flow-nat>

Usage

```
<pgcp-flow-entry>
  <pgcp-flow-nat>
    <pgcp-flow-nat-ip>
      pgcp-flow-nat-ip
    </pgcp-flow-nat-ip>
    <pgcp-flow-nat-port>
      pgcp-flow-nat-port
    </pgcp-flow-nat-port>
    <pgcp-flow-translated-ip>
      pgcp-flow-translated-ip
    </pgcp-flow-translated-ip>
    <pgcp-flow-translated-port>
      pgcp-flow-translated-port
    </pgcp-flow-translated-port>
  </pgcp-flow-nat>
</pgcp-flow-entry>
```

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Description NAT translation

<pgcp-flow-nat>

Usage

```
<pgcp-per-service-set-flow-table>
 <service-pgcp-flow-table>
  <pgcp-flow-entry>
   <pgcp-flow-nat>
    <pgcp-flow-nat-ip>
     pgcp-flow-nat-ip
    </pgcp-flow-nat-ip>
    <pgcp-flow-nat-port>
     pgcp-flow-nat-port
    </pgcp-flow-nat-port>
    <pgcp-flow-translated-ip>
     pgcp-flow-translated-ip
    </pgcp-flow-translated-ip>
    <pgcp-flow-translated-port>
     pgcp-flow-translated-port
    </pgcp-flow-translated-port>
   </pgcp-flow-nat>
  </pgcp-flow-entry>
 </service-pgcp-flow-table>
</pgcp-per-service-set-flow-table>
```

Description NAT translation

<pgcp-flow-nat>

Usage

```
<service-pgcp-flow-table-information>
 <pgcp-per-service-set-flow-table>
  <service-pgcp-flow-table>
   <pgcp-flow-entry>
    <pgcp-flow-nat>
     <pgcp-flow-nat-ip>
      pgcp-flow-nat-ip
     </pgcp-flow-nat-ip>
     <pgcp-flow-nat-port>
      pgcp-flow-nat-port
     </pgcp-flow-nat-port>
     <pgcp-flow-translated-ip>
      pgcp-flow-translated-ip
     </pgcp-flow-translated-ip>
     <pgcp-flow-translated-port>
      pgcp-flow-translated-port
     </pgcp-flow-translated-port>
    </pgcp-flow-nat>
   </pgcp-flow-entry>
  </service-pgcp-flow-table>
 </pgcp-per-service-set-flow-table>
```


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```
</service-pgcp-flow-table-information>
```

Description NAT translation

<pgcp-flow-nat>

Usage

```
<pgcp-per-service-set-conversation>
  <pgcp-conversation>
    <service-pgcp-flow-table>
      <pgcp-flow-entry>
        <pgcp-flow-nat>
          <pgcp-flow-nat-ip>
            pgcp-flow-nat-ip
          </pgcp-flow-nat-ip>
          <pgcp-flow-nat-port>
            pgcp-flow-nat-port
          </pgcp-flow-nat-port>
          <pgcp-flow-translated-ip>
            pgcp-flow-translated-ip
          </pgcp-flow-translated-ip>
          <pgcp-flow-translated-port>
            pgcp-flow-translated-port
          </pgcp-flow-translated-port>
        </pgcp-flow-nat>
      </pgcp-flow-entry>
    </service-pgcp-flow-table>
  </pgcp-conversation>
</pgcp-per-service-set-conversation>
```

Description NAT translation

<pgcp-flow-nat>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>
    <pgcp-conversation>
      <service-pgcp-flow-table>
        <pgcp-flow-entry>
          <pgcp-flow-nat>
            <pgcp-flow-nat-ip>
              pgcp-flow-nat-ip
            </pgcp-flow-nat-ip>
            <pgcp-flow-nat-port>
              pgcp-flow-nat-port
            </pgcp-flow-nat-port>
            <pgcp-flow-translated-ip>
              pgcp-flow-translated-ip
            </pgcp-flow-translated-ip>
            <pgcp-flow-translated-port>
              pgcp-flow-translated-port
```

```
            </pgcp-flow-translated-port>
          </pgcp-flow-nat>
        </pgcp-flow-entry>
      </service-pgcp-flow-table>
    </pgcp-conversation>
  </pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description NAT translation

<pgcp-per-service-set-conversation>

Usage

```
<pgcp-per-service-set-conversation>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <pgcp-conversation>....</pgcp-conversation>
</pgcp-per-service-set-conversation>
```

Description Show conversations

<pgcp-per-service-set-conversation>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <pgcp-conversation>....</pgcp-conversation>
  </pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description Show conversations

<pgcp-per-service-set-flow-table>

Usage

```
<pgcp-per-service-set-flow-table>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
```


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```
  </interface-name>
  <service-pgcp-flow-table>....</service-pgcp-flow-table>
</pgcp-per-service-set-flow-table>
```

Description Flows sorted by service set

<pgcp-per-service-set-flow-table>

Usage

```
<service-pgcp-flow-table-information>
  <pgcp-per-service-set-flow-table>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <service-pgcp-flow-table>....</service-pgcp-flow-table>
  </pgcp-per-service-set-flow-table>
</service-pgcp-flow-table-information>
```

Description Flows sorted by service set

<pgcpd-active-configuration>

Usage

```
<pgcpd-active-configuration>
  <virtual-interface-entry>....</virtual-interface-entry>
  <controller-entry>....</controller-entry>
  <h248-timers-entry>....</h248-timers-entry>
  <h248-options-entry>....</h248-options-entry>
  <base-root-entry>....</base-root-entry>
<h248-segmentation-properties-entry>....</h248-segmentation-properties-entry>

  <h248-diffserv-entry>....</h248-diffserv-entry>
  <h248-notification-behavior-entry>....</h248-notification-behavior-entry>

<h248-application-data-inactivity-detection-entry>....</h248-application-data-inactivity-detection-entry>


<h248-event-timestamp-notification-entry>....</h248-event-timestamp-notification-entry>

  <inactivity-timer-entry>....</inactivity-timer-entry>
  <fast-update-filters-entry>....</fast-update-filters-entry>
  <overload-control-entry>....</overload-control-entry>
  <gateway-entry>....</gateway-entry>
  <rule-ref-entry>....</rule-ref-entry>
  <rule-entry>....</rule-entry>
  <service-pic-entry>....</service-pic-entry>
  <service-set-entry>....</service-set-entry>
  <firewall-entry>....</firewall-entry>
  <pgcpd-config>....</pgcpd-config>
```

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```
</pgcpd-active-configuration>
```

Description

<pgcpd-config>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <media-service-entry>....</media-service-entry>
    <virtual-interface-entry>....</virtual-interface-entry>
    <gateway-entry>....</gateway-entry>
    <rule-entry>....</rule-entry>
    <service-set-entry>....</service-set-entry>
    <service-pic-entry>....</service-pic-entry>
    <firewall-entry>....</firewall-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<pool-address-range-list>

Usage

```
<service-nat-pool-information>
  <sfw-per-service-set-nat-pool>
    <service-nat-pool>
      <pool-address-range-list>
  </pool-address-range-list>
    </service-nat-pool>
  </sfw-per-service-set-nat-pool>
</service-nat-pool-information>
```

Description List of address ranges

<quality-of-service-entries>

Usage

```
<lsqinfo-cpu-usage-information>
  <quality-of-service-entries>
    <quality-of-service-entry>....</quality-of-service-entry>
  </quality-of-service-entries>
</lsqinfo-cpu-usage-information>
```

Description

<quality-of-service-entry>

Usage

```
<lsqinfo-cpu-usage-information>
  <quality-of-service-entries>
```


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```
<quality-of-service-entry>
  <cpu-name>
    cpu-name
  </cpu-name>
  <idle>
    idle
  </idle>
  <timer>
    timer
  </timer>
  <system>
    system
  </system>
  <output>
    output
  </output>
  <input>
    input
  </input>
  <fragment-output>
    fragment-output
  </fragment-output>
  <bypass-output>
    bypass-output
  </bypass-output>
  <free-frame>
    free-frame
  </free-frame>
</quality-of-service-entry>
</quality-of-service-entries>
</lsqinfo-cpu-usage-information>
```

Description QoS CPU usage information

<radius-accounting-server-information-entry>

Usage

```
<radius-accounting-server-information-entry>
  <radius-server-ip-address>
    radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-state>
    radius-server-state
  </radius-server-state>
  <radius-server-udp-port>
    radius-server-udp-port
  </radius-server-udp-port>
  <radius-server-retry-count>
    radius-server-retry-count
  </radius-server-retry-count>
  <radius-server-timeout>
    radius-server-timeout
  </radius-server-timeout>
  <radius-server-pending-requests>
```

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```
    radius-server-pending-requests
   </radius-server-pending-requests>
   <radius-server-maximum-sessions>
    radius-server-maximum-sessions
   </radius-server-maximum-sessions>
   <radius-server-dead-time>
    radius-server-dead-time
   </radius-server-dead-time>
   <radius-server-secret-type>
    radius-server-secret-type
   </radius-server-secret-type>
  </radius-accounting-server-information-entry>
```

Description RADIUS accounting server information entry sorted by IP address

<radius-accounting-server-information-entry>

Usage

```
<services-l2tp-radius-accounting-servers-information>
  <radius-accounting-server-information-entry>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-state>
      radius-server-state
    </radius-server-state>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-server-retry-count>
      radius-server-retry-count
    </radius-server-retry-count>
    <radius-server-timeout>
      radius-server-timeout
    </radius-server-timeout>
    <radius-server-pending-requests>
      radius-server-pending-requests
    </radius-server-pending-requests>
    <radius-server-maximum-sessions>
      radius-server-maximum-sessions
    </radius-server-maximum-sessions>
    <radius-server-dead-time>
      radius-server-dead-time
    </radius-server-dead-time>
    <radius-server-secret-type>
      radius-server-secret-type
    </radius-server-secret-type>
  </radius-accounting-server-information-entry>
</services-l2tp-radius-accounting-servers-information>
```

Description RADIUS accounting server information entry sorted by IP address

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<radius-accounting-server-information-entry>

Usage

```
<services-l2tp-radius-authentication-accounting-servers-information>
  <radius-accounting-server-information-entry>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-state>
      radius-server-state
    </radius-server-state>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-server-retry-count>
      radius-server-retry-count
    </radius-server-retry-count>
    <radius-server-timeout>
      radius-server-timeout
    </radius-server-timeout>
    <radius-server-pending-requests>
      radius-server-pending-requests
    </radius-server-pending-requests>
    <radius-server-maximum-sessions>
      radius-server-maximum-sessions
    </radius-server-maximum-sessions>
    <radius-server-dead-time>
      radius-server-dead-time
    </radius-server-dead-time>
    <radius-server-secret-type>
      radius-server-secret-type
    </radius-server-secret-type>
  </radius-accounting-server-information-entry>
</services-l2tp-radius-authentication-accounting-servers-information>
```

Description RADIUS accounting server information entry sorted by IP address

<radius-accounting-statistic-information-entry>

Usage

```
<radius-accounting-statistic-information-entry>
  <radius-server-statistics-entry-header>
    radius-server-statistics-entry-header
  </radius-server-statistics-entry-header>
  <radius-server-profile-name>
    radius-server-profile-name
  </radius-server-profile-name>
  <radius-server-ip-address>
    radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-udp-port>
    radius-server-udp-port
  </radius-server-udp-port>
```

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```
<radius-statistic-requests>
  radius-statistic-requests
</radius-statistic-requests>
<radius-statistic-start-requests>
  radius-statistic-start-requests
</radius-statistic-start-requests>
<radius-statistic-interim-requests>
  radius-statistic-interim-requests
</radius-statistic-interim-requests>
<radius-statistic-stop-requests>
  radius-statistic-stop-requests
</radius-statistic-stop-requests>
<radius-statistic-rollover-requests>
  radius-statistic-rollover-requests
</radius-statistic-rollover-requests>
<radius-statistic-retransmissions>
  radius-statistic-retransmissions
</radius-statistic-retransmissions>
<radius-statistic-responses>
  radius-statistic-responses
</radius-statistic-responses>
<radius-statistic-start-responses>
  radius-statistic-start-responses
</radius-statistic-start-responses>
<radius-statistic-interim-responses>
  radius-statistic-interim-responses
</radius-statistic-interim-responses>
<radius-statistic-stop-responses>
  radius-statistic-stop-responses
</radius-statistic-stop-responses>
<radius-statistic-malformed-responses>
  radius-statistic-malformed-responses
</radius-statistic-malformed-responses>
<radius-statistic-bad-authenticators>
  radius-statistic-bad-authenticators
</radius-statistic-bad-authenticators>
<radius-statistic-requests-pending>
  radius-statistic-requests-pending
</radius-statistic-requests-pending>
<radius-statistic-request-timeouts>
  radius-statistic-request-timeouts
</radius-statistic-request-timeouts>
<radius-statistic-unknown-responses>
  radius-statistic-unknown-responses
</radius-statistic-unknown-responses>
<radius-statistic-packets-dropped>
  radius-statistic-packets-dropped
</radius-statistic-packets-dropped>
</radius-accounting-statistic-information-entry>
```

Description RADIUS accounting statistic entry sorted by IP address

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<radius-accounting-statistic-information-entry>

Usage

```
<services-l2tp-radius-accounting-statistics-information>
  <radius-accounting-statistic-information-entry>
    <radius-server-statistics-entry-header>
      radius-server-statistics-entry-header
    </radius-server-statistics-entry-header>
    <radius-server-profile-name>
      radius-server-profile-name
    </radius-server-profile-name>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-statistic-requests>
      radius-statistic-requests
    </radius-statistic-requests>
    <radius-statistic-start-requests>
      radius-statistic-start-requests
    </radius-statistic-start-requests>
    <radius-statistic-interim-requests>
      radius-statistic-interim-requests
    </radius-statistic-interim-requests>
    <radius-statistic-stop-requests>
      radius-statistic-stop-requests
    </radius-statistic-stop-requests>
    <radius-statistic-rollover-requests>
      radius-statistic-rollover-requests
    </radius-statistic-rollover-requests>
    <radius-statistic-retransmissions>
      radius-statistic-retransmissions
    </radius-statistic-retransmissions>
    <radius-statistic-responses>
      radius-statistic-responses
    </radius-statistic-responses>
    <radius-statistic-start-responses>
      radius-statistic-start-responses
    </radius-statistic-start-responses>
    <radius-statistic-interim-responses>
      radius-statistic-interim-responses
    </radius-statistic-interim-responses>
    <radius-statistic-stop-responses>
      radius-statistic-stop-responses
    </radius-statistic-stop-responses>
    <radius-statistic-malformed-responses>
      radius-statistic-malformed-responses
    </radius-statistic-malformed-responses>
    <radius-statistic-bad-authenticators>
      radius-statistic-bad-authenticators
    </radius-statistic-bad-authenticators>
    <radius-statistic-requests-pending>
      radius-statistic-requests-pending
```

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```
    </radius-statistic-requests-pending>
    <radius-statistic-request-timeouts>
      radius-statistic-request-timeouts
    </radius-statistic-request-timeouts>
    <radius-statistic-unknown-responses>
      radius-statistic-unknown-responses
    </radius-statistic-unknown-responses>
    <radius-statistic-packets-dropped>
      radius-statistic-packets-dropped
    </radius-statistic-packets-dropped>
  </radius-accounting-statistic-information-entry>
</services-l2tp-radius-accounting-statistics-information>
```

Description RADIUS accounting statistic entry sorted by IP address

<radius-accounting-statistic-information-entry>

Usage

```
<services-l2tp-radius-authentication-accounting-statistics-information>
  <radius-accounting-statistic-information-entry>
    <radius-server-statistics-entry-header>
      radius-server-statistics-entry-header
    </radius-server-statistics-entry-header>
    <radius-server-profile-name>
      radius-server-profile-name
    </radius-server-profile-name>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-statistic-requests>
      radius-statistic-requests
    </radius-statistic-requests>
    <radius-statistic-start-requests>
      radius-statistic-start-requests
    </radius-statistic-start-requests>
    <radius-statistic-interim-requests>
      radius-statistic-interim-requests
    </radius-statistic-interim-requests>
    <radius-statistic-stop-requests>
      radius-statistic-stop-requests
    </radius-statistic-stop-requests>
    <radius-statistic-rollover-requests>
      radius-statistic-rollover-requests
    </radius-statistic-rollover-requests>
    <radius-statistic-retransmissions>
      radius-statistic-retransmissions
    </radius-statistic-retransmissions>
    <radius-statistic-responses>
      radius-statistic-responses
    </radius-statistic-responses>
    <radius-statistic-start-responses>
```


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```
      radius-statistic-start-responses
    </radius-statistic-start-responses>
    <radius-statistic-interim-responses>
      radius-statistic-interim-responses
    </radius-statistic-interim-responses>
    <radius-statistic-stop-responses>
      radius-statistic-stop-responses
    </radius-statistic-stop-responses>
    <radius-statistic-malformed-responses>
      radius-statistic-malformed-responses
    </radius-statistic-malformed-responses>
    <radius-statistic-bad-authenticators>
      radius-statistic-bad-authenticators
    </radius-statistic-bad-authenticators>
    <radius-statistic-requests-pending>
      radius-statistic-requests-pending
    </radius-statistic-requests-pending>
    <radius-statistic-request-timeouts>
      radius-statistic-request-timeouts
    </radius-statistic-request-timeouts>
    <radius-statistic-unknown-responses>
      radius-statistic-unknown-responses
    </radius-statistic-unknown-responses>
    <radius-statistic-packets-dropped>
      radius-statistic-packets-dropped
    </radius-statistic-packets-dropped>
  </radius-accounting-statistic-information-entry>
</services-l2tp-radius-authentication-accounting-statistics-information>
```

Description RADIUS accounting statistic entry sorted by IP address

<radius-authentication-server-information-entry>

Usage

```
<radius-authentication-server-information-entry>
  <radius-server-ip-address>
    radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-state>
    radius-server-state
  </radius-server-state>
  <radius-server-udp-port>
    radius-server-udp-port
  </radius-server-udp-port>
  <radius-server-retry-count>
    radius-server-retry-count
  </radius-server-retry-count>
  <radius-server-timeout>
    radius-server-timeout
  </radius-server-timeout>
  <radius-server-pending-requests>
    radius-server-pending-requests
  </radius-server-pending-requests>
  <radius-server-maximum-sessions>
```

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```
    radius-server-maximum-sessions
   </radius-server-maximum-sessions>
   <radius-server-dead-time>
    radius-server-dead-time
   </radius-server-dead-time>
   <radius-server-secret-type>
    radius-server-secret-type
   </radius-server-secret-type>
  </radius-authentication-server-information-entry>
```

Description RADIUS authentication server information entry sorted by IP address

<radius-authentication-server-information-entry>

Usage

```
<services-l2tp-radius-authentication-servers-information>
 <radius-authentication-server-information-entry>
  <radius-server-ip-address>
   radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-state>
   radius-server-state
  </radius-server-state>
  <radius-server-udp-port>
   radius-server-udp-port
  </radius-server-udp-port>
  <radius-server-retry-count>
   radius-server-retry-count
  </radius-server-retry-count>
  <radius-server-timeout>
   radius-server-timeout
  </radius-server-timeout>
  <radius-server-pending-requests>
   radius-server-pending-requests
  </radius-server-pending-requests>
  <radius-server-maximum-sessions>
   radius-server-maximum-sessions
  </radius-server-maximum-sessions>
  <radius-server-dead-time>
   radius-server-dead-time
  </radius-server-dead-time>
  <radius-server-secret-type>
   radius-server-secret-type
  </radius-server-secret-type>
 </radius-authentication-server-information-entry>
</services-l2tp-radius-authentication-servers-information>
```

Description RADIUS authentication server information entry sorted by IP address

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<radius-authentication-server-information-entry>

Usage

```
<services-l2tp-radius-authentication-accounting-servers-information>
  <radius-authentication-server-information-entry>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-state>
      radius-server-state
    </radius-server-state>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-server-retry-count>
      radius-server-retry-count
    </radius-server-retry-count>
    <radius-server-timeout>
      radius-server-timeout
    </radius-server-timeout>
    <radius-server-pending-requests>
      radius-server-pending-requests
    </radius-server-pending-requests>
    <radius-server-maximum-sessions>
      radius-server-maximum-sessions
    </radius-server-maximum-sessions>
    <radius-server-dead-time>
      radius-server-dead-time
    </radius-server-dead-time>
    <radius-server-secret-type>
      radius-server-secret-type
    </radius-server-secret-type>
  </radius-authentication-server-information-entry>
</services-l2tp-radius-authentication-accounting-servers-information>
```

Description RADIUS authentication server information entry sorted by IP address

<radius-authentication-statistic-information-entry>

Usage

```
<radius-authentication-statistic-information-entry>
  <radius-server-statistics-entry-header>
    radius-server-statistics-entry-header
  </radius-server-statistics-entry-header>
  <radius-server-profile-name>
    radius-server-profile-name
  </radius-server-profile-name>
  <radius-server-ip-address>
    radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-udp-port>
    radius-server-udp-port
  </radius-server-udp-port>
```

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```
<radius-statistic-access-requests>
  radius-statistic-access-requests
</radius-statistic-access-requests>
<radius-statistic-rollover-requests>
  radius-statistic-rollover-requests
</radius-statistic-rollover-requests>
<radius-statistic-retransmissions>
  radius-statistic-retransmissions
</radius-statistic-retransmissions>
<radius-statistic-access-accepts>
  radius-statistic-access-accepts
</radius-statistic-access-accepts>
<radius-statistic-access-rejects>
  radius-statistic-access-rejects
</radius-statistic-access-rejects>
<radius-statistic-access-challenges>
  radius-statistic-access-challenges
</radius-statistic-access-challenges>
<radius-statistic-malformed-responses>
  radius-statistic-malformed-responses
</radius-statistic-malformed-responses>
<radius-statistic-bad-authenticators>
  radius-statistic-bad-authenticators
</radius-statistic-bad-authenticators>
<radius-statistic-requests-pending>
  radius-statistic-requests-pending
</radius-statistic-requests-pending>
<radius-statistic-request-timeouts>
  radius-statistic-request-timeouts
</radius-statistic-request-timeouts>
<radius-statistic-unknown-responses>
  radius-statistic-unknown-responses
</radius-statistic-unknown-responses>
<radius-statistic-packets-dropped>
  radius-statistic-packets-dropped
</radius-statistic-packets-dropped>
</radius-authentication-statistic-information-entry>
```

Description RADIUS authentication statistic entry sorted by IP address

<radius-authentication-statistic-information-entry>

Usage

```
<services-l2tp-radius-authentication-statistics-information>
  <radius-authentication-statistic-information-entry>
    <radius-server-statistics-entry-header>
      radius-server-statistics-entry-header
    </radius-server-statistics-entry-header>
    <radius-server-profile-name>
      radius-server-profile-name
    </radius-server-profile-name>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
```


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```
<radius-server-udp-port>
  radius-server-udp-port
</radius-server-udp-port>
<radius-statistic-access-requests>
  radius-statistic-access-requests
</radius-statistic-access-requests>
<radius-statistic-rollover-requests>
  radius-statistic-rollover-requests
</radius-statistic-rollover-requests>
<radius-statistic-retransmissions>
  radius-statistic-retransmissions
</radius-statistic-retransmissions>
<radius-statistic-access-accepts>
  radius-statistic-access-accepts
</radius-statistic-access-accepts>
<radius-statistic-access-rejects>
  radius-statistic-access-rejects
</radius-statistic-access-rejects>
<radius-statistic-access-challenges>
  radius-statistic-access-challenges
</radius-statistic-access-challenges>
<radius-statistic-malformed-responses>
  radius-statistic-malformed-responses
</radius-statistic-malformed-responses>
<radius-statistic-bad-authenticators>
  radius-statistic-bad-authenticators
</radius-statistic-bad-authenticators>
<radius-statistic-requests-pending>
  radius-statistic-requests-pending
</radius-statistic-requests-pending>
<radius-statistic-request-timeouts>
  radius-statistic-request-timeouts
</radius-statistic-request-timeouts>
<radius-statistic-unknown-responses>
  radius-statistic-unknown-responses
</radius-statistic-unknown-responses>
<radius-statistic-packets-dropped>
  radius-statistic-packets-dropped
</radius-statistic-packets-dropped>
</radius-authentication-statistic-information-entry>
</services-l2tp-radius-authentication-statistics-information>
```

Description RADIUS authentication statistic entry sorted by IP address

<radius-authentication-statistic-information-entry>

Usage

```
<services-l2tp-radius-authentication-accounting-statistics-information>
  <radius-authentication-statistic-information-entry>
    <radius-server-statistics-entry-header>
      radius-server-statistics-entry-header
    </radius-server-statistics-entry-header>
    <radius-server-profile-name>
      radius-server-profile-name
```

```
    </radius-server-profile-name>
    <radius-server-ip-address>
      radius-server-ip-address
    </radius-server-ip-address>
    <radius-server-udp-port>
      radius-server-udp-port
    </radius-server-udp-port>
    <radius-statistic-access-requests>
      radius-statistic-access-requests
    </radius-statistic-access-requests>
    <radius-statistic-rollover-requests>
      radius-statistic-rollover-requests
    </radius-statistic-rollover-requests>
    <radius-statistic-retransmissions>
      radius-statistic-retransmissions
    </radius-statistic-retransmissions>
    <radius-statistic-access-accepts>
      radius-statistic-access-accepts
    </radius-statistic-access-accepts>
    <radius-statistic-access-rejects>
      radius-statistic-access-rejects
    </radius-statistic-access-rejects>
    <radius-statistic-access-challenges>
      radius-statistic-access-challenges
    </radius-statistic-access-challenges>
    <radius-statistic-malformed-responses>
      radius-statistic-malformed-responses
    </radius-statistic-malformed-responses>
    <radius-statistic-bad-authenticators>
      radius-statistic-bad-authenticators
    </radius-statistic-bad-authenticators>
    <radius-statistic-requests-pending>
      radius-statistic-requests-pending
    </radius-statistic-requests-pending>
    <radius-statistic-request-timeouts>
      radius-statistic-request-timeouts
    </radius-statistic-request-timeouts>
    <radius-statistic-unknown-responses>
      radius-statistic-unknown-responses
    </radius-statistic-unknown-responses>
    <radius-statistic-packets-dropped>
      radius-statistic-packets-dropped
    </radius-statistic-packets-dropped>
  </radius-authentication-statistic-information-entry>
</services-l2tp-radius-authentication-accounting-statistics-information>
```

Description RADIUS authentication statistic entry sorted by IP address

<radius-profile-access-test-detail-result>

Usage

```
<radius-profile-access-test-detail-result>
  <radius-profile-name>
    radius-profile-name
```


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```
</radius-profile-name>
<radius-client-user-name>
  radius-client-user-name
</radius-client-user-name>
<radius-client-password>
  radius-client-password
</radius-client-password>
<radius-profile-num-servers>
  radius-profile-num-servers
</radius-profile-num-servers>
<radius-server-ip-address>
  radius-server-ip-address
</radius-server-ip-address>
<radius-server-udp-port>
  radius-server-udp-port
</radius-server-udp-port>
<radius-server-source-address>
  radius-server-source-address
</radius-server-source-address>
<radius-server-timeout>
  radius-server-timeout
</radius-server-timeout>
<radius-server-retry-count>
  radius-server-retry-count
</radius-server-retry-count>
<radius-server-secret>
  radius-server-secret
</radius-server-secret>
<radius-server-status>
  radius-server-status
</radius-server-status>
<radius-server-attempts>
  radius-server-attempts
</radius-server-attempts>
<radius-server-attribute-name>
  radius-server-attribute-name
</radius-server-attribute-name>
<radius-server-attribute-len>
  radius-server-attribute-len
</radius-server-attribute-len>
<radius-server-attribute-value>
  radius-server-attribute-value
</radius-server-attribute-value>
</radius-profile-access-test-detail-result>
```

Description RADIUS server acccess test detail

<radius-profile-access-test-result>

Usage

```
<radius-profile-access-test-result>
  <radius-profile-name>
    radius-profile-name
  </radius-profile-name>
```

```
<radius-client-user-name>
  radius-client-user-name
</radius-client-user-name>
<radius-client-password>
  radius-client-password
</radius-client-password>
<radius-profile-num-servers>
  radius-profile-num-servers
</radius-profile-num-servers>
<radius-server-ip-address>
  radius-server-ip-address
</radius-server-ip-address>
<radius-server-udp-port>
  radius-server-udp-port
</radius-server-udp-port>
<radius-server-source-address>
  radius-server-source-address
</radius-server-source-address>
<radius-server-timeout>
  radius-server-timeout
</radius-server-timeout>
<radius-server-retry-count>
  radius-server-retry-count
</radius-server-retry-count>
<radius-server-secret>
  radius-server-secret
</radius-server-secret>
<radius-server-status>
  radius-server-status
</radius-server-status>
<radius-server-attempts>
  radius-server-attempts
</radius-server-attempts>
</radius-profile-access-test-result>
```

Description RADIUS server acccess test

<radius-server-access-test-result>

Usage

```
<radius-server-access-test-result>
  <radius-server-ip-address>
    radius-server-ip-address
  </radius-server-ip-address>
  <radius-server-udp-port>
    radius-server-udp-port
  </radius-server-udp-port>
  <radius-server-source-address>
    radius-server-source-address
  </radius-server-source-address>
  <radius-server-timeout>
    radius-server-timeout
  </radius-server-timeout>
  <radius-server-retry-count>
```


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```
  radius-server-retry-count
 </radius-server-retry-count>
 <radius-server-secret>
  radius-server-secret
 </radius-server-secret>
 <radius-client-user-name>
  radius-client-user-name
 </radius-client-user-name>
 <radius-client-password>
  radius-client-password
 </radius-client-password>
 <radius-server-status>
  radius-server-status
 </radius-server-status>
</radius-server-access-test-result>
```

Description RADIUS server acccess test

<restart-bsg-service-information>

Usage

```
<restart-bsg-service-information>
 <gateway-name>
  gateway-name
 </gateway-name>
 <platform>
  platform
 </platform>
 <process-id>
  process-id
 </process-id>
</restart-bsg-service-information>
```

Description Restarted border signaling gateway process information

<restart-pgcp-service-information>

Usage

```
<restart-pgcp-service-information>
 <gateway-name>
  gateway-name
 </gateway-name>
 <platform>
  platform
 </platform>
 <process-id>
  process-id
 </process-id>
</restart-pgcp-service-information>
```

Description Restarted pgcp process information

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<rule-entry>

Usage

```
<pgcpd-active-configuration>
  <rule-entry>
    <rule-name>
      rule-name
    </rule-name>
    <rule-gateway-name>
      rule-gateway-name
    </rule-gateway-name>
    <media-service-ref-entry>....</media-service-ref-entry>
  </rule-entry>
</pgcpd-active-configuration>
```

Description

<rule-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <rule-entry>
      <rule-name>
        rule-name
      </rule-name>
      <rule-gateway-name>
        rule-gateway-name
      </rule-gateway-name>
      <media-service-ref-entry>....</media-service-ref-entry>
    </rule-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<rule-ref-entry>

Usage

```
<pgcpd-active-configuration>
  <rule-ref-entry>
    <rule-ref-name>
      rule-ref-name
    </rule-ref-name>
  </rule-ref-entry>
</pgcpd-active-configuration>
```

Description

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<rule-ref-entry>

Usage

```
<pgcpd-active-configuration>
  <service-set-entry>
    <rule-ref-entry>
      <rule-ref-name>
        rule-ref-name
      </rule-ref-name>
    </rule-ref-entry>
  </service-set-entry>
</pgcpd-active-configuration>
```

Description

<rule-ref-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <service-set-entry>
      <rule-ref-entry>
        <rule-ref-name>
          rule-ref-name
        </rule-ref-name>
      </rule-ref-entry>
    </service-set-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<sequencer-entries>

Usage

```
<lsqinfo-cpu-usage-information>
  <sequencer-entries>
    <sequencer-entry>....</sequencer-entry>
  </sequencer-entries>
</lsqinfo-cpu-usage-information>
```

Description

<sequencer-entry>

Usage

```
<lsqinfo-cpu-usage-information>
  <sequencer-entries>
    <sequencer-entry>
      <cpu-name>
        cpu-name
      </cpu-name>
```

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```
            <idle>
              idle
            </idle>
            <system>
              system
            </system>
            <input-lfi>
              input-lfi
            </input-lfi>
            <input-fragments>
              input-fragments
            </input-fragments>
            <output-fragments>
              output-fragments
            </output-fragments>
            <output-retry>
              output-retry
            </output-retry>
          </sequencer-entry>
        </sequencer-entries>
      </lsqinfo-cpu-usage-information>
```

Description Sequencer CPU usage information

<service-bsg-debug-method-invoker>

Usage

```
<service-bsg-debug-method-invoker>
  <service-bsg-debug-method-invoker-result>
    service-bsg-debug-method-invoker-result
  </service-bsg-debug-method-invoker-result>
</service-bsg-debug-method-invoker>
```

Description Service border signaling gateway debug method-invoker

<service-cos-statistics-entry>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>

<cos-stats-service-set-dscp-information>....</cos-stats-service-set-dscp-information>

<cos-stats-service-set-forwarding-class-information>....</cos-stats-service-set-forwarding-class-information>
```


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```
  </service-cos-statistics-entry>
</service-cos-statistics-information>
```

Description Class of service statistics entry

<service-cos-statistics-information>

Usage

```
<service-cos-statistics-information>
  <service-cos-statistics-entry>....</service-cos-statistics-entry>
</service-cos-statistics-information>
```

Description Class of service statistics information

<service-crtp-extensive-information>

Usage

```
<service-crtp-extensive-information>
</service-crtp-extensive-information>
```

Description Per-interface negotiated CRTP options and statistics

<service-crtp-flow-table>

Usage

```
<crtp-per-interface-flow-table>
  <service-crtp-flow-table>
    <crtp-flow-entry>....</crtp-flow-entry>
  </service-crtp-flow-table>
</crtp-per-interface-flow-table>
```

Description CRTP flows

<service-crtp-flow-table>

Usage

```
<service-crtp-flow-table-information>
  <crtp-per-interface-flow-table>
    <service-crtp-flow-table>
      <crtp-flow-entry>....</crtp-flow-entry>
    </service-crtp-flow-table>
  </crtp-per-interface-flow-table>
</service-crtp-flow-table-information>
```

Description CRTP flows

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<service-crtp-flow-table-information>

Usage

```
<service-crtp-flow-table-information>
  <crtp-per-interface-flow-table>....</crtp-per-interface-flow-table>
</service-crtp-flow-table-information>
```

Description CRTP flows sorted by interface name

<service-crtp-params-information>

Usage

```
<service-crtp-params-information>
</service-crtp-params-information>
```

Description Negotiated CRTP options sorted by interface name

<service-current-softwire-count>

Usage

```
<service-current-softwire-count-information>
  <service-current-softwire-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <ds-lite-softwire-count>
      ds-lite-softwire-count
    </ds-lite-softwire-count>
    <v6rd-softwire-count>
      v6rd-softwire-count
    </v6rd-softwire-count>
  </service-current-softwire-count>
</service-current-softwire-count-information>
```

Description Current softwire count

<service-current-softwire-count-information>

Usage

```
<service-current-softwire-count-information>
  <service-current-softwire-count>....</service-current-softwire-count>
</service-current-softwire-count-information>
```

Description Count of matching current softwire entries

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<service-flow-analysis-information>

Usage

```
<service-flow-analysis-information>
  <flow-analysis-statistics-pic-info>....</flow-analysis-statistics-pic-info>
  <flow-analysis-statistics-entry>....</flow-analysis-statistics-entry>

<flow-analysis-num-flows-sec-samples-entry>....</flow-analysis-num-flows-sec-samples-entry>

  <flow-analysis-num-flows-sec-entry>....</flow-analysis-num-flows-sec-entry>
<flow-analysis-protocol-lifetime-entry>....</flow-analysis-protocol-lifetime-entry>

</service-flow-analysis-information>
```

Description

<service-hcm-statistics-entry>

Usage

```
<service-hcm-statistics-information>
  <service-hcm-statistics-entry>
    <interface-name>
      interface-name
    </interface-name>
    <hcm-stats-rule-information>....</hcm-stats-rule-information>
  </service-hcm-statistics-entry>
</service-hcm-statistics-information>
```

Description HCM statistics entry

<service-hcm-statistics-information>

Usage

```
<service-hcm-statistics-information>
  <service-hcm-statistics-entry>....</service-hcm-statistics-entry>
</service-hcm-statistics-information>
```

Description HCM statistics information

<service-identification-statistics>

Usage

```
<service-identification-statistics>
  <interface-name>
    interface-name
  </interface-name>
  <interfaces>
    interfaces
  </interfaces>
  <packets>
    packets
```

```
</packets>
<bytes>
  bytes
</bytes>
<errored-packets>
  errored-packets
</errored-packets>
<errored-bytes>
  errored-bytes
</errored-bytes>
<packet-processing-error>
  packet-processing-error
</packet-processing-error>
<errored-packets-tcp-malformed>
  errored-packets-tcp-malformed
</errored-packets-tcp-malformed>
<errored-packets-wap-invalid-transaction>
  errored-packets-wap-invalid-transaction
</errored-packets-wap-invalid-transaction>
<errored-packets-wap-transaction-in-error>
  errored-packets-wap-transaction-in-error
</errored-packets-wap-transaction-in-error>
<errored-packets-http-transaction-in-error>
  errored-packets-http-transaction-in-error
</errored-packets-http-transaction-in-error>
<header-examination-packets>
  header-examination-packets
</header-examination-packets>
<header-examination-bytes>
  header-examination-bytes
</header-examination-bytes>
<header-examination-flow>
  header-examination-flow
</header-examination-flow>
<header-examination-flow-matched>
  header-examination-flow-matched
</header-examination-flow-matched>
<header-examination-protocol-required>
  header-examination-protocol-required
</header-examination-protocol-required>
<header-examination-http-protocol-required>
  header-examination-http-protocol-required
</header-examination-http-protocol-required>
<header-examination-wap-protocol-required>
  header-examination-wap-protocol-required
</header-examination-wap-protocol-required>
<protocol-inspected-flow>
  protocol-inspected-flow
</protocol-inspected-flow>
<protocol-inspection-flow>
  protocol-inspection-flow
</protocol-inspection-flow>
<protocol-inspection-packets>
  protocol-inspection-packets
</protocol-inspection-packets>
<protocol-inspection-bytes>
```


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```
  protocol-inspection-bytes
</protocol-inspection-bytes>
<protocol-inspection-flow-protocol-identified>
  protocol-inspection-flow-protocol-identified
</protocol-inspection-flow-protocol-identified>
<protocol-inspection-http-uri>
  protocol-inspection-http-uri
</protocol-inspection-http-uri>
<protocol-inspection-http-uri-matched>
  protocol-inspection-http-uri-matched
</protocol-inspection-http-uri-matched>
<protocol-inspection-wap-uri>
  protocol-inspection-wap-uri
</protocol-inspection-wap-uri>
<protocol-inspection-wap-uri-matched>
  protocol-inspection-wap-uri-matched
</protocol-inspection-wap-uri-matched>
<wap-transaction-created>
  wap-transaction-created
</wap-transaction-created>
<wap-transaction-maximum>
  wap-transaction-maximum
</wap-transaction-maximum>
<wap-transaction-freed>
  wap-transaction-freed
</wap-transaction-freed>
<wap-transaction-idle-freed>
  wap-transaction-idle-freed
</wap-transaction-idle-freed>
<http-transaction-created>
  http-transaction-created
</http-transaction-created>
<http-transaction-maximum>
  http-transaction-maximum
</http-transaction-maximum>
<http-transaction-freed>
  http-transaction-freed
</http-transaction-freed>
<http-transaction-idle-freed>
  http-transaction-idle-freed
</http-transaction-idle-freed>
<uri-processing-error>
  uri-processing-error
</uri-processing-error>
<uri-error-failed-to-process>
  uri-error-failed-to-process
</uri-error-failed-to-process>
<uri-error-too-long>
  uri-error-too-long
</uri-error-too-long>
<transaction-error-failed-to-parse>
  transaction-error-failed-to-parse
</transaction-error-failed-to-parse>
<uri-error-no-system-resources>
  uri-error-no-system-resources
</uri-error-no-system-resources>
```

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```
<header-examination-failed-configuration>
  header-examination-failed-configuration
</header-examination-failed-configuration>
<uri-examination-failed-configuration>
  uri-examination-failed-configuration
</uri-examination-failed-configuration>
</service-identification-statistics>
```

Description Statistics for the service-identification service

<service-identification-statistics>

Usage

```
<service-identification-statistics-information>
  <service-identification-statistics>
    <interface-name>
      interface-name
    </interface-name>
    <interfaces>
      interfaces
    </interfaces>
    <packets>
      packets
    </packets>
    <bytes>
      bytes
    </bytes>
    <errored-packets>
      errored-packets
    </errored-packets>
    <errored-bytes>
      errored-bytes
    </errored-bytes>
    <packet-processing-error>
      packet-processing-error
    </packet-processing-error>
    <errored-packets-tcp-malformed>
      errored-packets-tcp-malformed
    </errored-packets-tcp-malformed>
    <errored-packets-wap-invalid-transaction>
      errored-packets-wap-invalid-transaction
    </errored-packets-wap-invalid-transaction>
    <errored-packets-wap-transaction-in-error>
      errored-packets-wap-transaction-in-error
    </errored-packets-wap-transaction-in-error>
    <errored-packets-http-transaction-in-error>
      errored-packets-http-transaction-in-error
    </errored-packets-http-transaction-in-error>
    <header-examination-packets>
      header-examination-packets
    </header-examination-packets>
    <header-examination-bytes>
      header-examination-bytes
    </header-examination-bytes>
```


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```
<header-examination-flow>
  header-examination-flow
</header-examination-flow>
<header-examination-flow-matched>
  header-examination-flow-matched
</header-examination-flow-matched>
<header-examination-protocol-required>
  header-examination-protocol-required
</header-examination-protocol-required>
<header-examination-http-protocol-required>
  header-examination-http-protocol-required
</header-examination-http-protocol-required>
<header-examination-wap-protocol-required>
  header-examination-wap-protocol-required
</header-examination-wap-protocol-required>
<protocol-inspected-flow>
  protocol-inspected-flow
</protocol-inspected-flow>
<protocol-inspection-flow>
  protocol-inspection-flow
</protocol-inspection-flow>
<protocol-inspection-packets>
  protocol-inspection-packets
</protocol-inspection-packets>
<protocol-inspection-bytes>
  protocol-inspection-bytes
</protocol-inspection-bytes>
<protocol-inspection-flow-protocol-identified>
  protocol-inspection-flow-protocol-identified
</protocol-inspection-flow-protocol-identified>
<protocol-inspection-http-uri>
  protocol-inspection-http-uri
</protocol-inspection-http-uri>
<protocol-inspection-http-uri-matched>
  protocol-inspection-http-uri-matched
</protocol-inspection-http-uri-matched>
<protocol-inspection-wap-uri>
  protocol-inspection-wap-uri
</protocol-inspection-wap-uri>
<protocol-inspection-wap-uri-matched>
  protocol-inspection-wap-uri-matched
</protocol-inspection-wap-uri-matched>
<wap-transaction-created>
  wap-transaction-created
</wap-transaction-created>
<wap-transaction-maximum>
  wap-transaction-maximum
</wap-transaction-maximum>
<wap-transaction-freed>
  wap-transaction-freed
</wap-transaction-freed>
<wap-transaction-idle-freed>
  wap-transaction-idle-freed
</wap-transaction-idle-freed>
<http-transaction-created>
  http-transaction-created
```

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```
    </http-transaction-created>
    <http-transaction-maximum>
      http-transaction-maximum
    </http-transaction-maximum>
    <http-transaction-freed>
      http-transaction-freed
    </http-transaction-freed>
    <http-transaction-idle-freed>
      http-transaction-idle-freed
    </http-transaction-idle-freed>
    <uri-processing-error>
      uri-processing-error
    </uri-processing-error>
    <uri-error-failed-to-process>
      uri-error-failed-to-process
    </uri-error-failed-to-process>
    <uri-error-too-long>
      uri-error-too-long
    </uri-error-too-long>
    <transaction-error-failed-to-parse>
      transaction-error-failed-to-parse
    </transaction-error-failed-to-parse>
    <uri-error-no-system-resources>
      uri-error-no-system-resources
    </uri-error-no-system-resources>
    <header-examination-failed-configuration>
      header-examination-failed-configuration
    </header-examination-failed-configuration>
    <uri-examination-failed-configuration>
      uri-examination-failed-configuration
    </uri-examination-failed-configuration>
  </service-identification-statistics>
</service-identification-statistics-information>
```

Description Statistics for the service-identification service

<service-identification-statistics-information>

Usage

```
<service-identification-statistics-information>
  <service-identification-statistics>....</service-identification-statistics>
</service-identification-statistics-information>
```

Description

<service-ids-flow-table-information>

Usage

```
<service-ids-flow-table-information>
  <ids-show-summary>....</ids-show-summary>
  <ids-per-service-set-flow-table>....</ids-per-service-set-flow-table>
</service-ids-flow-table-information>
```


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Description IDS table

<service-l2tp-destination-clear-information>

Usage

```
<service-l2tp-destination-clear-information>
  <l2tp-destination-clear-entry>....</l2tp-destination-clear-entry>
</service-l2tp-destination-clear-information>
```

Description L2TP cleared destination information

<service-l2tp-destination-information>

Usage

```
<service-l2tp-destination-information>
  <l2tp-destination-table>....</l2tp-destination-table>
</service-l2tp-destination-information>
```

Description L2TP destination information

<service-l2tp-lac-summary-information>

Usage

```
<service-l2tp-lac-summary-information>
  <l2tp-lac-summary-table>....</l2tp-lac-summary-table>
</service-l2tp-lac-summary-information>
```

Description L2TP summary information

<service-l2tp-multilink-clear-information>

Usage

```
<service-l2tp-multilink-clear-information>
  <l2tp-multilink-clear-entry>....</l2tp-multilink-clear-entry>
</service-l2tp-multilink-clear-information>
```

Description Multilink information cleared by L2TP

<service-l2tp-session-clear-information>

Usage

```
<service-l2tp-session-clear-information>
  <l2tp-session-clear-entry>....</l2tp-session-clear-entry>
</service-l2tp-session-clear-information>
```

Description L2TP cleared session information

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<service-l2tp-session-information>

Usage

```
<service-l2tp-session-information>
  <l2tp-per-tunnel-session-table>....</l2tp-per-tunnel-session-table>
</service-l2tp-session-information>
```

Description L2TP session information

<service-l2tp-summary-information>

Usage

```
<service-l2tp-summary-information>
  <l2tp-summary-table>....</l2tp-summary-table>
</service-l2tp-summary-information>
```

Description L2TP summary information

<service-l2tp-tunnel-clear-information>

Usage

```
<service-l2tp-tunnel-clear-information>
  <l2tp-tunnel-clear-entry>....</l2tp-tunnel-clear-entry>
</service-l2tp-tunnel-clear-information>
```

Description L2TP cleared tunnel information

<service-l2tp-tunnel-information>

Usage

```
<service-l2tp-tunnel-information>
  <l2tp-per-tunnel-group-tunnel-table>....</l2tp-per-tunnel-group-tunnel-table>
</service-l2tp-tunnel-information>
```

Description L2TP tunnel information

<service-l2tp-user-information>

Usage

```
<service-l2tp-user-information>
  <l2tp-per-tunnel-user-table>....</l2tp-per-tunnel-user-table>
</service-l2tp-user-information>
```

Description L2TP user information

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<service-msp-alg-conversation-information>

Usage

```
<service-msp-alg-conversation-information>
  <interface-name>
    interface-name
  </interface-name>
  <msp-alg-conv-all-entry>....</msp-alg-conv-all-entry>
  <msp-alg-conv-all-extensive-entry>....</msp-alg-conv-all-extensive-entry>
  <msp-alg-conv-summary-entry>....</msp-alg-conv-summary-entry>
  <msp-alg-conv-groups-entry>....</msp-alg-conv-groups-entry>
  <msp-alg-conv-group-num-entry>....</msp-alg-conv-group-num-entry>
  <msp-alg-conv-resources-entry>....</msp-alg-conv-resources-entry>
  <msp-alg-conv-resource-num-entry>....</msp-alg-conv-resource-num-entry>
</service-msp-alg-conversation-information>
```

Description Show ALG conversation details

<service-msp-alg-stats-information>

Usage

```
<service-msp-alg-stats-information>
  <interface-name>
    interface-name
  </interface-name>
  <msp-alg-rsh-entry>....</msp-alg-rsh-entry>
  <msp-alg-dns-entry>....</msp-alg-dns-entry>
  <msp-alg-pptp-entry>....</msp-alg-pptp-entry>
  <msp-alg-rtsp-entry>....</msp-alg-rtsp-entry>
  <msp-alg-ftp-entry>....</msp-alg-ftp-entry>
  <msp-alg-talk-entry>....</msp-alg-talk-entry>
  <msp-alg-sql-entry>....</msp-alg-sql-entry>
  <msp-alg-dce-rpc-portmap-entry>....</msp-alg-dce-rpc-portmap-entry>
  <msp-alg-dce-rpc-entry>....</msp-alg-dce-rpc-entry>
  <msp-alg-rpc-portmap-entry>....</msp-alg-rpc-portmap-entry>
  <msp-alg-rpc-entry>....</msp-alg-rpc-entry>
  <msp-alg-sip-entry>....</msp-alg-sip-entry>
</service-msp-alg-stats-information>
```

Description Show ALG statstics

<service-msp-flow-drain>

Usage

```
<service-msp-flow-drain-information>
  <service-msp-flow-drain>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
```

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```
<flows-removed>
  flows-removed
</flows-removed>
</service-msp-flow-drain>
</service-msp-flow-drain-information>
```

Description Flow removed

<service-msp-flow-drain-information>

Usage

```
<service-msp-flow-drain-information>
  <service-msp-flow-drain>....</service-msp-flow-drain>
</service-msp-flow-drain-information>
```

Description Remove established flows from the flow table

<service-msp-sess-count>

Usage

```
<service-msp-sess-count-information>
  <service-msp-sess-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sess-count>
      sess-count
    </sess-count>
  </service-msp-sess-count>
</service-msp-sess-count-information>
```

Description Stateful firewall sessions count

<service-msp-sess-count-information>

Usage

```
<service-msp-sess-count-information>
  <service-msp-sess-count>....</service-msp-sess-count>
</service-msp-sess-count-information>
```

Description Count of matching session entries

<service-msp-sess-table-information>

Usage

```
<service-msp-sess-table-information>
```


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```
  <msp-per-service-set-sess-table>....</msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description Sessions sorted by service set

<service-nat-ipv6-multicast-interfaces>

Usage

```
<service-nat-ipv6-multicast-interfaces>
  <v6-multicast-interface-name>
    v6-multicast-interface-name
  </v6-multicast-interface-name>
  <v6-multicast-configured-status>
    v6-multicast-configured-status
  </v6-multicast-configured-status>
  <v6-multicast-operation-status>
    v6-multicast-operation-status
  </v6-multicast-operation-status>
  <v6-multicast-by-all>
    v6-multicast-by-all
  </v6-multicast-by-all>
</service-nat-ipv6-multicast-interfaces>
```

Description IPv6 multicast interfaces

<service-nat-ipv6-multicast-interfaces>

Usage

```
<service-nat-ipv6-multicast-interfaces-information>
  <service-nat-ipv6-multicast-interfaces>
    <v6-multicast-interface-name>
      v6-multicast-interface-name
    </v6-multicast-interface-name>
    <v6-multicast-configured-status>
      v6-multicast-configured-status
    </v6-multicast-configured-status>
    <v6-multicast-operation-status>
      v6-multicast-operation-status
    </v6-multicast-operation-status>
    <v6-multicast-by-all>
      v6-multicast-by-all
    </v6-multicast-by-all>
  </service-nat-ipv6-multicast-interfaces>
</service-nat-ipv6-multicast-interfaces-information>
```

Description IPv6 multicast interfaces

<service-nat-ipv6-multicast-interfaces-information>

Usage

```
<service-nat-ipv6-multicast-interfaces-information>
```

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```
<service-nat-ipv6-multicast-interfaces>....</service-nat-ipv6-multicast-interfaces>

</service-nat-ipv6-multicast-interfaces-information>
```

Description IPv6 multicast interfaces information

<service-nat-mapping-information>

Usage

```
<service-nat-mapping-information>
  <natmapping-address-mapping>....</natmapping-address-mapping>
  <address-mappingv2>....</address-mappingv2>
  <sfw-per-service-set-nat-mapping>....</sfw-per-service-set-nat-mapping>
  <natmapping-summary>....</natmapping-summary>
</service-nat-mapping-information>
```

Description NAT mapping information

<service-nat-pool>

Usage

```
<service-nat-pool-information>
  <sfw-per-service-set-nat-pool>
    <service-nat-pool>
      <pool-name>
        pool-name
      </pool-name>
      <translation-type>
        translation-type
      </translation-type>
      <pool-address-start>
        pool-address-start
      </pool-address-start>
      <pool-address-end>
        pool-address-end
      </pool-address-end>
      <pool-address-range>
        pool-address-range
      </pool-address-range>
      <pool-address-range-list>....</pool-address-range-list>
      <pool-port-low>
        pool-port-low
      </pool-port-low>
      <pool-port-high>
        pool-port-high
      </pool-port-high>
      <pool-port-range>
        pool-port-range
      </pool-port-range>
      <pool-ports-in-use>
        pool-ports-in-use
      </pool-ports-in-use>
```


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```
<pool-out-of-port-errors>
  pool-out-of-port-errors
</pool-out-of-port-errors>
<pool-out-of-address-errors>
  pool-out-of-address-errors
</pool-out-of-address-errors>
<pool-max-ports-in-use>
  pool-max-ports-in-use
</pool-max-ports-in-use>
<pool-addresses-in-use>
  pool-addresses-in-use
</pool-addresses-in-use>
<port-block-size>
  port-block-size
</port-block-size>
<active-block-timeout>
  active-block-timeout
</active-block-timeout>
<max-blocks-per-address>
  max-blocks-per-address
</max-blocks-per-address>
<effective-port-blocks>
  effective-port-blocks
</effective-port-blocks>
<effective-ports>
  effective-ports
</effective-ports>
<max-port-blocks-used>
  max-port-blocks-used
</max-port-blocks-used>
<port-blocks-in-use>
  port-blocks-in-use
</port-blocks-in-use>
<port-block-allocation-errors>
  port-block-allocation-errors
</port-block-allocation-errors>
<effective-pba-port-range>
  effective-pba-port-range
</effective-pba-port-range>
<port-block-efficiency>
  port-block-efficiency
</port-block-efficiency>
<port-block-mem-alloc-failure-errors>
  port-block-mem-alloc-failure-errors
</port-block-mem-alloc-failure-errors>
<port-blocks-limit-exceeded-errors>
  port-blocks-limit-exceeded-errors
</port-blocks-limit-exceeded-errors>
</service-nat-pool>
</sfw-per-service-set-nat-pool>
</service-nat-pool-information>
```

Description NAT pool information

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<service-nat-pool-information>

Usage

```
<service-nat-pool-information>
  <sfw-per-service-set-nat-pool>....</sfw-per-service-set-nat-pool>
</service-nat-pool-information>
```

Description Show information about NAT pools

<service-nat-pool-map>

Usage

```
<service-nat-mapping-information>
  <sfw-per-service-set-nat-mapping>
    <service-nat-pool-map>
      <pool-name>
        pool-name
      </pool-name>
      <natmapping-address-mapping>....</natmapping-address-mapping>
      <address-mappingv2>....</address-mappingv2>
    </service-nat-pool-map>
  </sfw-per-service-set-nat-mapping>
</service-nat-mapping-information>
```

Description NAT pool information

<service-nat-statistics-clear-information>

Usage

```
<service-nat-statistics-clear-information>
  <clear-nat-statistics-status>
    clear-nat-statistics-status
  </clear-nat-statistics-status>
</service-nat-statistics-clear-information>
```

Description Clear NAT statistics information

<service-nat-statistics-information>

Usage

```
<service-nat-statistics-information>
  <interface-name>
    interface-name
  </interface-name>
  <query-unsupported-msg>
    query-unsupported-msg
  </query-unsupported-msg>
  <nat-total-session-accepts>
    nat-total-session-accepts
  </nat-total-session-accepts>
```


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```
<nat-total-session-discards>
  nat-total-session-discards
</nat-total-session-discards>
<nat-total-session-ignores>
  nat-total-session-ignores
</nat-total-session-ignores>
<nat-session-accepts-due-to-alg>
  nat-session-accepts-due-to-alg
</nat-session-accepts-due-to-alg>
<nat-pkt-dst-in-nat-route>
  nat-pkt-dst-in-nat-route
</nat-pkt-dst-in-nat-route>
<nat-session-ext-alloc-failures>
  nat-session-ext-alloc-failures
</nat-session-ext-alloc-failures>
<nat-map-allocation-successes>
  nat-map-allocation-successes
</nat-map-allocation-successes>
<nat-map-allocation-failures>
  nat-map-allocation-failures
</nat-map-allocation-failures>
<nat-total-pkts-processed>
  nat-total-pkts-processed
</nat-total-pkts-processed>
<nat-total-pkts-forwarded>
  nat-total-pkts-forwarded
</nat-total-pkts-forwarded>
<nat-total-pkts-discarded>
  nat-total-pkts-discarded
</nat-total-pkts-discarded>
<nat-total-pkts-translated>
  nat-total-pkts-translated
</nat-total-pkts-translated>
<nat-total-pkts-restored>
  nat-total-pkts-restored
</nat-total-pkts-restored>
<nat-src-ipv4-translations>
  nat-src-ipv4-translations
</nat-src-ipv4-translations>
<nat-src-ipv4-restorations>
  nat-src-ipv4-restorations
</nat-src-ipv4-restorations>
<nat-dst-ipv4-translations>
  nat-dst-ipv4-translations
</nat-dst-ipv4-translations>
<nat-dst-ipv4-restorations>
  nat-dst-ipv4-restorations
</nat-dst-ipv4-restorations>
<nat-src-port-translations>
  nat-src-port-translations
</nat-src-port-translations>
<nat-src-port-restorations>
  nat-src-port-restorations
</nat-src-port-restorations>
<nat-dst-port-translations>
  nat-dst-port-translations
```

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```
</nat-dst-port-translations>
<nat-dst-port-restorations>
  nat-dst-port-restorations
</nat-dst-port-restorations>
<nat-icmp-id-translations>
  nat-icmp-id-translations
</nat-icmp-id-translations>
<nat-icmp-id-restorations>
  nat-icmp-id-restorations
</nat-icmp-id-restorations>
<nat-icmp-error-translations>
  nat-icmp-error-translations
</nat-icmp-error-translations>
<nat-tcp-port-translations>
  nat-tcp-port-translations
</nat-tcp-port-translations>
<nat-tcp-port-restorations>
  nat-tcp-port-restorations
</nat-tcp-port-restorations>
<nat-udp-port-translations>
  nat-udp-port-translations
</nat-udp-port-translations>
<nat-udp-port-restorations>
  nat-udp-port-restorations
</nat-udp-port-restorations>
<nat-gre-call-id-translations>
  nat-gre-call-id-translations
</nat-gre-call-id-translations>
<nat-gre-call-id-restorations>
  nat-gre-call-id-restorations
</nat-gre-call-id-restorations>
</service-nat-statistics-information>
```

Description

<service-pgcp-conversation-information>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>....</pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description Show conversations

<service-pgcp-debug-applicationq-latency>

Usage

```
<service-pgcp-debug-applicationq-latency>
  <debug-applicationq-latency-information>
    debug-applicationq-latency-information
  </debug-applicationq-latency-information>
</service-pgcp-debug-applicationq-latency>
```


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Description

<service-pgcp-debug-applicationq-size>

Usage

```
<service-pgcp-debug-applicationq-size>
  <debug-applicationq-size-information>
    debug-applicationq-size-information
  </debug-applicationq-size-information>
</service-pgcp-debug-applicationq-size>
```

Description

<service-pgcp-debug-commit-latency>

Usage

```
<service-pgcp-debug-commit-latency>
  <debug-commit-latency-information>
    debug-commit-latency-information
  </debug-commit-latency-information>
</service-pgcp-debug-commit-latency>
```

Description

<service-pgcp-debug-mem-mgmt-location>

Usage

```
<service-pgcp-debug-mem-mgmt-location>
  <debug-mem-mgmt-location-information>
    debug-mem-mgmt-location-information
  </debug-mem-mgmt-location-information>
</service-pgcp-debug-mem-mgmt-location>
```

Description

<service-pgcp-debug-mem-mgmt-memory-usage>

Usage

```
<service-pgcp-debug-mem-mgmt-memory-usage>
  <debug-mem-mgmt-memory-usage-information>
    debug-mem-mgmt-memory-usage-information
  </debug-mem-mgmt-memory-usage-information>
</service-pgcp-debug-mem-mgmt-memory-usage>
```

Description

<service-pgcp-debug-mem-mgmt-type>

Usage

```
<service-pgcp-debug-mem-mgmt-type>
  <debug-mem-mgmt-type-information>
    debug-mem-mgmt-type-information
```

```
</debug-mem-mgmt-type-information>
</service-pgcp-debug-mem-mgmt-type>
```

Description

<service-pgcp-debug-profiling-applicationq-latency-information>

Usage

```
<service-pgcp-debug-profiling-applicationq-latency-information>
</service-pgcp-debug-profiling-applicationq-latency-information>
```

Description Application queue latency information cleared by pgcpd

<service-pgcp-debug-profiling-datastore-commit-latency-information>

Usage

```
<service-pgcp-debug-profiling-datastore-commit-latency-information>
</service-pgcp-debug-profiling-datastore-commit-latency-information>
```

Description Datastore commit latency information cleared by pgcpd

<service-pgcp-debug-profiling-resumeq-latency-information>

Usage

```
<service-pgcp-debug-profiling-resumeq-latency-information>
</service-pgcp-debug-profiling-resumeq-latency-information>
```

Description Resume queue latency information cleared by pgcpd

<service-pgcp-debug-profiling-waitq-latency-information>

Usage

```
<service-pgcp-debug-profiling-waitq-latency-information>
</service-pgcp-debug-profiling-waitq-latency-information>
```

Description Wait queue latency information cleared by pgcpd

<service-pgcp-debug-profiling-workq-latency-information>

Usage

```
<service-pgcp-debug-profiling-workq-latency-information>
</service-pgcp-debug-profiling-workq-latency-information>
```

Description Work queue latency information cleared by pgcpd

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<service-pgcp-debug-resumeq-latency>

Usage

```
<service-pgcp-debug-resumeq-latency>
  <debug-resumeq-latency-information>
    debug-resumeq-latency-information
  </debug-resumeq-latency-information>
</service-pgcp-debug-resumeq-latency>
```

Description

<service-pgcp-debug-resumeq-size>

Usage

```
<service-pgcp-debug-resumeq-size>
  <debug-resumeq-size-information>
    debug-resumeq-size-information
  </debug-resumeq-size-information>
</service-pgcp-debug-resumeq-size>
```

Description

<service-pgcp-debug-roundtrip>

Usage

```
<service-pgcp-debug-roundtrip>
  <debug-roundtrip-information>
    debug-roundtrip-information
  </debug-roundtrip-information>
</service-pgcp-debug-roundtrip>
```

Description

<service-pgcp-debug-waitq-latency>

Usage

```
<service-pgcp-debug-waitq-latency>
  <debug-waitq-latency-information>
    debug-waitq-latency-information
  </debug-waitq-latency-information>
</service-pgcp-debug-waitq-latency>
```

Description

<service-pgcp-debug-waitq-size>

Usage

```
<service-pgcp-debug-waitq-size>
  <debug-waitq-size-information>
    debug-waitq-size-information
  </debug-waitq-size-information>
```

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```
</service-pgcp-debug-waitq-size>
```

Description

<service-pgcp-debug-workq-latency>

Usage

```
<service-pgcp-debug-workq-latency>
  <debug-workq-latency-information>
    debug-workq-latency-information
  </debug-workq-latency-information>
</service-pgcp-debug-workq-latency>
```

Description

<service-pgcp-debug-workq-size>

Usage

```
<service-pgcp-debug-workq-size>
  <debug-workq-size-information>
    debug-workq-size-information
  </debug-workq-size-information>
</service-pgcp-debug-workq-size>
```

Description

<service-pgcp-error-reply>

Usage

```
<service-pgcp-error-reply>
  <service-pgcp-error-reply-message>
    service-pgcp-error-reply-message
  </service-pgcp-error-reply-message>
</service-pgcp-error-reply>
```

Description

<service-pgcp-flow-count>

Usage

```
<service-pgcp-flow-count-information>
  <service-pgcp-flow-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <flow-count>
      flow-count
    </flow-count>
  </service-pgcp-flow-count>
```


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```
</service-pgcp-flow-count-information>
```

Description Stateful firewall flow count

<service-pgcp-flow-count-information>

Usage

```
<service-pgcp-flow-count-information>
  <service-pgcp-flow-count>....</service-pgcp-flow-count>
</service-pgcp-flow-count-information>
```

Description Count of matching flow entries

<service-pgcp-flow-table>

Usage

```
<pgcp-per-service-set-flow-table>
  <service-pgcp-flow-table>
    <pgcp-flow-entry>....</pgcp-flow-entry>
  </service-pgcp-flow-table>
</pgcp-per-service-set-flow-table>
```

Description Stateful firewall flows

<service-pgcp-flow-table>

Usage

```
<service-pgcp-flow-table-information>
  <pgcp-per-service-set-flow-table>
    <service-pgcp-flow-table>
      <pgcp-flow-entry>....</pgcp-flow-entry>
    </service-pgcp-flow-table>
  </pgcp-per-service-set-flow-table>
</service-pgcp-flow-table-information>
```

Description Stateful firewall flows

<service-pgcp-flow-table>

Usage

```
<pgcp-per-service-set-conversation>
  <pgcp-conversation>
    <service-pgcp-flow-table>
      <pgcp-flow-entry>....</pgcp-flow-entry>
    </service-pgcp-flow-table>
  </pgcp-conversation>
</pgcp-per-service-set-conversation>
```

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Description Stateful firewall flows

<service-pgcp-flow-table>

Usage

```
<service-pgcp-conversation-information>
  <pgcp-per-service-set-conversation>
    <pgcp-conversation>
      <service-pgcp-flow-table>
        <pgcp-flow-entry>....</pgcp-flow-entry>
      </service-pgcp-flow-table>
    </pgcp-conversation>
  </pgcp-per-service-set-conversation>
</service-pgcp-conversation-information>
```

Description Stateful firewall flows

<service-pgcp-flow-table-information>

Usage

```
<service-pgcp-flow-table-information>
  <pgcp-per-service-set-flow-table>....</pgcp-per-service-set-flow-table>
</service-pgcp-flow-table-information>
```

Description Conversations sorted by service set

<service-pgcp-gate-entry-information>

Usage

```
<service-pgcp-gate-entry-information>
  <gate-id>
    gate-id
  </gate-id>
  <gate-state>
    gate-state
  </gate-state>
  <gate-direction>
    gate-direction
  </gate-direction>
  <gate-action>
    gate-action
  </gate-action>
  <source-routing-instance>
    source-routing-instance
  </source-routing-instance>
  <destination-routing-instance>
    destination-routing-instance
  </destination-routing-instance>
  <gate-service-set-id>
    gate-service-set-id
  </gate-service-set-id>
  <media-card-name>
```


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```
  media-card-name
</media-card-name>
<media-handler-name>
  media-handler-name
</media-handler-name>
<termination-id-string>
  termination-id-string
</termination-id-string>
<gate-remote-source-address>
  gate-remote-source-address
</gate-remote-source-address>
<gate-remote-source-port>
  gate-remote-source-port
</gate-remote-source-port>
<gate-remote-destination-address>
  gate-remote-destination-address
</gate-remote-destination-address>
<gate-remote-destination-port>
  gate-remote-destination-port
</gate-remote-destination-port>
<gate-local-source-address>
  gate-local-source-address
</gate-local-source-address>
<gate-local-source-port>
  gate-local-source-port
</gate-local-source-port>
<gate-local-destination-address>
  gate-local-destination-address
</gate-local-destination-address>
<gate-local-destination-port>
  gate-local-destination-port
</gate-local-destination-port>
<gate-transport>
  gate-transport
</gate-transport>
<gate-rtcp-shadow>
  gate-rtcp-shadow
</gate-rtcp-shadow>
<gate-latch>
  gate-latch
</gate-latch>
<gate-dscp>
  gate-dscp
</gate-dscp>
<gate-tman-policing>
  gate-tman-policing
</gate-tman-policing>
<gate-sdr>
  gate-sdr
</gate-sdr>
<gate-pdr>
  gate-pdr
</gate-pdr>
<gate-mbs>
  gate-mbs
</gate-mbs>
```

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```
<rtcp-sdr>
  rtcp-sdr
</rtcp-sdr>
<rtcp-pdr>
  rtcp-pdr
</rtcp-pdr>
<rtcp-mbs>
  rtcp-mbs
</rtcp-mbs>
<gate-fuf-policing>
  gate-fuf-policing
</gate-fuf-policing>
<gate-green-action>
  gate-green-action
</gate-green-action>
<gate-yellow-action>
  gate-yellow-action
</gate-yellow-action>
<gate-red-action>
  gate-red-action
</gate-red-action>
<gate-output-packets>
  gate-output-packets
</gate-output-packets>
<gate-input-packets>
  gate-input-packets
</gate-input-packets>
<gate-dropped-packets>
  gate-dropped-packets
</gate-dropped-packets>
<gate-lost-rtp-packets>
  gate-lost-rtp-packets
</gate-lost-rtp-packets>
<gate-fractional-lost-rtp-packets>
  gate-fractional-lost-rtp-packets
</gate-fractional-lost-rtp-packets>
<gate-rtcp-information>....</gate-rtcp-information>
<gate-measured-rate>
  gate-measured-rate
</gate-measured-rate>
<service-rate-limit-information>....</service-rate-limit-information>
<gate-fuf-statistics-information>....</gate-fuf-statistics-information>
<gate-mirroring-state>
  gate-mirroring-state
</gate-mirroring-state>
<gate-mirroring-correlation-number>
  gate-mirroring-correlation-number
</gate-mirroring-correlation-number>
<gate-mirroring-target-id>
  gate-mirroring-target-id
</gate-mirroring-target-id>
<gate-mirroring-direction>
  gate-mirroring-direction
</gate-mirroring-direction>
<gate-srtp-stats-information>....</gate-srtp-stats-information>
<gate-srtcp-stats-information>....</gate-srtcp-stats-information>
```


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```
</service-pgcp-gate-entry-information>
```

Description

<service-pgcp-gate-entry-information>

Usage

```
<service-pgcp-gates>
 <service-pgcp-gate-entry-information>
  <gate-id>
   gate-id
  </gate-id>
  <gate-state>
   gate-state
  </gate-state>
  <gate-direction>
   gate-direction
  </gate-direction>
  <gate-action>
   gate-action
  </gate-action>
  <source-routing-instance>
   source-routing-instance
  </source-routing-instance>
  <destination-routing-instance>
   destination-routing-instance
  </destination-routing-instance>
  <gate-service-set-id>
   gate-service-set-id
  </gate-service-set-id>
  <media-card-name>
   media-card-name
  </media-card-name>
  <media-handler-name>
   media-handler-name
  </media-handler-name>
  <termination-id-string>
   termination-id-string
  </termination-id-string>
  <gate-remote-source-address>
   gate-remote-source-address
  </gate-remote-source-address>
  <gate-remote-source-port>
   gate-remote-source-port
  </gate-remote-source-port>
  <gate-remote-destination-address>
   gate-remote-destination-address
  </gate-remote-destination-address>
  <gate-remote-destination-port>
   gate-remote-destination-port
  </gate-remote-destination-port>
  <gate-local-source-address>
   gate-local-source-address
  </gate-local-source-address>
  <gate-local-source-port>
```

```
  gate-local-source-port
</gate-local-source-port>
<gate-local-destination-address>
  gate-local-destination-address
</gate-local-destination-address>
<gate-local-destination-port>
  gate-local-destination-port
</gate-local-destination-port>
<gate-transport>
  gate-transport
</gate-transport>
<gate-rtcp-shadow>
  gate-rtcp-shadow
</gate-rtcp-shadow>
<gate-latch>
  gate-latch
</gate-latch>
<gate-dscp>
  gate-dscp
</gate-dscp>
<gate-tman-policing>
  gate-tman-policing
</gate-tman-policing>
<gate-sdr>
  gate-sdr
</gate-sdr>
<gate-pdr>
  gate-pdr
</gate-pdr>
<gate-mbs>
  gate-mbs
</gate-mbs>
<rtcp-sdr>
  rtcp-sdr
</rtcp-sdr>
<rtcp-pdr>
  rtcp-pdr
</rtcp-pdr>
<rtcp-mbs>
  rtcp-mbs
</rtcp-mbs>
<gate-fuf-policing>
  gate-fuf-policing
</gate-fuf-policing>
<gate-green-action>
  gate-green-action
</gate-green-action>
<gate-yellow-action>
  gate-yellow-action
</gate-yellow-action>
<gate-red-action>
  gate-red-action
</gate-red-action>
<gate-output-packets>
  gate-output-packets
</gate-output-packets>
```


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```
<gate-input-packets>
  gate-input-packets
</gate-input-packets>
<gate-dropped-packets>
  gate-dropped-packets
</gate-dropped-packets>
<gate-lost-rtp-packets>
  gate-lost-rtp-packets
</gate-lost-rtp-packets>
<gate-fractional-lost-rtp-packets>
  gate-fractional-lost-rtp-packets
</gate-fractional-lost-rtp-packets>
<gate-rtcp-information>....</gate-rtcp-information>
<gate-measured-rate>
  gate-measured-rate
</gate-measured-rate>
<service-rate-limit-information>....</service-rate-limit-information>
<gate-fuf-statistics-information>....</gate-fuf-statistics-information>
<gate-mirroring-state>
  gate-mirroring-state
</gate-mirroring-state>
<gate-mirroring-correlation-number>
  gate-mirroring-correlation-number
</gate-mirroring-correlation-number>
<gate-mirroring-target-id>
  gate-mirroring-target-id
</gate-mirroring-target-id>
<gate-mirroring-direction>
  gate-mirroring-direction
</gate-mirroring-direction>
<gate-srtp-stats-information>....</gate-srtp-stats-information>
<gate-srtcp-stats-information>....</gate-srtcp-stats-information>
</service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

<service-pgcp-gates>

Usage

```
<service-pgcp-gates>
  <gateway-entry>....</gateway-entry>
 <service-pgcp-gate-entry-information>....</service-pgcp-gate-entry-information>

  <service-pgcp-gates-count>....</service-pgcp-gates-count>
</service-pgcp-gates>
```

Description

<service-pgcp-gates-count>

Usage

```
<service-pgcp-gates-count>
  <gate-count>
```

```
    gate-count
   </gate-count>
   <gateway-name>
    gateway-name
   </gateway-name>
  </service-pgcp-gates-count>
```

Description Count of gate entries per gateway

<service-pgcp-gates-count>

Usage

```
<service-pgcp-gates>
 <service-pgcp-gates-count>
  <gate-count>
   gate-count
  </gate-count>
  <gateway-name>
   gateway-name
  </gateway-name>
 </service-pgcp-gates-count>
</service-pgcp-gates>
```

Description Count of gate entries per gateway

<service-pgcp-gates-drain-information>

Usage

```
<service-pgcp-gates-drain-information>
 <gateway-collections-number>
  gateway-collections-number
 </gateway-collections-number>
</service-pgcp-gates-drain-information>
```

Description Gates information cleared by pgcpd

<service-pgcp-stat-h248-per-command>

Usage

```
<service-pgcp-stat-h248-per-command>
 <command-name>
  command-name
 </command-name>
 <commands-total>
  commands-total
 </commands-total>
 <commands-wildcard>
  commands-wildcard
 </commands-wildcard>
 <commands-success>
  commands-success
```


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```
  </commands-success>
  <commands-error>
   commands-error
  </commands-error>
</service-pgcp-stat-h248-per-command>
```

Description

<service-pgcp-stat-h248-per-command>

Usage

```
<service-pgcp-statistics-gateway>
  <service-pgcp-stat-h248-per-command>
    <command-name>
      command-name
    </command-name>
    <commands-total>
      commands-total
    </commands-total>
    <commands-wildcard>
      commands-wildcard
    </commands-wildcard>
    <commands-success>
      commands-success
    </commands-success>
    <commands-error>
      commands-error
    </commands-error>
  </service-pgcp-stat-h248-per-command>
</service-pgcp-statistics-gateway>
```

Description

<service-pgcp-stat-h248-per-command-header>

Usage

```
<service-pgcp-stat-h248-per-command-header>
  <per-command-header-name>
    per-command-header-name
  </per-command-header-name>
</service-pgcp-stat-h248-per-command-header>
```

Description

<service-pgcp-stat-h248-per-command-header>

Usage

```
<service-pgcp-statistics-gateway>
  <service-pgcp-stat-h248-per-command-header>
    <per-command-header-name>
      per-command-header-name
    </per-command-header-name>
  </service-pgcp-stat-h248-per-command-header>
```

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```
</service-pgcp-statistics-gateway>
```

Description

<service-pgcp-statistics-drain-information>

Usage

```
<service-pgcp-statistics-drain-information>
</service-pgcp-statistics-drain-information>
```

Description Statistics information cleared by pgcpd

<service-pgcp-statistics-gateway>

Usage

```
<service-pgcp-statistics-gateway>
  <pgcp-statistics-since>
    pgcp-statistics-since
  </pgcp-statistics-since>
  <gateway-entry>....</gateway-entry>
  <service-pic-entry>....</service-pic-entry>
  <services-pgcp-traffic-entry>....</services-pgcp-traffic-entry>
  <services-pgcp-dropped-traffic-entry>....</services-pgcp-dropped-traffic-entry>

  <usage-counters-entry>....</usage-counters-entry>
  <service-pgcp-statistics-h248>....</service-pgcp-statistics-h248>

<service-pgcp-stat-h248-per-command-header>....</service-pgcp-stat-h248-per-command-header>


<service-pgcp-stat-h248-per-command>....</service-pgcp-stat-h248-per-command>

  </service-pgcp-statistics-gateway>
```

Description

<service-pgcp-statistics-h248>

Usage

```
<service-pgcp-statistics-h248>
  <messages-received>
    messages-received
  </messages-received>
  <octets-received>
    octets-received
  </octets-received>
  <messages-sent>
    messages-sent
  </messages-sent>
  <octets-sent>
    octets-sent
  </octets-sent>
```


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```
<protocol-errors>
  protocol-errors
</protocol-errors>
<transport-losses>
  transport-losses
</transport-losses>
<last-detected-event>
  last-detected-event
</last-detected-event>
<last-detected-event-time>
  last-detected-event-time
</last-detected-event-time>
<last-reset-time>
  last-reset-time
</last-reset-time>
</service-pgcp-statistics-h248>
```

Description

<service-pgcp-statistics-h248>

Usage

```
<service-pgcp-statistics-gateway>
  <service-pgcp-statistics-h248>
    <messages-received>
      messages-received
    </messages-received>
    <octets-received>
      octets-received
    </octets-received>
    <messages-sent>
      messages-sent
    </messages-sent>
    <octets-sent>
      octets-sent
    </octets-sent>
    <protocol-errors>
      protocol-errors
    </protocol-errors>
    <transport-losses>
      transport-losses
    </transport-losses>
    <last-detected-event>
      last-detected-event
    </last-detected-event>
    <last-detected-event-time>
      last-detected-event-time
    </last-detected-event-time>
    <last-reset-time>
      last-reset-time
    </last-reset-time>
  </service-pgcp-statistics-h248>
</service-pgcp-statistics-gateway>
```

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Description

<service-pgcp-termination-entry-information>

Usage

```
<service-pgcp-termination-entry-information>
  <termination-id-string>
    termination-id-string
  </termination-id-string>
  <termination-state>
    termination-state
  </termination-state>
  <termination-duration>
    termination-duration
  </termination-duration>
  <termination-h248-dump>
    termination-h248-dump
  </termination-h248-dump>
</service-pgcp-termination-entry-information>
```

Description

<service-pgcp-termination-entry-information>

Usage

```
<service-pgcp-terminations>
  <service-pgcp-termination-entry-information>
    <termination-id-string>
      termination-id-string
    </termination-id-string>
    <termination-state>
      termination-state
    </termination-state>
    <termination-duration>
      termination-duration
    </termination-duration>
    <termination-h248-dump>
      termination-h248-dump
    </termination-h248-dump>
  </service-pgcp-termination-entry-information>
</service-pgcp-terminations>
```

Description

<service-pgcp-termination-gates-information>

Usage

```
<service-pgcp-termination-gates-information>
  <gate-id>
    gate-id
  </gate-id>
  <gate-direction>
    gate-direction
  </gate-direction>
```


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```
<gate-state>
 gate-state
</gate-state>
<gate-action>
 gate-action
</gate-action>
</service-pgcp-termination-gates-information>
```

Description

<service-pgcp-termination-gates-information>

Usage

```
<service-pgcp-terminations>
 <service-pgcp-termination-gates-information>
  <gate-id>
   gate-id
  </gate-id>
  <gate-direction>
   gate-direction
  </gate-direction>
  <gate-state>
   gate-state
  </gate-state>
  <gate-action>
   gate-action
  </gate-action>
 </service-pgcp-termination-gates-information>
</service-pgcp-terminations>
```

Description

<service-pgcp-terminations>

Usage

```
<service-pgcp-terminations>
 <gateway-entry>....</gateway-entry>

<service-pgcp-termination-entry-information>....</service-pgcp-termination-entry-information>


<service-pgcp-termination-gates-information>....</service-pgcp-termination-gates-information>

 <service-pgcp-terminations-count>....</service-pgcp-terminations-count>
</service-pgcp-terminations>
```

Description

<service-pgcp-terminations-count>

Usage

```
<service-pgcp-terminations-count>
 <termination-count>
```

```
    termination-count
   </termination-count>
   <gateway-name>
    gateway-name
   </gateway-name>
  </service-pgcp-terminations-count>
```

Description Count of termination entries per gateway

<service-pgcp-terminations-count>

Usage

```
<service-pgcp-terminations>
 <service-pgcp-terminations-count>
  <termination-count>
   termination-count
  </termination-count>
  <gateway-name>
   gateway-name
  </gateway-name>
 </service-pgcp-terminations-count>
</service-pgcp-terminations>
```

Description Count of termination entries per gateway

<service-pic-entry>

Usage

```
<pgcpd-active-configuration>
 <service-pic-entry>
  <pic-name>
   pic-name
  </pic-name>
  <pic-status>
   pic-status
  </pic-status>
  <pic-redundancy-state>
   pic-redundancy-state
  </pic-redundancy-state>
  <primary-pic>
   primary-pic
  </primary-pic>
  <secondary-pic>
   secondary-pic
  </secondary-pic>
  <pic-ha-state>
   pic-ha-state
  </pic-ha-state>
  <last-change>
   last-change
  </last-change>
 </service-pic-entry>
```


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```
</pgcpd-active-configuration>
```

Description

<service-pic-entry>

Usage

```
<pgcpd-active-configuration>
 <pgcpd-config>
  <service-pic-entry>
   <pic-name>
    pic-name
   </pic-name>
   <pic-status>
    pic-status
   </pic-status>
   <pic-redundancy-state>
    pic-redundancy-state
   </pic-redundancy-state>
   <primary-pic>
    primary-pic
   </primary-pic>
   <secondary-pic>
    secondary-pic
   </secondary-pic>
   <pic-ha-state>
    pic-ha-state
   </pic-ha-state>
   <last-change>
    last-change
   </last-change>
  </service-pic-entry>
 </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<service-pic-entry>

Usage

```
<service-pgcp-statistics-gateway>
 <service-pic-entry>
  <pic-name>
   pic-name
  </pic-name>
  <pic-status>
   pic-status
  </pic-status>
  <pic-redundancy-state>
   pic-redundancy-state
  </pic-redundancy-state>
  <primary-pic>
   primary-pic
  </primary-pic>
```

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```
    <secondary-pic>
      secondary-pic
    </secondary-pic>
    <pic-ha-state>
      pic-ha-state
    </pic-ha-state>
    <last-change>
      last-change
    </last-change>
  </service-pic-entry>
</service-pgcp-statistics-gateway>
```

Description

<service-rate-limit-entry>

Usage

```
<service-rate-limit-information>
  <service-rate-limit-entry>
    <service-rate-limit-mark-color>
      service-rate-limit-mark-color
    </service-rate-limit-mark-color>
    <service-rate-limit-packet-count>
      service-rate-limit-packet-count
    </service-rate-limit-packet-count>
    <service-rate-limit-byte-count>
      service-rate-limit-byte-count
    </service-rate-limit-byte-count>
  </service-rate-limit-entry>
</service-rate-limit-information>
```

Description

<service-rate-limit-entry>

Usage

```
<service-pgcp-gate-entry-information>
  <service-rate-limit-information>
    <service-rate-limit-entry>
      <service-rate-limit-mark-color>
        service-rate-limit-mark-color
      </service-rate-limit-mark-color>
      <service-rate-limit-packet-count>
        service-rate-limit-packet-count
      </service-rate-limit-packet-count>
      <service-rate-limit-byte-count>
        service-rate-limit-byte-count
      </service-rate-limit-byte-count>
    </service-rate-limit-entry>
  </service-rate-limit-information>
</service-pgcp-gate-entry-information>
```

Description

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<service-rate-limit-entry>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <service-rate-limit-information>
      <service-rate-limit-entry>
        <service-rate-limit-mark-color>
          service-rate-limit-mark-color
        </service-rate-limit-mark-color>
        <service-rate-limit-packet-count>
          service-rate-limit-packet-count
        </service-rate-limit-packet-count>
        <service-rate-limit-byte-count>
          service-rate-limit-byte-count
        </service-rate-limit-byte-count>
      </service-rate-limit-entry>
    </service-rate-limit-information>
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description

<service-rate-limit-information>

Usage

```
<service-rate-limit-information>
  <service-rate-limit-entry>....</service-rate-limit-entry>
</service-rate-limit-information>
```

Description Rate limiting statistics

<service-rate-limit-information>

Usage

```
<service-pgcp-gate-entry-information>
  <service-rate-limit-information>
    <service-rate-limit-entry>....</service-rate-limit-entry>
  </service-rate-limit-information>
</service-pgcp-gate-entry-information>
```

Description Rate limiting statistics

<service-rate-limit-information>

Usage

```
<service-pgcp-gates>
  <service-pgcp-gate-entry-information>
    <service-rate-limit-information>
      <service-rate-limit-entry>....</service-rate-limit-entry>
    </service-rate-limit-information>
```

```
  </service-pgcp-gate-entry-information>
</service-pgcp-gates>
```

Description Rate limiting statistics

<service-set-cpu-statistics>

Usage

```
<service-set-cpu-statistics>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <cpu-utilization-percent>
    cpu-utilization-percent
  </cpu-utilization-percent>
</service-set-cpu-statistics>
```

Description CPU usage statistics

<service-set-cpu-statistics>

Usage

```
<service-set-cpu-statistics-information>
  <service-set-cpu-statistics>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <cpu-utilization-percent>
      cpu-utilization-percent
    </cpu-utilization-percent>
  </service-set-cpu-statistics>
</service-set-cpu-statistics-information>
```

Description CPU usage statistics

<service-set-cpu-statistics-information>

Usage

```
<service-set-cpu-statistics-information>
  <service-set-cpu-statistics>....</service-set-cpu-statistics>
</service-set-cpu-statistics-information>
```

Description

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<service-set-entry>

Usage

```
<pgcpd-active-configuration>
  <service-set-entry>
    <service-set-name>
      service-set-name
    </service-set-name>
    <id>
      id
    </id>
    <rule-ref-entry>....</rule-ref-entry>
  </service-set-entry>
</pgcpd-active-configuration>
```

Description

<service-set-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <service-set-entry>
      <service-set-name>
        service-set-name
      </service-set-name>
      <id>
        id
      </id>
      <rule-ref-entry>....</rule-ref-entry>
    </service-set-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

<service-set-memory-statistics>

Usage

```
<service-set-memory-statistics>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <bytes-used>
    bytes-used
  </bytes-used>
</service-set-memory-statistics>
```

Description Memory usage statistics

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<service-set-memory-statistics>

Usage

```
<service-set-memory-statistics-information>
  <service-set-memory-statistics>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <bytes-used>
      bytes-used
    </bytes-used>
  </service-set-memory-statistics>
</service-set-memory-statistics-information>
```

Description Memory usage statistics

<service-set-memory-statistics-information>

Usage

```
<service-set-memory-statistics-information>
  <service-set-memory-statistics>....</service-set-memory-statistics>
</service-set-memory-statistics-information>
```

Description

<service-set-packet-drop-statistics>

Usage

```
<service-set-packet-drop-statistics>
  <service-set-packet-drops>....</service-set-packet-drops>
</service-set-packet-drop-statistics>
```

Description

<service-set-packet-drops>

Usage

```
<service-set-packet-drops>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <cpulimit-drops>
    cpulimit-drops
  </cpulimit-drops>
  <memlimit-drops>
    memlimit-drops
```


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```
</memlimit-drops>
<flowlimit-drops>
  flowlimit-drops
</flowlimit-drops>
<tcpalg-drops>
  tcpalg-drops
</tcpalg-drops>
</service-set-packet-drops>
```

Description Packet-drop statistics

<service-set-packet-drops>

Usage

```
<service-set-packet-drop-statistics>
  <service-set-packet-drops>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <cpulimit-drops>
      cpulimit-drops
    </cpulimit-drops>
    <memlimit-drops>
      memlimit-drops
    </memlimit-drops>
    <flowlimit-drops>
      flowlimit-drops
    </flowlimit-drops>
    <tcpalg-drops>
      tcpalg-drops
    </tcpalg-drops>
  </service-set-packet-drops>
</service-set-packet-drop-statistics>
```

Description Packet-drop statistics

<service-set-plugin-information>

Usage

```
<service-set-plugin-information>
  <service-set-name>
    service-set-name
  </service-set-name>
  <service-set-state>
    service-set-state
  </service-set-state>
  <plugins-configured>
    plugins-configured
  </plugins-configured>
```

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```
<plugin-name>
  plugin-name
</plugin-name>
<plugin-id>
  plugin-id
</plugin-id>
</service-set-plugin-information>
```

Description Service set plugin information

<service-set-plugin-information>

Usage

```
<service-set-plugin-summary>
  <service-set-plugin-information>
    <service-set-name>
      service-set-name
    </service-set-name>
    <service-set-state>
      service-set-state
    </service-set-state>
    <plugins-configured>
      plugins-configured
    </plugins-configured>
    <plugin-name>
      plugin-name
    </plugin-name>
    <plugin-id>
      plugin-id
    </plugin-id>
  </service-set-plugin-information>
</service-set-plugin-summary>
```

Description Service set plugin information

<service-set-plugin-summary>

Usage

```
<service-set-plugin-summary>
  <interface-name>
    interface-name
  </interface-name>
  <service-set-plugin-information>....</service-set-plugin-information>
</service-set-plugin-summary>
```

Description Service set plugin summary

<service-set-service-type-entry>

Usage

```
<service-set-service-type-entry>
```


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```
<service-type>
  service-type
</service-type>
<service-sets-configured>
  service-sets-configured
</service-sets-configured>
<service-set-bytes-used>
  service-set-bytes-used
</service-set-bytes-used>
<service-set-percent-bytes-used>
  service-set-percent-bytes-used
</service-set-percent-bytes-used>
<service-set-cpu-utilization>
  service-set-cpu-utilization
</service-set-cpu-utilization>
<service-set-policy-bytes-used>
  service-set-policy-bytes-used
</service-set-policy-bytes-used>
<service-set-percent-policy-bytes-used>
  service-set-percent-policy-bytes-used
</service-set-percent-policy-bytes-used>
</service-set-service-type-entry>
```

Description Service set service type entry

<service-set-service-type-entry>

Usage

```
<service-set-summary-information>
  <service-set-summary-information-entry>
    <service-set-service-type-entry>
      <service-type>
        service-type
      </service-type>
      <service-sets-configured>
        service-sets-configured
      </service-sets-configured>
      <service-set-bytes-used>
        service-set-bytes-used
      </service-set-bytes-used>
      <service-set-percent-bytes-used>
        service-set-percent-bytes-used
      </service-set-percent-bytes-used>
      <service-set-cpu-utilization>
        service-set-cpu-utilization
      </service-set-cpu-utilization>
      <service-set-policy-bytes-used>
        service-set-policy-bytes-used
      </service-set-policy-bytes-used>
      <service-set-percent-policy-bytes-used>
        service-set-percent-policy-bytes-used
      </service-set-percent-policy-bytes-used>
    </service-set-service-type-entry>
  </service-set-summary-information-entry>
```

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```
</service-set-summary-information>
```

Description Service set service type entry

<service-set-summary-information>

Usage

```
<service-set-summary-information>

<service-set-summary-information-entry>....</service-set-summary-information-entry>

</service-set-summary-information>
```

Description Service set summary information

<service-set-summary-information-entry>

Usage

```
<service-set-summary-information>
  <service-set-summary-information-entry>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-service-type-entry>....</service-set-service-type-entry>
  </service-set-summary-information-entry>
</service-set-summary-information>
```

Description Service set summary information entry

<service-set-tcp-mss>

Usage

```
<service-set-tcp-mss>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <syn-received>
    syn-received
  </syn-received>
  <syn-modified>
    syn-modified
  </syn-modified>
</service-set-tcp-mss>
```

Description TCP MSS statistics

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<service-set-tcp-mss>

Usage

```
<service-set-tcp-mss-statistics>
  <service-set-tcp-mss>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <syn-received>
      syn-received
    </syn-received>
    <syn-modified>
      syn-modified
    </syn-modified>
  </service-set-tcp-mss>
</service-set-tcp-mss-statistics>
```

Description TCP MSS statistics

<service-set-tcp-mss-statistics>

Usage

```
<service-set-tcp-mss-statistics>
  <service-set-tcp-mss>....</service-set-tcp-mss>
</service-set-tcp-mss-statistics>
```

Description

<service-sfw-conversation-information>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>....</sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description Show conversations

<service-sfw-flow-count>

Usage

```
<service-sfw-flow-count-information>
  <service-sfw-flow-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
```

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```
<flow-count>
  flow-count
</flow-count>
</service-sfw-flow-count>
</service-sfw-flow-count-information>
```

Description Stateful firewall flow count

<service-sfw-flow-count-information>

Usage

```
<service-sfw-flow-count-information>
  <service-sfw-flow-count>....</service-sfw-flow-count>
</service-sfw-flow-count-information>
```

Description Count of matching flow entries

<service-sfw-flow-drain>

Usage

```
<service-sfw-flow-drain-information>
  <service-sfw-flow-drain>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <conversations-removed>
      conversations-removed
    </conversations-removed>
  </service-sfw-flow-drain>
</service-sfw-flow-drain-information>
```

Description Stateful firewall flow removed

<service-sfw-flow-drain-information>

Usage

```
<service-sfw-flow-drain-information>
  <service-sfw-flow-drain>....</service-sfw-flow-drain>
</service-sfw-flow-drain-information>
```

Description Remove established flows from the flow table

<service-sfw-flow-table>

Usage

```
<sfw-per-service-set-flow-table>
```


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```
  <service-sfw-flow-table>
    <sfw-flow-entry>....</sfw-flow-entry>
  </service-sfw-flow-table>
</sfw-per-service-set-flow-table>
```

Description Stateful firewall flows

<service-sfw-flow-table>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>
    <service-sfw-flow-table>
      <sfw-flow-entry>....</sfw-flow-entry>
    </service-sfw-flow-table>
  </sfw-per-service-set-flow-table>
</service-sfw-flow-table-information>
```

Description Stateful firewall flows

<service-sfw-flow-table>

Usage

```
<sfw-per-service-set-conversation>
  <sfw-conversation>
    <service-sfw-flow-table>
      <sfw-flow-entry>....</sfw-flow-entry>
    </service-sfw-flow-table>
  </sfw-conversation>
</sfw-per-service-set-conversation>
```

Description Stateful firewall flows

<service-sfw-flow-table>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>
    <sfw-conversation>
      <service-sfw-flow-table>
        <sfw-flow-entry>....</sfw-flow-entry>
      </service-sfw-flow-table>
    </sfw-conversation>
  </sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description Stateful firewall flows

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<service-sfw-flow-table-information>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>....</sfw-per-service-set-flow-table>
</service-sfw-flow-table-information>
```

Description Conversations sorted by service set

<service-sfw-ha-statistics>

Usage

```
<service-sfw-ha-statistics>
  <compute-tx-flows>
    compute-tx-flows
  </compute-tx-flows>
  <compute-rx-flows>
    compute-rx-flows
  </compute-rx-flows>
  <control-tx-flows>
    control-tx-flows
  </control-tx-flows>
  <control-rx-flows>
    control-rx-flows
  </control-rx-flows>
  <tcp-tx-flows>
    tcp-tx-flows
  </tcp-tx-flows>
  <tcp-rx-flows>
    tcp-rx-flows
  </tcp-rx-flows>
  <udp-tx-flows>
    udp-tx-flows
  </udp-tx-flows>
  <udp-rx-flows>
    udp-rx-flows
  </udp-rx-flows>
  <compute-tx-pkts>
    compute-tx-pkts
  </compute-tx-pkts>
  <compute-rx-pkts>
    compute-rx-pkts
  </compute-rx-pkts>
  <control-tx-pkts>
    control-tx-pkts
  </control-tx-pkts>
  <control-rx-pkts>
    control-rx-pkts
  </control-rx-pkts>
  <tcp-tx-pkts>
    tcp-tx-pkts
  </tcp-tx-pkts>
  <tcp-rx-pkts>
```


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```
  tcp-rx-pkts
</tcp-rx-pkts>
<udp-tx-pkts>
  udp-tx-pkts
</udp-tx-pkts>
<udp-rx-pkts>
  udp-rx-pkts
</udp-rx-pkts>
<compute-tx-bytes>
  compute-tx-bytes
</compute-tx-bytes>
<compute-rx-bytes>
  compute-rx-bytes
</compute-rx-bytes>
<control-tx-bytes>
  control-tx-bytes
</control-tx-bytes>
<control-rx-bytes>
  control-rx-bytes
</control-rx-bytes>
<tcp-tx-bytes>
  tcp-tx-bytes
</tcp-tx-bytes>
<tcp-rx-bytes>
  tcp-rx-bytes
</tcp-rx-bytes>
<udp-tx-bytes>
  udp-tx-bytes
</udp-tx-bytes>
<udp-rx-bytes>
  udp-rx-bytes
</udp-rx-bytes>
<tx-errors>
  tx-errors
</tx-errors>
<rx-errors>
  rx-errors
</rx-errors>
<num-of-nacks>
  num-of-nacks
</num-of-nacks>
<extended-num-of-dirty-flows>
  extended-num-of-dirty-flows
</extended-num-of-dirty-flows>
<brief-num-of-dirty-flows>
  brief-num-of-dirty-flows
</brief-num-of-dirty-flows>
<num-replicated-flows>
  num-replicated-flows
</num-replicated-flows>
</service-sfw-ha-statistics>
```

Description Stateful firewall high availability statistics information

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<service-sfw-sip-call-count>

Usage

```
<service-sfw-sip-call-count-information>
  <service-sfw-sip-call-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sip-call-count>
      sip-call-count
    </sip-call-count>
  </service-sfw-sip-call-count>
</service-sfw-sip-call-count-information>
```

Description SIP call count

<service-sfw-sip-call-count-information>

Usage

```
<service-sfw-sip-call-count-information>
  <service-sfw-sip-call-count>....</service-sfw-sip-call-count>
</service-sfw-sip-call-count-information>
```

Description Display a count of the matching SIP calls

<service-sfw-sip-call-drain>

Usage

```
<service-sfw-sip-call-drain-information>
  <service-sfw-sip-call-drain>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sip-calls-removed>
      sip-calls-removed
    </sip-calls-removed>
  </service-sfw-sip-call-drain>
</service-sfw-sip-call-drain-information>
```

Description SIP calls removed

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<service-sfw-sip-call-drain-information>

Usage

```
<service-sfw-sip-call-drain-information>
  <service-sfw-sip-call-drain>....</service-sfw-sip-call-drain>
</service-sfw-sip-call-drain-information>
```

Description Remove established SIP calls from the flow table

<service-sfw-sip-call-information>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>....</sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description SIP call information

<service-sfw-sip-registration-count>

Usage

```
<service-sfw-sip-registration-count-information>
  <service-sfw-sip-registration-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sip-registration-count>
      sip-registration-count
    </sip-registration-count>
  </service-sfw-sip-registration-count>
</service-sfw-sip-registration-count-information>
```

Description SIP registration count

<service-sfw-sip-registration-count-information>

Usage

```
<service-sfw-sip-registration-count-information>
  <service-sfw-sip-registration-count>....</service-sfw-sip-registration-count>
</service-sfw-sip-registration-count-information>
```

Description Display a count of the matching SIP registrations

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<service-sfw-sip-registration-drain>

Usage

```
<service-sfw-sip-registration-drain-information>
  <service-sfw-sip-registration-drain>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sip-registration-removed>
      sip-registration-removed
    </sip-registration-removed>
  </service-sfw-sip-registration-drain>
</service-sfw-sip-registration-drain-information>
```

Description SIP registration removed

<service-sfw-sip-registration-drain-information>

Usage

```
<service-sfw-sip-registration-drain-information>
  <service-sfw-sip-registration-drain>....</service-sfw-sip-registration-drain>
</service-sfw-sip-registration-drain-information>
```

Description Remove established SIP registrations from the flow table

<service-sfw-sip-registration-information>

Usage

```
<service-sfw-sip-registration-information>
 <sfw-per-service-set-sip-registrations>....</sfw-per-service-set-sip-registrations>

</service-sfw-sip-registration-information>
```

Description SIP registration information

<service-sfw-statistics-entry>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <interface-name>
      interface-name
    </interface-name>
    <sfw-stats-service-set-entry>....</sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```


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Description Stateful firewall statistics entry

<service-sfw-statistics-information>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>....</service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Stateful firewall statistics information

<service-softwire-6rd-statistics-entry>

Usage

```
<service-softwire-6rd-statistics-entry>
  <srv-pic-name>
    srv-pic-name
  </srv-pic-name>
  <softwire-created>
    softwire-created
  </softwire-created>
  <softwire-deleted>
    softwire-deleted
  </softwire-deleted>
  <flows-created>
    flows-created
  </flows-created>
  <flows-deleted>
    flows-deleted
  </flows-deleted>
  <slow-path>
    slow-path
  </slow-path>
  <fast-path>
    fast-path
  </fast-path>
  <fast-path-encap>
    fast-path-encap
  </fast-path-encap>
  <rule-match-succeeded>
    rule-match-succeeded
  </rule-match-succeeded>
  <rule-match-failed>
    rule-match-failed
  </rule-match-failed>
  <flow-creation-failed-retry>
    flow-creation-failed-retry
  </flow-creation-failed-retry>
  <slow-path-failed-retry>
    slow-path-failed-retry
  </slow-path-failed-retry>
  <softwire-creation-failed>
    softwire-creation-failed
```

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```
</softwire-creation-failed>
<flow-creation-failed>
  flow-creation-failed
</flow-creation-failed>
<slow-path-failed>
  slow-path-failed
</slow-path-failed>
<packet-not-ipv6-in-ipv4>
  packet-not-ipv6-in-ipv4
</packet-not-ipv6-in-ipv4>
<slow-path-ipv6-next-header-offset>
  slow-path-ipv6-next-header-offset
</slow-path-ipv6-next-header-offset>
<decap-packet-not-ipv6>
  decap-packet-not-ipv6
</decap-packet-not-ipv6>
<no-space-for-outer-header>
  no-space-for-outer-header
</no-space-for-outer-header>
<no-softwire-id>
  no-softwire-id
</no-softwire-id>
<no-flow-extension>
  no-flow-extension
</no-flow-extension>
<icmpv4-dropped-packets>
  icmpv4-dropped-packets
</icmpv4-dropped-packets>
</service-softwire-6rd-statistics-entry>
```

Description 6rd Statistics

<service-softwire-6rd-statistics-entry>

Usage

```
<service-softwire-statistics-information>
  <service-softwire-6rd-statistics-entry>
    <srv-pic-name>
      srv-pic-name
    </srv-pic-name>
    <softwire-created>
      softwire-created
    </softwire-created>
    <softwire-deleted>
      softwire-deleted
    </softwire-deleted>
    <flows-created>
      flows-created
    </flows-created>
    <flows-deleted>
      flows-deleted
    </flows-deleted>
    <slow-path>
      slow-path
```


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```
</slow-path>
<fast-path>
  fast-path
</fast-path>
<fast-path-encap>
  fast-path-encap
</fast-path-encap>
<rule-match-succeeded>
  rule-match-succeeded
</rule-match-succeeded>
<rule-match-failed>
  rule-match-failed
</rule-match-failed>
<flow-creation-failed-retry>
  flow-creation-failed-retry
</flow-creation-failed-retry>
<slow-path-failed-retry>
  slow-path-failed-retry
</slow-path-failed-retry>
<softwire-creation-failed>
  softwire-creation-failed
</softwire-creation-failed>
<flow-creation-failed>
  flow-creation-failed
</flow-creation-failed>
<slow-path-failed>
  slow-path-failed
</slow-path-failed>
<packet-not-ipv6-in-ipv4>
  packet-not-ipv6-in-ipv4
</packet-not-ipv6-in-ipv4>
<slow-path-ipv6-next-header-offset>
  slow-path-ipv6-next-header-offset
</slow-path-ipv6-next-header-offset>
<decap-packet-not-ipv6>
  decap-packet-not-ipv6
</decap-packet-not-ipv6>
<no-space-for-outer-header>
  no-space-for-outer-header
</no-space-for-outer-header>
<no-softwire-id>
  no-softwire-id
</no-softwire-id>
<no-flow-extension>
  no-flow-extension
</no-flow-extension>
<icmpv4-dropped-packets>
  icmpv4-dropped-packets
</icmpv4-dropped-packets>
</service-softwire-6rd-statistics-entry>
</service-softwire-statistics-information>
```

Description 6rd Statistics

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<service-softwire-6rd-statistics-entry>

Usage

```
<service-softwire-6rd-statistics-information>
  <service-softwire-6rd-statistics-entry>
    <srv-pic-name>
      srv-pic-name
    </srv-pic-name>
    <softwire-created>
      softwire-created
    </softwire-created>
    <softwire-deleted>
      softwire-deleted
    </softwire-deleted>
    <flows-created>
      flows-created
    </flows-created>
    <flows-deleted>
      flows-deleted
    </flows-deleted>
    <slow-path>
      slow-path
    </slow-path>
    <fast-path>
      fast-path
    </fast-path>
    <fast-path-encap>
      fast-path-encap
    </fast-path-encap>
    <rule-match-succeeded>
      rule-match-succeeded
    </rule-match-succeeded>
    <rule-match-failed>
      rule-match-failed
    </rule-match-failed>
    <flow-creation-failed-retry>
      flow-creation-failed-retry
    </flow-creation-failed-retry>
    <slow-path-failed-retry>
      slow-path-failed-retry
    </slow-path-failed-retry>
    <softwire-creation-failed>
      softwire-creation-failed
    </softwire-creation-failed>
    <flow-creation-failed>
      flow-creation-failed
    </flow-creation-failed>
    <slow-path-failed>
      slow-path-failed
    </slow-path-failed>
    <packet-not-ipv6-in-ipv4>
      packet-not-ipv6-in-ipv4
    </packet-not-ipv6-in-ipv4>
    <slow-path-ipv6-next-header-offset>
      slow-path-ipv6-next-header-offset
```


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```
    </slow-path-ipv6-next-header-offset>
    <decap-packet-not-ipv6>
      decap-packet-not-ipv6
    </decap-packet-not-ipv6>
    <no-space-for-outer-header>
      no-space-for-outer-header
    </no-space-for-outer-header>
    <no-softwire-id>
      no-softwire-id
    </no-softwire-id>
    <no-flow-extension>
      no-flow-extension
    </no-flow-extension>
    <icmpv4-dropped-packets>
      icmpv4-dropped-packets
    </icmpv4-dropped-packets>
  </service-softwire-6rd-statistics-entry>
</service-softwire-6rd-statistics-information>
```

Description 6rd Statistics

<service-softwire-6rd-statistics-information>

Usage

```
<service-softwire-6rd-statistics-information>
  <flow-analysis-statistics-pic-info>....</flow-analysis-statistics-pic-info>
  <service-softwire-6rd-statistics-entry>....</service-softwire-6rd-statistics-entry>

</service-softwire-6rd-statistics-information>
```

Description Softwire 6rd statistics information

<service-softwire-count>

Usage

```
<service-softwire-count-information>
  <service-softwire-count>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <softwire-count>
      softwire-count
    </softwire-count>
  </service-softwire-count>
</service-softwire-count-information>
```

Description Softwire count

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<service-softwire-count-information>

Usage

```
<service-softwire-count-information>
  <service-softwire-count>....</service-softwire-count>
</service-softwire-count-information>
```

Description Count of matching softwire entries

<service-softwire-dslite-statistics-entry>

Usage

```
<service-softwire-dslite-statistics-entry>
  <srv-pic-name>
    srv-pic-name
  </srv-pic-name>
  <softwire-created>
    softwire-created
  </softwire-created>
  <softwire-deleted>
    softwire-deleted
  </softwire-deleted>
  <flows-created>
    flows-created
  </flows-created>
  <flows-deleted>
    flows-deleted
  </flows-deleted>
  <slow-path>
    slow-path
  </slow-path>
  <fast-path>
    fast-path
  </fast-path>
  <fast-path-encap>
    fast-path-encap
  </fast-path-encap>
  <rule-match-succeeded>
    rule-match-succeeded
  </rule-match-succeeded>
  <rule-match-failed>
    rule-match-failed
  </rule-match-failed>
  <ipv6-packets-fragmented>
    ipv6-packets-fragmented
  </ipv6-packets-fragmented>
  <softwire-icmpv4-err-sent>
    softwire-icmpv4-err-sent
  </softwire-icmpv4-err-sent>
  <softwire-icmpv6-sent>
    softwire-icmpv6-sent
  </softwire-icmpv6-sent>
  <flow-creation-failed-retry>
```


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```
  flow-creation-failed-retry
 </flow-creation-failed-retry>
 <slow-path-failed-retry>
  slow-path-failed-retry
 </slow-path-failed-retry>
 <softwire-creation-failed>
  softwire-creation-failed
 </softwire-creation-failed>
 <flow-creation-failed>
  flow-creation-failed
 </flow-creation-failed>
 <slow-path-failed>
  slow-path-failed
 </slow-path-failed>
 <packet-not-ipv4-in-ipv6>
  packet-not-ipv4-in-ipv6
 </packet-not-ipv4-in-ipv6>
 <ipv6-fragmentation-error>
  ipv6-fragmentation-error
 </ipv6-fragmentation-error>
 <slow-path-ipv6-next-header-offset>
  slow-path-ipv6-next-header-offset
 </slow-path-ipv6-next-header-offset>
 <decap-packet-not-ipv4>
  decap-packet-not-ipv4
 </decap-packet-not-ipv4>
 <fast-path-ipv6-next-header-offset>
  fast-path-ipv6-next-header-offset
 </fast-path-ipv6-next-header-offset>
 <no-softwire-id>
  no-softwire-id
 </no-softwire-id>
 <no-flow-extension>
  no-flow-extension
 </no-flow-extension>
 <flow-limit-exceeded>
  flow-limit-exceeded
 </flow-limit-exceeded>
</service-softwire-dslite-statistics-entry>
```

Description DS-Lite Statistics

<service-softwire-dslite-statistics-entry>

Usage

```
<service-softwire-statistics-information>
 <service-softwire-dslite-statistics-entry>
  <srv-pic-name>
   srv-pic-name
  </srv-pic-name>
  <softwire-created>
   softwire-created
  </softwire-created>
  <softwire-deleted>
```

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```
  softwire-deleted
</softwire-deleted>
<flows-created>
  flows-created
</flows-created>
<flows-deleted>
  flows-deleted
</flows-deleted>
<slow-path>
  slow-path
</slow-path>
<fast-path>
  fast-path
</fast-path>
<fast-path-encap>
  fast-path-encap
</fast-path-encap>
<rule-match-succeeded>
  rule-match-succeeded
</rule-match-succeeded>
<rule-match-failed>
  rule-match-failed
</rule-match-failed>
<ipv6-packets-fragmented>
  ipv6-packets-fragmented
</ipv6-packets-fragmented>
<softwire-icmpv4-err-sent>
  softwire-icmpv4-err-sent
</softwire-icmpv4-err-sent>
<softwire-icmpv6-sent>
  softwire-icmpv6-sent
</softwire-icmpv6-sent>
<flow-creation-failed-retry>
  flow-creation-failed-retry
</flow-creation-failed-retry>
<slow-path-failed-retry>
  slow-path-failed-retry
</slow-path-failed-retry>
<softwire-creation-failed>
  softwire-creation-failed
</softwire-creation-failed>
<flow-creation-failed>
  flow-creation-failed
</flow-creation-failed>
<slow-path-failed>
  slow-path-failed
</slow-path-failed>
<packet-not-ipv4-in-ipv6>
  packet-not-ipv4-in-ipv6
</packet-not-ipv4-in-ipv6>
<ipv6-fragmentation-error>
  ipv6-fragmentation-error
</ipv6-fragmentation-error>
<slow-path-ipv6-next-header-offset>
  slow-path-ipv6-next-header-offset
</slow-path-ipv6-next-header-offset>
```


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```
        <decap-packet-not-ipv4>
          decap-packet-not-ipv4
        </decap-packet-not-ipv4>
        <fast-path-ipv6-next-header-offset>
          fast-path-ipv6-next-header-offset
        </fast-path-ipv6-next-header-offset>
        <no-softwire-id>
          no-softwire-id
        </no-softwire-id>
        <no-flow-extension>
          no-flow-extension
        </no-flow-extension>
        <flow-limit-exceeded>
          flow-limit-exceeded
        </flow-limit-exceeded>
      </service-softwire-dslite-statistics-entry>
    </service-softwire-statistics-information>
```

Description DS-Lite Statistics

<service-softwire-dslite-statistics-entry>

Usage

```
<service-softwire-dslite-statistics-information>
  <service-softwire-dslite-statistics-entry>
    <srv-pic-name>
      srv-pic-name
    </srv-pic-name>
    <softwire-created>
      softwire-created
    </softwire-created>
    <softwire-deleted>
      softwire-deleted
    </softwire-deleted>
    <flows-created>
      flows-created
    </flows-created>
    <flows-deleted>
      flows-deleted
    </flows-deleted>
    <slow-path>
      slow-path
    </slow-path>
    <fast-path>
      fast-path
    </fast-path>
    <fast-path-encap>
      fast-path-encap
    </fast-path-encap>
    <rule-match-succeeded>
      rule-match-succeeded
    </rule-match-succeeded>
    <rule-match-failed>
      rule-match-failed
```

```
</rule-match-failed>
<ipv6-packets-fragmented>
  ipv6-packets-fragmented
</ipv6-packets-fragmented>
<softwire-icmpv4-err-sent>
  softwire-icmpv4-err-sent
</softwire-icmpv4-err-sent>
<softwire-icmpv6-sent>
  softwire-icmpv6-sent
</softwire-icmpv6-sent>
<flow-creation-failed-retry>
  flow-creation-failed-retry
</flow-creation-failed-retry>
<slow-path-failed-retry>
  slow-path-failed-retry
</slow-path-failed-retry>
<softwire-creation-failed>
  softwire-creation-failed
</softwire-creation-failed>
<flow-creation-failed>
  flow-creation-failed
</flow-creation-failed>
<slow-path-failed>
  slow-path-failed
</slow-path-failed>
<packet-not-ipv4-in-ipv6>
  packet-not-ipv4-in-ipv6
</packet-not-ipv4-in-ipv6>
<ipv6-fragmentation-error>
  ipv6-fragmentation-error
</ipv6-fragmentation-error>
<slow-path-ipv6-next-header-offset>
  slow-path-ipv6-next-header-offset
</slow-path-ipv6-next-header-offset>
<decap-packet-not-ipv4>
  decap-packet-not-ipv4
</decap-packet-not-ipv4>
<fast-path-ipv6-next-header-offset>
  fast-path-ipv6-next-header-offset
</fast-path-ipv6-next-header-offset>
<no-softwire-id>
  no-softwire-id
</no-softwire-id>
<no-flow-extension>
  no-flow-extension
</no-flow-extension>
<flow-limit-exceeded>
  flow-limit-exceeded
</flow-limit-exceeded>
</service-softwire-dslite-statistics-entry>
</service-softwire-dslite-statistics-information>
```

Description DS-Lite Statistics

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<service-softwire-dslite-statistics-information>

Usage

```
<service-softwire-dslite-statistics-information>
  <flow-analysis-statistics-pic-info>....</flow-analysis-statistics-pic-info>

<service-softwire-dslite-statistics-entry>....</service-softwire-dslite-statistics-entry>
  </service-softwire-dslite-statistics-information>
```

Description Softwire dslite statistics information

<service-softwire-flow-table-information>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>....</softwire-per-service-set-flow-table>
</service-softwire-flow-table-information>
```

Description Conversations sorted by service set

<service-softwire-statistics-information>

Usage

```
<service-softwire-statistics-information>

<service-softwire-dslite-statistics-entry>....</service-softwire-dslite-statistics-entry>
  <service-softwire-6rd-statistics-entry>....</service-softwire-6rd-statistics-entry>

</service-softwire-statistics-information>
```

Description Softwire statistics information

<service-softwire-table>

Usage

```
<softwire-per-service-set-flow-table>
  <service-softwire-table>
    <softwire-entry>....</softwire-entry>
    <sfw-flow-entry>....</sfw-flow-entry>
  </service-softwire-table>
</softwire-per-service-set-flow-table>
```

Description Softwire flows

<service-softwire-table>

Usage

```
<service-softwire-table-information>
```

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```
<softwire-per-service-set-flow-table>
  <service-softwire-table>
    <softwire-entry>....</softwire-entry>
    <sfw-flow-entry>....</sfw-flow-entry>
  </service-softwire-table>
 </softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description Softwire flows

<service-softwire-table>

Usage

```
<service-softwire-flow-table-information>
 <softwire-per-service-set-flow-table>
  <service-softwire-table>
   <softwire-entry>....</softwire-entry>
   <sfw-flow-entry>....</sfw-flow-entry>
  </service-softwire-table>
 </softwire-per-service-set-flow-table>
</service-softwire-flow-table-information>
```

Description Softwire flows

<service-softwire-table-information>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>....</softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description Conversations sorted by service set

<services-l2tp-multilink-information>

Usage

```
<services-l2tp-multilink-information>
  <l2tp-multilink-entry>....</l2tp-multilink-entry>
</services-l2tp-multilink-information>
```

Description L2TP multilink information

<services-l2tp-radius-accounting-servers-information>

Usage

```
<services-l2tp-radius-accounting-servers-information>

<radius-accounting-server-information-entry>....</radius-accounting-server-information-entry>
```


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</services-l2tp-radius-accounting-servers-information>

Description RADIUS accounting servers information table

<services-l2tp-radius-accounting-statistics-information>

Usage

<services-l2tp-radius-accounting-statistics-information>

<radius-accounting-statistic-information-entry>....</radius-accounting-statistic-information-entry>

</services-l2tp-radius-accounting-statistics-information>

Description RADIUS accounting statistics information table

<services-l2tp-radius-authentication-accounting-servers-information>

Usage

<services-l2tp-radius-authentication-accounting-servers-information>

<radius-authentication-server-information-entry>....</radius-authentication-server-information-entry>

<radius-accounting-server-information-entry>....</radius-accounting-server-information-entry>

</services-l2tp-radius-authentication-accounting-servers-information>

Description RADIUS authentication and accounting servers information

<services-l2tp-radius-authentication-accounting-statistics-information>

Usage

<services-l2tp-radius-authentication-accounting-statistics-information>

<radius-authentication-statistic-information-entry>....</radius-authentication-statistic-information-entry>

<radius-accounting-statistic-information-entry>....</radius-accounting-statistic-information-entry>

</services-l2tp-radius-authentication-accounting-statistics-information>

Description RADIUS authentication and accounting statistics information

<services-l2tp-radius-authentication-servers-information>

Usage

<services-l2tp-radius-authentication-servers-information>

<radius-authentication-server-information-entry>....</radius-authentication-server-information-entry>

```
</services-l2tp-radius-authentication-servers-information>
```

Description RADIUS authentication servers information

<services-l2tp-radius-authentication-statistics-information>

Usage

```
<services-l2tp-radius-authentication-statistics-information>
<radius-authentication-statistic-information-entry>....</radius-authentication-statistic-information-entry>
</services-l2tp-radius-authentication-statistics-information>
```

Description RADIUS authentication statistics information

<services-l2tp-radius-servers-information-table-header>

Usage

```
<services-l2tp-radius-servers-information-table-header>
  <radius-server-information-table-header>
    radius-server-information-table-header
  </radius-server-information-table-header>
  <radius-server-profile-name>
    radius-server-profile-name
  </radius-server-profile-name>
</services-l2tp-radius-servers-information-table-header>
```

Description RADIUS authentication servers information

<services-pgcp-dropped-traffic-entry>

Usage

```
<services-pgcp-dropped-traffic-entry>
  <drop-packets-flow-drop-state>
    drop-packets-flow-drop-state
  </drop-packets-flow-drop-state>
  <drop-bytes-flow-drop-state>
    drop-bytes-flow-drop-state
  </drop-bytes-flow-drop-state>
  <drop-packets-flow-rate-limit>
    drop-packets-flow-rate-limit
  </drop-packets-flow-rate-limit>
  <drop-bytes-flow-rate-limit>
    drop-bytes-flow-rate-limit
  </drop-bytes-flow-rate-limit>
  <drop-packets-algs>
    drop-packets-algs
  </drop-packets-algs>
  <drop-bytes-algs>
    drop-bytes-algs
```


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```
  </drop-bytes-algs>
  <drop-packets-other>
    drop-packets-other
  </drop-packets-other>
  <drop-bytes-other>
    drop-bytes-other
  </drop-bytes-other>
</services-pgcp-dropped-traffic-entry>
```

Description

<services-pgcp-dropped-traffic-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <services-pgcp-dropped-traffic-entry>
    <drop-packets-flow-drop-state>
      drop-packets-flow-drop-state
    </drop-packets-flow-drop-state>
    <drop-bytes-flow-drop-state>
      drop-bytes-flow-drop-state
    </drop-bytes-flow-drop-state>
    <drop-packets-flow-rate-limit>
      drop-packets-flow-rate-limit
    </drop-packets-flow-rate-limit>
    <drop-bytes-flow-rate-limit>
      drop-bytes-flow-rate-limit
    </drop-bytes-flow-rate-limit>
    <drop-packets-algs>
      drop-packets-algs
    </drop-packets-algs>
    <drop-bytes-algs>
      drop-bytes-algs
    </drop-bytes-algs>
    <drop-packets-other>
      drop-packets-other
    </drop-packets-other>
    <drop-bytes-other>
      drop-bytes-other
    </drop-bytes-other>
  </services-pgcp-dropped-traffic-entry>
</service-pgcp-statistics-gateway>
```

Description

<services-pgcpd-root-termination>

Usage

```
<services-pgcpd-root-termination>
  <root-termination-information>
    root-termination-information
  </root-termination-information>
</services-pgcpd-root-termination>
```

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Description

<sfw-conversation>

Usage

```
<sfw-per-service-set-conversation>
  <sfw-conversation>
    <sfw-flow-table-conv-alg>
      sfw-flow-table-conv-alg
    </sfw-flow-table-conv-alg>
    <sfw-flow-table-conv-initiator>
      sfw-flow-table-conv-initiator
    </sfw-flow-table-conv-initiator>
    <sfw-flow-table-conv-responder>
      sfw-flow-table-conv-responder
    </sfw-flow-table-conv-responder>
    <service-sfw-flow-table>....</service-sfw-flow-table>
  </sfw-conversation>
</sfw-per-service-set-conversation>
```

Description Stateful firewall conversations

<sfw-conversation>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>
    <sfw-conversation>
      <sfw-flow-table-conv-alg>
        sfw-flow-table-conv-alg
      </sfw-flow-table-conv-alg>
      <sfw-flow-table-conv-initiator>
        sfw-flow-table-conv-initiator
      </sfw-flow-table-conv-initiator>
      <sfw-flow-table-conv-responder>
        sfw-flow-table-conv-responder
      </sfw-flow-table-conv-responder>
      <service-sfw-flow-table>....</service-sfw-flow-table>
    </sfw-conversation>
  </sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description Stateful firewall conversations

<sfw-flow-entry>

Usage

```
<sfw-flow-entry>
  <sfw-flow-protocol>
    sfw-flow-protocol
  </sfw-flow-protocol>
  <sfw-flow-source-ip>
    sfw-flow-source-ip
```


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```
</sfw-flow-source-ip>
<sfw-flow-source-port>
  sfw-flow-source-port
</sfw-flow-source-port>
<sfw-flow-destination-ip>
  sfw-flow-destination-ip
</sfw-flow-destination-ip>
<sfw-flow-destination-port>
  sfw-flow-destination-port
</sfw-flow-destination-port>
<sfw-flow-state>
  sfw-flow-state
</sfw-flow-state>
<sfw-flow-direction>
  sfw-flow-direction
</sfw-flow-direction>
<sfw-flow-frame-counter>
  sfw-flow-frame-counter
</sfw-flow-frame-counter>
<sfw-flow-gate-id>
  sfw-flow-gate-id
</sfw-flow-gate-id>
<sfw-flow-nat>....</sfw-flow-nat>
<sfw-flow-table-byte-count>
  sfw-flow-table-byte-count
</sfw-flow-table-byte-count>
<sfw-flow-table-tcp-window-size>
  sfw-flow-table-tcp-window-size
</sfw-flow-table-tcp-window-size>
<sfw-flow-table-tcp-acknowledge>
  sfw-flow-table-tcp-acknowledge
</sfw-flow-table-tcp-acknowledge>
<sfw-flow-table-tcp-tickle>
  sfw-flow-table-tcp-tickle
</sfw-flow-table-tcp-tickle>
<sfw-flow-table-role>
  sfw-flow-table-role
</sfw-flow-table-role>
<sfw-flow-table-timeout>
  sfw-flow-table-timeout
</sfw-flow-table-timeout>
<sfw-flow-table-protocol-detail>
  sfw-flow-table-protocol-detail
</sfw-flow-table-protocol-detail>
<sw-flow-nat-entry>....</sw-flow-nat-entry>
</sfw-flow-entry>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<sfw-per-service-set-flow-table>
  <service-sfw-flow-table>
```

```
<sfw-flow-entry>
  <sfw-flow-protocol>
    sfw-flow-protocol
  </sfw-flow-protocol>
  <sfw-flow-source-ip>
    sfw-flow-source-ip
  </sfw-flow-source-ip>
  <sfw-flow-source-port>
    sfw-flow-source-port
  </sfw-flow-source-port>
  <sfw-flow-destination-ip>
    sfw-flow-destination-ip
  </sfw-flow-destination-ip>
  <sfw-flow-destination-port>
    sfw-flow-destination-port
  </sfw-flow-destination-port>
  <sfw-flow-state>
    sfw-flow-state
  </sfw-flow-state>
  <sfw-flow-direction>
    sfw-flow-direction
  </sfw-flow-direction>
  <sfw-flow-frame-counter>
    sfw-flow-frame-counter
  </sfw-flow-frame-counter>
  <sfw-flow-gate-id>
    sfw-flow-gate-id
  </sfw-flow-gate-id>
  <sfw-flow-nat>....</sfw-flow-nat>
  <sfw-flow-table-byte-count>
    sfw-flow-table-byte-count
  </sfw-flow-table-byte-count>
  <sfw-flow-table-tcp-window-size>
    sfw-flow-table-tcp-window-size
  </sfw-flow-table-tcp-window-size>
  <sfw-flow-table-tcp-acknowledge>
    sfw-flow-table-tcp-acknowledge
  </sfw-flow-table-tcp-acknowledge>
  <sfw-flow-table-tcp-tickle>
    sfw-flow-table-tcp-tickle
  </sfw-flow-table-tcp-tickle>
  <sfw-flow-table-role>
    sfw-flow-table-role
  </sfw-flow-table-role>
  <sfw-flow-table-timeout>
    sfw-flow-table-timeout
  </sfw-flow-table-timeout>
  <sfw-flow-table-protocol-detail>
    sfw-flow-table-protocol-detail
  </sfw-flow-table-protocol-detail>
  <sw-flow-nat-entry>....</sw-flow-nat-entry>
 </sfw-flow-entry>
</service-sfw-flow-table>
</sfw-per-service-set-flow-table>
```


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Description Flow brief information

<sfw-flow-entry>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>
    <service-sfw-flow-table>
      <sfw-flow-entry>
        <sfw-flow-protocol>
          sfw-flow-protocol
        </sfw-flow-protocol>
        <sfw-flow-source-ip>
          sfw-flow-source-ip
        </sfw-flow-source-ip>
        <sfw-flow-source-port>
          sfw-flow-source-port
        </sfw-flow-source-port>
        <sfw-flow-destination-ip>
          sfw-flow-destination-ip
        </sfw-flow-destination-ip>
        <sfw-flow-destination-port>
          sfw-flow-destination-port
        </sfw-flow-destination-port>
        <sfw-flow-state>
          sfw-flow-state
        </sfw-flow-state>
        <sfw-flow-direction>
          sfw-flow-direction
        </sfw-flow-direction>
        <sfw-flow-frame-counter>
          sfw-flow-frame-counter
        </sfw-flow-frame-counter>
        <sfw-flow-gate-id>
          sfw-flow-gate-id
        </sfw-flow-gate-id>
        <sfw-flow-nat>....</sfw-flow-nat>
        <sfw-flow-table-byte-count>
          sfw-flow-table-byte-count
        </sfw-flow-table-byte-count>
        <sfw-flow-table-tcp-window-size>
          sfw-flow-table-tcp-window-size
        </sfw-flow-table-tcp-window-size>
        <sfw-flow-table-tcp-acknowledge>
          sfw-flow-table-tcp-acknowledge
        </sfw-flow-table-tcp-acknowledge>
        <sfw-flow-table-tcp-tickle>
          sfw-flow-table-tcp-tickle
        </sfw-flow-table-tcp-tickle>
        <sfw-flow-table-role>
          sfw-flow-table-role
        </sfw-flow-table-role>
        <sfw-flow-table-timeout>
          sfw-flow-table-timeout
        </sfw-flow-table-timeout>
```

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```
            <sfw-flow-table-protocol-detail>
              sfw-flow-table-protocol-detail
            </sfw-flow-table-protocol-detail>
            <sw-flow-nat-entry>....</sw-flow-nat-entry>
          </sfw-flow-entry>
        </service-sfw-flow-table>
      </sfw-per-service-set-flow-table>
    </service-sfw-flow-table-information>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<sfw-per-service-set-conversation>
  <sfw-conversation>
    <service-sfw-flow-table>
      <sfw-flow-entry>
        <sfw-flow-protocol>
          sfw-flow-protocol
        </sfw-flow-protocol>
        <sfw-flow-source-ip>
          sfw-flow-source-ip
        </sfw-flow-source-ip>
        <sfw-flow-source-port>
          sfw-flow-source-port
        </sfw-flow-source-port>
        <sfw-flow-destination-ip>
          sfw-flow-destination-ip
        </sfw-flow-destination-ip>
        <sfw-flow-destination-port>
          sfw-flow-destination-port
        </sfw-flow-destination-port>
        <sfw-flow-state>
          sfw-flow-state
        </sfw-flow-state>
        <sfw-flow-direction>
          sfw-flow-direction
        </sfw-flow-direction>
        <sfw-flow-frame-counter>
          sfw-flow-frame-counter
        </sfw-flow-frame-counter>
        <sfw-flow-gate-id>
          sfw-flow-gate-id
        </sfw-flow-gate-id>
        <sfw-flow-nat>....</sfw-flow-nat>
        <sfw-flow-table-byte-count>
          sfw-flow-table-byte-count
        </sfw-flow-table-byte-count>
        <sfw-flow-table-tcp-window-size>
          sfw-flow-table-tcp-window-size
        </sfw-flow-table-tcp-window-size>
        <sfw-flow-table-tcp-acknowledge>
          sfw-flow-table-tcp-acknowledge
```


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```
        </sfw-flow-table-tcp-acknowledge>
        <sfw-flow-table-tcp-tickle>
          sfw-flow-table-tcp-tickle
        </sfw-flow-table-tcp-tickle>
        <sfw-flow-table-role>
          sfw-flow-table-role
        </sfw-flow-table-role>
        <sfw-flow-table-timeout>
          sfw-flow-table-timeout
        </sfw-flow-table-timeout>
        <sfw-flow-table-protocol-detail>
          sfw-flow-table-protocol-detail
        </sfw-flow-table-protocol-detail>
        <sw-flow-nat-entry>....</sw-flow-nat-entry>
      </sfw-flow-entry>
    </service-sfw-flow-table>
  </sfw-conversation>
</sfw-per-service-set-conversation>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>
    <sfw-conversation>
      <service-sfw-flow-table>
        <sfw-flow-entry>
          <sfw-flow-protocol>
            sfw-flow-protocol
          </sfw-flow-protocol>
          <sfw-flow-source-ip>
            sfw-flow-source-ip
          </sfw-flow-source-ip>
          <sfw-flow-source-port>
            sfw-flow-source-port
          </sfw-flow-source-port>
          <sfw-flow-destination-ip>
            sfw-flow-destination-ip
          </sfw-flow-destination-ip>
          <sfw-flow-destination-port>
            sfw-flow-destination-port
          </sfw-flow-destination-port>
          <sfw-flow-state>
            sfw-flow-state
          </sfw-flow-state>
          <sfw-flow-direction>
            sfw-flow-direction
          </sfw-flow-direction>
          <sfw-flow-frame-counter>
            sfw-flow-frame-counter
          </sfw-flow-frame-counter>
          <sfw-flow-gate-id>
```

```
                sfw-flow-gate-id
               </sfw-flow-gate-id>
               <sfw-flow-nat>....</sfw-flow-nat>
               <sfw-flow-table-byte-count>
                sfw-flow-table-byte-count
               </sfw-flow-table-byte-count>
               <sfw-flow-table-tcp-window-size>
                sfw-flow-table-tcp-window-size
               </sfw-flow-table-tcp-window-size>
               <sfw-flow-table-tcp-acknowledge>
                sfw-flow-table-tcp-acknowledge
               </sfw-flow-table-tcp-acknowledge>
               <sfw-flow-table-tcp-tickle>
                sfw-flow-table-tcp-tickle
               </sfw-flow-table-tcp-tickle>
               <sfw-flow-table-role>
                sfw-flow-table-role
               </sfw-flow-table-role>
               <sfw-flow-table-timeout>
                sfw-flow-table-timeout
               </sfw-flow-table-timeout>
               <sfw-flow-table-protocol-detail>
                sfw-flow-table-protocol-detail
               </sfw-flow-table-protocol-detail>
               <sw-flow-nat-entry>....</sw-flow-nat-entry>
              </sfw-flow-entry>
             </service-sfw-flow-table>
            </sfw-conversation>
           </sfw-per-service-set-conversation>
          </service-sfw-conversation-information>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<softwire-per-service-set-flow-table>
 <service-softwire-table>
  <sfw-flow-entry>
   <sfw-flow-protocol>
    sfw-flow-protocol
   </sfw-flow-protocol>
   <sfw-flow-source-ip>
    sfw-flow-source-ip
   </sfw-flow-source-ip>
   <sfw-flow-source-port>
    sfw-flow-source-port
   </sfw-flow-source-port>
   <sfw-flow-destination-ip>
    sfw-flow-destination-ip
   </sfw-flow-destination-ip>
   <sfw-flow-destination-port>
    sfw-flow-destination-port
   </sfw-flow-destination-port>
```


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```
<sfw-flow-state>
  sfw-flow-state
</sfw-flow-state>
<sfw-flow-direction>
  sfw-flow-direction
</sfw-flow-direction>
<sfw-flow-frame-counter>
  sfw-flow-frame-counter
</sfw-flow-frame-counter>
<sfw-flow-gate-id>
  sfw-flow-gate-id
</sfw-flow-gate-id>
<sfw-flow-nat>....</sfw-flow-nat>
<sfw-flow-table-byte-count>
  sfw-flow-table-byte-count
</sfw-flow-table-byte-count>
<sfw-flow-table-tcp-window-size>
  sfw-flow-table-tcp-window-size
</sfw-flow-table-tcp-window-size>
<sfw-flow-table-tcp-acknowledge>
  sfw-flow-table-tcp-acknowledge
</sfw-flow-table-tcp-acknowledge>
<sfw-flow-table-tcp-tickle>
  sfw-flow-table-tcp-tickle
</sfw-flow-table-tcp-tickle>
<sfw-flow-table-role>
  sfw-flow-table-role
</sfw-flow-table-role>
<sfw-flow-table-timeout>
  sfw-flow-table-timeout
</sfw-flow-table-timeout>
<sfw-flow-table-protocol-detail>
  sfw-flow-table-protocol-detail
</sfw-flow-table-protocol-detail>
<sw-flow-nat-entry>....</sw-flow-nat-entry>
</sfw-flow-entry>
</service-softwire-table>
</softwire-per-service-set-flow-table>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sfw-flow-protocol>
          sfw-flow-protocol
        </sfw-flow-protocol>
        <sfw-flow-source-ip>
          sfw-flow-source-ip
        </sfw-flow-source-ip>
```

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```
                <sfw-flow-source-port>
                  sfw-flow-source-port
                </sfw-flow-source-port>
                <sfw-flow-destination-ip>
                  sfw-flow-destination-ip
                </sfw-flow-destination-ip>
                <sfw-flow-destination-port>
                  sfw-flow-destination-port
                </sfw-flow-destination-port>
                <sfw-flow-state>
                  sfw-flow-state
                </sfw-flow-state>
                <sfw-flow-direction>
                  sfw-flow-direction
                </sfw-flow-direction>
                <sfw-flow-frame-counter>
                  sfw-flow-frame-counter
                </sfw-flow-frame-counter>
                <sfw-flow-gate-id>
                  sfw-flow-gate-id
                </sfw-flow-gate-id>
                <sfw-flow-nat>....</sfw-flow-nat>
                <sfw-flow-table-byte-count>
                  sfw-flow-table-byte-count
                </sfw-flow-table-byte-count>
                <sfw-flow-table-tcp-window-size>
                  sfw-flow-table-tcp-window-size
                </sfw-flow-table-tcp-window-size>
                <sfw-flow-table-tcp-acknowledge>
                  sfw-flow-table-tcp-acknowledge
                </sfw-flow-table-tcp-acknowledge>
                <sfw-flow-table-tcp-tickle>
                  sfw-flow-table-tcp-tickle
                </sfw-flow-table-tcp-tickle>
                <sfw-flow-table-role>
                  sfw-flow-table-role
                </sfw-flow-table-role>
                <sfw-flow-table-timeout>
                  sfw-flow-table-timeout
                </sfw-flow-table-timeout>
                <sfw-flow-table-protocol-detail>
                  sfw-flow-table-protocol-detail
                </sfw-flow-table-protocol-detail>
                <sw-flow-nat-entry>....</sw-flow-nat-entry>
              </sfw-flow-entry>
            </service-softwire-table>
          </softwire-per-service-set-flow-table>
        </service-softwire-table-information>
```

Description Flow brief information

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<sfw-flow-entry>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sfw-flow-protocol>
          sfw-flow-protocol
        </sfw-flow-protocol>
        <sfw-flow-source-ip>
          sfw-flow-source-ip
        </sfw-flow-source-ip>
        <sfw-flow-source-port>
          sfw-flow-source-port
        </sfw-flow-source-port>
        <sfw-flow-destination-ip>
          sfw-flow-destination-ip
        </sfw-flow-destination-ip>
        <sfw-flow-destination-port>
          sfw-flow-destination-port
        </sfw-flow-destination-port>
        <sfw-flow-state>
          sfw-flow-state
        </sfw-flow-state>
        <sfw-flow-direction>
          sfw-flow-direction
        </sfw-flow-direction>
        <sfw-flow-frame-counter>
          sfw-flow-frame-counter
        </sfw-flow-frame-counter>
        <sfw-flow-gate-id>
          sfw-flow-gate-id
        </sfw-flow-gate-id>
        <sfw-flow-nat>....</sfw-flow-nat>
        <sfw-flow-table-byte-count>
          sfw-flow-table-byte-count
        </sfw-flow-table-byte-count>
        <sfw-flow-table-tcp-window-size>
          sfw-flow-table-tcp-window-size
        </sfw-flow-table-tcp-window-size>
        <sfw-flow-table-tcp-acknowledge>
          sfw-flow-table-tcp-acknowledge
        </sfw-flow-table-tcp-acknowledge>
        <sfw-flow-table-tcp-tickle>
          sfw-flow-table-tcp-tickle
        </sfw-flow-table-tcp-tickle>
        <sfw-flow-table-role>
          sfw-flow-table-role
        </sfw-flow-table-role>
        <sfw-flow-table-timeout>
          sfw-flow-table-timeout
        </sfw-flow-table-timeout>
        <sfw-flow-table-protocol-detail>
          sfw-flow-table-protocol-detail
```

```
            </sfw-flow-table-protocol-detail>
            <sw-flow-nat-entry>....</sw-flow-nat-entry>
          </sfw-flow-entry>
        </service-softwire-table>
      </softwire-per-service-set-flow-table>
    </service-softwire-flow-table-information>
```

Description Flow brief information

<sfw-flow-entry>

Usage

```
<service-msp-sess-table-information>
  <msp-per-service-set-sess-table>
    <sfw-flow-entry>
      <sfw-flow-protocol>
        sfw-flow-protocol
      </sfw-flow-protocol>
      <sfw-flow-source-ip>
        sfw-flow-source-ip
      </sfw-flow-source-ip>
      <sfw-flow-source-port>
        sfw-flow-source-port
      </sfw-flow-source-port>
      <sfw-flow-destination-ip>
        sfw-flow-destination-ip
      </sfw-flow-destination-ip>
      <sfw-flow-destination-port>
        sfw-flow-destination-port
      </sfw-flow-destination-port>
      <sfw-flow-state>
        sfw-flow-state
      </sfw-flow-state>
      <sfw-flow-direction>
        sfw-flow-direction
      </sfw-flow-direction>
      <sfw-flow-frame-counter>
        sfw-flow-frame-counter
      </sfw-flow-frame-counter>
      <sfw-flow-gate-id>
        sfw-flow-gate-id
      </sfw-flow-gate-id>
      <sfw-flow-nat>....</sfw-flow-nat>
      <sfw-flow-table-byte-count>
        sfw-flow-table-byte-count
      </sfw-flow-table-byte-count>
      <sfw-flow-table-tcp-window-size>
        sfw-flow-table-tcp-window-size
      </sfw-flow-table-tcp-window-size>
      <sfw-flow-table-tcp-acknowledge>
        sfw-flow-table-tcp-acknowledge
      </sfw-flow-table-tcp-acknowledge>
      <sfw-flow-table-tcp-tickle>
        sfw-flow-table-tcp-tickle
```


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```
    </sfw-flow-table-tcp-tickle>
    <sfw-flow-table-role>
      sfw-flow-table-role
    </sfw-flow-table-role>
    <sfw-flow-table-timeout>
      sfw-flow-table-timeout
    </sfw-flow-table-timeout>
    <sfw-flow-table-protocol-detail>
      sfw-flow-table-protocol-detail
    </sfw-flow-table-protocol-detail>
    <sw-flow-nat-entry>....</sw-flow-nat-entry>
  </sfw-flow-entry>
 </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description Flow brief information

<sfw-flow-nat>

Usage

```
<sfw-flow-nat>
 <sfw-flow-nat-type>
  sfw-flow-nat-type
 </sfw-flow-nat-type>
 <sfw-flow-nat-ip>
  sfw-flow-nat-ip
 </sfw-flow-nat-ip>
 <sfw-flow-nat-port>
  sfw-flow-nat-port
 </sfw-flow-nat-port>
 <sfw-flow-translated-ip>
  sfw-flow-translated-ip
 </sfw-flow-translated-ip>
 <sfw-flow-translated-port>
  sfw-flow-translated-port
 </sfw-flow-translated-port>
</sfw-flow-nat>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<sfw-flow-entry>
 <sfw-flow-nat>
  <sfw-flow-nat-type>
   sfw-flow-nat-type
  </sfw-flow-nat-type>
  <sfw-flow-nat-ip>
   sfw-flow-nat-ip
  </sfw-flow-nat-ip>
  <sfw-flow-nat-port>
```

```
            sfw-flow-nat-port
          </sfw-flow-nat-port>
          <sfw-flow-translated-ip>
            sfw-flow-translated-ip
          </sfw-flow-translated-ip>
          <sfw-flow-translated-port>
            sfw-flow-translated-port
          </sfw-flow-translated-port>
        </sfw-flow-nat>
      </sfw-flow-entry>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<sfw-per-service-set-flow-table>
  <service-sfw-flow-table>
    <sfw-flow-entry>
      <sfw-flow-nat>
        <sfw-flow-nat-type>
          sfw-flow-nat-type
        </sfw-flow-nat-type>
        <sfw-flow-nat-ip>
          sfw-flow-nat-ip
        </sfw-flow-nat-ip>
        <sfw-flow-nat-port>
          sfw-flow-nat-port
        </sfw-flow-nat-port>
        <sfw-flow-translated-ip>
          sfw-flow-translated-ip
        </sfw-flow-translated-ip>
        <sfw-flow-translated-port>
          sfw-flow-translated-port
        </sfw-flow-translated-port>
      </sfw-flow-nat>
    </sfw-flow-entry>
  </service-sfw-flow-table>
</sfw-per-service-set-flow-table>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>
    <service-sfw-flow-table>
      <sfw-flow-entry>
        <sfw-flow-nat>
          <sfw-flow-nat-type>
            sfw-flow-nat-type
```


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```
                </sfw-flow-nat-type>
                <sfw-flow-nat-ip>
                  sfw-flow-nat-ip
                </sfw-flow-nat-ip>
                <sfw-flow-nat-port>
                  sfw-flow-nat-port
                </sfw-flow-nat-port>
                <sfw-flow-translated-ip>
                  sfw-flow-translated-ip
                </sfw-flow-translated-ip>
                <sfw-flow-translated-port>
                  sfw-flow-translated-port
                </sfw-flow-translated-port>
              </sfw-flow-nat>
            </sfw-flow-entry>
          </service-sfw-flow-table>
        </sfw-per-service-set-flow-table>
      </service-sfw-flow-table-information>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<sfw-per-service-set-conversation>
  <sfw-conversation>
    <service-sfw-flow-table>
      <sfw-flow-entry>
        <sfw-flow-nat>
          <sfw-flow-nat-type>
            sfw-flow-nat-type
          </sfw-flow-nat-type>
          <sfw-flow-nat-ip>
            sfw-flow-nat-ip
          </sfw-flow-nat-ip>
          <sfw-flow-nat-port>
            sfw-flow-nat-port
          </sfw-flow-nat-port>
          <sfw-flow-translated-ip>
            sfw-flow-translated-ip
          </sfw-flow-translated-ip>
          <sfw-flow-translated-port>
            sfw-flow-translated-port
          </sfw-flow-translated-port>
        </sfw-flow-nat>
      </sfw-flow-entry>
    </service-sfw-flow-table>
  </sfw-conversation>
</sfw-per-service-set-conversation>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>
    <sfw-conversation>
      <service-sfw-flow-table>
        <sfw-flow-entry>
          <sfw-flow-nat>
            <sfw-flow-nat-type>
              sfw-flow-nat-type
            </sfw-flow-nat-type>
            <sfw-flow-nat-ip>
              sfw-flow-nat-ip
            </sfw-flow-nat-ip>
            <sfw-flow-nat-port>
              sfw-flow-nat-port
            </sfw-flow-nat-port>
            <sfw-flow-translated-ip>
              sfw-flow-translated-ip
            </sfw-flow-translated-ip>
            <sfw-flow-translated-port>
              sfw-flow-translated-port
            </sfw-flow-translated-port>
          </sfw-flow-nat>
        </sfw-flow-entry>
      </service-sfw-flow-table>
    </sfw-conversation>
  </sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<softwire-per-service-set-flow-table>
  <service-softwire-table>
    <sfw-flow-entry>
      <sfw-flow-nat>
        <sfw-flow-nat-type>
          sfw-flow-nat-type
        </sfw-flow-nat-type>
        <sfw-flow-nat-ip>
          sfw-flow-nat-ip
        </sfw-flow-nat-ip>
        <sfw-flow-nat-port>
          sfw-flow-nat-port
        </sfw-flow-nat-port>
        <sfw-flow-translated-ip>
          sfw-flow-translated-ip
        </sfw-flow-translated-ip>
        <sfw-flow-translated-port>
```


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```
                    sfw-flow-translated-port
                  </sfw-flow-translated-port>
                </sfw-flow-nat>
              </sfw-flow-entry>
            </service-softwire-table>
          </softwire-per-service-set-flow-table>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sfw-flow-nat>
          <sfw-flow-nat-type>
            sfw-flow-nat-type
          </sfw-flow-nat-type>
          <sfw-flow-nat-ip>
            sfw-flow-nat-ip
          </sfw-flow-nat-ip>
          <sfw-flow-nat-port>
            sfw-flow-nat-port
          </sfw-flow-nat-port>
          <sfw-flow-translated-ip>
            sfw-flow-translated-ip
          </sfw-flow-translated-ip>
          <sfw-flow-translated-port>
            sfw-flow-translated-port
          </sfw-flow-translated-port>
        </sfw-flow-nat>
      </sfw-flow-entry>
    </service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sfw-flow-nat>
          <sfw-flow-nat-type>
            sfw-flow-nat-type
          </sfw-flow-nat-type>
          <sfw-flow-nat-ip>
```

```
                sfw-flow-nat-ip
               </sfw-flow-nat-ip>
               <sfw-flow-nat-port>
                sfw-flow-nat-port
               </sfw-flow-nat-port>
               <sfw-flow-translated-ip>
                sfw-flow-translated-ip
               </sfw-flow-translated-ip>
               <sfw-flow-translated-port>
                sfw-flow-translated-port
               </sfw-flow-translated-port>
              </sfw-flow-nat>
             </sfw-flow-entry>
            </service-softwire-table>
           </softwire-per-service-set-flow-table>
          </service-softwire-flow-table-information>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<nat-plugin-sess-entry>
 <sfw-flow-nat>
  <sfw-flow-nat-type>
   sfw-flow-nat-type
  </sfw-flow-nat-type>
  <sfw-flow-nat-ip>
   sfw-flow-nat-ip
  </sfw-flow-nat-ip>
  <sfw-flow-nat-port>
   sfw-flow-nat-port
  </sfw-flow-nat-port>
  <sfw-flow-translated-ip>
   sfw-flow-translated-ip
  </sfw-flow-translated-ip>
  <sfw-flow-translated-port>
   sfw-flow-translated-port
  </sfw-flow-translated-port>
 </sfw-flow-nat>
</nat-plugin-sess-entry>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-msp-sess-table-information>
 <msp-per-service-set-sess-table>
  <sfw-flow-entry>
   <sfw-flow-nat>
    <sfw-flow-nat-type>
```


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```
                sfw-flow-nat-type
              </sfw-flow-nat-type>
              <sfw-flow-nat-ip>
                sfw-flow-nat-ip
              </sfw-flow-nat-ip>
              <sfw-flow-nat-port>
                sfw-flow-nat-port
              </sfw-flow-nat-port>
              <sfw-flow-translated-ip>
                sfw-flow-translated-ip
              </sfw-flow-translated-ip>
              <sfw-flow-translated-port>
                sfw-flow-translated-port
              </sfw-flow-translated-port>
            </sfw-flow-nat>
          </sfw-flow-entry>
        </msp-per-service-set-sess-table>
      </service-msp-sess-table-information>
```

Description NAT translation

<sfw-flow-nat>

Usage

```
<service-msp-sess-table-information>
  <msp-per-service-set-sess-table>
    <nat-plugin-sess-entry>
      <sfw-flow-nat>
        <sfw-flow-nat-type>
          sfw-flow-nat-type
        </sfw-flow-nat-type>
        <sfw-flow-nat-ip>
          sfw-flow-nat-ip
        </sfw-flow-nat-ip>
        <sfw-flow-nat-port>
          sfw-flow-nat-port
        </sfw-flow-nat-port>
        <sfw-flow-translated-ip>
          sfw-flow-translated-ip
        </sfw-flow-translated-ip>
        <sfw-flow-translated-port>
          sfw-flow-translated-port
        </sfw-flow-translated-port>
      </sfw-flow-nat>
    </nat-plugin-sess-entry>
  </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description NAT translation

<sfw-per-service-set-conversation>

Usage

```
<sfw-per-service-set-conversation>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <sfw-conversation>....</sfw-conversation>
</sfw-per-service-set-conversation>
```

Description Show conversations

<sfw-per-service-set-conversation>

Usage

```
<service-sfw-conversation-information>
  <sfw-per-service-set-conversation>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <sfw-conversation>....</sfw-conversation>
  </sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description Show conversations

<sfw-per-service-set-flow-table>

Usage

```
<sfw-per-service-set-flow-table>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <service-sfw-flow-table>....</service-sfw-flow-table>
</sfw-per-service-set-flow-table>
```

Description Flows sorted by service set

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<sfw-per-service-set-flow-table>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <service-sfw-flow-table>....</service-sfw-flow-table>
  </sfw-per-service-set-flow-table>
</service-sfw-flow-table-information>
```

Description Flows sorted by service set

<sfw-per-service-set-nat-mapping>

Usage

```
<service-nat-mapping-information>
  <sfw-per-service-set-nat-mapping>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <service-nat-pool-map>....</service-nat-pool-map>
  </sfw-per-service-set-nat-mapping>
</service-nat-mapping-information>
```

Description NAT mapping information for one service set

<sfw-per-service-set-nat-pool>

Usage

```
<service-nat-pool-information>
  <sfw-per-service-set-nat-pool>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <service-nat-pool>....</service-nat-pool>
  </sfw-per-service-set-nat-pool>
</service-nat-pool-information>
```

Description NAT pool information for one service set

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<sfw-per-service-set-sip-calls>

Usage

```
<sfw-per-service-set-sip-calls>
  <interface-name>
    interface-name
  </interface-name>
  <service-set-name>
    service-set-name
  </service-set-name>
  <sfw-sip-calls>....</sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description Stateful firewall SIP calls sorted by service set

<sfw-per-service-set-sip-calls>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sfw-sip-calls>....</sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description Stateful firewall SIP calls sorted by service set

<sfw-per-service-set-sip-registrations>

Usage

```
<sfw-per-service-set-sip-registrations>
  <interface-name>
    interface-name
  </interface-name>
  <service-set-name>
    service-set-name
  </service-set-name>
  <sfw-sip-registers>....</sfw-sip-registers>
</sfw-per-service-set-sip-registrations>
```

Description Stateful firewall SIP registrations sorted by service set

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<sfw-per-service-set-sip-registrations>

Usage

```
<service-sfw-sip-registration-information>
  <sfw-per-service-set-sip-registrations>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <sfw-sip-registers>....</sfw-sip-registers>
  </sfw-per-service-set-sip-registrations>
</service-sfw-sip-registration-information>
```

Description Stateful firewall SIP registrations sorted by service set

<sfw-sip-call-entry>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-from>
    sfw-sip-from
  </sfw-sip-from>
  <sfw-sip-to>
    sfw-sip-to
  </sfw-sip-to>
  <sfw-sip-callid>
    sfw-sip-callid
  </sfw-sip-callid>
  <sfw-sip-number-control-iflows>
    sfw-sip-number-control-iflows
  </sfw-sip-number-control-iflows>
  <sfw-sip-number-control-rflows>
    sfw-sip-number-control-rflows
  </sfw-sip-number-control-rflows>
  <sfw-sip-control-iflow-table>....</sfw-sip-control-iflow-table>
  <sfw-sip-control-rflow-table>....</sfw-sip-control-rflow-table>
  <sfw-sip-number-contact-iflows>
    sfw-sip-number-contact-iflows
  </sfw-sip-number-contact-iflows>
  <sfw-sip-number-contact-rflows>
    sfw-sip-number-contact-rflows
  </sfw-sip-number-contact-rflows>
  <sfw-sip-contact-iflow-table>....</sfw-sip-contact-iflow-table>
  <sfw-sip-contact-rflow-table>....</sfw-sip-contact-rflow-table>
  <sfw-sip-number-media-iflows>
    sfw-sip-number-media-iflows
  </sfw-sip-number-media-iflows>
  <sfw-sip-number-media-rflows>
    sfw-sip-number-media-rflows
  </sfw-sip-number-media-rflows>
  <sfw-sip-media-iflow-table>....</sfw-sip-media-iflow-table>
```

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```
    <sfw-sip-media-rflow-table>....</sfw-sip-media-rflow-table>
  </sfw-sip-call-entry>
```

Description Session Initiation Protocol call

<sfw-sip-call-entry>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-from>
        sfw-sip-from
      </sfw-sip-from>
      <sfw-sip-to>
        sfw-sip-to
      </sfw-sip-to>
      <sfw-sip-callid>
        sfw-sip-callid
      </sfw-sip-callid>
      <sfw-sip-number-control-iflows>
        sfw-sip-number-control-iflows
      </sfw-sip-number-control-iflows>
      <sfw-sip-number-control-rflows>
        sfw-sip-number-control-rflows
      </sfw-sip-number-control-rflows>
      <sfw-sip-control-iflow-table>....</sfw-sip-control-iflow-table>
      <sfw-sip-control-rflow-table>....</sfw-sip-control-rflow-table>
      <sfw-sip-number-contact-iflows>
        sfw-sip-number-contact-iflows
      </sfw-sip-number-contact-iflows>
      <sfw-sip-number-contact-rflows>
        sfw-sip-number-contact-rflows
      </sfw-sip-number-contact-rflows>
      <sfw-sip-contact-iflow-table>....</sfw-sip-contact-iflow-table>
      <sfw-sip-contact-rflow-table>....</sfw-sip-contact-rflow-table>
      <sfw-sip-number-media-iflows>
        sfw-sip-number-media-iflows
      </sfw-sip-number-media-iflows>
      <sfw-sip-number-media-rflows>
        sfw-sip-number-media-rflows
      </sfw-sip-number-media-rflows>
      <sfw-sip-media-iflow-table>....</sfw-sip-media-iflow-table>
      <sfw-sip-media-rflow-table>....</sfw-sip-media-rflow-table>
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description Session Initiation Protocol call

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<sfw-sip-call-entry>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>
        <sfw-sip-from>
          sfw-sip-from
        </sfw-sip-from>
        <sfw-sip-to>
          sfw-sip-to
        </sfw-sip-to>
        <sfw-sip-callid>
          sfw-sip-callid
        </sfw-sip-callid>
        <sfw-sip-number-control-iflows>
          sfw-sip-number-control-iflows
        </sfw-sip-number-control-iflows>
        <sfw-sip-number-control-rflows>
          sfw-sip-number-control-rflows
        </sfw-sip-number-control-rflows>
        <sfw-sip-control-iflow-table>....</sfw-sip-control-iflow-table>
        <sfw-sip-control-rflow-table>....</sfw-sip-control-rflow-table>
        <sfw-sip-number-contact-iflows>
          sfw-sip-number-contact-iflows
        </sfw-sip-number-contact-iflows>
        <sfw-sip-number-contact-rflows>
          sfw-sip-number-contact-rflows
        </sfw-sip-number-contact-rflows>
        <sfw-sip-contact-iflow-table>....</sfw-sip-contact-iflow-table>
        <sfw-sip-contact-rflow-table>....</sfw-sip-contact-rflow-table>
        <sfw-sip-number-media-iflows>
          sfw-sip-number-media-iflows
        </sfw-sip-number-media-iflows>
        <sfw-sip-number-media-rflows>
          sfw-sip-number-media-rflows
        </sfw-sip-number-media-rflows>
        <sfw-sip-media-iflow-table>....</sfw-sip-media-iflow-table>
        <sfw-sip-media-rflow-table>....</sfw-sip-media-rflow-table>
      </sfw-sip-call-entry>
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description Session Initiation Protocol call

<sfw-sip-calls>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>....</sfw-sip-call-entry>
```

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```
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-calls>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>....</sfw-sip-call-entry>
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description

<sfw-sip-contact-iflow-table>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-contact-iflow-table>
</sfw-sip-contact-iflow-table>
</sfw-sip-call-entry>
```

Description

<sfw-sip-contact-iflow-table>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-contact-iflow-table>
  </sfw-sip-contact-iflow-table>
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-contact-iflow-table>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>
        <sfw-sip-contact-iflow-table>
    </sfw-sip-contact-iflow-table>
      </sfw-sip-call-entry>
```


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```
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description

<sfw-sip-contact-rflow-table>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-contact-rflow-table>
</sfw-sip-contact-rflow-table>
</sfw-sip-call-entry>
```

Description

<sfw-sip-contact-rflow-table>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-contact-rflow-table>
  </sfw-sip-contact-rflow-table>
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-contact-rflow-table>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>
        <sfw-sip-contact-rflow-table>
    </sfw-sip-contact-rflow-table>
      </sfw-sip-call-entry>
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description

<sfw-sip-control-iflow-table>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-control-iflow-table>
</sfw-sip-control-iflow-table>
```

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```
</sfw-sip-call-entry>
```

Description

<sfw-sip-control-iflow-table>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-control-iflow-table>
  </sfw-sip-control-iflow-table>
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-control-iflow-table>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>
        <sfw-sip-control-iflow-table>
   </sfw-sip-control-iflow-table>
      </sfw-sip-call-entry>
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description

<sfw-sip-control-rflow-table>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-control-rflow-table>
</sfw-sip-control-rflow-table>
</sfw-sip-call-entry>
```

Description

<sfw-sip-control-rflow-table>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-control-rflow-table>
  </sfw-sip-control-rflow-table>
```


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```
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-control-rflow-table>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
      <sfw-sip-call-entry>
        <sfw-sip-control-rflow-table>
    </sfw-sip-control-rflow-table>
      </sfw-sip-call-entry>
    </sfw-sip-calls>
  </sfw-per-service-set-sip-calls>
</service-sfw-sip-call-information>
```

Description

<sfw-sip-media-iflow-table>

Usage

```
<sfw-sip-call-entry>
  <sfw-sip-media-iflow-table>
</sfw-sip-media-iflow-table>
</sfw-sip-call-entry>
```

Description

<sfw-sip-media-iflow-table>

Usage

```
<sfw-per-service-set-sip-calls>
  <sfw-sip-calls>
    <sfw-sip-call-entry>
      <sfw-sip-media-iflow-table>
  </sfw-sip-media-iflow-table>
    </sfw-sip-call-entry>
  </sfw-sip-calls>
</sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-media-iflow-table>

Usage

```
<service-sfw-sip-call-information>
  <sfw-per-service-set-sip-calls>
    <sfw-sip-calls>
```

```
        <sfw-sip-call-entry>
          <sfw-sip-media-iflow-table>
        </sfw-sip-media-iflow-table>
          </sfw-sip-call-entry>
        </sfw-sip-calls>
      </sfw-per-service-set-sip-calls>
    </service-sfw-sip-call-information>
```

Description

<sfw-sip-media-rflow-table>

Usage

```
    <sfw-sip-call-entry>
      <sfw-sip-media-rflow-table>
    </sfw-sip-media-rflow-table>
    </sfw-sip-call-entry>
```

Description

<sfw-sip-media-rflow-table>

Usage

```
    <sfw-per-service-set-sip-calls>
      <sfw-sip-calls>
        <sfw-sip-call-entry>
          <sfw-sip-media-rflow-table>
      </sfw-sip-media-rflow-table>
        </sfw-sip-call-entry>
      </sfw-sip-calls>
    </sfw-per-service-set-sip-calls>
```

Description

<sfw-sip-media-rflow-table>

Usage

```
    <service-sfw-sip-call-information>
      <sfw-per-service-set-sip-calls>
        <sfw-sip-calls>
          <sfw-sip-call-entry>
            <sfw-sip-media-rflow-table>
        </sfw-sip-media-rflow-table>
          </sfw-sip-call-entry>
        </sfw-sip-calls>
      </sfw-per-service-set-sip-calls>
    </service-sfw-sip-call-information>
```

Description

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<sfw-sip-register-entry>

Usage

```
<sfw-sip-register-entry>
  <sfw-sip-register-protocol>
    sfw-sip-register-protocol
  </sfw-sip-register-protocol>
  <sfw-sip-register-address>
    sfw-sip-register-address
  </sfw-sip-register-address>
  <sfw-sip-register-port>
    sfw-sip-register-port
  </sfw-sip-register-port>
  <sfw-sip-register-acked>
    sfw-sip-register-acked
  </sfw-sip-register-acked>
  <sfw-sip-register-expiration>
    sfw-sip-register-expiration
  </sfw-sip-register-expiration>
  <sfw-sip-register-remaining>
    sfw-sip-register-remaining
  </sfw-sip-register-remaining>
  <sfw-sip-from>
    sfw-sip-from
  </sfw-sip-from>
  <sfw-sip-to>
    sfw-sip-to
  </sfw-sip-to>
  <sfw-sip-callid>
    sfw-sip-callid
  </sfw-sip-callid>
</sfw-sip-register-entry>
```

Description Display a SIP register

<sfw-sip-register-entry>

Usage

```
<sfw-per-service-set-sip-registrations>
  <sfw-sip-registers>
    <sfw-sip-register-entry>
      <sfw-sip-register-protocol>
        sfw-sip-register-protocol
      </sfw-sip-register-protocol>
      <sfw-sip-register-address>
        sfw-sip-register-address
      </sfw-sip-register-address>
      <sfw-sip-register-port>
        sfw-sip-register-port
      </sfw-sip-register-port>
      <sfw-sip-register-acked>
        sfw-sip-register-acked
      </sfw-sip-register-acked>
```

```
        <sfw-sip-register-expiration>
          sfw-sip-register-expiration
        </sfw-sip-register-expiration>
        <sfw-sip-register-remaining>
          sfw-sip-register-remaining
        </sfw-sip-register-remaining>
        <sfw-sip-from>
          sfw-sip-from
        </sfw-sip-from>
        <sfw-sip-to>
          sfw-sip-to
        </sfw-sip-to>
        <sfw-sip-callid>
          sfw-sip-callid
        </sfw-sip-callid>
      </sfw-sip-register-entry>
    </sfw-sip-registers>
  </sfw-per-service-set-sip-registrations>
```

Description Display a SIP register

<sfw-sip-register-entry>

Usage

```
<service-sfw-sip-registration-information>
  <sfw-per-service-set-sip-registrations>
    <sfw-sip-registers>
      <sfw-sip-register-entry>
        <sfw-sip-register-protocol>
          sfw-sip-register-protocol
        </sfw-sip-register-protocol>
        <sfw-sip-register-address>
          sfw-sip-register-address
        </sfw-sip-register-address>
        <sfw-sip-register-port>
          sfw-sip-register-port
        </sfw-sip-register-port>
        <sfw-sip-register-acked>
          sfw-sip-register-acked
        </sfw-sip-register-acked>
        <sfw-sip-register-expiration>
          sfw-sip-register-expiration
        </sfw-sip-register-expiration>
        <sfw-sip-register-remaining>
          sfw-sip-register-remaining
        </sfw-sip-register-remaining>
        <sfw-sip-from>
          sfw-sip-from
        </sfw-sip-from>
        <sfw-sip-to>
          sfw-sip-to
        </sfw-sip-to>
        <sfw-sip-callid>
          sfw-sip-callid
```


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```
        </sfw-sip-callid>
       </sfw-sip-register-entry>
      </sfw-sip-registers>
     </sfw-per-service-set-sip-registrations>
    </service-sfw-sip-registration-information>
```

Description Display a SIP register

<sfw-sip-registers>

Usage

```
<sfw-per-service-set-sip-registrations>
 <sfw-sip-registers>
  <sfw-sip-register-entry>....</sfw-sip-register-entry>
 </sfw-sip-registers>
</sfw-per-service-set-sip-registrations>
```

Description

<sfw-sip-registers>

Usage

```
<service-sfw-sip-registration-information>
 <sfw-per-service-set-sip-registrations>
  <sfw-sip-registers>
   <sfw-sip-register-entry>....</sfw-sip-register-entry>
  </sfw-sip-registers>
 </sfw-per-service-set-sip-registrations>
</service-sfw-sip-registration-information>
```

Description

<sfw-stats-service-set-entry>

Usage

```
<sfw-stats-service-set-entry>
 <service-set-name>
  service-set-name
 </service-set-name>
 <total-flow-accepts>
  total-flow-accepts
 </total-flow-accepts>
 <total-flow-discards>
  total-flow-discards
 </total-flow-discards>
 <total-flow-rejects>
  total-flow-rejects
 </total-flow-rejects>
 <total-drops>
  total-drops
 </total-drops>
 <new-flow-counters>....</new-flow-counters>
```

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```
<existing-flow-counters>....</existing-flow-counters>
<drop_counters>....</drop_counters>
<error-counters>....</error-counters>
<ip-error-counters>....</ip-error-counters>
<tcp-error-counters>....</tcp-error-counters>
<udp-error-counters>....</udp-error-counters>
<icmp-error-counters>....</icmp-error-counters>
<alg-error-counters>....</alg-error-counters>
<alg-name>
  alg-name
</alg-name>
<sip-active-call-count>
  sip-active-call-count
</sip-active-call-count>
<sip-active-reg-count>
  sip-active-reg-count
</sip-active-reg-count>
<sip-alg-counters>....</sip-alg-counters>
</sfw-stats-service-set-entry>
```

Description Stateful firewall service set statistics entry

<sfw-stats-service-set-entry>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <service-set-name>
        service-set-name
      </service-set-name>
      <total-flow-accepts>
        total-flow-accepts
      </total-flow-accepts>
      <total-flow-discards>
        total-flow-discards
      </total-flow-discards>
      <total-flow-rejects>
        total-flow-rejects
      </total-flow-rejects>
      <total-drops>
        total-drops
      </total-drops>
      <new-flow-counters>....</new-flow-counters>
      <existing-flow-counters>....</existing-flow-counters>
      <drop_counters>....</drop_counters>
      <error-counters>....</error-counters>
      <ip-error-counters>....</ip-error-counters>
      <tcp-error-counters>....</tcp-error-counters>
      <udp-error-counters>....</udp-error-counters>
      <icmp-error-counters>....</icmp-error-counters>
      <alg-error-counters>....</alg-error-counters>
      <alg-name>
        alg-name
```


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```
      </alg-name>
      <sip-active-call-count>
        sip-active-call-count
      </sip-active-call-count>
      <sip-active-reg-count>
        sip-active-reg-count
      </sip-active-reg-count>
      <sip-alg-counters>....</sip-alg-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Stateful firewall service set statistics entry

<si-nat-pool>

Usage

```
<si-nat-pool-information>
  <si-per-service-set-nat-pool>
    <si-nat-pool>
      <pool-name>
        pool-name
      </pool-name>
      <si-pool-nated-packets>
        si-pool-nated-packets
      </si-pool-nated-packets>
      <si-pool-denated-packets>
        si-pool-denated-packets
      </si-pool-denated-packets>
      <si-pool-errors>
        si-pool-errors
      </si-pool-errors>
      <translation-type>
        translation-type
      </translation-type>
      <pool-address-range>
        pool-address-range
      </pool-address-range>
      <si-pool-address-range-list>....</si-pool-address-range-list>
    </si-nat-pool>
  </si-per-service-set-nat-pool>
</si-nat-pool-information>
```

Description NAT pool information

<si-nat-pool-information>

Usage

```
<si-nat-pool-information>
  <si-per-service-set-nat-pool>....</si-per-service-set-nat-pool>
</si-nat-pool-information>
```

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Description Show information about NAT pools

<si-per-service-set-nat-pool>

Usage

```
<si-nat-pool-information>
  <si-per-service-set-nat-pool>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <si-nat-pool>....</si-nat-pool>
  </si-per-service-set-nat-pool>
</si-nat-pool-information>
```

Description NAT pool information for one service set

<si-pool-address-range-list>

Usage

```
<si-nat-pool-information>
  <si-per-service-set-nat-pool>
    <si-nat-pool>
      <si-pool-address-range-list>
    </si-pool-address-range-list>
    </si-nat-pool>
  </si-per-service-set-nat-pool>
</si-nat-pool-information>
```

Description List of address ranges

<sip-alg-counters>

Usage

```
<sfw-stats-service-set-entry>
  <sip-alg-counters>
    <total-counters>....</total-counters>
    <parser-counters>....</parser-counters>
    <message-counters>....</message-counters>
  </sip-alg-counters>
</sfw-stats-service-set-entry>
```

Description SIP statistics

<sip-alg-counters>

Usage

```
<service-sfw-statistics-information>
```


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```
<service-sfw-statistics-entry>
  <sfw-stats-service-set-entry>
    <sip-alg-counters>
      <total-counters>....</total-counters>
      <parser-counters>....</parser-counters>
      <message-counters>....</message-counters>
    </sip-alg-counters>
  </sfw-stats-service-set-entry>
 </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description SIP statistics

<softwire-entry>

Usage

```
<softwire-entry>
  <softwire-source-ip>
    softwire-source-ip
  </softwire-source-ip>
  <softwire-destination-ip>
    softwire-destination-ip
  </softwire-destination-ip>
  <softwire-direction>
    softwire-direction
  </softwire-direction>
  <softwire-flow-count>
    softwire-flow-count
  </softwire-flow-count>
  <softwire-table-timeout>
    softwire-table-timeout
  </softwire-table-timeout>
</softwire-entry>
```

Description Flow brief information

<softwire-entry>

Usage

```
<softwire-per-service-set-flow-table>
  <service-softwire-table>
    <softwire-entry>
      <softwire-source-ip>
        softwire-source-ip
      </softwire-source-ip>
      <softwire-destination-ip>
        softwire-destination-ip
      </softwire-destination-ip>
      <softwire-direction>
        softwire-direction
      </softwire-direction>
      <softwire-flow-count>
```

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```
            softwire-flow-count
          </softwire-flow-count>
          <softwire-table-timeout>
            softwire-table-timeout
          </softwire-table-timeout>
        </softwire-entry>
      </service-softwire-table>
    </softwire-per-service-set-flow-table>
```

Description Flow brief information

<softwire-entry>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <softwire-entry>
        <softwire-source-ip>
          softwire-source-ip
        </softwire-source-ip>
        <softwire-destination-ip>
          softwire-destination-ip
        </softwire-destination-ip>
        <softwire-direction>
          softwire-direction
        </softwire-direction>
        <softwire-flow-count>
          softwire-flow-count
        </softwire-flow-count>
        <softwire-table-timeout>
          softwire-table-timeout
        </softwire-table-timeout>
      </softwire-entry>
    </service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description Flow brief information

<softwire-entry>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <softwire-entry>
        <softwire-source-ip>
          softwire-source-ip
        </softwire-source-ip>
        <softwire-destination-ip>
          softwire-destination-ip
```


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```
        </softwire-destination-ip>
        <softwire-direction>
          softwire-direction
        </softwire-direction>
        <softwire-flow-count>
          softwire-flow-count
        </softwire-flow-count>
        <softwire-table-timeout>
          softwire-table-timeout
        </softwire-table-timeout>
      </softwire-entry>
    </service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-flow-table-information>
```

Description Flow brief information

<softwire-per-service-set-flow-table>

Usage

```
<softwire-per-service-set-flow-table>
  <service-set-name>
    service-set-name
  </service-set-name>
  <interface-name>
    interface-name
  </interface-name>
  <service-softwire-table>....</service-softwire-table>
</softwire-per-service-set-flow-table>
```

Description Flows sorted by service set

<softwire-per-service-set-flow-table>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <service-softwire-table>....</service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description Flows sorted by service set

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<softwire-per-service-set-flow-table>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>
    <service-set-name>
      service-set-name
    </service-set-name>
    <interface-name>
      interface-name
    </interface-name>
    <service-softwire-table>....</service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-flow-table-information>
```

Description Flows sorted by service set

<sw-flow-nat-entry>

Usage

```
<sw-flow-nat-entry>
  <sfw-flow-nat-sw-nat-type>
    sfw-flow-nat-sw-nat-type
  </sfw-flow-nat-sw-nat-type>
  <sfw-flow-nat-ip>
    sfw-flow-nat-ip
  </sfw-flow-nat-ip>
  <sfw-flow-nat-port>
    sfw-flow-nat-port
  </sfw-flow-nat-port>
  <sfw-flow-translated-ip>
    sfw-flow-translated-ip
  </sfw-flow-translated-ip>
  <sfw-flow-translated-port>
    sfw-flow-translated-port
  </sfw-flow-translated-port>
</sw-flow-nat-entry>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<sfw-flow-entry>
  <sw-flow-nat-entry>
    <sfw-flow-nat-sw-nat-type>
      sfw-flow-nat-sw-nat-type
    </sfw-flow-nat-sw-nat-type>
    <sfw-flow-nat-ip>
      sfw-flow-nat-ip
    </sfw-flow-nat-ip>
    <sfw-flow-nat-port>
```


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```
        sfw-flow-nat-port
      </sfw-flow-nat-port>
      <sfw-flow-translated-ip>
        sfw-flow-translated-ip
      </sfw-flow-translated-ip>
      <sfw-flow-translated-port>
        sfw-flow-translated-port
      </sfw-flow-translated-port>
    </sw-flow-nat-entry>
  </sfw-flow-entry>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<sfw-per-service-set-flow-table>
  <service-sfw-flow-table>
    <sfw-flow-entry>
      <sw-flow-nat-entry>
        <sfw-flow-nat-sw-nat-type>
          sfw-flow-nat-sw-nat-type
        </sfw-flow-nat-sw-nat-type>
        <sfw-flow-nat-ip>
          sfw-flow-nat-ip
        </sfw-flow-nat-ip>
        <sfw-flow-nat-port>
          sfw-flow-nat-port
        </sfw-flow-nat-port>
        <sfw-flow-translated-ip>
          sfw-flow-translated-ip
        </sfw-flow-translated-ip>
        <sfw-flow-translated-port>
          sfw-flow-translated-port
        </sfw-flow-translated-port>
      </sw-flow-nat-entry>
    </sfw-flow-entry>
  </service-sfw-flow-table>
</sfw-per-service-set-flow-table>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<service-sfw-flow-table-information>
  <sfw-per-service-set-flow-table>
    <service-sfw-flow-table>
      <sfw-flow-entry>
        <sw-flow-nat-entry>
          <sfw-flow-nat-sw-nat-type>
            sfw-flow-nat-sw-nat-type
```

```
        </sfw-flow-nat-sw-nat-type>
        <sfw-flow-nat-ip>
          sfw-flow-nat-ip
        </sfw-flow-nat-ip>
        <sfw-flow-nat-port>
          sfw-flow-nat-port
        </sfw-flow-nat-port>
        <sfw-flow-translated-ip>
          sfw-flow-translated-ip
        </sfw-flow-translated-ip>
        <sfw-flow-translated-port>
          sfw-flow-translated-port
        </sfw-flow-translated-port>
      </sw-flow-nat-entry>
    </sfw-flow-entry>
  </service-sfw-flow-table>
 </sfw-per-service-set-flow-table>
</service-sfw-flow-table-information>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<sfw-per-service-set-conversation>
 <sfw-conversation>
  <service-sfw-flow-table>
   <sfw-flow-entry>
    <sw-flow-nat-entry>
     <sfw-flow-nat-sw-nat-type>
       sfw-flow-nat-sw-nat-type
     </sfw-flow-nat-sw-nat-type>
     <sfw-flow-nat-ip>
       sfw-flow-nat-ip
     </sfw-flow-nat-ip>
     <sfw-flow-nat-port>
       sfw-flow-nat-port
     </sfw-flow-nat-port>
     <sfw-flow-translated-ip>
       sfw-flow-translated-ip
     </sfw-flow-translated-ip>
     <sfw-flow-translated-port>
       sfw-flow-translated-port
     </sfw-flow-translated-port>
    </sw-flow-nat-entry>
   </sfw-flow-entry>
  </service-sfw-flow-table>
 </sfw-conversation>
</sfw-per-service-set-conversation>
```

Description NAT translation

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<sw-flow-nat-entry>

Usage

```
<service-sfw-conversation-information>
 <sfw-per-service-set-conversation>
  <sfw-conversation>
   <service-sfw-flow-table>
    <sfw-flow-entry>
     <sw-flow-nat-entry>
      <sfw-flow-nat-sw-nat-type>
       sfw-flow-nat-sw-nat-type
      </sfw-flow-nat-sw-nat-type>
      <sfw-flow-nat-ip>
       sfw-flow-nat-ip
      </sfw-flow-nat-ip>
      <sfw-flow-nat-port>
       sfw-flow-nat-port
      </sfw-flow-nat-port>
      <sfw-flow-translated-ip>
       sfw-flow-translated-ip
      </sfw-flow-translated-ip>
      <sfw-flow-translated-port>
       sfw-flow-translated-port
      </sfw-flow-translated-port>
     </sw-flow-nat-entry>
    </sfw-flow-entry>
   </service-sfw-flow-table>
  </sfw-conversation>
 </sfw-per-service-set-conversation>
</service-sfw-conversation-information>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<softwire-per-service-set-flow-table>
 <service-softwire-table>
  <sfw-flow-entry>
   <sw-flow-nat-entry>
    <sfw-flow-nat-sw-nat-type>
     sfw-flow-nat-sw-nat-type
    </sfw-flow-nat-sw-nat-type>
    <sfw-flow-nat-ip>
     sfw-flow-nat-ip
    </sfw-flow-nat-ip>
    <sfw-flow-nat-port>
     sfw-flow-nat-port
    </sfw-flow-nat-port>
    <sfw-flow-translated-ip>
     sfw-flow-translated-ip
    </sfw-flow-translated-ip>
    <sfw-flow-translated-port>
```

```
                    sfw-flow-translated-port
                  </sfw-flow-translated-port>
                </sw-flow-nat-entry>
              </sfw-flow-entry>
            </service-softwire-table>
          </softwire-per-service-set-flow-table>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<service-softwire-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sw-flow-nat-entry>
          <sfw-flow-nat-sw-nat-type>
            sfw-flow-nat-sw-nat-type
          </sfw-flow-nat-sw-nat-type>
          <sfw-flow-nat-ip>
            sfw-flow-nat-ip
          </sfw-flow-nat-ip>
          <sfw-flow-nat-port>
            sfw-flow-nat-port
          </sfw-flow-nat-port>
          <sfw-flow-translated-ip>
            sfw-flow-translated-ip
          </sfw-flow-translated-ip>
          <sfw-flow-translated-port>
            sfw-flow-translated-port
          </sfw-flow-translated-port>
        </sw-flow-nat-entry>
      </sfw-flow-entry>
    </service-softwire-table>
  </softwire-per-service-set-flow-table>
</service-softwire-table-information>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<service-softwire-flow-table-information>
  <softwire-per-service-set-flow-table>
    <service-softwire-table>
      <sfw-flow-entry>
        <sw-flow-nat-entry>
          <sfw-flow-nat-sw-nat-type>
            sfw-flow-nat-sw-nat-type
          </sfw-flow-nat-sw-nat-type>
          <sfw-flow-nat-ip>
```


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```
                sfw-flow-nat-ip
               </sfw-flow-nat-ip>
               <sfw-flow-nat-port>
                sfw-flow-nat-port
               </sfw-flow-nat-port>
               <sfw-flow-translated-ip>
                sfw-flow-translated-ip
               </sfw-flow-translated-ip>
               <sfw-flow-translated-port>
                sfw-flow-translated-port
               </sfw-flow-translated-port>
              </sw-flow-nat-entry>
             </sfw-flow-entry>
            </service-softwire-table>
           </softwire-per-service-set-flow-table>
          </service-softwire-flow-table-information>
```

Description NAT translation

<sw-flow-nat-entry>

Usage

```
<service-msp-sess-table-information>
 <msp-per-service-set-sess-table>
  <sfw-flow-entry>
   <sw-flow-nat-entry>
    <sfw-flow-nat-sw-nat-type>
     sfw-flow-nat-sw-nat-type
    </sfw-flow-nat-sw-nat-type>
    <sfw-flow-nat-ip>
     sfw-flow-nat-ip
    </sfw-flow-nat-ip>
    <sfw-flow-nat-port>
     sfw-flow-nat-port
    </sfw-flow-nat-port>
    <sfw-flow-translated-ip>
     sfw-flow-translated-ip
    </sfw-flow-translated-ip>
    <sfw-flow-translated-port>
     sfw-flow-translated-port
    </sfw-flow-translated-port>
   </sw-flow-nat-entry>
  </sfw-flow-entry>
 </msp-per-service-set-sess-table>
</service-msp-sess-table-information>
```

Description NAT translation

<syslog-stats-class>

Usage

```
<syslog-stats-class>
```

```
<syslog-stats-class-name>
  syslog-stats-class-name
</syslog-stats-class-name>
<syslog-stats-class-sent>
  syslog-stats-class-sent
</syslog-stats-class-sent>
<syslog-stats-class-dropped>
  syslog-stats-class-dropped
</syslog-stats-class-dropped>
<syslog-stats-class-dropped-low-priority>
  syslog-stats-class-dropped-low-priority
</syslog-stats-class-dropped-low-priority>
<syslog-stats-class-dropped-no-class-set>
  syslog-stats-class-dropped-no-class-set
</syslog-stats-class-dropped-no-class-set>
<syslog-stats-class-dropped-above-rate-limit>
  syslog-stats-class-dropped-above-rate-limit
</syslog-stats-class-dropped-above-rate-limit>
</syslog-stats-class>
```

Description

<syslog-stats-global>

Usage

```
<syslog-stats-global>
  <syslog-stats-global-rate-limit>
    syslog-stats-global-rate-limit
  </syslog-stats-global-rate-limit>
  <syslog-stats-global-sent>
    syslog-stats-global-sent
  </syslog-stats-global-sent>
  <syslog-stats-global-dropped>
    syslog-stats-global-dropped
  </syslog-stats-global-dropped>
</syslog-stats-global>
```

Description

<syslog-stats-interface>

Usage

```
<syslog-stats-interface>
  <syslog-stats-interface-name>
    syslog-stats-interface-name
  </syslog-stats-interface-name>
</syslog-stats-interface>
```

Description

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<syslog-stats-service-set>

Usage

```
<syslog-stats-service-set>
  <syslog-stats-svc-set-name>
    syslog-stats-svc-set-name
  </syslog-stats-svc-set-name>
  <syslog-stats-svc-set-sent>
    syslog-stats-svc-set-sent
  </syslog-stats-svc-set-sent>
  <syslog-stats-svc-set-dropped>
    syslog-stats-svc-set-dropped
  </syslog-stats-svc-set-dropped>
</syslog-stats-service-set>
```

Description

<tcp-error-counters>

Usage

```
<sfw-stats-service-set-entry>
  <tcp-error-counters>
    <tcp-header-length-error>
      tcp-header-length-error
    </tcp-header-length-error>
    <tcp-zero-port>
      tcp-zero-port
    </tcp-zero-port>
    <illegal-sequence-number-flags>
      illegal-sequence-number-flags
    </illegal-sequence-number-flags>
    <syn-attack>
      syn-attack
    </syn-attack>
    <non-syn-first-packet>
      non-syn-first-packet
    </non-syn-first-packet>
    <tcp-port-scan>
      tcp-port-scan
    </tcp-port-scan>
    <bad-syn-cookie-response>
      bad-syn-cookie-response
    </bad-syn-cookie-response>
    <tcp-recon-sequence-number-error>
      tcp-recon-sequence-number-error
    </tcp-recon-sequence-number-error>
    <tcp-recon-retransmits>
      tcp-recon-retransmits
    </tcp-recon-retransmits>
    <tcp-partially-opened-connection-timeout-syn-rcvd>
      tcp-partially-opened-connection-timeout-syn-rcvd
    </tcp-partially-opened-connection-timeout-syn-rcvd>
    <tcp-partially-opened-connection-timeout-syn-ack-rcvd>
      tcp-partially-opened-connection-timeout-syn-ack-rcvd
```

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```
</tcp-partially-opened-connection-timeout-syn-ack-rcvd>
<tcp-partially-closed-connection-reuse>
  tcp-partially-closed-connection-reuse
</tcp-partially-closed-connection-reuse>
<tcp-3way-error-client-sent-syn-ack>
  tcp-3way-error-client-sent-syn-ack
</tcp-3way-error-client-sent-syn-ack>
<tcp-3way-error-server-sent-ack>
  tcp-3way-error-server-sent-ack
</tcp-3way-error-server-sent-ack>
<tcp-3way-error-syn-seq-num-retrans-mismatch>
  tcp-3way-error-syn-seq-num-retrans-mismatch
</tcp-3way-error-syn-seq-num-retrans-mismatch>
<tcp-3way-error-rst-seq-num-mismatch>
  tcp-3way-error-rst-seq-num-mismatch
</tcp-3way-error-rst-seq-num-mismatch>
<tcp-3way-error-fin-received>
  tcp-3way-error-fin-received
</tcp-3way-error-fin-received>
<tcp-3way-error-invalid-flags>
  tcp-3way-error-invalid-flags
</tcp-3way-error-invalid-flags>
<tcp-3way-error-syn-no-flow-initiator>
  tcp-3way-error-syn-no-flow-initiator
</tcp-3way-error-syn-no-flow-initiator>
<tcp-3way-error-first-packet-syn-ack>
  tcp-3way-error-first-packet-syn-ack
</tcp-3way-error-first-packet-syn-ack>
<tcp-3way-error-first-packet-fin-ack>
  tcp-3way-error-first-packet-fin-ack
</tcp-3way-error-first-packet-fin-ack>
<tcp-3way-error-first-packet-fin>
  tcp-3way-error-first-packet-fin
</tcp-3way-error-first-packet-fin>
<tcp-3way-error-first-packet-rst>
  tcp-3way-error-first-packet-rst
</tcp-3way-error-first-packet-rst>
<tcp-3way-error-first-packet-ack>
  tcp-3way-error-first-packet-ack
</tcp-3way-error-first-packet-ack>
<tcp-3way-error-first-packet-invalid-flags>
  tcp-3way-error-first-packet-invalid-flags
</tcp-3way-error-first-packet-invalid-flags>
<tcp-close-error-no-final-ack>
  tcp-close-error-no-final-ack
</tcp-close-error-no-final-ack>
<tcp-resumed-flow>
  tcp-resumed-flow
</tcp-resumed-flow>
</tcp-error-counters>
</sfw-stats-service-set-entry>
```

Description Extensive output of TCP processing errors

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<tcp-error-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <tcp-error-counters>
        <tcp-header-length-error>
          tcp-header-length-error
        </tcp-header-length-error>
        <tcp-zero-port>
          tcp-zero-port
        </tcp-zero-port>
        <illegal-sequence-number-flags>
          illegal-sequence-number-flags
        </illegal-sequence-number-flags>
        <syn-attack>
          syn-attack
        </syn-attack>
        <non-syn-first-packet>
          non-syn-first-packet
        </non-syn-first-packet>
        <tcp-port-scan>
          tcp-port-scan
        </tcp-port-scan>
        <bad-syn-cookie-response>
          bad-syn-cookie-response
        </bad-syn-cookie-response>
        <tcp-recon-sequence-number-error>
          tcp-recon-sequence-number-error
        </tcp-recon-sequence-number-error>
        <tcp-recon-retransmits>
          tcp-recon-retransmits
        </tcp-recon-retransmits>
        <tcp-partially-opened-connection-timeout-syn-rcvd>
          tcp-partially-opened-connection-timeout-syn-rcvd
        </tcp-partially-opened-connection-timeout-syn-rcvd>
        <tcp-partially-opened-connection-timeout-syn-ack-rcvd>
          tcp-partially-opened-connection-timeout-syn-ack-rcvd
        </tcp-partially-opened-connection-timeout-syn-ack-rcvd>
        <tcp-partially-closed-connection-reuse>
          tcp-partially-closed-connection-reuse
        </tcp-partially-closed-connection-reuse>
        <tcp-3way-error-client-sent-syn-ack>
          tcp-3way-error-client-sent-syn-ack
        </tcp-3way-error-client-sent-syn-ack>
        <tcp-3way-error-server-sent-ack>
          tcp-3way-error-server-sent-ack
        </tcp-3way-error-server-sent-ack>
        <tcp-3way-error-syn-seq-num-retrans-mismatch>
          tcp-3way-error-syn-seq-num-retrans-mismatch
        </tcp-3way-error-syn-seq-num-retrans-mismatch>
        <tcp-3way-error-rst-seq-num-mismatch>
          tcp-3way-error-rst-seq-num-mismatch
        </tcp-3way-error-rst-seq-num-mismatch>
```

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```
<tcp-3way-error-fin-received>
  tcp-3way-error-fin-received
</tcp-3way-error-fin-received>
<tcp-3way-error-invalid-flags>
  tcp-3way-error-invalid-flags
</tcp-3way-error-invalid-flags>
<tcp-3way-error-syn-no-flow-initiator>
  tcp-3way-error-syn-no-flow-initiator
</tcp-3way-error-syn-no-flow-initiator>
<tcp-3way-error-first-packet-syn-ack>
  tcp-3way-error-first-packet-syn-ack
</tcp-3way-error-first-packet-syn-ack>
<tcp-3way-error-first-packet-fin-ack>
  tcp-3way-error-first-packet-fin-ack
</tcp-3way-error-first-packet-fin-ack>
<tcp-3way-error-first-packet-fin>
  tcp-3way-error-first-packet-fin
</tcp-3way-error-first-packet-fin>
<tcp-3way-error-first-packet-rst>
  tcp-3way-error-first-packet-rst
</tcp-3way-error-first-packet-rst>
<tcp-3way-error-first-packet-ack>
  tcp-3way-error-first-packet-ack
</tcp-3way-error-first-packet-ack>
<tcp-3way-error-first-packet-invalid-flags>
  tcp-3way-error-first-packet-invalid-flags
</tcp-3way-error-first-packet-invalid-flags>
<tcp-close-error-no-final-ack>
  tcp-close-error-no-final-ack
</tcp-close-error-no-final-ack>
<tcp-resumed-flow>
  tcp-resumed-flow
</tcp-resumed-flow>
</tcp-error-counters>
</sfw-stats-service-set-entry>
</service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Extensive output of TCP processing errors

<test-services-l2tp-tunnel-result>

Usage

```
<test-services-l2tp-tunnel-result>

<l2tp-tunnel-test-subscriber-information>....</l2tp-tunnel-test-subscriber-information>

  <l2tp-tunnel-test-result-table>....</l2tp-tunnel-test-result-table>
</test-services-l2tp-tunnel-result>
```

Description Result of the L2TP tunnel verification

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<total-counters>

Usage

```
<sfw-stats-service-set-entry>
  <sip-alg-counters>
    <total-counters>
      <total-messages>
        total-messages
      </total-messages>
      <call-segments>
        call-segments
      </call-segments>
    </total-counters>
  </sip-alg-counters>
</sfw-stats-service-set-entry>
```

Description Total statistics

<total-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <sip-alg-counters>
        <total-counters>
          <total-messages>
            total-messages
          </total-messages>
          <call-segments>
            call-segments
          </call-segments>
        </total-counters>
      </sip-alg-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Total statistics

<udp-error-counters>

Usage

```
<sfw-stats-service-set-entry>
  <udp-error-counters>
    <udp-header-length-error>
      udp-header-length-error
    </udp-header-length-error>
    <udp-zero-port>
      udp-zero-port
    </udp-zero-port>
    <udp-port-scan>
```

```
        udp-port-scan
      </udp-port-scan>
    </udp-error-counters>
  </sfw-stats-service-set-entry>
```

Description Extensive output of UDP processing errors

<udp-error-counters>

Usage

```
<service-sfw-statistics-information>
  <service-sfw-statistics-entry>
    <sfw-stats-service-set-entry>
      <udp-error-counters>
        <udp-header-length-error>
          udp-header-length-error
        </udp-header-length-error>
        <udp-zero-port>
          udp-zero-port
        </udp-zero-port>
        <udp-port-scan>
          udp-port-scan
        </udp-port-scan>
      </udp-error-counters>
    </sfw-stats-service-set-entry>
  </service-sfw-statistics-entry>
</service-sfw-statistics-information>
```

Description Extensive output of UDP processing errors

<uri-redirect-set-statistics>

Usage

```
<uri-redirect-set-statistics>
  <uri-redirect-set-name>
    uri-redirect-set-name
  </uri-redirect-set-name>
  <cause-roaming>
    cause-roaming
  </cause-roaming>
  <cause-time-of-day>
    cause-time-of-day
  </cause-time-of-day>
  <cause-quality-of-service>
    cause-quality-of-service
  </cause-quality-of-service>
  <cause-volume-expired>
    cause-volume-expired
  </cause-volume-expired>
  <cause-cost-warning>
    cause-cost-warning
  </cause-cost-warning>
```


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```
<cause-not-allowed>
  cause-not-allowed
</cause-not-allowed>
<cause-unsubscribed>
  cause-unsubscribed
</cause-unsubscribed>
<cause-credit-expiry>
  cause-credit-expiry
</cause-credit-expiry>
<cause-unknown>
  cause-unknown
</cause-unknown>
<cause-default>
  cause-default
</cause-default>
</uri-redirect-set-statistics>
```

Description Statistics for the URI redirect sets

<uri-redirect-set-statistics>

Usage

```
<uri-redirect-set-statistics-information>
  <uri-redirect-set-statistics>
    <uri-redirect-set-name>
      uri-redirect-set-name
    </uri-redirect-set-name>
    <cause-roaming>
      cause-roaming
    </cause-roaming>
    <cause-time-of-day>
      cause-time-of-day
    </cause-time-of-day>
    <cause-quality-of-service>
      cause-quality-of-service
    </cause-quality-of-service>
    <cause-volume-expired>
      cause-volume-expired
    </cause-volume-expired>
    <cause-cost-warning>
      cause-cost-warning
    </cause-cost-warning>
    <cause-not-allowed>
      cause-not-allowed
    </cause-not-allowed>
    <cause-unsubscribed>
      cause-unsubscribed
    </cause-unsubscribed>
    <cause-credit-expiry>
      cause-credit-expiry
    </cause-credit-expiry>
    <cause-unknown>
      cause-unknown
    </cause-unknown>
```

```
    <cause-default>
      cause-default
    </cause-default>
  </uri-redirect-set-statistics>
</uri-redirect-set-statistics-information>
```

Description Statistics for the URI redirect sets

<uri-redirect-set-statistics-information>

Usage

```
<uri-redirect-set-statistics-information>
  <interface-name>
    interface-name
  </interface-name>
  <interfaces>
    interfaces
  </interfaces>
  <uri-redirect-set-statistics>....</uri-redirect-set-statistics>
</uri-redirect-set-statistics-information>
```

Description

<usage-counters-entry>

Usage

```
<usage-counters-entry>
  <contexts-number>
    contexts-number
  </contexts-number>
  <emergency-contexts-number>
    emergency-contexts-number
  </emergency-contexts-number>
</usage-counters-entry>
```

Description

<usage-counters-entry>

Usage

```
<service-pgcp-statistics-gateway>
  <usage-counters-entry>
    <contexts-number>
      contexts-number
    </contexts-number>
    <emergency-contexts-number>
      emergency-contexts-number
    </emergency-contexts-number>
  </usage-counters-entry>
</service-pgcp-statistics-gateway>
```


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Description

<virtual-interface-entry>

Usage

```
<pgcpd-active-configuration>
  <virtual-interface-entry>
    <virtual-interface-name>
      virtual-interface-name
    </virtual-interface-name>
    <routing-instance>
      routing-instance
    </routing-instance>
    <interface-name>
      interface-name
    </interface-name>
    <vif-service-state>
      vif-service-state
    </vif-service-state>
    <media-service-ref-entry>....</media-service-ref-entry>
  </virtual-interface-entry>
</pgcpd-active-configuration>
```

Description

<virtual-interface-entry>

Usage

```
<pgcpd-active-configuration>
  <pgcpd-config>
    <virtual-interface-entry>
      <virtual-interface-name>
        virtual-interface-name
      </virtual-interface-name>
      <routing-instance>
        routing-instance
      </routing-instance>
      <interface-name>
        interface-name
      </interface-name>
      <vif-service-state>
        vif-service-state
      </vif-service-state>
      <media-service-ref-entry>....</media-service-ref-entry>
    </virtual-interface-entry>
  </pgcpd-config>
</pgcpd-active-configuration>
```

Description

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Summary of Alarm Response Tags

<alarm-detail>

Usage

```
<alarm-information>
  <alarm-detail>
    <alarm-time>
      alarm-time
    </alarm-time>
    <alarm-class>
      alarm-class
    </alarm-class>
    <alarm-description>
      alarm-description
    </alarm-description>
    <alarm-short-description>
      alarm-short-description
    </alarm-short-description>
    <alarm-type>
      alarm-type
    </alarm-type>
  </alarm-detail>
</alarm-information>
```

Description Detailed information about an active alarm

<alarm-detail>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <alarm-information>
      <alarm-detail>
        <alarm-time>
          alarm-time
        </alarm-time>
        <alarm-class>
          alarm-class
        </alarm-class>
        <alarm-description>
          alarm-description
        </alarm-description>
        <alarm-short-description>
          alarm-short-description
        </alarm-short-description>
        <alarm-type>
          alarm-type
        </alarm-type>
      </alarm-detail>
    </alarm-information>
  </multi-routing-engine-item>
```


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```
</multi-routing-engine-results>
```

Description Detailed information about an active alarm

<alarm-id-information>

Usage

```
<alarm-id-information>
  <alarm-id>
    alarm-id
  </alarm-id>
</alarm-id-information>
```

Description Alarm identification information

<alarm-information>

Usage

```
<alarm-information>
  <alarm-summary>....</alarm-summary>
  <alarm-detail>....</alarm-detail>
</alarm-information>
```

Description Information about all active alarms

<alarm-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <alarm-information>
      <alarm-summary>....</alarm-summary>
      <alarm-detail>....</alarm-detail>
    </alarm-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Information about all active alarms

<alarm-summary>

Usage

```
<alarm-information>
  <alarm-summary>
    <active-alarm-count>
      active-alarm-count
    </active-alarm-count>
    <no-active-alarms>
      no-active-alarms
```

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```
    </no-active-alarms>
  </alarm-summary>
</alarm-information>
```

Description Number of alarms currently active

<alarm-summary>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <alarm-information>
      <alarm-summary>
        <active-alarm-count>
          active-alarm-count
        </active-alarm-count>
        <no-active-alarms>
          no-active-alarms
        </no-active-alarms>
      </alarm-summary>
    </alarm-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Number of alarms currently active

<multi-routing-engine-item>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <re-name>
      re-name
    </re-name>
    <alarm-information>....</alarm-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Information about the active alarms on one Routing Engine on a platform with multiple Routing Engines

<multi-routing-engine-results>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>....</multi-routing-engine-item>
</multi-routing-engine-results>
```


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Description Information about alarms on one or more Routing Engines on a platform with multiple Routing Engines

Summary of ANCP Response Tags

<ancp-aid-entry>

Usage

```
<ancp-aid-information>
  <ancp-aid-entry>
    <if-type>
      if-type
    </if-type>
    <record-number>
      record-number
    </record-number>
    <if-name>
      if-name
    </if-name>
    <aid-name>
      aid-name
    </aid-name>
    <aid-ipaddress>
      aid-ipaddress
    </aid-ipaddress>
    <kernel-exist>
      kernel-exist
    </kernel-exist>
    <config-exist>
      config-exist
    </config-exist>
  </ancp-aid-entry>
</ancp-aid-information>
```

Description

<ancp-aid-information>

Usage

```
<ancp-aid-information>
  <ancp-aid-entry>....</ancp-aid-entry>
</ancp-aid-information>
```

Description

<ancp-config-entry>

Usage

```
<ancp-config-information>
  <ancp-config-entry>
    <if-type>
      if-type
    </if-type>
```

```
    <record-number>
      record-number
    </record-number>
    <if-name>
      if-name
    </if-name>
    <aid-name>
      aid-name
    </aid-name>
    <aid-ipaddress>
      aid-ipaddress
    </aid-ipaddress>
  </ancp-config-entry>
</ancp-config-information>
```

Description

<ancp-config-information>

Usage

```
<ancp-config-information>
  <ancp-scalar-entry>....</ancp-scalar-entry>
  <ancp-qos-adjust-entry>....</ancp-qos-adjust-entry>
  <ancp-config-entry>....</ancp-config-entry>
</ancp-config-information>
```

Description

<ancp-cos-entry>

Usage

```
<ancp-cos-information>
  <ancp-cos-entry>
    <interface-type>
      interface-type
    </interface-type>
    <interface-name>
      interface-name
    </interface-name>
    <interface-index>
      interface-index
    </interface-index>
    <shaping-rate>
      shaping-rate
    </shaping-rate>
    <last-update>
      last-update
    </last-update>
  </ancp-cos-entry>
</ancp-cos-information>
```

Description

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<ancp-cos-heading>

Usage

```
<ancp-cos-information>
  <ancp-cos-heading>
    <qos-adjust>
      qos-adjust
    </qos-adjust>
    <cos-state>
      cos-state
    </cos-state>
    <connect-time>
      connect-time
    </connect-time>
    <session-time>
      session-time
    </session-time>
    <rtcreate-time>
      rtcreate-time
    </rtcreate-time>
    <keepalive-time>
      keepalive-time
    </keepalive-time>
    <rate-update-time>
      rate-update-time
    </rate-update-time>
    <keepalive-timer>
      keepalive-timer
    </keepalive-timer>
  </ancp-cos-heading>
</ancp-cos-information>
```

Description

<ancp-cos-information>

Usage

```
<ancp-cos-information>
  <ancp-cos-heading>....</ancp-cos-heading>
  <ancp-cos-entry>....</ancp-cos-entry>
</ancp-cos-information>
```

Description

<ancp-kernel-entry>

Usage

```
<ancp-kernel-information>
  <ancp-kernel-entry>
    <if-type>
      if-type
    </if-type>
    <record-number>
```

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```
      record-number
    </record-number>
    <if-name>
      if-name
    </if-name>
    <if-index>
      if-index
    </if-index>
    <aid-name>
      aid-name
    </aid-name>
    <aid-ipaddress>
      aid-ipaddress
    </aid-ipaddress>
  </ancp-kernel-entry>
</ancp-kernel-information>
```

Description

<ancp-kernel-information>

Usage

```
<ancp-kernel-information>
  <ancp-kernel-entry>....</ancp-kernel-entry>
</ancp-kernel-information>
```

Description

<ancp-neighbor>

Usage

```
<ancp-neighbor>
  <received-syn-count>
    received-syn-count
  </received-syn-count>
  <received-synack-count>
    received-synack-count
  </received-synack-count>
  <received-ack-count>
    received-ack-count
  </received-ack-count>
  <received-rstack-count>
    received-rstack-count
  </received-rstack-count>
  <received-port-up-count>
    received-port-up-count
  </received-port-up-count>
  <received-port-down-count>
    received-port-down-count
  </received-port-down-count>
  <received-oam-count>
    received-oam-count
  </received-oam-count>
  <received-other-count>
```


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```
  received-other-count
</received-other-count>
<sent-syn-count>
  sent-syn-count
</sent-syn-count>
<sent-synack-count>
  sent-synack-count
</sent-synack-count>
<sent-ack-count>
  sent-ack-count
</sent-ack-count>
<sent-rstack-count>
  sent-rstack-count
</sent-rstack-count>
<sent-oam-count>
  sent-oam-count
</sent-oam-count>
<max-discovery-limit-exceed-count>
  max-discovery-limit-exceed-count
</max-discovery-limit-exceed-count>
<ip-address>
  ip-address
</ip-address>
<tcp-port>
  tcp-port
</tcp-port>
<up-time>
  up-time
</up-time>
<mac-address>
  mac-address
</mac-address>
<state>
  state
</state>
<neighbor-subscriber-count>
  neighbor-subscriber-count
</neighbor-subscriber-count>
<system-instance>
  system-instance
</system-instance>
<peer-instance>
  peer-instance
</peer-instance>
<capabilities>
  capabilities
</capabilities>
<adjacency-time>
  adjacency-time
</adjacency-time>
<peer-adjacency-time>
  peer-adjacency-time
</peer-adjacency-time>
<partition-type>
  partition-type
</partition-type>
```

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```
<partition-flag>
  partition-flag
</partition-flag>
<partition-identifier>
  partition-identifier
</partition-identifier>
<dead-time>
  dead-time
</dead-time>
</ancp-neighbor>
```

Description Information about a single ANCP neighbor

<ancp-neighbor>

Usage

```
<ancp-neighbor-information>
  <ancp-neighbor>
    <received-syn-count>
      received-syn-count
    </received-syn-count>
    <received-synack-count>
      received-synack-count
    </received-synack-count>
    <received-ack-count>
      received-ack-count
    </received-ack-count>
    <received-rstack-count>
      received-rstack-count
    </received-rstack-count>
    <received-port-up-count>
      received-port-up-count
    </received-port-up-count>
    <received-port-down-count>
      received-port-down-count
    </received-port-down-count>
    <received-oam-count>
      received-oam-count
    </received-oam-count>
    <received-other-count>
      received-other-count
    </received-other-count>
    <sent-syn-count>
      sent-syn-count
    </sent-syn-count>
    <sent-synack-count>
      sent-synack-count
    </sent-synack-count>
    <sent-ack-count>
      sent-ack-count
    </sent-ack-count>
    <sent-rstack-count>
      sent-rstack-count
    </sent-rstack-count>
```


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```
<sent-oam-count>
  sent-oam-count
</sent-oam-count>
<max-discovery-limit-exceed-count>
  max-discovery-limit-exceed-count
</max-discovery-limit-exceed-count>
<ip-address>
  ip-address
</ip-address>
<tcp-port>
  tcp-port
</tcp-port>
<up-time>
  up-time
</up-time>
<mac-address>
  mac-address
</mac-address>
<state>
  state
</state>
<neighbor-subscriber-count>
  neighbor-subscriber-count
</neighbor-subscriber-count>
<system-instance>
  system-instance
</system-instance>
<peer-instance>
  peer-instance
</peer-instance>
<capabilities>
  capabilities
</capabilities>
<adjacency-time>
  adjacency-time
</adjacency-time>
<peer-adjacency-time>
  peer-adjacency-time
</peer-adjacency-time>
<partition-type>
  partition-type
</partition-type>
<partition-flag>
  partition-flag
</partition-flag>
<partition-identifier>
  partition-identifier
</partition-identifier>
<dead-time>
  dead-time
</dead-time>
</ancp-neighbor>
</ancp-neighbor-information>
```

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Description Information about a single ANCP neighbor

<ancp-neighbor>

Usage

```
<ancp-subscriber-information>
 <ancp-neighbor>
  <received-syn-count>
   received-syn-count
  </received-syn-count>
  <received-synack-count>
   received-synack-count
  </received-synack-count>
  <received-ack-count>
   received-ack-count
  </received-ack-count>
  <received-rstack-count>
   received-rstack-count
  </received-rstack-count>
  <received-port-up-count>
   received-port-up-count
  </received-port-up-count>
  <received-port-down-count>
   received-port-down-count
  </received-port-down-count>
  <received-oam-count>
   received-oam-count
  </received-oam-count>
  <received-other-count>
   received-other-count
  </received-other-count>
  <sent-syn-count>
   sent-syn-count
  </sent-syn-count>
  <sent-synack-count>
   sent-synack-count
  </sent-synack-count>
  <sent-ack-count>
   sent-ack-count
  </sent-ack-count>
  <sent-rstack-count>
   sent-rstack-count
  </sent-rstack-count>
  <sent-oam-count>
   sent-oam-count
  </sent-oam-count>
  <max-discovery-limit-exceed-count>
   max-discovery-limit-exceed-count
  </max-discovery-limit-exceed-count>
  <ip-address>
   ip-address
  </ip-address>
  <tcp-port>
   tcp-port
  </tcp-port>
```


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```
<up-time>
  up-time
</up-time>
<mac-address>
  mac-address
</mac-address>
<state>
  state
</state>
<neighbor-subscriber-count>
  neighbor-subscriber-count
</neighbor-subscriber-count>
<system-instance>
  system-instance
</system-instance>
<peer-instance>
  peer-instance
</peer-instance>
<capabilities>
  capabilities
</capabilities>
<adjacency-time>
  adjacency-time
</adjacency-time>
<peer-adjacency-time>
  peer-adjacency-time
</peer-adjacency-time>
<partition-type>
  partition-type
</partition-type>
<partition-flag>
  partition-flag
</partition-flag>
<partition-identifier>
  partition-identifier
</partition-identifier>
<dead-time>
  dead-time
</dead-time>
</ancp-neighbor>
</ancp-subscriber-information>
```

Description Information about a single ANCP neighbor

<ancp-neighbor-configuration-entry>

Usage

```
<ancp-neighbor-configuration-information>
  <ancp-neighbor-configuration-entry>
    <record-number>
      record-number
    </record-number>
    <ancp-neighbor-ip>
      ancp-neighbor-ip
```

```
    </ancp-neighbor-ip>
    <ancp-neighbor-discovery-mode>
      ancp-neighbor-discovery-mode
    </ancp-neighbor-discovery-mode>
    <ancp-neighbor-ietf-mode>
      ancp-neighbor-ietf-mode
    </ancp-neighbor-ietf-mode>
    <ancp-neighbor-adjacency-timer>
      ancp-neighbor-adjacency-timer
    </ancp-neighbor-adjacency-timer>
    <ancp-neighbor-maximum-discovery-entries>
      ancp-neighbor-maximum-discovery-entries
    </ancp-neighbor-maximum-discovery-entries>
  </ancp-neighbor-configuration-entry>
</ancp-neighbor-configuration-information>
```

Description

<ancp-neighbor-configuration-information>

Usage

```
<ancp-neighbor-configuration-information>
  <ancp-neighbor-configuration-entry>....</ancp-neighbor-configuration-entry>
</ancp-neighbor-configuration-information>
```

Description

<ancp-neighbor-information>

Usage

```
<ancp-neighbor-information>
  <ancp-neighbor>....</ancp-neighbor>
</ancp-neighbor-information>
```

Description

<ancp-oam>

Usage

```
<ancp-oam>
  <ancp-oam-request-status>
    ancp-oam-request-status
  </ancp-oam-request-status>
  <ancp-oam-response-code>
    ancp-oam-response-code
  </ancp-oam-response-code>
  <ancp-oam-response-text>
    ancp-oam-response-text
  </ancp-oam-response-text>
  <ancp-oam-response-type>
    ancp-oam-response-type
  </ancp-oam-response-type>
```


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```
</ancp-oam>
```

Description Information about a single OAM request

<ancp-oam>

Usage

```
<ancp-oam-information>
  <ancp-oam>
    <ancp-oam-request-status>
      ancp-oam-request-status
    </ancp-oam-request-status>
    <ancp-oam-response-code>
      ancp-oam-response-code
    </ancp-oam-response-code>
    <ancp-oam-response-text>
      ancp-oam-response-text
    </ancp-oam-response-text>
    <ancp-oam-response-type>
      ancp-oam-response-type
    </ancp-oam-response-type>
  </ancp-oam>
</ancp-oam-information>
```

Description Information about a single OAM request

<ancp-oam-information>

Usage

```
<ancp-oam-information>
  <ancp-oam>....</ancp-oam>
</ancp-oam-information>
```

Description

<ancp-qos-adjust-entry>

Usage

```
<ancp-config-information>
  <ancp-qos-adjust-entry>
    <qos-adjust-adsl>
      qos-adjust-adsl
    </qos-adjust-adsl>
    <qos-adjust-adsl2>
      qos-adjust-adsl2
    </qos-adjust-adsl2>
    <qos-adjust-adsl2-plus>
      qos-adjust-adsl2-plus
    </qos-adjust-adsl2-plus>
    <qos-adjust-vdsl>
      qos-adjust-vdsl
```

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```
    </qos-adjust-vdsl>
    <qos-adjust-vdsl2>
      qos-adjust-vdsl2
    </qos-adjust-vdsl2>
    <qos-adjust-sdsl>
      qos-adjust-sdsl
    </qos-adjust-sdsl>
  </ancp-qos-adjust-entry>
</ancp-config-information>
```

Description

<ancp-scalar-entry>

Usage

```
<ancp-config-information>
  <ancp-scalar-entry>
    <qos-adjust>
      qos-adjust
    </qos-adjust>
    <ietf-mode>
      ietf-mode
    </ietf-mode>
    <adjacency-timer>
      adjacency-timer
    </adjacency-timer>
    <maximum-discovery-entries-neighbor>
      maximum-discovery-entries-neighbor
    </maximum-discovery-entries-neighbor>
    <wait-for-gsmp-syn>
      wait-for-gsmp-syn
    </wait-for-gsmp-syn>
    <gsmp-syn-timer>
      gsmp-syn-timer
    </gsmp-syn-timer>
  </ancp-scalar-entry>
</ancp-config-information>
```

Description

<ancp-statistics-information>

Usage

```
<ancp-statistics-information>
  <neighbor-count>
    neighbor-count
  </neighbor-count>
  <subscriber-count>
    subscriber-count
  </subscriber-count>
  <received-syn-count>
    received-syn-count
  </received-syn-count>
  <received-synack-count>
```


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```
  received-synack-count
 </received-synack-count>
 <received-ack-count>
  received-ack-count
 </received-ack-count>
 <received-rstack-count>
  received-rstack-count
 </received-rstack-count>
 <received-port-up-count>
  received-port-up-count
 </received-port-up-count>
 <received-port-down-count>
  received-port-down-count
 </received-port-down-count>
 <received-oam-count>
  received-oam-count
 </received-oam-count>
 <received-other-count>
  received-other-count
 </received-other-count>
 <sent-syn-count>
  sent-syn-count
 </sent-syn-count>
 <sent-synack-count>
  sent-synack-count
 </sent-synack-count>
 <sent-ack-count>
  sent-ack-count
 </sent-ack-count>
 <sent-rstack-count>
  sent-rstack-count
 </sent-rstack-count>
 <sent-oam-count>
  sent-oam-count
 </sent-oam-count>
 <accept-count>
  accept-count
 </accept-count>
 <accept-fail-count>
  accept-fail-count
 </accept-fail-count>
 <accept-config-deny-count>
  accept-config-deny-count
 </accept-config-deny-count>
</ancp-statistics-information>
```

Description

<ancp-subscriber>

Usage

```
<ancp-subscriber>
 <access-loop-identifier>
  access-loop-identifier
 </access-loop-identifier>
```

```
<access-loop-remote-identifier>
  access-loop-remote-identifier
</access-loop-remote-identifier>
<interface>
  interface
</interface>
<interface-type>
  interface-type
</interface-type>
<access-aggregate-circuit-identifier>
  access-aggregate-circuit-identifier
</access-aggregate-circuit-identifier>
<access-aggregate-circuit-binary-identifier>
  access-aggregate-circuit-binary-identifier
</access-aggregate-circuit-binary-identifier>
<dsl-type>
  dsl-type
</dsl-type>
<actual-net-data-upstream>
  actual-net-data-upstream
</actual-net-data-upstream>
<actual-net-data-downstream>
  actual-net-data-downstream
</actual-net-data-downstream>
<minimum-net-data-upstream>
  minimum-net-data-upstream
</minimum-net-data-upstream>
<minimum-net-data-downstream>
  minimum-net-data-downstream
</minimum-net-data-downstream>
<maximum-net-data-upstream>
  maximum-net-data-upstream
</maximum-net-data-upstream>
<maximum-net-data-downstream>
  maximum-net-data-downstream
</maximum-net-data-downstream>
<attainable-net-data-upstream>
  attainable-net-data-upstream
</attainable-net-data-upstream>
<attainable-net-data-downstream>
  attainable-net-data-downstream
</attainable-net-data-downstream>
<neighbor-ip-address>
  neighbor-ip-address
</neighbor-ip-address>
<minimum-low-power-data-upstream>
  minimum-low-power-data-upstream
</minimum-low-power-data-upstream>
<minimum-low-power-data-downstream>
  minimum-low-power-data-downstream
</minimum-low-power-data-downstream>
<maximum-interleave-delay-downstream>
  maximum-interleave-delay-downstream
</maximum-interleave-delay-downstream>
<maximum-interleave-delay-upstream>
  maximum-interleave-delay-upstream
```


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```
  </maximum-interleave-delay-upstream>
  <actual-interleave-delay-downstream>
    actual-interleave-delay-downstream
  </actual-interleave-delay-downstream>
  <actual-interleave-delay-upstream>
    actual-interleave-delay-upstream
  </actual-interleave-delay-upstream>
  <dsl-line-state>
    dsl-line-state
  </dsl-line-state>
  <dsl-line-data-link>
    dsl-line-data-link
  </dsl-line-data-link>
  <dsl-line-encapsulation>
    dsl-line-encapsulation
  </dsl-line-encapsulation>
  <dsl-line-encapsulation-payload>
    dsl-line-encapsulation-payload
  </dsl-line-encapsulation-payload>
</ancp-subscriber>
```

Description Information about a single ANCP subscriber

<ancp-subscriber>

Usage

```
<ancp-subscriber-information>
  <ancp-subscriber>
    <access-loop-identifier>
      access-loop-identifier
    </access-loop-identifier>
    <access-loop-remote-identifier>
      access-loop-remote-identifier
    </access-loop-remote-identifier>
    <interface>
      interface
    </interface>
    <interface-type>
      interface-type
    </interface-type>
    <access-aggregate-circuit-identifier>
      access-aggregate-circuit-identifier
    </access-aggregate-circuit-identifier>
    <access-aggregate-circuit-binary-identifier>
      access-aggregate-circuit-binary-identifier
    </access-aggregate-circuit-binary-identifier>
    <dsl-type>
      dsl-type
    </dsl-type>
    <actual-net-data-upstream>
      actual-net-data-upstream
    </actual-net-data-upstream>
    <actual-net-data-downstream>
      actual-net-data-downstream
```

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```
    </actual-net-data-downstream>
    <minimum-net-data-upstream>
      minimum-net-data-upstream
    </minimum-net-data-upstream>
    <minimum-net-data-downstream>
      minimum-net-data-downstream
    </minimum-net-data-downstream>
    <maximum-net-data-upstream>
      maximum-net-data-upstream
    </maximum-net-data-upstream>
    <maximum-net-data-downstream>
      maximum-net-data-downstream
    </maximum-net-data-downstream>
    <attainable-net-data-upstream>
      attainable-net-data-upstream
    </attainable-net-data-upstream>
    <attainable-net-data-downstream>
      attainable-net-data-downstream
    </attainable-net-data-downstream>
    <neighbor-ip-address>
      neighbor-ip-address
    </neighbor-ip-address>
    <minimum-low-power-data-upstream>
      minimum-low-power-data-upstream
    </minimum-low-power-data-upstream>
    <minimum-low-power-data-downstream>
      minimum-low-power-data-downstream
    </minimum-low-power-data-downstream>
    <maximum-interleave-delay-downstream>
      maximum-interleave-delay-downstream
    </maximum-interleave-delay-downstream>
    <maximum-interleave-delay-upstream>
      maximum-interleave-delay-upstream
    </maximum-interleave-delay-upstream>
    <actual-interleave-delay-downstream>
      actual-interleave-delay-downstream
    </actual-interleave-delay-downstream>
    <actual-interleave-delay-upstream>
      actual-interleave-delay-upstream
    </actual-interleave-delay-upstream>
    <dsl-line-state>
      dsl-line-state
    </dsl-line-state>
    <dsl-line-data-link>
      dsl-line-data-link
    </dsl-line-data-link>
    <dsl-line-encapsulation>
      dsl-line-encapsulation
    </dsl-line-encapsulation>
    <dsl-line-encapsulation-payload>
      dsl-line-encapsulation-payload
    </dsl-line-encapsulation-payload>
  </ancp-subscriber>
</ancp-subscriber-information>
```


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Description Information about a single ANCP subscriber

<ancp-subscriber-information>

Usage

```
<ancp-subscriber-information>
  <ancp-subscriber>....</ancp-subscriber>
  <ancp-neighbor>....</ancp-neighbor>
</ancp-subscriber-information>
```

Description

Summary of APPIDD Response Tags

<appid-application-group>

Usage

```
<appid-application-group>
  <application-group-summary>....</application-group-summary>
  <application-group-detail>....</application-group-detail>
</appid-application-group>
```

Description

<appid-application-group-statistics>

Usage

```
<appid-application-group-statistics-information>
  <appid-application-group-statistics>
    <application-name>
      application-name
    </application-name>
    <sessions>
      sessions
    </sessions>
    <bytes>
      bytes
    </bytes>
  </appid-application-group-statistics>
</appid-application-group-statistics-information>
```

Description

<appid-application-group-statistics-information>

Usage

```
<appid-application-group-statistics-information>
  <last-reset-group-stats>....</last-reset-group-stats>
  <appid-application-group-statistics>....</appid-application-group-statistics>
</appid-application-group-statistics-information>
```

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Description

<appid-application-signature>

Usage

```
<appid-application-signature>
  <application-signature-summary>....</application-signature-summary>
  <application-signature-detail>....</application-signature-detail>
</appid-application-signature>
```

Description

<appid-application-statistics>

Usage

```
<appid-application-statistics-information>
  <appid-application-statistics>
    <application-name>
      application-name
    </application-name>
    <sessions>
      sessions
    </sessions>
    <bytes>
      bytes
    </bytes>
  </appid-application-statistics>
</appid-application-statistics-information>
```

Description

<appid-application-statistics-information>

Usage

```
<appid-application-statistics-information>
  <last-reset-stats>....</last-reset-stats>
  <appid-application-statistics>....</appid-application-statistics>
</appid-application-statistics-information>
```

Description

<appid-application-system-cache>

Usage

```
<appid-application-system-cache-information>
  <appid-application-system-cache>
    <ip-address>
      ip-address
    </ip-address>
    <port>
      port
    </port>
    <protocol>
```


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```
    protocol
   </protocol>
   <appid-service>
    appid-service
   </appid-service>
   <appid-application>
    appid-application
   </appid-application>
   <cpu-id>
    cpu-id
   </cpu-id>
  </appid-application-system-cache>
</appid-application-system-cache-information>
```

Description

<appid-application-system-cache-information>

Usage

```
<appid-application-system-cache-information>
  <pic>
   pic
  </pic>
  <appid-cache-configuration>....</appid-cache-configuration>
  <appid-application-system-cache>....</appid-application-system-cache>
<appid-application-system-cache-usp>....</appid-application-system-cache-usp>

</appid-application-system-cache-information>
```

Description

<appid-application-system-cache-usp>

Usage

```
<appid-application-system-cache-information>
  <appid-application-system-cache-usp>
   <virtual-system-identifier>
    virtual-system-identifier
   </virtual-system-identifier>
   <ip-address>
    ip-address
   </ip-address>
   <ipv6-address>
    ipv6-address
   </ipv6-address>
   <port>
    port
   </port>
   <protocol>
    protocol
   </protocol>
   <index>
    index
   </index>
```

```
    <appid-application>
      appid-application
    </appid-application>
    <application-groups>
      application-groups
    </application-groups>
  </appid-application-system-cache-usp>
</appid-application-system-cache-information>
```

Description

<appid-cache-configuration>

Usage

```
<appid-application-system-cache-information>
  <appid-cache-configuration>
    <appid-asc-enable>
      appid-asc-enable
    </appid-asc-enable>
    <appid-nested-asc-enable>
      appid-nested-asc-enable
    </appid-nested-asc-enable>
    <appid-cache-unknown>
      appid-cache-unknown
    </appid-cache-unknown>
    <appid-cache-timeout>
      appid-cache-timeout
    </appid-cache-timeout>
  </appid-cache-configuration>
</appid-application-system-cache-information>
```

Description

<appid-counter>

Usage

```
<appid-counter-information>
  <appid-counter>
    <pic>
      pic
    </pic>
    <total-sessions>
      total-sessions
    </total-sessions>
    <total-matched-sessions>
      total-matched-sessions
    </total-matched-sessions>
    <total-unknown-sessions>
      total-unknown-sessions
    </total-unknown-sessions>
    <signature-matched-sessions>
      signature-matched-sessions
    </signature-matched-sessions>
    <uni-signature-matched-sessions>
```


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```
      uni-signature-matched-sessions
    </uni-signature-matched-sessions>
    <signature-unknown-sessions>
      signature-unknown-sessions
    </signature-unknown-sessions>
    <signature-encrypted-sessions>
      signature-encrypted-sessions
    </signature-encrypted-sessions>
    <signature-p2p-sessions>
      signature-p2p-sessions
    </signature-p2p-sessions>
    <address-matched-sessions>
      address-matched-sessions
    </address-matched-sessions>
    <address-unknown-sessions>
      address-unknown-sessions
    </address-unknown-sessions>
    <port-matched-sessions>
      port-matched-sessions
    </port-matched-sessions>
    <port-unknown-sessions>
      port-unknown-sessions
    </port-unknown-sessions>
    <icmp-matched-sessions>
      icmp-matched-sessions
    </icmp-matched-sessions>
    <icmp-unknown-sessions>
      icmp-unknown-sessions
    </icmp-unknown-sessions>
    <ip-protocol-matched-sessions>
      ip-protocol-matched-sessions
    </ip-protocol-matched-sessions>
    <ip-protocol-unknown-sessions>
      ip-protocol-unknown-sessions
    </ip-protocol-unknown-sessions>
    <application-system-cache-hit>
      application-system-cache-hit
    </application-system-cache-hit>
    <application-system-cache-miss>
      application-system-cache-miss
    </application-system-cache-miss>
    <protocol-matched-sessions>
      protocol-matched-sessions
    </protocol-matched-sessions>
    <protocol-unknown-sessions>
      protocol-unknown-sessions
    </protocol-unknown-sessions>
  </appid-counter>
</appid-counter-information>
```

Description

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<appid-counter-information>

Usage

```
<appid-counter-information>
  <pic>
    pic
  </pic>
  <appid-counter-usp>....</appid-counter-usp>
  <appid-counter>....</appid-counter>
</appid-counter-information>
```

Description Application identification counters

<appid-counter-usp>

Usage

```
<appid-counter-information>
  <appid-counter-usp>
    <counter-name>
      counter-name
    </counter-name>
    <counter-value>
      counter-value
    </counter-value>
  </appid-counter-usp>
</appid-counter-information>
```

Description

<appid-package-version>

Usage

```
<appid-package-version>
  <version-detail>
    version-detail
  </version-detail>
</appid-package-version>
```

Description

<application-group-detail>

Usage

```
<appid-application-group>
  <application-group-detail>
    <application-expired-date>
      application-expired-date
    </application-expired-date>
    <group-name>
      group-name
    </group-name>
    <group-id>
```


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```
      group-id
    </group-id>
    <group-description>
      group-description
    </group-description>
    <group-disabled>
      group-disabled
    </group-disabled>
    <number-applications>
      number-applications
    </number-applications>
    <number-sub-groups>
      number-sub-groups
    </number-sub-groups>
    <number-parent-groups>
      number-parent-groups
    </number-parent-groups>
    <application-list-detail>....</application-list-detail>
    <sub-groups-list-detail>....</sub-groups-list-detail>
    <parent-groups-list-detail>....</parent-groups-list-detail>
  </application-group-detail>
</appid-application-group>
```

Description

<application-group-list>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <application-signature-detail-header>
      <application-group-list>
        <group-name>
          group-name
        </group-name>
      </application-group-list>
    </application-signature-detail-header>
  </application-signature-detail>
</appid-application-signature>
```

Description

<application-group-summary>

Usage

```
<appid-application-group>
  <application-group-summary>
    <total-groups>
      total-groups
    </total-groups>
    <application-group-summary-list>....</application-group-summary-list>
  </application-group-summary>
</appid-application-group>
```

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Description Application group summary

<application-group-summary-list>

Usage

```
<appid-application-group>
  <application-group-summary>
    <application-group-summary-list>
      <group-name>
        group-name
      </group-name>
      <group-disabled>
        group-disabled
      </group-disabled>
      <group-id>
        group-id
      </group-id>
    </application-group-summary-list>
  </application-group-summary>
</appid-application-group>
```

Description

<application-list-detail>

Usage

```
<appid-application-group>
  <application-group-detail>
    <application-list-detail>
      <application-name>
        application-name
      </application-name>
    </application-list-detail>
  </application-group-detail>
</appid-application-group>
```

Description

<application-signature-detail>

Usage

```
<appid-application-signature>
  <application-signature-detail>
   <application-signature-detail-header>....</application-signature-detail-header>

   <regular-application-signature-detail>....</regular-application-signature-detail>

   <nested-application-signature-detail>....</nested-application-signature-detail>

  </application-signature-detail>
</appid-application-signature>
```


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Description

<application-signature-detail-header>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <application-signature-detail-header>
      <application-expired-date>
        application-expired-date
      </application-expired-date>
      <application-name>
        application-name
      </application-name>
      <application-type>
        application-type
      </application-type>
      <application-id>
        application-id
      </application-id>
      <application-description>
        application-description
      </application-description>
      <application-disabled>
        application-disabled
      </application-disabled>
      <application-number-parent-groups>
        application-number-parent-groups
      </application-number-parent-groups>
      <application-number-signatures>
        application-number-signatures
      </application-number-signatures>
      <application-group-list>....</application-group-list>
      <application-tag-list>....</application-tag-list>
    </application-signature-detail-header>
  </application-signature-detail>
</appid-application-signature>
```

Description

<application-signature-list>

Usage

```
<appid-application-signature>
  <application-signature-summary>
    <application-signature-list>
      <application-name>
        application-name
      </application-name>
      <application-disabled>
        application-disabled
      </application-disabled>
      <application-id>
        application-id
      </application-id>
```

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```
      <application-order>
        application-order
      </application-order>
    </application-signature-list>
  </application-signature-summary>
</appid-application-signature>
```

Description

<application-signature-summary>

Usage

```
<appid-application-signature>
  <application-signature-summary>
    <total-applications>
      total-applications
    </total-applications>
    <total-nested-applications>
      total-nested-applications
    </total-nested-applications>
    <application-signature-list>....</application-signature-list>
  </application-signature-summary>
</appid-application-signature>
```

Description Application signature summary

<application-tag-list>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <application-signature-detail-header>
      <application-tag-list>
        <application-tag-name>
          application-tag-name
        </application-tag-name>
        <application-tag-value>
          application-tag-value
        </application-tag-value>
      </application-tag-list>
    </application-signature-detail-header>
  </application-signature-detail>
</appid-application-signature>
```

Description

<apppack-download-status>

Usage

```
<apppack-download-status>
  <apppack-download-status-detail>
    apppack-download-status-detail
```


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```
  </apppack-download-status-detail>
</apppack-download-status>
```

Description Status of application package download

<apppack-expired-application-list>

Usage

```
<apppack-expired-list-information>
  <apppack-expired-application-list>
    <application-name>
      application-name
    </application-name>
    <expired-time>
      expired-time
    </expired-time>
  </apppack-expired-application-list>
</apppack-expired-list-information>
```

Description

<apppack-expired-group-list>

Usage

```
<apppack-expired-list-information>
  <apppack-expired-group-list>
    <group-name>
      group-name
    </group-name>
    <expired-time>
      expired-time
    </expired-time>
  </apppack-expired-group-list>
</apppack-expired-list-information>
```

Description

<apppack-expired-list-information>

Usage

```
<apppack-expired-list-information>
  <apppack-expired-application-list>....</apppack-expired-application-list>
  <apppack-expired-group-list>....</apppack-expired-group-list>
</apppack-expired-list-information>
```

Description Show expired application and application group

<apppack-install-status>

Usage

```
<apppack-install-status>
```

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```
<apppack-install-status-detail>
  apppack-install-status-detail
 </apppack-install-status-detail>
</apppack-install-status>
```

Description Status of application package install

<apppack-uninstall-status>

Usage

```
<apppack-uninstall-status>
 <apppack-uninstall-status-detail>
  apppack-uninstall-status-detail
 </apppack-uninstall-status-detail>
</apppack-uninstall-status>
```

Description Status of application package uninstall

<last-reset-group-stats>

Usage

```
<appid-application-group-statistics-information>
 <last-reset-group-stats>
  <last-reset>
   last-reset
  </last-reset>
  <elapsed-time>
   elapsed-time
  </elapsed-time>
 </last-reset-group-stats>
</appid-application-group-statistics-information>
```

Description

<last-reset-stats>

Usage

```
<appid-application-statistics-information>
 <last-reset-stats>
  <last-reset>
   last-reset
  </last-reset>
  <elapsed-time>
   elapsed-time
  </elapsed-time>
 </last-reset-stats>
</appid-application-statistics-information>
```

Description

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<nested-application-signature-detail>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <nested-application-signature-detail>
      <nested-signature-name>
        nested-signature-name
      </nested-signature-name>
      <nested-signature-chain-order>
        nested-signature-chain-order
      </nested-signature-chain-order>
      <nested-signature-max-trans>
        nested-signature-max-trans
      </nested-signature-max-trans>
      <nested-signature-order>
        nested-signature-order
      </nested-signature-order>
      <nested-l7protocol>
        nested-l7protocol
      </nested-l7protocol>
      <nested-signature-num-members>
        nested-signature-num-members
      </nested-signature-num-members>
      <nested-signature-member-list>....</nested-signature-member-list>
    </nested-application-signature-detail>
  </application-signature-detail>
</appid-application-signature>
```

Description

<nested-signature-member-list>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <nested-application-signature-detail>
      <nested-signature-member-list>
        <nested-signature-member-index>
          nested-signature-member-index
        </nested-signature-member-index>
        <nested-signature-member-context>
          nested-signature-member-context
        </nested-signature-member-context>
        <nested-signature-member-pattern>
          nested-signature-member-pattern
        </nested-signature-member-pattern>
        <nested-signature-member-direction>
          nested-signature-member-direction
        </nested-signature-member-direction>
      </nested-signature-member-list>
    </nested-application-signature-detail>
  </application-signature-detail>
```

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```
</appid-application-signature>
```

Description

<parent-groups-list-detail>

Usage

```
<appid-application-group>
  <application-group-detail>
    <parent-groups-list-detail>
      <group-name>
        group-name
      </group-name>
    </parent-groups-list-detail>
  </application-group-detail>
</appid-application-group>
```

Description

<regular-application-signature-detail>

Usage

```
<appid-application-signature>
  <application-signature-detail>
    <regular-application-signature-detail>
      <application-default-ports>
        application-default-ports
      </application-default-ports>
      <signature-port-range>
        signature-port-range
      </signature-port-range>
      <signature-cts-dfa-pattern>
        signature-cts-dfa-pattern
      </signature-cts-dfa-pattern>
      <signature-cts-pcre-pattern>
        signature-cts-pcre-pattern
      </signature-cts-pcre-pattern>
      <signature-stc-dfa-pattern>
        signature-stc-dfa-pattern
      </signature-stc-dfa-pattern>
      <signature-stc-pcre-pattern>
        signature-stc-pcre-pattern
      </signature-stc-pcre-pattern>
      <application-min-data>
        application-min-data
      </application-min-data>
      <application-min-data-stc>
        application-min-data-stc
      </application-min-data-stc>
      <application-order>
        application-order
      </application-order>
    </regular-application-signature-detail>
  </application-signature-detail>
```


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```
</appid-application-signature>
```

Description

<request-predefined-operation-status>

Usage

```
<request-predefined-operation-status>
  <request-predefined-operation-status-detail>
    request-predefined-operation-status-detail
  </request-predefined-operation-status-detail>
</request-predefined-operation-status>
```

Description Status of request predefined application or group operation

<sub-groups-list-detail>

Usage

```
<appid-application-group>
  <application-group-detail>
    <sub-groups-list-detail>
      <group-name>
        group-name
      </group-name>
    </sub-groups-list-detail>
  </application-group-detail>
</appid-application-group>
```

Description

Summary of Application Traffic Control Response Tags

<appqos-counter>

Usage

```
<appqos-counter-information>
  <pic>
    <appqos-counter>
      <counter-name>
        counter-name
      </counter-name>
      <counter-value>
        counter-value
      </counter-value>
    </appqos-counter>
  </pic>
</appqos-counter-information>
```

Description

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<appqos-counter>

Usage

```
<appqos-rule-statistics-information>
  <pic>
    <appqos-counter>
      <counter-name>
        counter-name
      </counter-name>
      <counter-value>
        counter-value
      </counter-value>
    </appqos-counter>
  </pic>
</appqos-rule-statistics-information>
```

Description

<appqos-counter>

Usage

```
<appqos-rate-limiter-statistics-information>
  <pic>
    <appqos-counter>
      <counter-name>
        counter-name
      </counter-name>
      <counter-value>
        counter-value
      </counter-value>
    </appqos-counter>
  </pic>
</appqos-rate-limiter-statistics-information>
```

Description

<appqos-counter-information>

Usage

```
<appqos-counter-information>
  <pic>....</pic>
</appqos-counter-information>
```

Description Application traffic control counters

<appqos-rate-limiter-statistics>

Usage

```
<appqos-counter-information>
  <pic>
    <appqos-rate-limiter-statistics>
      <application-ruleset-name>
```


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```
      application-ruleset-name
     </application-ruleset-name>
     <application-name>
      application-name
     </application-name>
     <cts-rate-limiter>
      cts-rate-limiter
     </cts-rate-limiter>
     <cts-rate>
      cts-rate
     </cts-rate>
     <stc-rate-limiter>
      stc-rate-limiter
     </stc-rate-limiter>
     <stc-rate>
      stc-rate
     </stc-rate>
    </appqos-rate-limiter-statistics>
   </pic>
</appqos-counter-information>
```

Description

<appqos-rate-limiter-statistics>

Usage

```
<appqos-rule-statistics-information>
 <pic>
  <appqos-rate-limiter-statistics>
   <application-ruleset-name>
    application-ruleset-name
   </application-ruleset-name>
   <application-name>
    application-name
   </application-name>
   <cts-rate-limiter>
    cts-rate-limiter
   </cts-rate-limiter>
   <cts-rate>
    cts-rate
   </cts-rate>
   <stc-rate-limiter>
    stc-rate-limiter
   </stc-rate-limiter>
   <stc-rate>
    stc-rate
   </stc-rate>
  </appqos-rate-limiter-statistics>
 </pic>
</appqos-rule-statistics-information>
```

Description

<appqos-rate-limiter-statistics>

Usage

```
<appqos-rate-limiter-statistics-information>
  <pic>
    <appqos-rate-limiter-statistics>
      <application-ruleset-name>
        application-ruleset-name
      </application-ruleset-name>
      <application-name>
        application-name
      </application-name>
      <cts-rate-limiter>
        cts-rate-limiter
      </cts-rate-limiter>
      <cts-rate>
        cts-rate
      </cts-rate>
      <stc-rate-limiter>
        stc-rate-limiter
      </stc-rate-limiter>
      <stc-rate>
        stc-rate
      </stc-rate>
    </appqos-rate-limiter-statistics>
  </pic>
</appqos-rate-limiter-statistics-information>
```

Description

<appqos-rate-limiter-statistics-information>

Usage

```
<appqos-rate-limiter-statistics-information>
  <pic>....</pic>
</appqos-rate-limiter-statistics-information>
```

Description Application traffic control rate limiter statistics information

<appqos-rule-statistics>

Usage

```
<appqos-counter-information>
  <pic>
    <appqos-rule-statistics>
      <ruleset-name>
        ruleset-name
      </ruleset-name>
      <rule-name>
        rule-name
      </rule-name>
      <rule-hits>
        rule-hits
```


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```
      </rule-hits>
    </appqos-rule-statistics>
  </pic>
</appqos-counter-information>
```

Description

<appqos-rule-statistics>

Usage

```
<appqos-rule-statistics-information>
  <pic>
    <appqos-rule-statistics>
      <ruleset-name>
        ruleset-name
      </ruleset-name>
      <rule-name>
        rule-name
      </rule-name>
      <rule-hits>
        rule-hits
      </rule-hits>
    </appqos-rule-statistics>
  </pic>
</appqos-rule-statistics-information>
```

Description

<appqos-rule-statistics>

Usage

```
<appqos-rate-limiter-statistics-information>
  <pic>
    <appqos-rule-statistics>
      <ruleset-name>
        ruleset-name
      </ruleset-name>
      <rule-name>
        rule-name
      </rule-name>
      <rule-hits>
        rule-hits
      </rule-hits>
    </appqos-rule-statistics>
  </pic>
</appqos-rate-limiter-statistics-information>
```

Description

<appqos-rule-statistics-information>

Usage

```
<appqos-rule-statistics-information>
```

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```
  <pic>....</pic>
</appqos-rule-statistics-information>
```

Description Application traffic control rule statistics information

<pic>

Usage

```
<appqos-counter-information>
  <pic>
    <name>
      name
    </name>
    <appqos-counter>....</appqos-counter>
    <appqos-rule-statistics>....</appqos-rule-statistics>
    <appqos-rate-limiter-statistics>....</appqos-rate-limiter-statistics>
  </pic>
</appqos-counter-information>
```

Description

<pic>

Usage

```
<appqos-rule-statistics-information>
  <pic>
    <name>
      name
    </name>
    <appqos-counter>....</appqos-counter>
    <appqos-rule-statistics>....</appqos-rule-statistics>
    <appqos-rate-limiter-statistics>....</appqos-rate-limiter-statistics>
  </pic>
</appqos-rule-statistics-information>
```

Description

<pic>

Usage

```
<appqos-rate-limiter-statistics-information>
  <pic>
    <name>
      name
    </name>
    <appqos-counter>....</appqos-counter>
    <appqos-rule-statistics>....</appqos-rule-statistics>
    <appqos-rate-limiter-statistics>....</appqos-rate-limiter-statistics>
  </pic>
</appqos-rate-limiter-statistics-information>
```


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Description

Summary of APS Response Tags

<aps-interface>

Usage

```
<aps-interface>
  <aps-interface-name>
    aps-interface-name
  </aps-interface-name>
  <aps-interface-group>
    aps-interface-group
  </aps-interface-group>
  <aps-interface-circuit-type>
    aps-interface-circuit-type
  </aps-interface-circuit-type>
  <aps-interface-circuit-state>
    aps-interface-circuit-state
  </aps-interface-circuit-state>
  <aps-interface-state>
    aps-interface-state
  </aps-interface-state>
  <aps-neighbor>
    aps-neighbor
  </aps-neighbor>
  <aps-adjacent-state>
    aps-adjacent-state
  </aps-adjacent-state>
  <aps-neighbor-select-state>
    aps-neighbor-select-state
  </aps-neighbor-select-state>
  <aps-time-remaining>
    aps-time-remaining
  </aps-time-remaining>
  <aps-channel-state>
    aps-channel-state
  </aps-channel-state>
  <aps-config-state>
    aps-config-state
  </aps-config-state>
  <aps-config-state-circuit>
    aps-config-state-circuit
  </aps-config-state-circuit>
  <aps-loop-circuit-type>
    aps-loop-circuit-type
  </aps-loop-circuit-type>
  <aps-loop-circuit-name>
    aps-loop-circuit-name
  </aps-loop-circuit-name>
  <aps-pair-interface-name>
    aps-pair-interface-name
  </aps-pair-interface-name>
  <aps-pair-group-name>
    aps-pair-group-name
```

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```
</aps-pair-group-name>
<aps-local-mode>
  aps-local-mode
</aps-local-mode>
<aps-neighbor-mode>
  aps-neighbor-mode
</aps-neighbor-mode>
<aps-request-k1>
  aps-request-k1
</aps-request-k1>
<aps-request-k2>
  aps-request-k2
</aps-request-k2>
<aps-receive-k1>
  aps-receive-k1
</aps-receive-k1>
<aps-transmit-k1>
  aps-transmit-k1
</aps-transmit-k1>
<aps-receive-k2>
  aps-receive-k2
</aps-receive-k2>
<aps-transmit-k2>
  aps-transmit-k2
</aps-transmit-k2>
<aps-neighbor-k1>
  aps-neighbor-k1
</aps-neighbor-k1>
<aps-neighbor-paired-request>
  aps-neighbor-paired-request
</aps-neighbor-paired-request>
<aps-revert-time>
  aps-revert-time
</aps-revert-time>
<aps-wait-to-restore-time>
  aps-wait-to-restore-time
</aps-wait-to-restore-time>
<aps-annex-b>
  aps-annex-b
</aps-annex-b>
<aps-neighbor-revert-time>
  aps-neighbor-revert-time
</aps-neighbor-revert-time>
<aps-neighbor-wait-to-restore-time>
  aps-neighbor-wait-to-restore-time
</aps-neighbor-wait-to-restore-time>
<aps-remaining-revert-time>
  aps-remaining-revert-time
</aps-remaining-revert-time>
<aps-remaining-wait-to-restore-time>
  aps-remaining-wait-to-restore-time
</aps-remaining-wait-to-restore-time>
<aps-remaining-forced-revert-time>
  aps-remaining-forced-revert-time
</aps-remaining-forced-revert-time>
<aps-remaining-hello-timer>
```


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```
    aps-remaining-hello-timer
   </aps-remaining-hello-timer>
   <aps-remaining-update-timer>
    aps-remaining-update-timer
   </aps-remaining-update-timer>
   <aps-remaining-holddown-timer>
    aps-remaining-holddown-timer
   </aps-remaining-holddown-timer>
  </aps-interface>
```

Description Information about an Automatic Protection Switching interface

<aps-interface>

Usage

```
<aps-interface-information>
 <aps-interface>
  <aps-interface-name>
   aps-interface-name
  </aps-interface-name>
  <aps-interface-group>
   aps-interface-group
  </aps-interface-group>
  <aps-interface-circuit-type>
   aps-interface-circuit-type
  </aps-interface-circuit-type>
  <aps-interface-circuit-state>
   aps-interface-circuit-state
  </aps-interface-circuit-state>
  <aps-interface-state>
   aps-interface-state
  </aps-interface-state>
  <aps-neighbor>
   aps-neighbor
  </aps-neighbor>
  <aps-adjacent-state>
   aps-adjacent-state
  </aps-adjacent-state>
  <aps-neighbor-select-state>
   aps-neighbor-select-state
  </aps-neighbor-select-state>
  <aps-time-remaining>
   aps-time-remaining
  </aps-time-remaining>
  <aps-channel-state>
   aps-channel-state
  </aps-channel-state>
  <aps-config-state>
   aps-config-state
  </aps-config-state>
  <aps-config-state-circuit>
   aps-config-state-circuit
  </aps-config-state-circuit>
  <aps-loop-circuit-type>
```

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```
  aps-loop-circuit-type
</aps-loop-circuit-type>
<aps-loop-circuit-name>
  aps-loop-circuit-name
</aps-loop-circuit-name>
<aps-pair-interface-name>
  aps-pair-interface-name
</aps-pair-interface-name>
<aps-pair-group-name>
  aps-pair-group-name
</aps-pair-group-name>
<aps-local-mode>
  aps-local-mode
</aps-local-mode>
<aps-neighbor-mode>
  aps-neighbor-mode
</aps-neighbor-mode>
<aps-request-k1>
  aps-request-k1
</aps-request-k1>
<aps-request-k2>
  aps-request-k2
</aps-request-k2>
<aps-receive-k1>
  aps-receive-k1
</aps-receive-k1>
<aps-transmit-k1>
  aps-transmit-k1
</aps-transmit-k1>
<aps-receive-k2>
  aps-receive-k2
</aps-receive-k2>
<aps-transmit-k2>
  aps-transmit-k2
</aps-transmit-k2>
<aps-neighbor-k1>
  aps-neighbor-k1
</aps-neighbor-k1>
<aps-neighbor-paired-request>
  aps-neighbor-paired-request
</aps-neighbor-paired-request>
<aps-revert-time>
  aps-revert-time
</aps-revert-time>
<aps-wait-to-restore-time>
  aps-wait-to-restore-time
</aps-wait-to-restore-time>
<aps-annex-b>
  aps-annex-b
</aps-annex-b>
<aps-neighbor-revert-time>
  aps-neighbor-revert-time
</aps-neighbor-revert-time>
<aps-neighbor-wait-to-restore-time>
  aps-neighbor-wait-to-restore-time
</aps-neighbor-wait-to-restore-time>
```


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```
    <aps-remaining-revert-time>
      aps-remaining-revert-time
    </aps-remaining-revert-time>
    <aps-remaining-wait-to-restore-time>
      aps-remaining-wait-to-restore-time
    </aps-remaining-wait-to-restore-time>
    <aps-remaining-forced-revert-time>
      aps-remaining-forced-revert-time
    </aps-remaining-forced-revert-time>
    <aps-remaining-hello-timer>
      aps-remaining-hello-timer
    </aps-remaining-hello-timer>
    <aps-remaining-update-timer>
      aps-remaining-update-timer
    </aps-remaining-update-timer>
    <aps-remaining-holddown-timer>
      aps-remaining-holddown-timer
    </aps-remaining-holddown-timer>
  </aps-interface>
</aps-interface-information>
```

Description Information about an Automatic Protection Switching interface

<aps-interface-information>

Usage

```
<aps-interface-information>
  <aps-interface>....</aps-interface>
</aps-interface-information>
```

Description Information about one or more Automatic Protection Switching interfaces

Summary of ARP Response Tags

<arp-table-entry>

Usage

```
<arp-table-entry>
  <mac-address>
    mac-address
  </mac-address>
  <ip-address>
    ip-address
  </ip-address>
  <hostname>
    hostname
  </hostname>
  <interface-name>
    interface-name
  </interface-name>
  <arp-table-entry-flags>....</arp-table-entry-flags>
  <time-to-expire>
```

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```
    time-to-expire
   </time-to-expire>
  </arp-table-entry>
```

Description Information about an entry in the ARP table

<arp-table-entry>

Usage

```
<arp-table-information>
  <arp-table-entry>
    <mac-address>
      mac-address
    </mac-address>
    <ip-address>
      ip-address
    </ip-address>
    <hostname>
      hostname
    </hostname>
    <interface-name>
      interface-name
    </interface-name>
    <arp-table-entry-flags>....</arp-table-entry-flags>
    <time-to-expire>
      time-to-expire
    </time-to-expire>
  </arp-table-entry>
</arp-table-information>
```

Description Information about an entry in the ARP table

<arp-table-entry-flags>

Usage

```
<arp-table-entry-flags>
  <none>
    none
  </none>
  <permanent>
    permanent
  </permanent>
  <published>
    published
  </published>
  <dead>
    dead
  </dead>
  <free>
    free
  </free>
```


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```
</arp-table-entry-flags>
```

Description One or more status flags for the ARP entry

<arp-table-entry-flags>

Usage

```
<arp-table-entry>
  <arp-table-entry-flags>
    <none>
      none
    </none>
    <permanent>
      permanent
    </permanent>
    <published>
      published
    </published>
    <dead>
      dead
    </dead>
    <free>
      free
    </free>
  </arp-table-entry-flags>
</arp-table-entry>
```

Description One or more status flags for the ARP entry

<arp-table-entry-flags>

Usage

```
<arp-table-information>
  <arp-table-entry>
    <arp-table-entry-flags>
      <none>
        none
      </none>
      <permanent>
        permanent
      </permanent>
      <published>
        published
      </published>
      <dead>
        dead
      </dead>
      <free>
        free
      </free>
    </arp-table-entry-flags>
  </arp-table-entry>
```

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```
</arp-table-information>
```

Description One or more status flags for the ARP entry

<arp-table-information>

Usage

```
<arp-table-information>
  <arp-table-entry>....</arp-table-entry>
  <arp-entry-count>
    arp-entry-count
  </arp-entry-count>
</arp-table-information>
```

Description Information about one or more entries in the ARP table

<clear-arp-table-result>

Usage

```
<clear-arp-table-result>
  <ip-address>
    ip-address
  </ip-address>
  <clear-success>
    clear-success
  </clear-success>
</clear-arp-table-result>
```

Description Results of a clear ARP command

<clear-arp-table-result>

Usage

```
<clear-arp-table-results>
  <clear-arp-table-result>
    <ip-address>
      ip-address
    </ip-address>
    <clear-success>
      clear-success
    </clear-success>
  </clear-arp-table-result>
</clear-arp-table-results>
```

Description Results of a clear ARP command

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<clear-arp-table-results>

Usage

```
<clear-arp-table-results>
  <clear-arp-table-result>....</clear-arp-table-result>
</clear-arp-table-results>
```

Description Clear ARP table entry results

Summary of Authentication Response Tags

<aaa-module-accounting-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-accounting-statistics>
    <requests>
      requests
    </requests>
    <accounting-response-failures>
      accounting-response-failures
    </accounting-response-failures>
    <accounting-response-success>
      accounting-response-success
    </accounting-response-success>
    <timeouts>
      timeouts
    </timeouts>
    <multistack-suppressions>
      multistack-suppressions
    </multistack-suppressions>
  </aaa-module-accounting-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-address-assignment-client-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-address-assignment-client-statistics>
    <client-name>
      client-name
    </client-name>
    <out-of-memory>
      out-of-memory
    </out-of-memory>
    <no-matches>
      no-matches
    </no-matches>
  </aaa-module-address-assignment-client-statistics>
```

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```
</aaa-module-statistics>
```

Description

<aaa-module-address-assignment-pool-statistics>

Usage

```
<aaa-module-statistics>
 <aaa-module-address-assignment-pool-statistics>
  <pool-name>
   pool-name
  </pool-name>
  <link-name>
   link-name
  </link-name>
  <out-of-memory>
   out-of-memory
  </out-of-memory>
  <out-of-addresses>
   out-of-addresses
  </out-of-addresses>
  <total-addresses>
   total-addresses
  </total-addresses>
  <used-addresses>
   used-addresses
  </used-addresses>
  <pool-usage>
   pool-usage
  </pool-usage>
 </aaa-module-address-assignment-pool-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-authentication-statistics>

Usage

```
<aaa-module-statistics>
 <aaa-module-authentication-statistics>
  <requests>
   requests
  </requests>
  <multistack-requests>
   multistack-requests
  </multistack-requests>
  <accepts>
   accepts
  </accepts>
  <rejects>
   rejects
  </rejects>
  <challenges>
   challenges
```


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```
    </challenges>
    <timeouts>
      timeouts
    </timeouts>
  </aaa-module-authentication-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-dynamic-requests-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-dynamic-requests-statistics>
    <requests>
      requests
    </requests>
    <processed-ok>
      processed-ok
    </processed-ok>
    <processing-error>
      processing-error
    </processing-error>
    <silent-drops>
      silent-drops
    </silent-drops>
  </aaa-module-dynamic-requests-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-radius-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-radius-statistics>
    <server-address>
      server-address
    </server-address>
    <profile>
      profile
    </profile>
    <max-outstanding>
      max-outstanding
    </max-outstanding>
    <current-outstanding>
      current-outstanding
    </current-outstanding>
    <peak-outstanding>
      peak-outstanding
    </peak-outstanding>
    <fail-outstanding>
      fail-outstanding
    </fail-outstanding>
```

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```
    <radius-statistics-error>
     radius-statistics-error
    </radius-statistics-error>
   </aaa-module-radius-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-re-authentication-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-re-authentication-statistics>
    <requests>
     requests
    </requests>
    <accepts>
     accepts
    </accepts>
    <aborts>
     aborts
    </aborts>
    <challenges>
     challenges
    </challenges>
    <internal-errors>
     internal-errors
    </internal-errors>
    <rejects>
     rejects
    </rejects>
    <timeouts>
     timeouts
    </timeouts>
  </aaa-module-re-authentication-statistics>
</aaa-module-statistics>
```

Description

<aaa-module-statistics>

Usage

```
<aaa-module-statistics>
  <requests>
   requests
  </requests>
  <multistack-requests>
   multistack-requests
  </multistack-requests>
  <accepts>
   accepts
  </accepts>
  <rejects>
   rejects
```


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```
</rejects>
<accounting-response-failures>
  accounting-response-failures
</accounting-response-failures>
<accounting-response-success>
  accounting-response-success
</accounting-response-success>
<timeouts>
  timeouts
</timeouts>
<multistack-suppressions>
  multistack-suppressions
</multistack-suppressions>
<challenges>
  challenges
</challenges>
<processed-ok>
  processed-ok
</processed-ok>
<processing-error>
  processing-error
</processing-error>
<silent-drops>
  silent-drops
</silent-drops>
<internal-errors>
  internal-errors
</internal-errors>
<aborts>
  aborts
</aborts>
<interim-updates-rcvd>
  interim-updates-rcvd
</interim-updates-rcvd>
<interim-updates-sent>
  interim-updates-sent
</interim-updates-sent>
<interim-updates-error-rcvd>
  interim-updates-error-rcvd
</interim-updates-error-rcvd>
<requested-final-stats>
  requested-final-stats
</requested-final-stats>
<final-stats-retry-count>
  final-stats-retry-count
</final-stats-retry-count>
<final-stats-rcvd>
  final-stats-rcvd
</final-stats-rcvd>
<final-stats-error-rcvd>
  final-stats-error-rcvd
</final-stats-error-rcvd>
<final-stats-sent>
  final-stats-sent
</final-stats-sent>
<time-only-info-sent>
```

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```
  time-only-info-sent
</time-only-info-sent>
<stats-timer-fired>
  stats-timer-fired
</stats-timer-fired>
<libstats-interim-egress-subs>
  libstats-interim-egress-subs
</libstats-interim-egress-subs>
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  libstats-interim-ingress-subs
</libstats-interim-ingress-subs>
<libstats-interim-egress-general-error>
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  libstats-final-egress-general-error
</libstats-final-egress-general-error>
```


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```
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</libstats-all-ingress-msg-types>
<libstats-all-egress-general-error>
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  libstats-all-egress-memory-error
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<libstats-all-ingress-memory-error>
  libstats-all-ingress-memory-error
```

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```
        </libstats-all-ingress-memory-error>
        <libstats-all-egress-ipc-error>
          libstats-all-egress-ipc-error
        </libstats-all-egress-ipc-error>
        <libstats-all-ingress-ipc-error>
          libstats-all-ingress-ipc-error
        </libstats-all-ingress-ipc-error>
        <libstats-all-egress-validation-error>
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        <libstats-all-ingress-validation-error>
          libstats-all-ingress-validation-error
        </libstats-all-ingress-validation-error>
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        <libstats-all-ingress-db-lookup-error>
          libstats-all-ingress-db-lookup-error
        </libstats-all-ingress-db-lookup-error>
      <aaa-module-authentication-statistics>....</aaa-module-authentication-statistics>

        <aaa-module-accounting-statistics>....</aaa-module-accounting-statistics>

    <aaa-module-dynamic-requests-statistics>....</aaa-module-dynamic-requests-statistics>


    <aaa-module-volume-accounting-statistics>....</aaa-module-volume-accounting-statistics>


    <aaa-module-re-authentication-statistics>....</aaa-module-re-authentication-statistics>


    <aaa-module-address-assignment-pool-statistics>....</aaa-module-address-assignment-pool-statistics>


    <aaa-module-address-assignment-client-statistics>....</aaa-module-address-assignment-client-statistics>

        <aaa-module-subscriber-statistics>....</aaa-module-subscriber-statistics>
        <aaa-module-radius-statistics>....</aaa-module-radius-statistics>
      </aaa-module-statistics>
```

Description Statistics for the authentication authorization and accounting (AAA) modules

<aaa-module-subscriber-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-subscriber-statistics>
    <total-number-of-subscribers>
      total-number-of-subscribers
    </total-number-of-subscribers>
  </aaa-module-subscriber-statistics>
</aaa-module-statistics>
```


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Description

<aaa-module-volume-accounting-statistics>

Usage

```
<aaa-module-statistics>
  <aaa-module-volume-accounting-statistics>
    <interim-updates-rcvd>
      interim-updates-rcvd
    </interim-updates-rcvd>
    <interim-updates-sent>
      interim-updates-sent
    </interim-updates-sent>
    <interim-updates-error-rcvd>
      interim-updates-error-rcvd
    </interim-updates-error-rcvd>
    <requested-final-stats>
      requested-final-stats
    </requested-final-stats>
    <final-stats-retry-count>
      final-stats-retry-count
    </final-stats-retry-count>
    <final-stats-rcvd>
      final-stats-rcvd
    </final-stats-rcvd>
    <final-stats-error-rcvd>
      final-stats-error-rcvd
    </final-stats-error-rcvd>
    <final-stats-sent>
      final-stats-sent
    </final-stats-sent>
    <time-only-info-sent>
      time-only-info-sent
    </time-only-info-sent>
    <stats-timer-fired>
      stats-timer-fired
    </stats-timer-fired>
    <libstats-interim-egress-subs>
      libstats-interim-egress-subs
    </libstats-interim-egress-subs>
    <libstats-interim-ingress-subs>
      libstats-interim-ingress-subs
    </libstats-interim-ingress-subs>
    <libstats-interim-egress-general-error>
      libstats-interim-egress-general-error
    </libstats-interim-egress-general-error>
    <libstats-interim-ingress-general-error>
      libstats-interim-ingress-general-error
    </libstats-interim-ingress-general-error>
    <libstats-interim-egress-kernel-error>
      libstats-interim-egress-kernel-error
    </libstats-interim-egress-kernel-error>
    <libstats-interim-ingress-kernel-error>
      libstats-interim-ingress-kernel-error
    </libstats-interim-ingress-kernel-error>
    <libstats-interim-egress-memory-error>
```

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libstats-interim-egress-memory-error
</libstats-interim-egress-memory-error>
<libstats-interim-ingress-memory-error>
libstats-interim-ingress-memory-error
</libstats-interim-ingress-memory-error>
<libstats-interim-egress-ipc-error>
libstats-interim-egress-ipc-error
</libstats-interim-egress-ipc-error>
<libstats-interim-ingress-ipc-error>
libstats-interim-ingress-ipc-error
</libstats-interim-ingress-ipc-error>
<libstats-interim-egress-validation-error>
libstats-interim-egress-validation-error
</libstats-interim-egress-validation-error>
<libstats-interim-ingress-validation-error>
libstats-interim-ingress-validation-error
</libstats-interim-ingress-validation-error>
<libstats-interim-egress-db-lookup-error>
libstats-interim-egress-db-lookup-error
</libstats-interim-egress-db-lookup-error>
<libstats-interim-ingress-db-lookup-error>
libstats-interim-ingress-db-lookup-error
</libstats-interim-ingress-db-lookup-error>
<libstats-final-egress-subs>
libstats-final-egress-subs
</libstats-final-egress-subs>
<libstats-final-ingress-subs>
libstats-final-ingress-subs
</libstats-final-ingress-subs>
<libstats-final-egress-general-error>
libstats-final-egress-general-error
</libstats-final-egress-general-error>
<libstats-final-ingress-general-error>
libstats-final-ingress-general-error
</libstats-final-ingress-general-error>
<libstats-final-egress-kernel-error>
libstats-final-egress-kernel-error
</libstats-final-egress-kernel-error>
<libstats-final-ingress-kernel-error>
libstats-final-ingress-kernel-error
</libstats-final-ingress-kernel-error>
<libstats-final-egress-memory-error>
libstats-final-egress-memory-error
</libstats-final-egress-memory-error>
<libstats-final-ingress-memory-error>
libstats-final-ingress-memory-error
</libstats-final-ingress-memory-error>
<libstats-final-egress-ipc-error>
libstats-final-egress-ipc-error
</libstats-final-egress-ipc-error>
<libstats-final-ingress-ipc-error>
libstats-final-ingress-ipc-error
</libstats-final-ingress-ipc-error>
<libstats-final-egress-validation-error>
libstats-final-egress-validation-error
</libstats-final-egress-validation-error>

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```
    <libstats-final-ingress-validation-error>
      libstats-final-ingress-validation-error
    </libstats-final-ingress-validation-error>
    <libstats-final-egress-db-lookup-error>
      libstats-final-egress-db-lookup-error
    </libstats-final-egress-db-lookup-error>
    <libstats-final-ingress-db-lookup-error>
      libstats-final-ingress-db-lookup-error
    </libstats-final-ingress-db-lookup-error>
    <libstats-all-egress-msg-types>
      libstats-all-egress-msg-types
    </libstats-all-egress-msg-types>
    <libstats-all-ingress-msg-types>
      libstats-all-ingress-msg-types
    </libstats-all-ingress-msg-types>
    <libstats-all-egress-general-error>
      libstats-all-egress-general-error
    </libstats-all-egress-general-error>
    <libstats-all-ingress-general-error>
      libstats-all-ingress-general-error
    </libstats-all-ingress-general-error>
    <libstats-all-egress-kernel-error>
      libstats-all-egress-kernel-error
    </libstats-all-egress-kernel-error>
    <libstats-all-ingress-kernel-error>
      libstats-all-ingress-kernel-error
    </libstats-all-ingress-kernel-error>
    <libstats-all-egress-memory-error>
      libstats-all-egress-memory-error
    </libstats-all-egress-memory-error>
    <libstats-all-ingress-memory-error>
      libstats-all-ingress-memory-error
    </libstats-all-ingress-memory-error>
    <libstats-all-egress-ipc-error>
      libstats-all-egress-ipc-error
    </libstats-all-egress-ipc-error>
    <libstats-all-ingress-ipc-error>
      libstats-all-ingress-ipc-error
    </libstats-all-ingress-ipc-error>
    <libstats-all-egress-validation-error>
      libstats-all-egress-validation-error
    </libstats-all-egress-validation-error>
    <libstats-all-ingress-validation-error>
      libstats-all-ingress-validation-error
    </libstats-all-ingress-validation-error>
    <libstats-all-egress-db-lookup-error>
      libstats-all-egress-db-lookup-error
    </libstats-all-egress-db-lookup-error>
    <libstats-all-ingress-db-lookup-error>
      libstats-all-ingress-db-lookup-error
    </libstats-all-ingress-db-lookup-error>
  </aaa-module-volume-accounting-statistics>
</aaa-module-statistics>
```

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Description

<aaa-subscriber-accounting-statistics>

Usage

```
<aaa-subscriber-table-details>
 <aaa-subscriber-statistics>

  <aaa-subscriber-accounting-statistics>
   <accounting-start-sent-successfully>
    accounting-start-sent-successfully
   </accounting-start-sent-successfully>
   <accounting-start-send-failed>
    accounting-start-send-failed
   </accounting-start-send-failed>
   <accounting-start-responses>
    accounting-start-responses
   </accounting-start-responses>
   <accounting-interim-sent-successfully>
    accounting-interim-sent-successfully
   </accounting-interim-sent-successfully>
   <accounting-interim-send-failed>
    accounting-interim-send-failed
   </accounting-interim-send-failed>
   <accounting-interim-responses>
    accounting-interim-responses
   </accounting-interim-responses>
  </aaa-subscriber-accounting-statistics>
 </aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-auth-statistics>

Usage

```
<aaa-subscriber-table-details>
 <aaa-subscriber-statistics>

<aaa-subscriber-auth-statistics>
     <authentication-challenge-requests>
      authentication-challenge-requests
     </authentication-challenge-requests>
     <authentication-challenge-responses>
      authentication-challenge-responses
     </authentication-challenge-responses>
    <aaa-subscriber-auth-statistics>
 </aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description

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<aaa-subscriber-reauth-statistics>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-statistics>

<aaa-subscriber-reauth-statistics>
    <re-authentication-requests>
      re-authentication-requests
    </re-authentication-requests>
    <re-authentication-responses>
      re-authentication-responses
    </re-authentication-responses>
    <re-authentication-aborts>
      re-authentication-aborts
    </re-authentication-aborts>
  <aaa-subscriber-reauth-statistics>
  </aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-service-statistics>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-statistics>

<aaa-subscriber-service-statistics>
    <service-name>
      service-name
    </service-name>
    <service-creates>
      service-creates
    </service-creates>
    <service-deletes>
      service-deletes
    </service-deletes>
    <service-timeouts>
      service-timeouts
    </service-timeouts>
  <aaa-subscriber-service-statistics>
  </aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-statistics>

Usage

```
<aaa-subscriber-table-details>

<aaa-subscriber-statistics>
```

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```
<authentication-challenge-requests>
  authentication-challenge-requests
</authentication-challenge-requests>
<authentication-challenge-responses>
  authentication-challenge-responses
</authentication-challenge-responses>
<accounting-start-sent-successfully>
  accounting-start-sent-successfully
</accounting-start-sent-successfully>
<accounting-start-send-failed>
  accounting-start-send-failed
</accounting-start-send-failed>
<accounting-start-responses>
  accounting-start-responses
</accounting-start-responses>
<accounting-interim-sent-successfully>
  accounting-interim-sent-successfully
</accounting-interim-sent-successfully>
<accounting-interim-send-failed>
  accounting-interim-send-failed
</accounting-interim-send-failed>
<accounting-interim-responses>
  accounting-interim-responses
</accounting-interim-responses>
<service-creates>
  service-creates
</service-creates>
<service-deletes>
  service-deletes
</service-deletes>
<service-timeouts>
  service-timeouts
</service-timeouts>
<re-authentication-requests>
  re-authentication-requests
</re-authentication-requests>
<re-authentication-responses>
  re-authentication-responses
</re-authentication-responses>
<re-authentication-aborts>
  re-authentication-aborts
</re-authentication-aborts>
<aaa-subscriber-auth-statistics>....</aaa-subscriber-auth-statistics>
<aaa-subscriber-accounting-statistics>....</aaa-subscriber-accounting-statistics>

<aaa-subscriber-service-statistics>....</aaa-subscriber-service-statistics>
<aaa-subscriber-reauth-statistics>....</aaa-subscriber-reauth-statistics>
</aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description

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<aaa-subscriber-table>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-table>
    <aaa-subscriber-table-entry>....</aaa-subscriber-table-entry>
    <aaa-subscriber-table-entry-details>....</aaa-subscriber-table-entry-details>

<aaa-subscriber-table-logical-system-routing-instance-entries>..</aaa-subscriber-table-logical-system-routing-instance-entries>


<aaa-subscriber-table-entry-service-details>.....</aaa-subscriber-table-entry-service-details>


<aaa-subscriber-table-entry-session-id-detail>....</aaa-subscriber-table-entry-session-id-detail>

  </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-table-details>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-table>....</aaa-subscriber-table>
  <aaa-subscriber-statistics>....</aaa-subscriber-statistics>
</aaa-subscriber-table-details>
```

Description Information about authentication, authorization and accounting (AAA) subscriber table

<aaa-subscriber-table-entry>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-table>
    <aaa-subscriber-table-entry>
      <user-name>
        user-name
      </user-name>
      <logical-system-routing-instance>
        logical-system-routing-instance
      </logical-system-routing-instance>
      <client-type>
        client-type
      </client-type>
      <session-id>
        session-id
      </session-id>
    </aaa-subscriber-table-entry>
  </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

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Description

<aaa-subscriber-table-entry-details>

Usage

```
<aaa-subscriber-table-details>
 <aaa-subscriber-table>
  <aaa-subscriber-table-entry-details>
   <logical-system-routing-instance>
    logical-system-routing-instance
   </logical-system-routing-instance>
   <client-type>
    client-type
   </client-type>
   <session-uptime>
    session-uptime
   </session-uptime>
   <accounting-status>
    accounting-status
   </accounting-status>
  </aaa-subscriber-table-entry-details>
 </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-table-entry-service-details>

Usage

```
<aaa-subscriber-table-details>
 <aaa-subscriber-table>
  <aaa-subscriber-table-entry-service-details>
   <service-name>
    service-name
   </service-name>
   <service-type>
    service-type
   </service-type>
   <service-quota>
    service-quota
   </service-quota>
   <accounting-status>
    accounting-status
   </accounting-status>
  </aaa-subscriber-table-entry-service-details>
 </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-table-entry-session-id-detail>

Usage

```
<aaa-subscriber-table-details>
```


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```
<aaa-subscriber-table>
  <aaa-subscriber-table-entry-session-id-detail>
    <client-type>
      client-type
    </client-type>
    <user-name>
      user-name
    </user-name>
    <stripped-user-name>
      stripped-user-name
    </stripped-user-name>
    <aaa-logical-system-routing-instance>
      aaa-logical-system-routing-instance
    </aaa-logical-system-routing-instance>
    <target-logical-system-routing-instance>
      target-logical-system-routing-instance
    </target-logical-system-routing-instance>
    <access-profile>
      access-profile
    </access-profile>
    <session-id>
      session-id
    </session-id>
    <accounting-session-id>
      accounting-session-id
    </accounting-session-id>
    <multi-accounting-session-id>
      multi-accounting-session-id
    </multi-accounting-session-id>
    <ip-address-assigned>
      ip-address-assigned
    </ip-address-assigned>
    <ipv6-address-assigned>
      ipv6-address-assigned
    </ipv6-address-assigned>
    <ipv6-prefix-assigned>
      ipv6-prefix-assigned
    </ipv6-prefix-assigned>
    <assignment-type>
      assignment-type
    </assignment-type>
    <auth-state>
      auth-state
    </auth-state>
    <gx-plus-prov-state>
      gx-plus-prov-state
    </gx-plus-prov-state>
    <accounting-state>
      accounting-state
    </accounting-state>
    <service-name>
      service-name
    </service-name>
    <service-state>
      service-state
    </service-state>
```

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```
      <service-session-id>
        service-session-id
      </service-session-id>
      <service-accounting-session-id>
        service-accounting-session-id
      </service-accounting-session-id>
      <accounting-status>
        accounting-status
      </accounting-status>
      <session-uptime>
        session-uptime
      </session-uptime>
      <service-accounting-state>
        service-accounting-state
      </service-accounting-state>
      <accounting-interim-interval>
        accounting-interim-interval
      </accounting-interim-interval>
      <service-accounting-protocol>
        service-accounting-protocol
      </service-accounting-protocol>
    </aaa-subscriber-table-entry-session-id-detail>
  </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

Description

<aaa-subscriber-table-logical-system-routing-instance-entries>

Usage

```
<aaa-subscriber-table-details>
  <aaa-subscriber-table>
    <aaa-subscriber-table-logical-system-routing-instance-entries>
      <user-name>
        user-name
      </user-name>
      <client-type>
        client-type
      </client-type>
      <logical-system-routing-instance>
        logical-system-routing-instance
      </logical-system-routing-instance>
    </aaa-subscriber-table-logical-system-routing-instance-entries>
  </aaa-subscriber-table>
</aaa-subscriber-table-details>
```

Description

<aaa-termcode-error>

Usage

```
<aaa-termcode-information>
  <aaa-termcode-error>
</aaa-termcode-error>
```


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```
</aaa-termcode-information>
```

Description

<aaa-termcode-information>

Usage

```
<aaa-termcode-information>
  <aaa-termcode-list>....</aaa-termcode-list>
  <aaa-termcode-summary-list>....</aaa-termcode-summary-list>
  <aaa-termcode-not-found>
    aaa-termcode-not-found
  </aaa-termcode-not-found>
  <aaa-termcode-error>....</aaa-termcode-error>
</aaa-termcode-information>
```

Description Terminate-code mapping information

<aaa-termcode-list>

Usage

```
<aaa-termcode-list>
  <aaa-termcode-radius-termcause>
    aaa-termcode-radius-termcause
  </aaa-termcode-radius-termcause>
  <aaa-termcode-custom-mapping>
    aaa-termcode-custom-mapping
  </aaa-termcode-custom-mapping>
  <aaa-termcode-usage-count>
    aaa-termcode-usage-count
  </aaa-termcode-usage-count>
  <aaa-termcode-type>
    aaa-termcode-type
  </aaa-termcode-type>
  <aaa-termcode-keyword>
    aaa-termcode-keyword
  </aaa-termcode-keyword>
</aaa-termcode-list>
```

Description Terminate-code mappings

<aaa-termcode-list>

Usage

```
<aaa-termcode-information>
  <aaa-termcode-list>
    <aaa-termcode-radius-termcause>
      aaa-termcode-radius-termcause
    </aaa-termcode-radius-termcause>
    <aaa-termcode-custom-mapping>
      aaa-termcode-custom-mapping
```

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```
    </aaa-termcode-custom-mapping>
    <aaa-termcode-usage-count>
     aaa-termcode-usage-count
    </aaa-termcode-usage-count>
    <aaa-termcode-type>
     aaa-termcode-type
    </aaa-termcode-type>
    <aaa-termcode-keyword>
     aaa-termcode-keyword
    </aaa-termcode-keyword>
   </aaa-termcode-list>
</aaa-termcode-information>
```

Description Terminate-code mappings

<aaa-termcode-reverse-error>

Usage

```
<aaa-termcode-reverse-information>
  <aaa-termcode-reverse-error>
</aaa-termcode-reverse-error>
</aaa-termcode-reverse-information>
```

Description

<aaa-termcode-reverse-information>

Usage

```
<aaa-termcode-reverse-information>
  <aaa-termcode-reverse-list>....</aaa-termcode-reverse-list>
 <aaa-termcode-reverse-summary-list>....</aaa-termcode-reverse-summary-list>

  <aaa-termcode-reverse-not-found>
   aaa-termcode-reverse-not-found
  </aaa-termcode-reverse-not-found>
  <aaa-termcode-reverse-error>....</aaa-termcode-reverse-error>
</aaa-termcode-reverse-information>
```

Description Terminate-code mapping information

<aaa-termcode-reverse-list>

Usage

```
<aaa-termcode-reverse-list>
  <aaa-termcode-radius-termcause>
   aaa-termcode-radius-termcause
  </aaa-termcode-radius-termcause>
  <aaa-termcode-custom-mapping>
   aaa-termcode-custom-mapping
  </aaa-termcode-custom-mapping>
  <aaa-termcode-usage-count>
```


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```
    aaa-termcode-usage-count
   </aaa-termcode-usage-count>
   <aaa-termcode-type>
    aaa-termcode-type
   </aaa-termcode-type>
   <aaa-termcode-keyword>
    aaa-termcode-keyword
   </aaa-termcode-keyword>
  </aaa-termcode-reverse-list>
```

Description Terminate-code mappings

<aaa-termcode-reverse-list>

Usage

```
<aaa-termcode-reverse-information>
 <aaa-termcode-reverse-list>
  <aaa-termcode-radius-termcause>
   aaa-termcode-radius-termcause
  </aaa-termcode-radius-termcause>
  <aaa-termcode-custom-mapping>
   aaa-termcode-custom-mapping
  </aaa-termcode-custom-mapping>
  <aaa-termcode-usage-count>
   aaa-termcode-usage-count
  </aaa-termcode-usage-count>
  <aaa-termcode-type>
   aaa-termcode-type
  </aaa-termcode-type>
  <aaa-termcode-keyword>
   aaa-termcode-keyword
  </aaa-termcode-keyword>
 </aaa-termcode-reverse-list>
</aaa-termcode-reverse-information>
```

Description Terminate-code mappings

<aaa-termcode-reverse-summary-list>

Usage

```
<aaa-termcode-reverse-summary-list>
 <aaa-termcode-radius-termcause>
  aaa-termcode-radius-termcause
 </aaa-termcode-radius-termcause>
 <aaa-termcode-custom-mapping>
  aaa-termcode-custom-mapping
 </aaa-termcode-custom-mapping>
 <aaa-termcode-mapping-count>
  aaa-termcode-mapping-count
 </aaa-termcode-mapping-count>
 <aaa-termcode-usage-count>
  aaa-termcode-usage-count
```

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```
    </aaa-termcode-usage-count>
    <aaa-termcode-type>
      aaa-termcode-type
    </aaa-termcode-type>
  </aaa-termcode-reverse-summary-list>
```

Description Terminate-code reverse mappings summary

<aaa-termcode-reverse-summary-list>

Usage

```
<aaa-termcode-reverse-information>
  <aaa-termcode-reverse-summary-list>
    <aaa-termcode-radius-termcause>
      aaa-termcode-radius-termcause
    </aaa-termcode-radius-termcause>
    <aaa-termcode-custom-mapping>
      aaa-termcode-custom-mapping
    </aaa-termcode-custom-mapping>
    <aaa-termcode-mapping-count>
      aaa-termcode-mapping-count
    </aaa-termcode-mapping-count>
    <aaa-termcode-usage-count>
      aaa-termcode-usage-count
    </aaa-termcode-usage-count>
    <aaa-termcode-type>
      aaa-termcode-type
    </aaa-termcode-type>
  </aaa-termcode-reverse-summary-list>
</aaa-termcode-reverse-information>
```

Description Terminate-code reverse mappings summary

<aaa-termcode-summary-list>

Usage

```
<aaa-termcode-summary-list>
  <aaa-termcode-custom-mapping>
    aaa-termcode-custom-mapping
  </aaa-termcode-custom-mapping>
  <aaa-termcode-mapping-count>
    aaa-termcode-mapping-count
  </aaa-termcode-mapping-count>
  <aaa-termcode-usage-count>
    aaa-termcode-usage-count
  </aaa-termcode-usage-count>
  <aaa-termcode-type>
    aaa-termcode-type
  </aaa-termcode-type>
</aaa-termcode-summary-list>
```


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Description Terminate-code mappings summary

<aaa-termcode-summary-list>

Usage

```
<aaa-termcode-information>
  <aaa-termcode-summary-list>
    <aaa-termcode-custom-mapping>
      aaa-termcode-custom-mapping
    </aaa-termcode-custom-mapping>
    <aaa-termcode-mapping-count>
      aaa-termcode-mapping-count
    </aaa-termcode-mapping-count>
    <aaa-termcode-usage-count>
      aaa-termcode-usage-count
    </aaa-termcode-usage-count>
    <aaa-termcode-type>
      aaa-termcode-type
    </aaa-termcode-type>
  </aaa-termcode-summary-list>
</aaa-termcode-information>
```

Description Terminate-code mappings summary

<aaa-test-result>

Usage

```
<aaa-test-result>
  <aaa-test-status>
    aaa-test-status
  </aaa-test-status>
  <radius-server-attribute-name>
    radius-server-attribute-name
  </radius-server-attribute-name>
  <radius-server-attribute-value>
    radius-server-attribute-value
  </radius-server-attribute-value>
  <terminate-attribute-name>
    terminate-attribute-name
  </terminate-attribute-name>
  <terminate-attribute-value>
    terminate-attribute-value
  </terminate-attribute-value>
</aaa-test-result>
```

Description RADIUS server acccess test

<address-assignment-pool-entry>

Usage

```
<address-assignment-pool-table-details>
  <address-assignment-pool-table>
```

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```
<address-assignment-pool-entry>
 <ip-address>
  ip-address
 </ip-address>
 <hardware-address>
  hardware-address
 </hardware-address>
 <host-name>
  host-name
 </host-name>
 <subscriber-type>
  subscriber-type
 </subscriber-type>
</address-assignment-pool-entry>
</address-assignment-pool-table>
</address-assignment-pool-table-details>
```

Description

<address-assignment-pool-table>

Usage

```
<address-assignment-pool-table-details>
 <address-assignment-pool-table>
  <address-assignment-pool-entry>....</address-assignment-pool-entry>
 </address-assignment-pool-table>
</address-assignment-pool-table-details>
```

Description

<address-assignment-pool-table-details>

Usage

```
<address-assignment-pool-table-details>
 <address-assignment-pool-table>....</address-assignment-pool-table>
</address-assignment-pool-table-details>
```

Description Information about address-assignment pool

<auth-pending-entry>

Usage

```
<auth-pending-table-details>
 <auth-pending-table>
  <auth-pending-entry>
   <index>
    index
   </index>
   <auth-status>
    auth-status
   </auth-status>
   <profile-name>
```


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```
        profile-name
       </profile-name>
       <user-name>
        user-name
       </user-name>
      </auth-pending-entry>
     </auth-pending-table>
    </auth-pending-table-details>
```

Description

<auth-pending-table>

Usage

```
<auth-pending-table-details>
 <auth-pending-table>
  <auth-pending-entry>....</auth-pending-entry>
 </auth-pending-table>
</auth-pending-table-details>
```

Description

<auth-pending-table-details>

Usage

```
<auth-pending-table-details>
 <auth-pending-table-info>....</auth-pending-table-info>
 <auth-pending-table>....</auth-pending-table>
</auth-pending-table-details>
```

Description Information about pending authentication requests

<auth-pending-table-info>

Usage

```
<auth-pending-table-details>
 <auth-pending-table-info>
  <auth-pending-total-entries>
   auth-pending-total-entries
  </auth-pending-total-entries>
 </auth-pending-table-info>
</auth-pending-table-details>
```

Description

<auth-statistics>

Usage

```
<auth-statistics>
 <total-statistics>....</total-statistics>
 <radius-auth-statistics>....</radius-auth-statistics>
```

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```
<ldap-auth-statistics>....</ldap-auth-statistics>
<securid-auth-statistics>....</securid-auth-statistics>
<local-auth-statistics>....</local-auth-statistics>
</auth-statistics>
```

Description Authentication statistics

<authd-memory-pool-information>

Usage

```
<authd-memory-pool-information>
  <memory-pool-name>
    memory-pool-name
  </memory-pool-name>
  <node-size>
    node-size
  </node-size>
  <pool-size>
    pool-size
  </pool-size>
  <total-allocation>
    total-allocation
  </total-allocation>
  <largest-allocation>
    largest-allocation
  </largest-allocation>
  <current-allocation>
    current-allocation
  </current-allocation>
  <number-of-grows>
    number-of-grows
  </number-of-grows>
  <number-of-fails>
    number-of-fails
  </number-of-fails>
  <number-of-oversize-allocations>
    number-of-oversize-allocations
  </number-of-oversize-allocations>
</authd-memory-pool-information>
```

Description Memory pool information for authd

<domain-map-statistics>

Usage

```
<domain-map-statistics>
  <matched-domains>
    matched-domains
  </matched-domains>
  <unmatched-domains>
    unmatched-domains
  </unmatched-domains>
```


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```
<missing-domains>
  missing-domains
</missing-domains>
<stripped-username>
  stripped-username
</stripped-username>
<default-used>
  default-used
</default-used>
</domain-map-statistics>
```

Description Domain maps related statistics

<gx-plus-downstream-stats-data>

Usage

```
<gx-plus-downstream-stats-data>
  <gx-plus-downstream-category>
    gx-plus-downstream-category
  </gx-plus-downstream-category>
  <gx-plus-downstream-counter-name>
    gx-plus-downstream-counter-name
  </gx-plus-downstream-counter-name>
  <gx-plus-downstream-counter-value>
    gx-plus-downstream-counter-value
  </gx-plus-downstream-counter-value>
</gx-plus-downstream-stats-data>
```

Description Gx-plus downsteam stats data

<gx-plus-downstream-stats-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-downstream-stats-table>
    <gx-plus-downstream-stats-data>
      <gx-plus-downstream-category>
        gx-plus-downstream-category
      </gx-plus-downstream-category>
      <gx-plus-downstream-counter-name>
        gx-plus-downstream-counter-name
      </gx-plus-downstream-counter-name>
      <gx-plus-downstream-counter-value>
        gx-plus-downstream-counter-value
      </gx-plus-downstream-counter-value>
    </gx-plus-downstream-stats-data>
  </gx-plus-downstream-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus downsteam stats data

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<gx-plus-downstream-stats-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-downstream-stats-table>
    <gx-plus-downstream-stats-data>....</gx-plus-downstream-stats-data>
  </gx-plus-downstream-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus downstream stats-table

<gx-plus-state-information>

Usage

```
<gx-plus-state-information>
  <gx-plus-engine-state>
    gx-plus-engine-state
  </gx-plus-engine-state>
  <gx-plus-config-state>
    gx-plus-config-state
  </gx-plus-config-state>
  <gx-plus-active-config-state>
    gx-plus-active-config-state
  </gx-plus-active-config-state>
  <gx-plus-diameter-config-state>
    gx-plus-diameter-config-state
  </gx-plus-diameter-config-state>
  <gx-plus-total-prov-count>
    gx-plus-total-prov-count
  </gx-plus-total-prov-count>
  <gx-plus-pending-prov-count>
    gx-plus-pending-prov-count
  </gx-plus-pending-prov-count>
  <gx-plus-pending-logout-count>
    gx-plus-pending-logout-count
  </gx-plus-pending-logout-count>
</gx-plus-state-information>
```

Description Gx-plus state information

<gx-plus-statistics-data>

Usage

```
<gx-plus-statistics-data>
  <gx-plus-counter-name>
    gx-plus-counter-name
  </gx-plus-counter-name>
  <gx-plus-counter-value>
    gx-plus-counter-value
  </gx-plus-counter-value>
</gx-plus-statistics-data>
```


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Description Gx-plus statistics data

<gx-plus-statistics-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-statistics-table>
    <gx-plus-statistics-data>
      <gx-plus-counter-name>
        gx-plus-counter-name
      </gx-plus-counter-name>
      <gx-plus-counter-value>
        gx-plus-counter-value
      </gx-plus-counter-value>
    </gx-plus-statistics-data>
  </gx-plus-statistics-table>
</gx-plus-statistics-information>
```

Description Gx-plus statistics data

<gx-plus-statistics-information>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-statistics-table>....</gx-plus-statistics-table>
  <gx-plus-sync-event-stats-table>....</gx-plus-sync-event-stats-table>
  <gx-plus-sync-event-de-stats-table>....</gx-plus-sync-event-de-stats-table>
  <gx-plus-upstream-stats-table>....</gx-plus-upstream-stats-table>
  <gx-plus-upstream-de-stats-table>....</gx-plus-upstream-de-stats-table>
  <gx-plus-downstream-stats-table>....</gx-plus-downstream-stats-table>
  <gx-plus-statistics-no-counters>
    gx-plus-statistics-no-counters
  </gx-plus-statistics-no-counters>
  <gx-plus-statistics-message>....</gx-plus-statistics-message>
</gx-plus-statistics-information>
```

Description Gx-plus statistics information

<gx-plus-statistics-message>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-statistics-message>
</gx-plus-statistics-message>
</gx-plus-statistics-information>
```

Description

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<gx-plus-statistics-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-statistics-table>
    <gx-plus-statistics-data>....</gx-plus-statistics-data>
  </gx-plus-statistics-table>
</gx-plus-statistics-information>
```

Description Gx-plus statistics table

<gx-plus-sync-event-de-stats-data>

Usage

```
<gx-plus-sync-event-de-stats-data>
  <gx-plus-sync-event-de>
    gx-plus-sync-event-de
  </gx-plus-sync-event-de>
  <gx-plus-sync-event-de-counter-name>
    gx-plus-sync-event-de-counter-name
  </gx-plus-sync-event-de-counter-name>
  <gx-plus-sync-event-de-counter-value>
    gx-plus-sync-event-de-counter-value
  </gx-plus-sync-event-de-counter-value>
</gx-plus-sync-event-de-stats-data>
```

Description Gx-plus sync-event diameter event stats data

<gx-plus-sync-event-de-stats-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-sync-event-de-stats-table>
    <gx-plus-sync-event-de-stats-data>
      <gx-plus-sync-event-de>
        gx-plus-sync-event-de
      </gx-plus-sync-event-de>
      <gx-plus-sync-event-de-counter-name>
        gx-plus-sync-event-de-counter-name
      </gx-plus-sync-event-de-counter-name>
      <gx-plus-sync-event-de-counter-value>
        gx-plus-sync-event-de-counter-value
      </gx-plus-sync-event-de-counter-value>
    </gx-plus-sync-event-de-stats-data>
  </gx-plus-sync-event-de-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus sync-event diameter event stats data

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<gx-plus-sync-event-de-stats-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-sync-event-de-stats-table>
    <gx-plus-sync-event-de-stats-data>....</gx-plus-sync-event-de-stats-data>
  </gx-plus-sync-event-de-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus syn-even diameter events stats table

<gx-plus-sync-event-stats-data>

Usage

```
<gx-plus-sync-event-stats-data>
  <gx-plus-sync-event>
    gx-plus-sync-event
  </gx-plus-sync-event>
  <gx-plus-sync-event-counter-name>
    gx-plus-sync-event-counter-name
  </gx-plus-sync-event-counter-name>
  <gx-plus-sync-event-counter-value>
    gx-plus-sync-event-counter-value
  </gx-plus-sync-event-counter-value>
</gx-plus-sync-event-stats-data>
```

Description Gx-plus sync-event stats data

<gx-plus-sync-event-stats-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-sync-event-stats-table>
    <gx-plus-sync-event-stats-data>
      <gx-plus-sync-event>
        gx-plus-sync-event
      </gx-plus-sync-event>
      <gx-plus-sync-event-counter-name>
        gx-plus-sync-event-counter-name
      </gx-plus-sync-event-counter-name>
      <gx-plus-sync-event-counter-value>
        gx-plus-sync-event-counter-value
      </gx-plus-sync-event-counter-value>
    </gx-plus-sync-event-stats-data>
  </gx-plus-sync-event-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus sync-event stats data

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<gx-plus-sync-event-stats-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-sync-event-stats-table>
    <gx-plus-sync-event-stats-data>....</gx-plus-sync-event-stats-data>
  </gx-plus-sync-event-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus sync-event stats table

<gx-plus-sync-state-data>

Usage

```
<gx-plus-sync-state-data>
  <gx-plus-sync-event-name>
    gx-plus-sync-event-name
  </gx-plus-sync-event-name>
  <gx-plus-sync-event-timeout>
    gx-plus-sync-event-timeout
  </gx-plus-sync-event-timeout>
</gx-plus-sync-state-data>
```

Description Gx-plus sync state data

<gx-plus-sync-state-data>

Usage

```
<gx-plus-sync-state-information>
  <gx-plus-sync-state-data>
    <gx-plus-sync-event-name>
      gx-plus-sync-event-name
    </gx-plus-sync-event-name>
    <gx-plus-sync-event-timeout>
      gx-plus-sync-event-timeout
    </gx-plus-sync-event-timeout>
  </gx-plus-sync-state-data>
</gx-plus-sync-state-information>
```

Description Gx-plus sync state data

<gx-plus-sync-state-information>

Usage

```
<gx-plus-sync-state-information>
  <gx-plus-sync-state-data>....</gx-plus-sync-state-data>
  <gx-plus-sync-state-no-events>
    gx-plus-sync-state-no-events
  </gx-plus-sync-state-no-events>
  <gx-plus-sync-state-message>....</gx-plus-sync-state-message>
```


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```
</gx-plus-sync-state-information>
```

Description Gx-plus sync state information

<gx-plus-sync-state-message>

Usage

```
<gx-plus-sync-state-information>
  <gx-plus-sync-state-message>
</gx-plus-sync-state-message>
</gx-plus-sync-state-information>
```

Description

<gx-plus-upstream-de-stats-data>

Usage

```
<gx-plus-upstream-de-stats-data>
  <gx-plus-upstream-de-category>
    gx-plus-upstream-de-category
  </gx-plus-upstream-de-category>
  <gx-plus-upstream-de-counter-name>
    gx-plus-upstream-de-counter-name
  </gx-plus-upstream-de-counter-name>
  <gx-plus-upstream-de-counter-value>
    gx-plus-upstream-de-counter-value
  </gx-plus-upstream-de-counter-value>
</gx-plus-upstream-de-stats-data>
```

Description Gx-plus upsteam diameter event stats data

<gx-plus-upstream-de-stats-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-upstream-de-stats-table>
    <gx-plus-upstream-de-stats-data>
      <gx-plus-upstream-de-category>
        gx-plus-upstream-de-category
      </gx-plus-upstream-de-category>
      <gx-plus-upstream-de-counter-name>
        gx-plus-upstream-de-counter-name
      </gx-plus-upstream-de-counter-name>
      <gx-plus-upstream-de-counter-value>
        gx-plus-upstream-de-counter-value
      </gx-plus-upstream-de-counter-value>
    </gx-plus-upstream-de-stats-data>
  </gx-plus-upstream-de-stats-table>
</gx-plus-statistics-information>
```

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Description Gx-plus upsteam diameter event stats data

<gx-plus-upstream-de-stats-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-upstream-de-stats-table>
    <gx-plus-upstream-de-stats-data>....</gx-plus-upstream-de-stats-data>
  </gx-plus-upstream-de-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus upstream diameter events stats table

<gx-plus-upstream-stats-data>

Usage

```
<gx-plus-upstream-stats-data>
  <gx-plus-upstream-category>
    gx-plus-upstream-category
  </gx-plus-upstream-category>
  <gx-plus-upstream-counter-name>
    gx-plus-upstream-counter-name
  </gx-plus-upstream-counter-name>
  <gx-plus-upstream-counter-value>
    gx-plus-upstream-counter-value
  </gx-plus-upstream-counter-value>
</gx-plus-upstream-stats-data>
```

Description Gx-plus upsteam stats data

<gx-plus-upstream-stats-data>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-upstream-stats-table>
    <gx-plus-upstream-stats-data>
      <gx-plus-upstream-category>
        gx-plus-upstream-category
      </gx-plus-upstream-category>
      <gx-plus-upstream-counter-name>
        gx-plus-upstream-counter-name
      </gx-plus-upstream-counter-name>
      <gx-plus-upstream-counter-value>
        gx-plus-upstream-counter-value
      </gx-plus-upstream-counter-value>
    </gx-plus-upstream-stats-data>
  </gx-plus-upstream-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus upsteam stats data

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<gx-plus-upstream-stats-table>

Usage

```
<gx-plus-statistics-information>
  <gx-plus-upstream-stats-table>
    <gx-plus-upstream-stats-data>....</gx-plus-upstream-stats-data>
  </gx-plus-upstream-stats-table>
</gx-plus-statistics-information>
```

Description Gx-plus upstream stats table

<ldap-auth-statistics>

Usage

```
<auth-statistics>
  <ldap-auth-statistics>
    <total-requests>
      total-requests
    </total-requests>
    <success-responses>
      success-responses
    </success-responses>
    <failure-responses>
      failure-responses
    </failure-responses>
  </ldap-auth-statistics>
</auth-statistics>
```

Description

<local-auth-statistics>

Usage

```
<auth-statistics>
  <local-auth-statistics>
    <total-requests>
      total-requests
    </total-requests>
    <success-responses>
      success-responses
    </success-responses>
    <failure-responses>
      failure-responses
    </failure-responses>
  </local-auth-statistics>
</auth-statistics>
```

Description

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<node-secret-file-table>

Usage

```
<node-secret-file-table>
  <node-secret-file-table-entry>....</node-secret-file-table-entry>
</node-secret-file-table>
```

Description Information about SecurID authentication node secret files

<node-secret-file-table-entry>

Usage

```
<node-secret-file-table>
  <node-secret-file-table-entry>
    <server-name>
      server-name
    </server-name>
    <node-secret-file>
      node-secret-file
    </node-secret-file>
  </node-secret-file-table-entry>
</node-secret-file-table>
```

Description

<radius-auth-statistics>

Usage

```
<auth-statistics>
  <radius-auth-statistics>
    <total-requests>
      total-requests
    </total-requests>
    <success-responses>
      success-responses
    </success-responses>
    <failure-responses>
      failure-responses
    </failure-responses>
  </radius-auth-statistics>
</auth-statistics>
```

Description

<securid-auth-statistics>

Usage

```
<auth-statistics>
  <securid-auth-statistics>
    <total-requests>
      total-requests
    </total-requests>
```


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```
    <success-responses>
      success-responses
    </success-responses>
    <failure-responses>
      failure-responses
    </failure-responses>
  </securid-auth-statistics>
</auth-statistics>
```

Description

<total-statistics>

Usage

```
<auth-statistics>
  <total-statistics>
    <total-requests>
      total-requests
    </total-requests>
    <total-responses>
      total-responses
    </total-responses>
  </total-statistics>
</auth-statistics>
```

Description

Summary of Bidirectional Forwarding Direction Response Tags

<bfd-client>

Usage

```
<bfd-session>
  <bfd-client>
    <client-name>
      client-name
    </client-name>
    <client-transmission-interval>
      client-transmission-interval
    </client-transmission-interval>
    <client-reception-interval>
      client-reception-interval
    </client-reception-interval>
    <client-multiplier>
      client-multiplier
    </client-multiplier>
    <client-holddown-interval>
      client-holddown-interval
    </client-holddown-interval>
    <client-state>
      client-state
    </client-state>
    <client-authentication>
      client-authentication
```

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```
    </client-authentication>
    <client-keychain>
     client-keychain
    </client-keychain>
    <client-algorithm>
     client-algorithm
    </client-algorithm>
    <client-authentication-loose>
     client-authentication-loose
    </client-authentication-loose>
   </bfd-client>
  </bfd-session>
```

Description Information about the clients

<bfd-client>

Usage

```
<bfd-session-information>
 <bfd-session>
  <bfd-client>
   <client-name>
    client-name
   </client-name>
   <client-transmission-interval>
    client-transmission-interval
   </client-transmission-interval>
   <client-reception-interval>
    client-reception-interval
   </client-reception-interval>
   <client-multiplier>
    client-multiplier
   </client-multiplier>
   <client-holddown-interval>
    client-holddown-interval
   </client-holddown-interval>
   <client-state>
    client-state
   </client-state>
   <client-authentication>
    client-authentication
   </client-authentication>
   <client-keychain>
    client-keychain
   </client-keychain>
   <client-algorithm>
    client-algorithm
   </client-algorithm>
   <client-authentication-loose>
    client-authentication-loose
   </client-authentication-loose>
  </bfd-client>
 </bfd-session>
```


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```
</bfd-session-information>
```

Description Information about the clients

<bfd-replication>

Usage

```
<bfd-replication>
  <bfd-replication-session-entry>....</bfd-replication-session-entry>
</bfd-replication>
```

Description Information about bidirectional forwarding detection replication state

<bfd-replication-session-entry>

Usage

```
<bfd-replication>
  <bfd-replication-session-entry>
    <session-neighbor>
      session-neighbor
    </session-neighbor>
    <session-interface>
      session-interface
    </session-interface>
    <local-discriminator>
      local-discriminator
    </local-discriminator>
    <replication-state>
      replication-state
    </replication-state>
  </bfd-replication-session-entry>
</bfd-replication>
```

Description

<bfd-session>

Usage

```
<bfd-session>
  <session-state>
    session-state
  </session-state>
  <session-interface>
    session-interface
  </session-interface>
  <session-neighbor>
    session-neighbor
  </session-neighbor>
  <session-detection-time>
    session-detection-time
  </session-detection-time>
```

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```
<session-transmission-interval>
  session-transmission-interval
</session-transmission-interval>
<session-adaptive-multiplier>
  session-adaptive-multiplier
</session-adaptive-multiplier>
<bfd-client>....</bfd-client>
<session-up-time>
  session-up-time
</session-up-time>
<previous-up-time>
  previous-up-time
</previous-up-time>
<session-down-time>
  session-down-time
</session-down-time>
<previous-down-time>
  previous-down-time
</previous-down-time>
<local-diagnostic>
  local-diagnostic
</local-diagnostic>
<remote-diagnostic>
  remote-diagnostic
</remote-diagnostic>
<remote-state>
  remote-state
</remote-state>
<v0-remote-state>
  v0-remote-state
</v0-remote-state>
<remote-listen>
  remote-listen
</remote-listen>
<session-version>
  session-version
</session-version>
<logical-system-id>
  logical-system-id
</logical-system-id>
<route-table-index>
  route-table-index
</route-table-index>
<minimum-asynchronous-interval>
  minimum-asynchronous-interval
</minimum-asynchronous-interval>
<minimum-slow-interval>
  minimum-slow-interval
</minimum-slow-interval>
<adaptive-asynchronous-transmission-interval>
  adaptive-asynchronous-transmission-interval
</adaptive-asynchronous-transmission-interval>
<adaptive-reception-interval>
  adaptive-reception-interval
</adaptive-reception-interval>
<minimum-transmission-interval>
```


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```
  minimum-transmission-interval
</minimum-transmission-interval>
<threshold-transmission-interval>
  threshold-transmission-interval
</threshold-transmission-interval>
<minimum-reception-interval>
  minimum-reception-interval
</minimum-reception-interval>
<detection-multiplier>
  detection-multiplier
</detection-multiplier>
<threshold-detection-time>
  threshold-detection-time
</threshold-detection-time>
<neighbor-minimum-transmission-interval>
  neighbor-minimum-transmission-interval
</neighbor-minimum-transmission-interval>
<neighbor-minimum-reception-interval>
  neighbor-minimum-reception-interval
</neighbor-minimum-reception-interval>
<neighbor-session-multiplier>
  neighbor-session-multiplier
</neighbor-session-multiplier>
<issu-state>
  issu-state
</issu-state>
<original-transmission-interval>
  original-transmission-interval
</original-transmission-interval>
<original-reception-interval>
  original-reception-interval
</original-reception-interval>
<local-discriminator>
  local-discriminator
</local-discriminator>
<remote-discriminator>
  remote-discriminator
</remote-discriminator>
<echo-mode-desired>
  echo-mode-desired
</echo-mode-desired>
<echo-mode-state>
  echo-mode-state
</echo-mode-state>
<no-absorb>
  no-absorb
</no-absorb>
<no-refresh>
  no-refresh
</no-refresh>
<update-adjacency>
  update-adjacency
</update-adjacency>
<update-transmit>
  update-transmit
</update-transmit>
```

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```
<neighbor-fate>
  neighbor-fate
</neighbor-fate>
<replicated>
  replicated
</replicated>
<holddown-timer>
  holddown-timer
</holddown-timer>
<adaptation-disabled>
  adaptation-disabled
</adaptation-disabled>
<l2vpn-local-site-id>
  l2vpn-local-site-id
</l2vpn-local-site-id>
<l2vpn-remote-site-id>
  l2vpn-remote-site-id
</l2vpn-remote-site-id>
<l2ckt-neighbor-address>
  l2ckt-neighbor-address
</l2ckt-neighbor-address>
<l2ckt-vc-id>
  l2ckt-vc-id
</l2ckt-vc-id>
<tunnel-name>
  tunnel-name
</tunnel-name>
<tunnel-path>
  tunnel-path
</tunnel-path>
<tunnel-prefix>
  tunnel-prefix
</tunnel-prefix>
<tunnel-prefix-length>
  tunnel-prefix-length
</tunnel-prefix-length>
<tunnel-type>
  tunnel-type
</tunnel-type>
<tunnel-destination>
  tunnel-destination
</tunnel-destination>
<multihop-time-to-live>
  multihop-time-to-live
</multihop-time-to-live>
<multihop>
  multihop
</multihop>
<multihop-routing-table-index>
  multihop-routing-table-index
</multihop-routing-table-index>
<multihop-local-address>
  multihop-local-address
</multihop-local-address>
<authentication>
  authentication
```


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```
  </authentication>
  <session-keychain>
    session-keychain
  </session-keychain>
  <session-algorithm>
    session-algorithm
  </session-algorithm>
  <session-authentication-loose>
    session-authentication-loose
  </session-authentication-loose>
</bfd-session>
```

Description Information about bidirectional forwarding detection session

<bfd-session>

Usage

```
<bfd-session-information>
  <bfd-session>
    <session-state>
      session-state
    </session-state>
    <session-interface>
      session-interface
    </session-interface>
    <session-neighbor>
      session-neighbor
    </session-neighbor>
    <session-detection-time>
      session-detection-time
    </session-detection-time>
    <session-transmission-interval>
      session-transmission-interval
    </session-transmission-interval>
    <session-adaptive-multiplier>
      session-adaptive-multiplier
    </session-adaptive-multiplier>
    <bfd-client>....</bfd-client>
    <session-up-time>
      session-up-time
    </session-up-time>
    <previous-up-time>
      previous-up-time
    </previous-up-time>
    <session-down-time>
      session-down-time
    </session-down-time>
    <previous-down-time>
      previous-down-time
    </previous-down-time>
    <local-diagnostic>
      local-diagnostic
    </local-diagnostic>
    <remote-diagnostic>
```

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```
  remote-diagnostic
</remote-diagnostic>
<remote-state>
  remote-state
</remote-state>
<v0-remote-state>
  v0-remote-state
</v0-remote-state>
<remote-listen>
  remote-listen
</remote-listen>
<session-version>
  session-version
</session-version>
<logical-system-id>
  logical-system-id
</logical-system-id>
<route-table-index>
  route-table-index
</route-table-index>
<minimum-asynchronous-interval>
  minimum-asynchronous-interval
</minimum-asynchronous-interval>
<minimum-slow-interval>
  minimum-slow-interval
</minimum-slow-interval>
<adaptive-asynchronous-transmission-interval>
  adaptive-asynchronous-transmission-interval
</adaptive-asynchronous-transmission-interval>
<adaptive-reception-interval>
  adaptive-reception-interval
</adaptive-reception-interval>
<minimum-transmission-interval>
  minimum-transmission-interval
</minimum-transmission-interval>
<threshold-transmission-interval>
  threshold-transmission-interval
</threshold-transmission-interval>
<minimum-reception-interval>
  minimum-reception-interval
</minimum-reception-interval>
<detection-multiplier>
  detection-multiplier
</detection-multiplier>
<threshold-detection-time>
  threshold-detection-time
</threshold-detection-time>
<neighbor-minimum-transmission-interval>
  neighbor-minimum-transmission-interval
</neighbor-minimum-transmission-interval>
<neighbor-minimum-reception-interval>
  neighbor-minimum-reception-interval
</neighbor-minimum-reception-interval>
<neighbor-session-multiplier>
  neighbor-session-multiplier
</neighbor-session-multiplier>
```


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```
<issu-state>
  issu-state
</issu-state>
<original-transmission-interval>
  original-transmission-interval
</original-transmission-interval>
<original-reception-interval>
  original-reception-interval
</original-reception-interval>
<local-discriminator>
  local-discriminator
</local-discriminator>
<remote-discriminator>
  remote-discriminator
</remote-discriminator>
<echo-mode-desired>
  echo-mode-desired
</echo-mode-desired>
<echo-mode-state>
  echo-mode-state
</echo-mode-state>
<no-absorb>
  no-absorb
</no-absorb>
<no-refresh>
  no-refresh
</no-refresh>
<update-adjacency>
  update-adjacency
</update-adjacency>
<update-transmit>
  update-transmit
</update-transmit>
<neighbor-fate>
  neighbor-fate
</neighbor-fate>
<replicated>
  replicated
</replicated>
<holddown-timer>
  holddown-timer
</holddown-timer>
<adaptation-disabled>
  adaptation-disabled
</adaptation-disabled>
<l2vpn-local-site-id>
  l2vpn-local-site-id
</l2vpn-local-site-id>
<l2vpn-remote-site-id>
  l2vpn-remote-site-id
</l2vpn-remote-site-id>
<l2ckt-neighbor-address>
  l2ckt-neighbor-address
</l2ckt-neighbor-address>
<l2ckt-vc-id>
  l2ckt-vc-id
```

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```
        </l2ckt-vc-id>
        <tunnel-name>
          tunnel-name
        </tunnel-name>
        <tunnel-path>
          tunnel-path
        </tunnel-path>
        <tunnel-prefix>
          tunnel-prefix
        </tunnel-prefix>
        <tunnel-prefix-length>
          tunnel-prefix-length
        </tunnel-prefix-length>
        <tunnel-type>
          tunnel-type
        </tunnel-type>
        <tunnel-destination>
          tunnel-destination
        </tunnel-destination>
        <multihop-time-to-live>
          multihop-time-to-live
        </multihop-time-to-live>
        <multihop>
          multihop
        </multihop>
        <multihop-routing-table-index>
          multihop-routing-table-index
        </multihop-routing-table-index>
        <multihop-local-address>
          multihop-local-address
        </multihop-local-address>
        <authentication>
          authentication
        </authentication>
        <session-keychain>
          session-keychain
        </session-keychain>
        <session-algorithm>
          session-algorithm
        </session-algorithm>
        <session-authentication-loose>
          session-authentication-loose
        </session-authentication-loose>
      </bfd-session>
    </bfd-session-information>
```

Description Information about bidirectional forwarding detection session

<bfd-session-information>

Usage

```
<bfd-session-information>
  <bfd-session>....</bfd-session>
  <sessions>
```


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```
  sessions
 </sessions>
 <clients>
  clients
 </clients>
 <cumulative-transmission-rate>
  cumulative-transmission-rate
 </cumulative-transmission-rate>
 <cumulative-reception-rate>
  cumulative-reception-rate
 </cumulative-reception-rate>
 <error-value>
  error-value
 </error-value>
</bfd-session-information>
```

Description

Summary of Clock Synchronization Response Tags

<clock-synchronization>

Usage

```
<clock-synchronization>
 <clock-status>
  clock-status
 </clock-status>
 <clock-lock-information>
  clock-lock-information
 </clock-lock-information>
 <clock-ineligible-reason>
  clock-ineligible-reason
 </clock-ineligible-reason>
 <clock-synchronization-source>....</clock-synchronization-source>
</clock-synchronization>
```

Description Clock synchronization

<clock-synchronization-cpld-information>

Usage

```
<clock-synchronization-cpld-information>
 <cpld-primary-mic>
  cpld-primary-mic
 </cpld-primary-mic>
 <cpld-secondary-mic>
  cpld-secondary-mic
 </cpld-secondary-mic>
</clock-synchronization-cpld-information>
```

Description

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<clock-synchronization-esmc-transmit>

Usage

```
<clock-synchronization-esmc-transmit>
  <esmc-transmit-interface-name>
    esmc-transmit-interface-name
  </esmc-transmit-interface-name>
  <esmc-transmit-interface-status>
    esmc-transmit-interface-status
  </esmc-transmit-interface-status>
</clock-synchronization-esmc-transmit>
```

Description ESMC Transmit interface details:

<clock-synchronization-esmc-transmit>

Usage

```
<clock-synchronization-esmc-transmit-information>
  <clock-synchronization-esmc-transmit>
    <esmc-transmit-interface-name>
      esmc-transmit-interface-name
    </esmc-transmit-interface-name>
    <esmc-transmit-interface-status>
      esmc-transmit-interface-status
    </esmc-transmit-interface-status>
  </clock-synchronization-esmc-transmit>
</clock-synchronization-esmc-transmit-information>
```

Description ESMC Transmit interface details:

<clock-synchronization-esmc-transmit-information>

Usage

```
<clock-synchronization-esmc-transmit-information>
<clock-synchronization-esmc-transmit>....</clock-synchronization-esmc-transmit>

</clock-synchronization-esmc-transmit-information>
```

Description Synchronous ethernet ESMC

<clock-synchronization-fpga-information>

Usage

```
<clock-synchronization-fpga-information>
  <acbc-primary-slot>
    acbc-primary-slot
  </acbc-primary-slot>
  <acbc-secondary-slot>
    acbc-secondary-slot
  </acbc-secondary-slot>
```


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```
</clock-synchronization-fpga-information>
```

Description

<clock-synchronization-gencfg>

Usage

```
<clock-synchronization-gencfg>
  <primary-index>
    primary-index
  </primary-index>
  <secondary-index>
    secondary-index
  </secondary-index>
  <primary-type>
    primary-type
  </primary-type>
  <secondary-type>
    secondary-type
  </secondary-type>
  <primary-quality-level>
    primary-quality-level
  </primary-quality-level>
  <secondary-quality-level>
    secondary-quality-level
  </secondary-quality-level>
  <primary-state>
    primary-state
  </primary-state>
  <secondary-state>
    secondary-state
  </secondary-state>
  <clock-flags>
    clock-flags
  </clock-flags>
</clock-synchronization-gencfg>
```

Description Global gencfg

<clock-synchronization-global-information>

Usage

```
<clock-synchronization-global-information>
  <network-option>
    network-option
  </network-option>
  <clock-mode>
    clock-mode
  </clock-mode>
  <quality-mode>
    quality-mode
  </quality-mode>
  <selection-mode>
```

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```
    selection-mode
  </selection-mode>
  <switchover-mode>
    switchover-mode
  </switchover-mode>
  <change-hold-interval>
    change-hold-interval
  </change-hold-interval>
  <switchover-hold-interval>
    switchover-hold-interval
  </switchover-hold-interval>
  <reboot-hold-interval>
    reboot-hold-interval
  </reboot-hold-interval>
  <master-status>
    master-status
  </master-status>
  <agentsmith-dpc-bitmap>
    agentsmith-dpc-bitmap
  </agentsmith-dpc-bitmap>
  <zarlink-support-dpc-bitmap>
    zarlink-support-dpc-bitmap
  </zarlink-support-dpc-bitmap>
  <fpga-support-synchronous-ethernet>
    fpga-support-synchronous-ethernet
  </fpga-support-synchronous-ethernet>
</clock-synchronization-global-information>
```

Description Global configuration

<clock-synchronization-interface-statistics>

Usage

```
<clock-synchronization-statistics>
  <clock-synchronization-interface-statistics>
    <clock-synchronization-interface-name>
      clock-synchronization-interface-name
    </clock-synchronization-interface-name>
    <interface-receive-esmc-count>
      interface-receive-esmc-count
    </interface-receive-esmc-count>
    <interface-transmit-esmc-count>
      interface-transmit-esmc-count
    </interface-transmit-esmc-count>
    <interface-receive-esmc-drop-count>
      interface-receive-esmc-drop-count
    </interface-receive-esmc-drop-count>
    <interface-esmc-ineligible-drop-count>
      interface-esmc-ineligible-drop-count
    </interface-esmc-ineligible-drop-count>
    <interface-adjacency-create-count>
      interface-adjacency-create-count
    </interface-adjacency-create-count>
  </clock-synchronization-interface-statistics>
```


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```
</clock-synchronization-statistics>
```

Description Interface statistics for clock synchronization

<clock-synchronization-ref-monitor>

Usage

```
<clock-synchronization-ref-monitor>
  <zarlink-fail-bitmap>
    zarlink-fail-bitmap
  </zarlink-fail-bitmap>
  <ack-reply-bitmap>
    ack-reply-bitmap
  </ack-reply-bitmap>
  <reference-must-mask>
    reference-must-mask
  </reference-must-mask>
  <current-event-context>
    current-event-context
  </current-event-context>
  <current-sequence-number>
    current-sequence-number
  </current-sequence-number>
  <current-reference-index>
    current-reference-index
  </current-reference-index>
  <next-function>
    next-function
  </next-function>
</clock-synchronization-ref-monitor>
```

Description

<clock-synchronization-source>

Usage

```
<clock-synchronization-source>
  <source-priority>
    source-priority
  </source-priority>
  <source-quality-level>
    source-quality-level
  </source-quality-level>
  <esmc-quality-level>
    esmc-quality-level
  </esmc-quality-level>
  <source-interface-name>
    source-interface-name
  </source-interface-name>
  <source-interface-status>
    source-interface-status
  </source-interface-status>
  <source-interface-index>
```

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```
    source-interface-index
  </source-interface-index>
  <clock-state>
    clock-state
  </clock-state>
  <interface-configuration-flags>
    interface-configuration-flags
  </interface-configuration-flags>
  <interface-flags>
    interface-flags
  </interface-flags>
  <source-clock-type>
    source-clock-type
  </source-clock-type>
  <source-clock-event>
    source-clock-event
  </source-clock-event>
  <interface-ineligible-reason>
    interface-ineligible-reason
  </interface-ineligible-reason>
  <clock-failure-reason>
    clock-failure-reason
  </clock-failure-reason>
  <interface-hold-interval-expiry>
    interface-hold-interval-expiry
  </interface-hold-interval-expiry>
</clock-synchronization-source>
```

Description SyncE source interface details:

<clock-synchronization-source>

Usage

```
<clock-synchronization>
  <clock-synchronization-source>
    <source-priority>
      source-priority
    </source-priority>
    <source-quality-level>
      source-quality-level
    </source-quality-level>
    <esmc-quality-level>
      esmc-quality-level
    </esmc-quality-level>
    <source-interface-name>
      source-interface-name
    </source-interface-name>
    <source-interface-status>
      source-interface-status
    </source-interface-status>
    <source-interface-index>
      source-interface-index
    </source-interface-index>
    <clock-state>
```


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```
  clock-state
 </clock-state>
 <interface-configuration-flags>
  interface-configuration-flags
 </interface-configuration-flags>
 <interface-flags>
  interface-flags
 </interface-flags>
 <source-clock-type>
  source-clock-type
 </source-clock-type>
 <source-clock-event>
  source-clock-event
 </source-clock-event>
 <interface-ineligible-reason>
  interface-ineligible-reason
 </interface-ineligible-reason>
 <clock-failure-reason>
  clock-failure-reason
 </clock-failure-reason>
 <interface-hold-interval-expiry>
  interface-hold-interval-expiry
 </interface-hold-interval-expiry>
</clock-synchronization-source>
</clock-synchronization>
```

Description SyncE source interface details:

<clock-synchronization-statistics>

Usage

```
<clock-synchronization-statistics>

<clock-synchronization-interface-statistics>....</clock-synchronization-interface-statistics>

</clock-synchronization-statistics>
```

Description Statistics about the clock synchronization

<clock-synchronization-zarlink>

Usage

```
<clock-synchronization-zarlink>
</clock-synchronization-zarlink>
```

Description

<ptp-acceptable-masters>

Usage

```
<ptp-acceptable-masters>
```

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```
<ptp-acceptable-table-local-ip>
  ptp-acceptable-table-local-ip
</ptp-acceptable-table-local-ip>
<ptp-acceptable-table-status>
  ptp-acceptable-table-status
</ptp-acceptable-table-status>
<ptp-acceptable-table-maximum-size>
  ptp-acceptable-table-maximum-size
</ptp-acceptable-table-maximum-size>
<ptp-acceptable-table-current-size>
  ptp-acceptable-table-current-size
</ptp-acceptable-table-current-size>
<ptp-acceptable-table-entry-address>
  ptp-acceptable-table-entry-address
</ptp-acceptable-table-entry-address>
<ptp-acceptable-table-entry-info>
  ptp-acceptable-table-entry-info
</ptp-acceptable-table-entry-info>
</ptp-acceptable-masters>
```

Description Show info on acceptable master clocks list

<ptp-bmc-information>

Usage

```
<ptp-bmc-information>
  <ptp-bmc-ip-address>
    ptp-bmc-ip-address
  </ptp-bmc-ip-address>
  <ptp-bmc-slot>
    ptp-bmc-slot
  </ptp-bmc-slot>
  <ptp-bmc-ifl-index>
    ptp-bmc-ifl-index
  </ptp-bmc-ifl-index>
  <ptp-bmc-stream-handle>
    ptp-bmc-stream-handle
  </ptp-bmc-stream-handle>
  <ptp-bmc-clock-identity>
    ptp-bmc-clock-identity
  </ptp-bmc-clock-identity>
  <ptp-bmc-port-number>
    ptp-bmc-port-number
  </ptp-bmc-port-number>
  <ptp-bmc-announce-utc-offset>
    ptp-bmc-announce-utc-offset
  </ptp-bmc-announce-utc-offset>
  <ptp-bmc-announce-time-source>
    ptp-bmc-announce-time-source
  </ptp-bmc-announce-time-source>
  <ptp-bmc-announce-steps-removed>
    ptp-bmc-announce-steps-removed
  </ptp-bmc-announce-steps-removed>
  <ptp-bmc-grandmaster-identity>
```


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```
  ptp-bmc-grandmaster-identity
 </ptp-bmc-grandmaster-identity>
 <ptp-bmc-grandmaster-clock-class>
  ptp-bmc-grandmaster-clock-class
 </ptp-bmc-grandmaster-clock-class>
 <ptp-bmc-grandmaster-clock-accuracy>
  ptp-bmc-grandmaster-clock-accuracy
 </ptp-bmc-grandmaster-clock-accuracy>
 <ptp-bmc-grandmaster-clock-variance>
  ptp-bmc-grandmaster-clock-variance
 </ptp-bmc-grandmaster-clock-variance>
 <ptp-bmc-grandmaster-priority1>
  ptp-bmc-grandmaster-priority1
 </ptp-bmc-grandmaster-priority1>
 <ptp-bmc-grandmaster-priority2>
  ptp-bmc-grandmaster-priority2
 </ptp-bmc-grandmaster-priority2>
 <ptp-bmc-receive-port-clock-identity>
  ptp-bmc-receive-port-clock-identity
 </ptp-bmc-receive-port-clock-identity>
 <ptp-bmc-receive-port-number>
  ptp-bmc-receive-port-number
 </ptp-bmc-receive-port-number>
 <ptp-bmc-header-flags>
  ptp-bmc-header-flags
 </ptp-bmc-header-flags>
 <ptp-bmc-header-source-clock-identity>
  ptp-bmc-header-source-clock-identity
 </ptp-bmc-header-source-clock-identity>
 <ptp-bmc-header-source-clock-port-number>
  ptp-bmc-header-source-clock-port-number
 </ptp-bmc-header-source-clock-port-number>
 <ptp-bmc-header-mean-interval>
  ptp-bmc-header-mean-interval
 </ptp-bmc-header-mean-interval>
</ptp-bmc-information>
```

Description Information about the PTP best master clock

<ptp-clock>

Usage

```
<ptp-clock>
 <ptp-clock-accuracy>
  ptp-clock-accuracy
 </ptp-clock-accuracy>
 <ptp-slot-number-string>
  ptp-slot-number-string
 </ptp-slot-number-string>
 <ptp-two-step-clk>
  ptp-two-step-clk
 </ptp-two-step-clk>
 <ptp-clock-id-default>
  ptp-clock-id-default
```

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```
</ptp-clock-id-default>
<ptp-number-of-ports>
  ptp-number-of-ports
</ptp-number-of-ports>
<ptp-clock-class>
  ptp-clock-class
</ptp-clock-class>
<ptp-clock-variance>
  ptp-clock-variance
</ptp-clock-variance>
<ptp-clock-priority1>
  ptp-clock-priority1
</ptp-clock-priority1>
<ptp-clock-priority2>
  ptp-clock-priority2
</ptp-clock-priority2>
<ptp-clock-slave-only>
  ptp-clock-slave-only
</ptp-clock-slave-only>
<ptp-clock-default-utc-offset>
  ptp-clock-default-utc-offset
</ptp-clock-default-utc-offset>
<ptp-clock-default-leap-59>
  ptp-clock-default-leap-59
</ptp-clock-default-leap-59>
<ptp-clock-default-leap-61>
  ptp-clock-default-leap-61
</ptp-clock-default-leap-61>
<ptp-clock-default-time-tracable>
  ptp-clock-default-time-tracable
</ptp-clock-default-time-tracable>
<ptp-clock-default-freq-tracable>
  ptp-clock-default-freq-tracable
</ptp-clock-default-freq-tracable>
<ptp-clock-default-time-source>
  ptp-clock-default-time-source
</ptp-clock-default-time-source>
<ptp-clock-delay-request-send-time>
  ptp-clock-delay-request-send-time
</ptp-clock-delay-request-send-time>
<ptp-clock-steps-removed>
  ptp-clock-steps-removed
</ptp-clock-steps-removed>
<ptp-clock-parent-id>
  ptp-clock-parent-id
</ptp-clock-parent-id>
<ptp-gmc-id>
  ptp-gmc-id
</ptp-gmc-id>
<ptp-gmc-class>
  ptp-gmc-class
</ptp-gmc-class>
<ptp-gmc-accuracy>
  ptp-gmc-accuracy
</ptp-gmc-accuracy>
<ptp-gmc-variance>
```


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```
  ptp-gmc-variance
 </ptp-gmc-variance>
 <ptp-gmc-priority1>
  ptp-gmc-priority1
 </ptp-gmc-priority1>
 <ptp-gmc-priority2>
  ptp-gmc-priority2
 </ptp-gmc-priority2>
 <ptp-clock-global-utc-offset>
  ptp-clock-global-utc-offset
 </ptp-clock-global-utc-offset>
 <ptp-clock-global-leap-59>
  ptp-clock-global-leap-59
 </ptp-clock-global-leap-59>
 <ptp-clock-global-leap-61>
  ptp-clock-global-leap-61
 </ptp-clock-global-leap-61>
 <ptp-clock-global-time-tracable>
  ptp-clock-global-time-tracable
 </ptp-clock-global-time-tracable>
 <ptp-clock-global-freq-tracable>
  ptp-clock-global-freq-tracable
 </ptp-clock-global-freq-tracable>
 <ptp-clock-global-time-scale>
  ptp-clock-global-time-scale
 </ptp-clock-global-time-scale>
 <ptp-clock-global-time-source>
  ptp-clock-global-time-source
 </ptp-clock-global-time-source>
</ptp-clock>
```

Description Show clock details

<ptp-clock-source>

Usage

```
<ptp-clock-source>
 <ptp-clock-source-ip>
  ptp-clock-source-ip
 </ptp-clock-source-ip>
 <ptp-clock-source-local-interface>
  ptp-clock-source-local-interface
 </ptp-clock-source-local-interface>
 <ptp-clock-source-local-ip-address>
  ptp-clock-source-local-ip-address
 </ptp-clock-source-local-ip-address>
 <ptp-clock-source-preference>
  ptp-clock-source-preference
 </ptp-clock-source-preference>
</ptp-clock-source>
```

Description PTP clock source details

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<ptp-global-information>

Usage

```
<ptp-global-information>
 <ptp-clock-mode>
  ptp-clock-mode
 </ptp-clock-mode>
 <ptp-domain>
  ptp-domain
 </ptp-domain>
 <ptp-priority1>
  ptp-priority1
 </ptp-priority1>
 <ptp-priority2>
  ptp-priority2
 </ptp-priority2>
 <ptp-announce-timeout>
  ptp-announce-timeout
 </ptp-announce-timeout>
 <ptp-clock-stepping>
  ptp-clock-stepping
 </ptp-clock-stepping>
 <ptp-transport>
  ptp-transport
 </ptp-transport>
 <master>
  master
 </master>
 <ptp-uni-neg>
  ptp-uni-neg
 </ptp-uni-neg>
 <ptp-total-ports>
  ptp-total-ports
 </ptp-total-ports>
 <ptp-slave-delay-request-string>
  ptp-slave-delay-request-string
 </ptp-slave-delay-request-string>
 <ptp-slave-announce-interval-string>
  ptp-slave-announce-interval-string
 </ptp-slave-announce-interval-string>
 <ptp-master-delay-request-string>
  ptp-master-delay-request-string
 </ptp-master-delay-request-string>
 <ptp-master-announce-interval-string>
  ptp-master-announce-interval-string
 </ptp-master-announce-interval-string>
 <ptp-slave-synchronization-interval-string>
  ptp-slave-synchronization-interval-string
 </ptp-slave-synchronization-interval-string>
 <ptp-master-synchronization-interval-string>
  ptp-master-synchronization-interval-string
 </ptp-master-synchronization-interval-string>
 <ptp-slave-count>
  ptp-slave-count
 </ptp-slave-count>
```


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```
<ptp-master-count>
  ptp-master-count
</ptp-master-count>
</ptp-global-information>
```

Description PTP global configuration

<ptp-lock-status>

Usage

```
<ptp-lock-status>
  <ptp-spll-lock-state>
    ptp-spll-lock-state
  </ptp-spll-lock-state>
  <ptp-spll-lock-state-string>
    ptp-spll-lock-state-string
  </ptp-spll-lock-state-string>
  <ptp-spll-phase-offset>
    ptp-spll-phase-offset
  </ptp-spll-phase-offset>
  <ptp-spll-error-flag>
    ptp-spll-error-flag
  </ptp-spll-error-flag>
  <ptp-fsm-header-string>
    ptp-fsm-header-string
  </ptp-fsm-header-string>
  <ptp-primary-reference-state>
    ptp-primary-reference-state
  </ptp-primary-reference-state>
  <ptp-secondary-reference-state>
    ptp-secondary-reference-state
  </ptp-secondary-reference-state>
  <ptp-slave-ifl-index>
    ptp-slave-ifl-index
  </ptp-slave-ifl-index>
  <ptp-master-ip-address>
    ptp-master-ip-address
  </ptp-master-ip-address>
</ptp-lock-status>
```

Description Show Software PLL Status

<ptp-master>

Usage

```
<ptp-master>
  <ptp-master-interface-name>
    ptp-master-interface-name
  </ptp-master-interface-name>
  <ptp-master-interface-status>
    ptp-master-interface-status
  </ptp-master-interface-status>
```

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```
<ptp-master-local-ip>
  ptp-master-local-ip
</ptp-master-local-ip>
<ptp-master-local-status>
  ptp-master-local-status
</ptp-master-local-status>
<ptp-master-total-slaves>
  ptp-master-total-slaves
</ptp-master-total-slaves>
<ptp-master-remote-ip>
  ptp-master-remote-ip
</ptp-master-remote-ip>
<ptp-master-remote-status>
  ptp-master-remote-status
</ptp-master-remote-status>
</ptp-master>
```

Description PTP master interface details

<ptp-port>

Usage

```
<ptp-port>
  <ptp-port-information>....</ptp-port-information>
</ptp-port>
```

Description Show port stream details

<ptp-port-information>

Usage

```
<ptp-port>
  <ptp-port-information>
    <ptp-clock-stream-handle>
      ptp-clock-stream-handle
    </ptp-clock-stream-handle>
    <ptp-delay-request>
      ptp-delay-request
    </ptp-delay-request>
    <ptp-announce-interval>
      ptp-announce-interval
    </ptp-announce-interval>
    <ptp-announce-timeout>
      ptp-announce-timeout
    </ptp-announce-timeout>
    <ptp-synchronization-interval>
      ptp-synchronization-interval
    </ptp-synchronization-interval>
    <ptp-port-local-ip>
      ptp-port-local-ip
    </ptp-port-local-ip>
    <ptp-port-remote-ip>
```


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```
        ptp-port-remote-ip
      </ptp-port-remote-ip>
      <ptp-clock-id>
        ptp-clock-id
      </ptp-clock-id>
      <ptp-port-state>
        ptp-port-state
      </ptp-port-state>
      <ptp-mean-path-delay-high>
        ptp-mean-path-delay-high
      </ptp-mean-path-delay-high>
      <ptp-mean-path-delay-low>
        ptp-mean-path-delay-low
      </ptp-mean-path-delay-low>
      <ptp-delay-mechanism>
        ptp-delay-mechanism
      </ptp-delay-mechanism>
      <ptp-port-number>
        ptp-port-number
      </ptp-port-number>
      <ptp-op-mode>
        ptp-op-mode
      </ptp-op-mode>
      <ptp-foreign-master-title-string>
        ptp-foreign-master-title-string
      </ptp-foreign-master-title-string>
      <ptp-foreign-master-clock-id>
        ptp-foreign-master-clock-id
      </ptp-foreign-master-clock-id>
      <ptp-foreign-master-messages>
        ptp-foreign-master-messages
      </ptp-foreign-master-messages>
      <ptp-foreign-master-current-messages>
        ptp-foreign-master-current-messages
      </ptp-foreign-master-current-messages>
    </ptp-port-information>
  </ptp-port>
```

Description Show details of each PTP stream

<ptp-slave>

Usage

```
<ptp-slave>
  <ptp-slave-interface-name>
    ptp-slave-interface-name
  </ptp-slave-interface-name>
  <ptp-slave-interface-status>
    ptp-slave-interface-status
  </ptp-slave-interface-status>
  <ptp-slave-local-ip>
    ptp-slave-local-ip
  </ptp-slave-local-ip>
  <ptp-slave-local-status>
```

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```
    ptp-slave-local-status
  </ptp-slave-local-status>
  <ptp-slave-total-masters>
    ptp-slave-total-masters
  </ptp-slave-total-masters>
  <ptp-slave-clock-source-ip>
    ptp-slave-clock-source-ip
  </ptp-slave-clock-source-ip>
  <ptp-slave-clock-source-flags>
    ptp-slave-clock-source-flags
  </ptp-slave-clock-source-flags>
</ptp-slave>
```

Description PTP slave interface details

<ptp-statistics>

Usage

```
<ptp-statistics>
  <ptp-clock-stream-handle>
    ptp-clock-stream-handle
  </ptp-clock-stream-handle>
  <ptp-statistics-local-ip>
    ptp-statistics-local-ip
  </ptp-statistics-local-ip>
  <ptp-statistics-remote-ip>
    ptp-statistics-remote-ip
  </ptp-statistics-remote-ip>
  <ptp-clock-statistics-in-unicast-packets>
    ptp-clock-statistics-in-unicast-packets
  </ptp-clock-statistics-in-unicast-packets>
  <ptp-clock-statistics-in-discards>
    ptp-clock-statistics-in-discards
  </ptp-clock-statistics-in-discards>
  <ptp-clock-statistics-in-errors>
    ptp-clock-statistics-in-errors
  </ptp-clock-statistics-in-errors>
  <ptp-clock-statistics-in-unknown-protocols>
    ptp-clock-statistics-in-unknown-protocols
  </ptp-clock-statistics-in-unknown-protocols>
  <ptp-clock-statistics-out-unicast-packets>
    ptp-clock-statistics-out-unicast-packets
  </ptp-clock-statistics-out-unicast-packets>
  <ptp-clock-statistics-out-discards>
    ptp-clock-statistics-out-discards
  </ptp-clock-statistics-out-discards>
  <ptp-clock-statistics-out-errors>
    ptp-clock-statistics-out-errors
  </ptp-clock-statistics-out-errors>
</ptp-statistics>
```

Description Show clock stream statistics

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<ptp-threads>

Usage

```
<ptp-threads>
  <ptp-thread-id>
    ptp-thread-id
  </ptp-thread-id>
  <ptp-thread-name>
    ptp-thread-name
  </ptp-thread-name>
  <ptp-thread-entry-function-pointer>
    ptp-thread-entry-function-pointer
  </ptp-thread-entry-function-pointer>
  <ptp-thread-priority>
    ptp-thread-priority
  </ptp-thread-priority>
  <ptp-thread-total>
    ptp-thread-total
  </ptp-thread-total>
</ptp-threads>
```

Description Show PTP thread details

<ptp-time>

Usage

```
<ptp-time>
  <ptp-seconds-elapsed>
    ptp-seconds-elapsed
  </ptp-seconds-elapsed>
  <ptp-calendar-time>
    ptp-calendar-time
  </ptp-calendar-time>
</ptp-time>
```

Description Show current time

<ptp-zarlink-config>

Usage

```
<ptp-zarlink-config>
  <ptp-version>
    ptp-version
  </ptp-version>
  <ptp-domain>
    ptp-domain
  </ptp-domain>
  <ptp-priority1>
    ptp-priority1
  </ptp-priority1>
  <ptp-priority2>
    ptp-priority2
```

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```
</ptp-priority2>
<ptp-clock-mode>
  ptp-clock-mode
</ptp-clock-mode>
<ptp-delay-request>
  ptp-delay-request
</ptp-delay-request>
<ptp-announce-timeout>
  ptp-announce-timeout
</ptp-announce-timeout>
<ptp-announce-interval>
  ptp-announce-interval
</ptp-announce-interval>
<ptp-synchronization-interval>
  ptp-synchronization-interval
</ptp-synchronization-interval>
<ptp-clock-stepping>
  ptp-clock-stepping
</ptp-clock-stepping>
<ptp-clock-accuracy>
  ptp-clock-accuracy
</ptp-clock-accuracy>
<ptp-clock-quality>
  ptp-clock-quality
</ptp-clock-quality>
<ptp-clock-log-variance>
  ptp-clock-log-variance
</ptp-clock-log-variance>
<ptp-clock-identity>
  ptp-clock-identity
</ptp-clock-identity>
<ptp-delay-response>
  ptp-delay-response
</ptp-delay-response>
</ptp-zarlink-config>
```

Description Show applied configuration for PTP

Summary of Class-of-Service Response Tags

<adaptive-shaper>

Usage

```
<adaptive-shaper>
  <adaptive-shaper-name>
    adaptive-shaper-name
  </adaptive-shaper-name>
  <table-index>
    table-index
  </table-index>
  <trigger-item>....</trigger-item>
</adaptive-shaper>
```


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Description Class-of-service adaptive shaper

<adaptive-shaper>

Usage

```
<cos-adaptive-shaper-information>
  <adaptive-shaper>
    <adaptive-shaper-name>
      adaptive-shaper-name
    </adaptive-shaper-name>
    <table-index>
      table-index
    </table-index>
    <trigger-item>....</trigger-item>
  </adaptive-shaper>
</cos-adaptive-shaper-information>
```

Description Class-of-service adaptive shaper

<alias-map>

Usage

```
<code-point-map>
  <alias-map>
    <alias-map-item>....</alias-map-item>
  </alias-map>
</code-point-map>
```

Description

<alias-map>

Usage

```
<cos-code-point-map-information>
  <code-point-map>
    <alias-map>
      <alias-map-item>....</alias-map-item>
    </alias-map>
  </code-point-map>
</cos-code-point-map-information>
```

Description

<alias-map>

Usage

```
<cos-information>
  <cos-code-point-map-information>
    <code-point-map>
      <alias-map>
        <alias-map-item>....</alias-map-item>
      </alias-map>
```

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```
    </code-point-map>
  </cos-code-point-map-information>
</cos-information>
```

Description

<alias-map-item>

Usage

```
<code-point-map>
  <alias-map>
    <alias-map-item>
      <code-point-bits>
        code-point-bits
      </code-point-bits>
      <code-point-alias>
        code-point-alias
      </code-point-alias>
    </alias-map-item>
  </alias-map>
</code-point-map>
```

Description

<alias-map-item>

Usage

```
<cos-code-point-map-information>
  <code-point-map>
    <alias-map>
      <alias-map-item>
        <code-point-bits>
          code-point-bits
        </code-point-bits>
        <code-point-alias>
          code-point-alias
        </code-point-alias>
      </alias-map-item>
    </alias-map>
  </code-point-map>
</cos-code-point-map-information>
```

Description

<alias-map-item>

Usage

```
<cos-information>
  <cos-code-point-map-information>
    <code-point-map>
      <alias-map>
        <alias-map-item>
          <code-point-bits>
```


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```
                code-point-bits
               </code-point-bits>
               <code-point-alias>
                code-point-alias
               </code-point-alias>
              </alias-map-item>
             </alias-map>
            </code-point-map>
           </cos-code-point-map-information>
          </cos-information>
```

Description

<channel>

Usage

```
<virtual-channel-group>
 <channel>
  <virtual-channel-name>
   virtual-channel-name
  </virtual-channel-name>
  <scheduler-map-name>
   scheduler-map-name
  </scheduler-map-name>
  <channel-shaping-rate>
   channel-shaping-rate
  </channel-shaping-rate>
  <adjustment-shape-value>
   adjustment-shape-value
  </adjustment-shape-value>
 </channel>
</virtual-channel-group>
```

Description

<channel>

Usage

```
<cos-virtual-channel-group-information>
 <virtual-channel-group>
  <channel>
   <virtual-channel-name>
    virtual-channel-name
   </virtual-channel-name>
   <scheduler-map-name>
    scheduler-map-name
   </scheduler-map-name>
   <channel-shaping-rate>
    channel-shaping-rate
   </channel-shaping-rate>
   <adjustment-shape-value>
    adjustment-shape-value
   </adjustment-shape-value>
  </channel>
```

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```
  </virtual-channel-group>
</cos-virtual-channel-group-information>
```

Description

<classifier>

Usage

```
<classifier>
  <classifier-name>
    classifier-name
  </classifier-name>
  <code-point-type>
    code-point-type
  </code-point-type>
  <table-index>
    table-index
  </table-index>
  <classifier-map>....</classifier-map>
</classifier>
```

Description Class-of-service code point classifier

<classifier>

Usage

```
<cos-classifier-information>
  <classifier>
    <classifier-name>
      classifier-name
    </classifier-name>
    <code-point-type>
      code-point-type
    </code-point-type>
    <table-index>
      table-index
    </table-index>
    <classifier-map>....</classifier-map>
  </classifier>
</cos-classifier-information>
```

Description Class-of-service code point classifier

<classifier>

Usage

```
<cos-information>
  <cos-classifier-information>
    <classifier>
      <classifier-name>
        classifier-name
```


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```
      </classifier-name>
      <code-point-type>
       code-point-type
      </code-point-type>
      <table-index>
       table-index
      </table-index>
      <classifier-map>....</classifier-map>
     </classifier>
    </cos-classifier-information>
</cos-information>
```

Description Class-of-service code point classifier

<classifier-map>

Usage

```
<classifier>
 <classifier-map>
  <classifier-map-item>....</classifier-map-item>
 </classifier-map>
</classifier>
```

Description

<classifier-map>

Usage

```
<cos-classifier-information>
 <classifier>
  <classifier-map>
   <classifier-map-item>....</classifier-map-item>
  </classifier-map>
 </classifier>
</cos-classifier-information>
```

Description

<classifier-map>

Usage

```
<cos-information>
 <cos-classifier-information>
  <classifier>
   <classifier-map>
    <classifier-map-item>....</classifier-map-item>
   </classifier-map>
  </classifier>
 </cos-classifier-information>
</cos-information>
```

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Description

<classifier-map-item>

Usage

```
<classifier>
  <classifier-map>
    <classifier-map-item>
      <code-point>
        code-point
      </code-point>
      <fc-name>
        fc-name
      </fc-name>
      <loss-priority>
        loss-priority
      </loss-priority>
      <cntag-present>
        cntag-present
      </cntag-present>
    </classifier-map-item>
  </classifier-map>
</classifier>
```

Description

<classifier-map-item>

Usage

```
<cos-classifier-information>
  <classifier>
    <classifier-map>
      <classifier-map-item>
        <code-point>
          code-point
        </code-point>
        <fc-name>
          fc-name
        </fc-name>
        <loss-priority>
          loss-priority
        </loss-priority>
        <cntag-present>
          cntag-present
        </cntag-present>
      </classifier-map-item>
    </classifier-map>
  </classifier>
</cos-classifier-information>
```

Description

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<classifier-map-item>

Usage

```
<cos-information>
  <cos-classifier-information>
    <classifier>
      <classifier-map>
        <classifier-map-item>
          <code-point>
            code-point
          </code-point>
          <fc-name>
            fc-name
          </fc-name>
          <loss-priority>
            loss-priority
          </loss-priority>
          <cntag-present>
            cntag-present
          </cntag-present>
        </classifier-map-item>
      </classifier-map>
    </classifier>
  </cos-classifier-information>
</cos-information>
```

Description

<classifier-table>

Usage

```
<cos-classifier-table-information>
  <classifier-table>
    <table-index>
      table-index
    </table-index>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <table-type>
      table-type
    </table-type>
    <classifier-table-entry>....</classifier-table-entry>
  </classifier-table>
</cos-classifier-table-information>
```

Description

<classifier-table>

Usage

```
<cos-table-information>
  <cos-classifier-table-information>
```

```
    <classifier-table>
     <table-index>
      table-index
     </table-index>
     <number-of-entries>
      number-of-entries
     </number-of-entries>
     <table-type>
      table-type
     </table-type>
     <classifier-table-entry>....</classifier-table-entry>
    </classifier-table>
  </cos-classifier-table-information>
</cos-table-information>
```

Description

<classifier-table-entry>

Usage

```
<cos-classifier-table-information>
  <classifier-table>
    <classifier-table-entry>
     <table-index>
      table-index
     </table-index>
     <code-point>
      code-point
     </code-point>
     <fc-queue-number>
      fc-queue-number
     </fc-queue-number>
     <loss-priority>
      loss-priority
     </loss-priority>
    </classifier-table-entry>
  </classifier-table>
</cos-classifier-table-information>
```

Description

<classifier-table-entry>

Usage

```
<cos-table-information>
  <cos-classifier-table-information>
    <classifier-table>
      <classifier-table-entry>
       <table-index>
        table-index
       </table-index>
       <code-point>
        code-point
       </code-point>
```


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```
        <fc-queue-number>
          fc-queue-number
        </fc-queue-number>
        <loss-priority>
          loss-priority
        </loss-priority>
      </classifier-table-entry>
    </classifier-table>
  </cos-classifier-table-information>
</cos-table-information>
```

Description

<classifier-table-map>

Usage

```
<cos-classifier-table-map-information>
  <classifier-table-map>
    <table-index>
      table-index
    </table-index>
    <table-type>
      table-type
    </table-type>
    <logical-interface>
      logical-interface
    </logical-interface>
    <logical-interface-index>
      logical-interface-index
    </logical-interface-index>
  </classifier-table-map>
</cos-classifier-table-map-information>
```

Description

<classifier-table-map>

Usage

```
<cos-table-information>
  <cos-classifier-table-map-information>
    <classifier-table-map>
      <table-index>
        table-index
      </table-index>
      <table-type>
        table-type
      </table-type>
      <logical-interface>
        logical-interface
      </logical-interface>
      <logical-interface-index>
        logical-interface-index
      </logical-interface-index>
    </classifier-table-map>
```

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```
  </cos-classifier-table-map-information>
</cos-table-information>
```

Description

<cls-md-map>

Usage

```
<cos-multi-destination-information>
  <cls-md-map>
    <multidest-classifier-name>
      multidest-classifier-name
    </multidest-classifier-name>
    <multidest-classifier-type>
      multidest-classifier-type
    </multidest-classifier-type>
    <multidest-classifier-index>
      multidest-classifier-index
    </multidest-classifier-index>
  </cls-md-map>
</cos-multi-destination-information>
```

Description

<cls-md-map>

Usage

```
<cos-information>
  <cos-multi-destination-information>
    <cls-md-map>
      <multidest-classifier-name>
        multidest-classifier-name
      </multidest-classifier-name>
      <multidest-classifier-type>
        multidest-classifier-type
      </multidest-classifier-type>
      <multidest-classifier-index>
        multidest-classifier-index
      </multidest-classifier-index>
    </cls-md-map>
  </cos-multi-destination-information>
</cos-information>
```

Description

<code-point-map>

Usage

```
<code-point-map>
  <code-point-type>
    code-point-type
  </code-point-type>
  <alias-map>....</alias-map>
```


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```
</code-point-map>
```

Description Class-of-service code point alias map

<code-point-map>

Usage

```
<cos-code-point-map-information>
  <code-point-map>
    <code-point-type>
      code-point-type
    </code-point-type>
    <alias-map>....</alias-map>
  </code-point-map>
</cos-code-point-map-information>
```

Description Class-of-service code point alias map

<code-point-map>

Usage

```
<cos-information>
  <cos-code-point-map-information>
    <code-point-map>
      <code-point-type>
        code-point-type
      </code-point-type>
      <alias-map>....</alias-map>
    </code-point-map>
  </cos-code-point-map-information>
</cos-information>
```

Description Class-of-service code point alias map

<congestion-notification-map>

Usage

```
<cos-congestion-notification-information>
  <cos-congestion-notification>
    <congestion-notification-map>
      <congestion-notification-map-item>....</congestion-notification-map-item>
    </congestion-notification-map>
  </cos-congestion-notification>
</cos-congestion-notification-information>
```

Description

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<congestion-notification-map-item>

Usage

```
<cos-congestion-notification-information>
  <cos-congestion-notification>
    <congestion-notification-map>
      <congestion-notification-map-item>
        <pfc-priority>
          pfc-priority
        </pfc-priority>
        <pfc-enable-state>
          pfc-enable-state
        </pfc-enable-state>
      </congestion-notification-map-item>
    </congestion-notification-map>
  </cos-congestion-notification>
</cos-congestion-notification-information>
```

Description

<cos-adaptive-shaper-information>

Usage

```
<cos-adaptive-shaper-information>
  <adaptive-shaper>....</adaptive-shaper>
</cos-adaptive-shaper-information>
```

Description

<cos-classifier-information>

Usage

```
<cos-classifier-information>
  <classifier>....</classifier>
</cos-classifier-information>
```

Description

<cos-classifier-information>

Usage

```
<cos-information>
  <cos-classifier-information>
    <classifier>....</classifier>
  </cos-classifier-information>
</cos-information>
```

Description

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<cos-classifier-table-information>

Usage

```
<cos-classifier-table-information>
  <classifier-table>....</classifier-table>
</cos-classifier-table-information>
```

Description

<cos-classifier-table-information>

Usage

```
<cos-table-information>
  <cos-classifier-table-information>
    <classifier-table>....</classifier-table>
  </cos-classifier-table-information>
</cos-table-information>
```

Description

<cos-classifier-table-map-information>

Usage

```
<cos-classifier-table-map-information>
  <classifier-table-map>....</classifier-table-map>
</cos-classifier-table-map-information>
```

Description

<cos-classifier-table-map-information>

Usage

```
<cos-table-information>
  <cos-classifier-table-map-information>
    <classifier-table-map>....</classifier-table-map>
  </cos-classifier-table-map-information>
</cos-table-information>
```

Description

<cos-code-point-map-information>

Usage

```
<cos-code-point-map-information>
  <code-point-map>....</code-point-map>
</cos-code-point-map-information>
```

Description

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<cos-code-point-map-information>

Usage

```
<cos-information>
  <cos-code-point-map-information>
    <code-point-map>....</code-point-map>
  </cos-code-point-map-information>
</cos-information>
```

Description

<cos-congestion-notification>

Usage

```
<cos-congestion-notification-information>
  <cos-congestion-notification>
    <congestion-notification-type>
      congestion-notification-type
    </congestion-notification-type>
    <congestion-notification-name>
      congestion-notification-name
    </congestion-notification-name>
    <congestion-notification-id>
      congestion-notification-id
    </congestion-notification-id>
    <congestion-notification-map>....</congestion-notification-map>
  </cos-congestion-notification>
</cos-congestion-notification-information>
```

Description

<cos-congestion-notification-information>

Usage

```
<cos-congestion-notification-information>
  <cos-congestion-notification>....</cos-congestion-notification>
</cos-congestion-notification-information>
```

Description

<cos-drop-profile-information>

Usage

```
<cos-drop-profile-information>
  <drop-profile>....</drop-profile>
</cos-drop-profile-information>
```

Description

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<cos-drop-profile-information>

Usage

```
<cos-information>
  <cos-drop-profile-information>
    <drop-profile>....</drop-profile>
  </cos-drop-profile-information>
</cos-information>
```

Description

<cos-fabric-scheduler-map-information>

Usage

```
<cos-fabric-scheduler-map-information>
  <fabric-scheduler-map>....</fabric-scheduler-map>
</cos-fabric-scheduler-map-information>
```

Description

<cos-fabric-scheduler-map-table-information>

Usage

```
<cos-fabric-scheduler-map-table-information>
  <fabric-scheduler-map-table>....</fabric-scheduler-map-table>
</cos-fabric-scheduler-map-table-information>
```

Description

<cos-forwarding-class-information>

Usage

```
<cos-forwarding-class-information>
  <fc-map>....</fc-map>
</cos-forwarding-class-information>
```

Description

<cos-forwarding-class-information>

Usage

```
<cos-information>
  <cos-forwarding-class-information>
    <fc-map>....</fc-map>
  </cos-forwarding-class-information>
</cos-information>
```

Description

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<cos-forwarding-class-map-information>

Usage

```
<cos-forwarding-class-map-information>
  <fc-map>....</fc-map>
</cos-forwarding-class-map-information>
```

Description

<cos-forwarding-class-map-information>

Usage

```
<cos-information>
  <cos-forwarding-class-map-information>
    <fc-map>....</fc-map>
  </cos-forwarding-class-map-information>
</cos-information>
```

Description

<cos-forwarding-class-map-interface-table-information>

Usage

```
<cos-forwarding-class-map-interface-table-information>
  <forwarding-class-queue-table-map>....</forwarding-class-queue-table-map>
</cos-forwarding-class-map-interface-table-information>
```

Description

<cos-forwarding-class-map-table-information>

Usage

```
<cos-forwarding-class-map-table-information>
  <forwarding-class-queue-table>....</forwarding-class-queue-table>
</cos-forwarding-class-map-table-information>
```

Description

<cos-forwarding-class-set-information>

Usage

```
<cos-forwarding-class-set-information>
  <forwarding-class-set>....</forwarding-class-set>
</cos-forwarding-class-set-information>
```

Description

<cos-forwarding-class-set-information>

Usage

```
<cos-information>
```


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```
<cos-forwarding-class-set-information>
  <forwarding-class-set>....</forwarding-class-set>
 </cos-forwarding-class-set-information>
</cos-information>
```

Description

<cos-fragmentation-map-information>

Usage

```
<cos-fragmentation-map-information>
  <fragmentation-map>....</fragmentation-map>
</cos-fragmentation-map-information>
```

Description

<cos-fragmentation-map-information>

Usage

```
<cos-information>
  <cos-fragmentation-map-information>
    <fragmentation-map>....</fragmentation-map>
  </cos-fragmentation-map-information>
</cos-information>
```

Description

<cos-information>

Usage

```
<cos-information>
  <cos-forwarding-class-information>....</cos-forwarding-class-information>

<cos-forwarding-class-map-information>....</cos-forwarding-class-map-information>

  <cos-classifier-information>....</cos-classifier-information>
  <cos-loss-priority-map-information>....</cos-loss-priority-map-information>
  <cos-drop-profile-information>....</cos-drop-profile-information>
  <cos-rewrite-information>....</cos-rewrite-information>
 <cos-loss-priority-rewrite-information>....</cos-loss-priority-rewrite-information>

  <cos-code-point-map-information>....</cos-code-point-map-information>
 <cos-fragmentation-map-information>....</cos-fragmentation-map-information>


<cos-translation-table-map-information>....</cos-translation-table-map-information>

  <cos-multi-destination-information>....</cos-multi-destination-information>
<cos-forwarding-class-set-information>....</cos-forwarding-class-set-information>

</cos-information>
```

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Description

<cos-interface-information>

Usage

```
<cos-interface-information>
  <interface-map>....</interface-map>
</cos-interface-information>
```

Description

<cos-interface-set-information>

Usage

```
<cos-interface-set-information>
  <interface-set-map>....</interface-set-map>
</cos-interface-set-information>
```

Description

<cos-l2tp-session-information>

Usage

```
<cos-l2tp-session-information>
  <l2tp-session-map>....</l2tp-session-map>
</cos-l2tp-session-information>
```

Description

<cos-loss-priority-map-information>

Usage

```
<cos-loss-priority-map-information>
  <loss-priority-map>....</loss-priority-map>
</cos-loss-priority-map-information>
```

Description

<cos-loss-priority-map-information>

Usage

```
<cos-information>
  <cos-loss-priority-map-information>
    <loss-priority-map>....</loss-priority-map>
  </cos-loss-priority-map-information>
</cos-information>
```

Description

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<cos-loss-priority-map-table-binding-information>

Usage

```
<cos-loss-priority-map-table-binding-information>
  <loss-priority-map-table-binding>....</loss-priority-map-table-binding>
</cos-loss-priority-map-table-binding-information>
```

Description

<cos-loss-priority-map-table-binding-information>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-binding-information>
    <loss-priority-map-table-binding>....</loss-priority-map-table-binding>
  </cos-loss-priority-map-table-binding-information>
</cos-table-information>
```

Description

<cos-loss-priority-map-table-information>

Usage

```
<cos-loss-priority-map-table-information>
  <loss-priority-map-table>....</loss-priority-map-table>
</cos-loss-priority-map-table-information>
```

Description

<cos-loss-priority-map-table-information>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-information>
    <loss-priority-map-table>....</loss-priority-map-table>
  </cos-loss-priority-map-table-information>
</cos-table-information>
```

Description

<cos-loss-priority-rewrite-information>

Usage

```
<cos-loss-priority-rewrite-information>
  <loss-priority-rewrite>....</loss-priority-rewrite>
</cos-loss-priority-rewrite-information>
```

Description

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<cos-loss-priority-rewrite-information>

Usage

```
<cos-information>
  <cos-loss-priority-rewrite-information>
    <loss-priority-rewrite>....</loss-priority-rewrite>
  </cos-loss-priority-rewrite-information>
</cos-information>
```

Description

<cos-loss-priority-rewrite-table-binding-information>

Usage

```
<cos-loss-priority-rewrite-table-binding-information>
  <loss-priority-rewrite-table-binding>....</loss-priority-rewrite-table-binding>
</cos-loss-priority-rewrite-table-binding-information>
```

Description

<cos-loss-priority-rewrite-table-binding-information>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-binding-information>
    <loss-priority-rewrite-table-binding>....</loss-priority-rewrite-table-binding>
  </cos-loss-priority-rewrite-table-binding-information>
</cos-table-information>
```

Description

<cos-loss-priority-rewrite-table-information>

Usage

```
<cos-loss-priority-rewrite-table-information>
  <loss-priority-rewrite-table>....</loss-priority-rewrite-table>
</cos-loss-priority-rewrite-table-information>
```

Description

<cos-loss-priority-rewrite-table-information>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-information>
    <loss-priority-rewrite-table>....</loss-priority-rewrite-table>
  </cos-loss-priority-rewrite-table-information>
</cos-table-information>
```

Description

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<cos-multi-destination-information>

Usage

```
<cos-multi-destination-information>
  <sm-md-map>....</sm-md-map>
  <fc-md-map>....</fc-md-map>
  <cls-md-map>....</cls-md-map>
</cos-multi-destination-information>
```

Description

<cos-multi-destination-information>

Usage

```
<cos-information>
  <cos-multi-destination-information>
    <sm-md-map>....</sm-md-map>
    <fc-md-map>....</fc-md-map>
    <cls-md-map>....</cls-md-map>
  </cos-multi-destination-information>
</cos-information>
```

Description

<cos-policer-table-map-information>

Usage

```
<cos-policer-table-map-information>
  <policer-table-map>....</policer-table-map>
</cos-policer-table-map-information>
```

Description

<cos-policer-table-map-information>

Usage

```
<cos-table-information>
  <cos-policer-table-map-information>
    <policer-table-map>....</policer-table-map>
  </cos-policer-table-map-information>
</cos-table-information>
```

Description

<cos-red-information>

Usage

```
<cos-red-information>
  <red>....</red>
</cos-red-information>
```

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Description

<cos-red-information>

Usage

```
<cos-table-information>
  <cos-red-information>
    <red>....</red>
  </cos-red-information>
</cos-table-information>
```

Description

<cos-rewrite-information>

Usage

```
<cos-rewrite-information>
  <rewrite>....</rewrite>
</cos-rewrite-information>
```

Description

<cos-rewrite-information>

Usage

```
<cos-information>
  <cos-rewrite-information>
    <rewrite>....</rewrite>
  </cos-rewrite-information>
</cos-information>
```

Description

<cos-rewrite-table-information>

Usage

```
<cos-rewrite-table-information>
  <rewrite-table>....</rewrite-table>
</cos-rewrite-table-information>
```

Description

<cos-rewrite-table-information>

Usage

```
<cos-table-information>
  <cos-rewrite-table-information>
    <rewrite-table>....</rewrite-table>
  </cos-rewrite-table-information>
</cos-table-information>
```


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Description

<cos-rewrite-table-map-information>

Usage

```
<cos-rewrite-table-map-information>
  <rewrite-table-map>....</rewrite-table-map>
</cos-rewrite-table-map-information>
```

Description

<cos-rewrite-table-map-information>

Usage

```
<cos-table-information>
  <cos-rewrite-table-map-information>
    <rewrite-table-map>....</rewrite-table-map>
  </cos-rewrite-table-map-information>
</cos-table-information>
```

Description

<cos-routing-instance-information>

Usage

```
<cos-routing-instance-information>
  <routing-instance-map>....</routing-instance-map>
</cos-routing-instance-information>
```

Description

<cos-scheduler-map-information>

Usage

```
<cos-scheduler-map-information>
  <scheduler-map>....</scheduler-map>
</cos-scheduler-map-information>
```

Description

<cos-scheduler-map-table-information>

Usage

```
<cos-scheduler-map-table-information>
  <policy>....</policy>
</cos-scheduler-map-table-information>
```

Description

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<cos-scheduler-map-table-information>

Usage

```
<cos-table-information>
  <cos-scheduler-map-table-information>
    <policy>....</policy>
  </cos-scheduler-map-table-information>
</cos-table-information>
```

Description

<cos-shaper-table-map-information>

Usage

```
<cos-shaper-table-map-information>
  <shaper-table-map>....</shaper-table-map>
</cos-shaper-table-map-information>
```

Description

<cos-shaper-table-map-information>

Usage

```
<cos-table-information>
  <cos-shaper-table-map-information>
    <shaper-table-map>....</shaper-table-map>
  </cos-shaper-table-map-information>
</cos-table-information>
```

Description

<cos-table-information>

Usage

```
<cos-table-information>
  <cos-classifier-table-information>....</cos-classifier-table-information>
<cos-classifier-table-map-information>....</cos-classifier-table-map-information>

<cos-loss-priority-map-table-information>....</cos-loss-priority-map-table-information>

<cos-loss-priority-map-table-binding-information>....</cos-loss-priority-map-table-binding-information>

<cos-scheduler-map-table-information>....</cos-scheduler-map-table-information>
    <cos-red-information>....</cos-red-information>
    <cos-rewrite-table-information>....</cos-rewrite-table-information>
    <cos-rewrite-table-map-information>....</cos-rewrite-table-map-information>

<cos-loss-priority-rewrite-table-information>....</cos-loss-priority-rewrite-table-information>
```


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```
<cos-loss-priority-rewrite-table-binding-information>...</cos-loss-priority-rewrite-table-binding-information>

  <cos-policer-table-map-information>....</cos-policer-table-map-information>
  <cos-shaper-table-map-information>....</cos-shaper-table-map-information>
</cos-table-information>
```

Description

<cos-traffic-control-profile-information>

Usage

```
<cos-traffic-control-profile-information>
  <traffic-control-profile>....</traffic-control-profile>
</cos-traffic-control-profile-information>
```

Description

<cos-translation-table-information>

Usage

```
<cos-translation-table-information>
  <translation-table>....</translation-table>
</cos-translation-table-information>
```

Description

<cos-translation-table-map-information>

Usage

```
<cos-translation-table-map-information>
  <translation-table>....</translation-table>
</cos-translation-table-map-information>
```

Description

<cos-translation-table-map-information>

Usage

```
<cos-information>
  <cos-translation-table-map-information>
    <translation-table>....</translation-table>
  </cos-translation-table-map-information>
</cos-information>
```

Description

<cos-translation-table-mapping-information>

Usage

```
<cos-translation-table-mapping-information>
```

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```
  <translation-table-mapping>....</translation-table-mapping>
</cos-translation-table-mapping-information>
```

Description

<cos-virtual-channel-group-information>

Usage

```
<cos-virtual-channel-group-information>
  <virtual-channel-group>....</virtual-channel-group>
</cos-virtual-channel-group-information>
```

Description

<cos-virtual-channel-information>

Usage

```
<cos-virtual-channel-information>
  <virtual-channel>....</virtual-channel>
</cos-virtual-channel-information>
```

Description

<drop-profile>

Usage

```
<drop-profile>
  <profile-name>
    profile-name
  </profile-name>
  <profile-type>
    profile-type
  </profile-type>
  <table-index>
    table-index
  </table-index>
  <profile-map>....</profile-map>
</drop-profile>
```

Description Class-of-service drop profile

<drop-profile>

Usage

```
<cos-drop-profile-information>
  <drop-profile>
    <profile-name>
      profile-name
    </profile-name>
    <profile-type>
      profile-type
```


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```
    </profile-type>
    <table-index>
     table-index
    </table-index>
    <profile-map>....</profile-map>
   </drop-profile>
</cos-drop-profile-information>
```

Description Class-of-service drop profile

<drop-profile>

Usage

```
<cos-information>
 <cos-drop-profile-information>
  <drop-profile>
   <profile-name>
    profile-name
   </profile-name>
   <profile-type>
    profile-type
   </profile-type>
   <table-index>
    table-index
   </table-index>
   <profile-map>....</profile-map>
  </drop-profile>
 </cos-drop-profile-information>
</cos-information>
```

Description Class-of-service drop profile

<drop-statistics>

Usage

```
<drop-statistics>
 <drop-pkts-high>
  drop-pkts-high
 </drop-pkts-high>
 <drop-pkts-low>
  drop-pkts-low
 </drop-pkts-low>
 <drop-bytes-high>
  drop-bytes-high
 </drop-bytes-high>
 <drop-bytes-low>
  drop-bytes-low
 </drop-bytes-low>
 <drop-pps-high>
  drop-pps-high
 </drop-pps-high>
 <drop-pps-low>
```

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```
    drop-pps-low
   </drop-pps-low>
   <drop-bps-high>
    drop-bps-high
   </drop-bps-high>
   <drop-bps-low>
    drop-bps-low
   </drop-bps-low>
  </drop-statistics>
```

Description Drop statistics

<drop-statistics>

Usage

```
<fpc-queue-information>
 <drop-statistics>
  <drop-pkts-high>
   drop-pkts-high
  </drop-pkts-high>
  <drop-pkts-low>
   drop-pkts-low
  </drop-pkts-low>
  <drop-bytes-high>
   drop-bytes-high
  </drop-bytes-high>
  <drop-bytes-low>
   drop-bytes-low
  </drop-bytes-low>
  <drop-pps-high>
   drop-pps-high
  </drop-pps-high>
  <drop-pps-low>
   drop-pps-low
  </drop-pps-low>
  <drop-bps-high>
   drop-bps-high
  </drop-bps-high>
  <drop-bps-low>
   drop-bps-low
  </drop-bps-low>
 </drop-statistics>
</fpc-queue-information>
```

Description Drop statistics

<drop-statistics>

Usage

```
<fabric-queue-information>
 <fpc-queue-information>
  <drop-statistics>
```


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```
<drop-pkts-high>
  drop-pkts-high
</drop-pkts-high>
<drop-pkts-low>
  drop-pkts-low
</drop-pkts-low>
<drop-bytes-high>
  drop-bytes-high
</drop-bytes-high>
<drop-bytes-low>
  drop-bytes-low
</drop-bytes-low>
<drop-pps-high>
  drop-pps-high
</drop-pps-high>
<drop-pps-low>
  drop-pps-low
</drop-pps-low>
<drop-bps-high>
  drop-bps-high
</drop-bps-high>
<drop-bps-low>
  drop-bps-low
</drop-bps-low>
</drop-statistics>
</fpc-queue-information>
</fabric-queue-information>
```

Description Drop statistics

<fabric-queue-information>

Usage

```
<fabric-queue-information>
  <fpc-queue-information>....</fpc-queue-information>
</fabric-queue-information>
```

Description

<fabric-scheduler>

Usage

```
<fabric-scheduler-map>
  <fabric-scheduler>
    <fabric-scheduler-name>
      fabric-scheduler-name
    </fabric-scheduler-name>
    <fabric-scheduler-index>
      fabric-scheduler-index
    </fabric-scheduler-index>
    <fabric-scheduler-drop-profile-ln-index>
      fabric-scheduler-drop-profile-ln-index
    </fabric-scheduler-drop-profile-ln-index>
```

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```
      <fabric-scheduler-drop-profile-ln>
        fabric-scheduler-drop-profile-ln
      </fabric-scheduler-drop-profile-ln>
      <fabric-scheduler-drop-profile-lt-index>
        fabric-scheduler-drop-profile-lt-index
      </fabric-scheduler-drop-profile-lt-index>
      <fabric-scheduler-drop-profile-lt>
        fabric-scheduler-drop-profile-lt
      </fabric-scheduler-drop-profile-lt>
      <fabric-scheduler-drop-profile-hn-index>
        fabric-scheduler-drop-profile-hn-index
      </fabric-scheduler-drop-profile-hn-index>
      <fabric-scheduler-drop-profile-hn>
        fabric-scheduler-drop-profile-hn
      </fabric-scheduler-drop-profile-hn>
      <fabric-scheduler-drop-profile-ht-index>
        fabric-scheduler-drop-profile-ht-index
      </fabric-scheduler-drop-profile-ht-index>
      <fabric-scheduler-drop-profile-ht>
        fabric-scheduler-drop-profile-ht
      </fabric-scheduler-drop-profile-ht>
    </fabric-scheduler>
  </fabric-scheduler-map>
```

Description

<fabric-scheduler>

Usage

```
<cos-fabric-scheduler-map-information>
  <fabric-scheduler-map>
    <fabric-scheduler>
      <fabric-scheduler-name>
        fabric-scheduler-name
      </fabric-scheduler-name>
      <fabric-scheduler-index>
        fabric-scheduler-index
      </fabric-scheduler-index>
      <fabric-scheduler-drop-profile-ln-index>
        fabric-scheduler-drop-profile-ln-index
      </fabric-scheduler-drop-profile-ln-index>
      <fabric-scheduler-drop-profile-ln>
        fabric-scheduler-drop-profile-ln
      </fabric-scheduler-drop-profile-ln>
      <fabric-scheduler-drop-profile-lt-index>
        fabric-scheduler-drop-profile-lt-index
      </fabric-scheduler-drop-profile-lt-index>
      <fabric-scheduler-drop-profile-lt>
        fabric-scheduler-drop-profile-lt
      </fabric-scheduler-drop-profile-lt>
      <fabric-scheduler-drop-profile-hn-index>
        fabric-scheduler-drop-profile-hn-index
      </fabric-scheduler-drop-profile-hn-index>
      <fabric-scheduler-drop-profile-hn>
        fabric-scheduler-drop-profile-hn
```


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```
      </fabric-scheduler-drop-profile-hn>
      <fabric-scheduler-drop-profile-ht-index>
        fabric-scheduler-drop-profile-ht-index
      </fabric-scheduler-drop-profile-ht-index>
      <fabric-scheduler-drop-profile-ht>
        fabric-scheduler-drop-profile-ht
      </fabric-scheduler-drop-profile-ht>
    </fabric-scheduler>
  </fabric-scheduler-map>
</cos-fabric-scheduler-map-information>
```

Description

<fabric-scheduler-map>

Usage

```
<fabric-scheduler-map>
  <fabric-scheduler-priority>
    fabric-scheduler-priority
  </fabric-scheduler-priority>
  <fabric-scheduler>....</fabric-scheduler>
</fabric-scheduler-map>
```

Description

<fabric-scheduler-map>

Usage

```
<cos-fabric-scheduler-map-information>
  <fabric-scheduler-map>
    <fabric-scheduler-priority>
      fabric-scheduler-priority
    </fabric-scheduler-priority>
    <fabric-scheduler>....</fabric-scheduler>
  </fabric-scheduler-map>
</cos-fabric-scheduler-map-information>
```

Description

<fabric-scheduler-map-table>

Usage

```
<fabric-scheduler-map-table>
  <fabric-scheduler-priority>
    fabric-scheduler-priority
  </fabric-scheduler-priority>
  <fabric-scheduler-queues>
    fabric-scheduler-queues
  </fabric-scheduler-queues>
  <fabric-scheduler-table>....</fabric-scheduler-table>
</fabric-scheduler-map-table>
```

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Description

<fabric-scheduler-map-table>

Usage

```
<cos-fabric-scheduler-map-table-information>
  <fabric-scheduler-map-table>
    <fabric-scheduler-priority>
      fabric-scheduler-priority
    </fabric-scheduler-priority>
    <fabric-scheduler-queues>
      fabric-scheduler-queues
    </fabric-scheduler-queues>
    <fabric-scheduler-table>....</fabric-scheduler-table>
  </fabric-scheduler-map-table>
</cos-fabric-scheduler-map-table-information>
```

Description

<fabric-scheduler-table>

Usage

```
<fabric-scheduler-map-table>
  <fabric-scheduler-table>
    <fabric-scheduler-index>
      fabric-scheduler-index
    </fabric-scheduler-index>
    <fabric-scheduler-drop-profile-hn-index>
      fabric-scheduler-drop-profile-hn-index
    </fabric-scheduler-drop-profile-hn-index>
    <fabric-scheduler-drop-profile-ln-index>
      fabric-scheduler-drop-profile-ln-index
    </fabric-scheduler-drop-profile-ln-index>
    <fabric-scheduler-drop-profile-ht-index>
      fabric-scheduler-drop-profile-ht-index
    </fabric-scheduler-drop-profile-ht-index>
    <fabric-scheduler-drop-profile-lt-index>
      fabric-scheduler-drop-profile-lt-index
    </fabric-scheduler-drop-profile-lt-index>
  </fabric-scheduler-table>
</fabric-scheduler-map-table>
```

Description

<fabric-scheduler-table>

Usage

```
<cos-fabric-scheduler-map-table-information>
  <fabric-scheduler-map-table>
    <fabric-scheduler-table>
      <fabric-scheduler-index>
        fabric-scheduler-index
      </fabric-scheduler-index>
      <fabric-scheduler-drop-profile-hn-index>
```


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```
            fabric-scheduler-drop-profile-hn-index
          </fabric-scheduler-drop-profile-hn-index>
          <fabric-scheduler-drop-profile-ln-index>
            fabric-scheduler-drop-profile-ln-index
          </fabric-scheduler-drop-profile-ln-index>
          <fabric-scheduler-drop-profile-ht-index>
            fabric-scheduler-drop-profile-ht-index
          </fabric-scheduler-drop-profile-ht-index>
          <fabric-scheduler-drop-profile-lt-index>
            fabric-scheduler-drop-profile-lt-index
          </fabric-scheduler-drop-profile-lt-index>
        </fabric-scheduler-table>
      </fabric-scheduler-map-table>
    </cos-fabric-scheduler-map-table-information>
```

Description

<fc-map>

Usage

```
<fc-map>
  <fc-map-item>....</fc-map-item>
</fc-map>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<forwarding-class-set>
  <forwarding-class-set-entry>
    <fc-map>
      <fc-map-item>....</fc-map-item>
    </fc-map>
  </forwarding-class-set-entry>
</forwarding-class-set>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-forwarding-class-information>
  <fc-map>
    <fc-map-item>....</fc-map-item>
  </fc-map>
</cos-forwarding-class-information>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-forwarding-class-map-information>
  <fc-map>
    <fc-map-item>....</fc-map-item>
  </fc-map>
</cos-forwarding-class-map-information>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-forwarding-class-set-information>
  <forwarding-class-set>
    <forwarding-class-set-entry>
      <fc-map>
        <fc-map-item>....</fc-map-item>
      </fc-map>
    </forwarding-class-set-entry>
  </forwarding-class-set>
</cos-forwarding-class-set-information>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-information>
  <cos-forwarding-class-information>
    <fc-map>
      <fc-map-item>....</fc-map-item>
    </fc-map>
  </cos-forwarding-class-information>
</cos-information>
```

Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-information>
  <cos-forwarding-class-map-information>
    <fc-map>
      <fc-map-item>....</fc-map-item>
    </fc-map>
  </cos-forwarding-class-map-information>
</cos-information>
```


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Description Class-of-service forwarding class to queue mapping

<fc-map>

Usage

```
<cos-information>
  <cos-forwarding-class-set-information>
    <forwarding-class-set>
      <forwarding-class-set-entry>
        <fc-map>
          <fc-map-item>....</fc-map-item>
        </fc-map>
      </forwarding-class-set-entry>
    </forwarding-class-set>
  </cos-forwarding-class-set-information>
</cos-information>
```

Description Class-of-service forwarding class to queue mapping

<fc-map-item>

Usage

```
<fc-map>
  <fc-map-item>
    <fc-name>
      fc-name
    </fc-name>
    <fc-number>
      fc-number
    </fc-number>
    <fc-queue-number>
      fc-queue-number
    </fc-queue-number>
    <fc-rqueue-number>
      fc-rqueue-number
    </fc-rqueue-number>
    <fc-priority>
      fc-priority
    </fc-priority>
    <fc-policing-priority>
      fc-policing-priority
    </fc-policing-priority>
  </fc-map-item>
</fc-map>
```

Description

<fc-map-item>

Usage

```
<forwarding-class-set>
  <forwarding-class-set-entry>
    <fc-map>
```

```
      <fc-map-item>
       <fc-name>
        fc-name
       </fc-name>
       <fc-number>
        fc-number
       </fc-number>
       <fc-queue-number>
        fc-queue-number
       </fc-queue-number>
       <fc-rqueue-number>
        fc-rqueue-number
       </fc-rqueue-number>
       <fc-priority>
        fc-priority
       </fc-priority>
       <fc-policing-priority>
        fc-policing-priority
       </fc-policing-priority>
      </fc-map-item>
     </fc-map>
    </forwarding-class-set-entry>
</forwarding-class-set>
```

Description

<fc-map-item>

Usage

```
<cos-forwarding-class-information>
 <fc-map>
  <fc-map-item>
   <fc-name>
    fc-name
   </fc-name>
   <fc-number>
    fc-number
   </fc-number>
   <fc-queue-number>
    fc-queue-number
   </fc-queue-number>
   <fc-rqueue-number>
    fc-rqueue-number
   </fc-rqueue-number>
   <fc-priority>
    fc-priority
   </fc-priority>
   <fc-policing-priority>
    fc-policing-priority
   </fc-policing-priority>
  </fc-map-item>
 </fc-map>
</cos-forwarding-class-information>
```


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Description

<fc-map-item>

Usage

```
<cos-forwarding-class-map-information>
 <fc-map>
  <fc-map-item>
   <fc-name>
    fc-name
   </fc-name>
   <fc-number>
    fc-number
   </fc-number>
   <fc-queue-number>
    fc-queue-number
   </fc-queue-number>
   <fc-rqueue-number>
    fc-rqueue-number
   </fc-rqueue-number>
   <fc-priority>
    fc-priority
   </fc-priority>
   <fc-policing-priority>
    fc-policing-priority
   </fc-policing-priority>
  </fc-map-item>
 </fc-map>
</cos-forwarding-class-map-information>
```

Description

<fc-map-item>

Usage

```
<cos-forwarding-class-set-information>
 <forwarding-class-set>
  <forwarding-class-set-entry>
   <fc-map>
    <fc-map-item>
     <fc-name>
      fc-name
     </fc-name>
     <fc-number>
      fc-number
     </fc-number>
     <fc-queue-number>
      fc-queue-number
     </fc-queue-number>
     <fc-rqueue-number>
      fc-rqueue-number
     </fc-rqueue-number>
     <fc-priority>
      fc-priority
     </fc-priority>
```

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```
            <fc-policing-priority>
              fc-policing-priority
            </fc-policing-priority>
          </fc-map-item>
        </fc-map>
      </forwarding-class-set-entry>
    </forwarding-class-set>
  </cos-forwarding-class-set-information>
```

Description

<fc-map-item>

Usage

```
<cos-information>
  <cos-forwarding-class-information>
    <fc-map>
      <fc-map-item>
        <fc-name>
          fc-name
        </fc-name>
        <fc-number>
          fc-number
        </fc-number>
        <fc-queue-number>
          fc-queue-number
        </fc-queue-number>
        <fc-rqueue-number>
          fc-rqueue-number
        </fc-rqueue-number>
        <fc-priority>
          fc-priority
        </fc-priority>
        <fc-policing-priority>
          fc-policing-priority
        </fc-policing-priority>
      </fc-map-item>
    </fc-map>
  </cos-forwarding-class-information>
</cos-information>
```

Description

<fc-map-item>

Usage

```
<cos-information>
  <cos-forwarding-class-map-information>
    <fc-map>
      <fc-map-item>
        <fc-name>
          fc-name
        </fc-name>
        <fc-number>
```


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```
        fc-number
       </fc-number>
       <fc-queue-number>
        fc-queue-number
       </fc-queue-number>
       <fc-rqueue-number>
        fc-rqueue-number
       </fc-rqueue-number>
       <fc-priority>
        fc-priority
       </fc-priority>
       <fc-policing-priority>
        fc-policing-priority
       </fc-policing-priority>
      </fc-map-item>
     </fc-map>
    </cos-forwarding-class-map-information>
</cos-information>
```

Description

<fc-map-item>

Usage

```
<cos-information>
 <cos-forwarding-class-set-information>
  <forwarding-class-set>
   <forwarding-class-set-entry>
    <fc-map>
     <fc-map-item>
      <fc-name>
       fc-name
      </fc-name>
      <fc-number>
       fc-number
      </fc-number>
      <fc-queue-number>
       fc-queue-number
      </fc-queue-number>
      <fc-rqueue-number>
       fc-rqueue-number
      </fc-rqueue-number>
      <fc-priority>
       fc-priority
      </fc-priority>
      <fc-policing-priority>
       fc-policing-priority
      </fc-policing-priority>
     </fc-map-item>
    </fc-map>
   </forwarding-class-set-entry>
  </forwarding-class-set>
 </cos-forwarding-class-set-information>
</cos-information>
```

Description

<fc-md-map>

Usage

```
<cos-multi-destination-information>
 <fc-md-map>
  <fc-name>
   fc-name
  </fc-name>
  <fc-queue-number>
   fc-queue-number
  </fc-queue-number>
 </fc-md-map>
</cos-multi-destination-information>
```

Description

<fc-md-map>

Usage

```
<cos-information>
 <cos-multi-destination-information>
  <fc-md-map>
   <fc-name>
    fc-name
   </fc-name>
   <fc-queue-number>
    fc-queue-number
   </fc-queue-number>
  </fc-md-map>
 </cos-multi-destination-information>
</cos-information>
```

Description

<forwarding-class-queue-table>

Usage

```
<cos-forwarding-class-map-table-information>
 <forwarding-class-queue-table>
  <table-index>
   table-index
  </table-index>
  <number-of-entries>
   number-of-entries
  </number-of-entries>
  <forwarding-class-queue-table-entry>....</forwarding-class-queue-table-entry>

 </forwarding-class-queue-table>
</cos-forwarding-class-map-table-information>
```

Description

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<forwarding-class-queue-table-entry>

Usage

```
<cos-forwarding-class-map-table-information>
  <forwarding-class-queue-table>
    <forwarding-class-queue-table-entry>
      <fc-number>
        fc-number
      </fc-number>
      <fc-queue-number>
        fc-queue-number
      </fc-queue-number>
      <fc-rqueue-number>
        fc-rqueue-number
      </fc-rqueue-number>
    </forwarding-class-queue-table-entry>
  </forwarding-class-queue-table>
</cos-forwarding-class-map-table-information>
```

Description

<forwarding-class-queue-table-map>

Usage

```
<cos-forwarding-class-map-interface-table-information>
  <forwarding-class-queue-table-map>
    <logical-interface>
      logical-interface
    </logical-interface>
    <logical-interface-index>
      logical-interface-index
    </logical-interface-index>
    <table-index>
      table-index
    </table-index>
  </forwarding-class-queue-table-map>
</cos-forwarding-class-map-interface-table-information>
```

Description

<forwarding-class-set>

Usage

```
<forwarding-class-set>
  <forwarding-class-set-entry>....</forwarding-class-set-entry>
</forwarding-class-set>
```

Description Class-of-service forwarding class set information

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<forwarding-class-set>

Usage

```
<cos-forwarding-class-set-information>
  <forwarding-class-set>
    <forwarding-class-set-entry>....</forwarding-class-set-entry>
  </forwarding-class-set>
</cos-forwarding-class-set-information>
```

Description Class-of-service forwarding class set information

<forwarding-class-set>

Usage

```
<cos-information>
  <cos-forwarding-class-set-information>
    <forwarding-class-set>
      <forwarding-class-set-entry>....</forwarding-class-set-entry>
    </forwarding-class-set>
  </cos-forwarding-class-set-information>
</cos-information>
```

Description Class-of-service forwarding class set information

<forwarding-class-set-attachment>

Usage

```
<forwarding-class-set-attachment>
  <forwarding-class-set-name>
    forwarding-class-set-name
  </forwarding-class-set-name>
  <table-index>
    table-index
  </table-index>
  <output-traffic-control-profile-name>
    output-traffic-control-profile-name
  </output-traffic-control-profile-name>
  <output-traffic-control-profile-index>
    output-traffic-control-profile-index
  </output-traffic-control-profile-index>
</forwarding-class-set-attachment>
```

Description Class-of-service forwarding class set interface attachment

<forwarding-class-set-attachment>

Usage

```
<interface-map>
  <forwarding-class-set-attachment>
    <forwarding-class-set-name>
```


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```
      forwarding-class-set-name
    </forwarding-class-set-name>
    <table-index>
      table-index
    </table-index>
    <output-traffic-control-profile-name>
      output-traffic-control-profile-name
    </output-traffic-control-profile-name>
    <output-traffic-control-profile-index>
      output-traffic-control-profile-index
    </output-traffic-control-profile-index>
  </forwarding-class-set-attachment>
</interface-map>
```

Description Class-of-service forwarding class set interface attachment

<forwarding-class-set-attachment>

Usage

```
<cos-interface-information>
  <interface-map>
    <forwarding-class-set-attachment>
      <forwarding-class-set-name>
        forwarding-class-set-name
      </forwarding-class-set-name>
      <table-index>
        table-index
      </table-index>
      <output-traffic-control-profile-name>
        output-traffic-control-profile-name
      </output-traffic-control-profile-name>
      <output-traffic-control-profile-index>
        output-traffic-control-profile-index
      </output-traffic-control-profile-index>
    </forwarding-class-set-attachment>
  </interface-map>
</cos-interface-information>
```

Description Class-of-service forwarding class set interface attachment

<forwarding-class-set-entry>

Usage

```
<forwarding-class-set>
  <forwarding-class-set-entry>
    <forwarding-class-set-name>
      forwarding-class-set-name
    </forwarding-class-set-name>
    <forwarding-class-set-type>
      forwarding-class-set-type
    </forwarding-class-set-type>
    <forwarding-class-set-index>
```

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```
      forwarding-class-set-index
    </forwarding-class-set-index>
    <fc-map>....</fc-map>
  </forwarding-class-set-entry>
</forwarding-class-set>
```

Description

<forwarding-class-set-entry>

Usage

```
<cos-forwarding-class-set-information>
  <forwarding-class-set>
    <forwarding-class-set-entry>
      <forwarding-class-set-name>
        forwarding-class-set-name
      </forwarding-class-set-name>
      <forwarding-class-set-type>
        forwarding-class-set-type
      </forwarding-class-set-type>
      <forwarding-class-set-index>
        forwarding-class-set-index
      </forwarding-class-set-index>
      <fc-map>....</fc-map>
    </forwarding-class-set-entry>
  </forwarding-class-set>
</cos-forwarding-class-set-information>
```

Description

<forwarding-class-set-entry>

Usage

```
<cos-information>
  <cos-forwarding-class-set-information>
    <forwarding-class-set>
      <forwarding-class-set-entry>
        <forwarding-class-set-name>
          forwarding-class-set-name
        </forwarding-class-set-name>
        <forwarding-class-set-type>
          forwarding-class-set-type
        </forwarding-class-set-type>
        <forwarding-class-set-index>
          forwarding-class-set-index
        </forwarding-class-set-index>
        <fc-map>....</fc-map>
      </forwarding-class-set-entry>
    </forwarding-class-set>
  </cos-forwarding-class-set-information>
</cos-information>
```

Description

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<fpc-queue-information>

Usage

```
<fpc-queue-information>
  <dest-fpc-index>
    dest-fpc-index
  </dest-fpc-index>
  <src-fpc-index>
    src-fpc-index
  </src-fpc-index>
  <total-statistics>....</total-statistics>
  <tx-statistics>....</tx-statistics>
  <drop-statistics>....</drop-statistics>
</fpc-queue-information>
```

Description Show fabric queuing information for an FPC

<fpc-queue-information>

Usage

```
<fabric-queue-information>
  <fpc-queue-information>
    <dest-fpc-index>
      dest-fpc-index
    </dest-fpc-index>
    <src-fpc-index>
      src-fpc-index
    </src-fpc-index>
    <total-statistics>....</total-statistics>
    <tx-statistics>....</tx-statistics>
    <drop-statistics>....</drop-statistics>
  </fpc-queue-information>
</fabric-queue-information>
```

Description Show fabric queuing information for an FPC

<fragment-map>

Usage

```
<fragmentation-map>
  <fragment-map>
    <fc-name>
      fc-name
    </fc-name>
    <fragment-threshold>
      fragment-threshold
    </fragment-threshold>
    <no-fragmentation>
      no-fragmentation
    </no-fragmentation>
    <fragment-multilink-class>
      fragment-multilink-class
```

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```
    </fragment-multilink-class>
  </fragment-map>
</fragmentation-map>
```

Description

<fragment-map>

Usage

```
<cos-fragmentation-map-information>
  <fragmentation-map>
    <fragment-map>
      <fc-name>
        fc-name
      </fc-name>
      <fragment-threshold>
        fragment-threshold
      </fragment-threshold>
      <no-fragmentation>
        no-fragmentation
      </no-fragmentation>
      <fragment-multilink-class>
        fragment-multilink-class
      </fragment-multilink-class>
    </fragment-map>
  </fragmentation-map>
</cos-fragmentation-map-information>
```

Description

<fragment-map>

Usage

```
<cos-information>
  <cos-fragmentation-map-information>
    <fragmentation-map>
      <fragment-map>
        <fc-name>
          fc-name
        </fc-name>
        <fragment-threshold>
          fragment-threshold
        </fragment-threshold>
        <no-fragmentation>
          no-fragmentation
        </no-fragmentation>
        <fragment-multilink-class>
          fragment-multilink-class
        </fragment-multilink-class>
      </fragment-map>
    </fragmentation-map>
  </cos-fragmentation-map-information>
</cos-information>
```


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Description

<fragmentation-map>

Usage

```
<fragmentation-map>
  <fragmentation-map-name>
    fragmentation-map-name
  </fragmentation-map-name>
  <fragmentation-map-index>
    fragmentation-map-index
  </fragmentation-map-index>
  <fragment-map>....</fragment-map>
</fragmentation-map>
```

Description Class-of-service fragmentation map

<fragmentation-map>

Usage

```
<cos-fragmentation-map-information>
  <fragmentation-map>
    <fragmentation-map-name>
      fragmentation-map-name
    </fragmentation-map-name>
    <fragmentation-map-index>
      fragmentation-map-index
    </fragmentation-map-index>
    <fragment-map>....</fragment-map>
  </fragmentation-map>
</cos-fragmentation-map-information>
```

Description Class-of-service fragmentation map

<fragmentation-map>

Usage

```
<cos-information>
  <cos-fragmentation-map-information>
    <fragmentation-map>
      <fragmentation-map-name>
        fragmentation-map-name
      </fragmentation-map-name>
      <fragmentation-map-index>
        fragmentation-map-index
      </fragmentation-map-index>
      <fragment-map>....</fragment-map>
    </fragmentation-map>
  </cos-fragmentation-map-information>
</cos-information>
```

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Description Class-of-service fragmentation map

<i-logical-map>

Usage

```
<i-logical-map>
  <i-logical-name>
    i-logical-name
  </i-logical-name>
  <i-logical-index>
    i-logical-index
  </i-logical-index>
  <interface-has-dedicated-queues>
    interface-has-dedicated-queues
  </interface-has-dedicated-queues>
  <i-logical-objects>....</i-logical-objects>
  <policer-bandwidth>
    policer-bandwidth
  </policer-bandwidth>
  <policer-burst>
    policer-burst
  </policer-burst>
  <shaper-bandwidth>
    shaper-bandwidth
  </shaper-bandwidth>
  <shaper-burst>
    shaper-burst
  </shaper-burst>
  <shaping-rate>
    shaping-rate
  </shaping-rate>
  <burst-size>
    burst-size
  </burst-size>
  <input-shaping-rate>
    input-shaping-rate
  </input-shaping-rate>
  <input-burst-size>
    input-burst-size
  </input-burst-size>
  <adjusting-application-name>
    adjusting-application-name
  </adjusting-application-name>
  <adjustment-type>
    adjustment-type
  </adjustment-type>
  <configured-shaping-rate>
    configured-shaping-rate
  </configured-shaping-rate>
  <adjustment-value>
    adjustment-value
  </adjustment-value>
  <adjustment-target>
    adjustment-target
  </adjustment-target>
```


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```
</i-logical-map>
```

Description

<i-logical-map>

Usage

```
<interface-map>
 <i-logical-map>
  <i-logical-name>
   i-logical-name
  </i-logical-name>
  <i-logical-index>
   i-logical-index
  </i-logical-index>
  <interface-has-dedicated-queues>
   interface-has-dedicated-queues
  </interface-has-dedicated-queues>
  <i-logical-objects>....</i-logical-objects>
  <policer-bandwidth>
   policer-bandwidth
  </policer-bandwidth>
  <policer-burst>
   policer-burst
  </policer-burst>
  <shaper-bandwidth>
   shaper-bandwidth
  </shaper-bandwidth>
  <shaper-burst>
   shaper-burst
  </shaper-burst>
  <shaping-rate>
   shaping-rate
  </shaping-rate>
  <burst-size>
   burst-size
  </burst-size>
  <input-shaping-rate>
   input-shaping-rate
  </input-shaping-rate>
  <input-burst-size>
   input-burst-size
  </input-burst-size>
  <adjusting-application-name>
   adjusting-application-name
  </adjusting-application-name>
  <adjustment-type>
   adjustment-type
  </adjustment-type>
  <configured-shaping-rate>
   configured-shaping-rate
  </configured-shaping-rate>
  <adjustment-value>
   adjustment-value
  </adjustment-value>
```

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```
    <adjustment-target>
     adjustment-target
    </adjustment-target>
   </i-logical-map>
</interface-map>
```

Description

<i-logical-map>

Usage

```
<routing-instance-map>
 <i-logical-map>
  <i-logical-name>
   i-logical-name
  </i-logical-name>
  <i-logical-index>
   i-logical-index
  </i-logical-index>
  <interface-has-dedicated-queues>
   interface-has-dedicated-queues
  </interface-has-dedicated-queues>
  <i-logical-objects>....</i-logical-objects>
  <policer-bandwidth>
   policer-bandwidth
  </policer-bandwidth>
  <policer-burst>
   policer-burst
  </policer-burst>
  <shaper-bandwidth>
   shaper-bandwidth
  </shaper-bandwidth>
  <shaper-burst>
   shaper-burst
  </shaper-burst>
  <shaping-rate>
   shaping-rate
  </shaping-rate>
  <burst-size>
   burst-size
  </burst-size>
  <input-shaping-rate>
   input-shaping-rate
  </input-shaping-rate>
  <input-burst-size>
   input-burst-size
  </input-burst-size>
  <adjusting-application-name>
   adjusting-application-name
  </adjusting-application-name>
  <adjustment-type>
   adjustment-type
  </adjustment-type>
  <configured-shaping-rate>
   configured-shaping-rate
```


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```
    </configured-shaping-rate>
    <adjustment-value>
      adjustment-value
    </adjustment-value>
    <adjustment-target>
      adjustment-target
    </adjustment-target>
  </i-logical-map>
</routing-instance-map>
```

Description

<i-logical-map>

Usage

```
<cos-interface-information>
  <interface-map>
    <i-logical-map>
      <i-logical-name>
        i-logical-name
      </i-logical-name>
      <i-logical-index>
        i-logical-index
      </i-logical-index>
      <interface-has-dedicated-queues>
        interface-has-dedicated-queues
      </interface-has-dedicated-queues>
      <i-logical-objects>....</i-logical-objects>
      <policer-bandwidth>
        policer-bandwidth
      </policer-bandwidth>
      <policer-burst>
        policer-burst
      </policer-burst>
      <shaper-bandwidth>
        shaper-bandwidth
      </shaper-bandwidth>
      <shaper-burst>
        shaper-burst
      </shaper-burst>
      <shaping-rate>
        shaping-rate
      </shaping-rate>
      <burst-size>
        burst-size
      </burst-size>
      <input-shaping-rate>
        input-shaping-rate
      </input-shaping-rate>
      <input-burst-size>
        input-burst-size
      </input-burst-size>
      <adjusting-application-name>
        adjusting-application-name
      </adjusting-application-name>
```

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```
      <adjustment-type>
        adjustment-type
      </adjustment-type>
      <configured-shaping-rate>
        configured-shaping-rate
      </configured-shaping-rate>
      <adjustment-value>
        adjustment-value
      </adjustment-value>
      <adjustment-target>
        adjustment-target
      </adjustment-target>
    </i-logical-map>
  </interface-map>
</cos-interface-information>
```

Description

<i-logical-map>

Usage

```
<cos-routing-instance-information>
  <routing-instance-map>
    <i-logical-map>
      <i-logical-name>
        i-logical-name
      </i-logical-name>
      <i-logical-index>
        i-logical-index
      </i-logical-index>
      <interface-has-dedicated-queues>
        interface-has-dedicated-queues
      </interface-has-dedicated-queues>
      <i-logical-objects>....</i-logical-objects>
      <policer-bandwidth>
        policer-bandwidth
      </policer-bandwidth>
      <policer-burst>
        policer-burst
      </policer-burst>
      <shaper-bandwidth>
        shaper-bandwidth
      </shaper-bandwidth>
      <shaper-burst>
        shaper-burst
      </shaper-burst>
      <shaping-rate>
        shaping-rate
      </shaping-rate>
      <burst-size>
        burst-size
      </burst-size>
      <input-shaping-rate>
        input-shaping-rate
      </input-shaping-rate>
```


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```
        <input-burst-size>
          input-burst-size
        </input-burst-size>
        <adjusting-application-name>
          adjusting-application-name
        </adjusting-application-name>
        <adjustment-type>
          adjustment-type
        </adjustment-type>
        <configured-shaping-rate>
          configured-shaping-rate
        </configured-shaping-rate>
        <adjustment-value>
          adjustment-value
        </adjustment-value>
        <adjustment-target>
          adjustment-target
        </adjustment-target>
      </i-logical-map>
    </routing-instance-map>
  </cos-routing-instance-information>
```

Description

<i-logical-objects>

Usage

```
<i-logical-map>
  <i-logical-objects>
    <i-logical-object-type>
      i-logical-object-type
    </i-logical-object-type>
    <i-logical-object-name>
      i-logical-object-name
    </i-logical-object-name>
    <i-logical-object-subtype>
      i-logical-object-subtype
    </i-logical-object-subtype>
    <i-logical-object-index>
      i-logical-object-index
    </i-logical-object-index>
  </i-logical-objects>
</i-logical-map>
```

Description Class-of-service logical interface mappings

<i-logical-objects>

Usage

```
<interface-map>
  <i-logical-map>
    <i-logical-objects>
      <i-logical-object-type>
```

```
                i-logical-object-type
               </i-logical-object-type>
               <i-logical-object-name>
                i-logical-object-name
               </i-logical-object-name>
               <i-logical-object-subtype>
                i-logical-object-subtype
               </i-logical-object-subtype>
               <i-logical-object-index>
                i-logical-object-index
               </i-logical-object-index>
              </i-logical-objects>
             </i-logical-map>
            </interface-map>
```

Description Class-of-service logical interface mappings

<i-logical-objects>

Usage

```
<routing-instance-map>
 <i-logical-map>
  <i-logical-objects>
   <i-logical-object-type>
    i-logical-object-type
   </i-logical-object-type>
   <i-logical-object-name>
    i-logical-object-name
   </i-logical-object-name>
   <i-logical-object-subtype>
    i-logical-object-subtype
   </i-logical-object-subtype>
   <i-logical-object-index>
    i-logical-object-index
   </i-logical-object-index>
  </i-logical-objects>
 </i-logical-map>
</routing-instance-map>
```

Description Class-of-service logical interface mappings

<i-logical-objects>

Usage

```
<cos-interface-information>
 <interface-map>
  <i-logical-map>
   <i-logical-objects>
    <i-logical-object-type>
     i-logical-object-type
    </i-logical-object-type>
    <i-logical-object-name>
```


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```
                i-logical-object-name
               </i-logical-object-name>
               <i-logical-object-subtype>
                i-logical-object-subtype
               </i-logical-object-subtype>
               <i-logical-object-index>
                i-logical-object-index
               </i-logical-object-index>
              </i-logical-objects>
             </i-logical-map>
            </interface-map>
           </cos-interface-information>
```

Description Class-of-service logical interface mappings

<i-logical-objects>

Usage

```
<cos-routing-instance-information>
 <routing-instance-map>
  <i-logical-map>
   <i-logical-objects>
    <i-logical-object-type>
     i-logical-object-type
    </i-logical-object-type>
    <i-logical-object-name>
     i-logical-object-name
    </i-logical-object-name>
    <i-logical-object-subtype>
     i-logical-object-subtype
    </i-logical-object-subtype>
    <i-logical-object-index>
     i-logical-object-index
    </i-logical-object-index>
   </i-logical-objects>
  </i-logical-map>
 </routing-instance-map>
</cos-routing-instance-information>
```

Description Class-of-service logical interface mappings

<interface-map>

Usage

```
<interface-map>
 <interface-name>
  interface-name
 </interface-name>
 <interface-index>
  interface-index
 </interface-index>
 <interface-queues-supported>
```

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```
  interface-queues-supported
</interface-queues-supported>
<interface-queues-in-use>
  interface-queues-in-use
</interface-queues-in-use>
<interface-total-queues-created>
  interface-total-queues-created
</interface-total-queues-created>
<interface-shaping-rate>
  interface-shaping-rate
</interface-shaping-rate>
<scheduler-map-name>
  scheduler-map-name
</scheduler-map-name>
<scheduler-map-index>
  scheduler-map-index
</scheduler-map-index>
<interface-input-shaping-rate>
  interface-input-shaping-rate
</interface-input-shaping-rate>
<input-scheduler-map-name>
  input-scheduler-map-name
</input-scheduler-map-name>
<input-scheduler-map-index>
  input-scheduler-map-index
</input-scheduler-map-index>
<chassis-scheduler-map-name>
  chassis-scheduler-map-name
</chassis-scheduler-map-name>
<chassis-scheduler-map-index>
  chassis-scheduler-map-index
</chassis-scheduler-map-index>
<input-traffic-control-profile-name>
  input-traffic-control-profile-name
</input-traffic-control-profile-name>
<input-traffic-control-profile-index>
  input-traffic-control-profile-index
</input-traffic-control-profile-index>
<output-traffic-control-profile-name>
  output-traffic-control-profile-name
</output-traffic-control-profile-name>
<output-traffic-control-profile-index>
  output-traffic-control-profile-index
</output-traffic-control-profile-index>
<forwarding-class-map-name>
  forwarding-class-map-name
</forwarding-class-map-name>
<forwarding-class-map-index>
  forwarding-class-map-index
</forwarding-class-map-index>
<interface-congestion-notification-map>
  interface-congestion-notification-map
</interface-congestion-notification-map>
<interface-congestion-notification-map-index>
  interface-congestion-notification-map-index
</interface-congestion-notification-map-index>
```


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```
  <forwarding-class-set-attachment>....</forwarding-class-set-attachment>
  <i-logical-map>....</i-logical-map>
</interface-map>
```

Description Class-of-service interface mappings

<interface-map>

Usage

```
<cos-interface-information>
  <interface-map>
    <interface-name>
      interface-name
    </interface-name>
    <interface-index>
      interface-index
    </interface-index>
    <interface-queues-supported>
      interface-queues-supported
    </interface-queues-supported>
    <interface-queues-in-use>
      interface-queues-in-use
    </interface-queues-in-use>
    <interface-total-queues-created>
      interface-total-queues-created
    </interface-total-queues-created>
    <interface-shaping-rate>
      interface-shaping-rate
    </interface-shaping-rate>
    <scheduler-map-name>
      scheduler-map-name
    </scheduler-map-name>
    <scheduler-map-index>
      scheduler-map-index
    </scheduler-map-index>
    <interface-input-shaping-rate>
      interface-input-shaping-rate
    </interface-input-shaping-rate>
    <input-scheduler-map-name>
      input-scheduler-map-name
    </input-scheduler-map-name>
    <input-scheduler-map-index>
      input-scheduler-map-index
    </input-scheduler-map-index>
    <chassis-scheduler-map-name>
      chassis-scheduler-map-name
    </chassis-scheduler-map-name>
    <chassis-scheduler-map-index>
      chassis-scheduler-map-index
    </chassis-scheduler-map-index>
    <input-traffic-control-profile-name>
      input-traffic-control-profile-name
    </input-traffic-control-profile-name>
    <input-traffic-control-profile-index>
```

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```
      input-traffic-control-profile-index
    </input-traffic-control-profile-index>
    <output-traffic-control-profile-name>
      output-traffic-control-profile-name
    </output-traffic-control-profile-name>
    <output-traffic-control-profile-index>
      output-traffic-control-profile-index
    </output-traffic-control-profile-index>
    <forwarding-class-map-name>
      forwarding-class-map-name
    </forwarding-class-map-name>
    <forwarding-class-map-index>
      forwarding-class-map-index
    </forwarding-class-map-index>
    <interface-congestion-notification-map>
      interface-congestion-notification-map
    </interface-congestion-notification-map>
    <interface-congestion-notification-map-index>
      interface-congestion-notification-map-index
    </interface-congestion-notification-map-index>
    <forwarding-class-set-attachment>....</forwarding-class-set-attachment>
    <i-logical-map>....</i-logical-map>
  </interface-map>
</cos-interface-information>
```

Description Class-of-service interface mappings

<interface-set-map>

Usage

```
<interface-set-map>
  <interface-set-name>
    interface-set-name
  </interface-set-name>
  <interface-set-index>
    interface-set-index
  </interface-set-index>
  <interface-name>
    interface-name
  </interface-name>
  <interface-index>
    interface-index
  </interface-index>
  <interface-queues-supported>
    interface-queues-supported
  </interface-queues-supported>
  <interface-queues-in-use>
    interface-queues-in-use
  </interface-queues-in-use>
  <output-traffic-control-profile-name>
    output-traffic-control-profile-name
  </output-traffic-control-profile-name>
  <output-traffic-control-profile-index>
    output-traffic-control-profile-index
```


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```
  </output-traffic-control-profile-index>
  <input-traffic-control-profile-name>
    input-traffic-control-profile-name
  </input-traffic-control-profile-name>
  <input-traffic-control-profile-index>
    input-traffic-control-profile-index
  </input-traffic-control-profile-index>
  <adjusting-application-name>
    adjusting-application-name
  </adjusting-application-name>
  <adjustment-type>
    adjustment-type
  </adjustment-type>
  <configured-shaping-rate>
    configured-shaping-rate
  </configured-shaping-rate>
  <adjustment-value>
    adjustment-value
  </adjustment-value>
  <adjustment-target>
    adjustment-target
  </adjustment-target>
</interface-set-map>
```

Description

<interface-set-map>

Usage

```
<cos-interface-set-information>
  <interface-set-map>
    <interface-set-name>
      interface-set-name
    </interface-set-name>
    <interface-set-index>
      interface-set-index
    </interface-set-index>
    <interface-name>
      interface-name
    </interface-name>
    <interface-index>
      interface-index
    </interface-index>
    <interface-queues-supported>
      interface-queues-supported
    </interface-queues-supported>
    <interface-queues-in-use>
      interface-queues-in-use
    </interface-queues-in-use>
    <output-traffic-control-profile-name>
      output-traffic-control-profile-name
    </output-traffic-control-profile-name>
    <output-traffic-control-profile-index>
      output-traffic-control-profile-index
    </output-traffic-control-profile-index>
```

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```
    <input-traffic-control-profile-name>
      input-traffic-control-profile-name
    </input-traffic-control-profile-name>
    <input-traffic-control-profile-index>
      input-traffic-control-profile-index
    </input-traffic-control-profile-index>
    <adjusting-application-name>
      adjusting-application-name
    </adjusting-application-name>
    <adjustment-type>
      adjustment-type
    </adjustment-type>
    <configured-shaping-rate>
      configured-shaping-rate
    </configured-shaping-rate>
    <adjustment-value>
      adjustment-value
    </adjustment-value>
    <adjustment-target>
      adjustment-target
    </adjustment-target>
  </interface-set-map>
</cos-interface-set-information>
```

Description

<l2tp-session-map>

Usage

```
<l2tp-session-map>
  <interface-name>
    interface-name
  </interface-name>
  <interface-index>
    interface-index
  </interface-index>
  <interface-queues-supported>
    interface-queues-supported
  </interface-queues-supported>
  <interface-queues-in-use>
    interface-queues-in-use
  </interface-queues-in-use>
  <l2tp-session-username>
    l2tp-session-username
  </l2tp-session-username>
  <l2tp-session-index>
    l2tp-session-index
  </l2tp-session-index>
  <traffic-control-profile-name>
    traffic-control-profile-name
  </traffic-control-profile-name>
  <traffic-control-profile-index>
    traffic-control-profile-index
  </traffic-control-profile-index>
  <scheduler-map-name>
```


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```
    scheduler-map-name
  </scheduler-map-name>
  <scheduler-map-index>
    scheduler-map-index
  </scheduler-map-index>
  <shaping-rate>
    shaping-rate
  </shaping-rate>
  <guaranteed-rate>
    guaranteed-rate
  </guaranteed-rate>
  <delay-buffer-rate>
    delay-buffer-rate
  </delay-buffer-rate>
  <encapsulation-overhead>
    encapsulation-overhead
  </encapsulation-overhead>
  <cell-overhead>
    cell-overhead
  </cell-overhead>
</l2tp-session-map>
```

Description Class-of-service L2TP session mappings

<l2tp-session-map>

Usage

```
<cos-l2tp-session-information>
  <l2tp-session-map>
    <interface-name>
      interface-name
    </interface-name>
    <interface-index>
      interface-index
    </interface-index>
    <interface-queues-supported>
      interface-queues-supported
    </interface-queues-supported>
    <interface-queues-in-use>
      interface-queues-in-use
    </interface-queues-in-use>
    <l2tp-session-username>
      l2tp-session-username
    </l2tp-session-username>
    <l2tp-session-index>
      l2tp-session-index
    </l2tp-session-index>
    <traffic-control-profile-name>
      traffic-control-profile-name
    </traffic-control-profile-name>
    <traffic-control-profile-index>
      traffic-control-profile-index
    </traffic-control-profile-index>
    <scheduler-map-name>
```

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```
      scheduler-map-name
    </scheduler-map-name>
    <scheduler-map-index>
      scheduler-map-index
    </scheduler-map-index>
    <shaping-rate>
      shaping-rate
    </shaping-rate>
    <guaranteed-rate>
      guaranteed-rate
    </guaranteed-rate>
    <delay-buffer-rate>
      delay-buffer-rate
    </delay-buffer-rate>
    <encapsulation-overhead>
      encapsulation-overhead
    </encapsulation-overhead>
    <cell-overhead>
      cell-overhead
    </cell-overhead>
  </l2tp-session-map>
</cos-l2tp-session-information>
```

Description Class-of-service L2TP session mappings

<loss-priority-map>

Usage

```
<loss-priority-map>
  <loss-priority-map-name>
    loss-priority-map-name
  </loss-priority-map-name>
  <code-point-type>
    code-point-type
  </code-point-type>
  <table-index>
    table-index
  </table-index>
  <loss-priority-map-table>....</loss-priority-map-table>
</loss-priority-map>
```

Description Class-of-service code point loss priority map

<loss-priority-map>

Usage

```
<cos-loss-priority-map-information>
  <loss-priority-map>
    <loss-priority-map-name>
      loss-priority-map-name
    </loss-priority-map-name>
    <code-point-type>
```


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```
    code-point-type
   </code-point-type>
   <table-index>
    table-index
   </table-index>
   <loss-priority-map-table>....</loss-priority-map-table>
  </loss-priority-map>
</cos-loss-priority-map-information>
```

Description Class-of-service code point loss priority map

<loss-priority-map>

Usage

```
<cos-information>
 <cos-loss-priority-map-information>
  <loss-priority-map>
   <loss-priority-map-name>
    loss-priority-map-name
   </loss-priority-map-name>
   <code-point-type>
    code-point-type
   </code-point-type>
   <table-index>
    table-index
   </table-index>
   <loss-priority-map-table>....</loss-priority-map-table>
  </loss-priority-map>
 </cos-loss-priority-map-information>
</cos-information>
```

Description Class-of-service code point loss priority map

<loss-priority-map-item>

Usage

```
<loss-priority-map>
 <loss-priority-map-table>
  <loss-priority-map-item>
   <code-point>
    code-point
   </code-point>
   <loss-priority>
    loss-priority
   </loss-priority>
  </loss-priority-map-item>
 </loss-priority-map-table>
</loss-priority-map>
```

Description

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<loss-priority-map-item>

Usage

```
<cos-loss-priority-map-information>
  <loss-priority-map>
    <loss-priority-map-table>
      <loss-priority-map-item>
        <code-point>
          code-point
        </code-point>
        <loss-priority>
          loss-priority
        </loss-priority>
      </loss-priority-map-item>
    </loss-priority-map-table>
  </loss-priority-map>
</cos-loss-priority-map-information>
```

Description

<loss-priority-map-item>

Usage

```
<cos-information>
  <cos-loss-priority-map-information>
    <loss-priority-map>
      <loss-priority-map-table>
        <loss-priority-map-item>
          <code-point>
            code-point
          </code-point>
          <loss-priority>
            loss-priority
          </loss-priority>
        </loss-priority-map-item>
      </loss-priority-map-table>
    </loss-priority-map>
  </cos-loss-priority-map-information>
</cos-information>
```

Description

<loss-priority-map-item>

Usage

```
<cos-loss-priority-map-table-information>
  <loss-priority-map-table>
    <loss-priority-map-item>
      <code-point>
        code-point
      </code-point>
      <loss-priority>
        loss-priority
```


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```
      </loss-priority>
    </loss-priority-map-item>
  </loss-priority-map-table>
</cos-loss-priority-map-table-information>
```

Description

<loss-priority-map-item>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-information>
    <loss-priority-map-table>
      <loss-priority-map-item>
        <code-point>
          code-point
        </code-point>
        <loss-priority>
          loss-priority
        </loss-priority>
      </loss-priority-map-item>
    </loss-priority-map-table>
  </cos-loss-priority-map-table-information>
</cos-table-information>
```

Description

<loss-priority-map-table>

Usage

```
<loss-priority-map>
  <loss-priority-map-table>
    <loss-priority-map-item>....</loss-priority-map-item>
    <table-index>
      table-index
    </table-index>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <table-type>
      table-type
    </table-type>
    <loss-priority-map-table-entry>....</loss-priority-map-table-entry>
  </loss-priority-map-table>
</loss-priority-map>
```

Description

<loss-priority-map-table>

Usage

```
<cos-loss-priority-map-information>
  <loss-priority-map>
```

```
    <loss-priority-map-table>
     <loss-priority-map-item>....</loss-priority-map-item>
     <table-index>
      table-index
     </table-index>
     <number-of-entries>
      number-of-entries
     </number-of-entries>
     <table-type>
      table-type
     </table-type>
     <loss-priority-map-table-entry>....</loss-priority-map-table-entry>
    </loss-priority-map-table>
   </loss-priority-map>
</cos-loss-priority-map-information>
```

Description

<loss-priority-map-table>

Usage

```
<cos-information>
 <cos-loss-priority-map-information>
  <loss-priority-map>
   <loss-priority-map-table>
    <loss-priority-map-item>....</loss-priority-map-item>
    <table-index>
     table-index
    </table-index>
    <number-of-entries>
     number-of-entries
    </number-of-entries>
    <table-type>
     table-type
    </table-type>
    <loss-priority-map-table-entry>....</loss-priority-map-table-entry>
   </loss-priority-map-table>
  </loss-priority-map>
 </cos-loss-priority-map-information>
</cos-information>
```

Description

<loss-priority-map-table>

Usage

```
<cos-loss-priority-map-table-information>
 <loss-priority-map-table>
  <loss-priority-map-item>....</loss-priority-map-item>
  <table-index>
   table-index
  </table-index>
  <number-of-entries>
   number-of-entries
```


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```
    </number-of-entries>
    <table-type>
     table-type
    </table-type>
    <loss-priority-map-table-entry>....</loss-priority-map-table-entry>
   </loss-priority-map-table>
</cos-loss-priority-map-table-information>
```

Description

<loss-priority-map-table>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-information>
    <loss-priority-map-table>
      <loss-priority-map-item>....</loss-priority-map-item>
      <table-index>
       table-index
      </table-index>
      <number-of-entries>
       number-of-entries
      </number-of-entries>
      <table-type>
       table-type
      </table-type>
      <loss-priority-map-table-entry>....</loss-priority-map-table-entry>
    </loss-priority-map-table>
  </cos-loss-priority-map-table-information>
</cos-table-information>
```

Description

<loss-priority-map-table-binding>

Usage

```
<cos-loss-priority-map-table-binding-information>
  <loss-priority-map-table-binding>
    <table-index>
     table-index
    </table-index>
    <table-type>
     table-type
    </table-type>
    <logical-interface>
     logical-interface
    </logical-interface>
    <logical-interface-index>
     logical-interface-index
    </logical-interface-index>
  </loss-priority-map-table-binding>
</cos-loss-priority-map-table-binding-information>
```

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Description

<loss-priority-map-table-binding>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-binding-information>
    <loss-priority-map-table-binding>
      <table-index>
        table-index
      </table-index>
      <table-type>
        table-type
      </table-type>
      <logical-interface>
        logical-interface
      </logical-interface>
      <logical-interface-index>
        logical-interface-index
      </logical-interface-index>
    </loss-priority-map-table-binding>
  </cos-loss-priority-map-table-binding-information>
</cos-table-information>
```

Description

<loss-priority-map-table-entry>

Usage

```
<loss-priority-map>
  <loss-priority-map-table>
    <loss-priority-map-table-entry>
      <table-index>
        table-index
      </table-index>
      <code-point>
        code-point
      </code-point>
      <loss-priority>
        loss-priority
      </loss-priority>
    </loss-priority-map-table-entry>
  </loss-priority-map-table>
</loss-priority-map>
```

Description

<loss-priority-map-table-entry>

Usage

```
<cos-loss-priority-map-information>
  <loss-priority-map>
    <loss-priority-map-table>
      <loss-priority-map-table-entry>
```


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```
        <table-index>
          table-index
        </table-index>
        <code-point>
          code-point
        </code-point>
        <loss-priority>
          loss-priority
        </loss-priority>
      </loss-priority-map-table-entry>
    </loss-priority-map-table>
  </loss-priority-map>
</cos-loss-priority-map-information>
```

Description

<loss-priority-map-table-entry>

Usage

```
<cos-information>
  <cos-loss-priority-map-information>
    <loss-priority-map>
      <loss-priority-map-table>
        <loss-priority-map-table-entry>
          <table-index>
            table-index
          </table-index>
          <code-point>
            code-point
          </code-point>
          <loss-priority>
            loss-priority
          </loss-priority>
        </loss-priority-map-table-entry>
      </loss-priority-map-table>
    </loss-priority-map>
  </cos-loss-priority-map-information>
</cos-information>
```

Description

<loss-priority-map-table-entry>

Usage

```
<cos-loss-priority-map-table-information>
  <loss-priority-map-table>
    <loss-priority-map-table-entry>
      <table-index>
        table-index
      </table-index>
      <code-point>
        code-point
      </code-point>
      <loss-priority>
```

```
        loss-priority
      </loss-priority>
    </loss-priority-map-table-entry>
  </loss-priority-map-table>
</cos-loss-priority-map-table-information>
```

Description

<loss-priority-map-table-entry>

Usage

```
<cos-table-information>
  <cos-loss-priority-map-table-information>
    <loss-priority-map-table>
      <loss-priority-map-table-entry>
        <table-index>
          table-index
        </table-index>
        <code-point>
          code-point
        </code-point>
        <loss-priority>
          loss-priority
        </loss-priority>
      </loss-priority-map-table-entry>
    </loss-priority-map-table>
  </cos-loss-priority-map-table-information>
</cos-table-information>
```

Description

<loss-priority-rewrite>

Usage

```
<loss-priority-rewrite>
  <loss-priority-rewrite-name>
    loss-priority-rewrite-name
  </loss-priority-rewrite-name>
  <code-point-type>
    code-point-type
  </code-point-type>
  <table-index>
    table-index
  </table-index>
  <loss-priority-rewrite-table>....</loss-priority-rewrite-table>
</loss-priority-rewrite>
```

Description Class-of-service loss priority to code point rewrite

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<loss-priority-rewrite>

Usage

```
<cos-loss-priority-rewrite-information>
  <loss-priority-rewrite>
    <loss-priority-rewrite-name>
      loss-priority-rewrite-name
    </loss-priority-rewrite-name>
    <code-point-type>
      code-point-type
    </code-point-type>
    <table-index>
      table-index
    </table-index>
    <loss-priority-rewrite-table>....</loss-priority-rewrite-table>
  </loss-priority-rewrite>
</cos-loss-priority-rewrite-information>
```

Description Class-of-service loss priority to code point rewrite

<loss-priority-rewrite>

Usage

```
<cos-information>
  <cos-loss-priority-rewrite-information>
    <loss-priority-rewrite>
      <loss-priority-rewrite-name>
        loss-priority-rewrite-name
      </loss-priority-rewrite-name>
      <code-point-type>
        code-point-type
      </code-point-type>
      <table-index>
        table-index
      </table-index>
      <loss-priority-rewrite-table>....</loss-priority-rewrite-table>
    </loss-priority-rewrite>
  </cos-loss-priority-rewrite-information>
</cos-information>
```

Description Class-of-service loss priority to code point rewrite

<loss-priority-rewrite-item>

Usage

```
<loss-priority-rewrite>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-item>
      <loss-priority>
        loss-priority
      </loss-priority>
      <code-point>
```

```
            code-point
          </code-point>
        </loss-priority-rewrite-item>
      </loss-priority-rewrite-table>
    </loss-priority-rewrite>
```

Description

<loss-priority-rewrite-item>

Usage

```
<cos-loss-priority-rewrite-information>
  <loss-priority-rewrite>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-item>
        <loss-priority>
          loss-priority
        </loss-priority>
        <code-point>
          code-point
        </code-point>
      </loss-priority-rewrite-item>
    </loss-priority-rewrite-table>
  </loss-priority-rewrite>
</cos-loss-priority-rewrite-information>
```

Description

<loss-priority-rewrite-item>

Usage

```
<cos-information>
  <cos-loss-priority-rewrite-information>
    <loss-priority-rewrite>
      <loss-priority-rewrite-table>
        <loss-priority-rewrite-item>
          <loss-priority>
            loss-priority
          </loss-priority>
          <code-point>
            code-point
          </code-point>
        </loss-priority-rewrite-item>
      </loss-priority-rewrite-table>
    </loss-priority-rewrite>
  </cos-loss-priority-rewrite-information>
</cos-information>
```

Description

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<loss-priority-rewrite-item>

Usage

```
<cos-loss-priority-rewrite-table-information>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-item>
      <loss-priority>
        loss-priority
      </loss-priority>
      <code-point>
        code-point
      </code-point>
    </loss-priority-rewrite-item>
  </loss-priority-rewrite-table>
</cos-loss-priority-rewrite-table-information>
```

Description

<loss-priority-rewrite-item>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-information>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-item>
        <loss-priority>
          loss-priority
        </loss-priority>
        <code-point>
          code-point
        </code-point>
      </loss-priority-rewrite-item>
    </loss-priority-rewrite-table>
  </cos-loss-priority-rewrite-table-information>
</cos-table-information>
```

Description

<loss-priority-rewrite-table>

Usage

```
<loss-priority-rewrite>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-item>....</loss-priority-rewrite-item>
    <table-index>
      table-index
    </table-index>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <table-type>
      table-type
    </table-type>
```

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```
    <loss-priority-rewrite-table-entry>....</loss-priority-rewrite-table-entry>
  </loss-priority-rewrite-table>
</loss-priority-rewrite>
```

Description

<loss-priority-rewrite-table>

Usage

```
<cos-loss-priority-rewrite-information>
  <loss-priority-rewrite>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-item>....</loss-priority-rewrite-item>
      <table-index>
        table-index
      </table-index>
      <number-of-entries>
        number-of-entries
      </number-of-entries>
      <table-type>
        table-type
      </table-type>
      <loss-priority-rewrite-table-entry>....</loss-priority-rewrite-table-entry>
    </loss-priority-rewrite-table>
  </loss-priority-rewrite>
</cos-loss-priority-rewrite-information>
```

Description

<loss-priority-rewrite-table>

Usage

```
<cos-information>
  <cos-loss-priority-rewrite-information>
    <loss-priority-rewrite>
      <loss-priority-rewrite-table>
        <loss-priority-rewrite-item>....</loss-priority-rewrite-item>
        <table-index>
          table-index
        </table-index>
        <number-of-entries>
          number-of-entries
        </number-of-entries>
        <table-type>
          table-type
        </table-type>
        <loss-priority-rewrite-table-entry>....</loss-priority-rewrite-table-entry>
      </loss-priority-rewrite-table>
    </loss-priority-rewrite>
  </cos-loss-priority-rewrite-information>
</cos-information>
```

Description

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<loss-priority-rewrite-table>

Usage

```
<cos-loss-priority-rewrite-table-information>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-item>....</loss-priority-rewrite-item>
    <table-index>
      table-index
    </table-index>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <table-type>
      table-type
    </table-type>
    <loss-priority-rewrite-table-entry>....</loss-priority-rewrite-table-entry>
  </loss-priority-rewrite-table>
</cos-loss-priority-rewrite-table-information>
```

Description

<loss-priority-rewrite-table>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-information>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-item>....</loss-priority-rewrite-item>
      <table-index>
        table-index
      </table-index>
      <number-of-entries>
        number-of-entries
      </number-of-entries>
      <table-type>
        table-type
      </table-type>
      <loss-priority-rewrite-table-entry>....</loss-priority-rewrite-table-entry>
    </loss-priority-rewrite-table>
  </cos-loss-priority-rewrite-table-information>
</cos-table-information>
```

Description

<loss-priority-rewrite-table-binding>

Usage

```
<cos-loss-priority-rewrite-table-binding-information>
  <loss-priority-rewrite-table-binding>
    <table-index>
      table-index
    </table-index>
    <table-type>
```

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```
      table-type
    </table-type>
    <logical-interface>
      logical-interface
    </logical-interface>
    <logical-interface-index>
      logical-interface-index
    </logical-interface-index>
  </loss-priority-rewrite-table-binding>
</cos-loss-priority-rewrite-table-binding-information>
```

Description

<loss-priority-rewrite-table-binding>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-binding-information>
    <loss-priority-rewrite-table-binding>
      <table-index>
        table-index
      </table-index>
      <table-type>
        table-type
      </table-type>
      <logical-interface>
        logical-interface
      </logical-interface>
      <logical-interface-index>
        logical-interface-index
      </logical-interface-index>
    </loss-priority-rewrite-table-binding>
  </cos-loss-priority-rewrite-table-binding-information>
</cos-table-information>
```

Description

<loss-priority-rewrite-table-entry>

Usage

```
<loss-priority-rewrite>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-table-entry>
      <table-index>
        table-index
      </table-index>
      <loss-priority>
        loss-priority
      </loss-priority>
      <code-point>
        code-point
      </code-point>
    </loss-priority-rewrite-table-entry>
  </loss-priority-rewrite-table>
```


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```
</loss-priority-rewrite>
```

Description

<loss-priority-rewrite-table-entry>

Usage

```
<cos-loss-priority-rewrite-information>
  <loss-priority-rewrite>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-table-entry>
        <table-index>
          table-index
        </table-index>
        <loss-priority>
          loss-priority
        </loss-priority>
        <code-point>
          code-point
        </code-point>
      </loss-priority-rewrite-table-entry>
    </loss-priority-rewrite-table>
  </loss-priority-rewrite>
</cos-loss-priority-rewrite-information>
```

Description

<loss-priority-rewrite-table-entry>

Usage

```
<cos-information>
  <cos-loss-priority-rewrite-information>
    <loss-priority-rewrite>
      <loss-priority-rewrite-table>
        <loss-priority-rewrite-table-entry>
          <table-index>
            table-index
          </table-index>
          <loss-priority>
            loss-priority
          </loss-priority>
          <code-point>
            code-point
          </code-point>
        </loss-priority-rewrite-table-entry>
      </loss-priority-rewrite-table>
    </loss-priority-rewrite>
  </cos-loss-priority-rewrite-information>
</cos-information>
```

Description

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<loss-priority-rewrite-table-entry>

Usage

```
<cos-loss-priority-rewrite-table-information>
  <loss-priority-rewrite-table>
    <loss-priority-rewrite-table-entry>
      <table-index>
        table-index
      </table-index>
      <loss-priority>
        loss-priority
      </loss-priority>
      <code-point>
        code-point
      </code-point>
    </loss-priority-rewrite-table-entry>
  </loss-priority-rewrite-table>
</cos-loss-priority-rewrite-table-information>
```

Description

<loss-priority-rewrite-table-entry>

Usage

```
<cos-table-information>
  <cos-loss-priority-rewrite-table-information>
    <loss-priority-rewrite-table>
      <loss-priority-rewrite-table-entry>
        <table-index>
          table-index
        </table-index>
        <loss-priority>
          loss-priority
        </loss-priority>
        <code-point>
          code-point
        </code-point>
      </loss-priority-rewrite-table-entry>
    </loss-priority-rewrite-table>
  </cos-loss-priority-rewrite-table-information>
</cos-table-information>
```

Description

<policer-table-map>

Usage

```
<cos-policer-table-map-information>
  <policer-table-map>
    <p-interface>
      p-interface
    </p-interface>
    <p-interface-index>
```


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```
    p-interface-index
   </p-interface-index>
   <policer-bandwidth>
    policer-bandwidth
   </policer-bandwidth>
   <policer-burst>
    policer-burst
   </policer-burst>
  </policer-table-map>
</cos-policer-table-map-information>
```

Description

<policer-table-map>

Usage

```
<cos-table-information>
 <cos-policer-table-map-information>
  <policer-table-map>
   <p-interface>
    p-interface
   </p-interface>
   <p-interface-index>
    p-interface-index
   </p-interface-index>
   <policer-bandwidth>
    policer-bandwidth
   </policer-bandwidth>
   <policer-burst>
    policer-burst
   </policer-burst>
  </policer-table-map>
 </cos-policer-table-map-information>
</cos-table-information>
```

Description

<policy>

Usage

```
<cos-scheduler-map-table-information>
 <policy>
  <interface>
   interface
  </interface>
  <interface-index>
   interface-index
  </interface-index>
  <policy-index>
   policy-index
  </policy-index>
  <policy-type>
   policy-type
  </policy-type>
```

```
    <policy-number-of-queues>
     policy-number-of-queues
    </policy-number-of-queues>
    <traffic-control-profile-name>
     traffic-control-profile-name
    </traffic-control-profile-name>
    <traffic-control-profile-index>
     traffic-control-profile-index
    </traffic-control-profile-index>
    <policy-entry>....</policy-entry>
   </policy>
</cos-scheduler-map-table-information>
```

Description

<policy>

Usage

```
<cos-table-information>
 <cos-scheduler-map-table-information>
  <policy>
   <interface>
    interface
   </interface>
   <interface-index>
    interface-index
   </interface-index>
   <policy-index>
    policy-index
   </policy-index>
   <policy-type>
    policy-type
   </policy-type>
   <policy-number-of-queues>
    policy-number-of-queues
   </policy-number-of-queues>
   <traffic-control-profile-name>
    traffic-control-profile-name
   </traffic-control-profile-name>
   <traffic-control-profile-index>
    traffic-control-profile-index
   </traffic-control-profile-index>
   <policy-entry>....</policy-entry>
  </policy>
 </cos-scheduler-map-table-information>
</cos-table-information>
```

Description

<policy-entry>

Usage

```
<cos-scheduler-map-table-information>
 <policy>
```


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```
<policy-entry>
  <table-index>
    table-index
  </table-index>
  <policy-entry-identifier>
    policy-entry-identifier
  </policy-entry-identifier>
  <fc-number>
    fc-number
  </fc-number>
  <fc-queue-number>
    fc-queue-number
  </fc-queue-number>
  <policy-transmit-rate>
    policy-transmit-rate
  </policy-transmit-rate>
  <policy-transmit-rate-percentage>
    policy-transmit-rate-percentage
  </policy-transmit-rate-percentage>
  <policy-transmit-rate-remainder>
    policy-transmit-rate-remainder
  </policy-transmit-rate-remainder>
  <policy-buffer-size-temporal>
    policy-buffer-size-temporal
  </policy-buffer-size-temporal>
  <policy-buffer-size-multi-destination-buffers>
    policy-buffer-size-multi-destination-buffers
  </policy-buffer-size-multi-destination-buffers>
  <policy-buffer-size-percentage>
    policy-buffer-size-percentage
  </policy-buffer-size-percentage>
  <policy-buffer-size-remainder>
    policy-buffer-size-remainder
  </policy-buffer-size-remainder>
  <policy-scheduling-priority>
    policy-scheduling-priority
  </policy-scheduling-priority>
  <policy-excess-priority>
    policy-excess-priority
  </policy-excess-priority>
  <policy-excess-rate-proportional>
    policy-excess-rate-proportional
  </policy-excess-rate-proportional>
  <policy-excess-rate-percentage>
    policy-excess-rate-percentage
  </policy-excess-rate-percentage>
  <policy-shaping-rate>
    policy-shaping-rate
  </policy-shaping-rate>
  <policy-shaping-rate-percentage>
    policy-shaping-rate-percentage
  </policy-shaping-rate-percentage>
  <policy-packet-loss-profile>....</policy-packet-loss-profile>
  <policy-exact>
    policy-exact
  </policy-exact>
```

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```
    </policy-entry>
  </policy>
</cos-scheduler-map-table-information>
```

Description

<policy-entry>

Usage

```
<cos-table-information>
  <cos-scheduler-map-table-information>
    <policy>
      <policy-entry>
        <table-index>
          table-index
        </table-index>
        <policy-entry-identifier>
          policy-entry-identifier
        </policy-entry-identifier>
        <fc-number>
          fc-number
        </fc-number>
        <fc-queue-number>
          fc-queue-number
        </fc-queue-number>
        <policy-transmit-rate>
          policy-transmit-rate
        </policy-transmit-rate>
        <policy-transmit-rate-percentage>
          policy-transmit-rate-percentage
        </policy-transmit-rate-percentage>
        <policy-transmit-rate-remainder>
          policy-transmit-rate-remainder
        </policy-transmit-rate-remainder>
        <policy-buffer-size-temporal>
          policy-buffer-size-temporal
        </policy-buffer-size-temporal>
        <policy-buffer-size-multi-destination-buffers>
          policy-buffer-size-multi-destination-buffers
        </policy-buffer-size-multi-destination-buffers>
        <policy-buffer-size-percentage>
          policy-buffer-size-percentage
        </policy-buffer-size-percentage>
        <policy-buffer-size-remainder>
          policy-buffer-size-remainder
        </policy-buffer-size-remainder>
        <policy-scheduling-priority>
          policy-scheduling-priority
        </policy-scheduling-priority>
        <policy-excess-priority>
          policy-excess-priority
        </policy-excess-priority>
        <policy-excess-rate-proportional>
          policy-excess-rate-proportional
        </policy-excess-rate-proportional>
```


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```
      <policy-excess-rate-percentage>
       policy-excess-rate-percentage
      </policy-excess-rate-percentage>
      <policy-shaping-rate>
       policy-shaping-rate
      </policy-shaping-rate>
      <policy-shaping-rate-percentage>
       policy-shaping-rate-percentage
      </policy-shaping-rate-percentage>
      <policy-packet-loss-profile>....</policy-packet-loss-profile>
      <policy-exact>
       policy-exact
      </policy-exact>
     </policy-entry>
    </policy>
   </cos-scheduler-map-table-information>
</cos-table-information>
```

Description

<policy-packet-loss-profile>

Usage

```
<cos-scheduler-map-table-information>
 <policy>
  <policy-entry>
   <policy-packet-loss-profile>
    <high-drop-profile-identifier>
     high-drop-profile-identifier
    </high-drop-profile-identifier>
    <medium-drop-profile-identifier>
     medium-drop-profile-identifier
    </medium-drop-profile-identifier>
    <low-drop-profile-identifier>
     low-drop-profile-identifier
    </low-drop-profile-identifier>
    <medium-high-drop-profile-identifier>
     medium-high-drop-profile-identifier
    </medium-high-drop-profile-identifier>
    <medium-low-drop-profile-identifier>
     medium-low-drop-profile-identifier
    </medium-low-drop-profile-identifier>
    <tcp-high-drop-profile-identifier>
     tcp-high-drop-profile-identifier
    </tcp-high-drop-profile-identifier>
    <tcp-low-drop-profile-identifier>
     tcp-low-drop-profile-identifier
    </tcp-low-drop-profile-identifier>
   </policy-packet-loss-profile>
  </policy-entry>
 </policy>
</cos-scheduler-map-table-information>
```

Description

<policy-packet-loss-profile>

Usage

```
<cos-table-information>
  <cos-scheduler-map-table-information>
    <policy>
      <policy-entry>
        <policy-packet-loss-profile>
          <high-drop-profile-identifier>
            high-drop-profile-identifier
          </high-drop-profile-identifier>
          <medium-drop-profile-identifier>
            medium-drop-profile-identifier
          </medium-drop-profile-identifier>
          <low-drop-profile-identifier>
            low-drop-profile-identifier
          </low-drop-profile-identifier>
          <medium-high-drop-profile-identifier>
            medium-high-drop-profile-identifier
          </medium-high-drop-profile-identifier>
          <medium-low-drop-profile-identifier>
            medium-low-drop-profile-identifier
          </medium-low-drop-profile-identifier>
          <tcp-high-drop-profile-identifier>
            tcp-high-drop-profile-identifier
          </tcp-high-drop-profile-identifier>
          <tcp-low-drop-profile-identifier>
            tcp-low-drop-profile-identifier
          </tcp-low-drop-profile-identifier>
        </policy-packet-loss-profile>
      </policy-entry>
    </policy>
  </cos-scheduler-map-table-information>
</cos-table-information>
```

Description

<profile-map>

Usage

```
<drop-profile>
  <profile-map>
    <profile-map-item>....</profile-map-item>
  </profile-map>
</drop-profile>
```

Description

<profile-map>

Usage

```
<cos-drop-profile-information>
  <drop-profile>
```


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```
    <profile-map>
      <profile-map-item>....</profile-map-item>
    </profile-map>
  </drop-profile>
</cos-drop-profile-information>
```

Description

<profile-map>

Usage

```
<cos-information>
  <cos-drop-profile-information>
    <drop-profile>
      <profile-map>
        <profile-map-item>....</profile-map-item>
      </profile-map>
    </drop-profile>
  </cos-drop-profile-information>
</cos-information>
```

Description

<profile-map-item>

Usage

```
<drop-profile>
  <profile-map>
    <profile-map-item>
      <fill-level>
        fill-level
      </fill-level>
      <probability>
        probability
      </probability>
    </profile-map-item>
  </profile-map>
</drop-profile>
```

Description

<profile-map-item>

Usage

```
<cos-drop-profile-information>
  <drop-profile>
    <profile-map>
      <profile-map-item>
        <fill-level>
          fill-level
        </fill-level>
        <probability>
          probability
```

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```
        </probability>
      </profile-map-item>
    </profile-map>
  </drop-profile>
</cos-drop-profile-information>
```

Description

<profile-map-item>

Usage

```
<cos-information>
  <cos-drop-profile-information>
    <drop-profile>
      <profile-map>
        <profile-map-item>
          <fill-level>
            fill-level
          </fill-level>
          <probability>
            probability
          </probability>
        </profile-map-item>
      </profile-map>
    </drop-profile>
  </cos-drop-profile-information>
</cos-information>
```

Description

<red>

Usage

```
<cos-red-information>
  <red>
    <red-drop-profile-identifier>
      red-drop-profile-identifier
    </red-drop-profile-identifier>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <red-entry>....</red-entry>
  </red>
</cos-red-information>
```

Description

<red>

Usage

```
<cos-table-information>
  <cos-red-information>
    <red>
```


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```
      <red-drop-profile-identifier>
        red-drop-profile-identifier
      </red-drop-profile-identifier>
      <number-of-entries>
        number-of-entries
      </number-of-entries>
      <red-entry>....</red-entry>
    </red>
  </cos-red-information>
</cos-table-information>
```

Description

<red-entry>

Usage

```
<cos-red-information>
  <red>
    <red-entry>
      <red-entry-index>
        red-entry-index
      </red-entry-index>
      <red-fullness>
        red-fullness
      </red-fullness>
      <red-drop-probability>
        red-drop-probability
      </red-drop-probability>
    </red-entry>
  </red>
</cos-red-information>
```

Description

<red-entry>

Usage

```
<cos-table-information>
  <cos-red-information>
    <red>
      <red-entry>
        <red-entry-index>
          red-entry-index
        </red-entry-index>
        <red-fullness>
          red-fullness
        </red-fullness>
        <red-drop-probability>
          red-drop-probability
        </red-drop-probability>
      </red-entry>
    </red>
  </cos-red-information>
```

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```
</cos-table-information>
```

Description

<rewrite>

Usage

```
<rewrite>
  <rewrite-name>
    rewrite-name
  </rewrite-name>
  <code-point-type>
    code-point-type
  </code-point-type>
  <table-index>
    table-index
  </table-index>
  <rewrite-map>....</rewrite-map>
</rewrite>
```

Description Class-of-service drop profile

<rewrite>

Usage

```
<cos-rewrite-information>
  <rewrite>
    <rewrite-name>
      rewrite-name
    </rewrite-name>
    <code-point-type>
      code-point-type
    </code-point-type>
    <table-index>
      table-index
    </table-index>
    <rewrite-map>....</rewrite-map>
  </rewrite>
</cos-rewrite-information>
```

Description Class-of-service drop profile

<rewrite>

Usage

```
<cos-information>
  <cos-rewrite-information>
    <rewrite>
      <rewrite-name>
        rewrite-name
      </rewrite-name>
```


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```
      <code-point-type>
        code-point-type
      </code-point-type>
      <table-index>
        table-index
      </table-index>
      <rewrite-map>....</rewrite-map>
    </rewrite>
  </cos-rewrite-information>
</cos-information>
```

Description Class-of-service drop profile

<rewrite-map>

Usage

```
<rewrite>
  <rewrite-map>
    <rewrite-map-item>....</rewrite-map-item>
  </rewrite-map>
</rewrite>
```

Description

<rewrite-map>

Usage

```
<cos-rewrite-information>
  <rewrite>
    <rewrite-map>
      <rewrite-map-item>....</rewrite-map-item>
    </rewrite-map>
  </rewrite>
</cos-rewrite-information>
```

Description

<rewrite-map>

Usage

```
<cos-information>
  <cos-rewrite-information>
    <rewrite>
      <rewrite-map>
        <rewrite-map-item>....</rewrite-map-item>
      </rewrite-map>
    </rewrite>
  </cos-rewrite-information>
</cos-information>
```

Description

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<rewrite-map-item>

Usage

```
<rewrite>
  <rewrite-map>
    <rewrite-map-item>
      <code-point>
        code-point
      </code-point>
      <fc-name>
        fc-name
      </fc-name>
      <loss-priority>
        loss-priority
      </loss-priority>
    </rewrite-map-item>
  </rewrite-map>
</rewrite>
```

Description

<rewrite-map-item>

Usage

```
<cos-rewrite-information>
  <rewrite>
    <rewrite-map>
      <rewrite-map-item>
        <code-point>
          code-point
        </code-point>
        <fc-name>
          fc-name
        </fc-name>
        <loss-priority>
          loss-priority
        </loss-priority>
      </rewrite-map-item>
    </rewrite-map>
  </rewrite>
</cos-rewrite-information>
```

Description

<rewrite-map-item>

Usage

```
<cos-information>
  <cos-rewrite-information>
    <rewrite>
      <rewrite-map>
        <rewrite-map-item>
          <code-point>
```


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```
            code-point
           </code-point>
           <fc-name>
            fc-name
           </fc-name>
           <loss-priority>
            loss-priority
           </loss-priority>
          </rewrite-map-item>
        </rewrite-map>
      </rewrite>
    </cos-rewrite-information>
  </cos-information>
```

Description

<rewrite-table>

Usage

```
<cos-rewrite-table-information>
  <rewrite-table>
    <table-index>
      table-index
    </table-index>
    <number-of-entries>
      number-of-entries
    </number-of-entries>
    <table-type>
      table-type
    </table-type>
    <rewrite-table-entry>....</rewrite-table-entry>
  </rewrite-table>
</cos-rewrite-table-information>
```

Description

<rewrite-table>

Usage

```
<cos-table-information>
  <cos-rewrite-table-information>
    <rewrite-table>
      <table-index>
        table-index
      </table-index>
      <number-of-entries>
        number-of-entries
      </number-of-entries>
      <table-type>
        table-type
      </table-type>
      <rewrite-table-entry>....</rewrite-table-entry>
    </rewrite-table>
  </cos-rewrite-table-information>
```

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```
</cos-table-information>
```

Description

<rewrite-table-entry>

Usage

```
<cos-rewrite-table-information>
 <rewrite-table>
  <rewrite-table-entry>
   <fc-queue-number>
    fc-queue-number
   </fc-queue-number>
   <rewrite-low-codepoint>
    rewrite-low-codepoint
   </rewrite-low-codepoint>
   <rewrite-low-enable-state>
    rewrite-low-enable-state
   </rewrite-low-enable-state>
   <rewrite-high-codepoint>
    rewrite-high-codepoint
   </rewrite-high-codepoint>
   <rewrite-high-enable-state>
    rewrite-high-enable-state
   </rewrite-high-enable-state>
   <rewrite-medium-codepoint>
    rewrite-medium-codepoint
   </rewrite-medium-codepoint>
   <rewrite-medium-enable-state>
    rewrite-medium-enable-state
   </rewrite-medium-enable-state>
   <rewrite-medium-low-codepoint>
    rewrite-medium-low-codepoint
   </rewrite-medium-low-codepoint>
   <rewrite-medium-low-enable-state>
    rewrite-medium-low-enable-state
   </rewrite-medium-low-enable-state>
   <rewrite-medium-high-codepoint>
    rewrite-medium-high-codepoint
   </rewrite-medium-high-codepoint>
   <rewrite-medium-high-enable-state>
    rewrite-medium-high-enable-state
   </rewrite-medium-high-enable-state>
  </rewrite-table-entry>
 </rewrite-table>
</cos-rewrite-table-information>
```

Description

<rewrite-table-entry>

Usage

```
<cos-table-information>
 <cos-rewrite-table-information>
```


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```
<rewrite-table>
 <rewrite-table-entry>
  <fc-queue-number>
   fc-queue-number
  </fc-queue-number>
  <rewrite-low-codepoint>
   rewrite-low-codepoint
  </rewrite-low-codepoint>
  <rewrite-low-enable-state>
   rewrite-low-enable-state
  </rewrite-low-enable-state>
  <rewrite-high-codepoint>
   rewrite-high-codepoint
  </rewrite-high-codepoint>
  <rewrite-high-enable-state>
   rewrite-high-enable-state
  </rewrite-high-enable-state>
  <rewrite-medium-codepoint>
   rewrite-medium-codepoint
  </rewrite-medium-codepoint>
  <rewrite-medium-enable-state>
   rewrite-medium-enable-state
  </rewrite-medium-enable-state>
  <rewrite-medium-low-codepoint>
   rewrite-medium-low-codepoint
  </rewrite-medium-low-codepoint>
  <rewrite-medium-low-enable-state>
   rewrite-medium-low-enable-state
  </rewrite-medium-low-enable-state>
  <rewrite-medium-high-codepoint>
   rewrite-medium-high-codepoint
  </rewrite-medium-high-codepoint>
  <rewrite-medium-high-enable-state>
   rewrite-medium-high-enable-state
  </rewrite-medium-high-enable-state>
 </rewrite-table-entry>
</rewrite-table>
</cos-rewrite-table-information>
</cos-table-information>
```

Description

<rewrite-table-map>

Usage

```
<cos-rewrite-table-map-information>
 <rewrite-table-map>
  <table-index>
   table-index
  </table-index>
  <table-type>
   table-type
  </table-type>
  <logical-interface>
   logical-interface
```

```
    </logical-interface>
    <logical-interface-index>
      logical-interface-index
    </logical-interface-index>
  </rewrite-table-map>
</cos-rewrite-table-map-information>
```

Description

<rewrite-table-map>

Usage

```
<cos-table-information>
  <cos-rewrite-table-map-information>
    <rewrite-table-map>
      <table-index>
        table-index
      </table-index>
      <table-type>
        table-type
      </table-type>
      <logical-interface>
        logical-interface
      </logical-interface>
      <logical-interface-index>
        logical-interface-index
      </logical-interface-index>
    </rewrite-table-map>
  </cos-rewrite-table-map-information>
</cos-table-information>
```

Description

<routing-instance-map>

Usage

```
<routing-instance-map>
  <routing-instance-name>
    routing-instance-name
  </routing-instance-name>
  <i-logical-map>....</i-logical-map>
</routing-instance-map>
```

Description Mapping between class-of-service objects and routing instances

<routing-instance-map>

Usage

```
<cos-routing-instance-information>
  <routing-instance-map>
    <routing-instance-name>
      routing-instance-name
```


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```
    </routing-instance-name>
    <i-logical-map>....</i-logical-map>
  </routing-instance-map>
</cos-routing-instance-information>
```

Description Mapping between class-of-service objects and routing instances

<scheduler>

Usage

```
<scheduler-map>
  <scheduler>
    <fc-name>
      fc-name
    </fc-name>
    <scheduler-name>
      scheduler-name
    </scheduler-name>
    <scheduler-index>
      scheduler-index
    </scheduler-index>
    <scheduler-tx-rate>
      scheduler-tx-rate
    </scheduler-tx-rate>
    <scheduler-tx-limit>
      scheduler-tx-limit
    </scheduler-tx-limit>
    <scheduler-buffer-size>
      scheduler-buffer-size
    </scheduler-buffer-size>
    <scheduler-buffer-limit>
      scheduler-buffer-limit
    </scheduler-buffer-limit>
    <scheduler-priority>
      scheduler-priority
    </scheduler-priority>
    <scheduler-excess-priority>
      scheduler-excess-priority
    </scheduler-excess-priority>
    <scheduler-shaping-rate>
      scheduler-shaping-rate
    </scheduler-shaping-rate>
    <scheduler-shaping-rate-burst>
      scheduler-shaping-rate-burst
    </scheduler-shaping-rate-burst>
    <scheduler-excess-rate>
      scheduler-excess-rate
    </scheduler-excess-rate>
    <scheduler-adjust-minimum>
      scheduler-adjust-minimum
    </scheduler-adjust-minimum>
    <scheduler-adjust-percent>
      scheduler-adjust-percent
    </scheduler-adjust-percent>
```

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<scheduler-drop-profile-ln-index>
  scheduler-drop-profile-ln-index
</scheduler-drop-profile-ln-index>
<scheduler-drop-profile-ln>
  scheduler-drop-profile-ln
</scheduler-drop-profile-ln>
<scheduler-drop-profile-lt-index>
  scheduler-drop-profile-lt-index
</scheduler-drop-profile-lt-index>
<scheduler-drop-profile-lt>
  scheduler-drop-profile-lt
</scheduler-drop-profile-lt>
<scheduler-drop-profile-hn-index>
  scheduler-drop-profile-hn-index
</scheduler-drop-profile-hn-index>
<scheduler-drop-profile-hn>
  scheduler-drop-profile-hn
</scheduler-drop-profile-hn>
<scheduler-drop-profile-ht-index>
  scheduler-drop-profile-ht-index
</scheduler-drop-profile-ht-index>
<scheduler-drop-profile-ht>
  scheduler-drop-profile-ht
</scheduler-drop-profile-ht>
<scheduler-drop-profile-la-index>
  scheduler-drop-profile-la-index
</scheduler-drop-profile-la-index>
<scheduler-drop-profile-la>
  scheduler-drop-profile-la
</scheduler-drop-profile-la>
<scheduler-drop-profile-mla-index>
  scheduler-drop-profile-mla-index
</scheduler-drop-profile-mla-index>
<scheduler-drop-profile-mla>
  scheduler-drop-profile-mla
</scheduler-drop-profile-mla>
<scheduler-drop-profile-mha-index>
  scheduler-drop-profile-mha-index
</scheduler-drop-profile-mha-index>
<scheduler-drop-profile-mha>
  scheduler-drop-profile-mha
</scheduler-drop-profile-mha>
<scheduler-drop-profile-ma-index>
  scheduler-drop-profile-ma-index
</scheduler-drop-profile-ma-index>
<scheduler-drop-profile-ma>
  scheduler-drop-profile-ma
</scheduler-drop-profile-ma>
<scheduler-drop-profile-ha-index>
  scheduler-drop-profile-ha-index
</scheduler-drop-profile-ha-index>
<scheduler-drop-profile-ha>
  scheduler-drop-profile-ha
</scheduler-drop-profile-ha>
<drop-profile-map-set-type>
  drop-profile-map-set-type

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```
    </drop-profile-map-set-type>
  </scheduler>
</scheduler-map>
```

Description

<scheduler>

Usage

```
<cos-scheduler-map-information>
  <scheduler-map>
    <scheduler>
      <fc-name>
        fc-name
      </fc-name>
      <scheduler-name>
        scheduler-name
      </scheduler-name>
      <scheduler-index>
        scheduler-index
      </scheduler-index>
      <scheduler-tx-rate>
        scheduler-tx-rate
      </scheduler-tx-rate>
      <scheduler-tx-limit>
        scheduler-tx-limit
      </scheduler-tx-limit>
      <scheduler-buffer-size>
        scheduler-buffer-size
      </scheduler-buffer-size>
      <scheduler-buffer-limit>
        scheduler-buffer-limit
      </scheduler-buffer-limit>
      <scheduler-priority>
        scheduler-priority
      </scheduler-priority>
      <scheduler-excess-priority>
        scheduler-excess-priority
      </scheduler-excess-priority>
      <scheduler-shaping-rate>
        scheduler-shaping-rate
      </scheduler-shaping-rate>
      <scheduler-shaping-rate-burst>
        scheduler-shaping-rate-burst
      </scheduler-shaping-rate-burst>
      <scheduler-excess-rate>
        scheduler-excess-rate
      </scheduler-excess-rate>
      <scheduler-adjust-minimum>
        scheduler-adjust-minimum
      </scheduler-adjust-minimum>
      <scheduler-adjust-percent>
        scheduler-adjust-percent
      </scheduler-adjust-percent>
      <scheduler-drop-profile-ln-index>
```

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```
  scheduler-drop-profile-ln-index
</scheduler-drop-profile-ln-index>
<scheduler-drop-profile-ln>
  scheduler-drop-profile-ln
</scheduler-drop-profile-ln>
<scheduler-drop-profile-lt-index>
  scheduler-drop-profile-lt-index
</scheduler-drop-profile-lt-index>
<scheduler-drop-profile-lt>
  scheduler-drop-profile-lt
</scheduler-drop-profile-lt>
<scheduler-drop-profile-hn-index>
  scheduler-drop-profile-hn-index
</scheduler-drop-profile-hn-index>
<scheduler-drop-profile-hn>
  scheduler-drop-profile-hn
</scheduler-drop-profile-hn>
<scheduler-drop-profile-ht-index>
  scheduler-drop-profile-ht-index
</scheduler-drop-profile-ht-index>
<scheduler-drop-profile-ht>
  scheduler-drop-profile-ht
</scheduler-drop-profile-ht>
<scheduler-drop-profile-la-index>
  scheduler-drop-profile-la-index
</scheduler-drop-profile-la-index>
<scheduler-drop-profile-la>
  scheduler-drop-profile-la
</scheduler-drop-profile-la>
<scheduler-drop-profile-mla-index>
  scheduler-drop-profile-mla-index
</scheduler-drop-profile-mla-index>
<scheduler-drop-profile-mla>
  scheduler-drop-profile-mla
</scheduler-drop-profile-mla>
<scheduler-drop-profile-mha-index>
  scheduler-drop-profile-mha-index
</scheduler-drop-profile-mha-index>
<scheduler-drop-profile-mha>
  scheduler-drop-profile-mha
</scheduler-drop-profile-mha>
<scheduler-drop-profile-ma-index>
  scheduler-drop-profile-ma-index
</scheduler-drop-profile-ma-index>
<scheduler-drop-profile-ma>
  scheduler-drop-profile-ma
</scheduler-drop-profile-ma>
<scheduler-drop-profile-ha-index>
  scheduler-drop-profile-ha-index
</scheduler-drop-profile-ha-index>
<scheduler-drop-profile-ha>
  scheduler-drop-profile-ha
</scheduler-drop-profile-ha>
<drop-profile-map-set-type>
  drop-profile-map-set-type
</drop-profile-map-set-type>
```


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```
    </scheduler>
  </scheduler-map>
</cos-scheduler-map-information>
```

Description

<scheduler-map>

Usage

```
<scheduler-map>
  <scheduler-map-name>
    scheduler-map-name
  </scheduler-map-name>
  <scheduler-map-index>
    scheduler-map-index
  </scheduler-map-index>
  <scheduler>....</scheduler>
</scheduler-map>
```

Description Class-of-service scheduler map

<scheduler-map>

Usage

```
<cos-scheduler-map-information>
  <scheduler-map>
    <scheduler-map-name>
      scheduler-map-name
    </scheduler-map-name>
    <scheduler-map-index>
      scheduler-map-index
    </scheduler-map-index>
    <scheduler>....</scheduler>
  </scheduler-map>
</cos-scheduler-map-information>
```

Description Class-of-service scheduler map

<shaper-table-map>

Usage

```
<cos-shaper-table-map-information>
  <shaper-table-map>
    <s-interface>
      s-interface
    </s-interface>
    <s-interface-index>
      s-interface-index
    </s-interface-index>
    <shaper-bandwidth>
      shaper-bandwidth
```

```
    </shaper-bandwidth>
    <shaper-burst>
      shaper-burst
    </shaper-burst>
  </shaper-table-map>
</cos-shaper-table-map-information>
```

Description

<shaper-table-map>

Usage

```
<cos-table-information>
  <cos-shaper-table-map-information>
    <shaper-table-map>
      <s-interface>
        s-interface
      </s-interface>
      <s-interface-index>
        s-interface-index
      </s-interface-index>
      <shaper-bandwidth>
        shaper-bandwidth
      </shaper-bandwidth>
      <shaper-burst>
        shaper-burst
      </shaper-burst>
    </shaper-table-map>
  </cos-shaper-table-map-information>
</cos-table-information>
```

Description

<sm-md-map>

Usage

```
<cos-multi-destination-information>
  <sm-md-map>
    <scheduler-map-name>
      scheduler-map-name
    </scheduler-map-name>
    <scheduler-map-index>
      scheduler-map-index
    </scheduler-map-index>
  </sm-md-map>
</cos-multi-destination-information>
```

Description

<sm-md-map>

Usage

```
<cos-information>
```


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```
<cos-multi-destination-information>
  <sm-md-map>
    <scheduler-map-name>
      scheduler-map-name
    </scheduler-map-name>
    <scheduler-map-index>
      scheduler-map-index
    </scheduler-map-index>
  </sm-md-map>
 </cos-multi-destination-information>
</cos-information>
```

Description

<total-statistics>

Usage

```
<total-statistics>
 <total-pkts-high>
  total-pkts-high
 </total-pkts-high>
 <total-pkts-low>
  total-pkts-low
 </total-pkts-low>
 <total-bytes-high>
  total-bytes-high
 </total-bytes-high>
 <total-bytes-low>
  total-bytes-low
 </total-bytes-low>
 <total-pps-high>
  total-pps-high
 </total-pps-high>
 <total-pps-low>
  total-pps-low
 </total-pps-low>
 <total-bps-high>
  total-bps-high
 </total-bps-high>
 <total-bps-low>
  total-bps-low
 </total-bps-low>
</total-statistics>
```

Description Total statistics

<total-statistics>

Usage

```
<fpc-queue-information>
 <total-statistics>
  <total-pkts-high>
   total-pkts-high
```

```
</total-pkts-high>
<total-pkts-low>
  total-pkts-low
</total-pkts-low>
<total-bytes-high>
  total-bytes-high
</total-bytes-high>
<total-bytes-low>
  total-bytes-low
</total-bytes-low>
<total-pps-high>
  total-pps-high
</total-pps-high>
<total-pps-low>
  total-pps-low
</total-pps-low>
<total-bps-high>
  total-bps-high
</total-bps-high>
<total-bps-low>
  total-bps-low
</total-bps-low>
</total-statistics>
</fpc-queue-information>
```

Description Total statistics

<total-statistics>

Usage

```
<fabric-queue-information>
  <fpc-queue-information>
    <total-statistics>
      <total-pkts-high>
        total-pkts-high
      </total-pkts-high>
      <total-pkts-low>
        total-pkts-low
      </total-pkts-low>
      <total-bytes-high>
        total-bytes-high
      </total-bytes-high>
      <total-bytes-low>
        total-bytes-low
      </total-bytes-low>
      <total-pps-high>
        total-pps-high
      </total-pps-high>
      <total-pps-low>
        total-pps-low
      </total-pps-low>
      <total-bps-high>
        total-bps-high
      </total-bps-high>
```


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```
        <total-bps-low>
          total-bps-low
        </total-bps-low>
      </total-statistics>
    </fpc-queue-information>
  </fabric-queue-information>
```

Description Total statistics

<traffic-control-profile>

Usage

```
<traffic-control-profile>
  <traffic-control-profile-name>
    traffic-control-profile-name
  </traffic-control-profile-name>
  <scheduler-map-name>
    scheduler-map-name
  </scheduler-map-name>
  <shaping-rate>
    shaping-rate
  </shaping-rate>
  <shaping-rate-burst>
    shaping-rate-burst
  </shaping-rate-burst>
  <shaping-rate-priority-high>
    shaping-rate-priority-high
  </shaping-rate-priority-high>
  <shaping-rate-priority-high-burst>
    shaping-rate-priority-high-burst
  </shaping-rate-priority-high-burst>
  <shaping-rate-priority-medium>
    shaping-rate-priority-medium
  </shaping-rate-priority-medium>
  <shaping-rate-priority-medium-burst>
    shaping-rate-priority-medium-burst
  </shaping-rate-priority-medium-burst>
  <shaping-rate-priority-low>
    shaping-rate-priority-low
  </shaping-rate-priority-low>
  <shaping-rate-priority-low-burst>
    shaping-rate-priority-low-burst
  </shaping-rate-priority-low-burst>
  <shaping-rate-excess-high>
    shaping-rate-excess-high
  </shaping-rate-excess-high>
  <shaping-rate-excess-high-burst>
    shaping-rate-excess-high-burst
  </shaping-rate-excess-high-burst>
  <shaping-rate-excess-low>
    shaping-rate-excess-low
  </shaping-rate-excess-low>
  <shaping-rate-excess-low-burst>
    shaping-rate-excess-low-burst
```

```
</shaping-rate-excess-low-burst>
<traffic-control-profile-index>
  traffic-control-profile-index
</traffic-control-profile-index>
<traffic-control-profile-instance>....</traffic-control-profile-instance>
<guaranteed-rate>
  guaranteed-rate
</guaranteed-rate>
<guaranteed-rate-burst>
  guaranteed-rate-burst
</guaranteed-rate-burst>
<delay-buffer-rate>
  delay-buffer-rate
</delay-buffer-rate>
<excess-rate>
  excess-rate
</excess-rate>
<excess-rate-high>
  excess-rate-high
</excess-rate-high>
<excess-rate-low>
  excess-rate-low
</excess-rate-low>
<overhead-bytes>
  overhead-bytes
</overhead-bytes>
<overhead-accounting-mode>
  overhead-accounting-mode
</overhead-accounting-mode>
<adjust-minimum>
  adjust-minimum
</adjust-minimum>
</traffic-control-profile>
```

Description Information about one or more traffic control profiles

<traffic-control-profile>

Usage

```
<cos-traffic-control-profile-information>
  <traffic-control-profile>
    <traffic-control-profile-name>
      traffic-control-profile-name
    </traffic-control-profile-name>
    <scheduler-map-name>
      scheduler-map-name
    </scheduler-map-name>
    <shaping-rate>
      shaping-rate
    </shaping-rate>
    <shaping-rate-burst>
      shaping-rate-burst
    </shaping-rate-burst>
    <shaping-rate-priority-high>
```


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```
  shaping-rate-priority-high
</shaping-rate-priority-high>
<shaping-rate-priority-high-burst>
  shaping-rate-priority-high-burst
</shaping-rate-priority-high-burst>
<shaping-rate-priority-medium>
  shaping-rate-priority-medium
</shaping-rate-priority-medium>
<shaping-rate-priority-medium-burst>
  shaping-rate-priority-medium-burst
</shaping-rate-priority-medium-burst>
<shaping-rate-priority-low>
  shaping-rate-priority-low
</shaping-rate-priority-low>
<shaping-rate-priority-low-burst>
  shaping-rate-priority-low-burst
</shaping-rate-priority-low-burst>
<shaping-rate-excess-high>
  shaping-rate-excess-high
</shaping-rate-excess-high>
<shaping-rate-excess-high-burst>
  shaping-rate-excess-high-burst
</shaping-rate-excess-high-burst>
<shaping-rate-excess-low>
  shaping-rate-excess-low
</shaping-rate-excess-low>
<shaping-rate-excess-low-burst>
  shaping-rate-excess-low-burst
</shaping-rate-excess-low-burst>
<traffic-control-profile-index>
  traffic-control-profile-index
</traffic-control-profile-index>
<traffic-control-profile-instance>....</traffic-control-profile-instance>
<guaranteed-rate>
  guaranteed-rate
</guaranteed-rate>
<guaranteed-rate-burst>
  guaranteed-rate-burst
</guaranteed-rate-burst>
<delay-buffer-rate>
  delay-buffer-rate
</delay-buffer-rate>
<excess-rate>
  excess-rate
</excess-rate>
<excess-rate-high>
  excess-rate-high
</excess-rate-high>
<excess-rate-low>
  excess-rate-low
</excess-rate-low>
<overhead-bytes>
  overhead-bytes
</overhead-bytes>
<overhead-accounting-mode>
  overhead-accounting-mode
```

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```
    </overhead-accounting-mode>
    <adjust-minimum>
      adjust-minimum
    </adjust-minimum>
  </traffic-control-profile>
</cos-traffic-control-profile-information>
```

Description Information about one or more traffic control profiles

<traffic-control-profile-instance>

Usage

```
<traffic-control-profile-instance>
  <traffic-control-profile-instance-name>
    traffic-control-profile-instance-name
  </traffic-control-profile-instance-name>
  <traffic-control-profile-instance-index>
    traffic-control-profile-instance-index
  </traffic-control-profile-instance-index>
  <instance-reference-count>
    instance-reference-count
  </instance-reference-count>
</traffic-control-profile-instance>
```

Description Class-of-service traffic control profile instance

<traffic-control-profile-instance>

Usage

```
<traffic-control-profile>
  <traffic-control-profile-instance>
    <traffic-control-profile-instance-name>
      traffic-control-profile-instance-name
    </traffic-control-profile-instance-name>
    <traffic-control-profile-instance-index>
      traffic-control-profile-instance-index
    </traffic-control-profile-instance-index>
    <instance-reference-count>
      instance-reference-count
    </instance-reference-count>
  </traffic-control-profile-instance>
</traffic-control-profile>
```

Description Class-of-service traffic control profile instance

<traffic-control-profile-instance>

Usage

```
<cos-traffic-control-profile-information>
  <traffic-control-profile>
    <traffic-control-profile-instance>
```


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```
        <traffic-control-profile-instance-name>
          traffic-control-profile-instance-name
        </traffic-control-profile-instance-name>
        <traffic-control-profile-instance-index>
          traffic-control-profile-instance-index
        </traffic-control-profile-instance-index>
        <instance-reference-count>
          instance-reference-count
        </instance-reference-count>
      </traffic-control-profile-instance>
    </traffic-control-profile>
  </cos-traffic-control-profile-information>
```

Description Class-of-service traffic control profile instance

<translation-table>

Usage

```
<translation-table>
  <translation-table-name>
    translation-table-name
  </translation-table-name>
  <translation-table-type>
    translation-table-type
  </translation-table-type>
  <table-index>
    table-index
  </table-index>
  <translation-table-map>....</translation-table-map>
  <number-of-entries>
    number-of-entries
  </number-of-entries>
  <translation-table-entry>....</translation-table-entry>
</translation-table>
```

Description Class-of-service code point translation table

<translation-table>

Usage

```
<cos-translation-table-map-information>
  <translation-table>
    <translation-table-name>
      translation-table-name
    </translation-table-name>
    <translation-table-type>
      translation-table-type
    </translation-table-type>
    <table-index>
      table-index
    </table-index>
    <translation-table-map>....</translation-table-map>
```

```
    <number-of-entries>
     number-of-entries
    </number-of-entries>
    <translation-table-entry>....</translation-table-entry>
   </translation-table>
</cos-translation-table-map-information>
```

Description Class-of-service code point translation table

<translation-table>

Usage

```
<cos-information>
 <cos-translation-table-map-information>
  <translation-table>
   <translation-table-name>
    translation-table-name
   </translation-table-name>
   <translation-table-type>
    translation-table-type
   </translation-table-type>
   <table-index>
    table-index
   </table-index>
   <translation-table-map>....</translation-table-map>
   <number-of-entries>
    number-of-entries
   </number-of-entries>
   <translation-table-entry>....</translation-table-entry>
  </translation-table>
 </cos-translation-table-map-information>
</cos-information>
```

Description Class-of-service code point translation table

<translation-table>

Usage

```
<cos-translation-table-information>
 <translation-table>
  <translation-table-name>
   translation-table-name
  </translation-table-name>
  <translation-table-type>
   translation-table-type
  </translation-table-type>
  <table-index>
   table-index
  </table-index>
  <translation-table-map>....</translation-table-map>
  <number-of-entries>
   number-of-entries
```


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```
    </number-of-entries>
    <translation-table-entry>....</translation-table-entry>
  </translation-table>
</cos-translation-table-information>
```

Description Class-of-service code point translation table

<translation-table-entry>

Usage

```
<translation-table>
  <translation-table-entry>
    <table-index>
      table-index
    </table-index>
    <from-code-point>
      from-code-point
    </from-code-point>
    <to-code-point>
      to-code-point
    </to-code-point>
  </translation-table-entry>
</translation-table>
```

Description

<translation-table-entry>

Usage

```
<cos-translation-table-map-information>
  <translation-table>
    <translation-table-entry>
      <table-index>
        table-index
      </table-index>
      <from-code-point>
        from-code-point
      </from-code-point>
      <to-code-point>
        to-code-point
      </to-code-point>
    </translation-table-entry>
  </translation-table>
</cos-translation-table-map-information>
```

Description

<translation-table-entry>

Usage

```
<cos-information>
  <cos-translation-table-map-information>
```

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```
    <translation-table>
     <translation-table-entry>
      <table-index>
       table-index
      </table-index>
      <from-code-point>
       from-code-point
      </from-code-point>
      <to-code-point>
       to-code-point
      </to-code-point>
     </translation-table-entry>
    </translation-table>
  </cos-translation-table-map-information>
</cos-information>
```

Description

<translation-table-entry>

Usage

```
<cos-translation-table-information>
  <translation-table>
    <translation-table-entry>
      <table-index>
        table-index
      </table-index>
      <from-code-point>
        from-code-point
      </from-code-point>
      <to-code-point>
        to-code-point
      </to-code-point>
    </translation-table-entry>
  </translation-table>
</cos-translation-table-information>
```

Description

<translation-table-map>

Usage

```
<translation-table>
  <translation-table-map>
    <translation-table-map-item>....</translation-table-map-item>
  </translation-table-map>
</translation-table>
```

Description

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<translation-table-map>

Usage

```
<cos-translation-table-map-information>
  <translation-table>
    <translation-table-map>
      <translation-table-map-item>....</translation-table-map-item>
    </translation-table-map>
  </translation-table>
</cos-translation-table-map-information>
```

Description

<translation-table-map>

Usage

```
<cos-information>
  <cos-translation-table-map-information>
    <translation-table>
      <translation-table-map>
        <translation-table-map-item>....</translation-table-map-item>
      </translation-table-map>
    </translation-table>
  </cos-translation-table-map-information>
</cos-information>
```

Description

<translation-table-map>

Usage

```
<cos-translation-table-information>
  <translation-table>
    <translation-table-map>
      <translation-table-map-item>....</translation-table-map-item>
    </translation-table-map>
  </translation-table>
</cos-translation-table-information>
```

Description

<translation-table-map-item>

Usage

```
<translation-table>
  <translation-table-map>
    <translation-table-map-item>
      <from-code-point>
        from-code-point
      </from-code-point>
      <to-code-point>
        to-code-point
```

```
    </to-code-point>
   </translation-table-map-item>
  </translation-table-map>
</translation-table>
```

Description

<translation-table-map-item>

Usage

```
<cos-translation-table-map-information>
 <translation-table>
  <translation-table-map>
   <translation-table-map-item>
    <from-code-point>
     from-code-point
    </from-code-point>
    <to-code-point>
     to-code-point
    </to-code-point>
   </translation-table-map-item>
  </translation-table-map>
 </translation-table>
</cos-translation-table-map-information>
```

Description

<translation-table-map-item>

Usage

```
<cos-information>
 <cos-translation-table-map-information>
  <translation-table>
   <translation-table-map>
    <translation-table-map-item>
     <from-code-point>
      from-code-point
     </from-code-point>
     <to-code-point>
      to-code-point
     </to-code-point>
    </translation-table-map-item>
   </translation-table-map>
  </translation-table>
 </cos-translation-table-map-information>
</cos-information>
```

Description

<translation-table-map-item>

Usage

```
<cos-translation-table-information>
```


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```
<translation-table>
  <translation-table-map>
    <translation-table-map-item>
      <from-code-point>
        from-code-point
      </from-code-point>
      <to-code-point>
        to-code-point
      </to-code-point>
    </translation-table-map-item>
  </translation-table-map>
 </translation-table>
</cos-translation-table-information>
```

Description

<translation-table-mapping>

Usage

```
<cos-translation-table-mapping-information>
 <translation-table-mapping>
  <table-index>
   table-index
  </table-index>
  <translation-table-type>
   translation-table-type
  </translation-table-type>
  <logical-interface>
   logical-interface
  </logical-interface>
  <logical-interface-index>
   logical-interface-index
  </logical-interface-index>
 </translation-table-mapping>
</cos-translation-table-mapping-information>
```

Description

<trigger-item>

Usage

```
<adaptive-shaper>
 <trigger-item>
  <trigger-type>
   trigger-type
  </trigger-type>
  <adaptive-shaping-rate>
   adaptive-shaping-rate
  </adaptive-shaping-rate>
 </trigger-item>
</adaptive-shaper>
```

Description

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<trigger-item>

Usage

```
<cos-adaptive-shaper-information>
  <adaptive-shaper>
    <trigger-item>
      <trigger-type>
        trigger-type
      </trigger-type>
      <adaptive-shaping-rate>
        adaptive-shaping-rate
      </adaptive-shaping-rate>
    </trigger-item>
  </adaptive-shaper>
</cos-adaptive-shaper-information>
```

Description

<tx-statistics>

Usage

```
<tx-statistics>
  <tx-pkts-high>
    tx-pkts-high
  </tx-pkts-high>
  <tx-pkts-low>
    tx-pkts-low
  </tx-pkts-low>
  <tx-bytes-high>
    tx-bytes-high
  </tx-bytes-high>
  <tx-bytes-low>
    tx-bytes-low
  </tx-bytes-low>
  <tx-pps-high>
    tx-pps-high
  </tx-pps-high>
  <tx-pps-low>
    tx-pps-low
  </tx-pps-low>
  <tx-bps-high>
    tx-bps-high
  </tx-bps-high>
  <tx-bps-low>
    tx-bps-low
  </tx-bps-low>
</tx-statistics>
```

Description Tx statistics

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<tx-statistics>

Usage

```
<fpc-queue-information>
  <tx-statistics>
    <tx-pkts-high>
      tx-pkts-high
    </tx-pkts-high>
    <tx-pkts-low>
      tx-pkts-low
    </tx-pkts-low>
    <tx-bytes-high>
      tx-bytes-high
    </tx-bytes-high>
    <tx-bytes-low>
      tx-bytes-low
    </tx-bytes-low>
    <tx-pps-high>
      tx-pps-high
    </tx-pps-high>
    <tx-pps-low>
      tx-pps-low
    </tx-pps-low>
    <tx-bps-high>
      tx-bps-high
    </tx-bps-high>
    <tx-bps-low>
      tx-bps-low
    </tx-bps-low>
  </tx-statistics>
</fpc-queue-information>
```

Description Tx statistics

<tx-statistics>

Usage

```
<fabric-queue-information>
  <fpc-queue-information>
    <tx-statistics>
      <tx-pkts-high>
        tx-pkts-high
      </tx-pkts-high>
      <tx-pkts-low>
        tx-pkts-low
      </tx-pkts-low>
      <tx-bytes-high>
        tx-bytes-high
      </tx-bytes-high>
      <tx-bytes-low>
        tx-bytes-low
      </tx-bytes-low>
      <tx-pps-high>
```

```
            tx-pps-high
           </tx-pps-high>
           <tx-pps-low>
            tx-pps-low
           </tx-pps-low>
           <tx-bps-high>
            tx-bps-high
           </tx-bps-high>
           <tx-bps-low>
            tx-bps-low
           </tx-bps-low>
          </tx-statistics>
         </fpc-queue-information>
        </fabric-queue-information>
```

Description Tx statistics

<virtual-channel>

Usage

```
<virtual-channel>
 <virtual-channel-name>
  virtual-channel-name
 </virtual-channel-name>
 <table-index>
  table-index
 </table-index>
</virtual-channel>
```

Description Class-of-service virtual channel

<virtual-channel>

Usage

```
<cos-virtual-channel-information>
 <virtual-channel>
  <virtual-channel-name>
   virtual-channel-name
  </virtual-channel-name>
  <table-index>
   table-index
  </table-index>
 </virtual-channel>
</cos-virtual-channel-information>
```

Description Class-of-service virtual channel

<virtual-channel-group>

Usage

```
<virtual-channel-group>
```


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```
<virtual-channel-group-name>
  virtual-channel-group-name
</virtual-channel-group-name>
<table-index>
  table-index
</table-index>
<channel>....</channel>
</virtual-channel-group>
```

Description Class-of-service virtual channel group

<virtual-channel-group>

Usage

```
<cos-virtual-channel-group-information>
  <virtual-channel-group>
    <virtual-channel-group-name>
      virtual-channel-group-name
    </virtual-channel-group-name>
    <table-index>
      table-index
    </table-index>
    <channel>....</channel>
  </virtual-channel-group>
</cos-virtual-channel-group-information>
```

Description Class-of-service virtual channel group

Summary of Database Replication Response Tags

<database-replication-statistics-information>

Usage

```
<database-replication-statistics-information>
  <dropped-connections-total>
    dropped-connections-total
  </dropped-connections-total>
  <max-buffer-count>
    max-buffer-count
  </max-buffer-count>
  <msg-received-bytes>
    msg-received-bytes
  </msg-received-bytes>
  <msgs-received-total>
    msgs-received-total
  </msgs-received-total>
  <msg-sent-bytes>
    msg-sent-bytes
  </msg-sent-bytes>
  <msgs-sent-total>
    msgs-sent-total
  </msgs-sent-total>
```

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```
<queue-full-total>
  queue-full-total
</queue-full-total>
<queue-max-size>
  queue-max-size
</queue-max-size>
</database-replication-statistics-information>
```

Description Statistics from the database replication

<database-replication-summary-information>

Usage

```
<database-replication-summary-information>
  <replication-graceful-restart-type>
    replication-graceful-restart-type
  </replication-graceful-restart-type>
  <replication-mastership-type>
    replication-mastership-type
  </replication-mastership-type>
  <replication-connection-type>
    replication-connection-type
  </replication-connection-type>
  <replication-database-type>
    replication-database-type
  </replication-database-type>
  <replication-queue-type>
    replication-queue-type
  </replication-queue-type>
</database-replication-summary-information>
```

Description General state information about the database replication status

Summary of DCD Response Tags

<bundle-information>

Usage

```
<targeting-information>
  <bundle-information>
    <bundle-name>
      bundle-name
    </bundle-name>
    <redundancy-mode>
      redundancy-mode
    </redundancy-mode>
    <n-distribution-interfaces>
      n-distribution-interfaces
    </n-distribution-interfaces>
    <row>....</row>
  </bundle-information>
```


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```
</targeting-information>
```

Description

<dcd-resource-usage>

Usage

```
<dcd-resource-usage>
  <time-information>....</time-information>
</dcd-resource-usage>
```

Description

<rebalance-interface>

Usage

```
<rebalance-interface>
  <rebalance-operation-status>....</rebalance-operation-status>
</rebalance-interface>
```

Description

<rebalance-operation-status>

Usage

```
<rebalance-interface>
  <rebalance-operation-status>
    <interface-name>
      interface-name
    </interface-name>
  </rebalance-operation-status>
</rebalance-interface>
```

Description

<row>

Usage

```
<targeting-information>
  <bundle-information>
    <row>
      <physical-intf-name>
        physical-intf-name
      </physical-intf-name>
      <link-status>
        link-status
      </link-status>
      <n-primary-distributions>
        n-primary-distributions
      </n-primary-distributions>
      <n-backup-distributions>
        n-backup-distributions
```

```
      </n-backup-distributions>
    </row>
  </bundle-information>
</targeting-information>
```

Description

<targeting-information>

Usage

```
<targeting-information>
  <bundle-information>....</bundle-information>
</targeting-information>
```

Description

<time-information>

Usage

```
<dcd-resource-usage>
  <time-information>
    <user-time-sec>
      user-time-sec
    </user-time-sec>
    <user-time-msec>
      user-time-msec
    </user-time-msec>
    <system-time>
      system-time
    </system-time>
    <system-time-msec>
      system-time-msec
    </system-time-msec>
  </time-information>
</dcd-resource-usage>
```

Description

<trace-interface>

Usage

```
<trace-interface>
  <trace-operation-status>....</trace-operation-status>
</trace-interface>
```

Description

<trace-operation-status>

Usage

```
<trace-interface>
  <trace-operation-status>
```


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```
    <status-info>
      status-info
    </status-info>
  </trace-operation-status>
</trace-interface>
```

Description

Summary of Dynamic Flow Capture Response Tags

<content-destination-information>

Usage

```
<dfc-information>
  <content-destination-information>
    <capture-group-id>
      capture-group-id
    </capture-group-id>
    <content-destination-id>
      content-destination-id
    </content-destination-id>
    <criteria>
      criteria
    </criteria>
    <bandwidth>
      bandwidth
    </bandwidth>
    <average-bandwidth>
      average-bandwidth
    </average-bandwidth>
    <matched-packets>
      matched-packets
    </matched-packets>
    <matched-bytes>
      matched-bytes
    </matched-bytes>
    <dropped-packets>
      dropped-packets
    </dropped-packets>
    <congestion-notifications>
      congestion-notifications
    </congestion-notifications>
    <average-bandwidth-ipv6>
      average-bandwidth-ipv6
    </average-bandwidth-ipv6>
  </content-destination-information>
</dfc-information>
```

Description

<control-source-information>

Usage

```
<dfc-information>
```

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```
<control-source-information>
  <capture-group-id>
    capture-group-id
  </capture-group-id>
  <control-source-id>
    control-source-id
  </control-source-id>
  <criteria-added>
    criteria-added
  </criteria-added>
  <criteria-add-failed>
    criteria-add-failed
  </criteria-add-failed>
  <active-criteria>
    active-criteria
  </active-criteria>
  <active-criteria-ipv4>
    active-criteria-ipv4
  </active-criteria-ipv4>
  <active-criteria-ipv6>
    active-criteria-ipv6
  </active-criteria-ipv6>
  <active-criteria-static>
    active-criteria-static
  </active-criteria-static>
  <active-criteria-static-ipv4>
    active-criteria-static-ipv4
  </active-criteria-static-ipv4>
  <active-criteria-static-ipv6>
    active-criteria-static-ipv6
  </active-criteria-static-ipv6>
  <active-criteria-dynamic>
    active-criteria-dynamic
  </active-criteria-dynamic>
  <active-criteria-dynamic-ipv4>
    active-criteria-dynamic-ipv4
  </active-criteria-dynamic-ipv4>
  <active-criteria-dynamic-ipv6>
    active-criteria-dynamic-ipv6
  </active-criteria-dynamic-ipv6>
  <control-protocol-requests>
    control-protocol-requests
  </control-protocol-requests>
  <control-protocol-requests-add>
    control-protocol-requests-add
  </control-protocol-requests-add>
  <control-protocol-requests-delete>
    control-protocol-requests-delete
  </control-protocol-requests-delete>
  <control-protocol-requests-list>
    control-protocol-requests-list
  </control-protocol-requests-list>
  <control-protocol-requests-refresh>
    control-protocol-requests-refresh
  </control-protocol-requests-refresh>
  <control-protocol-requests-noop>
```


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```
  control-protocol-requests-noop
</control-protocol-requests-noop>
<control-protocol-requests-add-failed>
  control-protocol-requests-add-failed
</control-protocol-requests-add-failed>
<control-protocol-requests-delete-failed>
  control-protocol-requests-delete-failed
</control-protocol-requests-delete-failed>
<control-protocol-requests-list-failed>
  control-protocol-requests-list-failed
</control-protocol-requests-list-failed>
<control-protocol-requests-refresh-failed>
  control-protocol-requests-refresh-failed
</control-protocol-requests-refresh-failed>
<control-protocol-requests-noop-failed>
  control-protocol-requests-noop-failed
</control-protocol-requests-noop-failed>
<add-request-rate>
  add-request-rate
</add-request-rate>
<add-request-peak-rate>
  add-request-peak-rate
</add-request-peak-rate>
<bandwidth-all>
  bandwidth-all
</bandwidth-all>
<notifications>
  notifications
</notifications>
<notifications-restart>
  notifications-restart
</notifications-restart>
<notifications-rollover>
  notifications-rollover
</notifications-rollover>
<notifications-noop>
  notifications-noop
</notifications-noop>
<notifications-timeout>
  notifications-timeout
</notifications-timeout>
<notifications-congestion>
  notifications-congestion
</notifications-congestion>
<notifications-congestion-delete>
  notifications-congestion-delete
</notifications-congestion-delete>
<notifications-dups-dropped>
  notifications-dups-dropped
</notifications-dups-dropped>
<criteria-deleted>
  criteria-deleted
</criteria-deleted>
<criteria-deleted-timeout-idle>
  criteria-deleted-timeout-idle
</criteria-deleted-timeout-idle>
```

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```
    <criteria-deleted-timeout-total>
      criteria-deleted-timeout-total
    </criteria-deleted-timeout-total>
    <criteria-deleted-packets>
      criteria-deleted-packets
    </criteria-deleted-packets>
    <criteria-deleted-bytes>
      criteria-deleted-bytes
    </criteria-deleted-bytes>
    <sequence-number>
      sequence-number
    </sequence-number>
  </control-source-information>
</dfc-information>
```

Description

<dfc-information>

Usage

```
<dfc-information>
  <control-source-information>....</control-source-information>
  <content-destination-information>....</content-destination-information>
  <dfc-statistics-information>....</dfc-statistics-information>
</dfc-information>
```

Description

<dfc-statistics-information>

Usage

```
<dfc-information>
  <dfc-statistics-information>
    <capture-group-id>
      capture-group-id
    </capture-group-id>
    <input-packets-control-protocol>
      input-packets-control-protocol
    </input-packets-control-protocol>
    <input-packets-cap-data>
      input-packets-cap-data
    </input-packets-cap-data>
    <input-packets-cap-data-ipv4>
      input-packets-cap-data-ipv4
    </input-packets-cap-data-ipv4>
    <input-packets-cap-data-ipv6>
      input-packets-cap-data-ipv6
    </input-packets-cap-data-ipv6>
    <input-packets-control-iri>
      input-packets-control-iri
    </input-packets-control-iri>
    <input-packets-control-protocol-not-ip>
      input-packets-control-protocol-not-ip
    </input-packets-control-protocol-not-ip>
```


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```
<input-packets-control-protocol-not-udp>
  input-packets-control-protocol-not-udp
</input-packets-control-protocol-not-udp>
<input-packets-control-protocol-invalid-dest-ip>
  input-packets-control-protocol-invalid-dest-ip
</input-packets-control-protocol-invalid-dest-ip>
<input-packets-control-protocol-drop-other>
  input-packets-control-protocol-drop-other
</input-packets-control-protocol-drop-other>
<input-packets-control-protocol-drop-no-memory>
  input-packets-control-protocol-drop-no-memory
</input-packets-control-protocol-drop-no-memory>
<input-packets-control-protocol-drop-unauthorized>
  input-packets-control-protocol-drop-unauthorized
</input-packets-control-protocol-drop-unauthorized>
<input-packets-control-protocol-drop-bad-req>
  input-packets-control-protocol-drop-bad-req
</input-packets-control-protocol-drop-bad-req>
<input-packets-control-protocol-drop-unknown-control-source>
  input-packets-control-protocol-drop-unknown-control-source
</input-packets-control-protocol-drop-unknown-control-source>
<input-packets-control-protocol-drop-not-dtcp>
  input-packets-control-protocol-drop-not-dtcp
</input-packets-control-protocol-drop-not-dtcp>
<input-packets-control-protocol-drop-bad-cmdline>
  input-packets-control-protocol-drop-bad-cmdline
</input-packets-control-protocol-drop-bad-cmdline>
<input-packets-control-protocol-drop-bandwidth-exceeded>
  input-packets-control-protocol-drop-bandwidth-exceeded
</input-packets-control-protocol-drop-bandwidth-exceeded>
<input-packets-control-protocol-drop-rate-bandwidth-exceeded>
  input-packets-control-protocol-drop-rate-bandwidth-exceeded
</input-packets-control-protocol-drop-rate-bandwidth-exceeded>
<input-packets-drop-unknown>
  input-packets-drop-unknown
</input-packets-drop-unknown>
<input-packets-drop-cap-data-not-ipv4-or-ipv6>
  input-packets-drop-cap-data-not-ipv4-or-ipv6
</input-packets-drop-cap-data-not-ipv4-or-ipv6>
<input-packets-drop-cap-data-too-small>
  input-packets-drop-cap-data-too-small
</input-packets-drop-cap-data-too-small>
<input-packets-drop-cap-data-drop>
  input-packets-drop-cap-data-drop
</input-packets-drop-cap-data-drop>
<input-packets-drop-cap-data-nomatch>
  input-packets-drop-cap-data-nomatch
</input-packets-drop-cap-data-nomatch>
<input-packets-drop-bandwidth-exceeded>
  input-packets-drop-bandwidth-exceeded
</input-packets-drop-bandwidth-exceeded>
<input-packets-drop-rate-bandwidth-exceeded>
  input-packets-drop-rate-bandwidth-exceeded
</input-packets-drop-rate-bandwidth-exceeded>
<output-packets-control-protocol>
  output-packets-control-protocol
```

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```
    </output-packets-control-protocol>
    <output-packets-cap-data>
      output-packets-cap-data
    </output-packets-cap-data>
    <output-packets-drop-control-protocol>
      output-packets-drop-control-protocol
    </output-packets-drop-control-protocol>
    <output-packets-drop-cap-data>
      output-packets-drop-cap-data
    </output-packets-drop-cap-data>
    <flowstats-active-cache-entries-count>
      flowstats-active-cache-entries-count
    </flowstats-active-cache-entries-count>
    <flowstats-active-cache-usage-percentage>
      flowstats-active-cache-usage-percentage
    </flowstats-active-cache-usage-percentage>
    <flowstats-cache-entries-allocated>
      flowstats-cache-entries-allocated
    </flowstats-cache-entries-allocated>
    <flowstats-control-source-count>
      flowstats-control-source-count
    </flowstats-control-source-count>
    <flowstats-content-destination-count>
      flowstats-content-destination-count
    </flowstats-content-destination-count>
    <flowstats-criteria-count>
      flowstats-criteria-count
    </flowstats-criteria-count>
    <flowstats-maximum-criteria-matching-flow>
      flowstats-maximum-criteria-matching-flow
    </flowstats-maximum-criteria-matching-flow>
    <flowstats-purged-flows>
      flowstats-purged-flows
    </flowstats-purged-flows>
    <flowstats-maximum-filter-matching-packet>
      flowstats-maximum-filter-matching-packet
    </flowstats-maximum-filter-matching-packet>
  </dfc-statistics-information>
</dfc-information>
```

Description

Summary of DHCP Relay Response Tags

<binding-summary>

Usage

```
<dhcp-relay-binding-information>
  <binding-summary>
    <binding-count>
      binding-count
    </binding-count>
    <init-count>
      init-count
```


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```
    </init-count>
    <bound-count>
      bound-count
    </bound-count>
    <selecting-count>
      selecting-count
    </selecting-count>
    <requesting-count>
      requesting-count
    </requesting-count>
    <renewing-count>
      renewing-count
    </renewing-count>
    <rebinding-count>
      rebinding-count
    </rebinding-count>
    <releasing-count>
      releasing-count
    </releasing-count>
    <restore-count>
      restore-count
    </restore-count>
  </binding-summary>
</dhcp-relay-binding-information>
```

Description

<dhcp-binding>

Usage

```
<dhcp-relay-binding-information>
  <dhcp-binding>
    <allocated-address>
      allocated-address
    </allocated-address>
    <mac-address>
      mac-address
    </mac-address>
    <lease-expires>
      lease-expires
    </lease-expires>
    <lease-start-time>
      lease-start-time
    </lease-start-time>
    <lease-end-time>
      lease-end-time
    </lease-end-time>
    <last-packet-received-time>
      last-packet-received-time
    </last-packet-received-time>
    <lease-state>
      lease-state
    </lease-state>
    <interface-name>
      interface-name
```

```
</interface-name>
<vlan-id>
  vlan-id
</vlan-id>
<svlan-id>
  svlan-id
</svlan-id>
<demux-interface-name>
  demux-interface-name
</demux-interface-name>
<server-ip-address>
  server-ip-address
</server-ip-address>
<server-interface-name>
  server-interface-name
</server-interface-name>
<bootp-relay-address>
  bootp-relay-address
</bootp-relay-address>
<previous-bootp-relay-address>
  previous-bootp-relay-address
</previous-bootp-relay-address>
<session-id>
  session-id
</session-id>
<pool-name>
  pool-name
</pool-name>
<profile-name>
  profile-name
</profile-name>
<dhcp-lease-binding-type>
  dhcp-lease-binding-type
</dhcp-lease-binding-type>
<client-id-len>
  client-id-len
</client-id-len>
<client-id>
  client-id
</client-id>
<alt-client-id-len>
  alt-client-id-len
</alt-client-id-len>
<alt-client-id>
  alt-client-id
</alt-client-id>
<client-option-type>
  client-option-type
</client-option-type>
<client-option-len>
  client-option-len
</client-option-len>
<client-option-data>
  client-option-data
</client-option-data>
<option-82-length-from-client>
```


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```
  option-82-length-from-client
</option-82-length-from-client>
<option-82-data-from-client>
  option-82-data-from-client
</option-82-data-from-client>
<hardware-type>
  hardware-type
</hardware-type>
<logical-system-routing-instance>
  logical-system-routing-instance
</logical-system-routing-instance>
<bridge-domain>
  bridge-domain
</bridge-domain>
<client-info>
  client-info
</client-info>
<retail-logical-system-routing-instance>
  retail-logical-system-routing-instance
</retail-logical-system-routing-instance>
<retail-bridge-domain>
  retail-bridge-domain
</retail-bridge-domain>
<wholesale-logical-system-routing-instance>
  wholesale-logical-system-routing-instance
</wholesale-logical-system-routing-instance>
<wholesale-bridge-domain>
  wholesale-bridge-domain
</wholesale-bridge-domain>
<antispoof-filter-name>
  antispoof-filter-name
</antispoof-filter-name>
<antispoof-filter-flags>
  antispoof-filter-flags
</antispoof-filter-flags>
<antispoof-filter-state>
  antispoof-filter-state
</antispoof-filter-state>
<antispoof-filter-type>
  antispoof-filter-type
</antispoof-filter-type>
<antispoof-filter-term-id>
  antispoof-filter-term-id
</antispoof-filter-term-id>
<antispoof-filter-action>
  antispoof-filter-action
</antispoof-filter-action>
<antispoof-filter-parent>
  antispoof-filter-parent
</antispoof-filter-parent>
<antispoof-filter-owner>
  antispoof-filter-owner
</antispoof-filter-owner>
<authentication-num-servers>
  authentication-num-servers
</authentication-num-servers>
```

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```
    <client-stale-count>
      client-stale-count
    </client-stale-count>
    <auth-client-limit>
      auth-client-limit
    </auth-client-limit>
    <auth-relay-server-group>
      auth-relay-server-group
    </auth-relay-server-group>
  </dhcp-binding>
</dhcp-relay-binding-information>
```

Description Information about the address assigned to a Dynamic Host Configuration Protocol client

<dhcp-relay-binding-information>

Usage

```
<dhcp-relay-binding-information>
  <binding-summary>....</binding-summary>
  <dhcp-binding>....</dhcp-binding>
</dhcp-relay-binding-information>
```

Description Information about the address assigned to each of one or more Dynamic Host Configuration Protocol clients

<dhcp-relay-statistics-information>

Usage

```
<dhcp-relay-statistics-information>
  <dropped-packet-total>
    dropped-packet-total
  </dropped-packet-total>
  <dropped-packet-bad-hardware>
    dropped-packet-bad-hardware
  </dropped-packet-bad-hardware>
  <dropped-packet-bootp-packet>
    dropped-packet-bootp-packet
  </dropped-packet-bootp-packet>
  <dropped-packet-bad-bootp-opcode>
    dropped-packet-bad-bootp-opcode
  </dropped-packet-bad-bootp-opcode>
  <dropped-packet-bad-options>
    dropped-packet-bad-options
  </dropped-packet-bad-options>
  <dropped-packet-invalid-server-address>
    dropped-packet-invalid-server-address
  </dropped-packet-invalid-server-address>
  <dropped-packet-no-addresses>
    dropped-packet-no-addresses
  </dropped-packet-no-addresses>
  <dropped-packet-no-interface-cfg>
    dropped-packet-no-interface-cfg
```


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```
</dropped-packet-no-interface-cfg>
<dropped-packet-no-local-address>
  dropped-packet-no-local-address
</dropped-packet-no-local-address>
<dropped-packet-too-short>
  dropped-packet-too-short
</dropped-packet-too-short>
<dropped-packet-send-error>
  dropped-packet-send-error
</dropped-packet-send-error>
<dropped-packet-option-60>
  dropped-packet-option-60
</dropped-packet-option-60>
<dropped-packet-option-82>
  dropped-packet-option-82
</dropped-packet-option-82>
<dropped-packet-authentication>
  dropped-packet-authentication
</dropped-packet-authentication>
<dropped-packet-dynamic-profile>
  dropped-packet-dynamic-profile
</dropped-packet-dynamic-profile>
<dropped-packet-license>
  dropped-packet-license
</dropped-packet-license>
<dropped-packet-bad-dhcp-opcode>
  dropped-packet-bad-dhcp-opcode
</dropped-packet-bad-dhcp-opcode>
<dropped-packet-no-options>
  dropped-packet-no-options
</dropped-packet-no-options>
<dropped-packet-hop-limit>
  dropped-packet-hop-limit
</dropped-packet-hop-limit>
<dropped-packet-ttl-expired>
  dropped-packet-ttl-expired
</dropped-packet-ttl-expired>
<dropped-packet-bad-udp-checksum>
  dropped-packet-bad-udp-checksum
</dropped-packet-bad-udp-checksum>
<dropped-packet-inactive-vlan>
  dropped-packet-inactive-vlan
</dropped-packet-inactive-vlan>
<dropped-packet-dhcp-service-total>
  dropped-packet-dhcp-service-total
</dropped-packet-dhcp-service-total>
<message-table>....</message-table>
<forwarded-packets-total>
  forwarded-packets-total
</forwarded-packets-total>
<forwarded-bootrequest-packets>
  forwarded-bootrequest-packets
</forwarded-bootrequest-packets>
<forwarded-bootreply-packets>
  forwarded-bootreply-packets
</forwarded-bootreply-packets>
```

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```
</dhcp-relay-statistics-information>
```

Description Statistics from the Dynamic Host Configuration Protocol Relay

<dhcpv6-binding>

Usage

```
<dhcpv6-relay-binding-information>
  <dhcpv6-binding>
    <allocated-address>
      allocated-address
    </allocated-address>
    <allocated-prefix>
      allocated-prefix
    </allocated-prefix>
    <client-duid>
      client-duid
    </client-duid>
    <client-id-len>
      client-id-len
    </client-id-len>
    <client-id>
      client-id
    </client-id>
    <alt-client-id-len>
      alt-client-id-len
    </alt-client-id-len>
    <alt-client-id>
      alt-client-id
    </alt-client-id>
    <lease-expires>
      lease-expires
    </lease-expires>
    <lease-start-time>
      lease-start-time
    </lease-start-time>
    <lease-end-time>
      lease-end-time
    </lease-end-time>
    <last-packet-received-time>
      last-packet-received-time
    </last-packet-received-time>
    <lease-state>
      lease-state
    </lease-state>
    <interface-name>
      interface-name
    </interface-name>
    <vlan-id>
      vlan-id
    </vlan-id>
    <svlan-id>
      svlan-id
    </svlan-id>
```


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```
<demux-interface-name>
  demux-interface-name
</demux-interface-name>
<server-ip-address>
  server-ip-address
</server-ip-address>
<session-id>
  session-id
</session-id>
<server-interface-name>
  server-interface-name
</server-interface-name>
<v6-relay-address>
  v6-relay-address
</v6-relay-address>
<previous-v6-relay-address>
  previous-v6-relay-address
</previous-v6-relay-address>
<pool-name>
  pool-name
</pool-name>
<profile-name>
  profile-name
</profile-name>
<dhcpv6-server-id>
  dhcpv6-server-id
</dhcpv6-server-id>
<dhcp-lease-binding-type>
  dhcp-lease-binding-type
</dhcp-lease-binding-type>
<client-option-type>
  client-option-type
</client-option-type>
<client-option-len>
  client-option-len
</client-option-len>
<client-option-data>
  client-option-data
</client-option-data>
<option-18-length-from-client>
  option-18-length-from-client
</option-18-length-from-client>
<option-18-data-from-client>
  option-18-data-from-client
</option-18-data-from-client>
<hardware-type>
  hardware-type
</hardware-type>
<logical-system-routing-instance>
  logical-system-routing-instance
</logical-system-routing-instance>
<bridge-domain>
  bridge-domain
</bridge-domain>
<authentication-num-servers>
  authentication-num-servers
```

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```
    </authentication-num-servers>
    <client-stale-count>
      client-stale-count
    </client-stale-count>
    <auth-client-limit>
      auth-client-limit
    </auth-client-limit>
    <auth-relay-server-group>
      auth-relay-server-group
    </auth-relay-server-group>
  </dhcpv6-binding>
</dhcpv6-relay-binding-information>
```

Description Information about the address assigned to an IPv6 Dynamic Host Configuration Protocol client

<dhcpv6-binding-summary>

Usage

```
<dhcpv6-relay-binding-information>
  <dhcpv6-binding-summary>
    <dhcpv6-binding-count>
      dhcpv6-binding-count
    </dhcpv6-binding-count>
    <dhcpv6-init-count>
      dhcpv6-init-count
    </dhcpv6-init-count>
    <dhcpv6-bound-count>
      dhcpv6-bound-count
    </dhcpv6-bound-count>
    <dhcpv6-selecting-count>
      dhcpv6-selecting-count
    </dhcpv6-selecting-count>
    <dhcpv6-requesting-count>
      dhcpv6-requesting-count
    </dhcpv6-requesting-count>
    <dhcpv6-renewing-count>
      dhcpv6-renewing-count
    </dhcpv6-renewing-count>
    <dhcpv6-rebinding-count>
      dhcpv6-rebinding-count
    </dhcpv6-rebinding-count>
    <dhcpv6-releasing-count>
      dhcpv6-releasing-count
    </dhcpv6-releasing-count>
    <dhcpv6-restore-count>
      dhcpv6-restore-count
    </dhcpv6-restore-count>
  </dhcpv6-binding-summary>
</dhcpv6-relay-binding-information>
```

Description

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<dhcpv6-message>

Usage

```
<dhcpv6-relay-statistics-information>
  <dhcpv6-message-table>
    <dhcpv6-message>
      <dhcpv6-message-name>
        dhcpv6-message-name
      </dhcpv6-message-name>
      <dhcpv6-message-count>
        dhcpv6-message-count
      </dhcpv6-message-count>
    </dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-relay-statistics-information>
```

Description Information about a DHCPv6 message

<dhcpv6-message-table>

Usage

```
<dhcpv6-relay-statistics-information>
  <dhcpv6-message-table>
    <dhcpv6-message-direction>
      dhcpv6-message-direction
    </dhcpv6-message-direction>
    <dhcpv6-message>....</dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-relay-statistics-information>
```

Description Information about one or more DHCPv6 messages sent or received by the DHCPv6 server

<dhcpv6-relay-binding-information>

Usage

```
<dhcpv6-relay-binding-information>
  <dhcpv6-binding-summary>....</dhcpv6-binding-summary>
  <dhcpv6-binding>....</dhcpv6-binding>
</dhcpv6-relay-binding-information>
```

Description Information about the address assigned to each of one or more DHCPv6 clients

<dhcpv6-relay-statistics-information>

Usage

```
<dhcpv6-relay-statistics-information>
  <v6-dropped-packet-total>
    v6-dropped-packet-total
  </v6-dropped-packet-total>
  <v6-dropped-packet-no-safd>
```

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```
    v6-dropped-packet-no-safd
   </v6-dropped-packet-no-safd>
   <v6-dropped-packet-bad-send>
    v6-dropped-packet-bad-send
   </v6-dropped-packet-bad-send>
   <v6-dropped-packet-short-packet>
    v6-dropped-packet-short-packet
   </v6-dropped-packet-short-packet>
   <v6-dropped-packet-bad-msgtype>
    v6-dropped-packet-bad-msgtype
   </v6-dropped-packet-bad-msgtype>
   <v6-dropped-packet-bad-options>
    v6-dropped-packet-bad-options
   </v6-dropped-packet-bad-options>
   <v6-dropped-packet-bad-srcaddress>
    v6-dropped-packet-bad-srcaddress
   </v6-dropped-packet-bad-srcaddress>
   <v6-dropped-packet-relay-hop-count>
    v6-dropped-packet-relay-hop-count
   </v6-dropped-packet-relay-hop-count>
   <v6-dropped-packet-no-client-id>
    v6-dropped-packet-no-client-id
   </v6-dropped-packet-no-client-id>
   <v6-dropped-packet-strict-reconfigure>
    v6-dropped-packet-strict-reconfigure
   </v6-dropped-packet-strict-reconfigure>
   <dhcpv6-message-table>....</dhcpv6-message-table>
  </dhcpv6-relay-statistics-information>
```

Description Statistics from the IPv6 Dynamic Host Configuration Protocol Server

<message>

Usage

```
  <dhcp-relay-statistics-information>
   <message-table>
    <message>
     <message-name>
      message-name
     </message-name>
     <message-count>
      message-count
     </message-count>
    </message>
   </message-table>
  </dhcp-relay-statistics-information>
```

Description Information about a DHCP or BOOTP message

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<message-table>

Usage

```
<dhcp-relay-statistics-information>
  <message-table>
    <message-direction>
      message-direction
    </message-direction>
    <message>....</message>
  </message-table>
</dhcp-relay-statistics-information>
```

Description Information about one or more DHCP or bootstrap protocol (BOOTP) messages sent or received by the DHCP relay

Summary of DHCP Server Response Tags

<binding-summary>

Usage

```
<dhcp-server-binding-information>
  <binding-summary>
    <binding-count>
      binding-count
    </binding-count>
    <init-count>
      init-count
    </init-count>
    <bound-count>
      bound-count
    </bound-count>
    <selecting-count>
      selecting-count
    </selecting-count>
    <requesting-count>
      requesting-count
    </requesting-count>
    <renewing-count>
      renewing-count
    </renewing-count>
    <releasing-count>
      releasing-count
    </releasing-count>
    <restore-count>
      restore-count
    </restore-count>
  </binding-summary>
</dhcp-server-binding-information>
```

Description

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<dhcp-binding>

Usage

```
<dhcp-server-binding-information>
  <dhcp-binding>
    <allocated-address>
      allocated-address
    </allocated-address>
    <mac-address>
      mac-address
    </mac-address>
    <lease-expires>
      lease-expires
    </lease-expires>
    <lease-start-time>
      lease-start-time
    </lease-start-time>
    <lease-end-time>
      lease-end-time
    </lease-end-time>
    <last-packet-received-time>
      last-packet-received-time
    </last-packet-received-time>
    <lease-state>
      lease-state
    </lease-state>
    <interface-name>
      interface-name
    </interface-name>
    <vlan-id>
      vlan-id
    </vlan-id>
    <svlan-id>
      svlan-id
    </svlan-id>
    <demux-interface-name>
      demux-interface-name
    </demux-interface-name>
    <server-ip-address>
      server-ip-address
    </server-ip-address>
    <bootp-relay-address>
      bootp-relay-address
    </bootp-relay-address>
    <previous-bootp-relay-address>
      previous-bootp-relay-address
    </previous-bootp-relay-address>
    <session-id>
      session-id
    </session-id>
    <pool-name>
      pool-name
    </pool-name>
    <profile-name>
      profile-name
```


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```
</profile-name>
<dhcp-lease-binding-type>
  dhcp-lease-binding-type
</dhcp-lease-binding-type>
<client-id-len>
  client-id-len
</client-id-len>
<client-id>
  client-id
</client-id>
<alt-client-id-len>
  alt-client-id-len
</alt-client-id-len>
<alt-client-id>
  alt-client-id
</alt-client-id>
<client-option-type>
  client-option-type
</client-option-type>
<client-option-len>
  client-option-len
</client-option-len>
<client-option-data>
  client-option-data
</client-option-data>
<option-82-length-from-client>
  option-82-length-from-client
</option-82-length-from-client>
<option-82-data-from-client>
  option-82-data-from-client
</option-82-data-from-client>
<hardware-type>
  hardware-type
</hardware-type>
<logical-system-routing-instance>
  logical-system-routing-instance
</logical-system-routing-instance>
<bridge-domain>
  bridge-domain
</bridge-domain>
<client-info>
  client-info
</client-info>
<retail-logical-system-routing-instance>
  retail-logical-system-routing-instance
</retail-logical-system-routing-instance>
<retail-bridge-domain>
  retail-bridge-domain
</retail-bridge-domain>
<wholesale-logical-system-routing-instance>
  wholesale-logical-system-routing-instance
</wholesale-logical-system-routing-instance>
<wholesale-bridge-domain>
  wholesale-bridge-domain
</wholesale-bridge-domain>
<antispoof-filter-name>
```

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```
      antispoof-filter-name
    </antispoof-filter-name>
    <antispoof-filter-flags>
      antispoof-filter-flags
    </antispoof-filter-flags>
    <antispoof-filter-state>
      antispoof-filter-state
    </antispoof-filter-state>
    <antispoof-filter-type>
      antispoof-filter-type
    </antispoof-filter-type>
    <antispoof-filter-term-id>
      antispoof-filter-term-id
    </antispoof-filter-term-id>
    <antispoof-filter-action>
      antispoof-filter-action
    </antispoof-filter-action>
    <antispoof-filter-parent>
      antispoof-filter-parent
    </antispoof-filter-parent>
    <antispoof-filter-owner>
      antispoof-filter-owner
    </antispoof-filter-owner>
    <authentication-num-servers>
      authentication-num-servers
    </authentication-num-servers>
    <client-stale-count>
      client-stale-count
    </client-stale-count>
    <auth-client-limit>
      auth-client-limit
    </auth-client-limit>
    <auth-relay-server-group>
      auth-relay-server-group
    </auth-relay-server-group>
  </dhcp-binding>
</dhcp-server-binding-information>
```

Description Information about the address assigned to a Dynamic Host Configuration Protocol client

<dhcp-server-binding-information>

Usage

```
<dhcp-server-binding-information>
  <binding-summary>....</binding-summary>
  <dhcp-binding>....</dhcp-binding>
</dhcp-server-binding-information>
```

Description Information about the address assigned to each of one or more Dynamic Host Configuration Protocol clients

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<dhcp-server-statistics-information>

Usage

```
<dhcp-server-statistics-information>
  <dropped-packet-total>
    dropped-packet-total
  </dropped-packet-total>
  <dropped-packet-bad-hardware>
    dropped-packet-bad-hardware
  </dropped-packet-bad-hardware>
  <dropped-packet-bootp-packet>
    dropped-packet-bootp-packet
  </dropped-packet-bootp-packet>
  <dropped-packet-bad-bootp-opcode>
    dropped-packet-bad-bootp-opcode
  </dropped-packet-bad-bootp-opcode>
  <dropped-packet-bad-options>
    dropped-packet-bad-options
  </dropped-packet-bad-options>
  <dropped-packet-invalid-server-address>
    dropped-packet-invalid-server-address
  </dropped-packet-invalid-server-address>
  <dropped-packet-no-addresses>
    dropped-packet-no-addresses
  </dropped-packet-no-addresses>
  <dropped-packet-no-interface-cfg>
    dropped-packet-no-interface-cfg
  </dropped-packet-no-interface-cfg>
  <dropped-packet-no-local-address>
    dropped-packet-no-local-address
  </dropped-packet-no-local-address>
  <dropped-packet-too-short>
    dropped-packet-too-short
  </dropped-packet-too-short>
  <dropped-packet-send-error>
    dropped-packet-send-error
  </dropped-packet-send-error>
  <dropped-packet-option-60>
    dropped-packet-option-60
  </dropped-packet-option-60>
  <dropped-packet-option-82>
    dropped-packet-option-82
  </dropped-packet-option-82>
  <dropped-packet-authentication>
    dropped-packet-authentication
  </dropped-packet-authentication>
  <dropped-packet-dynamic-profile>
    dropped-packet-dynamic-profile
  </dropped-packet-dynamic-profile>
  <dropped-packet-license>
    dropped-packet-license
  </dropped-packet-license>
  <dropped-packet-bad-dhcp-opcode>
    dropped-packet-bad-dhcp-opcode
  </dropped-packet-bad-dhcp-opcode>
```

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```
<dropped-packet-no-options>
  dropped-packet-no-options
</dropped-packet-no-options>
<dropped-packet-hop-limit>
  dropped-packet-hop-limit
</dropped-packet-hop-limit>
<dropped-packet-ttl-expired>
  dropped-packet-ttl-expired
</dropped-packet-ttl-expired>
<dropped-packet-bad-udp-checksum>
  dropped-packet-bad-udp-checksum
</dropped-packet-bad-udp-checksum>
<dropped-packet-inactive-vlan>
  dropped-packet-inactive-vlan
</dropped-packet-inactive-vlan>
<dropped-packet-dhcp-service-total>
  dropped-packet-dhcp-service-total
</dropped-packet-dhcp-service-total>
<message-table>....</message-table>
<forwarded-packets-total>
  forwarded-packets-total
</forwarded-packets-total>
<forwarded-bootrequest-packets>
  forwarded-bootrequest-packets
</forwarded-bootrequest-packets>
<forwarded-bootreply-packets>
  forwarded-bootreply-packets
</forwarded-bootreply-packets>
</dhcp-server-statistics-information>
```

Description Statistics from the Dynamic Host Configuration Protocol Server

<dhcpv6-binding>

Usage

```
<dhcpv6-server-binding-information>
  <dhcpv6-binding>
    <allocated-address>
      allocated-address
    </allocated-address>
    <allocated-prefix>
      allocated-prefix
    </allocated-prefix>
    <client-duid>
      client-duid
    </client-duid>
    <client-id-len>
      client-id-len
    </client-id-len>
    <client-id>
      client-id
    </client-id>
    <alt-client-id-len>
      alt-client-id-len
```


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```
</alt-client-id-len>
<alt-client-id>
  alt-client-id
</alt-client-id>
<lease-expires>
  lease-expires
</lease-expires>
<lease-start-time>
  lease-start-time
</lease-start-time>
<lease-end-time>
  lease-end-time
</lease-end-time>
<last-packet-received-time>
  last-packet-received-time
</last-packet-received-time>
<lease-state>
  lease-state
</lease-state>
<interface-name>
  interface-name
</interface-name>
<vlan-id>
  vlan-id
</vlan-id>
<svlan-id>
  svlan-id
</svlan-id>
<demux-interface-name>
  demux-interface-name
</demux-interface-name>
<server-ip-address>
  server-ip-address
</server-ip-address>
<session-id>
  session-id
</session-id>
<pool-name>
  pool-name
</pool-name>
<delegated-pool-name>
  delegated-pool-name
</delegated-pool-name>
<profile-name>
  profile-name
</profile-name>
<dhcpv6-server-id>
  dhcpv6-server-id
</dhcpv6-server-id>
<dhcp-lease-binding-type>
  dhcp-lease-binding-type
</dhcp-lease-binding-type>
<logical-system-routing-instance>
  logical-system-routing-instance
</logical-system-routing-instance>
<bridge-domain>
```

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```
      bridge-domain
    </bridge-domain>
    <client-info>
      client-info
    </client-info>
    <retail-logical-system-routing-instance>
      retail-logical-system-routing-instance
    </retail-logical-system-routing-instance>
    <retail-bridge-domain>
      retail-bridge-domain
    </retail-bridge-domain>
    <wholesale-logical-system-routing-instance>
      wholesale-logical-system-routing-instance
    </wholesale-logical-system-routing-instance>
    <wholesale-bridge-domain>
      wholesale-bridge-domain
    </wholesale-bridge-domain>
    <authentication-num-servers>
      authentication-num-servers
    </authentication-num-servers>
    <client-stale-count>
      client-stale-count
    </client-stale-count>
    <auth-client-limit>
      auth-client-limit
    </auth-client-limit>
    <auth-relay-server-group>
      auth-relay-server-group
    </auth-relay-server-group>
  </dhcpv6-binding>
</dhcpv6-server-binding-information>
```

Description Information about the address assigned to an IPv6 Dynamic Host Configuration Protocol client

<dhcpv6-binding-summary>

Usage

```
<dhcpv6-server-binding-information>
  <dhcpv6-binding-summary>
    <dhcpv6-binding-count>
      dhcpv6-binding-count
    </dhcpv6-binding-count>
    <dhcpv6-init-count>
      dhcpv6-init-count
    </dhcpv6-init-count>
    <dhcpv6-bound-count>
      dhcpv6-bound-count
    </dhcpv6-bound-count>
    <dhcpv6-selecting-count>
      dhcpv6-selecting-count
    </dhcpv6-selecting-count>
    <dhcpv6-requesting-count>
      dhcpv6-requesting-count
```


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```
    </dhcpv6-requesting-count>
    <dhcpv6-renewing-count>
      dhcpv6-renewing-count
    </dhcpv6-renewing-count>
    <dhcpv6-releasing-count>
      dhcpv6-releasing-count
    </dhcpv6-releasing-count>
    <dhcpv6-restore-count>
      dhcpv6-restore-count
    </dhcpv6-restore-count>
  </dhcpv6-binding-summary>
</dhcpv6-server-binding-information>
```

Description

<dhcpv6-message>

Usage

```
<dhcpv6-server-statistics-information>
  <dhcpv6-message-table>
    <dhcpv6-message>
      <dhcpv6-message-name>
        dhcpv6-message-name
      </dhcpv6-message-name>
      <dhcpv6-message-count>
        dhcpv6-message-count
      </dhcpv6-message-count>
    </dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-server-statistics-information>
```

Description Information about a DHCPv6 message

<dhcpv6-message-table>

Usage

```
<dhcpv6-server-statistics-information>
  <dhcpv6-message-table>
    <dhcpv6-message-direction>
      dhcpv6-message-direction
    </dhcpv6-message-direction>
    <dhcpv6-message>....</dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-server-statistics-information>
```

Description Information about one or more DHCPv6 messages sent or received by the DHCPv6 server

<dhcpv6-server-binding-information>

Usage

```
<dhcpv6-server-binding-information>
```

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```
  <dhcpv6-binding-summary>....</dhcpv6-binding-summary>
  <dhcpv6-binding>....</dhcpv6-binding>
</dhcpv6-server-binding-information>
```

Description Information about the address assigned to each of one or more DHCPv6 clients

<dhcpv6-server-statistics-information>

Usage

```
<dhcpv6-server-statistics-information>
  <v6-dropped-packet-total>
    v6-dropped-packet-total
  </v6-dropped-packet-total>
  <v6-dropped-packet-no-safd>
    v6-dropped-packet-no-safd
  </v6-dropped-packet-no-safd>
  <v6-dropped-packet-bad-send>
    v6-dropped-packet-bad-send
  </v6-dropped-packet-bad-send>
  <v6-dropped-packet-short-packet>
    v6-dropped-packet-short-packet
  </v6-dropped-packet-short-packet>
  <v6-dropped-packet-bad-msgtype>
    v6-dropped-packet-bad-msgtype
  </v6-dropped-packet-bad-msgtype>
  <v6-dropped-packet-bad-options>
    v6-dropped-packet-bad-options
  </v6-dropped-packet-bad-options>
  <v6-dropped-packet-bad-srcaddress>
    v6-dropped-packet-bad-srcaddress
  </v6-dropped-packet-bad-srcaddress>
  <v6-dropped-packet-relay-hop-count>
    v6-dropped-packet-relay-hop-count
  </v6-dropped-packet-relay-hop-count>
  <v6-dropped-packet-no-client-id>
    v6-dropped-packet-no-client-id
  </v6-dropped-packet-no-client-id>
  <v6-dropped-packet-strict-reconfigure>
    v6-dropped-packet-strict-reconfigure
  </v6-dropped-packet-strict-reconfigure>
  <v6-dropped-packet-authentication>
    v6-dropped-packet-authentication
  </v6-dropped-packet-authentication>
  <v6-dropped-packet-dynamic-profile>
    v6-dropped-packet-dynamic-profile
  </v6-dropped-packet-dynamic-profile>
  <v6-dropped-packet-license>
    v6-dropped-packet-license
  </v6-dropped-packet-license>
  <v6-dropped-packet-inactive-vlan>
    v6-dropped-packet-inactive-vlan
  </v6-dropped-packet-inactive-vlan>
  <v6-dropped-packet-dhcpv6-service-total>
    v6-dropped-packet-dhcpv6-service-total
```


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```
  </v6-dropped-packet-dhcpv6-service-total>
  <dhcpv6-message-table>....</dhcpv6-message-table>
</dhcpv6-server-statistics-information>
```

Description Statistics from the IPv6 Dynamic Host Configuration Protocol Server

<message>

Usage

```
<dhcp-server-statistics-information>
  <message-table>
    <message>
      <message-name>
        message-name
      </message-name>
      <message-count>
        message-count
      </message-count>
    </message>
  </message-table>
</dhcp-server-statistics-information>
```

Description Information about a DHCP or BOOTP message

<message-table>

Usage

```
<dhcp-server-statistics-information>
  <message-table>
    <message-direction>
      message-direction
    </message-direction>
    <message>....</message>
  </message-table>
</dhcp-server-statistics-information>
```

Description Information about one or more DHCP or bootstrap protocol (BOOTP) messages sent or received by the DHCP server

Summary of DHCP Service Response Tags

<dhcp-service-statistics-information>

Usage

```
<dhcp-service-statistics-information>
  <dropped-packet-dhcp-service-total>
    dropped-packet-dhcp-service-total
  </dropped-packet-dhcp-service-total>
  <dropped-packet-read-error>
    dropped-packet-read-error
```

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```
</dropped-packet-read-error>
<dropped-packet-bad-ip-header>
  dropped-packet-bad-ip-header
</dropped-packet-bad-ip-header>
<dropped-packet-short-packet>
  dropped-packet-short-packet
</dropped-packet-short-packet>
<dropped-packet-no-interface>
  dropped-packet-no-interface
</dropped-packet-no-interface>
<dropped-packet-no-routing-instance>
  dropped-packet-no-routing-instance
</dropped-packet-no-routing-instance>
<dropped-packet-no-mem>
  dropped-packet-no-mem
</dropped-packet-no-mem>
<dropped-packet-recovery-in-progress>
  dropped-packet-recovery-in-progress
</dropped-packet-recovery-in-progress>
</dhcp-service-statistics-information>
```

Description Dynamic Host Configuration Protocol Service Statistics

<dhcp-service-statistics-interface-information>

Usage

```
<dhcp-service-statistics-interface-information>
  <dropped-packet-total>
    dropped-packet-total
  </dropped-packet-total>
  <dropped-packet-bad-hardware>
    dropped-packet-bad-hardware
  </dropped-packet-bad-hardware>
  <dropped-packet-bootp-packet>
    dropped-packet-bootp-packet
  </dropped-packet-bootp-packet>
  <dropped-packet-bad-bootp-opcode>
    dropped-packet-bad-bootp-opcode
  </dropped-packet-bad-bootp-opcode>
  <dropped-packet-bad-options>
    dropped-packet-bad-options
  </dropped-packet-bad-options>
  <dropped-packet-invalid-server-address>
    dropped-packet-invalid-server-address
  </dropped-packet-invalid-server-address>
  <dropped-packet-no-addresses>
    dropped-packet-no-addresses
  </dropped-packet-no-addresses>
  <dropped-packet-no-interface-cfg>
    dropped-packet-no-interface-cfg
  </dropped-packet-no-interface-cfg>
  <dropped-packet-no-local-address>
    dropped-packet-no-local-address
  </dropped-packet-no-local-address>
```


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```
<dropped-packet-too-short>
  dropped-packet-too-short
</dropped-packet-too-short>
<dropped-packet-send-error>
  dropped-packet-send-error
</dropped-packet-send-error>
<dropped-packet-option-60>
  dropped-packet-option-60
</dropped-packet-option-60>
<dropped-packet-option-82>
  dropped-packet-option-82
</dropped-packet-option-82>
<dropped-packet-authentication>
  dropped-packet-authentication
</dropped-packet-authentication>
<dropped-packet-dynamic-profile>
  dropped-packet-dynamic-profile
</dropped-packet-dynamic-profile>
<dropped-packet-license>
  dropped-packet-license
</dropped-packet-license>
<dropped-packet-bad-dhcp-opcode>
  dropped-packet-bad-dhcp-opcode
</dropped-packet-bad-dhcp-opcode>
<dropped-packet-no-options>
  dropped-packet-no-options
</dropped-packet-no-options>
<dropped-packet-hop-limit>
  dropped-packet-hop-limit
</dropped-packet-hop-limit>
<dropped-packet-ttl-expired>
  dropped-packet-ttl-expired
</dropped-packet-ttl-expired>
<dropped-packet-bad-udp-checksum>
  dropped-packet-bad-udp-checksum
</dropped-packet-bad-udp-checksum>
<dropped-packet-inactive-vlan>
  dropped-packet-inactive-vlan
</dropped-packet-inactive-vlan>
<message-table>....</message-table>
<forwarded-packets-total>
  forwarded-packets-total
</forwarded-packets-total>
<forwarded-bootrequest-packets>
  forwarded-bootrequest-packets
</forwarded-bootrequest-packets>
<forwarded-bootreply-packets>
  forwarded-bootreply-packets
</forwarded-bootreply-packets>
</dhcp-service-statistics-interface-information>
```

Description Dynamic Host Configuration Protocol Interface Statistics

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<dhcpv6-message>

Usage

```
<dhcpv6-service-statistics-interface-information>
  <dhcpv6-message-table>
    <dhcpv6-message>
      <dhcpv6-message-name>
        dhcpv6-message-name
      </dhcpv6-message-name>
      <dhcpv6-message-count>
        dhcpv6-message-count
      </dhcpv6-message-count>
    </dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-service-statistics-interface-information>
```

Description

<dhcpv6-message-table>

Usage

```
<dhcpv6-service-statistics-interface-information>
  <dhcpv6-message-table>
    <dhcpv6-message-direction>
      dhcpv6-message-direction
    </dhcpv6-message-direction>
    <dhcpv6-message>....</dhcpv6-message>
  </dhcpv6-message-table>
</dhcpv6-service-statistics-interface-information>
```

Description Packet coutns for DHCPv6 messages sent or received by the interface

<dhcpv6-service-statistics-information>

Usage

```
<dhcpv6-service-statistics-information>
  <v6-dropped-packet-dhcpv6-service-total>
    v6-dropped-packet-dhcpv6-service-total
  </v6-dropped-packet-dhcpv6-service-total>
  <v6-dropped-packet-read-error>
    v6-dropped-packet-read-error
  </v6-dropped-packet-read-error>
  <v6-dropped-packet-bad-ip-header>
    v6-dropped-packet-bad-ip-header
  </v6-dropped-packet-bad-ip-header>
  <v6-dropped-packet-short-packet>
    v6-dropped-packet-short-packet
  </v6-dropped-packet-short-packet>
  <v6-dropped-packet-no-interface>
    v6-dropped-packet-no-interface
  </v6-dropped-packet-no-interface>
  <v6-dropped-packet-no-safd>
    v6-dropped-packet-no-safd
```


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```
  </v6-dropped-packet-no-safd>
  <v6-dropped-packet-no-routing-instance>
    v6-dropped-packet-no-routing-instance
  </v6-dropped-packet-no-routing-instance>
  <v6-dropped-packet-no-mem>
    v6-dropped-packet-no-mem
  </v6-dropped-packet-no-mem>
  <v6-dropped-packet-recovery-in-progress>
    v6-dropped-packet-recovery-in-progress
  </v6-dropped-packet-recovery-in-progress>
</dhcpv6-service-statistics-information>
```

Description Dynamic Host Configuration Protocol v6 Service Statistics

<dhcpv6-service-statistics-interface-information>

Usage

```
<dhcpv6-service-statistics-interface-information>
  <v6-dropped-packet-total>
    v6-dropped-packet-total
  </v6-dropped-packet-total>
  <v6-dropped-packet-no-safd>
    v6-dropped-packet-no-safd
  </v6-dropped-packet-no-safd>
  <v6-dropped-packet-bad-send>
    v6-dropped-packet-bad-send
  </v6-dropped-packet-bad-send>
  <v6-dropped-packet-short-packet>
    v6-dropped-packet-short-packet
  </v6-dropped-packet-short-packet>
  <v6-dropped-packet-bad-msgtype>
    v6-dropped-packet-bad-msgtype
  </v6-dropped-packet-bad-msgtype>
  <v6-dropped-packet-bad-options>
    v6-dropped-packet-bad-options
  </v6-dropped-packet-bad-options>
  <v6-dropped-packet-bad-srcaddress>
    v6-dropped-packet-bad-srcaddress
  </v6-dropped-packet-bad-srcaddress>
  <v6-dropped-packet-relay-hop-count>
    v6-dropped-packet-relay-hop-count
  </v6-dropped-packet-relay-hop-count>
  <v6-dropped-packet-no-client-id>
    v6-dropped-packet-no-client-id
  </v6-dropped-packet-no-client-id>
  <v6-dropped-packet-strict-reconfigure>
    v6-dropped-packet-strict-reconfigure
  </v6-dropped-packet-strict-reconfigure>
  <v6-dropped-packet-authentication>
    v6-dropped-packet-authentication
  </v6-dropped-packet-authentication>
  <v6-dropped-packet-dynamic-profile>
    v6-dropped-packet-dynamic-profile
  </v6-dropped-packet-dynamic-profile>
```

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```
<v6-dropped-packet-license>
  v6-dropped-packet-license
</v6-dropped-packet-license>
<v6-dropped-packet-inactive-vlan>
  v6-dropped-packet-inactive-vlan
</v6-dropped-packet-inactive-vlan>
<dhcpv6-message-table>....</dhcpv6-message-table>
</dhcpv6-service-statistics-interface-information>
```

Description Dynamic Host Configuration Protocol v6 Interface Statistics

<message>

Usage

```
<dhcp-service-statistics-interface-information>
  <message-table>
    <message>
      <message-name>
        message-name
      </message-name>
      <message-count>
        message-count
      </message-count>
    </message>
  </message-table>
</dhcp-service-statistics-interface-information>
```

Description

<message-table>

Usage

```
<dhcp-service-statistics-interface-information>
  <message-table>
    <message-direction>
      message-direction
    </message-direction>
    <message>....</message>
  </message-table>
</dhcp-service-statistics-interface-information>
```

Description Packet counts for DHCP messages sent or received by the interface

Summary of Dialer Response Tags

<dial-string-list>

Usage

```
<dial-string-list>
  <dial-string>
    dial-string
```


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```
  </dial-string>
</dial-string-list>
```

Description

<dial-string-list>

Usage

```
<dialer-interface>
  <dial-string-list>
    <dial-string>
      dial-string
    </dial-string>
  </dial-string-list>
</dialer-interface>
```

Description

<dial-string-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <dial-string-list>
      <dial-string>
        dial-string
      </dial-string>
    </dial-string-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

<dialer-defaults-information>

Usage

```
<dialer-defaults-information>
  <default-idle-timeout>
    default-idle-timeout
  </default-idle-timeout>
  <default-activation-delay>
    default-activation-delay
  </default-activation-delay>
  <default-deactivation-delay>
    default-deactivation-delay
  </default-deactivation-delay>
  <default-initial-route-check>
    default-initial-route-check
  </default-initial-route-check>
  <default-pool-priority>
    default-pool-priority
  </default-pool-priority>
  <default-load-threshold>
```

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```
    default-load-threshold
  </default-load-threshold>
  <default-load-interval>
    default-load-interval
  </default-load-interval>
  <default-redial-delay>
    default-redial-delay
  </default-redial-delay>
  <default-callback-wait-period>
    default-callback-wait-period
  </default-callback-wait-period>
</dialer-defaults-information>
```

Description

<dialer-info>

Usage

```
<dialer-info>
  <dialer-interface-name>
    dialer-interface-name
  </dialer-interface-name>
  <dialer-interface-state>
    dialer-interface-state
  </dialer-interface-state>
  <dialer-interface-flags>....</dialer-interface-flags>
</dialer-info>
```

Description

<dialer-info>

Usage

```
<pool-member-list>
  <dialer-info>
    <dialer-interface-name>
      dialer-interface-name
    </dialer-interface-name>
    <dialer-interface-state>
      dialer-interface-state
    </dialer-interface-state>
    <dialer-interface-flags>....</dialer-interface-flags>
  </dialer-info>
</pool-member-list>
```

Description

<dialer-info>

Usage

```
<dialer-pool>
  <pool-member-list>
    <dialer-info>
```


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```
      <dialer-interface-name>
       dialer-interface-name
      </dialer-interface-name>
      <dialer-interface-state>
       dialer-interface-state
      </dialer-interface-state>
      <dialer-interface-flags>....</dialer-interface-flags>
     </dialer-info>
    </pool-member-list>
  </dialer-pool>
```

Description

<dialer-info>

Usage

```
<dialer-pool-information>
  <dialer-pool>
    <pool-member-list>
      <dialer-info>
        <dialer-interface-name>
          dialer-interface-name
        </dialer-interface-name>
        <dialer-interface-state>
          dialer-interface-state
        </dialer-interface-state>
        <dialer-interface-flags>....</dialer-interface-flags>
      </dialer-info>
    </pool-member-list>
  </dialer-pool>
</dialer-pool-information>
```

Description

<dialer-interface>

Usage

```
<dialer-interface>
  <dialer-interface-name>
    dialer-interface-name
  </dialer-interface-name>
  <dialer-interface-state>
    dialer-interface-state
  </dialer-interface-state>
  <dialer-interface-flags>....</dialer-interface-flags>
  <pool-id>
    pool-id
  </pool-id>
  <primary-interface>
    primary-interface
  </primary-interface>
  <dial-string-list>....</dial-string-list>
  <sub-interface-list>....</sub-interface-list>
  <watch-list>....</watch-list>
```

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```
<activation-delay>
  activation-delay
</activation-delay>
<deactivation-delay>
  deactivation-delay
</deactivation-delay>
<activation-delay-elapsed>
  activation-delay-elapsed
</activation-delay-elapsed>
<deactivation-delay-elapsed>
  deactivation-delay-elapsed
</deactivation-delay-elapsed>
<call-idle-timeout>
  call-idle-timeout
</call-idle-timeout>
<initial-route-check>
  initial-route-check
</initial-route-check>
<redial-delay>
  redial-delay
</redial-delay>
<callback-wait-period>
  callback-wait-period
</callback-wait-period>
<callback-wait-period-elapsed>
  callback-wait-period-elapsed
</callback-wait-period-elapsed>
<load-threshold>
  load-threshold
</load-threshold>
<load-interval>
  load-interval
</load-interval>
</dialer-interface>
```

Description

<dialer-interface>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <dialer-interface-name>
      dialer-interface-name
    </dialer-interface-name>
    <dialer-interface-state>
      dialer-interface-state
    </dialer-interface-state>
    <dialer-interface-flags>....</dialer-interface-flags>
    <pool-id>
      pool-id
    </pool-id>
    <primary-interface>
      primary-interface
    </primary-interface>
```


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```
    <dial-string-list>....</dial-string-list>
    <sub-interface-list>....</sub-interface-list>
    <watch-list>....</watch-list>
    <activation-delay>
      activation-delay
    </activation-delay>
    <deactivation-delay>
      deactivation-delay
    </deactivation-delay>
    <activation-delay-elapsed>
      activation-delay-elapsed
    </activation-delay-elapsed>
    <deactivation-delay-elapsed>
      deactivation-delay-elapsed
    </deactivation-delay-elapsed>
    <call-idle-timeout>
      call-idle-timeout
    </call-idle-timeout>
    <initial-route-check>
      initial-route-check
    </initial-route-check>
    <redial-delay>
      redial-delay
    </redial-delay>
    <callback-wait-period>
      callback-wait-period
    </callback-wait-period>
    <callback-wait-period-elapsed>
      callback-wait-period-elapsed
    </callback-wait-period-elapsed>
    <load-threshold>
      load-threshold
    </load-threshold>
    <load-interval>
      load-interval
    </load-interval>
  </dialer-interface>
</dialer-interface-information>
```

Description

<dialer-interface-flags>

Usage

```
<dialer-interface>
  <dialer-interface-flags>
    <backup>
      backup
    </backup>
    <multilink>
      multilink
    </multilink>
    <watchlist>
      watchlist
    </watchlist>
```

```
      <interesting-detected>
       interesting-detected
      </interesting-detected>
     </dialer-interface-flags>
    </dialer-interface>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<dialer-interface-information>
 <dialer-interface>
  <dialer-interface-flags>
   <backup>
    backup
   </backup>
   <multilink>
    multilink
   </multilink>
   <watchlist>
    watchlist
   </watchlist>
   <interesting-detected>
    interesting-detected
   </interesting-detected>
  </dialer-interface-flags>
 </dialer-interface>
</dialer-interface-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<dialer-info>
 <dialer-interface-flags>
  <backup>
   backup
  </backup>
  <multilink>
   multilink
  </multilink>
  <watchlist>
   watchlist
  </watchlist>
  <interesting-detected>
   interesting-detected
  </interesting-detected>
 </dialer-interface-flags>
</dialer-info>
```


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Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<pool-member-list>
  <dialer-info>
    <dialer-interface-flags>
      <backup>
        backup
      </backup>
      <multilink>
        multilink
      </multilink>
      <watchlist>
        watchlist
      </watchlist>
      <interesting-detected>
        interesting-detected
      </interesting-detected>
    </dialer-interface-flags>
  </dialer-info>
</pool-member-list>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<dialer-pool>
  <pool-member-list>
    <dialer-info>
      <dialer-interface-flags>
        <backup>
          backup
        </backup>
        <multilink>
          multilink
        </multilink>
        <watchlist>
          watchlist
        </watchlist>
        <interesting-detected>
          interesting-detected
        </interesting-detected>
      </dialer-interface-flags>
    </dialer-info>
  </pool-member-list>
</dialer-pool>
```

Description Flags indicating interface configuration

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<dialer-interface-flags>

Usage

```
<dialer-pool-information>
  <dialer-pool>
    <pool-member-list>
      <dialer-info>
        <dialer-interface-flags>
          <backup>
            backup
          </backup>
          <multilink>
            multilink
          </multilink>
          <watchlist>
            watchlist
          </watchlist>
          <interesting-detected>
            interesting-detected
          </interesting-detected>
        </dialer-interface-flags>
      </dialer-info>
    </pool-member-list>
  </dialer-pool>
</dialer-pool-information>
```

Description Flags indicating interface configuration

<dialer-interface-information>

Usage

```
<dialer-interface-information>
  <dialer-interface>....</dialer-interface>
</dialer-interface-information>
```

Description

<dialer-pool>

Usage

```
<dialer-pool>
  <pool-id>
    pool-id
  </pool-id>
  <pool-member-list>....</pool-member-list>
</dialer-pool>
```

Description

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<dialer-pool>

Usage

```
<dialer-pool-information>
  <dialer-pool>
    <pool-id>
      pool-id
    </pool-id>
    <pool-member-list>....</pool-member-list>
  </dialer-pool>
</dialer-pool-information>
```

Description

<dialer-pool-information>

Usage

```
<dialer-pool-information>
  <dialer-pool>....</dialer-pool>
</dialer-pool-information>
```

Description

<pool-member-list>

Usage

```
<pool-member-list>
  <dialer-info>....</dialer-info>
  <sub-info>....</sub-info>
</pool-member-list>
```

Description

<pool-member-list>

Usage

```
<dialer-pool>
  <pool-member-list>
    <dialer-info>....</dialer-info>
    <sub-info>....</sub-info>
  </pool-member-list>
</dialer-pool>
```

Description

<pool-member-list>

Usage

```
<dialer-pool-information>
  <dialer-pool>
    <pool-member-list>
      <dialer-info>....</dialer-info>
```

```
      <sub-info>....</sub-info>
    </pool-member-list>
  </dialer-pool>
</dialer-pool-information>
```

Description

<sub-info>

Usage

```
<sub-info>
  <sub-interface-name>
    sub-interface-name
  </sub-interface-name>
  <sub-interface-flags>
    sub-interface-flags
  </sub-interface-flags>
  <pool-priority>
    pool-priority
  </pool-priority>
</sub-info>
```

Description

<sub-info>

Usage

```
<pool-member-list>
  <sub-info>
    <sub-interface-name>
      sub-interface-name
    </sub-interface-name>
    <sub-interface-flags>
      sub-interface-flags
    </sub-interface-flags>
    <pool-priority>
      pool-priority
    </pool-priority>
  </sub-info>
</pool-member-list>
```

Description

<sub-info>

Usage

```
<dialer-pool>
  <pool-member-list>
    <sub-info>
      <sub-interface-name>
        sub-interface-name
      </sub-interface-name>
      <sub-interface-flags>
```


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```
        sub-interface-flags
       </sub-interface-flags>
       <pool-priority>
        pool-priority
       </pool-priority>
      </sub-info>
     </pool-member-list>
    </dialer-pool>
```

Description

<sub-info>

Usage

```
<dialer-pool-information>
 <dialer-pool>
  <pool-member-list>
   <sub-info>
    <sub-interface-name>
     sub-interface-name
    </sub-interface-name>
    <sub-interface-flags>
     sub-interface-flags
    </sub-interface-flags>
    <pool-priority>
     pool-priority
    </pool-priority>
   </sub-info>
  </pool-member-list>
 </dialer-pool>
</dialer-pool-information>
```

Description

<sub-interface-list>

Usage

```
<sub-interface-list>
 <sub-interface-name>
  sub-interface-name
 </sub-interface-name>
</sub-interface-list>
```

Description

<sub-interface-list>

Usage

```
<dialer-interface>
 <sub-interface-list>
  <sub-interface-name>
   sub-interface-name
  </sub-interface-name>
```

```
  </sub-interface-list>
</dialer-interface>
```

Description

<sub-interface-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <sub-interface-list>
      <sub-interface-name>
        sub-interface-name
      </sub-interface-name>
    </sub-interface-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

<watch-list>

Usage

```
<watch-list>
  <watch-route>
    watch-route
  </watch-route>
</watch-list>
```

Description

<watch-list>

Usage

```
<dialer-interface>
  <watch-list>
    <watch-route>
      watch-route
    </watch-route>
  </watch-list>
</dialer-interface>
```

Description

<watch-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <watch-list>
      <watch-route>
        watch-route
```


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```
      </watch-route>
    </watch-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

Summary of Dynamic Configuration Response Tags

<client-session-info>

Usage

```
<dynamic-configuration-information>
  <client-session-info>
    <accounting-session-id>
      accounting-session-id
    </accounting-session-id>
    <client-session-type>
      client-session-type
    </client-session-type>
    <jsrc-session-id>
      jsrc-session-id
    </jsrc-session-id>
    <address-pool>
      address-pool
    </address-pool>
    <interface>
      interface
    </interface>
    <ip-address>
      ip-address
    </ip-address>
    <ip-address-mask>
      ip-address-mask
    </ip-address-mask>
    <ipv6-address>
      ipv6-address
    </ipv6-address>
    <ipv6-prefix>
      ipv6-prefix
    </ipv6-prefix>
    <ipv6-network-prefix-len>
      ipv6-network-prefix-len
    </ipv6-network-prefix-len>
    <ipv6-interface-address>
      ipv6-interface-address
    </ipv6-interface-address>
    <logical-system>
      logical-system
    </logical-system>
    <profile>
      profile
    </profile>
    <profile-version>
```

```
  profile-version
</profile-version>
<mac-address>
  mac-address
</mac-address>
<nas-port-type>
  nas-port-type
</nas-port-type>
<routing-instance>
  routing-instance
</routing-instance>
<access-profile-name>
  access-profile-name
</access-profile-name>
<session-id>
  session-id
</session-id>
<state>
  state
</state>
<user-name>
  user-name
</user-name>
<login-time>
  login-time
</login-time>
<l2tp-local-ip-address>
  l2tp-local-ip-address
</l2tp-local-ip-address>
<l2tp-local-session-id>
  l2tp-local-session-id
</l2tp-local-session-id>
<l2tp-local-tunnel-id>
  l2tp-local-tunnel-id
</l2tp-local-tunnel-id>
<l2tp-remote-ip-address>
  l2tp-remote-ip-address
</l2tp-remote-ip-address>
<l2tp-remote-session-id>
  l2tp-remote-session-id
</l2tp-remote-session-id>
<l2tp-remote-tunnel-id>
  l2tp-remote-tunnel-id
</l2tp-remote-tunnel-id>
<l2tp-tunnel-group-id>
  l2tp-tunnel-group-id
</l2tp-tunnel-group-id>
<l2tp-ppp-profile-name>
  l2tp-ppp-profile-name
</l2tp-ppp-profile-name>
<dhcp-option>
  dhcp-option
</dhcp-option>
<dynamic-configuration-info>....</dynamic-configuration-info>
<session-ids>....</session-ids>
<dhcp-gi-address>
```


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```
  dhcp-gi-address
</dhcp-gi-address>
<ifl-type>
  ifl-type
</ifl-type>
<service-bundle>
  service-bundle
</service-bundle>
<nas-ipv6-address>
  nas-ipv6-address
</nas-ipv6-address>
<login-ipv6-host>
  login-ipv6-host
</login-ipv6-host>
<delegated-ipv6-prefix>
  delegated-ipv6-prefix
</delegated-ipv6-prefix>
<framed-interface-id>
  framed-interface-id
</framed-interface-id>
<framed-ipv4-pool>
  framed-ipv4-pool
</framed-ipv4-pool>
<framed-ipv6-pool>
  framed-ipv6-pool
</framed-ipv6-pool>
<delegated-ipv6-pool>
  delegated-ipv6-pool
</delegated-ipv6-pool>
<aggregate-type>
  aggregate-type
</aggregate-type>
<logical-interface>
  logical-interface
</logical-interface>
<accounting-type>
  accounting-type
</accounting-type>
<accounting-interval>
  accounting-interval
</accounting-interval>
<config-bits>
  config-bits
</config-bits>
<vlan-tag>
  vlan-tag
</vlan-tag>
<svlan-tag>
  svlan-tag
</svlan-tag>
<service-type>
  service-type
</service-type>
<framed-protocol>
  framed-protocol
</framed-protocol>
```

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```
<calling-station-id>
  calling-station-id
</calling-station-id>
<primary-ipv6-dns-address>
  primary-ipv6-dns-address
</primary-ipv6-dns-address>
<secondary-ipv6-dns-address>
  secondary-ipv6-dns-address
</secondary-ipv6-dns-address>
<dsl-forum-attributes>
  dsl-forum-attributes
</dsl-forum-attributes>
<advisory-options-upstream-rate>
  advisory-options-upstream-rate
</advisory-options-upstream-rate>
<advisory-options-downstream-rate>
  advisory-options-downstream-rate
</advisory-options-downstream-rate>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
</client-session-info>
</dynamic-configuration-information>
```

Description Client session information

<connection>

Usage

```
<shm-ipc-statistics>
  <user>
    <connection>
      <peer-name>
        peer-name
      </peer-name>
      <connection-status>
        connection-status
      </connection-status>
      <socket>....</socket>
      <queue>....</queue>
    </connection>
  </user>
</shm-ipc-statistics>
```

Description

<consumer-message-counters>

Usage

```
<shm-ipc-statistics>
```


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```
<user>
  <consumer-message-counters>
    <msg-received>
      msg-received
    </msg-received>
    <ack-sent>
      ack-sent
    </ack-sent>
    <nak-sent>
      nak-sent
    </nak-sent>
  </consumer-message-counters>
 </user>
</shm-ipc-statistics>
```

Description

<dynamic-configuration-attribute>

Usage

```
<dynamic-configuration-info>
  <dynamic-configuration-attribute>
    <attribute-name>
      attribute-name
    </attribute-name>
    <attribute-value>
      attribute-value
    </attribute-value>
  </dynamic-configuration-attribute>
</dynamic-configuration-info>
```

Description Dynamic configuration attribute

<dynamic-configuration-attribute>

Usage

```
<dynamic-configuration-information>
  <client-session-info>
    <dynamic-configuration-info>
      <dynamic-configuration-attribute>
        <attribute-name>
          attribute-name
        </attribute-name>
        <attribute-value>
          attribute-value
        </attribute-value>
      </dynamic-configuration-attribute>
    </dynamic-configuration-info>
  </client-session-info>
</dynamic-configuration-information>
```

Description Dynamic configuration attribute

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<dynamic-configuration-attribute>

Usage

```
<dynamic-configuration-information>
  <service-session-info>
    <dynamic-configuration-info>
      <dynamic-configuration-attribute>
        <attribute-name>
          attribute-name
        </attribute-name>
        <attribute-value>
          attribute-value
        </attribute-value>
      </dynamic-configuration-attribute>
    </dynamic-configuration-info>
  </service-session-info>
</dynamic-configuration-information>
```

Description Dynamic configuration attribute

<dynamic-configuration-info>

Usage

```
<dynamic-configuration-info>
  <dynamic-configuration-attribute>....</dynamic-configuration-attribute>
</dynamic-configuration-info>
```

Description Dynamic configuration

<dynamic-configuration-info>

Usage

```
<dynamic-configuration-information>
  <client-session-info>
    <dynamic-configuration-info>
      <dynamic-configuration-attribute>....</dynamic-configuration-attribute>
    </dynamic-configuration-info>
  </client-session-info>
</dynamic-configuration-information>
```

Description Dynamic configuration

<dynamic-configuration-info>

Usage

```
<dynamic-configuration-information>
  <service-session-info>
    <dynamic-configuration-info>
      <dynamic-configuration-attribute>....</dynamic-configuration-attribute>
    </dynamic-configuration-info>
```


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```
  </service-session-info>
</dynamic-configuration-information>
```

Description Dynamic configuration

<dynamic-configuration-information>

Usage

```
<dynamic-configuration-information>
  <session-ids>....</session-ids>
  <client-session-info>....</client-session-info>
  <service-session-info>....</service-session-info>
  <results>....</results>
  <profile-results>....</profile-results>
</dynamic-configuration-information>
```

Description Dynamic configuration command information

<performance-counters>

Usage

```
<shm-ipc-statistics>
  <user>
    <performance-counters>
      <socket-received>
        socket-received
      </socket-received>
      <socket-sent>
        socket-sent
      </socket-sent>
      <socket-errors>
        socket-errors
      </socket-errors>
      <ipc-received>
        ipc-received
      </ipc-received>
      <ipc-sent>
        ipc-sent
      </ipc-sent>
      <ipc-errors>
        ipc-errors
      </ipc-errors>
    </performance-counters>
  </user>
</shm-ipc-statistics>
```

Description

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<producer-message-counters>

Usage

```
<shm-ipc-statistics>
  <user>
    <producer-message-counters>
      <msg-sent>
        msg-sent
      </msg-sent>
      <ack-received>
        ack-received
      </ack-received>
      <nak-received>
        nak-received
      </nak-received>
      <backpressure>
        backpressure
      </backpressure>
    </producer-message-counters>
  </user>
</shm-ipc-statistics>
```

Description

<profile-results>

Usage

```
<profile-results>
  <profile-name>
    profile-name
  </profile-name>
  <profile-action>
    profile-action
  </profile-action>
  <session-id>
    session-id
  </session-id>
  <session-type>
    session-type
  </session-type>
  <request-result>
    request-result
  </request-result>
  <failure-reason>
    failure-reason
  </failure-reason>
  <config-bits>
    config-bits
  </config-bits>
</profile-results>
```

Description

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<profile-results>

Usage

```
<dynamic-configuration-information>
  <profile-results>
    <profile-name>
      profile-name
    </profile-name>
    <profile-action>
      profile-action
    </profile-action>
    <session-id>
      session-id
    </session-id>
    <session-type>
      session-type
    </session-type>
    <request-result>
      request-result
    </request-result>
    <failure-reason>
      failure-reason
    </failure-reason>
    <config-bits>
      config-bits
    </config-bits>
  </profile-results>
</dynamic-configuration-information>
```

Description

<queue>

Usage

```
<shm-ipc-statistics>
  <user>
    <connection>
      <queue>
        <msg-complete>
          msg-complete
        </msg-complete>
        <msg-posted>
          msg-posted
        </msg-posted>
        <msg-pending>
          msg-pending
        </msg-pending>
        <max-msg-pending>
          max-msg-pending
        </max-msg-pending>
        <msg-held>
          msg-held
        </msg-held>
      </queue>
```

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```
    </connection>
  </user>
</shm-ipc-statistics>
```

Description

<results>

Usage

```
<results>
  <action>
    action
  </action>
  <session-type>
    session-type
  </session-type>
  <session-id>
    session-id
  </session-id>
  <success>
    success
  </success>
  <failure>
    failure
  </failure>
</results>
```

Description Result for dynamic configuration operation command

<results>

Usage

```
<dynamic-configuration-information>
  <results>
    <action>
      action
    </action>
    <session-type>
      session-type
    </session-type>
    <session-id>
      session-id
    </session-id>
    <success>
      success
    </success>
    <failure>
      failure
    </failure>
  </results>
</dynamic-configuration-information>
```


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Description Result for dynamic configuration operation command

<service-session-info>

Usage

```
<dynamic-configuration-information>
  <service-session-info>
    <session-id>
      session-id
    </session-id>
    <start-time>
      start-time
    </start-time>
    <service-name>
      service-name
    </service-name>
    <accounting-session-id>
      accounting-session-id
    </accounting-session-id>
    <accounting-type>
      accounting-type
    </accounting-type>
    <accounting-interval>
      accounting-interval
    </accounting-interval>
    <accounting-volume-quota>
      accounting-volume-quota
    </accounting-volume-quota>
    <accounting-time-quota>
      accounting-time-quota
    </accounting-time-quota>
    <state>
      state
    </state>
    <dynamic-configuration-info>....</dynamic-configuration-info>
    <config-bits>
      config-bits
    </config-bits>
    <service-activation-time>
      service-activation-time
    </service-activation-time>
  </service-session-info>
</dynamic-configuration-information>
```

Description Service session information

<session-ids>

Usage

```
<dynamic-configuration-information>
  <session-ids>
    <session-id>
      session-id
```

```
    </session-id>
  </session-ids>
</dynamic-configuration-information>
```

Description Session IDs

<session-ids>

Usage

```
<dynamic-configuration-information>
  <client-session-info>
    <session-ids>
      <session-id>
        session-id
      </session-id>
    </session-ids>
  </client-session-info>
</dynamic-configuration-information>
```

Description Session IDs

<shm-ipc-statistics>

Usage

```
<shm-ipc-statistics>
  <user>....</user>
  <failure-reason>
    failure-reason
  </failure-reason>
</shm-ipc-statistics>
```

Description

<socket>

Usage

```
<shm-ipc-statistics>
  <user>
    <connection>
      <socket>
        <consumer-received>
          consumer-received
        </consumer-received>
        <consumer-sent>
          consumer-sent
        </consumer-sent>
        <producer-received>
          producer-received
        </producer-received>
        <producer-sent>
          producer-sent
```


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```
        </producer-sent>
       </socket>
      </connection>
     </user>
</shm-ipc-statistics>
```

Description

<tracelog-data>

Usage

```
<tracelog-data>
 <tracelog-entry>....</tracelog-entry>
</tracelog-data>
```

Description

<tracelog-data-performance>

Usage

```
<tracelog-data-performance>
 <tracelog-entry-performance>....</tracelog-entry-performance>
</tracelog-data-performance>
```

Description

<tracelog-entry>

Usage

```
<tracelog-data>
 <tracelog-entry>
  <log-prefix>
   log-prefix
  </log-prefix>
  <index>
   index
  </index>
  <process-id>
   process-id
  </process-id>
  <thread-id>
   thread-id
  </thread-id>
  <entry-delta-seconds>
   entry-delta-seconds
  </entry-delta-seconds>
  <entry-delta-microseconds>
   entry-delta-microseconds
  </entry-delta-microseconds>
  <running-time-seconds>
   running-time-seconds
  </running-time-seconds>
  <running-time-microseconds>
```

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```
    running-time-microseconds
   </running-time-microseconds>
   <system-time-seconds>
    system-time-seconds
   </system-time-seconds>
   <system-time-microseconds>
    system-time-microseconds
   </system-time-microseconds>
   <logged-data>
    logged-data
   </logged-data>
  </tracelog-entry>
</tracelog-data>
```

Description

<tracelog-entry-performance>

Usage

```
<tracelog-data-performance>
  <tracelog-entry-performance>
   <log-prefix-perf>
    log-prefix-perf
   </log-prefix-perf>
   <index-perf>
    index-perf
   </index-perf>
   <process-id-perf>
    process-id-perf
   </process-id-perf>
   <thread-id-perf>
    thread-id-perf
   </thread-id-perf>
   <entry-delta-seconds-perf>
    entry-delta-seconds-perf
   </entry-delta-seconds-perf>
   <entry-delta-microseconds-perf>
    entry-delta-microseconds-perf
   </entry-delta-microseconds-perf>
   <running-time-seconds-perf>
    running-time-seconds-perf
   </running-time-seconds-perf>
   <running-time-microseconds-perf>
    running-time-microseconds-perf
   </running-time-microseconds-perf>
   <user-cpu-seconds-perf>
    user-cpu-seconds-perf
   </user-cpu-seconds-perf>
   <user-cpu-microseconds-perf>
    user-cpu-microseconds-perf
   </user-cpu-microseconds-perf>
   <system-cpu-seconds-perf>
    system-cpu-seconds-perf
   </system-cpu-seconds-perf>
   <system-cpu-microseconds-perf>
```


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```
    system-cpu-microseconds-perf
   </system-cpu-microseconds-perf>
   <system-time-seconds-perf>
    system-time-seconds-perf
   </system-time-seconds-perf>
   <system-time-microseconds-perf>
    system-time-microseconds-perf
   </system-time-microseconds-perf>
   <vol-ctxsw-perf>
    vol-ctxsw-perf
   </vol-ctxsw-perf>
   <ivol-ctxsw-perf>
    ivol-ctxsw-perf
   </ivol-ctxsw-perf>
   <logged-data-perf>
    logged-data-perf
   </logged-data-perf>
  </tracelog-entry-performance>
</tracelog-data-performance>
```

Description

<tracelog-information>

Usage

```
<tracelog-information>
  <tracelog-status-info>....</tracelog-status-info>
</tracelog-information>
```

Description

<tracelog-status-info>

Usage

```
<tracelog-information>
  <tracelog-status-info>
   <log-name>
    log-name
   </log-name>
   <max-entries>
    max-entries
   </max-entries>
   <cur-index>
    cur-index
   </cur-index>
   <max-data>
    max-data
   </max-data>
   <wrap-cnt>
    wrap-cnt
   </wrap-cnt>
   <wrapable>
    wrapable
   </wrapable>
```

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```
    <frozen>
     frozen
    </frozen>
    <collect-perf>
     collect-perf
    </collect-perf>
  </tracelog-status-info>
</tracelog-information>
```

Description

<uid>

Usage

```
<uid-show>
  <uid>
    <number>
     number
    </number>
    <count>
     count
    </count>
    <hash>
     hash
    </hash>
  </uid>
</uid-show>
```

Description

<uid-show>

Usage

```
<uid-show>
  <uid>....</uid>
</uid-show>
```

Description

<user>

Usage

```
<shm-ipc-statistics>
  <user>
    <name>
     name
    </name>
    <role>
     role
    </role>
    <status>
     status
    </status>
```


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```
    <performance-counters>....</performance-counters>
    <producer-message-counters>....</producer-message-counters>
    <consumer-message-counters>....</consumer-message-counters>
    <connection>....</connection>
  </user>
</shm-ipc-statistics>
```

Description

Summary of Ethernet Delay Measurement Response Tags

<cfm-ethdm-error-snapshot>

Usage

```
<cfm-ethdm-error-snapshot>
  <cfm-ethdm-error-reason>
    cfm-ethdm-error-reason
  </cfm-ethdm-error-reason>
</cfm-ethdm-error-snapshot>
```

Description

<cfm-ethdm-error-snapshot>

Usage

```
<ethdm-results>
  <cfm-ethdm-error-snapshot>
    <cfm-ethdm-error-reason>
      cfm-ethdm-error-reason
    </cfm-ethdm-error-reason>
  </cfm-ethdm-error-snapshot>
</ethdm-results>
```

Description

<cfm-ethdm-request-snapshot>

Usage

```
<cfm-ethdm-request-snapshot>
  <cfm-ethdm-type>
    cfm-ethdm-type
  </cfm-ethdm-type>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
  </cfm-maintenance-domain-name>
  <cfm-maintenance-association-name>
    cfm-maintenance-association-name
```

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```
  </cfm-maintenance-association-name>
  <cfm-local-mep-identifier>
   cfm-local-mep-identifier
  </cfm-local-mep-identifier>
  <cfm-destination-mac-address>
   cfm-destination-mac-address
  </cfm-destination-mac-address>
</cfm-ethdm-request-snapshot>
```

Description

<cfm-ethdm-request-snapshot>

Usage

```
<ethdm-results>
  <cfm-ethdm-request-snapshot>
    <cfm-ethdm-type>
     cfm-ethdm-type
    </cfm-ethdm-type>
    <cfm-interface-name>
     cfm-interface-name
    </cfm-interface-name>
    <cfm-level>
     cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
     cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-association-name>
     cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-local-mep-identifier>
     cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-destination-mac-address>
     cfm-destination-mac-address
    </cfm-destination-mac-address>
  </cfm-ethdm-request-snapshot>
</ethdm-results>
```

Description

<cfm-oneway-ethdm-reply-summary>

Usage

```
<cfm-oneway-ethdm-reply-summary>
  <cfm-oneway-ethdm-requests-packets>
   cfm-oneway-ethdm-requests-packets
  </cfm-oneway-ethdm-requests-packets>
</cfm-oneway-ethdm-reply-summary>
```

Description

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<cfm-oneway-ethdm-reply-summary>

Usage

```
<ethdm-results>
  <cfm-oneway-ethdm-reply-summary>
    <cfm-oneway-ethdm-requests-packets>
      cfm-oneway-ethdm-requests-packets
    </cfm-oneway-ethdm-requests-packets>
  </cfm-oneway-ethdm-reply-summary>
</ethdm-results>
```

Description

<cfm-twoway-ethdm-reply-entry>

Usage

```
<cfm-twoway-ethdm-reply-entry>
  <cfm-destination-mac-address>
    cfm-destination-mac-address
  </cfm-destination-mac-address>
  <cfm-twoway-ethdm-invalid-timestamp-response>
    cfm-twoway-ethdm-invalid-timestamp-response
  </cfm-twoway-ethdm-invalid-timestamp-response>
  <cfm-twoway-ethdm-invalid-flags-response>
    cfm-twoway-ethdm-invalid-flags-response
  </cfm-twoway-ethdm-invalid-flags-response>
  <cfm-twoway-ethdm-invalid-tlvoffset-response>
    cfm-twoway-ethdm-invalid-tlvoffset-response
  </cfm-twoway-ethdm-invalid-tlvoffset-response>
  <cfm-twoway-ethdm-no-endtlv-response>
    cfm-twoway-ethdm-no-endtlv-response
  </cfm-twoway-ethdm-no-endtlv-response>
  <cfm-twoway-ethdm-delay>
    cfm-twoway-ethdm-delay
  </cfm-twoway-ethdm-delay>
  <cfm-twoway-ethdm-delay-variation>
    cfm-twoway-ethdm-delay-variation
  </cfm-twoway-ethdm-delay-variation>
</cfm-twoway-ethdm-reply-entry>
```

Description

<cfm-twoway-ethdm-reply-entry>

Usage

```
<ethdm-results>
  <cfm-twoway-ethdm-reply-entry>
    <cfm-destination-mac-address>
      cfm-destination-mac-address
    </cfm-destination-mac-address>
    <cfm-twoway-ethdm-invalid-timestamp-response>
      cfm-twoway-ethdm-invalid-timestamp-response
    </cfm-twoway-ethdm-invalid-timestamp-response>
```

```
    <cfm-twoway-ethdm-invalid-flags-response>
      cfm-twoway-ethdm-invalid-flags-response
    </cfm-twoway-ethdm-invalid-flags-response>
    <cfm-twoway-ethdm-invalid-tlvoffset-response>
      cfm-twoway-ethdm-invalid-tlvoffset-response
    </cfm-twoway-ethdm-invalid-tlvoffset-response>
    <cfm-twoway-ethdm-no-endtlv-response>
      cfm-twoway-ethdm-no-endtlv-response
    </cfm-twoway-ethdm-no-endtlv-response>
    <cfm-twoway-ethdm-delay>
      cfm-twoway-ethdm-delay
    </cfm-twoway-ethdm-delay>
    <cfm-twoway-ethdm-delay-variation>
      cfm-twoway-ethdm-delay-variation
    </cfm-twoway-ethdm-delay-variation>
  </cfm-twoway-ethdm-reply-entry>
</ethdm-results>
```

Description

<cfm-twoway-ethdm-reply-summary>

Usage

```
<cfm-twoway-ethdm-reply-summary>
  <cfm-twoway-ethdm-requests-packets>
    cfm-twoway-ethdm-requests-packets
  </cfm-twoway-ethdm-requests-packets>
  <cfm-twoway-ethdm-responses-packets>
    cfm-twoway-ethdm-responses-packets
  </cfm-twoway-ethdm-responses-packets>
  <cfm-twoway-ethdm-invalid-responses-packets>
    cfm-twoway-ethdm-invalid-responses-packets
  </cfm-twoway-ethdm-invalid-responses-packets>
  <cfm-twoway-ethdm-average-delay>
    cfm-twoway-ethdm-average-delay
  </cfm-twoway-ethdm-average-delay>
  <cfm-twoway-ethdm-average-delay-variation>
    cfm-twoway-ethdm-average-delay-variation
  </cfm-twoway-ethdm-average-delay-variation>
  <cfm-twoway-ethdm-bestcase-delay>
    cfm-twoway-ethdm-bestcase-delay
  </cfm-twoway-ethdm-bestcase-delay>
  <cfm-twoway-ethdm-worstcase-delay>
    cfm-twoway-ethdm-worstcase-delay
  </cfm-twoway-ethdm-worstcase-delay>
</cfm-twoway-ethdm-reply-summary>
```

Description

<cfm-twoway-ethdm-reply-summary>

Usage

```
<ethdm-results>
  <cfm-twoway-ethdm-reply-summary>
```


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```
    <cfm-twoway-ethdm-requests-packets>
      cfm-twoway-ethdm-requests-packets
    </cfm-twoway-ethdm-requests-packets>
    <cfm-twoway-ethdm-responses-packets>
      cfm-twoway-ethdm-responses-packets
    </cfm-twoway-ethdm-responses-packets>
    <cfm-twoway-ethdm-invalid-responses-packets>
      cfm-twoway-ethdm-invalid-responses-packets
    </cfm-twoway-ethdm-invalid-responses-packets>
    <cfm-twoway-ethdm-average-delay>
      cfm-twoway-ethdm-average-delay
    </cfm-twoway-ethdm-average-delay>
    <cfm-twoway-ethdm-average-delay-variation>
      cfm-twoway-ethdm-average-delay-variation
    </cfm-twoway-ethdm-average-delay-variation>
    <cfm-twoway-ethdm-bestcase-delay>
      cfm-twoway-ethdm-bestcase-delay
    </cfm-twoway-ethdm-bestcase-delay>
    <cfm-twoway-ethdm-worstcase-delay>
      cfm-twoway-ethdm-worstcase-delay
    </cfm-twoway-ethdm-worstcase-delay>
  </cfm-twoway-ethdm-reply-summary>
</ethdm-results>
```

Description

<ethdm-results>

Usage

```
<ethdm-results>
  <cfm-ethdm-error-snapshot>....</cfm-ethdm-error-snapshot>
  <cfm-ethdm-request-snapshot>....</cfm-ethdm-request-snapshot>
  <cfm-twoway-ethdm-reply-entry>....</cfm-twoway-ethdm-reply-entry>
  <cfm-oneway-ethdm-reply-summary>....</cfm-oneway-ethdm-reply-summary>

  <cfm-twoway-ethdm-reply-summary>....</cfm-twoway-ethdm-reply-summary>

</ethdm-results>
```

Description

Summary of Ethernet Link Management Response Tags

<cfm-ethlm-cir-reply-entry>

Usage

```
<cfm-ethlm-cir-reply-entry>
  <cfm-destination-mac-address>
    cfm-destination-mac-address
  </cfm-destination-mac-address>
  <cfm-ethlm-cir-near-end-frame-loss>
    cfm-ethlm-cir-near-end-frame-loss
  </cfm-ethlm-cir-near-end-frame-loss>
  <cfm-ethlm-cir-far-end-frame-loss>
```

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```
    cfm-ethlm-cir-far-end-frame-loss
  </cfm-ethlm-cir-far-end-frame-loss>
  <cfm-ethlm-cir-near-end-loss-ratio>
    cfm-ethlm-cir-near-end-loss-ratio
  </cfm-ethlm-cir-near-end-loss-ratio>
  <cfm-ethlm-cir-far-end-loss-ratio>
    cfm-ethlm-cir-far-end-loss-ratio
  </cfm-ethlm-cir-far-end-loss-ratio>
</cfm-ethlm-cir-reply-entry>
```

Description

<cfm-ethlm-cir-reply-entry>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-cir-reply-entry>
    <cfm-destination-mac-address>
      cfm-destination-mac-address
    </cfm-destination-mac-address>
    <cfm-ethlm-cir-near-end-frame-loss>
      cfm-ethlm-cir-near-end-frame-loss
    </cfm-ethlm-cir-near-end-frame-loss>
    <cfm-ethlm-cir-far-end-frame-loss>
      cfm-ethlm-cir-far-end-frame-loss
    </cfm-ethlm-cir-far-end-frame-loss>
    <cfm-ethlm-cir-near-end-loss-ratio>
      cfm-ethlm-cir-near-end-loss-ratio
    </cfm-ethlm-cir-near-end-loss-ratio>
    <cfm-ethlm-cir-far-end-loss-ratio>
      cfm-ethlm-cir-far-end-loss-ratio
    </cfm-ethlm-cir-far-end-loss-ratio>
  </cfm-ethlm-cir-reply-entry>
</ethlm-cir-eir-results>
```

Description

<cfm-ethlm-cir-reply-summary>

Usage

```
<cfm-ethlm-cir-reply-summary>
  <cfm-ethlm-requests-packets>
    cfm-ethlm-requests-packets
  </cfm-ethlm-requests-packets>
  <cfm-ethlm-response-packets>
    cfm-ethlm-response-packets
  </cfm-ethlm-response-packets>
  <cfm-ethlm-cir-average-near-end-frame-loss>
    cfm-ethlm-cir-average-near-end-frame-loss
  </cfm-ethlm-cir-average-near-end-frame-loss>
  <cfm-ethlm-cir-average-near-end-loss-ratio>
    cfm-ethlm-cir-average-near-end-loss-ratio
  </cfm-ethlm-cir-average-near-end-loss-ratio>
  <cfm-ethlm-cir-average-far-end-frame-loss>
```


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```
    cfm-ethlm-cir-average-far-end-frame-loss
  </cfm-ethlm-cir-average-far-end-frame-loss>
  <cfm-ethlm-cir-average-far-end-loss-ratio>
    cfm-ethlm-cir-average-far-end-loss-ratio
  </cfm-ethlm-cir-average-far-end-loss-ratio>
  <cfm-ethlm-cir-near-end-best-case-frame-loss>
    cfm-ethlm-cir-near-end-best-case-frame-loss
  </cfm-ethlm-cir-near-end-best-case-frame-loss>
  <cfm-ethlm-cir-near-end-best-case-loss-ratio>
    cfm-ethlm-cir-near-end-best-case-loss-ratio
  </cfm-ethlm-cir-near-end-best-case-loss-ratio>
  <cfm-ethlm-cir-near-end-worst-case-frame-loss>
    cfm-ethlm-cir-near-end-worst-case-frame-loss
  </cfm-ethlm-cir-near-end-worst-case-frame-loss>
  <cfm-ethlm-cir-near-end-worst-case-loss-ratio>
    cfm-ethlm-cir-near-end-worst-case-loss-ratio
  </cfm-ethlm-cir-near-end-worst-case-loss-ratio>
  <cfm-ethlm-cir-far-end-best-case-frame-loss>
    cfm-ethlm-cir-far-end-best-case-frame-loss
  </cfm-ethlm-cir-far-end-best-case-frame-loss>
  <cfm-ethlm-cir-far-end-best-case-loss-ratio>
    cfm-ethlm-cir-far-end-best-case-loss-ratio
  </cfm-ethlm-cir-far-end-best-case-loss-ratio>
  <cfm-ethlm-cir-far-end-worst-case-frame-loss>
    cfm-ethlm-cir-far-end-worst-case-frame-loss
  </cfm-ethlm-cir-far-end-worst-case-frame-loss>
  <cfm-ethlm-cir-far-end-worst-case-loss-ratio>
    cfm-ethlm-cir-far-end-worst-case-loss-ratio
  </cfm-ethlm-cir-far-end-worst-case-loss-ratio>
</cfm-ethlm-cir-reply-summary>
```

Description

<cfm-ethlm-cir-reply-summary>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-cir-reply-summary>
    <cfm-ethlm-requests-packets>
      cfm-ethlm-requests-packets
    </cfm-ethlm-requests-packets>
    <cfm-ethlm-response-packets>
      cfm-ethlm-response-packets
    </cfm-ethlm-response-packets>
    <cfm-ethlm-cir-average-near-end-frame-loss>
      cfm-ethlm-cir-average-near-end-frame-loss
    </cfm-ethlm-cir-average-near-end-frame-loss>
    <cfm-ethlm-cir-average-near-end-loss-ratio>
      cfm-ethlm-cir-average-near-end-loss-ratio
    </cfm-ethlm-cir-average-near-end-loss-ratio>
    <cfm-ethlm-cir-average-far-end-frame-loss>
      cfm-ethlm-cir-average-far-end-frame-loss
    </cfm-ethlm-cir-average-far-end-frame-loss>
    <cfm-ethlm-cir-average-far-end-loss-ratio>
      cfm-ethlm-cir-average-far-end-loss-ratio
```

```
    </cfm-ethlm-cir-average-far-end-loss-ratio>
    <cfm-ethlm-cir-near-end-best-case-frame-loss>
      cfm-ethlm-cir-near-end-best-case-frame-loss
    </cfm-ethlm-cir-near-end-best-case-frame-loss>
    <cfm-ethlm-cir-near-end-best-case-loss-ratio>
      cfm-ethlm-cir-near-end-best-case-loss-ratio
    </cfm-ethlm-cir-near-end-best-case-loss-ratio>
    <cfm-ethlm-cir-near-end-worst-case-frame-loss>
      cfm-ethlm-cir-near-end-worst-case-frame-loss
    </cfm-ethlm-cir-near-end-worst-case-frame-loss>
    <cfm-ethlm-cir-near-end-worst-case-loss-ratio>
      cfm-ethlm-cir-near-end-worst-case-loss-ratio
    </cfm-ethlm-cir-near-end-worst-case-loss-ratio>
    <cfm-ethlm-cir-far-end-best-case-frame-loss>
      cfm-ethlm-cir-far-end-best-case-frame-loss
    </cfm-ethlm-cir-far-end-best-case-frame-loss>
    <cfm-ethlm-cir-far-end-best-case-loss-ratio>
      cfm-ethlm-cir-far-end-best-case-loss-ratio
    </cfm-ethlm-cir-far-end-best-case-loss-ratio>
    <cfm-ethlm-cir-far-end-worst-case-frame-loss>
      cfm-ethlm-cir-far-end-worst-case-frame-loss
    </cfm-ethlm-cir-far-end-worst-case-frame-loss>
    <cfm-ethlm-cir-far-end-worst-case-loss-ratio>
      cfm-ethlm-cir-far-end-worst-case-loss-ratio
    </cfm-ethlm-cir-far-end-worst-case-loss-ratio>
  </cfm-ethlm-cir-reply-summary>
</ethlm-cir-eir-results>
```

Description

<cfm-ethlm-eir-reply-entry>

Usage

```
<cfm-ethlm-eir-reply-entry>
  <cfm-destination-mac-address>
    cfm-destination-mac-address
  </cfm-destination-mac-address>
  <cfm-ethlm-eir-near-end-frame-loss>
    cfm-ethlm-eir-near-end-frame-loss
  </cfm-ethlm-eir-near-end-frame-loss>
  <cfm-ethlm-eir-far-end-frame-loss>
    cfm-ethlm-eir-far-end-frame-loss
  </cfm-ethlm-eir-far-end-frame-loss>
  <cfm-ethlm-eir-near-end-loss-ratio>
    cfm-ethlm-eir-near-end-loss-ratio
  </cfm-ethlm-eir-near-end-loss-ratio>
  <cfm-ethlm-eir-far-end-loss-ratio>
    cfm-ethlm-eir-far-end-loss-ratio
  </cfm-ethlm-eir-far-end-loss-ratio>
</cfm-ethlm-eir-reply-entry>
```

Description

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<cfm-ethlm-eir-reply-entry>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-eir-reply-entry>
    <cfm-destination-mac-address>
      cfm-destination-mac-address
    </cfm-destination-mac-address>
    <cfm-ethlm-eir-near-end-frame-loss>
      cfm-ethlm-eir-near-end-frame-loss
    </cfm-ethlm-eir-near-end-frame-loss>
    <cfm-ethlm-eir-far-end-frame-loss>
      cfm-ethlm-eir-far-end-frame-loss
    </cfm-ethlm-eir-far-end-frame-loss>
    <cfm-ethlm-eir-near-end-loss-ratio>
      cfm-ethlm-eir-near-end-loss-ratio
    </cfm-ethlm-eir-near-end-loss-ratio>
    <cfm-ethlm-eir-far-end-loss-ratio>
      cfm-ethlm-eir-far-end-loss-ratio
    </cfm-ethlm-eir-far-end-loss-ratio>
  </cfm-ethlm-eir-reply-entry>
</ethlm-cir-eir-results>
```

Description

<cfm-ethlm-eir-reply-summary>

Usage

```
<cfm-ethlm-eir-reply-summary>
  <cfm-ethlm-eir-average-near-end-frame-loss>
    cfm-ethlm-eir-average-near-end-frame-loss
  </cfm-ethlm-eir-average-near-end-frame-loss>
  <cfm-ethlm-eir-average-near-end-loss-ratio>
    cfm-ethlm-eir-average-near-end-loss-ratio
  </cfm-ethlm-eir-average-near-end-loss-ratio>
  <cfm-ethlm-eir-average-far-end-frame-loss>
    cfm-ethlm-eir-average-far-end-frame-loss
  </cfm-ethlm-eir-average-far-end-frame-loss>
  <cfm-ethlm-eir-average-far-end-loss-ratio>
    cfm-ethlm-eir-average-far-end-loss-ratio
  </cfm-ethlm-eir-average-far-end-loss-ratio>
  <cfm-ethlm-eir-near-end-best-case-frame-loss>
    cfm-ethlm-eir-near-end-best-case-frame-loss
  </cfm-ethlm-eir-near-end-best-case-frame-loss>
  <cfm-ethlm-eir-near-end-best-case-loss-ratio>
    cfm-ethlm-eir-near-end-best-case-loss-ratio
  </cfm-ethlm-eir-near-end-best-case-loss-ratio>
  <cfm-ethlm-eir-near-end-worst-case-frame-loss>
    cfm-ethlm-eir-near-end-worst-case-frame-loss
  </cfm-ethlm-eir-near-end-worst-case-frame-loss>
  <cfm-ethlm-eir-near-end-worst-case-loss-ratio>
    cfm-ethlm-eir-near-end-worst-case-loss-ratio
  </cfm-ethlm-eir-near-end-worst-case-loss-ratio>
  <cfm-ethlm-eir-far-end-best-case-frame-loss>
```

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```
    cfm-ethlm-eir-far-end-best-case-frame-loss
  </cfm-ethlm-eir-far-end-best-case-frame-loss>
  <cfm-ethlm-eir-far-end-best-case-loss-ratio>
    cfm-ethlm-eir-far-end-best-case-loss-ratio
  </cfm-ethlm-eir-far-end-best-case-loss-ratio>
  <cfm-ethlm-eir-far-end-worst-case-frame-loss>
    cfm-ethlm-eir-far-end-worst-case-frame-loss
  </cfm-ethlm-eir-far-end-worst-case-frame-loss>
  <cfm-ethlm-eir-far-end-worst-case-loss-ratio>
    cfm-ethlm-eir-far-end-worst-case-loss-ratio
  </cfm-ethlm-eir-far-end-worst-case-loss-ratio>
</cfm-ethlm-eir-reply-summary>
```

Description

<cfm-ethlm-eir-reply-summary>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-eir-reply-summary>
    <cfm-ethlm-eir-average-near-end-frame-loss>
      cfm-ethlm-eir-average-near-end-frame-loss
    </cfm-ethlm-eir-average-near-end-frame-loss>
    <cfm-ethlm-eir-average-near-end-loss-ratio>
      cfm-ethlm-eir-average-near-end-loss-ratio
    </cfm-ethlm-eir-average-near-end-loss-ratio>
    <cfm-ethlm-eir-average-far-end-frame-loss>
      cfm-ethlm-eir-average-far-end-frame-loss
    </cfm-ethlm-eir-average-far-end-frame-loss>
    <cfm-ethlm-eir-average-far-end-loss-ratio>
      cfm-ethlm-eir-average-far-end-loss-ratio
    </cfm-ethlm-eir-average-far-end-loss-ratio>
    <cfm-ethlm-eir-near-end-best-case-frame-loss>
      cfm-ethlm-eir-near-end-best-case-frame-loss
    </cfm-ethlm-eir-near-end-best-case-frame-loss>
    <cfm-ethlm-eir-near-end-best-case-loss-ratio>
      cfm-ethlm-eir-near-end-best-case-loss-ratio
    </cfm-ethlm-eir-near-end-best-case-loss-ratio>
    <cfm-ethlm-eir-near-end-worst-case-frame-loss>
      cfm-ethlm-eir-near-end-worst-case-frame-loss
    </cfm-ethlm-eir-near-end-worst-case-frame-loss>
    <cfm-ethlm-eir-near-end-worst-case-loss-ratio>
      cfm-ethlm-eir-near-end-worst-case-loss-ratio
    </cfm-ethlm-eir-near-end-worst-case-loss-ratio>
    <cfm-ethlm-eir-far-end-best-case-frame-loss>
      cfm-ethlm-eir-far-end-best-case-frame-loss
    </cfm-ethlm-eir-far-end-best-case-frame-loss>
    <cfm-ethlm-eir-far-end-best-case-loss-ratio>
      cfm-ethlm-eir-far-end-best-case-loss-ratio
    </cfm-ethlm-eir-far-end-best-case-loss-ratio>
    <cfm-ethlm-eir-far-end-worst-case-frame-loss>
      cfm-ethlm-eir-far-end-worst-case-frame-loss
    </cfm-ethlm-eir-far-end-worst-case-frame-loss>
    <cfm-ethlm-eir-far-end-worst-case-loss-ratio>
      cfm-ethlm-eir-far-end-worst-case-loss-ratio
```


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```
    </cfm-ethlm-eir-far-end-worst-case-loss-ratio>
  </cfm-ethlm-eir-reply-summary>
</ethlm-cir-eir-results>
```

Description

<cfm-ethlm-error-reply-entry>

Usage

```
<cfm-ethlm-error-reply-entry>
  <cfm-ethlm-invalid-flags-response>
    cfm-ethlm-invalid-flags-response
  </cfm-ethlm-invalid-flags-response>
  <cfm-ethlm-invalid-tlvoffset-response>
    cfm-ethlm-invalid-tlvoffset-response
  </cfm-ethlm-invalid-tlvoffset-response>
  <cfm-ethlm-no-endtlv-response>
    cfm-ethlm-no-endtlv-response
  </cfm-ethlm-no-endtlv-response>
  <cfm-ethlm-no-juniperlmtlv-response>
    cfm-ethlm-no-juniperlmtlv-response
  </cfm-ethlm-no-juniperlmtlv-response>
  <cfm-ethlm-server-counter-reset-response>
    cfm-ethlm-server-counter-reset-response
  </cfm-ethlm-server-counter-reset-response>
</cfm-ethlm-error-reply-entry>
```

Description

<cfm-ethlm-error-reply-entry>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-error-reply-entry>
    <cfm-ethlm-invalid-flags-response>
      cfm-ethlm-invalid-flags-response
    </cfm-ethlm-invalid-flags-response>
    <cfm-ethlm-invalid-tlvoffset-response>
      cfm-ethlm-invalid-tlvoffset-response
    </cfm-ethlm-invalid-tlvoffset-response>
    <cfm-ethlm-no-endtlv-response>
      cfm-ethlm-no-endtlv-response
    </cfm-ethlm-no-endtlv-response>
    <cfm-ethlm-no-juniperlmtlv-response>
      cfm-ethlm-no-juniperlmtlv-response
    </cfm-ethlm-no-juniperlmtlv-response>
    <cfm-ethlm-server-counter-reset-response>
      cfm-ethlm-server-counter-reset-response
    </cfm-ethlm-server-counter-reset-response>
  </cfm-ethlm-error-reply-entry>
</ethlm-cir-eir-results>
```

Description

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<cfm-ethlm-error-snapshot>

Usage

```
<cfm-ethlm-error-snapshot>
  <cfm-ethlm-error-reason>
    cfm-ethlm-error-reason
  </cfm-ethlm-error-reason>
</cfm-ethlm-error-snapshot>
```

Description

<cfm-ethlm-error-snapshot>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-error-snapshot>
    <cfm-ethlm-error-reason>
      cfm-ethlm-error-reason
    </cfm-ethlm-error-reason>
  </cfm-ethlm-error-snapshot>
</ethlm-cir-eir-results>
```

Description

<cfm-ethlm-request-snapshot>

Usage

```
<cfm-ethlm-request-snapshot>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
  </cfm-maintenance-domain-name>
  <cfm-maintenance-association-name>
    cfm-maintenance-association-name
  </cfm-maintenance-association-name>
  <cfm-local-mep-identifier>
    cfm-local-mep-identifier
  </cfm-local-mep-identifier>
  <cfm-destination-mac-address>
    cfm-destination-mac-address
  </cfm-destination-mac-address>
</cfm-ethlm-request-snapshot>
```

Description

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<cfm-ethlm-request-snapshot>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-request-snapshot>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-association-name>
      cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-local-mep-identifier>
      cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-destination-mac-address>
      cfm-destination-mac-address
    </cfm-destination-mac-address>
  </cfm-ethlm-request-snapshot>
</ethlm-cir-eir-results>
```

Description

<ethlm-cir-eir-results>

Usage

```
<ethlm-cir-eir-results>
  <cfm-ethlm-error-snapshot>....</cfm-ethlm-error-snapshot>
  <cfm-ethlm-request-snapshot>....</cfm-ethlm-request-snapshot>
  <cfm-ethlm-error-reply-entry>....</cfm-ethlm-error-reply-entry>
  <cfm-ethlm-cir-reply-entry>....</cfm-ethlm-cir-reply-entry>
  <cfm-ethlm-eir-reply-entry>....</cfm-ethlm-eir-reply-entry>
  <cfm-ethlm-cir-reply-summary>....</cfm-ethlm-cir-reply-summary>
  <cfm-ethlm-eir-reply-summary>....</cfm-ethlm-eir-reply-summary>
</ethlm-cir-eir-results>
```

Description

Summary of ETH Ping Response Tags

<cfm-loopback-error-snapshot>

Usage

```
<cfm-loopback-error-snapshot>
  <cfm-loopback-error-reason>
    cfm-loopback-error-reason
  </cfm-loopback-error-reason>
```

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```
</cfm-loopback-error-snapshot>
```

Description

<cfm-loopback-error-snapshot>

Usage

```
<ethping-results>
  <cfm-loopback-error-snapshot>
    <cfm-loopback-error-reason>
      cfm-loopback-error-reason
    </cfm-loopback-error-reason>
  </cfm-loopback-error-snapshot>
</ethping-results>
```

Description

<cfm-loopback-reply-entry>

Usage

```
<cfm-loopback-reply-entry>
  <cfm-loopback-responses-bytes>
    cfm-loopback-responses-bytes
  </cfm-loopback-responses-bytes>
  <cfm-target-mac-address>
    cfm-target-mac-address
  </cfm-target-mac-address>
  <cfm-loopback-transaction-identifier>
    cfm-loopback-transaction-identifier
  </cfm-loopback-transaction-identifier>
</cfm-loopback-reply-entry>
```

Description

<cfm-loopback-reply-entry>

Usage

```
<ethping-results>
  <cfm-loopback-reply-entry>
    <cfm-loopback-responses-bytes>
      cfm-loopback-responses-bytes
    </cfm-loopback-responses-bytes>
    <cfm-target-mac-address>
      cfm-target-mac-address
    </cfm-target-mac-address>
    <cfm-loopback-transaction-identifier>
      cfm-loopback-transaction-identifier
    </cfm-loopback-transaction-identifier>
  </cfm-loopback-reply-entry>
</ethping-results>
```

Description

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<cfm-loopback-reply-summary>

Usage

```
<cfm-loopback-reply-summary>
  <cfm-loopback-requests-packets>
    cfm-loopback-requests-packets
  </cfm-loopback-requests-packets>
  <cfm-loopback-responses-packets>
    cfm-loopback-responses-packets
  </cfm-loopback-responses-packets>
  <cfm-loopback-percentage-packet-loss>
    cfm-loopback-percentage-packet-loss
  </cfm-loopback-percentage-packet-loss>
</cfm-loopback-reply-summary>
```

Description

<cfm-loopback-reply-summary>

Usage

```
<ethping-results>
  <cfm-loopback-reply-summary>
    <cfm-loopback-requests-packets>
      cfm-loopback-requests-packets
    </cfm-loopback-requests-packets>
    <cfm-loopback-responses-packets>
      cfm-loopback-responses-packets
    </cfm-loopback-responses-packets>
    <cfm-loopback-percentage-packet-loss>
      cfm-loopback-percentage-packet-loss
    </cfm-loopback-percentage-packet-loss>
  </cfm-loopback-reply-summary>
</ethping-results>
```

Description

<cfm-loopback-request-snapshot>

Usage

```
<cfm-loopback-request-snapshot>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
  </cfm-maintenance-domain-name>
  <cfm-maintenance-association-name>
    cfm-maintenance-association-name
  </cfm-maintenance-association-name>
  <cfm-local-mep-identifier>
```

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```
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-target-mac-address>
    cfm-target-mac-address
   </cfm-target-mac-address>
   <cfm-loopback-transaction-identifier>
    cfm-loopback-transaction-identifier
   </cfm-loopback-transaction-identifier>
   <cfm-loopback-requests-bytes>
    cfm-loopback-requests-bytes
   </cfm-loopback-requests-bytes>
  </cfm-loopback-request-snapshot>
```

Description

<cfm-loopback-request-snapshot>

Usage

```
<ethping-results>
 <cfm-loopback-request-snapshot>
  <cfm-interface-name>
   cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
   cfm-level
  </cfm-level>
  <cfm-maintenance-domain-name>
   cfm-maintenance-domain-name
  </cfm-maintenance-domain-name>
  <cfm-maintenance-association-name>
   cfm-maintenance-association-name
  </cfm-maintenance-association-name>
  <cfm-local-mep-identifier>
   cfm-local-mep-identifier
  </cfm-local-mep-identifier>
  <cfm-target-mac-address>
   cfm-target-mac-address
  </cfm-target-mac-address>
  <cfm-loopback-transaction-identifier>
   cfm-loopback-transaction-identifier
  </cfm-loopback-transaction-identifier>
  <cfm-loopback-requests-bytes>
   cfm-loopback-requests-bytes
  </cfm-loopback-requests-bytes>
 </cfm-loopback-request-snapshot>
</ethping-results>
```

Description

<ethping-results>

Usage

```
<ethping-results>
 <cfm-loopback-error-snapshot>....</cfm-loopback-error-snapshot>
```


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```
  <cfm-loopback-request-snapshot>....</cfm-loopback-request-snapshot>
  <cfm-loopback-reply-entry>....</cfm-loopback-reply-entry>
  <cfm-loopback-reply-summary>....</cfm-loopback-reply-summary>
</ethping-results>
```

Description

Summary of Ethernet Traceroute Response Tags

<cfm-linktrace-error-snapshot>

Usage

```
<cfm-linktrace-error-snapshot>
  <cfm-linktrace-error-reason>
    cfm-linktrace-error-reason
  </cfm-linktrace-error-reason>
</cfm-linktrace-error-snapshot>
```

Description

<cfm-linktrace-error-snapshot>

Usage

```
<ethtraceroute-results>
  <cfm-linktrace-error-snapshot>
    <cfm-linktrace-error-reason>
      cfm-linktrace-error-reason
    </cfm-linktrace-error-reason>
  </cfm-linktrace-error-snapshot>
</ethtraceroute-results>
```

Description

<cfm-linktrace-reply-entry>

Usage

```
<cfm-linktrace-reply-entry>
  <cfm-linktrace-request-hop-identifier>
    cfm-linktrace-request-hop-identifier
  </cfm-linktrace-request-hop-identifier>
  <cfm-linktrace-reply-ttl>
    cfm-linktrace-reply-ttl
  </cfm-linktrace-reply-ttl>
  <cfm-mep-mip-mac-address>
    cfm-mep-mip-mac-address
  </cfm-mep-mip-mac-address>
  <cfm-next-hop-mac-address>
    cfm-next-hop-mac-address
  </cfm-next-hop-mac-address>
  <cfm-linktrace-reply-wait-str>
    cfm-linktrace-reply-wait-str
  </cfm-linktrace-reply-wait-str>
```

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```
</cfm-linktrace-reply-entry>
```

Description

<cfm-linktrace-reply-entry>

Usage

```
<ethtraceroute-results>
 <cfm-linktrace-reply-entry>
  <cfm-linktrace-request-hop-identifier>
   cfm-linktrace-request-hop-identifier
  </cfm-linktrace-request-hop-identifier>
  <cfm-linktrace-reply-ttl>
   cfm-linktrace-reply-ttl
  </cfm-linktrace-reply-ttl>
  <cfm-mep-mip-mac-address>
   cfm-mep-mip-mac-address
  </cfm-mep-mip-mac-address>
  <cfm-next-hop-mac-address>
   cfm-next-hop-mac-address
  </cfm-next-hop-mac-address>
  <cfm-linktrace-reply-wait-str>
   cfm-linktrace-reply-wait-str
  </cfm-linktrace-reply-wait-str>
 </cfm-linktrace-reply-entry>
</ethtraceroute-results>
```

Description

<cfm-linktrace-request-snapshot>

Usage

```
<cfm-linktrace-request-snapshot>
 <cfm-interface-name>
  cfm-interface-name
 </cfm-interface-name>
 <cfm-level>
  cfm-level
 </cfm-level>
 <cfm-maintenance-domain-name>
  cfm-maintenance-domain-name
 </cfm-maintenance-domain-name>
 <cfm-maintenance-association-name>
  cfm-maintenance-association-name
 </cfm-maintenance-association-name>
 <cfm-local-mep-identifier>
  cfm-local-mep-identifier
 </cfm-local-mep-identifier>
 <cfm-target-mac-address>
  cfm-target-mac-address
 </cfm-target-mac-address>
 <cfm-linktrace-transaction-identifier>
  cfm-linktrace-transaction-identifier
 </cfm-linktrace-transaction-identifier>
```


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```
</cfm-linktrace-request-snapshot>
```

Description

<cfm-linktrace-request-snapshot>

Usage

```
<ethtraceroute-results>
  <cfm-linktrace-request-snapshot>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-association-name>
      cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-local-mep-identifier>
      cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-target-mac-address>
      cfm-target-mac-address
    </cfm-target-mac-address>
    <cfm-linktrace-transaction-identifier>
      cfm-linktrace-transaction-identifier
    </cfm-linktrace-transaction-identifier>
  </cfm-linktrace-request-snapshot>
</ethtraceroute-results>
```

Description

<ethtraceroute-results>

Usage

```
<ethtraceroute-results>
  <cfm-linktrace-error-snapshot>....</cfm-linktrace-error-snapshot>
  <cfm-linktrace-request-snapshot>....</cfm-linktrace-request-snapshot>
  <cfm-linktrace-reply-entry>....</cfm-linktrace-reply-entry>
</ethtraceroute-results>
```

Description

Summary of Firewall Filter Response Tags

<counter>

Usage

```
<counter>
  <counter-name>
```

```
    counter-name
  </counter-name>
  <byte-count>
    byte-count
  </byte-count>
  <packet-count>
    packet-count
  </packet-count>
</counter>
```

Description Counter information

<counter>

Usage

```
<filter-information>
  <counter>
    <counter-name>
      counter-name
    </counter-name>
    <byte-count>
      byte-count
    </byte-count>
    <packet-count>
      packet-count
    </packet-count>
  </counter>
</filter-information>
```

Description Counter information

<counter>

Usage

```
<firewall-information>
  <filter-information>
    <counter>
      <counter-name>
        counter-name
      </counter-name>
      <byte-count>
        byte-count
      </byte-count>
      <packet-count>
        packet-count
      </packet-count>
    </counter>
  </filter-information>
</firewall-information>
```

Description Counter information

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<counter>

Usage

```
<firewall-prefix-action-information>
  <counter>
    <counter-name>
      counter-name
    </counter-name>
    <byte-count>
      byte-count
    </byte-count>
    <packet-count>
      packet-count
    </packet-count>
  </counter>
</firewall-prefix-action-information>
```

Description Counter information

<filter-information>

Usage

```
<filter-information>
  <filter-name>
    filter-name
  </filter-name>
  <counter>....</counter>
  <policer>....</policer>
  <filter-version>....</filter-version>
</filter-information>
```

Description Details of a firewall filter

<filter-information>

Usage

```
<firewall-information>
  <filter-information>
    <filter-name>
      filter-name
    </filter-name>
    <counter>....</counter>
    <policer>....</policer>
    <filter-version>....</filter-version>
  </filter-information>
</firewall-information>
```

Description Details of a firewall filter

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<filter-version>

Usage

```
<filter-version>
  <filter-name>
    filter-name
  </filter-name>
  <version>
    version
  </version>
</filter-version>
```

Description Filter version information

<filter-version>

Usage

```
<filter-information>
  <filter-version>
    <filter-name>
      filter-name
    </filter-name>
    <version>
      version
    </version>
  </filter-version>
</filter-information>
```

Description Filter version information

<filter-version>

Usage

```
<firewall-information>
  <filter-information>
    <filter-version>
      <filter-name>
        filter-name
      </filter-name>
      <version>
        version
      </version>
    </filter-version>
  </filter-information>
</firewall-information>
```

Description Filter version information

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<firewall-db-object-counts>

Usage

```
<firewall-db-object-counts>
  <firewall-db-object-type>
    firewall-db-object-type
  </firewall-db-object-type>
  <firewall-db-object-dynamic>
    firewall-db-object-dynamic
  </firewall-db-object-dynamic>
  <firewall-db-object-config>
    firewall-db-object-config
  </firewall-db-object-config>
  <firewall-db-object-kernel>
    firewall-db-object-kernel
  </firewall-db-object-kernel>
</firewall-db-object-counts>
```

Description

<firewall-db-object-counts>

Usage

```
<firewall-db-object-information>
  <firewall-db-object-counts>
    <firewall-db-object-type>
      firewall-db-object-type
    </firewall-db-object-type>
    <firewall-db-object-dynamic>
      firewall-db-object-dynamic
    </firewall-db-object-dynamic>
    <firewall-db-object-config>
      firewall-db-object-config
    </firewall-db-object-config>
    <firewall-db-object-kernel>
      firewall-db-object-kernel
    </firewall-db-object-kernel>
  </firewall-db-object-counts>
</firewall-db-object-information>
```

Description

<firewall-db-object-information>

Usage

```
<firewall-db-object-information>
  <firewall-db-object-counts>....</firewall-db-object-counts>
</firewall-db-object-information>
```

Description

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<firewall-debug-information>

Usage

```
<firewall-debug-information>
  <firewall-debug-str>
    firewall-debug-str
  </firewall-debug-str>
</firewall-debug-information>
```

Description

<firewall-emalloc-information>

Usage

```
<firewall-emalloc-information>
  <firewall-emalloc-stats>....</firewall-emalloc-stats>
</firewall-emalloc-information>
```

Description

<firewall-emalloc-stats>

Usage

```
<firewall-emalloc-stats>
  <firewall-emalloc-phase>
    firewall-emalloc-phase
  </firewall-emalloc-phase>
  <firewall-emalloc-type>
    firewall-emalloc-type
  </firewall-emalloc-type>
  <firewall-emalloc-num-times>
    firewall-emalloc-num-times
  </firewall-emalloc-num-times>
  <firewall-emalloc-max-alloced>
    firewall-emalloc-max-alloced
  </firewall-emalloc-max-alloced>
</firewall-emalloc-stats>
```

Description

<firewall-emalloc-stats>

Usage

```
<firewall-emalloc-information>
  <firewall-emalloc-stats>
    <firewall-emalloc-phase>
      firewall-emalloc-phase
    </firewall-emalloc-phase>
    <firewall-emalloc-type>
      firewall-emalloc-type
    </firewall-emalloc-type>
    <firewall-emalloc-num-times>
```


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```
      firewall-emalloc-num-times
    </firewall-emalloc-num-times>
    <firewall-emalloc-max-alloced>
      firewall-emalloc-max-alloced
    </firewall-emalloc-max-alloced>
  </firewall-emalloc-stats>
</firewall-emalloc-information>
```

Description

<firewall-information>

Usage

```
<firewall-information>
  <filter-information>....</filter-information>
</firewall-information>
```

Description

<firewall-log-information>

Usage

```
<firewall-log-information>
  <log-information>....</log-information>
</firewall-log-information>
```

Description

<firewall-prefix-action-information>

Usage

```
<firewall-prefix-action-information>
  <filter-name>
    filter-name
  </filter-name>
  <counter>....</counter>
  <policer>....</policer>
</firewall-prefix-action-information>
```

Description Display prefix specific counter and policer statistics for a filter

<log-information>

Usage

```
<log-information>
  <time>
    time
  </time>
  <filter-name>
    filter-name
  </filter-name>
```

```
<action-name>
  action-name
</action-name>
<interface-name>
  interface-name
</interface-name>
<protocol-name>
  protocol-name
</protocol-name>
<source-address>
  source-address
</source-address>
<destination-address>
  destination-address
</destination-address>
<packet-length>
  packet-length
</packet-length>
<icmp-type>
  icmp-type
</icmp-type>
<icmp-code>
  icmp-code
</icmp-code>
</log-information>
```

Description Details of a single firewall log entry

<log-information>

Usage

```
<firewall-log-information>
  <log-information>
    <time>
      time
    </time>
    <filter-name>
      filter-name
    </filter-name>
    <action-name>
      action-name
    </action-name>
    <interface-name>
      interface-name
    </interface-name>
    <protocol-name>
      protocol-name
    </protocol-name>
    <source-address>
      source-address
    </source-address>
    <destination-address>
      destination-address
    </destination-address>
```


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```
    <packet-length>
      packet-length
    </packet-length>
    <icmp-type>
      icmp-type
    </icmp-type>
    <icmp-code>
      icmp-code
    </icmp-code>
  </log-information>
</firewall-log-information>
```

Description Details of a single firewall log entry

<policer>

Usage

```
<policer>
  <policer-name>
    policer-name
  </policer-name>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</policer>
```

Description Policer information

<policer>

Usage

```
<filter-information>
  <policer>
    <policer-name>
      policer-name
    </policer-name>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </policer>
</filter-information>
```

Description Policer information

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<policer>

Usage

```
<firewall-information>
  <filter-information>
    <policer>
      <policer-name>
        policer-name
      </policer-name>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </policer>
  </filter-information>
</firewall-information>
```

Description Policer information

<policer>

Usage

```
<firewall-prefix-action-information>
  <policer>
    <policer-name>
      policer-name
    </policer-name>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </policer>
</firewall-prefix-action-information>
```

Description Policer information

Summary of J20 Gateway GPRS Support Response Tags

<apn-pdp-context-deletion-results>

Usage

```
<apn-pdp-context-deletion-results>
  <apn-name>
    apn-name
  </apn-name>
  <user-category>
    user-category
```


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```
    </user-category>

<interface-pdp-context-deletion-information>....</interface-pdp-context-deletion-information>

  </apn-pdp-context-deletion-results>
```

Description Results for an APN-wide PDP context deletion command

<apn-statistics>

Usage

```
<apn-statistics-information>
 <apn-statistics>
  <name>
   name
  </name>
  <pdp-context-statistics>....</pdp-context-statistics>
  <gtp-error-statistics>....</gtp-error-statistics>
  <uplink>....</uplink>
  <downlink>....</downlink>
  <ggsn-pdp-per-user-category>....</ggsn-pdp-per-user-category>
  <radius-statistics-information>....</radius-statistics-information>
 <rulespace-based-charging-statistics>....</rulespace-based-charging-statistics>

  <signalling>....</signalling>
  <tft-filter-count>
   tft-filter-count
  </tft-filter-count>
  <neighbor-solicitation-req-received>
   neighbor-solicitation-req-received
  </neighbor-solicitation-req-received>
  <neighbor-solicitation-req-responded>
   neighbor-solicitation-req-responded
  </neighbor-solicitation-req-responded>
  <router-solicitation-req-received>
   router-solicitation-req-received
  </router-solicitation-req-received>
  <router-solicitation-req-responded>
   router-solicitation-req-responded
  </router-solicitation-req-responded>
 </apn-statistics>
</apn-statistics-information>
```

Description Statistics for a single APN

<apn-statistics-information>

Usage

```
<apn-statistics-information>
 <apn-statistics>....</apn-statistics>
 <sbcc-statistics-information>....</sbcc-statistics-information>
 <service-based-charging-for-gx>....</service-based-charging-for-gx>
```

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```
</apn-statistics-information>
```

Description APN statistics for the GGSN

<authorization-discard-information>

Usage

```
<authorization-discard-information>
  <authorization-discard-statistics>....</authorization-discard-statistics>
</authorization-discard-information>
```

Description

<authorization-discard-information>

Usage

```
<sbcc-statistics-information>
  <authorization-discard-information>
    <authorization-discard-statistics>....</authorization-discard-statistics>
  </authorization-discard-information>
</sbcc-statistics-information>
```

Description

<authorization-discard-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>....</authorization-discard-statistics>
    </authorization-discard-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description

<authorization-discard-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <authorization-discard-information>
        <authorization-discard-statistics>....</authorization-discard-statistics>
      </authorization-discard-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```


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Description

<authorization-discard-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>....</authorization-discard-statistics>
    </authorization-discard-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description

<authorization-discard-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>....</authorization-discard-statistics>
    </authorization-discard-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description

<authorization-discard-statistics>

Usage

```
<authorization-discard-information>
  <authorization-discard-statistics>
    <service-class-source>
      service-class-source
    </service-class-source>
    <packets>
      packets
    </packets>
    <bytes>
      bytes
    </bytes>
  </authorization-discard-statistics>
</authorization-discard-information>
```

Description Statistics for authorization-based packet discards

<authorization-discard-statistics>

Usage

```
<sbcc-statistics-information>
  <authorization-discard-information>
    <authorization-discard-statistics>
```

```
      <service-class-source>
        service-class-source
      </service-class-source>
      <packets>
        packets
      </packets>
      <bytes>
        bytes
      </bytes>
    </authorization-discard-statistics>
  </authorization-discard-information>
</sbcc-statistics-information>
```

Description Statistics for authorization-based packet discards

<authorization-discard-statistics>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>
        <service-class-source>
          service-class-source
        </service-class-source>
        <packets>
          packets
        </packets>
        <bytes>
          bytes
        </bytes>
      </authorization-discard-statistics>
    </authorization-discard-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Statistics for authorization-based packet discards

<authorization-discard-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <authorization-discard-information>
        <authorization-discard-statistics>
          <service-class-source>
            service-class-source
          </service-class-source>
          <packets>
            packets
          </packets>
```


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```
            <bytes>
              bytes
            </bytes>
          </authorization-discard-statistics>
        </authorization-discard-information>
      </sbcc-statistics-information>
    </ggsn-interface>
  </ggsn-interface-information>
```

Description Statistics for authorization-based packet discards

<authorization-discard-statistics>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>
        <service-class-source>
          service-class-source
        </service-class-source>
        <packets>
          packets
        </packets>
        <bytes>
          bytes
        </bytes>
      </authorization-discard-statistics>
    </authorization-discard-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Statistics for authorization-based packet discards

<authorization-discard-statistics>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <authorization-discard-information>
      <authorization-discard-statistics>
        <service-class-source>
          service-class-source
        </service-class-source>
        <packets>
          packets
        </packets>
        <bytes>
          bytes
        </bytes>
      </authorization-discard-statistics>
    </authorization-discard-information>
```

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```
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Statistics for authorization-based packet discards

<billing-gateway>

Usage

```
<gtp-prime-statistics-information>
  <billing-gateway>
    <address>
      address
    </address>
    <time-connected>
      time-connected
    </time-connected>
  </billing-gateway>
</gtp-prime-statistics-information>
```

Description Active billing gateway information

<call-trace>

Usage

```
<call-trace>
  <imsi>
    imsi
  </imsi>
  <msisdn>
    msisdn
  </msisdn>
  <time-started>
    time-started
  </time-started>
  <nsapi-information>....</nsapi-information>
</call-trace>
```

Description Information about a GGSN node call trace

<call-trace>

Usage

```
<call-trace-information>
  <call-trace>
    <imsi>
      imsi
    </imsi>
    <msisdn>
      msisdn
    </msisdn>
    <time-started>
```


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```
      time-started
    </time-started>
    <nsapi-information>....</nsapi-information>
  </call-trace>
</call-trace-information>
```

Description Information about a GGSN node call trace

<call-trace-information>

Usage

```
<call-trace-information>
  <number-enabled>
    number-enabled
  </number-enabled>
  <number-active>
    number-active
  </number-active>
  <call-trace>....</call-trace>
</call-trace-information>
```

Description Information about call traces enabled for the GGSN node

<ccas-information>

Usage

```
<ccas-information>
  <ccas-statistics>....</ccas-statistics>
</ccas-information>
```

Description Information about credit control application systems

<ccas-information>

Usage

```
<sbcc-statistics-information>
  <ccas-information>
    <ccas-statistics>....</ccas-statistics>
  </ccas-information>
</sbcc-statistics-information>
```

Description Information about credit control application systems

<ccas-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <ccas-information>
```

```
      <ccas-statistics>....</ccas-statistics>
    </ccas-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Information about credit control application systems

<ccas-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <ccas-information>
        <ccas-statistics>....</ccas-statistics>
      </ccas-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about credit control application systems

<ccas-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <ccas-information>
      <ccas-statistics>....</ccas-statistics>
    </ccas-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Information about credit control application systems

<ccas-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <ccas-information>
      <ccas-statistics>....</ccas-statistics>
    </ccas-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Information about credit control application systems

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<ccas-statistics>

Usage

```
<ccas-information>
  <ccas-statistics>
    <ccas-identifier>
      ccas-identifier
    </ccas-identifier>
    <ccas-start-request>
      ccas-start-request
    </ccas-start-request>
    <ccas-start-request-failed>
      ccas-start-request-failed
    </ccas-start-request-failed>
    <ccas-update-request>
      ccas-update-request
    </ccas-update-request>
    <ccas-update-request-failed>
      ccas-update-request-failed
    </ccas-update-request-failed>
    <ccas-stop-request>
      ccas-stop-request
    </ccas-stop-request>
    <ccas-stop-request-failed>
      ccas-stop-request-failed
    </ccas-stop-request-failed>
    <ccas-user-service-denied>
      ccas-user-service-denied
    </ccas-user-service-denied>
    <ccas-user-unknown>
      ccas-user-unknown
    </ccas-user-unknown>
    <ccas-authorization-failure>
      ccas-authorization-failure
    </ccas-authorization-failure>
    <ccas-cc-not-applicable>
      ccas-cc-not-applicable
    </ccas-cc-not-applicable>
  </ccas-statistics>
</ccas-information>
```

Description Statistics for a credit control application system

<ccas-statistics>

Usage

```
<sbcc-statistics-information>
  <ccas-information>
    <ccas-statistics>
      <ccas-identifier>
        ccas-identifier
      </ccas-identifier>
      <ccas-start-request>
```

```
            ccas-start-request
          </ccas-start-request>
          <ccas-start-request-failed>
            ccas-start-request-failed
          </ccas-start-request-failed>
          <ccas-update-request>
            ccas-update-request
          </ccas-update-request>
          <ccas-update-request-failed>
            ccas-update-request-failed
          </ccas-update-request-failed>
          <ccas-stop-request>
            ccas-stop-request
          </ccas-stop-request>
          <ccas-stop-request-failed>
            ccas-stop-request-failed
          </ccas-stop-request-failed>
          <ccas-user-service-denied>
            ccas-user-service-denied
          </ccas-user-service-denied>
          <ccas-user-unknown>
            ccas-user-unknown
          </ccas-user-unknown>
          <ccas-authorization-failure>
            ccas-authorization-failure
          </ccas-authorization-failure>
          <ccas-cc-not-applicable>
            ccas-cc-not-applicable
          </ccas-cc-not-applicable>
        </ccas-statistics>
      </ccas-information>
    </sbcc-statistics-information>
```

Description Statistics for a credit control application system

<ccas-statistics>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <ccas-information>
      <ccas-statistics>
        <ccas-identifier>
          ccas-identifier
        </ccas-identifier>
        <ccas-start-request>
          ccas-start-request
        </ccas-start-request>
        <ccas-start-request-failed>
          ccas-start-request-failed
        </ccas-start-request-failed>
        <ccas-update-request>
          ccas-update-request
        </ccas-update-request>
```


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```
            <ccas-update-request-failed>
              ccas-update-request-failed
            </ccas-update-request-failed>
            <ccas-stop-request>
              ccas-stop-request
            </ccas-stop-request>
            <ccas-stop-request-failed>
              ccas-stop-request-failed
            </ccas-stop-request-failed>
            <ccas-user-service-denied>
              ccas-user-service-denied
            </ccas-user-service-denied>
            <ccas-user-unknown>
              ccas-user-unknown
            </ccas-user-unknown>
            <ccas-authorization-failure>
              ccas-authorization-failure
            </ccas-authorization-failure>
            <ccas-cc-not-applicable>
              ccas-cc-not-applicable
            </ccas-cc-not-applicable>
          </ccas-statistics>
        </ccas-information>
      </sbcc-statistics-information>
    </ggsn-interface>
```

Description Statistics for a credit control application system

<ccas-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <ccas-information>
        <ccas-statistics>
          <ccas-identifier>
            ccas-identifier
          </ccas-identifier>
          <ccas-start-request>
            ccas-start-request
          </ccas-start-request>
          <ccas-start-request-failed>
            ccas-start-request-failed
          </ccas-start-request-failed>
          <ccas-update-request>
            ccas-update-request
          </ccas-update-request>
          <ccas-update-request-failed>
            ccas-update-request-failed
          </ccas-update-request-failed>
          <ccas-stop-request>
            ccas-stop-request
          </ccas-stop-request>
```

```
                <ccas-stop-request-failed>
                  ccas-stop-request-failed
                </ccas-stop-request-failed>
                <ccas-user-service-denied>
                  ccas-user-service-denied
                </ccas-user-service-denied>
                <ccas-user-unknown>
                  ccas-user-unknown
                </ccas-user-unknown>
                <ccas-authorization-failure>
                  ccas-authorization-failure
                </ccas-authorization-failure>
                <ccas-cc-not-applicable>
                  ccas-cc-not-applicable
                </ccas-cc-not-applicable>
              </ccas-statistics>
            </ccas-information>
          </sbcc-statistics-information>
        </ggsn-interface>
      </ggsn-interface-information>
```

Description Statistics for a credit control application system

<ccas-statistics>

Usage

```
      <ggsn-statistics>
        <sbcc-statistics-information>
          <ccas-information>
            <ccas-statistics>
              <ccas-identifier>
                ccas-identifier
              </ccas-identifier>
              <ccas-start-request>
                ccas-start-request
              </ccas-start-request>
              <ccas-start-request-failed>
                ccas-start-request-failed
              </ccas-start-request-failed>
              <ccas-update-request>
                ccas-update-request
              </ccas-update-request>
              <ccas-update-request-failed>
                ccas-update-request-failed
              </ccas-update-request-failed>
              <ccas-stop-request>
                ccas-stop-request
              </ccas-stop-request>
              <ccas-stop-request-failed>
                ccas-stop-request-failed
              </ccas-stop-request-failed>
              <ccas-user-service-denied>
                ccas-user-service-denied
              </ccas-user-service-denied>
```


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```
            <ccas-user-unknown>
              ccas-user-unknown
            </ccas-user-unknown>
            <ccas-authorization-failure>
              ccas-authorization-failure
            </ccas-authorization-failure>
            <ccas-cc-not-applicable>
              ccas-cc-not-applicable
            </ccas-cc-not-applicable>
          </ccas-statistics>
        </ccas-information>
      </sbcc-statistics-information>
    </ggsn-statistics>
```

Description Statistics for a credit control application system

<ccas-statistics>

Usage

```
    <apn-statistics-information>
      <sbcc-statistics-information>
        <ccas-information>
          <ccas-statistics>
            <ccas-identifier>
              ccas-identifier
            </ccas-identifier>
            <ccas-start-request>
              ccas-start-request
            </ccas-start-request>
            <ccas-start-request-failed>
              ccas-start-request-failed
            </ccas-start-request-failed>
            <ccas-update-request>
              ccas-update-request
            </ccas-update-request>
            <ccas-update-request-failed>
              ccas-update-request-failed
            </ccas-update-request-failed>
            <ccas-stop-request>
              ccas-stop-request
            </ccas-stop-request>
            <ccas-stop-request-failed>
              ccas-stop-request-failed
            </ccas-stop-request-failed>
            <ccas-user-service-denied>
              ccas-user-service-denied
            </ccas-user-service-denied>
            <ccas-user-unknown>
              ccas-user-unknown
            </ccas-user-unknown>
            <ccas-authorization-failure>
              ccas-authorization-failure
            </ccas-authorization-failure>
            <ccas-cc-not-applicable>
```

```
                ccas-cc-not-applicable
              </ccas-cc-not-applicable>
            </ccas-statistics>
          </ccas-information>
        </sbcc-statistics-information>
      </apn-statistics-information>
```

Description Statistics for a credit control application system

<ccr-statistics>

Usage

```
<service-based-charging-for-gx>
  <ccr-statistics>
    <ccr-identifier>
      ccr-identifier
    </ccr-identifier>
    <authorization-failure>
      authorization-failure
    </authorization-failure>
    <authentication-failure>
      authentication-failure
    </authentication-failure>
    <session-failure>
      session-failure
    </session-failure>
  </ccr-statistics>
</service-based-charging-for-gx>
```

Description Statistics for a credit control application system

<ccr-statistics>

Usage

```
<apn-statistics-information>
  <service-based-charging-for-gx>
    <ccr-statistics>
      <ccr-identifier>
        ccr-identifier
      </ccr-identifier>
      <authorization-failure>
        authorization-failure
      </authorization-failure>
      <authentication-failure>
        authentication-failure
      </authentication-failure>
      <session-failure>
        session-failure
      </session-failure>
    </ccr-statistics>
  </service-based-charging-for-gx>
```


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```
</apn-statistics-information>
```

Description Statistics for a credit control application system

<charging-statistics-information>

Usage

```
<charging-statistics-information>
  <encoded-cdrs>
    encoded-cdrs
  </encoded-cdrs>
  <failed-encoded-cdrs>
    failed-encoded-cdrs
  </failed-encoded-cdrs>
  <generated-ftp-cdrs>
    generated-ftp-cdrs
  </generated-ftp-cdrs>
  <generated-gtpp-cdrs>
    generated-gtpp-cdrs
  </generated-gtpp-cdrs>
  <gtpp-log-cdrs>
    gtpp-log-cdrs
  </gtpp-log-cdrs>
  <gtpp-send-attempted-cdrs>
    gtpp-send-attempted-cdrs
  </gtpp-send-attempted-cdrs>
  <gtpp-send-failed-cdrs>
    gtpp-send-failed-cdrs
  </gtpp-send-failed-cdrs>
</charging-statistics-information>
```

Description Charging statistics

<charging-statistics-information>

Usage

```
<ggsn-statistics>
  <charging-statistics-information>
    <encoded-cdrs>
      encoded-cdrs
    </encoded-cdrs>
    <failed-encoded-cdrs>
      failed-encoded-cdrs
    </failed-encoded-cdrs>
    <generated-ftp-cdrs>
      generated-ftp-cdrs
    </generated-ftp-cdrs>
    <generated-gtpp-cdrs>
      generated-gtpp-cdrs
    </generated-gtpp-cdrs>
    <gtpp-log-cdrs>
      gtpp-log-cdrs
```

```
    </gtpp-log-cdrs>
    <gtpp-send-attempted-cdrs>
     gtpp-send-attempted-cdrs
    </gtpp-send-attempted-cdrs>
    <gtpp-send-failed-cdrs>
     gtpp-send-failed-cdrs
    </gtpp-send-failed-cdrs>
   </charging-statistics-information>
</ggsn-statistics>
```

Description Charging statistics

<cpu-info>

Usage

```
<ggsn-interface>
 <resources>
  <cpu-info>
   <cpu-id>
    cpu-id
   </cpu-id>
   <cpu-load>
    cpu-load
   </cpu-load>
  </cpu-info>
 </resources>
</ggsn-interface>
```

Description CPU usage

<cpu-info>

Usage

```
<ggsn-interface-information>
 <ggsn-interface>
  <resources>
   <cpu-info>
    <cpu-id>
     cpu-id
    </cpu-id>
    <cpu-load>
     cpu-load
    </cpu-load>
   </cpu-info>
  </resources>
 </ggsn-interface>
</ggsn-interface-information>
```

Description CPU usage

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<das-information>

Usage

```
<das-information>
  <das-statistics>....</das-statistics>
</das-information>
```

Description Information about diameter application systems

<das-information>

Usage

```
<sbcc-statistics-information>
  <das-information>
    <das-statistics>....</das-statistics>
  </das-information>
</sbcc-statistics-information>
```

Description Information about diameter application systems

<das-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <das-information>
      <das-statistics>....</das-statistics>
    </das-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Information about diameter application systems

<das-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <das-information>
        <das-statistics>....</das-statistics>
      </das-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about diameter application systems

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<das-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <das-information>
      <das-statistics>....</das-statistics>
    </das-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Information about diameter application systems

<das-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <das-information>
      <das-statistics>....</das-statistics>
    </das-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Information about diameter application systems

<das-statistics>

Usage

```
<das-information>
  <das-statistics>
    <das-identifier>
      das-identifier
    </das-identifier>
    <request>
      request
    </request>
  </das-statistics>
</das-information>
```

Description Statistics for a diameter application system

<das-statistics>

Usage

```
<sbcc-statistics-information>
  <das-information>
    <das-statistics>
      <das-identifier>
        das-identifier
```


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```
      </das-identifier>
      <request>
       request
      </request>
     </das-statistics>
    </das-information>
   </sbcc-statistics-information>
```

Description Statistics for a diameter application system

<das-statistics>

Usage

```
<ggsn-interface>
 <sbcc-statistics-information>
  <das-information>
   <das-statistics>
    <das-identifier>
     das-identifier
    </das-identifier>
    <request>
     request
    </request>
   </das-statistics>
  </das-information>
 </sbcc-statistics-information>
</ggsn-interface>
```

Description Statistics for a diameter application system

<das-statistics>

Usage

```
<ggsn-interface-information>
 <ggsn-interface>
  <sbcc-statistics-information>
   <das-information>
    <das-statistics>
     <das-identifier>
      das-identifier
     </das-identifier>
     <request>
      request
     </request>
    </das-statistics>
   </das-information>
  </sbcc-statistics-information>
 </ggsn-interface>
</ggsn-interface-information>
```

Description Statistics for a diameter application system

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<das-statistics>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <das-information>
      <das-statistics>
        <das-identifier>
          das-identifier
        </das-identifier>
        <request>
          request
        </request>
      </das-statistics>
    </das-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Statistics for a diameter application system

<das-statistics>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <das-information>
      <das-statistics>
        <das-identifier>
          das-identifier
        </das-identifier>
        <request>
          request
        </request>
      </das-statistics>
    </das-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Statistics for a diameter application system

<data-record-transfer-statistics>

Usage

```
<data-record-transfer-statistics>
  <request-transmitted>
    request-transmitted
  </request-transmitted>
  <response-received>
    response-received
  </response-received>
  <request-accepted>
    request-accepted
```


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```
</request-accepted>
<error-no-resources>
  error-no-resources
</error-no-resources>
<error-service-unsupported>
  error-service-unsupported
</error-service-unsupported>
<error-system-failure>
  error-system-failure
</error-system-failure>
<error-invalid-request-format>
  error-invalid-request-format
</error-invalid-request-format>
<error-version-unsupported>
  error-version-unsupported
</error-version-unsupported>
<error-request-unfulfilled>
  error-request-unfulfilled
</error-request-unfulfilled>
<error-decoding-error>
  error-decoding-error
</error-decoding-error>
<error-already-fulfilled>
  error-already-fulfilled
</error-already-fulfilled>
<error-duplicate-packet-fulfilled>
  error-duplicate-packet-fulfilled
</error-duplicate-packet-fulfilled>
<send-data-record-packet>
  send-data-record-packet
</send-data-record-packet>
</data-record-transfer-statistics>
```

Description GTP Prime data record transfer statistics

<data-record-transfer-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <data-record-transfer-statistics>
      <request-transmitted>
        request-transmitted
      </request-transmitted>
      <response-received>
        response-received
      </response-received>
      <request-accepted>
        request-accepted
      </request-accepted>
      <error-no-resources>
        error-no-resources
      </error-no-resources>
      <error-service-unsupported>
```

```
            error-service-unsupported
           </error-service-unsupported>
           <error-system-failure>
            error-system-failure
           </error-system-failure>
           <error-invalid-request-format>
            error-invalid-request-format
           </error-invalid-request-format>
           <error-version-unsupported>
            error-version-unsupported
           </error-version-unsupported>
           <error-request-unfulfilled>
            error-request-unfulfilled
           </error-request-unfulfilled>
           <error-decoding-error>
            error-decoding-error
           </error-decoding-error>
           <error-already-fulfilled>
            error-already-fulfilled
           </error-already-fulfilled>
           <error-duplicate-packet-fulfilled>
            error-duplicate-packet-fulfilled
           </error-duplicate-packet-fulfilled>
           <send-data-record-packet>
            send-data-record-packet
           </send-data-record-packet>
          </data-record-transfer-statistics>
         </gtp-prime-statistics>
        </gtp-prime-statistics-information>
```

Description GTP Prime data record transfer statistics

<downlink>

Usage

```
<downlink>
 <packets>
  packets
 </packets>
 <packets-ipv6>
  packets-ipv6
 </packets-ipv6>
 <bytes>
  bytes
 </bytes>
 <bytes-ipv6>
  bytes-ipv6
 </bytes-ipv6>
 <dropped-packets>
  dropped-packets
 </dropped-packets>
 <dropped-packets-ipv6>
  dropped-packets-ipv6
 </dropped-packets-ipv6>
```


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```
  <dropped-bytes>
   dropped-bytes
  </dropped-bytes>
  <dropped-bytes-ipv6>
   dropped-bytes-ipv6
  </dropped-bytes-ipv6>
</downlink>
```

Description Link traffic in the downlink direction

<downlink>

Usage

```
<ggsn-statistics>
  <downlink>
    <packets>
      packets
    </packets>
    <packets-ipv6>
      packets-ipv6
    </packets-ipv6>
    <bytes>
      bytes
    </bytes>
    <bytes-ipv6>
      bytes-ipv6
    </bytes-ipv6>
    <dropped-packets>
      dropped-packets
    </dropped-packets>
    <dropped-packets-ipv6>
      dropped-packets-ipv6
    </dropped-packets-ipv6>
    <dropped-bytes>
      dropped-bytes
    </dropped-bytes>
    <dropped-bytes-ipv6>
      dropped-bytes-ipv6
    </dropped-bytes-ipv6>
  </downlink>
</ggsn-statistics>
```

Description Link traffic in the downlink direction

<downlink>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <downlink>
      <packets>
        packets
```

```
        </packets>
        <packets-ipv6>
          packets-ipv6
        </packets-ipv6>
        <bytes>
          bytes
        </bytes>
        <bytes-ipv6>
          bytes-ipv6
        </bytes-ipv6>
        <dropped-packets>
          dropped-packets
        </dropped-packets>
        <dropped-packets-ipv6>
          dropped-packets-ipv6
        </dropped-packets-ipv6>
        <dropped-bytes>
          dropped-bytes
        </dropped-bytes>
        <dropped-bytes-ipv6>
          dropped-bytes-ipv6
        </dropped-bytes-ipv6>
      </downlink>
    </apn-statistics>
  </apn-statistics-information>
```

Description Link traffic in the downlink direction

<downlink>

Usage

```
<sgsn-statistics-information>
  <sgsn-statistics>
    <downlink>
      <packets>
        packets
      </packets>
      <packets-ipv6>
        packets-ipv6
      </packets-ipv6>
      <bytes>
        bytes
      </bytes>
      <bytes-ipv6>
        bytes-ipv6
      </bytes-ipv6>
      <dropped-packets>
        dropped-packets
      </dropped-packets>
      <dropped-packets-ipv6>
        dropped-packets-ipv6
      </dropped-packets-ipv6>
      <dropped-bytes>
        dropped-bytes
```


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```
      </dropped-bytes>
      <dropped-bytes-ipv6>
        dropped-bytes-ipv6
      </dropped-bytes-ipv6>
    </downlink>
  </sgsn-statistics>
</sgsn-statistics-information>
```

Description Link traffic in the downlink direction

<echo-request-statistics>

Usage

```
<echo-request-statistics>
  <request-received>
    request-received
  </request-received>
  <request-transmitted>
    request-transmitted
  </request-transmitted>
  <response-received>
    response-received
  </response-received>
  <response-transmitted>
    response-transmitted
  </response-transmitted>
</echo-request-statistics>
```

Description Echo request information

<echo-request-statistics>

Usage

```
<gtp-statistics-information>
  <gtp-statistics>
    <echo-request-statistics>
      <request-received>
        request-received
      </request-received>
      <request-transmitted>
        request-transmitted
      </request-transmitted>
      <response-received>
        response-received
      </response-received>
      <response-transmitted>
        response-transmitted
      </response-transmitted>
    </echo-request-statistics>
  </gtp-statistics>
</gtp-statistics-information>
```

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Description Echo request information

<echo-request-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <echo-request-statistics>
      <request-received>
        request-received
      </request-received>
      <request-transmitted>
        request-transmitted
      </request-transmitted>
      <response-received>
        response-received
      </response-received>
      <response-transmitted>
        response-transmitted
      </response-transmitted>
    </echo-request-statistics>
  </gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description Echo request information

<ggsn-interface>

Usage

```
<ggsn-interface>
  <service-interface>
    service-interface
  </service-interface>
  <weighted-pdp-context-load-in-payload>
    weighted-pdp-context-load-in-payload
  </weighted-pdp-context-load-in-payload>
  <weighted-pdp-context-load-in-control>
    weighted-pdp-context-load-in-control
  </weighted-pdp-context-load-in-control>
  <external-address>
    external-address
  </external-address>
  <internal-address>
    internal-address
  </internal-address>
  <operating-function>
    operating-function
  </operating-function>
  <hardware-version>
    hardware-version
  </hardware-version>
  <software-version>
    software-version
```


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```
  </software-version>
  <pdp>....</pdp>
  <resources>....</resources>
  <tft-statistics>....</tft-statistics>
  <time-started>
   time-started
  </time-started>
  <sbcc-statistics-information>....</sbcc-statistics-information>
</ggsn-interface>
```

Description Information about GGSN-C and GGSN-U service interfaces

<ggsn-interface>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <service-interface>
     service-interface
    </service-interface>
    <weighted-pdp-context-load-in-payload>
     weighted-pdp-context-load-in-payload
    </weighted-pdp-context-load-in-payload>
    <weighted-pdp-context-load-in-control>
     weighted-pdp-context-load-in-control
    </weighted-pdp-context-load-in-control>
    <external-address>
     external-address
    </external-address>
    <internal-address>
     internal-address
    </internal-address>
    <operating-function>
     operating-function
    </operating-function>
    <hardware-version>
     hardware-version
    </hardware-version>
    <software-version>
     software-version
    </software-version>
    <pdp>....</pdp>
    <resources>....</resources>
    <tft-statistics>....</tft-statistics>
    <time-started>
     time-started
    </time-started>
    <sbcc-statistics-information>....</sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about GGSN-C and GGSN-U service interfaces

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<ggsn-interface-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>....</ggsn-interface>
</ggsn-interface-information>
```

Description GGSN PIC information

<ggsn-pdp-per-user-category>

Usage

```
<ggsn-pdp-per-user-category>
  <user-category-line>....</user-category-line>
</ggsn-pdp-per-user-category>
```

Description Active PDP per user category

<ggsn-pdp-per-user-category>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <ggsn-pdp-per-user-category>
      <user-category-line>....</user-category-line>
    </ggsn-pdp-per-user-category>
  </apn-statistics>
</apn-statistics-information>
```

Description Active PDP per user category

<ggsn-statistics>

Usage

```
<ggsn-statistics>
  <time-started>
    time-started
  </time-started>
  <time-sampled>
    time-sampled
  </time-sampled>
  <pdp-context-statistics>....</pdp-context-statistics>

<interface-pdp-context-statistics-information>....</interface-pdp-context-statistics-information>

  <subscriber-count>
    subscriber-count
  </subscriber-count>
  <uplink>....</uplink>
  <downlink>....</downlink>
```


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```
<tft-filter-count>
  tft-filter-count
</tft-filter-count>
<wlan-pdp-context-activation-procedures>
  wlan-pdp-context-activation-procedures
</wlan-pdp-context-activation-procedures>
<wlan-processed-uplink-bytes>
  wlan-processed-uplink-bytes
</wlan-processed-uplink-bytes>
<wlan-dropped-uplink-packets>
  wlan-dropped-uplink-packets
</wlan-dropped-uplink-packets>
<wlan-processed-uplink-packets>
  wlan-processed-uplink-packets
</wlan-processed-uplink-packets>
<wlan-completed-pdp-context-activations>
  wlan-completed-pdp-context-activations
</wlan-completed-pdp-context-activations>
<wlan-active-pdp-contexts>
  wlan-active-pdp-contexts
</wlan-active-pdp-contexts>
<wlan-processed-downlink-bytes>
  wlan-processed-downlink-bytes
</wlan-processed-downlink-bytes>
<wlan-dropped-downlink-packets>
  wlan-dropped-downlink-packets
</wlan-dropped-downlink-packets>
<wlan-processed-downlink-packets>
  wlan-processed-downlink-packets
</wlan-processed-downlink-packets>
<weighted-pdp-context-load>....</weighted-pdp-context-load>
<sbcc-statistics-information>....</sbcc-statistics-information>
<charging-statistics-information>....</charging-statistics-information>
<radius-statistics-information>....</radius-statistics-information>
</ggsn-statistics>
```

Description Global statistics for the GGSN node

<gtp-error-statistics>

Usage

```
<gtp-error-statistics>
  <request-accepted>
    request-accepted
  </request-accepted>
  <error-indication-received>
    error-indication-received
  </error-indication-received>
  <error-indication-transmitted>
    error-indication-transmitted
  </error-indication-transmitted>
  <error-version-unsupported>
    error-version-unsupported
  </error-version-unsupported>
```

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```
<error-invalid-request-format>
  error-invalid-request-format
</error-invalid-request-format>
<error-invalid-request-format-when-update>
  error-invalid-request-format-when-update
</error-invalid-request-format-when-update>
<error-invalid-request-format-when-delete>
  error-invalid-request-format-when-delete
</error-invalid-request-format-when-delete>
<error-no-resources>
  error-no-resources
</error-no-resources>
<error-no-dynamic-address-available>
  error-no-dynamic-address-available
</error-no-dynamic-address-available>
<error-no-memory>
  error-no-memory
</error-no-memory>
<error-unknown-apn>
  error-unknown-apn
</error-unknown-apn>
<error-unknown-pdp-address-or-type>
  error-unknown-pdp-address-or-type
</error-unknown-pdp-address-or-type>
<error-authentication-failed>
  error-authentication-failed
</error-authentication-failed>
<error-system-failure>
  error-system-failure
</error-system-failure>
<error-system-failure-when-update>
  error-system-failure-when-update
</error-system-failure-when-update>
<error-tft-error-semantic>
  error-tft-error-semantic
</error-tft-error-semantic>
<error-tft-error-semantic-when-update>
  error-tft-error-semantic-when-update
</error-tft-error-semantic-when-update>
<error-tft-error-syntax>
  error-tft-error-syntax
</error-tft-error-syntax>
<error-tft-error-syntax-when-update>
  error-tft-error-syntax-when-update
</error-tft-error-syntax-when-update>
<error-packet-filter-semantic>
  error-packet-filter-semantic
</error-packet-filter-semantic>
<error-packet-filter-semantic-when-update>
  error-packet-filter-semantic-when-update
</error-packet-filter-semantic-when-update>
<error-packet-filter-syntax>
  error-packet-filter-syntax
</error-packet-filter-syntax>
<error-packet-filter-syntax-when-update>
  error-packet-filter-syntax-when-update
```


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```
</error-packet-filter-syntax-when-update>
<error-mandatory-ie-missing>
  error-mandatory-ie-missing
</error-mandatory-ie-missing>
<error-mandatory-ie-missing-when-update>
  error-mandatory-ie-missing-when-update
</error-mandatory-ie-missing-when-update>
<error-mandatory-ie-missing-when-delete>
  error-mandatory-ie-missing-when-delete
</error-mandatory-ie-missing-when-delete>
<error-mandatory-ie-invalid>
  error-mandatory-ie-invalid
</error-mandatory-ie-invalid>
<error-mandatory-ie-invalid-when-update>
  error-mandatory-ie-invalid-when-update
</error-mandatory-ie-invalid-when-update>
<error-mandatory-ie-invalid-when-delete>
  error-mandatory-ie-invalid-when-delete
</error-mandatory-ie-invalid-when-delete>
<error-optional-ie-invalid>
  error-optional-ie-invalid
</error-optional-ie-invalid>
<error-optional-ie-invalid-when-update>
  error-optional-ie-invalid-when-update
</error-optional-ie-invalid-when-update>
<error-optional-ie-invalid-when-delete>
  error-optional-ie-invalid-when-delete
</error-optional-ie-invalid-when-delete>
<error-reference-invalid>
  error-reference-invalid
</error-reference-invalid>
<error-reference-invalid-when-update>
  error-reference-invalid-when-update
</error-reference-invalid-when-update>
<error-reference-invalid-when-delete>
  error-reference-invalid-when-delete
</error-reference-invalid-when-delete>
<error-service-unsupported>
  error-service-unsupported
</error-service-unsupported>
<error-already-activated>
  error-already-activated
</error-already-activated>
<error-access-denied>
  error-access-denied
</error-access-denied>
</gtp-error-statistics>
```

Description GTP error statistics

<gtp-error-statistics>

Usage

```
<gtp-statistics-information>
```

```
<gtp-statistics>
  <gtp-error-statistics>
    <request-accepted>
      request-accepted
    </request-accepted>
    <error-indication-received>
      error-indication-received
    </error-indication-received>
    <error-indication-transmitted>
      error-indication-transmitted
    </error-indication-transmitted>
    <error-version-unsupported>
      error-version-unsupported
    </error-version-unsupported>
    <error-invalid-request-format>
      error-invalid-request-format
    </error-invalid-request-format>
    <error-invalid-request-format-when-update>
      error-invalid-request-format-when-update
    </error-invalid-request-format-when-update>
    <error-invalid-request-format-when-delete>
      error-invalid-request-format-when-delete
    </error-invalid-request-format-when-delete>
    <error-no-resources>
      error-no-resources
    </error-no-resources>
    <error-no-dynamic-address-available>
      error-no-dynamic-address-available
    </error-no-dynamic-address-available>
    <error-no-memory>
      error-no-memory
    </error-no-memory>
    <error-unknown-apn>
      error-unknown-apn
    </error-unknown-apn>
    <error-unknown-pdp-address-or-type>
      error-unknown-pdp-address-or-type
    </error-unknown-pdp-address-or-type>
    <error-authentication-failed>
      error-authentication-failed
    </error-authentication-failed>
    <error-system-failure>
      error-system-failure
    </error-system-failure>
    <error-system-failure-when-update>
      error-system-failure-when-update
    </error-system-failure-when-update>
    <error-tft-error-semantic>
      error-tft-error-semantic
    </error-tft-error-semantic>
    <error-tft-error-semantic-when-update>
      error-tft-error-semantic-when-update
    </error-tft-error-semantic-when-update>
    <error-tft-error-syntax>
      error-tft-error-syntax
    </error-tft-error-syntax>
```


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```
<error-tft-error-syntax-when-update>
  error-tft-error-syntax-when-update
</error-tft-error-syntax-when-update>
<error-packet-filter-semantic>
  error-packet-filter-semantic
</error-packet-filter-semantic>
<error-packet-filter-semantic-when-update>
  error-packet-filter-semantic-when-update
</error-packet-filter-semantic-when-update>
<error-packet-filter-syntax>
  error-packet-filter-syntax
</error-packet-filter-syntax>
<error-packet-filter-syntax-when-update>
  error-packet-filter-syntax-when-update
</error-packet-filter-syntax-when-update>
<error-mandatory-ie-missing>
  error-mandatory-ie-missing
</error-mandatory-ie-missing>
<error-mandatory-ie-missing-when-update>
  error-mandatory-ie-missing-when-update
</error-mandatory-ie-missing-when-update>
<error-mandatory-ie-missing-when-delete>
  error-mandatory-ie-missing-when-delete
</error-mandatory-ie-missing-when-delete>
<error-mandatory-ie-invalid>
  error-mandatory-ie-invalid
</error-mandatory-ie-invalid>
<error-mandatory-ie-invalid-when-update>
  error-mandatory-ie-invalid-when-update
</error-mandatory-ie-invalid-when-update>
<error-mandatory-ie-invalid-when-delete>
  error-mandatory-ie-invalid-when-delete
</error-mandatory-ie-invalid-when-delete>
<error-optional-ie-invalid>
  error-optional-ie-invalid
</error-optional-ie-invalid>
<error-optional-ie-invalid-when-update>
  error-optional-ie-invalid-when-update
</error-optional-ie-invalid-when-update>
<error-optional-ie-invalid-when-delete>
  error-optional-ie-invalid-when-delete
</error-optional-ie-invalid-when-delete>
<error-reference-invalid>
  error-reference-invalid
</error-reference-invalid>
<error-reference-invalid-when-update>
  error-reference-invalid-when-update
</error-reference-invalid-when-update>
<error-reference-invalid-when-delete>
  error-reference-invalid-when-delete
</error-reference-invalid-when-delete>
<error-service-unsupported>
  error-service-unsupported
</error-service-unsupported>
<error-already-activated>
  error-already-activated
```

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```
        </error-already-activated>
        <error-access-denied>
          error-access-denied
        </error-access-denied>
      </gtp-error-statistics>
    </gtp-statistics>
  </gtp-statistics-information>
```

Description GTP error statistics

<gtp-error-statistics>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <gtp-error-statistics>
      <request-accepted>
        request-accepted
      </request-accepted>
      <error-indication-received>
        error-indication-received
      </error-indication-received>
      <error-indication-transmitted>
        error-indication-transmitted
      </error-indication-transmitted>
      <error-version-unsupported>
        error-version-unsupported
      </error-version-unsupported>
      <error-invalid-request-format>
        error-invalid-request-format
      </error-invalid-request-format>
      <error-invalid-request-format-when-update>
        error-invalid-request-format-when-update
      </error-invalid-request-format-when-update>
      <error-invalid-request-format-when-delete>
        error-invalid-request-format-when-delete
      </error-invalid-request-format-when-delete>
      <error-no-resources>
        error-no-resources
      </error-no-resources>
      <error-no-dynamic-address-available>
        error-no-dynamic-address-available
      </error-no-dynamic-address-available>
      <error-no-memory>
        error-no-memory
      </error-no-memory>
      <error-unknown-apn>
        error-unknown-apn
      </error-unknown-apn>
      <error-unknown-pdp-address-or-type>
        error-unknown-pdp-address-or-type
      </error-unknown-pdp-address-or-type>
      <error-authentication-failed>
        error-authentication-failed
```


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```
</error-authentication-failed>
<error-system-failure>
  error-system-failure
</error-system-failure>
<error-system-failure-when-update>
  error-system-failure-when-update
</error-system-failure-when-update>
<error-tft-error-semantic>
  error-tft-error-semantic
</error-tft-error-semantic>
<error-tft-error-semantic-when-update>
  error-tft-error-semantic-when-update
</error-tft-error-semantic-when-update>
<error-tft-error-syntax>
  error-tft-error-syntax
</error-tft-error-syntax>
<error-tft-error-syntax-when-update>
  error-tft-error-syntax-when-update
</error-tft-error-syntax-when-update>
<error-packet-filter-semantic>
  error-packet-filter-semantic
</error-packet-filter-semantic>
<error-packet-filter-semantic-when-update>
  error-packet-filter-semantic-when-update
</error-packet-filter-semantic-when-update>
<error-packet-filter-syntax>
  error-packet-filter-syntax
</error-packet-filter-syntax>
<error-packet-filter-syntax-when-update>
  error-packet-filter-syntax-when-update
</error-packet-filter-syntax-when-update>
<error-mandatory-ie-missing>
  error-mandatory-ie-missing
</error-mandatory-ie-missing>
<error-mandatory-ie-missing-when-update>
  error-mandatory-ie-missing-when-update
</error-mandatory-ie-missing-when-update>
<error-mandatory-ie-missing-when-delete>
  error-mandatory-ie-missing-when-delete
</error-mandatory-ie-missing-when-delete>
<error-mandatory-ie-invalid>
  error-mandatory-ie-invalid
</error-mandatory-ie-invalid>
<error-mandatory-ie-invalid-when-update>
  error-mandatory-ie-invalid-when-update
</error-mandatory-ie-invalid-when-update>
<error-mandatory-ie-invalid-when-delete>
  error-mandatory-ie-invalid-when-delete
</error-mandatory-ie-invalid-when-delete>
<error-optional-ie-invalid>
  error-optional-ie-invalid
</error-optional-ie-invalid>
<error-optional-ie-invalid-when-update>
  error-optional-ie-invalid-when-update
</error-optional-ie-invalid-when-update>
<error-optional-ie-invalid-when-delete>
```

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```
            error-optional-ie-invalid-when-delete
          </error-optional-ie-invalid-when-delete>
          <error-reference-invalid>
            error-reference-invalid
          </error-reference-invalid>
          <error-reference-invalid-when-update>
            error-reference-invalid-when-update
          </error-reference-invalid-when-update>
          <error-reference-invalid-when-delete>
            error-reference-invalid-when-delete
          </error-reference-invalid-when-delete>
          <error-service-unsupported>
            error-service-unsupported
          </error-service-unsupported>
          <error-already-activated>
            error-already-activated
          </error-already-activated>
          <error-access-denied>
            error-access-denied
          </error-access-denied>
        </gtp-error-statistics>
      </apn-statistics>
    </apn-statistics-information>
```

Description GTP error statistics

<gtp-error-statistics>

Usage

```
<sgsn-statistics-information>
  <sgsn-statistics>
    <gtp-error-statistics>
      <request-accepted>
        request-accepted
      </request-accepted>
      <error-indication-received>
        error-indication-received
      </error-indication-received>
      <error-indication-transmitted>
        error-indication-transmitted
      </error-indication-transmitted>
      <error-version-unsupported>
        error-version-unsupported
      </error-version-unsupported>
      <error-invalid-request-format>
        error-invalid-request-format
      </error-invalid-request-format>
      <error-invalid-request-format-when-update>
        error-invalid-request-format-when-update
      </error-invalid-request-format-when-update>
      <error-invalid-request-format-when-delete>
        error-invalid-request-format-when-delete
      </error-invalid-request-format-when-delete>
      <error-no-resources>
```


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```
  error-no-resources
</error-no-resources>
<error-no-dynamic-address-available>
  error-no-dynamic-address-available
</error-no-dynamic-address-available>
<error-no-memory>
  error-no-memory
</error-no-memory>
<error-unknown-apn>
  error-unknown-apn
</error-unknown-apn>
<error-unknown-pdp-address-or-type>
  error-unknown-pdp-address-or-type
</error-unknown-pdp-address-or-type>
<error-authentication-failed>
  error-authentication-failed
</error-authentication-failed>
<error-system-failure>
  error-system-failure
</error-system-failure>
<error-system-failure-when-update>
  error-system-failure-when-update
</error-system-failure-when-update>
<error-tft-error-semantic>
  error-tft-error-semantic
</error-tft-error-semantic>
<error-tft-error-semantic-when-update>
  error-tft-error-semantic-when-update
</error-tft-error-semantic-when-update>
<error-tft-error-syntax>
  error-tft-error-syntax
</error-tft-error-syntax>
<error-tft-error-syntax-when-update>
  error-tft-error-syntax-when-update
</error-tft-error-syntax-when-update>
<error-packet-filter-semantic>
  error-packet-filter-semantic
</error-packet-filter-semantic>
<error-packet-filter-semantic-when-update>
  error-packet-filter-semantic-when-update
</error-packet-filter-semantic-when-update>
<error-packet-filter-syntax>
  error-packet-filter-syntax
</error-packet-filter-syntax>
<error-packet-filter-syntax-when-update>
  error-packet-filter-syntax-when-update
</error-packet-filter-syntax-when-update>
<error-mandatory-ie-missing>
  error-mandatory-ie-missing
</error-mandatory-ie-missing>
<error-mandatory-ie-missing-when-update>
  error-mandatory-ie-missing-when-update
</error-mandatory-ie-missing-when-update>
<error-mandatory-ie-missing-when-delete>
  error-mandatory-ie-missing-when-delete
</error-mandatory-ie-missing-when-delete>
```

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```
<error-mandatory-ie-invalid>
  error-mandatory-ie-invalid
</error-mandatory-ie-invalid>
<error-mandatory-ie-invalid-when-update>
  error-mandatory-ie-invalid-when-update
</error-mandatory-ie-invalid-when-update>
<error-mandatory-ie-invalid-when-delete>
  error-mandatory-ie-invalid-when-delete
</error-mandatory-ie-invalid-when-delete>
<error-optional-ie-invalid>
  error-optional-ie-invalid
</error-optional-ie-invalid>
<error-optional-ie-invalid-when-update>
  error-optional-ie-invalid-when-update
</error-optional-ie-invalid-when-update>
<error-optional-ie-invalid-when-delete>
  error-optional-ie-invalid-when-delete
</error-optional-ie-invalid-when-delete>
<error-reference-invalid>
  error-reference-invalid
</error-reference-invalid>
<error-reference-invalid-when-update>
  error-reference-invalid-when-update
</error-reference-invalid-when-update>
<error-reference-invalid-when-delete>
  error-reference-invalid-when-delete
</error-reference-invalid-when-delete>
<error-service-unsupported>
  error-service-unsupported
</error-service-unsupported>
<error-already-activated>
  error-already-activated
</error-already-activated>
<error-access-denied>
  error-access-denied
</error-access-denied>
</gtp-error-statistics>
</sgsn-statistics>
</sgsn-statistics-information>
```

Description GTP error statistics

<gtp-prime-error-statistics>

Usage

```
<gtp-prime-error-statistics>
  <error-mandatory-ie-missing>
    error-mandatory-ie-missing
  </error-mandatory-ie-missing>
  <error-mandatory-ie-invalid>
    error-mandatory-ie-invalid
  </error-mandatory-ie-invalid>
  <error-optional-ie-invalid>
    error-optional-ie-invalid
```


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```
  </error-optional-ie-invalid>
  <error-reference-invalid>
   error-reference-invalid
  </error-reference-invalid>
</gtp-prime-error-statistics>
```

Description GTP Prime error statistics

<gtp-prime-error-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <gtp-prime-error-statistics>
      <error-mandatory-ie-missing>
        error-mandatory-ie-missing
      </error-mandatory-ie-missing>
      <error-mandatory-ie-invalid>
        error-mandatory-ie-invalid
      </error-mandatory-ie-invalid>
      <error-optional-ie-invalid>
        error-optional-ie-invalid
      </error-optional-ie-invalid>
      <error-reference-invalid>
        error-reference-invalid
      </error-reference-invalid>
    </gtp-prime-error-statistics>
  </gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description GTP Prime error statistics

<gtp-prime-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <service-interface>
      service-interface
    </service-interface>
    <echo-request-statistics>....</echo-request-statistics>
    <version-unsupported-statistics>....</version-unsupported-statistics>
    <node-alive-request-statistics>....</node-alive-request-statistics>
    <redirection-request-statistics>....</redirection-request-statistics>
    <data-record-transfer-statistics>....</data-record-transfer-statistics>
    <gtp-prime-error-statistics>....</gtp-prime-error-statistics>
  </gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description GTP Prime statistics information

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<gtp-prime-statistics-information>

Usage

```
<gtp-prime-statistics-information>
  <billing-gateway>....</billing-gateway>
  <gtp-prime-statistics>....</gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description GTP Prime statistics information

<gtp-statistics>

Usage

```
<gtp-statistics-information>
  <gtp-statistics>
    <service-interface>
      service-interface
    </service-interface>
    <uplink-packets>
      uplink-packets
    </uplink-packets>
    <uplink-bytes>
      uplink-bytes
    </uplink-bytes>
    <downlink-packets>
      downlink-packets
    </downlink-packets>
    <downlink-bytes>
      downlink-bytes
    </downlink-bytes>
    <dropped-packets>
      dropped-packets
    </dropped-packets>
    <active-tunnels>
      active-tunnels
    </active-tunnels>
    <created-tunnels>
      created-tunnels
    </created-tunnels>
    <echo-request-statistics>....</echo-request-statistics>
    <version-unsupported-statistics>....</version-unsupported-statistics>
    <pdp-request-statistics>....</pdp-request-statistics>
    <gtp-error-statistics>....</gtp-error-statistics>
  </gtp-statistics>
</gtp-statistics-information>
```

Description GTP statistics information

<gtp-statistics-information>

Usage

```
<gtp-statistics-information>
```


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```
  <gtp-statistics>....</gtp-statistics>
</gtp-statistics-information>
```

Description GTP statistics information

<incoming>

Usage

```
<signalling>
  <incoming>
    <packets>
      packets
    </packets>
    <bytes>
      bytes
    </bytes>
  </incoming>
</signalling>
```

Description

<incoming>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <signalling>
      <incoming>
        <packets>
          packets
        </packets>
        <bytes>
          bytes
        </bytes>
      </incoming>
    </signalling>
  </apn-statistics>
</apn-statistics-information>
```

Description

<inspection-information>

Usage

```
<inspection-information>
  <packet-inspection>
    packet-inspection
  </packet-inspection>
</inspection-information>
```

Description Packet inspection related information

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<interface-action-results>

Usage

```
<interface-action-results>
  <interface-action>
    interface-action
  </interface-action>
  <service-interface>
    service-interface
  </service-interface>
  <daemon-name>
    daemon-name
  </daemon-name>
</interface-action-results>
```

Description Results of an interface action

<interface-pdp-context-deletion>

Usage

```
<apn-pdp-context-deletion-results>
  <interface-pdp-context-deletion-information>
    <interface-pdp-context-deletion>
      <pdp-deleted>
        pdp-deleted
      </pdp-deleted>
      <service-interface>
        service-interface
      </service-interface>
    </interface-pdp-context-deletion>
  </interface-pdp-context-deletion-information>
</apn-pdp-context-deletion-results>
```

Description

<interface-pdp-context-deletion-information>

Usage

```
<apn-pdp-context-deletion-results>
  <interface-pdp-context-deletion-information>
    <interface-pdp-context-deletion>....</interface-pdp-context-deletion>
  </interface-pdp-context-deletion-information>
</apn-pdp-context-deletion-results>
```

Description Information about PDP context deletion on a per-interface basis

<interface-pdp-context-statistics>

Usage

```
<interface-pdp-context-statistics>
  <service-interface>
```


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```
  service-interface
 </service-interface>
 <pdp-context-statistics>....</pdp-context-statistics>
</interface-pdp-context-statistics>
```

Description Interface-level PDP context statistics

<interface-pdp-context-statistics>

Usage

```
<ggsn-statistics>
 <interface-pdp-context-statistics-information>
  <interface-pdp-context-statistics>
   <service-interface>
    service-interface
   </service-interface>
   <pdp-context-statistics>....</pdp-context-statistics>
  </interface-pdp-context-statistics>
 </interface-pdp-context-statistics-information>
</ggsn-statistics>
```

Description Interface-level PDP context statistics

<interface-pdp-context-statistics-information>

Usage

```
<ggsn-statistics>
 <interface-pdp-context-statistics-information>
  <interface-pdp-context-statistics>....</interface-pdp-context-statistics>
 </interface-pdp-context-statistics-information>
</ggsn-statistics>
```

Description

<l2tp-tunnel-packet-statistics>

Usage

```
<l2tp-tunnel-packet-statistics>
 <control-tx-packets>
  control-tx-packets
 </control-tx-packets>
 <control-rx-packets>
  control-rx-packets
 </control-rx-packets>
 <data-tx-packets>
  data-tx-packets
 </data-tx-packets>
 <data-rx-packets>
  data-rx-packets
 </data-rx-packets>
 <discard-tx-packets>
```

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```
    discard-tx-packets
   </discard-tx-packets>
   <discard-rx-packets>
    discard-rx-packets
   </discard-rx-packets>
  </l2tp-tunnel-packet-statistics>
```

Description L2TP tunnel statistics

<l2tp-tunnel-packet-statistics>

Usage

```
<l2tp-tunnel-statistics-information>
 <l2tp-tunnel-statistics>
  <l2tp-tunnel-packet-statistics>
   <control-tx-packets>
    control-tx-packets
   </control-tx-packets>
   <control-rx-packets>
    control-rx-packets
   </control-rx-packets>
   <data-tx-packets>
    data-tx-packets
   </data-tx-packets>
   <data-rx-packets>
    data-rx-packets
   </data-rx-packets>
   <discard-tx-packets>
    discard-tx-packets
   </discard-tx-packets>
   <discard-rx-packets>
    discard-rx-packets
   </discard-rx-packets>
  </l2tp-tunnel-packet-statistics>
 </l2tp-tunnel-statistics>
</l2tp-tunnel-statistics-information>
```

Description L2TP tunnel statistics

<l2tp-tunnel-statistics>

Usage

```
<l2tp-tunnel-statistics-information>
 <l2tp-tunnel-statistics>
  <local-tid>
   local-tid
  </local-tid>
  <remote-tid>
   remote-tid
  </remote-tid>
  <local-ip>
   local-ip
```


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```
    </local-ip>
    <remote-ip>
     remote-ip
    </remote-ip>
    <active-sessions>
     active-sessions
    </active-sessions>
    <l2tp-tunnel-packet-statistics>....</l2tp-tunnel-packet-statistics>
   </l2tp-tunnel-statistics>
</l2tp-tunnel-statistics-information>
```

Description L2TP tunnel-statistics for a single tunnel

<l2tp-tunnel-statistics-information>

Usage

```
<l2tp-tunnel-statistics-information>
  <l2tp-tunnel-statistics>....</l2tp-tunnel-statistics>
</l2tp-tunnel-statistics-information>
```

Description L2TP tunnel-statistics for the GGSN

<logical-apn-statistics>

Usage

```
<logical-apn-statistics-information>
  <logical-apn-statistics>
    <name>
     name
    </name>
    <pdp-attempted-activation>
     pdp-attempted-activation
    </pdp-attempted-activation>
    <pdp-blocked>
     pdp-blocked
    </pdp-blocked>
    <default-apn-selected>
     default-apn-selected
    </default-apn-selected>
    <default-apn-invalid>
     default-apn-invalid
    </default-apn-invalid>
    <username-based-apn-selected>
     username-based-apn-selected
    </username-based-apn-selected>
    <username-based-apn-invalid>
     username-based-apn-invalid
    </username-based-apn-invalid>
  </logical-apn-statistics>
</logical-apn-statistics-information>
```

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Description Statistics for a single logical APN

<logical-apn-statistics-information>

Usage

```
<logical-apn-statistics-information>
  <logical-apn-statistics>....</logical-apn-statistics>
</logical-apn-statistics-information>
```

Description Logical APN statistics for the GGSN

<mobile-user>

Usage

```
<mobile-user-information>
  <mobile-user>
    <imsi>
      imsi
    </imsi>
    <msisdn>
      msisdn
    </msisdn>
    <pdp-context-information>....</pdp-context-information>
  </mobile-user>
</mobile-user-information>
```

Description Information about a mobile user

<mobile-user>

Usage

```
<pdp-context-deletion-results>
  <mobile-user>
    <imsi>
      imsi
    </imsi>
    <msisdn>
      msisdn
    </msisdn>
    <pdp-context-information>....</pdp-context-information>
  </mobile-user>
</pdp-context-deletion-results>
```

Description Information about a mobile user

<mobile-user-information>

Usage

```
<mobile-user-information>
  <mobile-user>....</mobile-user>
```


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```
</mobile-user-information>
```

Description

<node-action-results>

Usage

```
<node-action-results>
  <node-action>
    node-action
  </node-action>
</node-action-results>
```

Description Results of a GGSN node action command

<node-alive-request-statistics>

Usage

```
<node-alive-request-statistics>
  <request-received>
    request-received
  </request-received>
  <request-transmitted>
    request-transmitted
  </request-transmitted>
  <response-received>
    response-received
  </response-received>
  <response-transmitted>
    response-transmitted
  </response-transmitted>
</node-alive-request-statistics>
```

Description GTP Prime node alive request statistics

<node-alive-request-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <node-alive-request-statistics>
      <request-received>
        request-received
      </request-received>
      <request-transmitted>
        request-transmitted
      </request-transmitted>
      <response-received>
        response-received
      </response-received>
      <response-transmitted>
```

```
            response-transmitted
           </response-transmitted>
          </node-alive-request-statistics>
         </gtp-prime-statistics>
        </gtp-prime-statistics-information>
```

Description GTP Prime node alive request statistics

<nsapi-information>

Usage

```
<call-trace>
 <nsapi-information>
  <nsapi>
   nsapi
  </nsapi>
 </nsapi-information>
</call-trace>
```

Description List of NSAPIs associated with user

<nsapi-information>

Usage

```
<call-trace-information>
 <call-trace>
  <nsapi-information>
   <nsapi>
    nsapi
   </nsapi>
  </nsapi-information>
 </call-trace>
</call-trace-information>
```

Description List of NSAPIs associated with user

<outgoing>

Usage

```
<signalling>
 <outgoing>
  <packets>
   packets
  </packets>
  <bytes>
   bytes
  </bytes>
 </outgoing>
</signalling>
```


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Description

<outgoing>

Usage

```
<apn-statistics-information>
 <apn-statistics>
  <signalling>
   <outgoing>
    <packets>
     packets
    </packets>
    <bytes>
     bytes
    </bytes>
   </outgoing>
  </signalling>
 </apn-statistics>
</apn-statistics-information>
```

Description

<packet-filter>

Usage

```
<packet-filter>
 <evaluation-precedence>
  evaluation-precedence
 </evaluation-precedence>
 <source-address>
  source-address
 </source-address>
 <source-mask>
  source-mask
 </source-mask>
 <source-port-range>
  source-port-range
 </source-port-range>
 <destination-port-range>
  destination-port-range
 </destination-port-range>
 <diffserv-code-point>
  diffserv-code-point
 </diffserv-code-point>
 <flow-label>
  flow-label
 </flow-label>
 <spi>
  spi
 </spi>
 <protocol>
  protocol
 </protocol>
</packet-filter>
```

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Description

<packet-filter>

Usage

```
<pdp-context>
  <traffic-flow-template-information>
    <traffic-flow-template>
      <packet-filter-information>
        <packet-filter>
          <evaluation-precedence>
            evaluation-precedence
          </evaluation-precedence>
          <source-address>
            source-address
          </source-address>
          <source-mask>
            source-mask
          </source-mask>
          <source-port-range>
            source-port-range
          </source-port-range>
          <destination-port-range>
            destination-port-range
          </destination-port-range>
          <diffserv-code-point>
            diffserv-code-point
          </diffserv-code-point>
          <flow-label>
            flow-label
          </flow-label>
          <spi>
            spi
          </spi>
          <protocol>
            protocol
          </protocol>
        </packet-filter>
      </packet-filter-information>
    </traffic-flow-template>
  </traffic-flow-template-information>
</pdp-context>
```

Description

<packet-filter>

Usage

```
<mobile-user-information>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>
        <traffic-flow-template-information>
          <traffic-flow-template>
            <packet-filter-information>
```


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```
                    <packet-filter>
                     <evaluation-precedence>
                      evaluation-precedence
                     </evaluation-precedence>
                     <source-address>
                      source-address
                     </source-address>
                     <source-mask>
                      source-mask
                     </source-mask>
                     <source-port-range>
                      source-port-range
                     </source-port-range>
                     <destination-port-range>
                      destination-port-range
                     </destination-port-range>
                     <diffserv-code-point>
                      diffserv-code-point
                     </diffserv-code-point>
                     <flow-label>
                      flow-label
                     </flow-label>
                     <spi>
                      spi
                     </spi>
                     <protocol>
                      protocol
                     </protocol>
                    </packet-filter>
                   </packet-filter-information>
                  </traffic-flow-template>
                 </traffic-flow-template-information>
                </pdp-context>
               </pdp-context-information>
              </mobile-user>
             </mobile-user-information>
```

Description

<packet-filter>

Usage

```
<pdp-context-deletion-results>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
    <traffic-flow-template-information>
     <traffic-flow-template>
      <packet-filter-information>
       <packet-filter>
        <evaluation-precedence>
         evaluation-precedence
        </evaluation-precedence>
        <source-address>
         source-address
```

```
                    </source-address>
                    <source-mask>
                      source-mask
                    </source-mask>
                    <source-port-range>
                      source-port-range
                    </source-port-range>
                    <destination-port-range>
                      destination-port-range
                    </destination-port-range>
                    <diffserv-code-point>
                      diffserv-code-point
                    </diffserv-code-point>
                    <flow-label>
                      flow-label
                    </flow-label>
                    <spi>
                      spi
                    </spi>
                    <protocol>
                      protocol
                    </protocol>
                  </packet-filter>
                </packet-filter-information>
              </traffic-flow-template>
            </traffic-flow-template-information>
          </pdp-context>
        </pdp-context-information>
      </mobile-user>
    </pdp-context-deletion-results>
```

Description

<packet-filter-information>

Usage

```
<pdp-context>
  <traffic-flow-template-information>
    <traffic-flow-template>
      <packet-filter-information>
        <packet-filter>....</packet-filter>
      </packet-filter-information>
    </traffic-flow-template>
  </traffic-flow-template-information>
</pdp-context>
```

Description Filters for this TFT

<packet-filter-information>

Usage

```
<mobile-user-information>
  <mobile-user>
```


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```
<pdp-context-information>
 <pdp-context>
  <traffic-flow-template-information>
   <traffic-flow-template>
    <packet-filter-information>
     <packet-filter>....</packet-filter>
    </packet-filter-information>
   </traffic-flow-template>
  </traffic-flow-template-information>
 </pdp-context>
</pdp-context-information>
</mobile-user>
</mobile-user-information>
```

Description Filters for this TFT

<packet-filter-information>

Usage

```
<pdp-context-deletion-results>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
    <traffic-flow-template-information>
     <traffic-flow-template>
      <packet-filter-information>
       <packet-filter>....</packet-filter>
      </packet-filter-information>
     </traffic-flow-template>
    </traffic-flow-template-information>
   </pdp-context>
  </pdp-context-information>
 </mobile-user>
</pdp-context-deletion-results>
```

Description Filters for this TFT

<pdp>

Usage

```
<ggsn-interface>
 <pdp>
  <pdp-state>
   pdp-state
  </pdp-state>
  <pdp-assigned>
   pdp-assigned
  </pdp-assigned>
  <pdp-capacity>
   pdp-capacity
  </pdp-capacity>
 </pdp>
```

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```
</ggsn-interface>
```

Description PDP context information

<pdp>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <pdp>
      <pdp-state>
        pdp-state
      </pdp-state>
      <pdp-assigned>
        pdp-assigned
      </pdp-assigned>
      <pdp-capacity>
        pdp-capacity
      </pdp-capacity>
    </pdp>
  </ggsn-interface>
</ggsn-interface-information>
```

Description PDP context information

<pdp-context>

Usage

```
<pdp-context>
  <nsapi>
    nsapi
  </nsapi>
  <nsapi-linked>
    nsapi-linked
  </nsapi-linked>
  <apn-name>
    apn-name
  </apn-name>
  <sgsn-address>
    sgsn-address
  </sgsn-address>
  <address>
    address
  </address>
  <charging-identifier>
    charging-identifier
  </charging-identifier>
  <quality-of-service>....</quality-of-service>
  <traffic-flow-template-information>....</traffic-flow-template-information>
</pdp-context>
```


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Description Information relating to an MT/MS PDP context

<pdp-context>

Usage

```
<mobile-user-information>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
    <nsapi>
     nsapi
    </nsapi>
    <nsapi-linked>
     nsapi-linked
    </nsapi-linked>
    <apn-name>
     apn-name
    </apn-name>
    <sgsn-address>
     sgsn-address
    </sgsn-address>
    <address>
     address
    </address>
    <charging-identifier>
     charging-identifier
    </charging-identifier>
    <quality-of-service>....</quality-of-service>
    <traffic-flow-template-information>....</traffic-flow-template-information>

   </pdp-context>
  </pdp-context-information>
 </mobile-user>
</mobile-user-information>
```

Description Information relating to an MT/MS PDP context

<pdp-context>

Usage

```
<pdp-context-deletion-results>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
    <nsapi>
     nsapi
    </nsapi>
    <nsapi-linked>
     nsapi-linked
    </nsapi-linked>
    <apn-name>
     apn-name
    </apn-name>
```

```
                <sgsn-address>
                  sgsn-address
                </sgsn-address>
                <address>
                  address
                </address>
                <charging-identifier>
                  charging-identifier
                </charging-identifier>
                <quality-of-service>....</quality-of-service>
                <traffic-flow-template-information>....</traffic-flow-template-information>

              </pdp-context>
            </pdp-context-information>
          </mobile-user>
        </pdp-context-deletion-results>
```

Description Information relating to an MT/MS PDP context

<pdp-context-deletion-results>

Usage

```
<pdp-context-deletion-results>
  <mobile-user>....</mobile-user>
</pdp-context-deletion-results>
```

Description Results for a single PDP context deletion command

<pdp-context-information>

Usage

```
<mobile-user-information>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>....</pdp-context>
    </pdp-context-information>
  </mobile-user>
</mobile-user-information>
```

Description List of PDP contexts associated with the user

<pdp-context-information>

Usage

```
<pdp-context-deletion-results>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>....</pdp-context>
    </pdp-context-information>
  </mobile-user>
```


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```
</pdp-context-deletion-results>
```

Description List of PDP contexts associated with the user

<pdp-context-statistics>

Usage

```
<pdp-context-statistics>
  <pdp-active>
    pdp-active
  </pdp-active>
  <pdp-active-conversational>
    pdp-active-conversational
  </pdp-active-conversational>
  <pdp-active-streaming>
    pdp-active-streaming
  </pdp-active-streaming>
  <pdp-active-interactive>
    pdp-active-interactive
  </pdp-active-interactive>
  <pdp-active-background>
    pdp-active-background
  </pdp-active-background>
  <pdp-active-ipv6>
    pdp-active-ipv6
  </pdp-active-ipv6>
  <pdp-active-imsi>
    pdp-active-imsi
  </pdp-active-imsi>
  <pdp-active-msisdn>
    pdp-active-msisdn
  </pdp-active-msisdn>
  <pdp-blocked>
    pdp-blocked
  </pdp-blocked>
  <pdp-apn-by-logical-apn-selection>
    pdp-apn-by-logical-apn-selection
  </pdp-apn-by-logical-apn-selection>
  <pdp-apn-by-logical-apn-default>
    pdp-apn-by-logical-apn-default
  </pdp-apn-by-logical-apn-default>
  <pdp-assigned-msisdn>
    pdp-assigned-msisdn
  </pdp-assigned-msisdn>
  <pdp-assigned-shared-msisdn>
    pdp-assigned-shared-msisdn
  </pdp-assigned-shared-msisdn>
  <pdp-attempted-activation>
    pdp-attempted-activation
  </pdp-attempted-activation>
  <pdp-attempted-activation-ipv6>
    pdp-attempted-activation-ipv6
  </pdp-attempted-activation-ipv6>
  <pdp-completed-activation>
```

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pdp-completed-activation
</pdp-completed-activation>
<pdp-completed-activation-ipv6>
pdp-completed-activation-ipv6
</pdp-completed-activation-ipv6>
<pdp-attempted-activation-dhcp>
pdp-attempted-activation-dhcp
</pdp-attempted-activation-dhcp>
<pdp-completed-activation-dhcp>
pdp-completed-activation-dhcp
</pdp-completed-activation-dhcp>
<pdp-attempted-activation-radius>
pdp-attempted-activation-radius
</pdp-attempted-activation-radius>
<pdp-completed-activation-radius>
pdp-completed-activation-radius
</pdp-completed-activation-radius>
<pdp-attempted-activation-local-pool>
pdp-attempted-activation-local-pool
</pdp-attempted-activation-local-pool>
<pdp-completed-activation-local-pool>
pdp-completed-activation-local-pool
</pdp-completed-activation-local-pool>
<pdp-attempted-activation-dynamic>
pdp-attempted-activation-dynamic
</pdp-attempted-activation-dynamic>
<pdp-completed-activation-dynamic>
pdp-completed-activation-dynamic
</pdp-completed-activation-dynamic>
<pdp-attempted-mobile-activation>
pdp-attempted-mobile-activation
</pdp-attempted-mobile-activation>
<pdp-completed-mobile-activation>
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</pdp-completed-mobile-activation>
<pdp-attempted-deactivation>
pdp-attempted-deactivation
</pdp-attempted-deactivation>
<pdp-completed-deactivation>
pdp-completed-deactivation
</pdp-completed-deactivation>
<pdp-attempted-node-deactivation>
pdp-attempted-node-deactivation
</pdp-attempted-node-deactivation>
<pdp-completed-node-deactivation>
pdp-completed-node-deactivation
</pdp-completed-node-deactivation>
<pdp-completed-idle-deactivation>
pdp-completed-idle-deactivation
</pdp-completed-idle-deactivation>
<pdp-completed-session-deactivation>
pdp-completed-session-deactivation
</pdp-completed-session-deactivation>
<pdp-attempted-mobile-deactivation>
pdp-attempted-mobile-deactivation
</pdp-attempted-mobile-deactivation>

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```
<pdp-completed-mobile-deactivation>
  pdp-completed-mobile-deactivation
</pdp-completed-mobile-deactivation>
<pdp-attempted-authentication-activation>
  pdp-attempted-authentication-activation
</pdp-attempted-authentication-activation>
<pdp-completed-authentication-activation>
  pdp-completed-authentication-activation
</pdp-completed-authentication-activation>
<pdp-attempted-mobile-sgsn-update>
  pdp-attempted-mobile-sgsn-update
</pdp-attempted-mobile-sgsn-update>
<pdp-completed-mobile-sgsn-update>
  pdp-completed-mobile-sgsn-update
</pdp-completed-mobile-sgsn-update>
<pdp-created>
  pdp-created
</pdp-created>
<pdp-created-ipv6>
  pdp-created-ipv6
</pdp-created-ipv6>
<pdp-create-failed>
  pdp-create-failed
</pdp-create-failed>
<pdp-create-failed-ipv6>
  pdp-create-failed-ipv6
</pdp-create-failed-ipv6>
<pdp-secondary-created>
  pdp-secondary-created
</pdp-secondary-created>
<pdp-secondary-created-ipv6>
  pdp-secondary-created-ipv6
</pdp-secondary-created-ipv6>
<pdp-secondary-create-failed>
  pdp-secondary-create-failed
</pdp-secondary-create-failed>
<pdp-secondary-attempted-ipv6>
  pdp-secondary-attempted-ipv6
</pdp-secondary-attempted-ipv6>
<pdp-secondary-completed-ipv6>
  pdp-secondary-completed-ipv6
</pdp-secondary-completed-ipv6>
<pdp-last-create>
  pdp-last-create
</pdp-last-create>
<pdp-secondary-create-failed-ipv6>
  pdp-secondary-create-failed-ipv6
</pdp-secondary-create-failed-ipv6>
<pdp-updates>
  pdp-updates
</pdp-updates>
<pdp-update-failed>
  pdp-update-failed
</pdp-update-failed>
<pdp-deleted>
  pdp-deleted
```

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```
</pdp-deleted>
<pdp-deleted-by-idle-supervision>
  pdp-deleted-by-idle-supervision
</pdp-deleted-by-idle-supervision>
<pdp-deleted-by-session-supervision>
  pdp-deleted-by-session-supervision
</pdp-deleted-by-session-supervision>
<pdp-deleted-by-command>
  pdp-deleted-by-command
</pdp-deleted-by-command>
<pdp-deleted-by-failure>
  pdp-deleted-by-failure
</pdp-deleted-by-failure>
<pdp-delete-failed>
  pdp-delete-failed
</pdp-delete-failed>
<pdp-last-delete>
  pdp-last-delete
</pdp-last-delete>
<pdp-successful-deactivations>
  pdp-successful-deactivations
</pdp-successful-deactivations>
<pdp-failed-deactivations>
  pdp-failed-deactivations
</pdp-failed-deactivations>
<pdp-maximum>
  pdp-maximum
</pdp-maximum>
<pdp-minimum>
  pdp-minimum
</pdp-minimum>
<pdp-mean>
  pdp-mean
</pdp-mean>
<pdp-active-l2tp-tunnels>
  pdp-active-l2tp-tunnels
</pdp-active-l2tp-tunnels>
<pdp-active-l2tp-sessions>
  pdp-active-l2tp-sessions
</pdp-active-l2tp-sessions>
<pdp-maximum-active-l2tp-tunnels>
  pdp-maximum-active-l2tp-tunnels
</pdp-maximum-active-l2tp-tunnels>
<pdp-maximum-active-l2tp-sessions>
  pdp-maximum-active-l2tp-sessions
</pdp-maximum-active-l2tp-sessions>
<ims-dedicated-completed-activation>
  ims-dedicated-completed-activation
</ims-dedicated-completed-activation>
<ims-dedicated-failed-activation>
  ims-dedicated-failed-activation
</ims-dedicated-failed-activation>
<ims-general-completed-activation>
  ims-general-completed-activation
</ims-general-completed-activation>
<ims-general-failed-activation>
```


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```
    ims-general-failed-activation
   </ims-general-failed-activation>
   <ims-general-active-failed-activation>
    ims-general-active-failed-activation
   </ims-general-active-failed-activation>
   <ims-signalling-packets-drops>
    ims-signalling-packets-drops
   </ims-signalling-packets-drops>
  </pdp-context-statistics>
```

Description Information about PDP context events

<pdp-context-statistics>

Usage

```
<interface-pdp-context-statistics>
 <pdp-context-statistics>
  <pdp-active>
   pdp-active
  </pdp-active>
  <pdp-active-conversational>
   pdp-active-conversational
  </pdp-active-conversational>
  <pdp-active-streaming>
   pdp-active-streaming
  </pdp-active-streaming>
  <pdp-active-interactive>
   pdp-active-interactive
  </pdp-active-interactive>
  <pdp-active-background>
   pdp-active-background
  </pdp-active-background>
  <pdp-active-ipv6>
   pdp-active-ipv6
  </pdp-active-ipv6>
  <pdp-active-imsi>
   pdp-active-imsi
  </pdp-active-imsi>
  <pdp-active-msisdn>
   pdp-active-msisdn
  </pdp-active-msisdn>
  <pdp-blocked>
   pdp-blocked
  </pdp-blocked>
  <pdp-apn-by-logical-apn-selection>
   pdp-apn-by-logical-apn-selection
  </pdp-apn-by-logical-apn-selection>
  <pdp-apn-by-logical-apn-default>
   pdp-apn-by-logical-apn-default
  </pdp-apn-by-logical-apn-default>
  <pdp-assigned-msisdn>
   pdp-assigned-msisdn
  </pdp-assigned-msisdn>
  <pdp-assigned-shared-msisdn>
```

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pdp-assigned-shared-msisdn
</pdp-assigned-shared-msisdn>
<pdp-attempted-activation>
pdp-attempted-activation
</pdp-attempted-activation>
<pdp-attempted-activation-ipv6>
pdp-attempted-activation-ipv6
</pdp-attempted-activation-ipv6>
<pdp-completed-activation>
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</pdp-completed-activation>
<pdp-completed-activation-ipv6>
pdp-completed-activation-ipv6
</pdp-completed-activation-ipv6>
<pdp-attempted-activation-dhcp>
pdp-attempted-activation-dhcp
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pdp-attempted-activation-local-pool
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<pdp-completed-node-deactivation>
pdp-completed-node-deactivation
</pdp-completed-node-deactivation>

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```
<pdp-completed-idle-deactivation>
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</pdp-completed-idle-deactivation>
<pdp-completed-session-deactivation>
  pdp-completed-session-deactivation
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  pdp-attempted-mobile-deactivation
</pdp-attempted-mobile-deactivation>
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</pdp-completed-mobile-deactivation>
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  pdp-attempted-authentication-activation
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</pdp-completed-authentication-activation>
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</pdp-created-ipv6>
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</pdp-secondary-created>
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  pdp-secondary-created-ipv6
</pdp-secondary-created-ipv6>
<pdp-secondary-create-failed>
  pdp-secondary-create-failed
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  pdp-secondary-attempted-ipv6
</pdp-secondary-attempted-ipv6>
<pdp-secondary-completed-ipv6>
  pdp-secondary-completed-ipv6
</pdp-secondary-completed-ipv6>
<pdp-last-create>
  pdp-last-create
</pdp-last-create>
<pdp-secondary-create-failed-ipv6>
  pdp-secondary-create-failed-ipv6
```

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```
</pdp-secondary-create-failed-ipv6>
<pdp-updates>
  pdp-updates
</pdp-updates>
<pdp-update-failed>
  pdp-update-failed
</pdp-update-failed>
<pdp-deleted>
  pdp-deleted
</pdp-deleted>
<pdp-deleted-by-idle-supervision>
  pdp-deleted-by-idle-supervision
</pdp-deleted-by-idle-supervision>
<pdp-deleted-by-session-supervision>
  pdp-deleted-by-session-supervision
</pdp-deleted-by-session-supervision>
<pdp-deleted-by-command>
  pdp-deleted-by-command
</pdp-deleted-by-command>
<pdp-deleted-by-failure>
  pdp-deleted-by-failure
</pdp-deleted-by-failure>
<pdp-delete-failed>
  pdp-delete-failed
</pdp-delete-failed>
<pdp-last-delete>
  pdp-last-delete
</pdp-last-delete>
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  pdp-successful-deactivations
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<pdp-maximum>
  pdp-maximum
</pdp-maximum>
<pdp-minimum>
  pdp-minimum
</pdp-minimum>
<pdp-mean>
  pdp-mean
</pdp-mean>
<pdp-active-l2tp-tunnels>
  pdp-active-l2tp-tunnels
</pdp-active-l2tp-tunnels>
<pdp-active-l2tp-sessions>
  pdp-active-l2tp-sessions
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<pdp-maximum-active-l2tp-tunnels>
  pdp-maximum-active-l2tp-tunnels
</pdp-maximum-active-l2tp-tunnels>
<pdp-maximum-active-l2tp-sessions>
  pdp-maximum-active-l2tp-sessions
</pdp-maximum-active-l2tp-sessions>
<ims-dedicated-completed-activation>
```


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```
      ims-dedicated-completed-activation
    </ims-dedicated-completed-activation>
    <ims-dedicated-failed-activation>
      ims-dedicated-failed-activation
    </ims-dedicated-failed-activation>
    <ims-general-completed-activation>
      ims-general-completed-activation
    </ims-general-completed-activation>
    <ims-general-failed-activation>
      ims-general-failed-activation
    </ims-general-failed-activation>
    <ims-general-active-failed-activation>
      ims-general-active-failed-activation
    </ims-general-active-failed-activation>
    <ims-signalling-packets-drops>
      ims-signalling-packets-drops
    </ims-signalling-packets-drops>
  </pdp-context-statistics>
</interface-pdp-context-statistics>
```

Description Information about PDP context events

<pdp-context-statistics>

Usage

```
<ggsn-statistics>
  <pdp-context-statistics>
    <pdp-active>
      pdp-active
    </pdp-active>
    <pdp-active-conversational>
      pdp-active-conversational
    </pdp-active-conversational>
    <pdp-active-streaming>
      pdp-active-streaming
    </pdp-active-streaming>
    <pdp-active-interactive>
      pdp-active-interactive
    </pdp-active-interactive>
    <pdp-active-background>
      pdp-active-background
    </pdp-active-background>
    <pdp-active-ipv6>
      pdp-active-ipv6
    </pdp-active-ipv6>
    <pdp-active-imsi>
      pdp-active-imsi
    </pdp-active-imsi>
    <pdp-active-msisdn>
      pdp-active-msisdn
    </pdp-active-msisdn>
    <pdp-blocked>
      pdp-blocked
    </pdp-blocked>
```

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<pdp-apn-by-logical-apn-selection>
pdp-apn-by-logical-apn-selection
</pdp-apn-by-logical-apn-selection>
<pdp-apn-by-logical-apn-default>
pdp-apn-by-logical-apn-default
</pdp-apn-by-logical-apn-default>
<pdp-assigned-msisdn>
pdp-assigned-msisdn
</pdp-assigned-msisdn>
<pdp-assigned-shared-msisdn>
pdp-assigned-shared-msisdn
</pdp-assigned-shared-msisdn>
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pdp-attempted-activation
</pdp-attempted-activation>
<pdp-attempted-activation-ipv6>
pdp-attempted-activation-ipv6
</pdp-attempted-activation-ipv6>
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</pdp-completed-activation>
<pdp-completed-activation-ipv6>
pdp-completed-activation-ipv6
</pdp-completed-activation-ipv6>
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pdp-attempted-activation-dhcp
</pdp-attempted-activation-dhcp>
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</pdp-attempted-mobile-activation>
<pdp-completed-mobile-activation>
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</pdp-completed-mobile-activation>
<pdp-attempted-deactivation>
pdp-attempted-deactivation

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```
</pdp-attempted-deactivation>
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<pdp-completed-authentication-activation>
  pdp-completed-authentication-activation
</pdp-completed-authentication-activation>
<pdp-attempted-mobile-sgsn-update>
  pdp-attempted-mobile-sgsn-update
</pdp-attempted-mobile-sgsn-update>
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</pdp-secondary-create-failed>
<pdp-secondary-attempted-ipv6>
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```


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    <pdp-maximum-active-l2tp-sessions>
      pdp-maximum-active-l2tp-sessions
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      ims-dedicated-completed-activation
    </ims-dedicated-completed-activation>
    <ims-dedicated-failed-activation>
      ims-dedicated-failed-activation
    </ims-dedicated-failed-activation>
    <ims-general-completed-activation>
      ims-general-completed-activation
    </ims-general-completed-activation>
    <ims-general-failed-activation>
      ims-general-failed-activation
    </ims-general-failed-activation>
    <ims-general-active-failed-activation>
      ims-general-active-failed-activation
    </ims-general-active-failed-activation>
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      ims-signalling-packets-drops
    </ims-signalling-packets-drops>
  </pdp-context-statistics>
</ggsn-statistics>
```

Description Information about PDP context events

<pdp-context-statistics>

Usage

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    <interface-pdp-context-statistics>
      <pdp-context-statistics>
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        </pdp-active>
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        </pdp-active-conversational>
        <pdp-active-streaming>
          pdp-active-streaming
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        <pdp-active-interactive>
          pdp-active-interactive
        </pdp-active-interactive>
        <pdp-active-background>
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```

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  pdp-attempted-activation-dynamic

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</interface-pdp-context-statistics>
</interface-pdp-context-statistics-information>
</ggsn-statistics>
```

Description Information about PDP context events

<pdp-context-statistics>

Usage

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        pdp-active
```

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<pdp-deleted-by-command>
pdp-deleted-by-command
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<pdp-deleted-by-failure>
pdp-deleted-by-failure

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        </pdp-delete-failed>
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          pdp-last-delete
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        </pdp-successful-deactivations>
        <pdp-failed-deactivations>
          pdp-failed-deactivations
        </pdp-failed-deactivations>
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        </pdp-minimum>
        <pdp-mean>
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        </pdp-mean>
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        <ims-dedicated-failed-activation>
          ims-dedicated-failed-activation
        </ims-dedicated-failed-activation>
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        </ims-general-completed-activation>
        <ims-general-failed-activation>
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        <ims-general-active-failed-activation>
          ims-general-active-failed-activation
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          ims-signalling-packets-drops
        </ims-signalling-packets-drops>
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  </apn-statistics-information>
```

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Description Information about PDP context events

<pdp-context-statistics>

Usage

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 <sgsn-statistics>
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    pdp-active-conversational
   </pdp-active-conversational>
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    pdp-active-streaming
   </pdp-active-streaming>
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    pdp-active-interactive
   </pdp-active-interactive>
   <pdp-active-background>
    pdp-active-background
   </pdp-active-background>
   <pdp-active-ipv6>
    pdp-active-ipv6
   </pdp-active-ipv6>
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    pdp-active-imsi
   </pdp-active-imsi>
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    pdp-active-msisdn
   </pdp-active-msisdn>
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    pdp-blocked
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    pdp-apn-by-logical-apn-selection
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    pdp-apn-by-logical-apn-default
   </pdp-apn-by-logical-apn-default>
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    pdp-assigned-msisdn
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    pdp-attempted-activation
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    pdp-attempted-activation-ipv6
   </pdp-attempted-activation-ipv6>
   <pdp-completed-activation>
    pdp-completed-activation
```


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</pdp-attempted-activation-dynamic>
<pdp-completed-activation-dynamic>
  pdp-completed-activation-dynamic
</pdp-completed-activation-dynamic>
<pdp-attempted-mobile-activation>
  pdp-attempted-mobile-activation
</pdp-attempted-mobile-activation>
<pdp-completed-mobile-activation>
  pdp-completed-mobile-activation
</pdp-completed-mobile-activation>
<pdp-attempted-deactivation>
  pdp-attempted-deactivation
</pdp-attempted-deactivation>
<pdp-completed-deactivation>
  pdp-completed-deactivation
</pdp-completed-deactivation>
<pdp-attempted-node-deactivation>
  pdp-attempted-node-deactivation
</pdp-attempted-node-deactivation>
<pdp-completed-node-deactivation>
  pdp-completed-node-deactivation
</pdp-completed-node-deactivation>
<pdp-completed-idle-deactivation>
  pdp-completed-idle-deactivation
</pdp-completed-idle-deactivation>
<pdp-completed-session-deactivation>
  pdp-completed-session-deactivation
</pdp-completed-session-deactivation>
<pdp-attempted-mobile-deactivation>
  pdp-attempted-mobile-deactivation
</pdp-attempted-mobile-deactivation>
<pdp-completed-mobile-deactivation>
```

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pdp-completed-mobile-deactivation
</pdp-completed-mobile-deactivation>
<pdp-attempted-authentication-activation>
pdp-attempted-authentication-activation
</pdp-attempted-authentication-activation>
<pdp-completed-authentication-activation>
pdp-completed-authentication-activation
</pdp-completed-authentication-activation>
<pdp-attempted-mobile-sgsn-update>
pdp-attempted-mobile-sgsn-update
</pdp-attempted-mobile-sgsn-update>
<pdp-completed-mobile-sgsn-update>
pdp-completed-mobile-sgsn-update
</pdp-completed-mobile-sgsn-update>
<pdp-created>
pdp-created
</pdp-created>
<pdp-created-ipv6>
pdp-created-ipv6
</pdp-created-ipv6>
<pdp-create-failed>
pdp-create-failed
</pdp-create-failed>
<pdp-create-failed-ipv6>
pdp-create-failed-ipv6
</pdp-create-failed-ipv6>
<pdp-secondary-created>
pdp-secondary-created
</pdp-secondary-created>
<pdp-secondary-created-ipv6>
pdp-secondary-created-ipv6
</pdp-secondary-created-ipv6>
<pdp-secondary-create-failed>
pdp-secondary-create-failed
</pdp-secondary-create-failed>
<pdp-secondary-attempted-ipv6>
pdp-secondary-attempted-ipv6
</pdp-secondary-attempted-ipv6>
<pdp-secondary-completed-ipv6>
pdp-secondary-completed-ipv6
</pdp-secondary-completed-ipv6>
<pdp-last-create>
pdp-last-create
</pdp-last-create>
<pdp-secondary-create-failed-ipv6>
pdp-secondary-create-failed-ipv6
</pdp-secondary-create-failed-ipv6>
<pdp-updates>
pdp-updates
</pdp-updates>
<pdp-update-failed>
pdp-update-failed
</pdp-update-failed>
<pdp-deleted>
pdp-deleted
</pdp-deleted>

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```
<pdp-deleted-by-idle-supervision>
  pdp-deleted-by-idle-supervision
</pdp-deleted-by-idle-supervision>
<pdp-deleted-by-session-supervision>
  pdp-deleted-by-session-supervision
</pdp-deleted-by-session-supervision>
<pdp-deleted-by-command>
  pdp-deleted-by-command
</pdp-deleted-by-command>
<pdp-deleted-by-failure>
  pdp-deleted-by-failure
</pdp-deleted-by-failure>
<pdp-delete-failed>
  pdp-delete-failed
</pdp-delete-failed>
<pdp-last-delete>
  pdp-last-delete
</pdp-last-delete>
<pdp-successful-deactivations>
  pdp-successful-deactivations
</pdp-successful-deactivations>
<pdp-failed-deactivations>
  pdp-failed-deactivations
</pdp-failed-deactivations>
<pdp-maximum>
  pdp-maximum
</pdp-maximum>
<pdp-minimum>
  pdp-minimum
</pdp-minimum>
<pdp-mean>
  pdp-mean
</pdp-mean>
<pdp-active-l2tp-tunnels>
  pdp-active-l2tp-tunnels
</pdp-active-l2tp-tunnels>
<pdp-active-l2tp-sessions>
  pdp-active-l2tp-sessions
</pdp-active-l2tp-sessions>
<pdp-maximum-active-l2tp-tunnels>
  pdp-maximum-active-l2tp-tunnels
</pdp-maximum-active-l2tp-tunnels>
<pdp-maximum-active-l2tp-sessions>
  pdp-maximum-active-l2tp-sessions
</pdp-maximum-active-l2tp-sessions>
<ims-dedicated-completed-activation>
  ims-dedicated-completed-activation
</ims-dedicated-completed-activation>
<ims-dedicated-failed-activation>
  ims-dedicated-failed-activation
</ims-dedicated-failed-activation>
<ims-general-completed-activation>
  ims-general-completed-activation
</ims-general-completed-activation>
<ims-general-failed-activation>
  ims-general-failed-activation
```

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```
    </ims-general-failed-activation>
    <ims-general-active-failed-activation>
      ims-general-active-failed-activation
    </ims-general-active-failed-activation>
    <ims-signalling-packets-drops>
      ims-signalling-packets-drops
    </ims-signalling-packets-drops>
  </pdp-context-statistics>
 </sgsn-statistics>
</sgsn-statistics-information>
```

Description Information about PDP context events

<pdp-diagnostics-per-apn>

Usage

```
<pdp-diagnostics-per-apn>
 <pdp-id>
  pdp-id
 </pdp-id>
</pdp-diagnostics-per-apn>
```

Description

<pdp-request-statistics>

Usage

```
<pdp-request-statistics>
 <create-request-received>
  create-request-received
 </create-request-received>
 <create-response-transmitted>
  create-response-transmitted
 </create-response-transmitted>
 <update-request-received>
  update-request-received
 </update-request-received>
 <update-request-transmitted>
  update-request-transmitted
 </update-request-transmitted>
 <update-response-received>
  update-response-received
 </update-response-received>
 <update-response-transmitted>
  update-response-transmitted
 </update-response-transmitted>
 <delete-request-received>
  delete-request-received
 </delete-request-received>
 <delete-request-transmitted>
  delete-request-transmitted
 </delete-request-transmitted>
 <delete-response-received>
```


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```
    delete-response-received
   </delete-response-received>
   <delete-response-transmitted>
    delete-response-transmitted
   </delete-response-transmitted>
  </pdp-request-statistics>
```

Description PDP context request statistics

<pdp-request-statistics>

Usage

```
<gtp-statistics-information>
 <gtp-statistics>
  <pdp-request-statistics>
   <create-request-received>
    create-request-received
   </create-request-received>
   <create-response-transmitted>
    create-response-transmitted
   </create-response-transmitted>
   <update-request-received>
    update-request-received
   </update-request-received>
   <update-request-transmitted>
    update-request-transmitted
   </update-request-transmitted>
   <update-response-received>
    update-response-received
   </update-response-received>
   <update-response-transmitted>
    update-response-transmitted
   </update-response-transmitted>
   <delete-request-received>
    delete-request-received
   </delete-request-received>
   <delete-request-transmitted>
    delete-request-transmitted
   </delete-request-transmitted>
   <delete-response-received>
    delete-response-received
   </delete-response-received>
   <delete-response-transmitted>
    delete-response-transmitted
   </delete-response-transmitted>
  </pdp-request-statistics>
 </gtp-statistics>
</gtp-statistics-information>
```

Description PDP context request statistics

<pras-information>

Usage

```
<pras-information>
  <pras-statistics>....</pras-statistics>
</pras-information>
```

Description Information about policy rating application systems

<pras-information>

Usage

```
<sbcc-statistics-information>
  <pras-information>
    <pras-statistics>....</pras-statistics>
  </pras-information>
</sbcc-statistics-information>
```

Description Information about policy rating application systems

<pras-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <pras-information>
      <pras-statistics>....</pras-statistics>
    </pras-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Information about policy rating application systems

<pras-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <pras-information>
        <pras-statistics>....</pras-statistics>
      </pras-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about policy rating application systems

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<pras-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <pras-information>
      <pras-statistics>....</pras-statistics>
    </pras-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Information about policy rating application systems

<pras-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <pras-information>
      <pras-statistics>....</pras-statistics>
    </pras-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Information about policy rating application systems

<pras-statistics>

Usage

```
<pras-information>
  <pras-statistics>
    <pras-identifier>
      pras-identifier
    </pras-identifier>
    <pras-start-request>
      pras-start-request
    </pras-start-request>
    <pras-start-request-failed>
      pras-start-request-failed
    </pras-start-request-failed>
    <pras-update-request>
      pras-update-request
    </pras-update-request>
    <pras-update-request-failed>
      pras-update-request-failed
    </pras-update-request-failed>
    <pras-stop-request>
      pras-stop-request
    </pras-stop-request>
    <pras-stop-request-failed>
      pras-stop-request-failed
    </pras-stop-request-failed>
```

```
    <pras-user-service-denied>
     pras-user-service-denied
    </pras-user-service-denied>
    <pras-user-unknown>
     pras-user-unknown
    </pras-user-unknown>
   </pras-statistics>
  </pras-information>
```

Description Statistics for a policy rating application system

<pras-statistics>

Usage

```
<sbcc-statistics-information>
 <pras-information>
  <pras-statistics>
   <pras-identifier>
    pras-identifier
   </pras-identifier>
   <pras-start-request>
    pras-start-request
   </pras-start-request>
   <pras-start-request-failed>
    pras-start-request-failed
   </pras-start-request-failed>
   <pras-update-request>
    pras-update-request
   </pras-update-request>
   <pras-update-request-failed>
    pras-update-request-failed
   </pras-update-request-failed>
   <pras-stop-request>
    pras-stop-request
   </pras-stop-request>
   <pras-stop-request-failed>
    pras-stop-request-failed
   </pras-stop-request-failed>
   <pras-user-service-denied>
    pras-user-service-denied
   </pras-user-service-denied>
   <pras-user-unknown>
    pras-user-unknown
   </pras-user-unknown>
  </pras-statistics>
 </pras-information>
</sbcc-statistics-information>
```

Description Statistics for a policy rating application system

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<pras-statistics>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <pras-information>
      <pras-statistics>
        <pras-identifier>
          pras-identifier
        </pras-identifier>
        <pras-start-request>
          pras-start-request
        </pras-start-request>
        <pras-start-request-failed>
          pras-start-request-failed
        </pras-start-request-failed>
        <pras-update-request>
          pras-update-request
        </pras-update-request>
        <pras-update-request-failed>
          pras-update-request-failed
        </pras-update-request-failed>
        <pras-stop-request>
          pras-stop-request
        </pras-stop-request>
        <pras-stop-request-failed>
          pras-stop-request-failed
        </pras-stop-request-failed>
        <pras-user-service-denied>
          pras-user-service-denied
        </pras-user-service-denied>
        <pras-user-unknown>
          pras-user-unknown
        </pras-user-unknown>
      </pras-statistics>
    </pras-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Statistics for a policy rating application system

<pras-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <pras-information>
        <pras-statistics>
          <pras-identifier>
            pras-identifier
          </pras-identifier>
          <pras-start-request>
```

```
                pras-start-request
               </pras-start-request>
               <pras-start-request-failed>
                pras-start-request-failed
               </pras-start-request-failed>
               <pras-update-request>
                pras-update-request
               </pras-update-request>
               <pras-update-request-failed>
                pras-update-request-failed
               </pras-update-request-failed>
               <pras-stop-request>
                pras-stop-request
               </pras-stop-request>
               <pras-stop-request-failed>
                pras-stop-request-failed
               </pras-stop-request-failed>
               <pras-user-service-denied>
                pras-user-service-denied
               </pras-user-service-denied>
               <pras-user-unknown>
                pras-user-unknown
               </pras-user-unknown>
              </pras-statistics>
             </pras-information>
            </sbcc-statistics-information>
           </ggsn-interface>
          </ggsn-interface-information>
```

Description Statistics for a policy rating application system

<pras-statistics>

Usage

```
          <ggsn-statistics>
           <sbcc-statistics-information>
            <pras-information>
             <pras-statistics>
              <pras-identifier>
               pras-identifier
              </pras-identifier>
              <pras-start-request>
               pras-start-request
              </pras-start-request>
              <pras-start-request-failed>
               pras-start-request-failed
              </pras-start-request-failed>
              <pras-update-request>
               pras-update-request
              </pras-update-request>
              <pras-update-request-failed>
               pras-update-request-failed
              </pras-update-request-failed>
              <pras-stop-request>
```


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```
      pras-stop-request
     </pras-stop-request>
     <pras-stop-request-failed>
      pras-stop-request-failed
     </pras-stop-request-failed>
     <pras-user-service-denied>
      pras-user-service-denied
     </pras-user-service-denied>
     <pras-user-unknown>
      pras-user-unknown
     </pras-user-unknown>
    </pras-statistics>
   </pras-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Statistics for a policy rating application system

<pras-statistics>

Usage

```
<apn-statistics-information>
 <sbcc-statistics-information>
  <pras-information>
   <pras-statistics>
    <pras-identifier>
     pras-identifier
    </pras-identifier>
    <pras-start-request>
     pras-start-request
    </pras-start-request>
    <pras-start-request-failed>
     pras-start-request-failed
    </pras-start-request-failed>
    <pras-update-request>
     pras-update-request
    </pras-update-request>
    <pras-update-request-failed>
     pras-update-request-failed
    </pras-update-request-failed>
    <pras-stop-request>
     pras-stop-request
    </pras-stop-request>
    <pras-stop-request-failed>
     pras-stop-request-failed
    </pras-stop-request-failed>
    <pras-user-service-denied>
     pras-user-service-denied
    </pras-user-service-denied>
    <pras-user-unknown>
     pras-user-unknown
    </pras-user-unknown>
   </pras-statistics>
  </pras-information>
```

```
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Statistics for a policy rating application system

<quality-of-service>

Usage

```
<pdp-context>
  <quality-of-service>
    <gi-diffserv-code-point>
      gi-diffserv-code-point
    </gi-diffserv-code-point>
    <gn-diffserv-code-point>
      gn-diffserv-code-point
    </gn-diffserv-code-point>
    <downlink-bitrate>
      downlink-bitrate
    </downlink-bitrate>
  </quality-of-service>
</pdp-context>
```

Description PDP context quality-of-service information

<quality-of-service>

Usage

```
<mobile-user-information>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>
        <quality-of-service>
          <gi-diffserv-code-point>
            gi-diffserv-code-point
          </gi-diffserv-code-point>
          <gn-diffserv-code-point>
            gn-diffserv-code-point
          </gn-diffserv-code-point>
          <downlink-bitrate>
            downlink-bitrate
          </downlink-bitrate>
        </quality-of-service>
      </pdp-context>
    </pdp-context-information>
  </mobile-user>
</mobile-user-information>
```

Description PDP context quality-of-service information

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<quality-of-service>

Usage

```
<pdp-context-deletion-results>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>
        <quality-of-service>
          <gi-diffserv-code-point>
            gi-diffserv-code-point
          </gi-diffserv-code-point>
          <gn-diffserv-code-point>
            gn-diffserv-code-point
          </gn-diffserv-code-point>
          <downlink-bitrate>
            downlink-bitrate
          </downlink-bitrate>
        </quality-of-service>
      </pdp-context>
    </pdp-context-information>
  </mobile-user>
</pdp-context-deletion-results>
```

Description PDP context quality-of-service information

<radius-statistics-information>

Usage

```
<radius-statistics-information>
  <radius-authentication-failure>
    radius-authentication-failure
  </radius-authentication-failure>
  <accounting-failure>
    accounting-failure
  </accounting-failure>
</radius-statistics-information>
```

Description Radius statistics

<radius-statistics-information>

Usage

```
<ggsn-statistics>
  <radius-statistics-information>
    <radius-authentication-failure>
      radius-authentication-failure
    </radius-authentication-failure>
    <accounting-failure>
      accounting-failure
    </accounting-failure>
  </radius-statistics-information>
```

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```
</ggsn-statistics>
```

Description Radius statistics

<radius-statistics-information>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <radius-statistics-information>
      <radius-authentication-failure>
        radius-authentication-failure
      </radius-authentication-failure>
      <accounting-failure>
        accounting-failure
      </accounting-failure>
    </radius-statistics-information>
  </apn-statistics>
</apn-statistics-information>
```

Description Radius statistics

<rate-group-information>

Usage

```
<rate-group-information>
  <rate-group-statistics>....</rate-group-statistics>
</rate-group-information>
```

Description Information about a rate group

<rate-group-information>

Usage

```
<sbcc-statistics-information>
  <rate-group-information>
    <rate-group-statistics>....</rate-group-statistics>
  </rate-group-information>
</sbcc-statistics-information>
```

Description Information about a rate group

<rate-group-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>....</rate-group-statistics>
```


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```
    </rate-group-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Information about a rate group

<rate-group-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <rate-group-information>
        <rate-group-statistics>....</rate-group-statistics>
      </rate-group-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about a rate group

<rate-group-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>....</rate-group-statistics>
    </rate-group-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Information about a rate group

<rate-group-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>....</rate-group-statistics>
    </rate-group-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Information about a rate group

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<rate-group-statistics>

Usage

```
<rate-group-information>
  <rate-group-statistics>
    <rate-group-identifier>
      rate-group-identifier
    </rate-group-identifier>
    <transactions-start>
      transactions-start
    </transactions-start>
    <transactions-success>
      transactions-success
    </transactions-success>
  </rate-group-statistics>
</rate-group-information>
```

Description Statistics for a rate group

<rate-group-statistics>

Usage

```
<sbcc-statistics-information>
  <rate-group-information>
    <rate-group-statistics>
      <rate-group-identifier>
        rate-group-identifier
      </rate-group-identifier>
      <transactions-start>
        transactions-start
      </transactions-start>
      <transactions-success>
        transactions-success
      </transactions-success>
    </rate-group-statistics>
  </rate-group-information>
</sbcc-statistics-information>
```

Description Statistics for a rate group

<rate-group-statistics>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>
        <rate-group-identifier>
          rate-group-identifier
        </rate-group-identifier>
        <transactions-start>
          transactions-start
```


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```
            </transactions-start>
            <transactions-success>
              transactions-success
            </transactions-success>
          </rate-group-statistics>
        </rate-group-information>
      </sbcc-statistics-information>
    </ggsn-interface>
```

Description Statistics for a rate group

<rate-group-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <rate-group-information>
        <rate-group-statistics>
          <rate-group-identifier>
            rate-group-identifier
          </rate-group-identifier>
          <transactions-start>
            transactions-start
          </transactions-start>
          <transactions-success>
            transactions-success
          </transactions-success>
        </rate-group-statistics>
      </rate-group-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Statistics for a rate group

<rate-group-statistics>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>
        <rate-group-identifier>
          rate-group-identifier
        </rate-group-identifier>
        <transactions-start>
          transactions-start
        </transactions-start>
        <transactions-success>
          transactions-success
        </transactions-success>
```

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```
      </rate-group-statistics>
    </rate-group-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Statistics for a rate group

<rate-group-statistics>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <rate-group-information>
      <rate-group-statistics>
        <rate-group-identifier>
          rate-group-identifier
        </rate-group-identifier>
        <transactions-start>
          transactions-start
        </transactions-start>
        <transactions-success>
          transactions-success
        </transactions-success>
      </rate-group-statistics>
    </rate-group-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Statistics for a rate group

<redirection-request-statistics>

Usage

```
<redirection-request-statistics>
  <request-received>
    request-received
  </request-received>
  <request-transmitted>
    request-transmitted
  </request-transmitted>
  <response-received>
    response-received
  </response-received>
  <response-transmitted>
    response-transmitted
  </response-transmitted>
</redirection-request-statistics>
```

Description GTP Prime redirection request statistics

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<redirection-request-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <redirection-request-statistics>
      <request-received>
        request-received
      </request-received>
      <request-transmitted>
        request-transmitted
      </request-transmitted>
      <response-received>
        response-received
      </response-received>
      <response-transmitted>
        response-transmitted
      </response-transmitted>
    </redirection-request-statistics>
  </gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description GTP Prime redirection request statistics

<resources>

Usage

```
<ggsn-interface>
  <resources>
    <cpu-info>....</cpu-info>
    <memory-total>
      memory-total
    </memory-total>
    <memory-used>
      memory-used
    </memory-used>
  </resources>
</ggsn-interface>
```

Description CPU and memory information for a PIC

<resources>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <resources>
      <cpu-info>....</cpu-info>
      <memory-total>
        memory-total
      </memory-total>
      <memory-used>
```

```
            memory-used
           </memory-used>
          </resources>
         </ggsn-interface>
        </ggsn-interface-information>
```

Description CPU and memory information for a PIC

<rs-statistics>

Usage

```
<rulespace-based-charging-statistics>
 <rs-statistics>
  <rs-identifier>
   rs-identifier
  </rs-identifier>
  <uplink-statistics>
   uplink-statistics
  </uplink-statistics>
  <downlink-statistics>
   downlink-statistics
  </downlink-statistics>
  <service-instances>
   service-instances
  </service-instances>
  <discarded-uplink>
   discarded-uplink
  </discarded-uplink>
  <discarded-downlink>
   discarded-downlink
  </discarded-downlink>
  <gate-discarded-uplink>
   gate-discarded-uplink
  </gate-discarded-uplink>
  <gate-discarded-downlink>
   gate-discarded-downlink
  </gate-discarded-downlink>
 </rs-statistics>
</rulespace-based-charging-statistics>
```

Description Statistics for a rule space

<rs-statistics>

Usage

```
<apn-statistics-information>
 <apn-statistics>
  <rulespace-based-charging-statistics>
   <rs-statistics>
    <rs-identifier>
     rs-identifier
    </rs-identifier>
```


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```
<uplink-statistics>
  uplink-statistics
</uplink-statistics>
<downlink-statistics>
  downlink-statistics
</downlink-statistics>
<service-instances>
  service-instances
</service-instances>
<discarded-uplink>
  discarded-uplink
</discarded-uplink>
<discarded-downlink>
  discarded-downlink
</discarded-downlink>
<gate-discarded-uplink>
  gate-discarded-uplink
</gate-discarded-uplink>
<gate-discarded-downlink>
  gate-discarded-downlink
</gate-discarded-downlink>
</rs-statistics>
</rulespace-based-charging-statistics>
</apn-statistics>
</apn-statistics-information>
```

Description Statistics for a rule space

<rulespace-based-charging-statistics>

Usage

```
<rulespace-based-charging-statistics>
  <rs-statistics>....</rs-statistics>
</rulespace-based-charging-statistics>
```

Description Information about rule spaces

<rulespace-based-charging-statistics>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <rulespace-based-charging-statistics>
      <rs-statistics>....</rs-statistics>
    </rulespace-based-charging-statistics>
  </apn-statistics>
</apn-statistics-information>
```

Description Information about rule spaces

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<sbcc-statistics-information>

Usage

```
<sbcc-statistics-information>
  <prepaid-request>
    prepaid-request
  </prepaid-request>
  <rating-request>
    rating-request
  </rating-request>
  <prepaid-user>
    prepaid-user
  </prepaid-user>
  <prepaid-context>
    prepaid-context
  </prepaid-context>
  <prepaid-pdp-creates-attempted>
    prepaid-pdp-creates-attempted
  </prepaid-pdp-creates-attempted>
  <prepaid-pdp-creates-failed>
    prepaid-pdp-creates-failed
  </prepaid-pdp-creates-failed>
  <pdp-initiated-deactivation>
    pdp-initiated-deactivation
  </pdp-initiated-deactivation>
  <credit-start-request-attempted>
    credit-start-request-attempted
  </credit-start-request-attempted>
  <credit-start-request-failed>
    credit-start-request-failed
  </credit-start-request-failed>
  <rating-initial-request-attempted>
    rating-initial-request-attempted
  </rating-initial-request-attempted>
  <rating-initial-request-failed>
    rating-initial-request-failed
  </rating-initial-request-failed>
  <rating-update-request-attempted>
    rating-update-request-attempted
  </rating-update-request-attempted>
  <rating-update-request-failed>
    rating-update-request-failed
  </rating-update-request-failed>
  <credit-update-request-attempted>
    credit-update-request-attempted
  </credit-update-request-attempted>
  <credit-update-request-failed>
    credit-update-request-failed
  </credit-update-request-failed>
  <credit-stop-request-attempted>
    credit-stop-request-attempted
  </credit-stop-request-attempted>
  <credit-stop-request-failed>
    credit-stop-request-failed
  </credit-stop-request-failed>
```


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```
<external-prs-update>
  external-prs-update
</external-prs-update>
<external-prs-update-no-match>
  external-prs-update-no-match
</external-prs-update-no-match>
<external-credit-update>
  external-credit-update
</external-credit-update>
<external-credit-update-no-match>
  external-credit-update-no-match
</external-credit-update-no-match>
<external-update-failed>
  external-update-failed
</external-update-failed>
<duration-time>
  duration-time
</duration-time>
<activation-bearer-ctrl-accept>
  activation-bearer-ctrl-accept
</activation-bearer-ctrl-accept>
<activation-bearer-ctrl-reject>
  activation-bearer-ctrl-reject
</activation-bearer-ctrl-reject>
<activation-bearer-ctrl-upgrade>
  activation-bearer-ctrl-upgrade
</activation-bearer-ctrl-upgrade>
<activation-bearer-ctrl-downgrade>
  activation-bearer-ctrl-downgrade
</activation-bearer-ctrl-downgrade>
<modification-bearer-ctrl-accept>
  modification-bearer-ctrl-accept
</modification-bearer-ctrl-accept>
<modification-bearer-ctrl-deactivate>
  modification-bearer-ctrl-deactivate
</modification-bearer-ctrl-deactivate>
<modification-bearer-ctrl-upgrade>
  modification-bearer-ctrl-upgrade
</modification-bearer-ctrl-upgrade>
<modification-bearer-ctrl-downgrade>
  modification-bearer-ctrl-downgrade
</modification-bearer-ctrl-downgrade>
<activation-no-bearer-ctrl-accept>
  activation-no-bearer-ctrl-accept
</activation-no-bearer-ctrl-accept>
<activation-no-bearer-ctrl-reject>
  activation-no-bearer-ctrl-reject
</activation-no-bearer-ctrl-reject>
<activation-no-bearer-ctrl-downgrade>
  activation-no-bearer-ctrl-downgrade
</activation-no-bearer-ctrl-downgrade>
<modification-no-bearer-ctrl-accept>
  modification-no-bearer-ctrl-accept
</modification-no-bearer-ctrl-accept>
<modification-no-bearer-ctrl-deactivate>
  modification-no-bearer-ctrl-deactivate
```

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```
</modification-no-bearer-ctrl-deactivate>
<modification-no-bearer-ctrl-downgrade>
  modification-no-bearer-ctrl-downgrade
</modification-no-bearer-ctrl-downgrade>
<das-information>....</das-information>
<pras-information>....</pras-information>
<ccas-information>....</ccas-information>
<service-class-information>....</service-class-information>
<service-identifier-information>....</service-identifier-information>
<rate-group-information>....</rate-group-information>
<authorization-discard-information>....</authorization-discard-information>
</sbcc-statistics-information>
```

Description Service-based charging statistics

<sbcc-statistics-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <prepaid-request>
      prepaid-request
    </prepaid-request>
    <rating-request>
      rating-request
    </rating-request>
    <prepaid-user>
      prepaid-user
    </prepaid-user>
    <prepaid-context>
      prepaid-context
    </prepaid-context>
    <prepaid-pdp-creates-attempted>
      prepaid-pdp-creates-attempted
    </prepaid-pdp-creates-attempted>
    <prepaid-pdp-creates-failed>
      prepaid-pdp-creates-failed
    </prepaid-pdp-creates-failed>
    <pdp-initiated-deactivation>
      pdp-initiated-deactivation
    </pdp-initiated-deactivation>
    <credit-start-request-attempted>
      credit-start-request-attempted
    </credit-start-request-attempted>
    <credit-start-request-failed>
      credit-start-request-failed
    </credit-start-request-failed>
    <rating-initial-request-attempted>
      rating-initial-request-attempted
    </rating-initial-request-attempted>
    <rating-initial-request-failed>
      rating-initial-request-failed
    </rating-initial-request-failed>
    <rating-update-request-attempted>
```


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```
  rating-update-request-attempted
</rating-update-request-attempted>
<rating-update-request-failed>
  rating-update-request-failed
</rating-update-request-failed>
<credit-update-request-attempted>
  credit-update-request-attempted
</credit-update-request-attempted>
<credit-update-request-failed>
  credit-update-request-failed
</credit-update-request-failed>
<credit-stop-request-attempted>
  credit-stop-request-attempted
</credit-stop-request-attempted>
<credit-stop-request-failed>
  credit-stop-request-failed
</credit-stop-request-failed>
<external-prs-update>
  external-prs-update
</external-prs-update>
<external-prs-update-no-match>
  external-prs-update-no-match
</external-prs-update-no-match>
<external-credit-update>
  external-credit-update
</external-credit-update>
<external-credit-update-no-match>
  external-credit-update-no-match
</external-credit-update-no-match>
<external-update-failed>
  external-update-failed
</external-update-failed>
<duration-time>
  duration-time
</duration-time>
<activation-bearer-ctrl-accept>
  activation-bearer-ctrl-accept
</activation-bearer-ctrl-accept>
<activation-bearer-ctrl-reject>
  activation-bearer-ctrl-reject
</activation-bearer-ctrl-reject>
<activation-bearer-ctrl-upgrade>
  activation-bearer-ctrl-upgrade
</activation-bearer-ctrl-upgrade>
<activation-bearer-ctrl-downgrade>
  activation-bearer-ctrl-downgrade
</activation-bearer-ctrl-downgrade>
<modification-bearer-ctrl-accept>
  modification-bearer-ctrl-accept
</modification-bearer-ctrl-accept>
<modification-bearer-ctrl-deactivate>
  modification-bearer-ctrl-deactivate
</modification-bearer-ctrl-deactivate>
<modification-bearer-ctrl-upgrade>
  modification-bearer-ctrl-upgrade
</modification-bearer-ctrl-upgrade>
```

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```
<modification-bearer-ctrl-downgrade>
  modification-bearer-ctrl-downgrade
</modification-bearer-ctrl-downgrade>
<activation-no-bearer-ctrl-accept>
  activation-no-bearer-ctrl-accept
</activation-no-bearer-ctrl-accept>
<activation-no-bearer-ctrl-reject>
  activation-no-bearer-ctrl-reject
</activation-no-bearer-ctrl-reject>
<activation-no-bearer-ctrl-downgrade>
  activation-no-bearer-ctrl-downgrade
</activation-no-bearer-ctrl-downgrade>
<modification-no-bearer-ctrl-accept>
  modification-no-bearer-ctrl-accept
</modification-no-bearer-ctrl-accept>
<modification-no-bearer-ctrl-deactivate>
  modification-no-bearer-ctrl-deactivate
</modification-no-bearer-ctrl-deactivate>
<modification-no-bearer-ctrl-downgrade>
  modification-no-bearer-ctrl-downgrade
</modification-no-bearer-ctrl-downgrade>
<das-information>....</das-information>
<pras-information>....</pras-information>
<ccas-information>....</ccas-information>
<service-class-information>....</service-class-information>
<service-identifier-information>....</service-identifier-information>
<rate-group-information>....</rate-group-information>
<authorization-discard-information>....</authorization-discard-information>
</sbcc-statistics-information>
</ggsn-interface>
```

Description Service-based charging statistics

<sbcc-statistics-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <prepaid-request>
        prepaid-request
      </prepaid-request>
      <rating-request>
        rating-request
      </rating-request>
      <prepaid-user>
        prepaid-user
      </prepaid-user>
      <prepaid-context>
        prepaid-context
      </prepaid-context>
      <prepaid-pdp-creates-attempted>
        prepaid-pdp-creates-attempted
      </prepaid-pdp-creates-attempted>
```


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```
<prepaid-pdp-creates-failed>
  prepaid-pdp-creates-failed
</prepaid-pdp-creates-failed>
<pdp-initiated-deactivation>
  pdp-initiated-deactivation
</pdp-initiated-deactivation>
<credit-start-request-attempted>
  credit-start-request-attempted
</credit-start-request-attempted>
<credit-start-request-failed>
  credit-start-request-failed
</credit-start-request-failed>
<rating-initial-request-attempted>
  rating-initial-request-attempted
</rating-initial-request-attempted>
<rating-initial-request-failed>
  rating-initial-request-failed
</rating-initial-request-failed>
<rating-update-request-attempted>
  rating-update-request-attempted
</rating-update-request-attempted>
<rating-update-request-failed>
  rating-update-request-failed
</rating-update-request-failed>
<credit-update-request-attempted>
  credit-update-request-attempted
</credit-update-request-attempted>
<credit-update-request-failed>
  credit-update-request-failed
</credit-update-request-failed>
<credit-stop-request-attempted>
  credit-stop-request-attempted
</credit-stop-request-attempted>
<credit-stop-request-failed>
  credit-stop-request-failed
</credit-stop-request-failed>
<external-prs-update>
  external-prs-update
</external-prs-update>
<external-prs-update-no-match>
  external-prs-update-no-match
</external-prs-update-no-match>
<external-credit-update>
  external-credit-update
</external-credit-update>
<external-credit-update-no-match>
  external-credit-update-no-match
</external-credit-update-no-match>
<external-update-failed>
  external-update-failed
</external-update-failed>
<duration-time>
  duration-time
</duration-time>
<activation-bearer-ctrl-accept>
  activation-bearer-ctrl-accept
```

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```
        </activation-bearer-ctrl-accept>
        <activation-bearer-ctrl-reject>
          activation-bearer-ctrl-reject
        </activation-bearer-ctrl-reject>
        <activation-bearer-ctrl-upgrade>
          activation-bearer-ctrl-upgrade
        </activation-bearer-ctrl-upgrade>
        <activation-bearer-ctrl-downgrade>
          activation-bearer-ctrl-downgrade
        </activation-bearer-ctrl-downgrade>
        <modification-bearer-ctrl-accept>
          modification-bearer-ctrl-accept
        </modification-bearer-ctrl-accept>
        <modification-bearer-ctrl-deactivate>
          modification-bearer-ctrl-deactivate
        </modification-bearer-ctrl-deactivate>
        <modification-bearer-ctrl-upgrade>
          modification-bearer-ctrl-upgrade
        </modification-bearer-ctrl-upgrade>
        <modification-bearer-ctrl-downgrade>
          modification-bearer-ctrl-downgrade
        </modification-bearer-ctrl-downgrade>
        <activation-no-bearer-ctrl-accept>
          activation-no-bearer-ctrl-accept
        </activation-no-bearer-ctrl-accept>
        <activation-no-bearer-ctrl-reject>
          activation-no-bearer-ctrl-reject
        </activation-no-bearer-ctrl-reject>
        <activation-no-bearer-ctrl-downgrade>
          activation-no-bearer-ctrl-downgrade
        </activation-no-bearer-ctrl-downgrade>
        <modification-no-bearer-ctrl-accept>
          modification-no-bearer-ctrl-accept
        </modification-no-bearer-ctrl-accept>
        <modification-no-bearer-ctrl-deactivate>
          modification-no-bearer-ctrl-deactivate
        </modification-no-bearer-ctrl-deactivate>
        <modification-no-bearer-ctrl-downgrade>
          modification-no-bearer-ctrl-downgrade
        </modification-no-bearer-ctrl-downgrade>
        <das-information>....</das-information>
        <pras-information>....</pras-information>
        <ccas-information>....</ccas-information>
        <service-class-information>....</service-class-information>
        <service-identifier-information>....</service-identifier-information>
        <rate-group-information>....</rate-group-information>
        <authorization-discard-information>....</authorization-discard-information>
      </sbcc-statistics-information>
    </ggsn-interface>
  </ggsn-interface-information>
```

Description Service-based charging statistics

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<sbcc-statistics-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <prepaid-request>
      prepaid-request
    </prepaid-request>
    <rating-request>
      rating-request
    </rating-request>
    <prepaid-user>
      prepaid-user
    </prepaid-user>
    <prepaid-context>
      prepaid-context
    </prepaid-context>
    <prepaid-pdp-creates-attempted>
      prepaid-pdp-creates-attempted
    </prepaid-pdp-creates-attempted>
    <prepaid-pdp-creates-failed>
      prepaid-pdp-creates-failed
    </prepaid-pdp-creates-failed>
    <pdp-initiated-deactivation>
      pdp-initiated-deactivation
    </pdp-initiated-deactivation>
    <credit-start-request-attempted>
      credit-start-request-attempted
    </credit-start-request-attempted>
    <credit-start-request-failed>
      credit-start-request-failed
    </credit-start-request-failed>
    <rating-initial-request-attempted>
      rating-initial-request-attempted
    </rating-initial-request-attempted>
    <rating-initial-request-failed>
      rating-initial-request-failed
    </rating-initial-request-failed>
    <rating-update-request-attempted>
      rating-update-request-attempted
    </rating-update-request-attempted>
    <rating-update-request-failed>
      rating-update-request-failed
    </rating-update-request-failed>
    <credit-update-request-attempted>
      credit-update-request-attempted
    </credit-update-request-attempted>
    <credit-update-request-failed>
      credit-update-request-failed
    </credit-update-request-failed>
    <credit-stop-request-attempted>
      credit-stop-request-attempted
    </credit-stop-request-attempted>
    <credit-stop-request-failed>
      credit-stop-request-failed
```

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```
</credit-stop-request-failed>
<external-prs-update>
  external-prs-update
</external-prs-update>
<external-prs-update-no-match>
  external-prs-update-no-match
</external-prs-update-no-match>
<external-credit-update>
  external-credit-update
</external-credit-update>
<external-credit-update-no-match>
  external-credit-update-no-match
</external-credit-update-no-match>
<external-update-failed>
  external-update-failed
</external-update-failed>
<duration-time>
  duration-time
</duration-time>
<activation-bearer-ctrl-accept>
  activation-bearer-ctrl-accept
</activation-bearer-ctrl-accept>
<activation-bearer-ctrl-reject>
  activation-bearer-ctrl-reject
</activation-bearer-ctrl-reject>
<activation-bearer-ctrl-upgrade>
  activation-bearer-ctrl-upgrade
</activation-bearer-ctrl-upgrade>
<activation-bearer-ctrl-downgrade>
  activation-bearer-ctrl-downgrade
</activation-bearer-ctrl-downgrade>
<modification-bearer-ctrl-accept>
  modification-bearer-ctrl-accept
</modification-bearer-ctrl-accept>
<modification-bearer-ctrl-deactivate>
  modification-bearer-ctrl-deactivate
</modification-bearer-ctrl-deactivate>
<modification-bearer-ctrl-upgrade>
  modification-bearer-ctrl-upgrade
</modification-bearer-ctrl-upgrade>
<modification-bearer-ctrl-downgrade>
  modification-bearer-ctrl-downgrade
</modification-bearer-ctrl-downgrade>
<activation-no-bearer-ctrl-accept>
  activation-no-bearer-ctrl-accept
</activation-no-bearer-ctrl-accept>
<activation-no-bearer-ctrl-reject>
  activation-no-bearer-ctrl-reject
</activation-no-bearer-ctrl-reject>
<activation-no-bearer-ctrl-downgrade>
  activation-no-bearer-ctrl-downgrade
</activation-no-bearer-ctrl-downgrade>
<modification-no-bearer-ctrl-accept>
  modification-no-bearer-ctrl-accept
</modification-no-bearer-ctrl-accept>
<modification-no-bearer-ctrl-deactivate>
```


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```
    modification-no-bearer-ctrl-deactivate
   </modification-no-bearer-ctrl-deactivate>
   <modification-no-bearer-ctrl-downgrade>
    modification-no-bearer-ctrl-downgrade
   </modification-no-bearer-ctrl-downgrade>
   <das-information>....</das-information>
   <pras-information>....</pras-information>
   <ccas-information>....</ccas-information>
   <service-class-information>....</service-class-information>
   <service-identifier-information>....</service-identifier-information>
   <rate-group-information>....</rate-group-information>
   <authorization-discard-information>....</authorization-discard-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Service-based charging statistics

<sbcc-statistics-information>

Usage

```
<apn-statistics-information>
 <sbcc-statistics-information>
  <prepaid-request>
   prepaid-request
  </prepaid-request>
  <rating-request>
   rating-request
  </rating-request>
  <prepaid-user>
   prepaid-user
  </prepaid-user>
  <prepaid-context>
   prepaid-context
  </prepaid-context>
  <prepaid-pdp-creates-attempted>
   prepaid-pdp-creates-attempted
  </prepaid-pdp-creates-attempted>
  <prepaid-pdp-creates-failed>
   prepaid-pdp-creates-failed
  </prepaid-pdp-creates-failed>
  <pdp-initiated-deactivation>
   pdp-initiated-deactivation
  </pdp-initiated-deactivation>
  <credit-start-request-attempted>
   credit-start-request-attempted
  </credit-start-request-attempted>
  <credit-start-request-failed>
   credit-start-request-failed
  </credit-start-request-failed>
  <rating-initial-request-attempted>
   rating-initial-request-attempted
  </rating-initial-request-attempted>
  <rating-initial-request-failed>
   rating-initial-request-failed
```

```
</rating-initial-request-failed>
<rating-update-request-attempted>
  rating-update-request-attempted
</rating-update-request-attempted>
<rating-update-request-failed>
  rating-update-request-failed
</rating-update-request-failed>
<credit-update-request-attempted>
  credit-update-request-attempted
</credit-update-request-attempted>
<credit-update-request-failed>
  credit-update-request-failed
</credit-update-request-failed>
<credit-stop-request-attempted>
  credit-stop-request-attempted
</credit-stop-request-attempted>
<credit-stop-request-failed>
  credit-stop-request-failed
</credit-stop-request-failed>
<external-prs-update>
  external-prs-update
</external-prs-update>
<external-prs-update-no-match>
  external-prs-update-no-match
</external-prs-update-no-match>
<external-credit-update>
  external-credit-update
</external-credit-update>
<external-credit-update-no-match>
  external-credit-update-no-match
</external-credit-update-no-match>
<external-update-failed>
  external-update-failed
</external-update-failed>
<duration-time>
  duration-time
</duration-time>
<activation-bearer-ctrl-accept>
  activation-bearer-ctrl-accept
</activation-bearer-ctrl-accept>
<activation-bearer-ctrl-reject>
  activation-bearer-ctrl-reject
</activation-bearer-ctrl-reject>
<activation-bearer-ctrl-upgrade>
  activation-bearer-ctrl-upgrade
</activation-bearer-ctrl-upgrade>
<activation-bearer-ctrl-downgrade>
  activation-bearer-ctrl-downgrade
</activation-bearer-ctrl-downgrade>
<modification-bearer-ctrl-accept>
  modification-bearer-ctrl-accept
</modification-bearer-ctrl-accept>
<modification-bearer-ctrl-deactivate>
  modification-bearer-ctrl-deactivate
</modification-bearer-ctrl-deactivate>
<modification-bearer-ctrl-upgrade>
```


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```
    modification-bearer-ctrl-upgrade
   </modification-bearer-ctrl-upgrade>
   <modification-bearer-ctrl-downgrade>
    modification-bearer-ctrl-downgrade
   </modification-bearer-ctrl-downgrade>
   <activation-no-bearer-ctrl-accept>
    activation-no-bearer-ctrl-accept
   </activation-no-bearer-ctrl-accept>
   <activation-no-bearer-ctrl-reject>
    activation-no-bearer-ctrl-reject
   </activation-no-bearer-ctrl-reject>
   <activation-no-bearer-ctrl-downgrade>
    activation-no-bearer-ctrl-downgrade
   </activation-no-bearer-ctrl-downgrade>
   <modification-no-bearer-ctrl-accept>
    modification-no-bearer-ctrl-accept
   </modification-no-bearer-ctrl-accept>
   <modification-no-bearer-ctrl-deactivate>
    modification-no-bearer-ctrl-deactivate
   </modification-no-bearer-ctrl-deactivate>
   <modification-no-bearer-ctrl-downgrade>
    modification-no-bearer-ctrl-downgrade
   </modification-no-bearer-ctrl-downgrade>
   <das-information>....</das-information>
   <pras-information>....</pras-information>
   <ccas-information>....</ccas-information>
   <service-class-information>....</service-class-information>
   <service-identifier-information>....</service-identifier-information>
   <rate-group-information>....</rate-group-information>
   <authorization-discard-information>....</authorization-discard-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Service-based charging statistics

<service-based-charging-for-gx>

Usage

```
<service-based-charging-for-gx>
  <ccr-statistics>....</ccr-statistics>
  <dynamic-charging-rules>
   dynamic-charging-rules
  </dynamic-charging-rules>
  <active-predifened-charging-rules>
   active-predifened-charging-rules
  </active-predifened-charging-rules>
  <active-predifened-charging-rulbases>
   active-predifened-charging-rulbases
  </active-predifened-charging-rulbases>
</service-based-charging-for-gx>
```

Description Service-base charging statistics for the gx interface

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<service-based-charging-for-gx>

Usage

```
<apn-statistics-information>
  <service-based-charging-for-gx>
    <ccr-statistics>....</ccr-statistics>
    <dynamic-charging-rules>
      dynamic-charging-rules
    </dynamic-charging-rules>
    <active-predifened-charging-rules>
      active-predifened-charging-rules
    </active-predifened-charging-rules>
    <active-predifened-charging-rulbases>
      active-predifened-charging-rulbases
    </active-predifened-charging-rulbases>
  </service-based-charging-for-gx>
</apn-statistics-information>
```

Description Service-base charging statistics for the gx interface

<service-class-information>

Usage

```
<service-class-information>
  <service-class-statistics>....</service-class-statistics>
</service-class-information>
```

Description Information about a service class

<service-class-information>

Usage

```
<sbcc-statistics-information>
  <service-class-information>
    <service-class-statistics>....</service-class-statistics>
  </service-class-information>
</sbcc-statistics-information>
```

Description Information about a service class

<service-class-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>....</service-class-statistics>
    </service-class-information>
  </sbcc-statistics-information>
```


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```
</ggsn-interface>
```

Description Information about a service class

<service-class-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <service-class-information>
        <service-class-statistics>....</service-class-statistics>
      </service-class-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Information about a service class

<service-class-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>....</service-class-statistics>
    </service-class-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description Information about a service class

<service-class-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>....</service-class-statistics>
    </service-class-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Information about a service class

<service-class-statistics>

Usage

```
<service-class-information>
```

```
<service-class-statistics>
  <service-class-identifier>
    service-class-identifier
  </service-class-identifier>
  <uplink-bytes>
    uplink-bytes
  </uplink-bytes>
  <downlink-bytes>
    downlink-bytes
  </downlink-bytes>
  <active-time>
    active-time
  </active-time>
</service-class-statistics>
</service-class-information>
```

Description Statistics for a service class

<service-class-statistics>

Usage

```
<sbcc-statistics-information>
  <service-class-information>
    <service-class-statistics>
      <service-class-identifier>
        service-class-identifier
      </service-class-identifier>
      <uplink-bytes>
        uplink-bytes
      </uplink-bytes>
      <downlink-bytes>
        downlink-bytes
      </downlink-bytes>
      <active-time>
        active-time
      </active-time>
    </service-class-statistics>
  </service-class-information>
</sbcc-statistics-information>
```

Description Statistics for a service class

<service-class-statistics>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>
        <service-class-identifier>
          service-class-identifier
        </service-class-identifier>
```


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```
        <uplink-bytes>
          uplink-bytes
        </uplink-bytes>
        <downlink-bytes>
          downlink-bytes
        </downlink-bytes>
        <active-time>
          active-time
        </active-time>
      </service-class-statistics>
    </service-class-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

Description Statistics for a service class

<service-class-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <service-class-information>
        <service-class-statistics>
          <service-class-identifier>
            service-class-identifier
          </service-class-identifier>
          <uplink-bytes>
            uplink-bytes
          </uplink-bytes>
          <downlink-bytes>
            downlink-bytes
          </downlink-bytes>
          <active-time>
            active-time
          </active-time>
        </service-class-statistics>
      </service-class-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description Statistics for a service class

<service-class-statistics>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>
        <service-class-identifier>
```

```
            service-class-identifier
          </service-class-identifier>
          <uplink-bytes>
            uplink-bytes
          </uplink-bytes>
          <downlink-bytes>
            downlink-bytes
          </downlink-bytes>
          <active-time>
            active-time
          </active-time>
        </service-class-statistics>
      </service-class-information>
    </sbcc-statistics-information>
  </ggsn-statistics>
```

Description Statistics for a service class

<service-class-statistics>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <service-class-information>
      <service-class-statistics>
        <service-class-identifier>
          service-class-identifier
        </service-class-identifier>
        <uplink-bytes>
          uplink-bytes
        </uplink-bytes>
        <downlink-bytes>
          downlink-bytes
        </downlink-bytes>
        <active-time>
          active-time
        </active-time>
      </service-class-statistics>
    </service-class-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description Statistics for a service class

<service-id-information>

Usage

```
<service-id-information>
  <service-id-statistics>....</service-id-statistics>
</service-id-information>
```


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Description Information about a service ID

<service-id-statistics>

Usage

```
<service-id-information>
  <service-id-statistics>
    <service-id-identifier>
      service-id-identifier
    </service-id-identifier>
    <uplink-bytes>
      uplink-bytes
    </uplink-bytes>
    <downlink-bytes>
      downlink-bytes
    </downlink-bytes>
    <transactions-charged>
      transactions-charged
    </transactions-charged>
    <transactions-failed>
      transactions-failed
    </transactions-failed>
    <transactions-start>
      transactions-start
    </transactions-start>
    <transactions-success>
      transactions-success
    </transactions-success>
  </service-id-statistics>
</service-id-information>
```

Description Statistics for a service ID

<service-identifier-information>

Usage

```
<sbcc-statistics-information>
  <service-identifier-information>
</service-identifier-information>
</sbcc-statistics-information>
```

Description

<service-identifier-information>

Usage

```
<ggsn-interface>
  <sbcc-statistics-information>
    <service-identifier-information>
 </service-identifier-information>
  </sbcc-statistics-information>
</ggsn-interface>
```

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Description

<service-identifier-information>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <sbcc-statistics-information>
      <service-identifier-information>
  </service-identifier-information>
    </sbcc-statistics-information>
  </ggsn-interface>
</ggsn-interface-information>
```

Description

<service-identifier-information>

Usage

```
<ggsn-statistics>
  <sbcc-statistics-information>
    <service-identifier-information>
 </service-identifier-information>
  </sbcc-statistics-information>
</ggsn-statistics>
```

Description

<service-identifier-information>

Usage

```
<apn-statistics-information>
  <sbcc-statistics-information>
    <service-identifier-information>
 </service-identifier-information>
  </sbcc-statistics-information>
</apn-statistics-information>
```

Description

<sgsn-statistics>

Usage

```
<sgsn-statistics-information>
  <sgsn-statistics>
    <address>
      address
    </address>
    <pdp-context-statistics>....</pdp-context-statistics>
    <uplink>....</uplink>
    <downlink>....</downlink>
    <gtp-error-statistics>....</gtp-error-statistics>
  </sgsn-statistics>
```


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```
</sgsn-statistics-information>
```

Description Statistics information for an SGSN

<sgsn-statistics-information>

Usage

```
<sgsn-statistics-information>
  <sgsn-statistics>....</sgsn-statistics>
</sgsn-statistics-information>
```

Description SGSN-level statistics for the GGSN service

<signalling>

Usage

```
<signalling>
  <incoming>....</incoming>
  <outgoing>....</outgoing>
</signalling>
```

Description Signaling traffic

<signalling>

Usage

```
<apn-statistics-information>
  <apn-statistics>
    <signalling>
      <incoming>....</incoming>
      <outgoing>....</outgoing>
    </signalling>
  </apn-statistics>
</apn-statistics-information>
```

Description Signaling traffic

<software-action-results>

Usage

```
<software-action-results>
  <software-action-message>
    software-action-message
  </software-action-message>
</software-action-results>
```

Description Results of a GGSN software software command

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<tft-statistics>

Usage

```
<ggsn-interface>
  <tft-statistics>
    <maximum-tft-filter-depth>
      maximum-tft-filter-depth
    </maximum-tft-filter-depth>
    <mean-tft-filter-depth>
      mean-tft-filter-depth
    </mean-tft-filter-depth>
  </tft-statistics>
</ggsn-interface>
```

Description

<tft-statistics>

Usage

```
<ggsn-interface-information>
  <ggsn-interface>
    <tft-statistics>
      <maximum-tft-filter-depth>
        maximum-tft-filter-depth
      </maximum-tft-filter-depth>
      <mean-tft-filter-depth>
        mean-tft-filter-depth
      </mean-tft-filter-depth>
    </tft-statistics>
  </ggsn-interface>
</ggsn-interface-information>
```

Description

<traffic-flow-template>

Usage

```
<pdp-context>
  <traffic-flow-template-information>
    <traffic-flow-template>
      <packet-filter-information>....</packet-filter-information>
    </traffic-flow-template>
  </traffic-flow-template-information>
</pdp-context>
```

Description TFT information

<traffic-flow-template>

Usage

```
<mobile-user-information>
  <mobile-user>
```


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```
<pdp-context-information>
 <pdp-context>
  <traffic-flow-template-information>
   <traffic-flow-template>
    <packet-filter-information>....</packet-filter-information>
   </traffic-flow-template>
  </traffic-flow-template-information>
 </pdp-context>
</pdp-context-information>
</mobile-user>
</mobile-user-information>
```

Description TFT information

<traffic-flow-template>

Usage

```
<pdp-context-deletion-results>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
    <traffic-flow-template-information>
     <traffic-flow-template>
      <packet-filter-information>....</packet-filter-information>
     </traffic-flow-template>
    </traffic-flow-template-information>
   </pdp-context>
  </pdp-context-information>
 </mobile-user>
</pdp-context-deletion-results>
```

Description TFT information

<traffic-flow-template-information>

Usage

```
<pdp-context>
 <traffic-flow-template-information>
  <traffic-flow-template>....</traffic-flow-template>
 </traffic-flow-template-information>
</pdp-context>
```

Description Traffic flow templates (TFTs)

<traffic-flow-template-information>

Usage

```
<mobile-user-information>
 <mobile-user>
  <pdp-context-information>
   <pdp-context>
```

```
        <traffic-flow-template-information>
          <traffic-flow-template>....</traffic-flow-template>
        </traffic-flow-template-information>
      </pdp-context>
    </pdp-context-information>
  </mobile-user>
</mobile-user-information>
```

Description Traffic flow templates (TFTs)

<traffic-flow-template-information>

Usage

```
<pdp-context-deletion-results>
  <mobile-user>
    <pdp-context-information>
      <pdp-context>
        <traffic-flow-template-information>
          <traffic-flow-template>....</traffic-flow-template>
        </traffic-flow-template-information>
      </pdp-context>
    </pdp-context-information>
  </mobile-user>
</pdp-context-deletion-results>
```

Description Traffic flow templates (TFTs)

<uplink>

Usage

```
<uplink>
  <packets>
    packets
  </packets>
  <packets-ipv6>
    packets-ipv6
  </packets-ipv6>
  <bytes>
    bytes
  </bytes>
  <bytes-ipv6>
    bytes-ipv6
  </bytes-ipv6>
  <dropped-packets>
    dropped-packets
  </dropped-packets>
  <dropped-packets-ipv6>
    dropped-packets-ipv6
  </dropped-packets-ipv6>
  <dropped-bytes>
    dropped-bytes
  </dropped-bytes>
```


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```
  <dropped-bytes-ipv6>
   dropped-bytes-ipv6
  </dropped-bytes-ipv6>
</uplink>
```

Description Link traffic in the uplink direction

<uplink>

Usage

```
<ggsn-statistics>
 <uplink>
  <packets>
   packets
  </packets>
  <packets-ipv6>
   packets-ipv6
  </packets-ipv6>
  <bytes>
   bytes
  </bytes>
  <bytes-ipv6>
   bytes-ipv6
  </bytes-ipv6>
  <dropped-packets>
   dropped-packets
  </dropped-packets>
  <dropped-packets-ipv6>
   dropped-packets-ipv6
  </dropped-packets-ipv6>
  <dropped-bytes>
   dropped-bytes
  </dropped-bytes>
  <dropped-bytes-ipv6>
   dropped-bytes-ipv6
  </dropped-bytes-ipv6>
 </uplink>
</ggsn-statistics>
```

Description Link traffic in the uplink direction

<uplink>

Usage

```
<apn-statistics-information>
 <apn-statistics>
  <uplink>
   <packets>
    packets
   </packets>
   <packets-ipv6>
    packets-ipv6
```

```
        </packets-ipv6>
        <bytes>
          bytes
        </bytes>
        <bytes-ipv6>
          bytes-ipv6
        </bytes-ipv6>
        <dropped-packets>
          dropped-packets
        </dropped-packets>
        <dropped-packets-ipv6>
          dropped-packets-ipv6
        </dropped-packets-ipv6>
        <dropped-bytes>
          dropped-bytes
        </dropped-bytes>
        <dropped-bytes-ipv6>
          dropped-bytes-ipv6
        </dropped-bytes-ipv6>
      </uplink>
    </apn-statistics>
  </apn-statistics-information>
```

Description Link traffic in the uplink direction

<uplink>

Usage

```
<sgsn-statistics-information>
  <sgsn-statistics>
    <uplink>
      <packets>
        packets
      </packets>
      <packets-ipv6>
        packets-ipv6
      </packets-ipv6>
      <bytes>
        bytes
      </bytes>
      <bytes-ipv6>
        bytes-ipv6
      </bytes-ipv6>
      <dropped-packets>
        dropped-packets
      </dropped-packets>
      <dropped-packets-ipv6>
        dropped-packets-ipv6
      </dropped-packets-ipv6>
      <dropped-bytes>
        dropped-bytes
      </dropped-bytes>
      <dropped-bytes-ipv6>
        dropped-bytes-ipv6
```


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```
      </dropped-bytes-ipv6>
     </uplink>
    </sgsn-statistics>
</sgsn-statistics-information>
```

Description Link traffic in the uplink direction

<user-category-line>

Usage

```
<ggsn-pdp-per-user-category>
 <user-category-line>
  <user-category>
   user-category
  </user-category>
  <pdp-active>
   pdp-active
  </pdp-active>
 </user-category-line>
</ggsn-pdp-per-user-category>
```

Description

<user-category-line>

Usage

```
<apn-statistics-information>
 <apn-statistics>
  <ggsn-pdp-per-user-category>
   <user-category-line>
    <user-category>
     user-category
    </user-category>
    <pdp-active>
     pdp-active
    </pdp-active>
   </user-category-line>
  </ggsn-pdp-per-user-category>
 </apn-statistics>
</apn-statistics-information>
```

Description

<version-unsupported-statistics>

Usage

```
<version-unsupported-statistics>
 <version-unsupported-received>
  version-unsupported-received
 </version-unsupported-received>
 <version-unsupported-transmitted>
  version-unsupported-transmitted
```

```
    </version-unsupported-transmitted>
  </version-unsupported-statistics>
```

Description Version unsupported message information

<version-unsupported-statistics>

Usage

```
<gtp-statistics-information>
  <gtp-statistics>
    <version-unsupported-statistics>
      <version-unsupported-received>
        version-unsupported-received
      </version-unsupported-received>
      <version-unsupported-transmitted>
        version-unsupported-transmitted
      </version-unsupported-transmitted>
    </version-unsupported-statistics>
  </gtp-statistics>
</gtp-statistics-information>
```

Description Version unsupported message information

<version-unsupported-statistics>

Usage

```
<gtp-prime-statistics-information>
  <gtp-prime-statistics>
    <version-unsupported-statistics>
      <version-unsupported-received>
        version-unsupported-received
      </version-unsupported-received>
      <version-unsupported-transmitted>
        version-unsupported-transmitted
      </version-unsupported-transmitted>
    </version-unsupported-statistics>
  </gtp-prime-statistics>
</gtp-prime-statistics-information>
```

Description Version unsupported message information

<weighted-pdp-context-load>

Usage

```
<ggsn-statistics>
  <weighted-pdp-context-load>
    <weighted-pdp-context-load-in-control>
      weighted-pdp-context-load-in-control
    </weighted-pdp-context-load-in-control>
    <weighted-pdp-context-load-in-payload>
      weighted-pdp-context-load-in-payload
```


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```
    </weighted-pdp-context-load-in-payload>
  </weighted-pdp-context-load>
</ggsn-statistics>
```

Description

Summary of GRES Test Point Response Tags

<actions>

Usage

```
<test-point>
  <actions>
    <trigger-after>
      trigger-after
    </trigger-after>
    <delay>
      delay
    </delay>
    <trigger-count>
      trigger-count
    </trigger-count>
    <hold-database>
      hold-database
    </hold-database>
    <kernel-panic>
      kernel-panic
    </kernel-panic>
    <daemon-restart>
      daemon-restart
    </daemon-restart>
  </actions>
</test-point>
```

Description

<actions>

Usage

```
<gres-test-point-list>
  <test-point>
    <actions>
      <trigger-after>
        trigger-after
      </trigger-after>
      <delay>
        delay
      </delay>
      <trigger-count>
        trigger-count
      </trigger-count>
      <hold-database>
        hold-database
      </hold-database>
```

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```
      <kernel-panic>
       kernel-panic
      </kernel-panic>
      <daemon-restart>
       daemon-restart
      </daemon-restart>
     </actions>
    </test-point>
  </gres-test-point-list>
```

Description

<actions>

Usage

```
<gres-test-point-information>
  <gres-test-point-list>
    <test-point>
      <actions>
        <trigger-after>
          trigger-after
        </trigger-after>
        <delay>
          delay
        </delay>
        <trigger-count>
          trigger-count
        </trigger-count>
        <hold-database>
          hold-database
        </hold-database>
        <kernel-panic>
          kernel-panic
        </kernel-panic>
        <daemon-restart>
          daemon-restart
        </daemon-restart>
      </actions>
    </test-point>
  </gres-test-point-list>
</gres-test-point-information>
```

Description

<gres-test-point-error>

Usage

```
<gres-test-point-error>
  <message>
    message
  </message>
</gres-test-point-error>
```


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Description Command failure message

<gres-test-point-error>

Usage

```
<gres-test-point-information>
  <gres-test-point-error>
    <message>
      message
    </message>
  </gres-test-point-error>
</gres-test-point-information>
```

Description Command failure message

<gres-test-point-information>

Usage

```
<gres-test-point-information>
  <gres-test-point-list>....</gres-test-point-list>
  <gres-test-point-error>....</gres-test-point-error>
</gres-test-point-information>
```

Description

<gres-test-point-list>

Usage

```
<gres-test-point-list>
  <test-point>....</test-point>
</gres-test-point-list>
```

Description Test point information

<gres-test-point-list>

Usage

```
<gres-test-point-information>
  <gres-test-point-list>
    <test-point>....</test-point>
  </gres-test-point-list>
</gres-test-point-information>
```

Description Test point information

<test-point>

Usage

```
<test-point>
```

```
<id>
  id
</id>
<description>
  description
</description>
<state>
  state
</state>
<hit-count>
  hit-count
</hit-count>
<actions>....</actions>
</test-point>
```

Description Test point instance

<test-point>

Usage

```
<gres-test-point-list>
  <test-point>
    <id>
      id
    </id>
    <description>
      description
    </description>
    <state>
      state
    </state>
    <hit-count>
      hit-count
    </hit-count>
    <actions>....</actions>
  </test-point>
</gres-test-point-list>
```

Description Test point instance

<test-point>

Usage

```
<gres-test-point-information>
  <gres-test-point-list>
    <test-point>
      <id>
        id
      </id>
      <description>
        description
      </description>
```


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```
        <state>
          state
        </state>
        <hit-count>
          hit-count
        </hit-count>
        <actions>....</actions>
      </test-point>
    </gres-test-point-list>
  </gres-test-point-information>
```

Description Test point instance

Summary of UDP Forwarding Helper Response Tags

<helper-statistics-information>

Usage

```
<helper-statistics-information>
<helper-statistics-service-information>....</helper-statistics-service-information>

</helper-statistics-information>
```

Description Port forwarding helper statistics

<helper-statistics-service-information>

Usage

```
<helper-statistics-information>
  <helper-statistics-service-information>
    <service-name>
      service-name
    </service-name>
    <received-packets>
      received-packets
    </received-packets>
    <forwarded-packets>
      forwarded-packets
    </forwarded-packets>
    <dropped-packets>
      dropped-packets
    </dropped-packets>
    <dropped-packets-nointerface>
      dropped-packets-nointerface
    </dropped-packets-nointerface>
    <dropped-packets-nortinst>
      dropped-packets-nortinst
    </dropped-packets-nortinst>
    <dropped-packets-badread>
      dropped-packets-badread
    </dropped-packets-badread>
    <dropped-packets-badsend>
```

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```
      dropped-packets-badsend
    </dropped-packets-badsend>
    <dropped-packets-badaddr>
      dropped-packets-badaddr
    </dropped-packets-badaddr>
    <dropped-packets-nolocaladdr>
      dropped-packets-nolocaladdr
    </dropped-packets-nolocaladdr>
    <dropped-packets-noroute>
      dropped-packets-noroute
    </dropped-packets-noroute>
  </helper-statistics-service-information>
</helper-statistics-information>
```

Description Port forwarding helper statistics for a particular service

Summary of ICCP Response Tags

<iccp-client>

Usage

```
<iccp-information>
  <iccp-client>
    <client-name>
      client-name
    </client-name>
    <client-rg-groups>
      client-rg-groups
    </client-rg-groups>
  </iccp-client>
</iccp-information>
```

Description

<iccp-information>

Usage

```
<iccp-information>
  <iccp-peer>....</iccp-peer>
  <iccp-client>....</iccp-client>
</iccp-information>
```

Description Information about ICCP state

<iccp-peer>

Usage

```
<iccp-information>
  <iccp-peer>
    <peer-address>
      peer-address
```


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```
    </peer-address>
    <peer-conn-state-information>....</peer-conn-state-information>
    <rg-groups>....</rg-groups>
  </iccp-peer>
</iccp-information>
```

Description

<peer-conn-state>

Usage

```
<peer-conn-state>
  <peer-conn-tcp-state>
    peer-conn-tcp-state
  </peer-conn-tcp-state>
  <peer-conn-bfd-state>
    peer-conn-bfd-state
  </peer-conn-bfd-state>
</peer-conn-state>
```

Description

<peer-conn-state>

Usage

```
<iccp-information>
  <iccp-peer>
    <peer-conn-state-information>
      <peer-conn-state>
        <peer-conn-tcp-state>
          peer-conn-tcp-state
        </peer-conn-tcp-state>
        <peer-conn-bfd-state>
          peer-conn-bfd-state
        </peer-conn-bfd-state>
      </peer-conn-state>
    </peer-conn-state-information>
  </iccp-peer>
</iccp-information>
```

Description

<peer-conn-state-information>

Usage

```
<iccp-information>
  <iccp-peer>
    <peer-conn-state-information>
      <peer-conn-state>....</peer-conn-state>
    </peer-conn-state-information>
  </iccp-peer>
</iccp-information>
```

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Description Peer Connection State

<rg-group-entry>

Usage

```
<rg-group-entry>
  <redundancy-group>
    redundancy-group
  </redundancy-group>
  <rg-state>
    rg-state
  </rg-state>
</rg-group-entry>
```

Description Information about a particular ICCP Redundancy Group

<rg-group-entry>

Usage

```
<iccp-information>
  <iccp-peer>
    <rg-groups>
      <rg-group-entry>
        <redundancy-group>
          redundancy-group
        </redundancy-group>
        <rg-state>
          rg-state
        </rg-state>
      </rg-group-entry>
    </rg-groups>
  </iccp-peer>
</iccp-information>
```

Description Information about a particular ICCP Redundancy Group

<rg-groups>

Usage

```
<iccp-information>
  <iccp-peer>
    <rg-groups>
      <rg-group-entry>....</rg-group-entry>
    </rg-groups>
  </iccp-peer>
</iccp-information>
```

Description Redundancy Group Information configured for this peer

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Summary of IDP Response Tags

<clear-idp-ssl-session-cache-information>

Usage

```
<clear-idp-ssl-session-cache-information>
  <cleared-ssl-session-cache-count>
    cleared-ssl-session-cache-count
  </cleared-ssl-session-cache-count>
</clear-idp-ssl-session-cache-information>
```

Description Information about cleared SSL session cache entries

<get-idp-addos-application-information>

Usage

```
<get-idp-addos-application-information>
  <idp-addos-application>....</idp-addos-application>
</get-idp-addos-application-information>
```

Description Show IDP DDOS Application information

<get-idp-ssl-session-cache-information>

Usage

```
<get-idp-ssl-session-cache-information>
  <idp-ssl-session-cache-count>
    idp-ssl-session-cache-count
  </idp-ssl-session-cache-count>
  <idp-ssl-session-cache-entry>....</idp-ssl-session-cache-entry>
</get-idp-ssl-session-cache-information>
```

Description Information about SSL session cache table

<idp-addos-application>

Usage

```
<get-idp-addos-application-information>
  <idp-addos-application>
    <to-zone>
      to-zone
    </to-zone>
    <destination-address>
      destination-address
    </destination-address>
    <ddos-application>
      ddos-application
    </ddos-application>
    <connections-per-sec>
      connections-per-sec
```

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```
    </connections-per-sec>
    <ddos-context>
     ddos-context
    </ddos-context>
    <contexts-per-tick>
     contexts-per-tick
    </contexts-per-tick>
    <context-value>
     context-value
    </context-value>
    <context-values-per-tick>
     context-values-per-tick
    </context-values-per-tick>
  </idp-addos-application>
</get-idp-addos-application-information>
```

Description

<idp-anomaly>

Usage

```
<idp-anomaly-list>
  <idp-anomaly>
    <attack-service-name>
     attack-service-name
    </attack-service-name>
    <service-id>
     service-id
    </service-id>
    <attack-name>
     attack-name
    </attack-name>
    <attack-id>
     attack-id
    </attack-id>
  </idp-anomaly>
</idp-anomaly-list>
```

Description

<idp-anomaly-list>

Usage

```
<idp-anomaly-list>
  <idp-anomaly>....</idp-anomaly>
</idp-anomaly-list>
```

Description

<idp-application-statistics>

Usage

```
<idp-application-statistics-information>
```


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```
<idp-application-statistics>
  <name>
    name
  </name>
  <value>
    value
  </value>
</idp-application-statistics>
</idp-application-statistics-information>
```

Description

<idp-application-statistics-information>

Usage

```
<idp-application-statistics-information>
  <idp-application-statistics>....</idp-application-statistics>
</idp-application-statistics-information>
```

Description

<idp-application-system-cache-information>

Usage

```
<idp-application-system-cache-information>
  <idp-application-system-cache-pic>....</idp-application-system-cache-pic>
</idp-application-system-cache-information>
```

Description

<idp-application-system-cache-pic>

Usage

```
<idp-application-system-cache-information>
  <idp-application-system-cache-pic>
    <pic-name>
      pic-name
    </pic-name>

<idp-application-system-cache-statistics>....</idp-application-system-cache-statistics>

  </idp-application-system-cache-pic>
</idp-application-system-cache-information>
```

Description

<idp-application-system-cache-statistics>

Usage

```
<idp-application-system-cache-information>
  <idp-application-system-cache-pic>
    <idp-application-system-cache-statistics>
```

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```
      <virtual-system-identifier>
        virtual-system-identifier
      </virtual-system-identifier>
      <ip-address>
        ip-address
      </ip-address>
      <ipv6-address>
        ipv6-address
      </ipv6-address>
      <port>
        port
      </port>
      <protocol>
        protocol
      </protocol>
      <idp-service>
        idp-service
      </idp-service>
      <idp-application>
        idp-application
      </idp-application>
    </idp-application-system-cache-statistics>
  </idp-application-system-cache-pic>
</idp-application-system-cache-information>
```

Description

<idp-attack-description-information>

Usage

```
<idp-attack-description-information>
  <idp-attack-description>
    idp-attack-description
  </idp-attack-description>
</idp-attack-description-information>
```

Description

<idp-attack-detail-information>

Usage

```
<idp-attack-detail-information>
  <idp-attack-detail-name>
    idp-attack-detail-name
  </idp-attack-detail-name>
  <idp-attack-detail-severity>
    idp-attack-detail-severity
  </idp-attack-detail-severity>
  <idp-attack-detail-category>
    idp-attack-detail-category
  </idp-attack-detail-category>
  <idp-attack-detail-recommended>
    idp-attack-detail-recommended
  </idp-attack-detail-recommended>
```


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```
<idp-attack-detail-recoact>
  idp-attack-detail-recoact
</idp-attack-detail-recoact>
<idp-attack-detail-type>
  idp-attack-detail-type
</idp-attack-detail-type>
<idp-attack-detail-direction>
  idp-attack-detail-direction
</idp-attack-detail-direction>
<idp-attack-detail-falsepos>
  idp-attack-detail-falsepos
</idp-attack-detail-falsepos>
<idp-attack-detail-service>
  idp-attack-detail-service
</idp-attack-detail-service>
</idp-attack-detail-information>
```

Description

<idp-attack-groups>

Usage

```
<idp-predefined-attack-groups>
  <idp-attack-groups>
    <name>
      name
    </name>
  </idp-attack-groups>
</idp-predefined-attack-groups>
```

Description

<idp-attack-information>

Usage

```
<idp-attack-information>
  <idp-attack-statistics>....</idp-attack-statistics>
</idp-attack-information>
```

Description

<idp-attack-statistics>

Usage

```
<idp-attack-information>
  <idp-attack-statistics>
    <name>
      name
    </name>
    <value>
      value
    </value>
  </idp-attack-statistics>
```

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```
</idp-attack-information>
```

Description

<idp-attacks-list>

Usage

```
<idp-predefined-attacks>
 <idp-attacks-list>
  <name>
   name
  </name>
 </idp-attacks-list>
</idp-predefined-attacks>
```

Description

<idp-cache-aggregate-statistics>

Usage

```
<idp-cache-statistics>
 <idp-cache-aggregate-statistics>
  <total-memory-used>
   total-memory-used
  </total-memory-used>
  <cache-entries>
   cache-entries
  </cache-entries>
  <single-rules>
   single-rules
  </single-rules>
  <multiple-rules>
   multiple-rules
  </multiple-rules>
 </idp-cache-aggregate-statistics>
</idp-cache-statistics>
```

Description

<idp-cache-rule>

Usage

```
<idp-cache-statistics>
 <idp-cache-rule-statistics>
  <idp-cache-rule>
   <rule-pointer>
    rule-pointer
   </rule-pointer>
   <rule-number>
    rule-number
   </rule-number>
   <idp-service>
    idp-service
```


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```
    </idp-service>
    <protocol>
      protocol
    </protocol>
    <direction>
      direction
    </direction>
    <auxiliary-flow>
      auxiliary-flow
    </auxiliary-flow>
    <line-separator>
      line-separator
    </line-separator>
    <memory-bytes>
      memory-bytes
    </memory-bytes>
  </idp-cache-rule>
 </idp-cache-rule-statistics>
</idp-cache-statistics>
```

Description

<idp-cache-rule-statistics>

Usage

```
<idp-cache-statistics>
 <idp-cache-rule-statistics>
   <idp-cache-rule>....</idp-cache-rule>
 </idp-cache-rule-statistics>
</idp-cache-statistics>
```

Description

<idp-cache-service>

Usage

```
<idp-cache-statistics>
 <idp-cache-service-memory-statistics>
   <idp-cache-service>
     <idp-service>
       idp-service
     </idp-service>
     <memory-in-kb>
       memory-in-kb
     </memory-in-kb>
   </idp-cache-service>
 </idp-cache-service-memory-statistics>
</idp-cache-statistics>
```

Description

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<idp-cache-service-memory-statistics>

Usage

```
<idp-cache-statistics>
  <idp-cache-service-memory-statistics>
    <idp-cache-service>....</idp-cache-service>
  </idp-cache-service-memory-statistics>
</idp-cache-statistics>
```

Description

<idp-cache-statistics>

Usage

```
<idp-cache-statistics>
  <idp-cache-rule-statistics>....</idp-cache-rule-statistics>
<idp-cache-service-memory-statistics>....</idp-cache-service-memory-statistics>

  <idp-cache-aggregate-statistics>....</idp-cache-aggregate-statistics>
</idp-cache-statistics>
```

Description

<idp-context-list>

Usage

```
<idp-context-list>
  <idp-contexts>....</idp-contexts>
</idp-context-list>
```

Description

<idp-contexts>

Usage

```
<idp-context-list>
  <idp-contexts>
    <service-name>
      service-name
    </service-name>
    <context-name>
      context-name
    </context-name>
    <offset-id>
      offset-id
    </offset-id>
    <context-direction>
      context-direction
    </context-direction>
  </idp-contexts>
</idp-context-list>
```


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Description

<idp-counter-information>

Usage

```
<idp-counter-information>
  <idp-counter-statistics>....</idp-counter-statistics>
</idp-counter-information>
```

Description

<idp-counter-statistics>

Usage

```
<idp-counter-information>
  <idp-counter-statistics>
    <name>
      name
    </name>
    <value>
      value
    </value>
  </idp-counter-statistics>
</idp-counter-information>
```

Description

<idp-detail-status-information>

Usage

```
<idp-detail-status-information>

<idp-status-detail-per-spu-information>....</idp-status-detail-per-spu-information>
    </idp-detail-status-information>
```

Description IDP detail status information

<idp-icmp-flow-count>

Usage

```
<idp-status-information>
  <idp-icmp-flow-count>
    <current-icmp-flow-count>
      current-icmp-flow-count
    </current-icmp-flow-count>
    <maximum-icmp-flow-count>
      maximum-icmp-flow-count
    </maximum-icmp-flow-count>
    <maximum-icmp-flow-count-time>
      maximum-icmp-flow-count-time
    </maximum-icmp-flow-count-time>
    <date-time>
      date-time
```

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```
    </date-time>
  </idp-icmp-flow-count>
</idp-status-information>
```

Description

<idp-kbits-per-second-information>

Usage

```
<idp-status-information>
  <idp-kbits-per-second-information>
    <idp-kbits-per-second>
      idp-kbits-per-second
    </idp-kbits-per-second>
    <idp-peak-kbits-per-second>
      idp-peak-kbits-per-second
    </idp-peak-kbits-per-second>
    <date-time>
      date-time
    </date-time>
  </idp-kbits-per-second-information>
</idp-status-information>
```

Description

<idp-kbits-spu-per-second-information>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
    <idp-kbits-spu-per-second-information>
      <idp-kbits-per-second>
        idp-kbits-per-second
      </idp-kbits-per-second>
      <idp-peak-kbits-per-second>
        idp-peak-kbits-per-second
      </idp-peak-kbits-per-second>
      <date-time>
        date-time
      </date-time>
    </idp-kbits-spu-per-second-information>
  </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-latency>

Usage

```
<idp-status-information>
  <idp-latency>
    <minimum-latency-time>
      minimum-latency-time
```


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```
    </minimum-latency-time>
    <maximum-latency-time>
     maximum-latency-time
    </maximum-latency-time>
    <average-latency-time>
     average-latency-time
    </average-latency-time>
   </idp-latency>
</idp-status-information>
```

Description

<idp-lsys-policy-association>

Usage

```
<idp-lsys-policy-association>
  <idp-lsys-policy-association-entry>....</idp-lsys-policy-association-entry>
</idp-lsys-policy-association>
```

Description Show IDP policy association

<idp-lsys-policy-association-entry>

Usage

```
<idp-lsys-policy-association>
  <idp-lsys-policy-association-entry>
    <idp-policy-name>
     idp-policy-name
    </idp-policy-name>
    <logical-system-name>
     logical-system-name
    </logical-system-name>
  </idp-lsys-policy-association-entry>
</idp-lsys-policy-association>
```

Description

<idp-memory-information>

Usage

```
<idp-memory-information>
  <idp-memory-per-spu-information>....</idp-memory-per-spu-information>
</idp-memory-information>
```

Description

<idp-memory-per-spu-information>

Usage

```
<idp-memory-information>
  <idp-memory-per-spu-information>
```

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```
    <pic-name>
      pic-name
    </pic-name>
    <total-idp-data-plane-memory-in-mb>
      total-idp-data-plane-memory-in-mb
    </total-idp-data-plane-memory-in-mb>
    <total-idp-data-plane-memory-used-in-mb>
      total-idp-data-plane-memory-used-in-mb
    </total-idp-data-plane-memory-used-in-mb>
    <total-idp-data-plane-memory-used-in-kb>
      total-idp-data-plane-memory-used-in-kb
    </total-idp-data-plane-memory-used-in-kb>
    <total-idp-data-plane-memory-used-in-percentage>
      total-idp-data-plane-memory-used-in-percentage
    </total-idp-data-plane-memory-used-in-percentage>
    <total-idp-data-plane-memory-available-in-mb>
      total-idp-data-plane-memory-available-in-mb
    </total-idp-data-plane-memory-available-in-mb>
    <total-idp-data-plane-memory-available-in-kb>
      total-idp-data-plane-memory-available-in-kb
    </total-idp-data-plane-memory-available-in-kb>
    <total-idp-data-plane-memory-available-in-percentage>
      total-idp-data-plane-memory-available-in-percentage
    </total-idp-data-plane-memory-available-in-percentage>
  </idp-memory-per-spu-information>
</idp-memory-information>
```

Description

<idp-mode>

Usage

```
<idp-mode>
  <idp-forwarding-process-mode>
    idp-forwarding-process-mode
  </idp-forwarding-process-mode>
</idp-mode>
```

Description

<idp-other-flow-count>

Usage

```
<idp-status-information>
  <idp-other-flow-count>
    <current-other-flow-count>
      current-other-flow-count
    </current-other-flow-count>
    <maximum-other-flow-count>
      maximum-other-flow-count
    </maximum-other-flow-count>
    <maximum-other-flow-count-time>
      maximum-other-flow-count-time
    </maximum-other-flow-count-time>
```


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```
    <date-time>
     date-time
    </date-time>
   </idp-other-flow-count>
</idp-status-information>
```

Description

<idp-packet-count>

Usage

```
<idp-status-information>
 <idp-packet-count>
  <icmp-packet-count>
   icmp-packet-count
  </icmp-packet-count>
  <tcp-packet-count>
   tcp-packet-count
  </tcp-packet-count>
  <udp-packet-count>
   udp-packet-count
  </udp-packet-count>
  <other-packet-count>
   other-packet-count
  </other-packet-count>
 </idp-packet-count>
</idp-status-information>
```

Description

<idp-packets-per-second-information>

Usage

```
<idp-status-information>
 <idp-packets-per-second-information>
  <idp-packets-per-second>
   idp-packets-per-second
  </idp-packets-per-second>
  <idp-peak-packets-per-second>
   idp-peak-packets-per-second
  </idp-peak-packets-per-second>
  <date-time>
   date-time
  </date-time>
 </idp-packets-per-second-information>
</idp-status-information>
```

Description

<idp-packets-spu-per-second-information>

Usage

```
<idp-detail-status-information>
```

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```
<idp-status-detail-per-spu-information>
  <idp-packets-spu-per-second-information>
    <idp-packets-per-second>
      idp-packets-per-second
    </idp-packets-per-second>
    <idp-peak-packets-per-second>
      idp-peak-packets-per-second
    </idp-peak-packets-per-second>
    <date-time>
      date-time
    </date-time>
  </idp-packets-spu-per-second-information>
 </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-policy>

Usage

```
<idp-policy>
  <policy-load-templates>....</policy-load-templates>
</idp-policy>
```

Description

<idp-policy-commit-status>

Usage

```
<idp-policy-commit-status>
  <policy-commit-status-detail>
    policy-commit-status-detail
  </policy-commit-status-detail>
</idp-policy-commit-status>
```

Description Status of ongoing policy compilation and load

<idp-policy-list-entry>

Usage

```
<idp-subscriber-policy-list>
  <idp-subscriber-policy-per-pic-information>
    <idp-policy-list-entry>
      <id>
        id
      </id>
      <policy-name>
        policy-name
      </policy-name>
      <sessions>
        sessions
      </sessions>
```


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```
        <memory>
          memory
        </memory>
        <idp-detector-versions>
          idp-detector-versions
        </idp-detector-versions>
      </idp-policy-list-entry>
    </idp-subscriber-policy-per-pic-information>
  </idp-subscriber-policy-list>
```

Description Information about policy list entry

<idp-predefined-attack-groups>

Usage

```
<idp-predefined-attack-groups>
  <idp-attack-groups>....</idp-attack-groups>
</idp-predefined-attack-groups>
```

Description IDP predefined-attack-groups list

<idp-predefined-attacks>

Usage

```
<idp-predefined-attacks>
  <idp-attacks-list>....</idp-attacks-list>
</idp-predefined-attacks>
```

Description IDP predefined-attacks list

<idp-protocol-list>

Usage

```
<idp-protocol-list>
  <idp-protocols>....</idp-protocols>
</idp-protocol-list>
```

Description

<idp-protocols>

Usage

```
<idp-protocol-list>
  <idp-protocols>
    <protocol-name>
      protocol-name
    </protocol-name>
    <protocol-type>
      protocol-type
    </protocol-type>
```

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```
    <port-number>
     port-number
    </port-number>
    <line-seperator>
     line-seperator
    </line-seperator>
    <scope>
     scope
    </scope>
   </idp-protocols>
</idp-protocol-list>
```

Description

<idp-qmodule>

Usage

```
<idp-qmodule-information>
 <idp-qmodule>
  <name>
   name
  </name>
  <minimum-time>
   minimum-time
  </minimum-time>
  <maximum-time>
   maximum-time
  </maximum-time>
  <average-time>
   average-time
  </average-time>
  <number-of-packets>
   number-of-packets
  </number-of-packets>
  <number-of-packets-dropped>
   number-of-packets-dropped
  </number-of-packets-dropped>
  <number-of-error-packets>
   number-of-error-packets
  </number-of-error-packets>
 </idp-qmodule>
</idp-qmodule-information>
```

Description IDP q-module

<idp-qmodule-information>

Usage

```
<idp-qmodule-information>
 <idp-qmodule>....</idp-qmodule>
</idp-qmodule-information>
```


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Description IDP Q-Module information

<idp-recent-security-package-information>

Usage

```
<idp-recent-security-package-information>
  <recent-security-package-version>
    recent-security-package-version
  </recent-security-package-version>
</idp-recent-security-package-information>
```

Description Information about last ten security db versions

<idp-rule-information>

Usage

```
<idp-rule-information>
  <idp-rule-name>
    idp-rule-name
  </idp-rule-name>
  <idp-rulebase-type>....</idp-rulebase-type>
</idp-rule-information>
```

Description

<idp-rule-information>

Usage

```
<idp-rulebase>
  <idp-rule-information>
    <idp-rule-name>
      idp-rule-name
    </idp-rule-name>
    <idp-rulebase-type>....</idp-rulebase-type>
  </idp-rule-information>
</idp-rulebase>
```

Description

<idp-rulebase>

Usage

```
<idp-rulebase>
  <idp-rule-information>....</idp-rule-information>
</idp-rulebase>
```

Description

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<idp-rulebase-type>

Usage

```
<idp-rulebase-type>
  <idp-rulebase-type-name>
    idp-rulebase-type-name
  </idp-rulebase-type-name>
  <number-of-rules>
    number-of-rules
  </number-of-rules>
</idp-rulebase-type>
```

Description IDP rulebase type

<idp-rulebase-type>

Usage

```
<idp-rule-information>
  <idp-rulebase-type>
    <idp-rulebase-type-name>
      idp-rulebase-type-name
    </idp-rulebase-type-name>
    <number-of-rules>
      number-of-rules
    </number-of-rules>
  </idp-rulebase-type>
</idp-rule-information>
```

Description IDP rulebase type

<idp-rulebase-type>

Usage

```
<idp-rulebase>
  <idp-rule-information>
    <idp-rulebase-type>
      <idp-rulebase-type-name>
        idp-rulebase-type-name
      </idp-rulebase-type-name>
      <number-of-rules>
        number-of-rules
      </number-of-rules>
    </idp-rulebase-type>
  </idp-rule-information>
</idp-rulebase>
```

Description IDP rulebase type

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<idp-security-package-information>

Usage

```
<idp-security-package-information>
  <security-package-version>
    security-package-version
  </security-package-version>
  <detector-version>
    detector-version
  </detector-version>
  <policy-template-version>
    policy-template-version
  </policy-template-version>
</idp-security-package-information>
```

Description

<idp-session>

Usage

```
<idp-session-information>
  <idp-session>
    <session-identifier>
      session-identifier
    </session-identifier>
    <source-address>
      source-address
    </source-address>
    <source-port>
      source-port
    </source-port>
    <destination-address>
      destination-address
    </destination-address>
    <destination-port>
      destination-port
    </destination-port>
    <from-zone>
      from-zone
    </from-zone>
    <to-zone>
      to-zone
    </to-zone>
    <protocol>
      protocol
    </protocol>
    <idp-service>
      idp-service
    </idp-service>
    <fw-service>
      fw-service
    </fw-service>
    <timeout>
      timeout
```

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```
    </timeout>
    <maximum-timeout>
      maximum-timeout
    </maximum-timeout>
  </idp-session>
</idp-session-information>
```

Description IDP session

<idp-session-count>

Usage

```
<idp-status-information>
  <idp-session-count>
    <icmp-session-count>
      icmp-session-count
    </icmp-session-count>
    <tcp-session-count>
      tcp-session-count
    </tcp-session-count>
    <udp-session-count>
      udp-session-count
    </udp-session-count>
    <other-session-count>
      other-session-count
    </other-session-count>
  </idp-session-count>
</idp-status-information>
```

Description

<idp-session-information>

Usage

```
<idp-session-information>
  <idp-session>....</idp-session>
</idp-session-information>
```

Description IDP Session information

<idp-session-summary-information>

Usage

```
<idp-session-summary-information>

<idp-session-summary-per-pic-information>....</idp-session-summary-per-pic-information>

  <total-sessions>
    total-sessions
  </total-sessions>
```


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```
</idp-session-summary-information>
```

Description Summary information for IDP sessions

<idp-session-summary-per-pic-information>

Usage

```
<idp-session-summary-information>
  <idp-session-summary-per-pic-information>
    <pic-name>
      pic-name
    </pic-name>
    <maximum-sessions>
      maximum-sessions
    </maximum-sessions>
    <active-sessions>
      active-sessions
    </active-sessions>
  </idp-session-summary-per-pic-information>
</idp-session-summary-information>
```

Description IDP session summary per PIC information

<idp-spu-icmp-flow-count>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
    <idp-spu-icmp-flow-count>
      <current-icmp-flow-count>
        current-icmp-flow-count
      </current-icmp-flow-count>
      <maximum-icmp-flow-count>
        maximum-icmp-flow-count
      </maximum-icmp-flow-count>
      <maximum-icmp-flow-count-time>
        maximum-icmp-flow-count-time
      </maximum-icmp-flow-count-time>
      <date-time>
        date-time
      </date-time>
    </idp-spu-icmp-flow-count>
  </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-latency>

Usage

```
<idp-detail-status-information>
```

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```
<idp-status-detail-per-spu-information>
  <idp-spu-latency>
    <minimum-latency-time>
      minimum-latency-time
    </minimum-latency-time>
    <maximum-latency-time>
      maximum-latency-time
    </maximum-latency-time>
    <average-latency-time>
      average-latency-time
    </average-latency-time>
  </idp-spu-latency>
 </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-other-flow-count>

Usage

```
<idp-detail-status-information>
 <idp-status-detail-per-spu-information>
  <idp-spu-other-flow-count>
    <current-other-flow-count>
      current-other-flow-count
    </current-other-flow-count>
    <maximum-other-flow-count>
      maximum-other-flow-count
    </maximum-other-flow-count>
    <maximum-other-flow-count-time>
      maximum-other-flow-count-time
    </maximum-other-flow-count-time>
    <date-time>
      date-time
    </date-time>
  </idp-spu-other-flow-count>
 </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-packet-count>

Usage

```
<idp-detail-status-information>
 <idp-status-detail-per-spu-information>
  <idp-spu-packet-count>
    <icmp-packet-count>
      icmp-packet-count
    </icmp-packet-count>
    <tcp-packet-count>
      tcp-packet-count
    </tcp-packet-count>
    <udp-packet-count>
```


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```
            udp-packet-count
           </udp-packet-count>
           <other-packet-count>
            other-packet-count
           </other-packet-count>
          </idp-spu-packet-count>
         </idp-status-detail-per-spu-information>
        </idp-detail-status-information>
```

Description

<idp-spu-session-count>

Usage

```
<idp-detail-status-information>
 <idp-status-detail-per-spu-information>
  <idp-spu-session-count>
   <icmp-session-count>
    icmp-session-count
   </icmp-session-count>
   <tcp-session-count>
    tcp-session-count
   </tcp-session-count>
   <udp-session-count>
    udp-session-count
   </udp-session-count>
   <other-session-count>
    other-session-count
   </other-session-count>
  </idp-spu-session-count>
 </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-ssl-session-information>

Usage

```
<idp-detail-status-information>
 <idp-status-detail-per-spu-information>
  <idp-spu-ssl-session-information>
   <ssl-session-count>
    ssl-session-count
   </ssl-session-count>
  </idp-spu-ssl-session-information>
 </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

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<idp-spu-tcp-flow-count>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
    <idp-spu-tcp-flow-count>
      <current-tcp-flow-count>
        current-tcp-flow-count
      </current-tcp-flow-count>
      <maximum-tcp-flow-count>
        maximum-tcp-flow-count
      </maximum-tcp-flow-count>
      <maximum-tcp-flow-count-time>
        maximum-tcp-flow-count-time
      </maximum-tcp-flow-count-time>
      <date-time>
        date-time
      </date-time>
    </idp-spu-tcp-flow-count>
  </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-udp-flow-count>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
    <idp-spu-udp-flow-count>
      <current-udp-flow-count>
        current-udp-flow-count
      </current-udp-flow-count>
      <maximum-udp-flow-count>
        maximum-udp-flow-count
      </maximum-udp-flow-count>
      <maximum-udp-flow-count-time>
        maximum-udp-flow-count-time
      </maximum-udp-flow-count-time>
      <date-time>
        date-time
      </date-time>
    </idp-spu-udp-flow-count>
  </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-spu-uptime>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
```


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```
<idp-spu-uptime>
  <pic-name>
    pic-name
  </pic-name>
  <idp-status>
    idp-status
  </idp-status>
  <date-time>
    date-time
  </date-time>
  <time-length>
    time-length
  </time-length>
</idp-spu-uptime>
</idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description

<idp-ssl-key-information>

Usage

```
<idp-ssl-key-information>
  <idp-ssl-key-count>
    idp-ssl-key-count
  </idp-ssl-key-count>
  <idp-ssl-per-key-information>....</idp-ssl-per-key-information>
  <idp-ssl-port-per-key-information>....</idp-ssl-port-per-key-information>
</idp-ssl-key-information>
```

Description Show SSL keys and server addresses

<idp-ssl-per-key-information>

Usage

```
<idp-ssl-key-information>
  <idp-ssl-per-key-information>
    <key-name>
      key-name
    </key-name>
    <destination-address>
      destination-address
    </destination-address>
  </idp-ssl-per-key-information>
</idp-ssl-key-information>
```

Description

<idp-ssl-port-per-key-information>

Usage

```
<idp-ssl-key-information>
```

```
<idp-ssl-port-per-key-information>
  <key-name>
    key-name
  </key-name>
  <destination-address>
    destination-address
  </destination-address>
  <destination-port>
    destination-port
  </destination-port>
</idp-ssl-port-per-key-information>
</idp-ssl-key-information>
```

Description

<idp-ssl-session-cache-entry>

Usage

```
<get-idp-ssl-session-cache-information>
  <idp-ssl-session-cache-entry>
    <ssl-session-identifier>
      ssl-session-identifier
    </ssl-session-identifier>
  </idp-ssl-session-cache-entry>
</get-idp-ssl-session-cache-information>
```

Description Information about SSL session cache entry

<idp-ssl-session-information>

Usage

```
<idp-status-information>
  <idp-ssl-session-information>
    <ssl-session-count>
      ssl-session-count
    </ssl-session-count>
  </idp-ssl-session-information>
</idp-status-information>
```

Description

<idp-status-detail-per-spu-information>

Usage

```
<idp-detail-status-information>
  <idp-status-detail-per-spu-information>
    <idp-spu-uptime>....</idp-spu-uptime>

<idp-packets-spu-per-second-information>....</idp-packets-spu-per-second-information>


<idp-kbits-spu-per-second-information>....</idp-kbits-spu-per-second-information>
```


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```
    <idp-spu-latency>....</idp-spu-latency>
    <idp-spu-packet-count>....</idp-spu-packet-count>
    <idp-spu-icmp-flow-count>....</idp-spu-icmp-flow-count>
    <idp-spu-tcp-flow-count>....</idp-spu-tcp-flow-count>
    <idp-spu-udp-flow-count>....</idp-spu-udp-flow-count>
    <idp-spu-other-flow-count>....</idp-spu-other-flow-count>
    <idp-spu-session-count>....</idp-spu-session-count>
    <idp-spu-ssl-session-information>....</idp-spu-ssl-session-information>
  </idp-status-detail-per-spu-information>
</idp-detail-status-information>
```

Description IDP status per PIC information

<idp-status-information>

Usage

```
<idp-status-information>
  <idp-uptime>....</idp-uptime>
 <idp-packets-per-second-information>....</idp-packets-per-second-information>

  <idp-kbits-per-second-information>....</idp-kbits-per-second-information>
  <idp-latency>....</idp-latency>
  <idp-packet-count>....</idp-packet-count>
  <idp-icmp-flow-count>....</idp-icmp-flow-count>
  <idp-tcp-flow-count>....</idp-tcp-flow-count>
  <idp-udp-flow-count>....</idp-udp-flow-count>
  <idp-other-flow-count>....</idp-other-flow-count>
  <idp-session-count>....</idp-session-count>
  <idp-ssl-session-information>....</idp-ssl-session-information>
</idp-status-information>
```

Description IDP status information

<idp-subscriber-policy-list>

Usage

```
<idp-subscriber-policy-list>

<idp-subscriber-policy-per-pic-information>....</idp-subscriber-policy-per-pic-information>

</idp-subscriber-policy-list>
```

Description Information about loaded policy lists

<idp-subscriber-policy-per-pic-information>

Usage

```
<idp-subscriber-policy-list>
  <idp-subscriber-policy-per-pic-information>
    <pic-name>
      pic-name
```

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```
    </pic-name>
    <idp-policy-list-entry>....</idp-policy-list-entry>
  </idp-subscriber-policy-per-pic-information>
</idp-subscriber-policy-list>
```

Description IDP subscriber policy per pic information

<idp-tcp-flow-count>

Usage

```
<idp-status-information>
  <idp-tcp-flow-count>
    <current-tcp-flow-count>
      current-tcp-flow-count
    </current-tcp-flow-count>
    <maximum-tcp-flow-count>
      maximum-tcp-flow-count
    </maximum-tcp-flow-count>
    <maximum-tcp-flow-count-time>
      maximum-tcp-flow-count-time
    </maximum-tcp-flow-count-time>
    <date-time>
      date-time
    </date-time>
  </idp-tcp-flow-count>
</idp-status-information>
```

Description

<idp-udp-flow-count>

Usage

```
<idp-status-information>
  <idp-udp-flow-count>
    <current-udp-flow-count>
      current-udp-flow-count
    </current-udp-flow-count>
    <maximum-udp-flow-count>
      maximum-udp-flow-count
    </maximum-udp-flow-count>
    <maximum-udp-flow-count-time>
      maximum-udp-flow-count-time
    </maximum-udp-flow-count-time>
    <date-time>
      date-time
    </date-time>
  </idp-udp-flow-count>
</idp-status-information>
```

Description

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<idp-uptime>

Usage

```
<idp-status-information>
  <idp-uptime>
    <idp-status>
      idp-status
    </idp-status>
    <date-time>
      date-time
    </date-time>
    <time-length>
      time-length
    </time-length>
  </idp-uptime>
</idp-status-information>
```

Description

<idp-version-information>

Usage

```
<idp-version-information>
  <idp-policy-name>
    idp-policy-name
  </idp-policy-name>
  <idp-detector-version>
    idp-detector-version
  </idp-detector-version>
  <idp-sigdb-version>
    idp-sigdb-version
  </idp-sigdb-version>
</idp-version-information>
```

Description

<policy-load-templates>

Usage

```
<idp-policy>
  <policy-load-templates>
    <desc>
      desc
    </desc>
  </policy-load-templates>
</idp-policy>
```

Description

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<request-idp-policy-load>

Usage

```
<request-idp-policy-load>
  <idp-policy-load-result>
    idp-policy-load-result
  </idp-policy-load-result>
</request-idp-policy-load>
```

Description Show IDP security policy load information

<request-idp-ssl-key-add>

Usage

```
<request-idp-ssl-key-add>
</request-idp-ssl-key-add>
```

Description Add SSL server and private key binding

<request-idp-ssl-key-delete>

Usage

```
<request-idp-ssl-key-delete>
  <key-number>
    key-number
  </key-number>
  <server-number>
    server-number
  </server-number>
</request-idp-ssl-key-delete>
```

Description Delete SSL server and private key binding

<request-idp-storage-cleanup>

Usage

```
<request-idp-storage-cleanup>
  <idp-storage-cleanup-secdb>
    idp-storage-cleanup-secdb
  </idp-storage-cleanup-secdb>
  <idp-storage-cleanup-dfa-cache>
    idp-storage-cleanup-dfa-cache
  </idp-storage-cleanup-dfa-cache>
</request-idp-storage-cleanup>
```

Description Perform cleanup of non-essential IDP files

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<secpack-download-policy-template-file>

Usage

```
<secpack-download-policy-template-file>
  <secpack-download-policy-template-file-detail>
    secpack-download-policy-template-file-detail
  </secpack-download-policy-template-file-detail>
</secpack-download-policy-template-file>
```

Description Current status of policy template file

<secpack-download-policy-template-result>

Usage

```
<secpack-download-policy-template-result>
  <secpack-download-policy-template-detail>
    secpack-download-policy-template-detail
  </secpack-download-policy-template-detail>
</secpack-download-policy-template-result>
```

Description Status of policy templates operation

<secpack-download-status>

Usage

```
<secpack-download-status>
  <secpack-download-status-detail>
    secpack-download-status-detail
  </secpack-download-status-detail>
</secpack-download-status>
```

Description Status of security package download

<secpack-update-policy-template-result>

Usage

```
<secpack-update-policy-template-result>
  <secpack-update-policy-template-detail>
    secpack-update-policy-template-detail
  </secpack-update-policy-template-detail>
</secpack-update-policy-template-result>
```

Description Status of policy templates operation

<secpack-update-status>

Usage

```
<secpack-update-status>
```

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```
<secpack-status-detail>
  secpack-status-detail
</secpack-status-detail>
</secpack-update-status>
```

Description Status of security package install

Summary of Interface Metadata Response Tags

<channels>

Usage

```
<interface>
  <channels>
    <subunit>
      subunit
    </subunit>
  </channels>
</interface>
```

Description Channelized interface information

<channels>

Usage

```
<interface-metadata-information>
  <interface>
    <channels>
      <subunit>
        subunit
      </subunit>
    </channels>
  </interface>
</interface-metadata-information>
```

Description Channelized interface information

<interface>

Usage

```
<interface>
  <name>
    name
  </name>
  <long>
    long
  </long>
  <pics-per-slot>
    pics-per-slot
  </pics-per-slot>
```


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```
<ports-per-slot>
  ports-per-slot
</ports-per-slot>
<max-mtu>
  max-mtu
</max-mtu>
<flag>
  flag
</flag>
<channels>....</channels>
<max-channelization>
  max-channelization
</max-channelization>
<product>
  product
</product>
</interface>
```

Description Information about an interface

<interface>

Usage

```
<interface-metadata-information>
  <interface>
    <name>
      name
    </name>
    <long>
      long
    </long>
    <pics-per-slot>
      pics-per-slot
    </pics-per-slot>
    <ports-per-slot>
      ports-per-slot
    </ports-per-slot>
    <max-mtu>
      max-mtu
    </max-mtu>
    <flag>
      flag
    </flag>
    <channels>....</channels>
    <max-channelization>
      max-channelization
    </max-channelization>
    <product>
      product
    </product>
  </interface>
</interface-metadata-information>
```

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Description Information about an interface

<interface-metadata-information>

Usage

```
<interface-metadata-information>
  <interface>....</interface>
</interface-metadata-information>
```

Description Informtation on one or more interfaces

Summary of Interface Response Tags

<active-alarms>

Usage

```
<physical-interface>
  <active-alarms>
    <type>
      type
    </type>
    <interface-alarms>....</interface-alarms>
  </active-alarms>
</physical-interface>
```

Description

<active-alarms>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <active-alarms>
        <type>
          type
        </type>
        <interface-alarms>....</interface-alarms>
      </active-alarms>
    </link-entry>
  </links>
</physical-interface>
```

Description

<active-alarms>

Usage

```
<interface-information>
  <physical-interface>
    <active-alarms>
```


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```
      <type>
       type
      </type>
      <interface-alarms>....</interface-alarms>
     </active-alarms>
    </physical-interface>
</interface-information>
```

Description

<active-alarms>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>
    <active-alarms>
     <type>
      type
     </type>
     <interface-alarms>....</interface-alarms>
    </active-alarms>
   </link-entry>
  </links>
 </physical-interface>
</interface-information>
```

Description

<active-alarms>

Usage

```
<interface-filter-information>
 <physical-interface>
  <active-alarms>
   <type>
    type
   </type>
   <interface-alarms>....</interface-alarms>
  </active-alarms>
 </physical-interface>
</interface-filter-information>
```

Description

<active-alarms>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>
```

```
        <active-alarms>
          <type>
            type
          </type>
          <interface-alarms>....</interface-alarms>
        </active-alarms>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<active-alarms>

Usage

```
<interface-policer-information>
  <physical-interface>
    <active-alarms>
      <type>
        type
      </type>
      <interface-alarms>....</interface-alarms>
    </active-alarms>
  </physical-interface>
</interface-policer-information>
```

Description

<active-alarms>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-alarms>
          <type>
            type
          </type>
          <interface-alarms>....</interface-alarms>
        </active-alarms>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<active-alarms-otn>

Usage

```
<physical-interface>
```


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```
  <active-alarms-otn>
    <type-otn>
      type-otn
    </type-otn>
    <interface-alarms>....</interface-alarms>
  </active-alarms-otn>
</physical-interface>
```

Description

<active-alarms-otn>

Usage

```
<interface-information>
  <physical-interface>
    <active-alarms-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-alarms-otn>
  </physical-interface>
</interface-information>
```

Description

<active-alarms-otn>

Usage

```
<interface-filter-information>
  <physical-interface>
    <active-alarms-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-alarms-otn>
  </physical-interface>
</interface-filter-information>
```

Description

<active-alarms-otn>

Usage

```
<interface-policer-information>
  <physical-interface>
    <active-alarms-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-alarms-otn>
```

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```
  </physical-interface>
</interface-policer-information>
```

Description

<active-defects>

Usage

```
<physical-interface>
  <active-defects>
    <type>
      type
    </type>
    <interface-alarms>....</interface-alarms>
  </active-defects>
</physical-interface>
```

Description

<active-defects>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <active-defects>
        <type>
          type
        </type>
        <interface-alarms>....</interface-alarms>
      </active-defects>
    </link-entry>
  </links>
</physical-interface>
```

Description

<active-defects>

Usage

```
<interface-information>
  <physical-interface>
    <active-defects>
      <type>
        type
      </type>
      <interface-alarms>....</interface-alarms>
    </active-defects>
  </physical-interface>
</interface-information>
```

Description

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<active-defects>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-defects>
          <type>
            type
          </type>
          <interface-alarms>....</interface-alarms>
        </active-defects>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<active-defects>

Usage

```
<interface-filter-information>
  <physical-interface>
    <active-defects>
      <type>
        type
      </type>
      <interface-alarms>....</interface-alarms>
    </active-defects>
  </physical-interface>
</interface-filter-information>
```

Description

<active-defects>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-defects>
          <type>
            type
          </type>
          <interface-alarms>....</interface-alarms>
        </active-defects>
      </link-entry>
    </links>
  </physical-interface>
```

```
</interface-filter-information>
```

Description

<active-defects>

Usage

```
<interface-policer-information>
  <physical-interface>
    <active-defects>
      <type>
        type
      </type>
      <interface-alarms>....</interface-alarms>
    </active-defects>
  </physical-interface>
</interface-policer-information>
```

Description

<active-defects>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-defects>
          <type>
            type
          </type>
          <interface-alarms>....</interface-alarms>
        </active-defects>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<active-defects-otn>

Usage

```
<physical-interface>
  <active-defects-otn>
    <type-otn>
      type-otn
    </type-otn>
    <interface-alarms>....</interface-alarms>
  </active-defects-otn>
</physical-interface>
```


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Description

<active-defects-otn>

Usage

```
<interface-information>
  <physical-interface>
    <active-defects-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-defects-otn>
  </physical-interface>
</interface-information>
```

Description

<active-defects-otn>

Usage

```
<interface-filter-information>
  <physical-interface>
    <active-defects-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-defects-otn>
  </physical-interface>
</interface-filter-information>
```

Description

<active-defects-otn>

Usage

```
<interface-policer-information>
  <physical-interface>
    <active-defects-otn>
      <type-otn>
        type-otn
      </type-otn>
      <interface-alarms>....</interface-alarms>
    </active-defects-otn>
  </physical-interface>
</interface-policer-information>
```

Description

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<address-family>

Usage

```
<address-family>
  <compression-device-name>
    compression-device-name
  </compression-device-name>
  <address-family-name>
    address-family-name
  </address-family-name>
  <multilink-bundle-name>
    multilink-bundle-name
  </multilink-bundle-name>
  <as-bundle-name>
    as-bundle-name
  </as-bundle-name>
  <ae-bundle-name>
    ae-bundle-name
  </ae-bundle-name>
  <es-sa-name>
    es-sa-name
  </es-sa-name>
  <es-sa-fail-count>
    es-sa-fail-count
  </es-sa-fail-count>
  <es-sa-xmt-seq-num>
    es-sa-xmt-seq-num
  </es-sa-xmt-seq-num>
  <es-sa-recv-seq-num>
    es-sa-recv-seq-num
  </es-sa-recv-seq-num>
  <mtu>
    mtu
  </mtu>
  <maximum-labels>
    maximum-labels
  </maximum-labels>
  <address-family-flags>....</address-family-flags>
  <address-family-unnumbered>....</address-family-unnumbered>
  <arp-respond-any-local-address>
    arp-respond-any-local-address
  </arp-respond-any-local-address>
  <pppoe-underlying-information>....</pppoe-underlying-information>
  <generation>
    generation
  </generation>
  <route-table>
    route-table
  </route-table>
  <filter-information>....</filter-information>
  <policer-information>....</policer-information>
  <interface-address>....</interface-address>
  <mac-validate-statistics>....</mac-validate-statistics>
  <route-rpf-statistics>....</route-rpf-statistics>
  <destination-class-statistics>....</destination-class-statistics>
```


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```
  <source-class-statistics>....</source-class-statistics>
</address-family>
```

Description

<address-family>

Usage

```
<logical-interface>
 <address-family>
  <compression-device-name>
   compression-device-name
  </compression-device-name>
  <address-family-name>
   address-family-name
  </address-family-name>
  <multilink-bundle-name>
   multilink-bundle-name
  </multilink-bundle-name>
  <as-bundle-name>
   as-bundle-name
  </as-bundle-name>
  <ae-bundle-name>
   ae-bundle-name
  </ae-bundle-name>
  <es-sa-name>
   es-sa-name
  </es-sa-name>
  <es-sa-fail-count>
   es-sa-fail-count
  </es-sa-fail-count>
  <es-sa-xmt-seq-num>
   es-sa-xmt-seq-num
  </es-sa-xmt-seq-num>
  <es-sa-recv-seq-num>
   es-sa-recv-seq-num
  </es-sa-recv-seq-num>
  <mtu>
   mtu
  </mtu>
  <maximum-labels>
   maximum-labels
  </maximum-labels>
  <address-family-flags>....</address-family-flags>
  <address-family-unnumbered>....</address-family-unnumbered>
  <arp-respond-any-local-address>
   arp-respond-any-local-address
  </arp-respond-any-local-address>
  <pppoe-underlying-information>....</pppoe-underlying-information>
  <generation>
   generation
  </generation>
  <route-table>
   route-table
  </route-table>
```

```
    <filter-information>....</filter-information>
    <policer-information>....</policer-information>
    <interface-address>....</interface-address>
    <mac-validate-statistics>....</mac-validate-statistics>
    <route-rpf-statistics>....</route-rpf-statistics>
    <destination-class-statistics>....</destination-class-statistics>
    <source-class-statistics>....</source-class-statistics>
   </address-family>
</logical-interface>
```

Description

<address-family>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <compression-device-name>
        compression-device-name
      </compression-device-name>
      <address-family-name>
        address-family-name
      </address-family-name>
      <multilink-bundle-name>
        multilink-bundle-name
      </multilink-bundle-name>
      <as-bundle-name>
        as-bundle-name
      </as-bundle-name>
      <ae-bundle-name>
        ae-bundle-name
      </ae-bundle-name>
      <es-sa-name>
        es-sa-name
      </es-sa-name>
      <es-sa-fail-count>
        es-sa-fail-count
      </es-sa-fail-count>
      <es-sa-xmt-seq-num>
        es-sa-xmt-seq-num
      </es-sa-xmt-seq-num>
      <es-sa-recv-seq-num>
        es-sa-recv-seq-num
      </es-sa-recv-seq-num>
      <mtu>
        mtu
      </mtu>
      <maximum-labels>
        maximum-labels
      </maximum-labels>
      <address-family-flags>....</address-family-flags>
      <address-family-unnumbered>....</address-family-unnumbered>
      <arp-respond-any-local-address>
        arp-respond-any-local-address
```


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```
    </arp-respond-any-local-address>
    <pppoe-underlying-information>....</pppoe-underlying-information>
    <generation>
     generation
    </generation>
    <route-table>
     route-table
    </route-table>
    <filter-information>....</filter-information>
    <policer-information>....</policer-information>
    <interface-address>....</interface-address>
    <mac-validate-statistics>....</mac-validate-statistics>
    <route-rpf-statistics>....</route-rpf-statistics>
    <destination-class-statistics>....</destination-class-statistics>
    <source-class-statistics>....</source-class-statistics>
   </address-family>
  </logical-interface>
</physical-interface>
```

Description

<address-family>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <compression-device-name>
     compression-device-name
    </compression-device-name>
    <address-family-name>
     address-family-name
    </address-family-name>
    <multilink-bundle-name>
     multilink-bundle-name
    </multilink-bundle-name>
    <as-bundle-name>
     as-bundle-name
    </as-bundle-name>
    <ae-bundle-name>
     ae-bundle-name
    </ae-bundle-name>
    <es-sa-name>
     es-sa-name
    </es-sa-name>
    <es-sa-fail-count>
     es-sa-fail-count
    </es-sa-fail-count>
    <es-sa-xmt-seq-num>
     es-sa-xmt-seq-num
    </es-sa-xmt-seq-num>
    <es-sa-recv-seq-num>
     es-sa-recv-seq-num
    </es-sa-recv-seq-num>
```

```
        <mtu>
          mtu
        </mtu>
        <maximum-labels>
          maximum-labels
        </maximum-labels>
        <address-family-flags>....</address-family-flags>
        <address-family-unnumbered>....</address-family-unnumbered>
        <arp-respond-any-local-address>
          arp-respond-any-local-address
        </arp-respond-any-local-address>
        <pppoe-underlying-information>....</pppoe-underlying-information>
        <generation>
          generation
        </generation>
        <route-table>
          route-table
        </route-table>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <interface-address>....</interface-address>
        <mac-validate-statistics>....</mac-validate-statistics>
        <route-rpf-statistics>....</route-rpf-statistics>
        <destination-class-statistics>....</destination-class-statistics>
        <source-class-statistics>....</source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<address-family>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <compression-device-name>
        compression-device-name
      </compression-device-name>
      <address-family-name>
        address-family-name
      </address-family-name>
      <multilink-bundle-name>
        multilink-bundle-name
      </multilink-bundle-name>
      <as-bundle-name>
        as-bundle-name
      </as-bundle-name>
      <ae-bundle-name>
        ae-bundle-name
      </ae-bundle-name>
      <es-sa-name>
        es-sa-name
```


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```
      </es-sa-name>
      <es-sa-fail-count>
        es-sa-fail-count
      </es-sa-fail-count>
      <es-sa-xmt-seq-num>
        es-sa-xmt-seq-num
      </es-sa-xmt-seq-num>
      <es-sa-recv-seq-num>
        es-sa-recv-seq-num
      </es-sa-recv-seq-num>
      <mtu>
        mtu
      </mtu>
      <maximum-labels>
        maximum-labels
      </maximum-labels>
      <address-family-flags>....</address-family-flags>
      <address-family-unnumbered>....</address-family-unnumbered>
      <arp-respond-any-local-address>
        arp-respond-any-local-address
      </arp-respond-any-local-address>
      <pppoe-underlying-information>....</pppoe-underlying-information>
      <generation>
        generation
      </generation>
      <route-table>
        route-table
      </route-table>
      <filter-information>....</filter-information>
      <policer-information>....</policer-information>
      <interface-address>....</interface-address>
      <mac-validate-statistics>....</mac-validate-statistics>
      <route-rpf-statistics>....</route-rpf-statistics>
      <destination-class-statistics>....</destination-class-statistics>
      <source-class-statistics>....</source-class-statistics>
    </address-family>
  </logical-interface>
</interface-information>
```

Description

<address-family>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <compression-device-name>
          compression-device-name
        </compression-device-name>
        <address-family-name>
          address-family-name
        </address-family-name>
        <multilink-bundle-name>
```

```
          multilink-bundle-name
        </multilink-bundle-name>
        <as-bundle-name>
          as-bundle-name
        </as-bundle-name>
        <ae-bundle-name>
          ae-bundle-name
        </ae-bundle-name>
        <es-sa-name>
          es-sa-name
        </es-sa-name>
        <es-sa-fail-count>
          es-sa-fail-count
        </es-sa-fail-count>
        <es-sa-xmt-seq-num>
          es-sa-xmt-seq-num
        </es-sa-xmt-seq-num>
        <es-sa-recv-seq-num>
          es-sa-recv-seq-num
        </es-sa-recv-seq-num>
        <mtu>
          mtu
        </mtu>
        <maximum-labels>
          maximum-labels
        </maximum-labels>
        <address-family-flags>....</address-family-flags>
        <address-family-unnumbered>....</address-family-unnumbered>
        <arp-respond-any-local-address>
          arp-respond-any-local-address
        </arp-respond-any-local-address>
        <pppoe-underlying-information>....</pppoe-underlying-information>
        <generation>
          generation
        </generation>
        <route-table>
          route-table
        </route-table>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <interface-address>....</interface-address>
        <mac-validate-statistics>....</mac-validate-statistics>
        <route-rpf-statistics>....</route-rpf-statistics>
        <destination-class-statistics>....</destination-class-statistics>
        <source-class-statistics>....</source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

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<address-family>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <compression-device-name>
        compression-device-name
      </compression-device-name>
      <address-family-name>
        address-family-name
      </address-family-name>
      <multilink-bundle-name>
        multilink-bundle-name
      </multilink-bundle-name>
      <as-bundle-name>
        as-bundle-name
      </as-bundle-name>
      <ae-bundle-name>
        ae-bundle-name
      </ae-bundle-name>
      <es-sa-name>
        es-sa-name
      </es-sa-name>
      <es-sa-fail-count>
        es-sa-fail-count
      </es-sa-fail-count>
      <es-sa-xmt-seq-num>
        es-sa-xmt-seq-num
      </es-sa-xmt-seq-num>
      <es-sa-recv-seq-num>
        es-sa-recv-seq-num
      </es-sa-recv-seq-num>
      <mtu>
        mtu
      </mtu>
      <maximum-labels>
        maximum-labels
      </maximum-labels>
      <address-family-flags>....</address-family-flags>
      <address-family-unnumbered>....</address-family-unnumbered>
      <arp-respond-any-local-address>
        arp-respond-any-local-address
      </arp-respond-any-local-address>
      <pppoe-underlying-information>....</pppoe-underlying-information>
      <generation>
        generation
      </generation>
      <route-table>
        route-table
      </route-table>
      <filter-information>....</filter-information>
      <policer-information>....</policer-information>
      <interface-address>....</interface-address>
      <mac-validate-statistics>....</mac-validate-statistics>
```

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```
      <route-rpf-statistics>....</route-rpf-statistics>
      <destination-class-statistics>....</destination-class-statistics>
      <source-class-statistics>....</source-class-statistics>
     </address-family>
    </logical-interface>
</interface-filter-information>
```

Description

<address-family>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <compression-device-name>
     compression-device-name
    </compression-device-name>
    <address-family-name>
     address-family-name
    </address-family-name>
    <multilink-bundle-name>
     multilink-bundle-name
    </multilink-bundle-name>
    <as-bundle-name>
     as-bundle-name
    </as-bundle-name>
    <ae-bundle-name>
     ae-bundle-name
    </ae-bundle-name>
    <es-sa-name>
     es-sa-name
    </es-sa-name>
    <es-sa-fail-count>
     es-sa-fail-count
    </es-sa-fail-count>
    <es-sa-xmt-seq-num>
     es-sa-xmt-seq-num
    </es-sa-xmt-seq-num>
    <es-sa-recv-seq-num>
     es-sa-recv-seq-num
    </es-sa-recv-seq-num>
    <mtu>
     mtu
    </mtu>
    <maximum-labels>
     maximum-labels
    </maximum-labels>
    <address-family-flags>....</address-family-flags>
    <address-family-unnumbered>....</address-family-unnumbered>
    <arp-respond-any-local-address>
     arp-respond-any-local-address
    </arp-respond-any-local-address>
    <pppoe-underlying-information>....</pppoe-underlying-information>
```


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```
        <generation>
          generation
        </generation>
        <route-table>
          route-table
        </route-table>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <interface-address>....</interface-address>
        <mac-validate-statistics>....</mac-validate-statistics>
        <route-rpf-statistics>....</route-rpf-statistics>
        <destination-class-statistics>....</destination-class-statistics>
        <source-class-statistics>....</source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<address-family>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <compression-device-name>
        compression-device-name
      </compression-device-name>
      <address-family-name>
        address-family-name
      </address-family-name>
      <multilink-bundle-name>
        multilink-bundle-name
      </multilink-bundle-name>
      <as-bundle-name>
        as-bundle-name
      </as-bundle-name>
      <ae-bundle-name>
        ae-bundle-name
      </ae-bundle-name>
      <es-sa-name>
        es-sa-name
      </es-sa-name>
      <es-sa-fail-count>
        es-sa-fail-count
      </es-sa-fail-count>
      <es-sa-xmt-seq-num>
        es-sa-xmt-seq-num
      </es-sa-xmt-seq-num>
      <es-sa-recv-seq-num>
        es-sa-recv-seq-num
      </es-sa-recv-seq-num>
      <mtu>
        mtu
```

```
      </mtu>
      <maximum-labels>
        maximum-labels
      </maximum-labels>
      <address-family-flags>....</address-family-flags>
      <address-family-unnumbered>....</address-family-unnumbered>
      <arp-respond-any-local-address>
        arp-respond-any-local-address
      </arp-respond-any-local-address>
      <pppoe-underlying-information>....</pppoe-underlying-information>
      <generation>
        generation
      </generation>
      <route-table>
        route-table
      </route-table>
      <filter-information>....</filter-information>
      <policer-information>....</policer-information>
      <interface-address>....</interface-address>
      <mac-validate-statistics>....</mac-validate-statistics>
      <route-rpf-statistics>....</route-rpf-statistics>
      <destination-class-statistics>....</destination-class-statistics>
      <source-class-statistics>....</source-class-statistics>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description

<address-family-flags>

Usage

```
<address-family-flags>
  <ifff-none>
    ifff-none
  </ifff-none>
  <ifff-primary>
    ifff-primary
  </ifff-primary>
  <ifff-redirects>
    ifff-redirects
  </ifff-redirects>
  <ifff-no-redirects>
    ifff-no-redirects
  </ifff-no-redirects>
  <ifff-no-neighbor-learn>
    ifff-no-neighbor-learn
  </ifff-no-neighbor-learn>
  <ifff-targeted-broadcast>
    ifff-targeted-broadcast
  </ifff-targeted-broadcast>
  <ifff-sendbcast-pkt-to-re>
    ifff-sendbcast-pkt-to-re
  </ifff-sendbcast-pkt-to-re>
  <ifff-hard-down>
```


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```
  ifff-hard-down
</ifff-hard-down>
<ifff-down>
  ifff-down
</ifff-down>
<ifff-up>
  ifff-up
</ifff-up>
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
```

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```
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
</ifff-mtu-protocol-adj>
<ifff-unnumbered>
  ifff-unnumbered
</ifff-unnumbered>
<ifff-tcc-mpls>
  ifff-tcc-mpls
</ifff-tcc-mpls>
<ifff-tcc-inet>
  ifff-tcc-inet
</ifff-tcc-inet>
<ifff-tcc-inet6>
  ifff-tcc-inet6
</ifff-tcc-inet6>
<ifff-tcc-iso>
  ifff-tcc-iso
</ifff-tcc-iso>
<ifff-port-mode-isid-trunk>
  ifff-port-mode-isid-trunk
</ifff-port-mode-isid-trunk>
<generic-value>
  generic-value
</generic-value>
</address-family-flags>
```

Description

<address-family-flags>

Usage

```
<address-family>
  <address-family-flags>
    <ifff-none>
      ifff-none
    </ifff-none>
    <ifff-primary>
      ifff-primary
    </ifff-primary>
    <ifff-redirects>
      ifff-redirects
    </ifff-redirects>
    <ifff-no-redirects>
      ifff-no-redirects
    </ifff-no-redirects>
    <ifff-no-neighbor-learn>
      ifff-no-neighbor-learn
    </ifff-no-neighbor-learn>
    <ifff-targeted-broadcast>
```


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```
  ifff-targeted-broadcast
</ifff-targeted-broadcast>
<ifff-sendbcast-pkt-to-re>
  ifff-sendbcast-pkt-to-re
</ifff-sendbcast-pkt-to-re>
<ifff-hard-down>
  ifff-hard-down
</ifff-hard-down>
<ifff-down>
  ifff-down
</ifff-down>
<ifff-up>
  ifff-up
</ifff-up>
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
```

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```
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
</ifff-mtu-protocol-adj>
<ifff-unnumbered>
  ifff-unnumbered
</ifff-unnumbered>
<ifff-tcc-mpls>
  ifff-tcc-mpls
</ifff-tcc-mpls>
<ifff-tcc-inet>
  ifff-tcc-inet
</ifff-tcc-inet>
<ifff-tcc-inet6>
  ifff-tcc-inet6
</ifff-tcc-inet6>
<ifff-tcc-iso>
  ifff-tcc-iso
</ifff-tcc-iso>
<ifff-port-mode-isid-trunk>
  ifff-port-mode-isid-trunk
</ifff-port-mode-isid-trunk>
<generic-value>
  generic-value
</generic-value>
</address-family-flags>
</address-family>
```

Description

<address-family-flags>

Usage

```
<logical-interface>
  <address-family>
    <address-family-flags>
      <ifff-none>
        ifff-none
      </ifff-none>
      <ifff-primary>
        ifff-primary
      </ifff-primary>
      <ifff-redirects>
        ifff-redirects
```


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```
</ifff-redirects>
<ifff-no-redirects>
  ifff-no-redirects
</ifff-no-redirects>
<ifff-no-neighbor-learn>
  ifff-no-neighbor-learn
</ifff-no-neighbor-learn>
<ifff-targeted-broadcast>
  ifff-targeted-broadcast
</ifff-targeted-broadcast>
<ifff-sendbcast-pkt-to-re>
  ifff-sendbcast-pkt-to-re
</ifff-sendbcast-pkt-to-re>
<ifff-hard-down>
  ifff-hard-down
</ifff-hard-down>
<ifff-down>
  ifff-down
</ifff-down>
<ifff-up>
  ifff-up
</ifff-up>
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
```

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```
      ifff-rpf-check
    </ifff-rpf-check>
    <ifff-rpf-loose-mode>
      ifff-rpf-loose-mode
    </ifff-rpf-loose-mode>
    <ifff-sample-input>
      ifff-sample-input
    </ifff-sample-input>
    <ifff-sample-output>
      ifff-sample-output
    </ifff-sample-output>
    <ifff-no-asynch-notification>
      ifff-no-asynch-notification
    </ifff-no-asynch-notification>
    <ifff-negotiate-address>
      ifff-negotiate-address
    </ifff-negotiate-address>
    <ifff-port-mode-trunk>
      ifff-port-mode-trunk
    </ifff-port-mode-trunk>
    <ifff-mtu-protocol-adj>
      ifff-mtu-protocol-adj
    </ifff-mtu-protocol-adj>
    <ifff-unnumbered>
      ifff-unnumbered
    </ifff-unnumbered>
    <ifff-tcc-mpls>
      ifff-tcc-mpls
    </ifff-tcc-mpls>
    <ifff-tcc-inet>
      ifff-tcc-inet
    </ifff-tcc-inet>
    <ifff-tcc-inet6>
      ifff-tcc-inet6
    </ifff-tcc-inet6>
    <ifff-tcc-iso>
      ifff-tcc-iso
    </ifff-tcc-iso>
    <ifff-port-mode-isid-trunk>
      ifff-port-mode-isid-trunk
    </ifff-port-mode-isid-trunk>
    <generic-value>
      generic-value
    </generic-value>
  </address-family-flags>
 </address-family>
</logical-interface>
```

Description

<address-family-flags>

Usage

```
<physical-interface>
 <logical-interface>
```


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```
<address-family>
  <address-family-flags>
    <ifff-none>
      ifff-none
    </ifff-none>
    <ifff-primary>
      ifff-primary
    </ifff-primary>
    <ifff-redirects>
      ifff-redirects
    </ifff-redirects>
    <ifff-no-redirects>
      ifff-no-redirects
    </ifff-no-redirects>
    <ifff-no-neighbor-learn>
      ifff-no-neighbor-learn
    </ifff-no-neighbor-learn>
    <ifff-targeted-broadcast>
      ifff-targeted-broadcast
    </ifff-targeted-broadcast>
    <ifff-sendbcast-pkt-to-re>
      ifff-sendbcast-pkt-to-re
    </ifff-sendbcast-pkt-to-re>
    <ifff-hard-down>
      ifff-hard-down
    </ifff-hard-down>
    <ifff-down>
      ifff-down
    </ifff-down>
    <ifff-up>
      ifff-up
    </ifff-up>
    <ifff-func1>
      ifff-func1
    </ifff-func1>
    <ifff-func2>
      ifff-func2
    </ifff-func2>
    <ifff-is-primary>
      ifff-is-primary
    </ifff-is-primary>
    <ifff-recv-options>
      ifff-recv-options
    </ifff-recv-options>
    <ifff-recv-ttl-exceeded>
      ifff-recv-ttl-exceeded
    </ifff-recv-ttl-exceeded>
    <ifff-dst-class-usage>
      ifff-dst-class-usage
    </ifff-dst-class-usage>
    <ifff-src-class-input>
      ifff-src-class-input
    </ifff-src-class-input>
    <ifff-src-class-output>
      ifff-src-class-output
    </ifff-src-class-output>
```

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```
        <ifff-mtu-user-conf>
          ifff-mtu-user-conf
        </ifff-mtu-user-conf>
        <ifff-mac-validate-strict>
          ifff-mac-validate-strict
        </ifff-mac-validate-strict>
        <ifff-mac-validate-loose>
          ifff-mac-validate-loose
        </ifff-mac-validate-loose>
        <ifff-rpf-check>
          ifff-rpf-check
        </ifff-rpf-check>
        <ifff-rpf-loose-mode>
          ifff-rpf-loose-mode
        </ifff-rpf-loose-mode>
        <ifff-sample-input>
          ifff-sample-input
        </ifff-sample-input>
        <ifff-sample-output>
          ifff-sample-output
        </ifff-sample-output>
        <ifff-no-asynch-notification>
          ifff-no-asynch-notification
        </ifff-no-asynch-notification>
        <ifff-negotiate-address>
          ifff-negotiate-address
        </ifff-negotiate-address>
        <ifff-port-mode-trunk>
          ifff-port-mode-trunk
        </ifff-port-mode-trunk>
        <ifff-mtu-protocol-adj>
          ifff-mtu-protocol-adj
        </ifff-mtu-protocol-adj>
        <ifff-unnumbered>
          ifff-unnumbered
        </ifff-unnumbered>
        <ifff-tcc-mpls>
          ifff-tcc-mpls
        </ifff-tcc-mpls>
        <ifff-tcc-inet>
          ifff-tcc-inet
        </ifff-tcc-inet>
        <ifff-tcc-inet6>
          ifff-tcc-inet6
        </ifff-tcc-inet6>
        <ifff-tcc-iso>
          ifff-tcc-iso
        </ifff-tcc-iso>
        <ifff-port-mode-isid-trunk>
          ifff-port-mode-isid-trunk
        </ifff-port-mode-isid-trunk>
        <generic-value>
          generic-value
        </generic-value>
      </address-family-flags>
    </address-family>
```


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```
  </logical-interface>
</physical-interface>
```

Description

<address-family-flags>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <address-family-flags>
     <ifff-none>
      ifff-none
     </ifff-none>
     <ifff-primary>
      ifff-primary
     </ifff-primary>
     <ifff-redirects>
      ifff-redirects
     </ifff-redirects>
     <ifff-no-redirects>
      ifff-no-redirects
     </ifff-no-redirects>
     <ifff-no-neighbor-learn>
      ifff-no-neighbor-learn
     </ifff-no-neighbor-learn>
     <ifff-targeted-broadcast>
      ifff-targeted-broadcast
     </ifff-targeted-broadcast>
     <ifff-sendbcast-pkt-to-re>
      ifff-sendbcast-pkt-to-re
     </ifff-sendbcast-pkt-to-re>
     <ifff-hard-down>
      ifff-hard-down
     </ifff-hard-down>
     <ifff-down>
      ifff-down
     </ifff-down>
     <ifff-up>
      ifff-up
     </ifff-up>
     <ifff-func1>
      ifff-func1
     </ifff-func1>
     <ifff-func2>
      ifff-func2
     </ifff-func2>
     <ifff-is-primary>
      ifff-is-primary
     </ifff-is-primary>
     <ifff-recv-options>
      ifff-recv-options
     </ifff-recv-options>
```

<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
</ifff-mtu-protocol-adj>
<ifff-unnumbered>
  ifff-unnumbered
</ifff-unnumbered>
<ifff-tcc-mpls>
  ifff-tcc-mpls
</ifff-tcc-mpls>
<ifff-tcc-inet>
  ifff-tcc-inet
</ifff-tcc-inet>
<ifff-tcc-inet6>
  ifff-tcc-inet6

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```
        </ifff-tcc-inet6>
        <ifff-tcc-iso>
          ifff-tcc-iso
        </ifff-tcc-iso>
        <ifff-port-mode-isid-trunk>
          ifff-port-mode-isid-trunk
        </ifff-port-mode-isid-trunk>
        <generic-value>
          generic-value
        </generic-value>
      </address-family-flags>
    </address-family>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<address-family-flags>

Usage

```
<interface-information>
 <logical-interface>
  <address-family>
   <address-family-flags>
    <ifff-none>
     ifff-none
    </ifff-none>
    <ifff-primary>
     ifff-primary
    </ifff-primary>
    <ifff-redirects>
     ifff-redirects
    </ifff-redirects>
    <ifff-no-redirects>
     ifff-no-redirects
    </ifff-no-redirects>
    <ifff-no-neighbor-learn>
     ifff-no-neighbor-learn
    </ifff-no-neighbor-learn>
    <ifff-targeted-broadcast>
     ifff-targeted-broadcast
    </ifff-targeted-broadcast>
    <ifff-sendbcast-pkt-to-re>
     ifff-sendbcast-pkt-to-re
    </ifff-sendbcast-pkt-to-re>
    <ifff-hard-down>
     ifff-hard-down
    </ifff-hard-down>
    <ifff-down>
     ifff-down
    </ifff-down>
    <ifff-up>
     ifff-up
    </ifff-up>
```

```
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
```


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```
        </ifff-mtu-protocol-adj>
        <ifff-unnumbered>
          ifff-unnumbered
        </ifff-unnumbered>
        <ifff-tcc-mpls>
          ifff-tcc-mpls
        </ifff-tcc-mpls>
        <ifff-tcc-inet>
          ifff-tcc-inet
        </ifff-tcc-inet>
        <ifff-tcc-inet6>
          ifff-tcc-inet6
        </ifff-tcc-inet6>
        <ifff-tcc-iso>
          ifff-tcc-iso
        </ifff-tcc-iso>
        <ifff-port-mode-isid-trunk>
          ifff-port-mode-isid-trunk
        </ifff-port-mode-isid-trunk>
        <generic-value>
          generic-value
        </generic-value>
      </address-family-flags>
    </address-family>
  </logical-interface>
</interface-information>
```

Description

<address-family-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <address-family-flags>
          <ifff-none>
            ifff-none
          </ifff-none>
          <ifff-primary>
            ifff-primary
          </ifff-primary>
          <ifff-redirects>
            ifff-redirects
          </ifff-redirects>
          <ifff-no-redirects>
            ifff-no-redirects
          </ifff-no-redirects>
          <ifff-no-neighbor-learn>
            ifff-no-neighbor-learn
          </ifff-no-neighbor-learn>
          <ifff-targeted-broadcast>
            ifff-targeted-broadcast
          </ifff-targeted-broadcast>
```

<ifff-sendbcast-pkt-to-re>
  ifff-sendbcast-pkt-to-re
</ifff-sendbcast-pkt-to-re>
<ifff-hard-down>
  ifff-hard-down
</ifff-hard-down>
<ifff-down>
  ifff-down
</ifff-down>
<ifff-up>
  ifff-up
</ifff-up>
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output

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```
        </ifff-sample-output>
        <ifff-no-asynch-notification>
          ifff-no-asynch-notification
        </ifff-no-asynch-notification>
        <ifff-negotiate-address>
          ifff-negotiate-address
        </ifff-negotiate-address>
        <ifff-port-mode-trunk>
          ifff-port-mode-trunk
        </ifff-port-mode-trunk>
        <ifff-mtu-protocol-adj>
          ifff-mtu-protocol-adj
        </ifff-mtu-protocol-adj>
        <ifff-unnumbered>
          ifff-unnumbered
        </ifff-unnumbered>
        <ifff-tcc-mpls>
          ifff-tcc-mpls
        </ifff-tcc-mpls>
        <ifff-tcc-inet>
          ifff-tcc-inet
        </ifff-tcc-inet>
        <ifff-tcc-inet6>
          ifff-tcc-inet6
        </ifff-tcc-inet6>
        <ifff-tcc-iso>
          ifff-tcc-iso
        </ifff-tcc-iso>
        <ifff-port-mode-isid-trunk>
          ifff-port-mode-isid-trunk
        </ifff-port-mode-isid-trunk>
        <generic-value>
          generic-value
        </generic-value>
      </address-family-flags>
    </address-family>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<address-family-flags>

Usage

```
<interface-filter-information>
 <logical-interface>
  <address-family>
   <address-family-flags>
    <ifff-none>
     ifff-none
    </ifff-none>
    <ifff-primary>
     ifff-primary
    </ifff-primary>
```

<ifff-redirects>
  ifff-redirects
</ifff-redirects>
<ifff-no-redirects>
  ifff-no-redirects
</ifff-no-redirects>
<ifff-no-neighbor-learn>
  ifff-no-neighbor-learn
</ifff-no-neighbor-learn>
<ifff-targeted-broadcast>
  ifff-targeted-broadcast
</ifff-targeted-broadcast>
<ifff-sendbcast-pkt-to-re>
  ifff-sendbcast-pkt-to-re
</ifff-sendbcast-pkt-to-re>
<ifff-hard-down>
  ifff-hard-down
</ifff-hard-down>
<ifff-down>
  ifff-down
</ifff-down>
<ifff-up>
  ifff-up
</ifff-up>
<ifff-func1>
  ifff-func1
</ifff-func1>
<ifff-func2>
  ifff-func2
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose

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```
        </ifff-mac-validate-loose>
        <ifff-rpf-check>
          ifff-rpf-check
        </ifff-rpf-check>
        <ifff-rpf-loose-mode>
          ifff-rpf-loose-mode
        </ifff-rpf-loose-mode>
        <ifff-sample-input>
          ifff-sample-input
        </ifff-sample-input>
        <ifff-sample-output>
          ifff-sample-output
        </ifff-sample-output>
        <ifff-no-asynch-notification>
          ifff-no-asynch-notification
        </ifff-no-asynch-notification>
        <ifff-negotiate-address>
          ifff-negotiate-address
        </ifff-negotiate-address>
        <ifff-port-mode-trunk>
          ifff-port-mode-trunk
        </ifff-port-mode-trunk>
        <ifff-mtu-protocol-adj>
          ifff-mtu-protocol-adj
        </ifff-mtu-protocol-adj>
        <ifff-unnumbered>
          ifff-unnumbered
        </ifff-unnumbered>
        <ifff-tcc-mpls>
          ifff-tcc-mpls
        </ifff-tcc-mpls>
        <ifff-tcc-inet>
          ifff-tcc-inet
        </ifff-tcc-inet>
        <ifff-tcc-inet6>
          ifff-tcc-inet6
        </ifff-tcc-inet6>
        <ifff-tcc-iso>
          ifff-tcc-iso
        </ifff-tcc-iso>
        <ifff-port-mode-isid-trunk>
          ifff-port-mode-isid-trunk
        </ifff-port-mode-isid-trunk>
        <generic-value>
          generic-value
        </generic-value>
      </address-family-flags>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description

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<address-family-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <address-family-flags>
          <ifff-none>
            ifff-none
          </ifff-none>
          <ifff-primary>
            ifff-primary
          </ifff-primary>
          <ifff-redirects>
            ifff-redirects
          </ifff-redirects>
          <ifff-no-redirects>
            ifff-no-redirects
          </ifff-no-redirects>
          <ifff-no-neighbor-learn>
            ifff-no-neighbor-learn
          </ifff-no-neighbor-learn>
          <ifff-targeted-broadcast>
            ifff-targeted-broadcast
          </ifff-targeted-broadcast>
          <ifff-sendbcast-pkt-to-re>
            ifff-sendbcast-pkt-to-re
          </ifff-sendbcast-pkt-to-re>
          <ifff-hard-down>
            ifff-hard-down
          </ifff-hard-down>
          <ifff-down>
            ifff-down
          </ifff-down>
          <ifff-up>
            ifff-up
          </ifff-up>
          <ifff-func1>
            ifff-func1
          </ifff-func1>
          <ifff-func2>
            ifff-func2
          </ifff-func2>
          <ifff-is-primary>
            ifff-is-primary
          </ifff-is-primary>
          <ifff-recv-options>
            ifff-recv-options
          </ifff-recv-options>
          <ifff-recv-ttl-exceeded>
            ifff-recv-ttl-exceeded
          </ifff-recv-ttl-exceeded>
          <ifff-dst-class-usage>
            ifff-dst-class-usage
```


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```
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
</ifff-mtu-protocol-adj>
<ifff-unnumbered>
  ifff-unnumbered
</ifff-unnumbered>
<ifff-tcc-mpls>
  ifff-tcc-mpls
</ifff-tcc-mpls>
<ifff-tcc-inet>
  ifff-tcc-inet
</ifff-tcc-inet>
<ifff-tcc-inet6>
  ifff-tcc-inet6
</ifff-tcc-inet6>
<ifff-tcc-iso>
  ifff-tcc-iso
</ifff-tcc-iso>
<ifff-port-mode-isid-trunk>
```

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```
                ifff-port-mode-isid-trunk
               </ifff-port-mode-isid-trunk>
               <generic-value>
                generic-value
               </generic-value>
              </address-family-flags>
             </address-family>
            </logical-interface>
           </physical-interface>
          </interface-policer-information>
```

Description

<address-family-flags>

Usage

```
<interface-policer-information>
 <logical-interface>
  <address-family>
   <address-family-flags>
    <ifff-none>
     ifff-none
    </ifff-none>
    <ifff-primary>
     ifff-primary
    </ifff-primary>
    <ifff-redirects>
     ifff-redirects
    </ifff-redirects>
    <ifff-no-redirects>
     ifff-no-redirects
    </ifff-no-redirects>
    <ifff-no-neighbor-learn>
     ifff-no-neighbor-learn
    </ifff-no-neighbor-learn>
    <ifff-targeted-broadcast>
     ifff-targeted-broadcast
    </ifff-targeted-broadcast>
    <ifff-sendbcast-pkt-to-re>
     ifff-sendbcast-pkt-to-re
    </ifff-sendbcast-pkt-to-re>
    <ifff-hard-down>
     ifff-hard-down
    </ifff-hard-down>
    <ifff-down>
     ifff-down
    </ifff-down>
    <ifff-up>
     ifff-up
    </ifff-up>
    <ifff-func1>
     ifff-func1
    </ifff-func1>
    <ifff-func2>
     ifff-func2
```


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```
</ifff-func2>
<ifff-is-primary>
  ifff-is-primary
</ifff-is-primary>
<ifff-recv-options>
  ifff-recv-options
</ifff-recv-options>
<ifff-recv-ttl-exceeded>
  ifff-recv-ttl-exceeded
</ifff-recv-ttl-exceeded>
<ifff-dst-class-usage>
  ifff-dst-class-usage
</ifff-dst-class-usage>
<ifff-src-class-input>
  ifff-src-class-input
</ifff-src-class-input>
<ifff-src-class-output>
  ifff-src-class-output
</ifff-src-class-output>
<ifff-mtu-user-conf>
  ifff-mtu-user-conf
</ifff-mtu-user-conf>
<ifff-mac-validate-strict>
  ifff-mac-validate-strict
</ifff-mac-validate-strict>
<ifff-mac-validate-loose>
  ifff-mac-validate-loose
</ifff-mac-validate-loose>
<ifff-rpf-check>
  ifff-rpf-check
</ifff-rpf-check>
<ifff-rpf-loose-mode>
  ifff-rpf-loose-mode
</ifff-rpf-loose-mode>
<ifff-sample-input>
  ifff-sample-input
</ifff-sample-input>
<ifff-sample-output>
  ifff-sample-output
</ifff-sample-output>
<ifff-no-asynch-notification>
  ifff-no-asynch-notification
</ifff-no-asynch-notification>
<ifff-negotiate-address>
  ifff-negotiate-address
</ifff-negotiate-address>
<ifff-port-mode-trunk>
  ifff-port-mode-trunk
</ifff-port-mode-trunk>
<ifff-mtu-protocol-adj>
  ifff-mtu-protocol-adj
</ifff-mtu-protocol-adj>
<ifff-unnumbered>
  ifff-unnumbered
</ifff-unnumbered>
<ifff-tcc-mpls>
```

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```
            ifff-tcc-mpls
           </ifff-tcc-mpls>
           <ifff-tcc-inet>
            ifff-tcc-inet
           </ifff-tcc-inet>
           <ifff-tcc-inet6>
            ifff-tcc-inet6
           </ifff-tcc-inet6>
           <ifff-tcc-iso>
            ifff-tcc-iso
           </ifff-tcc-iso>
           <ifff-port-mode-isid-trunk>
            ifff-port-mode-isid-trunk
           </ifff-port-mode-isid-trunk>
           <generic-value>
            generic-value
           </generic-value>
          </address-family-flags>
        </address-family>
      </logical-interface>
    </interface-policer-information>
```

Description

<address-family-unnumbered>

Usage

```
<address-family>
  <address-family-unnumbered>
    <unnumbered-family-donor-interface-name>
      unnumbered-family-donor-interface-name
    </unnumbered-family-donor-interface-name>
    <unnumbered-family-donor-interface-index>
      unnumbered-family-donor-interface-index
    </unnumbered-family-donor-interface-index>
    <unnumbered-family-preferred-source-address>
      unnumbered-family-preferred-source-address
    </unnumbered-family-preferred-source-address>
  </address-family-unnumbered>
</address-family>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<logical-interface>
  <address-family>
    <address-family-unnumbered>
      <unnumbered-family-donor-interface-name>
        unnumbered-family-donor-interface-name
      </unnumbered-family-donor-interface-name>
      <unnumbered-family-donor-interface-index>
```


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```
        unnumbered-family-donor-interface-index
       </unnumbered-family-donor-interface-index>
       <unnumbered-family-preferred-source-address>
        unnumbered-family-preferred-source-address
       </unnumbered-family-preferred-source-address>
      </address-family-unnumbered>
     </address-family>
    </logical-interface>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<physical-interface>
 <logical-interface>
  <address-family>
   <address-family-unnumbered>
    <unnumbered-family-donor-interface-name>
     unnumbered-family-donor-interface-name
    </unnumbered-family-donor-interface-name>
    <unnumbered-family-donor-interface-index>
     unnumbered-family-donor-interface-index
    </unnumbered-family-donor-interface-index>
    <unnumbered-family-preferred-source-address>
     unnumbered-family-preferred-source-address
    </unnumbered-family-preferred-source-address>
   </address-family-unnumbered>
  </address-family>
 </logical-interface>
</physical-interface>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <address-family-unnumbered>
     <unnumbered-family-donor-interface-name>
      unnumbered-family-donor-interface-name
     </unnumbered-family-donor-interface-name>
     <unnumbered-family-donor-interface-index>
      unnumbered-family-donor-interface-index
     </unnumbered-family-donor-interface-index>
     <unnumbered-family-preferred-source-address>
      unnumbered-family-preferred-source-address
     </unnumbered-family-preferred-source-address>
    </address-family-unnumbered>
```

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```
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <address-family-unnumbered>
        <unnumbered-family-donor-interface-name>
          unnumbered-family-donor-interface-name
        </unnumbered-family-donor-interface-name>
        <unnumbered-family-donor-interface-index>
          unnumbered-family-donor-interface-index
        </unnumbered-family-donor-interface-index>
        <unnumbered-family-preferred-source-address>
          unnumbered-family-preferred-source-address
        </unnumbered-family-preferred-source-address>
      </address-family-unnumbered>
    </address-family>
  </logical-interface>
</interface-information>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <address-family-unnumbered>
          <unnumbered-family-donor-interface-name>
            unnumbered-family-donor-interface-name
          </unnumbered-family-donor-interface-name>
          <unnumbered-family-donor-interface-index>
            unnumbered-family-donor-interface-index
          </unnumbered-family-donor-interface-index>
          <unnumbered-family-preferred-source-address>
            unnumbered-family-preferred-source-address
          </unnumbered-family-preferred-source-address>
        </address-family-unnumbered>
      </address-family>
    </logical-interface>
  </physical-interface>
```


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```
</interface-filter-information>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <address-family-unnumbered>
        <unnumbered-family-donor-interface-name>
          unnumbered-family-donor-interface-name
        </unnumbered-family-donor-interface-name>
        <unnumbered-family-donor-interface-index>
          unnumbered-family-donor-interface-index
        </unnumbered-family-donor-interface-index>
        <unnumbered-family-preferred-source-address>
          unnumbered-family-preferred-source-address
        </unnumbered-family-preferred-source-address>
      </address-family-unnumbered>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description Information about an unnumbered address family

<address-family-unnumbered>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <address-family-unnumbered>
          <unnumbered-family-donor-interface-name>
            unnumbered-family-donor-interface-name
          </unnumbered-family-donor-interface-name>
          <unnumbered-family-donor-interface-index>
            unnumbered-family-donor-interface-index
          </unnumbered-family-donor-interface-index>
          <unnumbered-family-preferred-source-address>
            unnumbered-family-preferred-source-address
          </unnumbered-family-preferred-source-address>
        </address-family-unnumbered>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Information about an unnumbered address family

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<address-family-unnumbered>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <address-family-unnumbered>
        <unnumbered-family-donor-interface-name>
          unnumbered-family-donor-interface-name
        </unnumbered-family-donor-interface-name>
        <unnumbered-family-donor-interface-index>
          unnumbered-family-donor-interface-index
        </unnumbered-family-donor-interface-index>
        <unnumbered-family-preferred-source-address>
          unnumbered-family-preferred-source-address
        </unnumbered-family-preferred-source-address>
      </address-family-unnumbered>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description Information about an unnumbered address family

<atm-cos-information>

Usage

```
<atm-cos-information>
  <vc-cos-mode>
    vc-cos-mode
  </vc-cos-mode>
  <atm-cos-queue>....</atm-cos-queue>
</atm-cos-information>
```

Description

<atm-cos-information>

Usage

```
<virtual-circuit-information>
  <atm-cos-information>
    <vc-cos-mode>
      vc-cos-mode
    </vc-cos-mode>
    <atm-cos-queue>....</atm-cos-queue>
  </atm-cos-information>
</virtual-circuit-information>
```

Description

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<atm-cos-information>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-cos-information>
      <vc-cos-mode>
        vc-cos-mode
      </vc-cos-mode>
      <atm-cos-queue>....</atm-cos-queue>
    </atm-cos-information>
  </virtual-circuit-information>
</logical-interface>
```

Description

<atm-cos-information>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <vc-cos-mode>
          vc-cos-mode
        </vc-cos-mode>
        <atm-cos-queue>....</atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<atm-cos-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <vc-cos-mode>
            vc-cos-mode
          </vc-cos-mode>
          <atm-cos-queue>....</atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

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Description

<atm-cos-information>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <vc-cos-mode>
     vc-cos-mode
    </vc-cos-mode>
    <atm-cos-queue>....</atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-information>
```

Description

<atm-cos-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <vc-cos-mode>
      vc-cos-mode
     </vc-cos-mode>
     <atm-cos-queue>....</atm-cos-queue>
    </atm-cos-information>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<atm-cos-information>

Usage

```
<interface-filter-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <vc-cos-mode>
     vc-cos-mode
    </vc-cos-mode>
    <atm-cos-queue>....</atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
```


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```
</interface-filter-information>
```

Description

<atm-cos-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <vc-cos-mode>
      vc-cos-mode
     </vc-cos-mode>
     <atm-cos-queue>....</atm-cos-queue>
    </atm-cos-information>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<atm-cos-information>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <vc-cos-mode>
     vc-cos-mode
    </vc-cos-mode>
    <atm-cos-queue>....</atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-policer-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<atm-cos-plp-statistics>
 <atm-plp0-output-bytes>
  atm-plp0-output-bytes
 </atm-plp0-output-bytes>
 <atm-plp1-output-bytes>
  atm-plp1-output-bytes
 </atm-plp1-output-bytes>
 <atm-plp0-output-packets>
```

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```
      atm-plp0-output-packets
    </atm-plp0-output-packets>
    <atm-plp1-output-packets>
      atm-plp1-output-packets
    </atm-plp1-output-packets>
    <atm-plp0-byte-drops>
      atm-plp0-byte-drops
    </atm-plp0-byte-drops>
    <atm-plp1-byte-drops>
      atm-plp1-byte-drops
    </atm-plp1-byte-drops>
    <atm-plp0-packet-drops>
      atm-plp0-packet-drops
    </atm-plp0-packet-drops>
    <atm-plp1-packet-drops>
      atm-plp1-packet-drops
    </atm-plp1-packet-drops>
  </atm-cos-plp-statistics>
```

Description

<atm-cos-plp-statistics>

Usage

```
<atm-cos-queue>
  <atm-cos-plp-statistics>
    <atm-plp0-output-bytes>
      atm-plp0-output-bytes
    </atm-plp0-output-bytes>
    <atm-plp1-output-bytes>
      atm-plp1-output-bytes
    </atm-plp1-output-bytes>
    <atm-plp0-output-packets>
      atm-plp0-output-packets
    </atm-plp0-output-packets>
    <atm-plp1-output-packets>
      atm-plp1-output-packets
    </atm-plp1-output-packets>
    <atm-plp0-byte-drops>
      atm-plp0-byte-drops
    </atm-plp0-byte-drops>
    <atm-plp1-byte-drops>
      atm-plp1-byte-drops
    </atm-plp1-byte-drops>
    <atm-plp0-packet-drops>
      atm-plp0-packet-drops
    </atm-plp0-packet-drops>
    <atm-plp1-packet-drops>
      atm-plp1-packet-drops
    </atm-plp1-packet-drops>
  </atm-cos-plp-statistics>
</atm-cos-queue>
```

Description

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<atm-cos-plp-statistics>

Usage

```
<atm-cos-information>
  <atm-cos-queue>
    <atm-cos-plp-statistics>
      <atm-plp0-output-bytes>
        atm-plp0-output-bytes
      </atm-plp0-output-bytes>
      <atm-plp1-output-bytes>
        atm-plp1-output-bytes
      </atm-plp1-output-bytes>
      <atm-plp0-output-packets>
        atm-plp0-output-packets
      </atm-plp0-output-packets>
      <atm-plp1-output-packets>
        atm-plp1-output-packets
      </atm-plp1-output-packets>
      <atm-plp0-byte-drops>
        atm-plp0-byte-drops
      </atm-plp0-byte-drops>
      <atm-plp1-byte-drops>
        atm-plp1-byte-drops
      </atm-plp1-byte-drops>
      <atm-plp0-packet-drops>
        atm-plp0-packet-drops
      </atm-plp0-packet-drops>
      <atm-plp1-packet-drops>
        atm-plp1-packet-drops
      </atm-plp1-packet-drops>
    </atm-cos-plp-statistics>
  </atm-cos-queue>
</atm-cos-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<virtual-circuit-information>
  <atm-cos-information>
    <atm-cos-queue>
      <atm-cos-plp-statistics>
        <atm-plp0-output-bytes>
          atm-plp0-output-bytes
        </atm-plp0-output-bytes>
        <atm-plp1-output-bytes>
          atm-plp1-output-bytes
        </atm-plp1-output-bytes>
        <atm-plp0-output-packets>
          atm-plp0-output-packets
        </atm-plp0-output-packets>
        <atm-plp1-output-packets>
          atm-plp1-output-packets
```

```
        </atm-plp1-output-packets>
        <atm-plp0-byte-drops>
          atm-plp0-byte-drops
        </atm-plp0-byte-drops>
        <atm-plp1-byte-drops>
          atm-plp1-byte-drops
        </atm-plp1-byte-drops>
        <atm-plp0-packet-drops>
          atm-plp0-packet-drops
        </atm-plp0-packet-drops>
        <atm-plp1-packet-drops>
          atm-plp1-packet-drops
        </atm-plp1-packet-drops>
      </atm-cos-plp-statistics>
    </atm-cos-queue>
  </atm-cos-information>
</virtual-circuit-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-cos-information>
      <atm-cos-queue>
        <atm-cos-plp-statistics>
          <atm-plp0-output-bytes>
            atm-plp0-output-bytes
          </atm-plp0-output-bytes>
          <atm-plp1-output-bytes>
            atm-plp1-output-bytes
          </atm-plp1-output-bytes>
          <atm-plp0-output-packets>
            atm-plp0-output-packets
          </atm-plp0-output-packets>
          <atm-plp1-output-packets>
            atm-plp1-output-packets
          </atm-plp1-output-packets>
          <atm-plp0-byte-drops>
            atm-plp0-byte-drops
          </atm-plp0-byte-drops>
          <atm-plp1-byte-drops>
            atm-plp1-byte-drops
          </atm-plp1-byte-drops>
          <atm-plp0-packet-drops>
            atm-plp0-packet-drops
          </atm-plp0-packet-drops>
          <atm-plp1-packet-drops>
            atm-plp1-packet-drops
          </atm-plp1-packet-drops>
        </atm-cos-plp-statistics>
      </atm-cos-queue>
    </atm-cos-information>
```


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```
  </virtual-circuit-information>
</logical-interface>
```

Description

<atm-cos-plp-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-plp-statistics>
            <atm-plp0-output-bytes>
              atm-plp0-output-bytes
            </atm-plp0-output-bytes>
            <atm-plp1-output-bytes>
              atm-plp1-output-bytes
            </atm-plp1-output-bytes>
            <atm-plp0-output-packets>
              atm-plp0-output-packets
            </atm-plp0-output-packets>
            <atm-plp1-output-packets>
              atm-plp1-output-packets
            </atm-plp1-output-packets>
            <atm-plp0-byte-drops>
              atm-plp0-byte-drops
            </atm-plp0-byte-drops>
            <atm-plp1-byte-drops>
              atm-plp1-byte-drops
            </atm-plp1-byte-drops>
            <atm-plp0-packet-drops>
              atm-plp0-packet-drops
            </atm-plp0-packet-drops>
            <atm-plp1-packet-drops>
              atm-plp1-packet-drops
            </atm-plp1-packet-drops>
          </atm-cos-plp-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<atm-cos-plp-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
```

```
<atm-cos-information>
 <atm-cos-queue>
  <atm-cos-plp-statistics>
   <atm-plp0-output-bytes>
    atm-plp0-output-bytes
   </atm-plp0-output-bytes>
   <atm-plp1-output-bytes>
    atm-plp1-output-bytes
   </atm-plp1-output-bytes>
   <atm-plp0-output-packets>
    atm-plp0-output-packets
   </atm-plp0-output-packets>
   <atm-plp1-output-packets>
    atm-plp1-output-packets
   </atm-plp1-output-packets>
   <atm-plp0-byte-drops>
    atm-plp0-byte-drops
   </atm-plp0-byte-drops>
   <atm-plp1-byte-drops>
    atm-plp1-byte-drops
   </atm-plp1-byte-drops>
   <atm-plp0-packet-drops>
    atm-plp0-packet-drops
   </atm-plp0-packet-drops>
   <atm-plp1-packet-drops>
    atm-plp1-packet-drops
   </atm-plp1-packet-drops>
  </atm-cos-plp-statistics>
 </atm-cos-queue>
</atm-cos-information>
</virtual-circuit-information>
</logical-interface>
</physical-interface>
</interface-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-plp-statistics>
      <atm-plp0-output-bytes>
       atm-plp0-output-bytes
      </atm-plp0-output-bytes>
      <atm-plp1-output-bytes>
       atm-plp1-output-bytes
      </atm-plp1-output-bytes>
      <atm-plp0-output-packets>
       atm-plp0-output-packets
      </atm-plp0-output-packets>
```


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```
                <atm-plp1-output-packets>
                  atm-plp1-output-packets
                </atm-plp1-output-packets>
                <atm-plp0-byte-drops>
                  atm-plp0-byte-drops
                </atm-plp0-byte-drops>
                <atm-plp1-byte-drops>
                  atm-plp1-byte-drops
                </atm-plp1-byte-drops>
                <atm-plp0-packet-drops>
                  atm-plp0-packet-drops
                </atm-plp0-packet-drops>
                <atm-plp1-packet-drops>
                  atm-plp1-packet-drops
                </atm-plp1-packet-drops>
              </atm-cos-plp-statistics>
            </atm-cos-queue>
          </atm-cos-information>
        </virtual-circuit-information>
      </logical-interface>
    </interface-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-plp-statistics>
              <atm-plp0-output-bytes>
                atm-plp0-output-bytes
              </atm-plp0-output-bytes>
              <atm-plp1-output-bytes>
                atm-plp1-output-bytes
              </atm-plp1-output-bytes>
              <atm-plp0-output-packets>
                atm-plp0-output-packets
              </atm-plp0-output-packets>
              <atm-plp1-output-packets>
                atm-plp1-output-packets
              </atm-plp1-output-packets>
              <atm-plp0-byte-drops>
                atm-plp0-byte-drops
              </atm-plp0-byte-drops>
              <atm-plp1-byte-drops>
                atm-plp1-byte-drops
              </atm-plp1-byte-drops>
              <atm-plp0-packet-drops>
                atm-plp0-packet-drops
              </atm-plp0-packet-drops>
```

```
                    <atm-plp1-packet-drops>
                      atm-plp1-packet-drops
                    </atm-plp1-packet-drops>
                  </atm-cos-plp-statistics>
                </atm-cos-queue>
              </atm-cos-information>
            </virtual-circuit-information>
          </logical-interface>
        </physical-interface>
      </interface-filter-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-plp-statistics>
            <atm-plp0-output-bytes>
              atm-plp0-output-bytes
            </atm-plp0-output-bytes>
            <atm-plp1-output-bytes>
              atm-plp1-output-bytes
            </atm-plp1-output-bytes>
            <atm-plp0-output-packets>
              atm-plp0-output-packets
            </atm-plp0-output-packets>
            <atm-plp1-output-packets>
              atm-plp1-output-packets
            </atm-plp1-output-packets>
            <atm-plp0-byte-drops>
              atm-plp0-byte-drops
            </atm-plp0-byte-drops>
            <atm-plp1-byte-drops>
              atm-plp1-byte-drops
            </atm-plp1-byte-drops>
            <atm-plp0-packet-drops>
              atm-plp0-packet-drops
            </atm-plp0-packet-drops>
            <atm-plp1-packet-drops>
              atm-plp1-packet-drops
            </atm-plp1-packet-drops>
          </atm-cos-plp-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

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<atm-cos-plp-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-plp-statistics>
              <atm-plp0-output-bytes>
                atm-plp0-output-bytes
              </atm-plp0-output-bytes>
              <atm-plp1-output-bytes>
                atm-plp1-output-bytes
              </atm-plp1-output-bytes>
              <atm-plp0-output-packets>
                atm-plp0-output-packets
              </atm-plp0-output-packets>
              <atm-plp1-output-packets>
                atm-plp1-output-packets
              </atm-plp1-output-packets>
              <atm-plp0-byte-drops>
                atm-plp0-byte-drops
              </atm-plp0-byte-drops>
              <atm-plp1-byte-drops>
                atm-plp1-byte-drops
              </atm-plp1-byte-drops>
              <atm-plp0-packet-drops>
                atm-plp0-packet-drops
              </atm-plp0-packet-drops>
              <atm-plp1-packet-drops>
                atm-plp1-packet-drops
              </atm-plp1-packet-drops>
            </atm-cos-plp-statistics>
          </atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<atm-cos-plp-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-plp-statistics>
            <atm-plp0-output-bytes>
```

```
                    atm-plp0-output-bytes
                  </atm-plp0-output-bytes>
                  <atm-plp1-output-bytes>
                    atm-plp1-output-bytes
                  </atm-plp1-output-bytes>
                  <atm-plp0-output-packets>
                    atm-plp0-output-packets
                  </atm-plp0-output-packets>
                  <atm-plp1-output-packets>
                    atm-plp1-output-packets
                  </atm-plp1-output-packets>
                  <atm-plp0-byte-drops>
                    atm-plp0-byte-drops
                  </atm-plp0-byte-drops>
                  <atm-plp1-byte-drops>
                    atm-plp1-byte-drops
                  </atm-plp1-byte-drops>
                  <atm-plp0-packet-drops>
                    atm-plp0-packet-drops
                  </atm-plp0-packet-drops>
                  <atm-plp1-packet-drops>
                    atm-plp1-packet-drops
                  </atm-plp1-packet-drops>
                </atm-cos-plp-statistics>
              </atm-cos-queue>
            </atm-cos-information>
          </virtual-circuit-information>
        </logical-interface>
      </interface-policer-information>
```

Description

<atm-cos-queue>

Usage

```
<atm-cos-queue>
  <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
  <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
  <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
</atm-cos-queue>
```

Description

<atm-cos-queue>

Usage

```
<atm-cos-information>
  <atm-cos-queue>
    <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
    <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
    <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
  </atm-cos-queue>
</atm-cos-information>
```


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Description

<atm-cos-queue>

Usage

```
<virtual-circuit-information>
  <atm-cos-information>
    <atm-cos-queue>
      <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
      <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
      <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
    </atm-cos-queue>
  </atm-cos-information>
</virtual-circuit-information>
```

Description

<atm-cos-queue>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-cos-information>
      <atm-cos-queue>
        <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
        <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
        <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
      </atm-cos-queue>
    </atm-cos-information>
  </virtual-circuit-information>
</logical-interface>
```

Description

<atm-cos-queue>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
          <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
          <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

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<atm-cos-queue>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
            <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
            <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
          </atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<atm-cos-queue>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
          <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
          <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<atm-cos-queue>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
            <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
            <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
          </atm-cos-queue>
```


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```
        </atm-cos-information>
       </virtual-circuit-information>
     </logical-interface>
   </physical-interface>
</interface-filter-information>
```

Description

<atm-cos-queue>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
          <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
          <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

<atm-cos-queue>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
            <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
            <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
          </atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<atm-cos-queue>

Usage

```
<interface-policer-information>
  <logical-interface>
```

```
      <virtual-circuit-information>
       <atm-cos-information>
        <atm-cos-queue>
         <atm-cos-queue-parameters>....</atm-cos-queue-parameters>
         <atm-cos-queue-statistics>....</atm-cos-queue-statistics>
         <atm-cos-plp-statistics>....</atm-cos-plp-statistics>
        </atm-cos-queue>
       </atm-cos-information>
      </virtual-circuit-information>
     </logical-interface>
    </interface-policer-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<atm-cos-queue-parameters>
 <cos-forwarding-class-name>
  cos-forwarding-class-name
 </cos-forwarding-class-name>
 <cos-queue-number>
  cos-queue-number
 </cos-queue-number>
 <scheduling-priority>
  scheduling-priority
 </scheduling-priority>
 <transmit-weight-cells>
  transmit-weight-cells
 </transmit-weight-cells>
 <transmit-weight-percent>
  transmit-weight-percent
 </transmit-weight-percent>
 <epd-threshold>
  epd-threshold
 </epd-threshold>
 <epd-threshold-plp0>
  epd-threshold-plp0
 </epd-threshold-plp0>
 <epd-threshold-plp1>
  epd-threshold-plp1
 </epd-threshold-plp1>
 <linear-red-drop-profile>....</linear-red-drop-profile>
</atm-cos-queue-parameters>
```

Description

<atm-cos-queue-parameters>

Usage

```
<atm-cos-queue>
 <atm-cos-queue-parameters>
  <cos-forwarding-class-name>
   cos-forwarding-class-name
```


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```
    </cos-forwarding-class-name>
    <cos-queue-number>
      cos-queue-number
    </cos-queue-number>
    <scheduling-priority>
      scheduling-priority
    </scheduling-priority>
    <transmit-weight-cells>
      transmit-weight-cells
    </transmit-weight-cells>
    <transmit-weight-percent>
      transmit-weight-percent
    </transmit-weight-percent>
    <epd-threshold>
      epd-threshold
    </epd-threshold>
    <epd-threshold-plp0>
      epd-threshold-plp0
    </epd-threshold-plp0>
    <epd-threshold-plp1>
      epd-threshold-plp1
    </epd-threshold-plp1>
    <linear-red-drop-profile>....</linear-red-drop-profile>
  </atm-cos-queue-parameters>
</atm-cos-queue>
```

Description

<atm-cos-queue-parameters>

Usage

```
<atm-cos-information>
  <atm-cos-queue>
    <atm-cos-queue-parameters>
      <cos-forwarding-class-name>
        cos-forwarding-class-name
      </cos-forwarding-class-name>
      <cos-queue-number>
        cos-queue-number
      </cos-queue-number>
      <scheduling-priority>
        scheduling-priority
      </scheduling-priority>
      <transmit-weight-cells>
        transmit-weight-cells
      </transmit-weight-cells>
      <transmit-weight-percent>
        transmit-weight-percent
      </transmit-weight-percent>
      <epd-threshold>
        epd-threshold
      </epd-threshold>
      <epd-threshold-plp0>
        epd-threshold-plp0
      </epd-threshold-plp0>
```

```
      <epd-threshold-plp1>
       epd-threshold-plp1
      </epd-threshold-plp1>
      <linear-red-drop-profile>....</linear-red-drop-profile>
     </atm-cos-queue-parameters>
    </atm-cos-queue>
   </atm-cos-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<virtual-circuit-information>
 <atm-cos-information>
  <atm-cos-queue>
   <atm-cos-queue-parameters>
    <cos-forwarding-class-name>
     cos-forwarding-class-name
    </cos-forwarding-class-name>
    <cos-queue-number>
     cos-queue-number
    </cos-queue-number>
    <scheduling-priority>
     scheduling-priority
    </scheduling-priority>
    <transmit-weight-cells>
     transmit-weight-cells
    </transmit-weight-cells>
    <transmit-weight-percent>
     transmit-weight-percent
    </transmit-weight-percent>
    <epd-threshold>
     epd-threshold
    </epd-threshold>
    <epd-threshold-plp0>
     epd-threshold-plp0
    </epd-threshold-plp0>
    <epd-threshold-plp1>
     epd-threshold-plp1
    </epd-threshold-plp1>
    <linear-red-drop-profile>....</linear-red-drop-profile>
   </atm-cos-queue-parameters>
  </atm-cos-queue>
 </atm-cos-information>
</virtual-circuit-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<logical-interface>
 <virtual-circuit-information>
```


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```
<atm-cos-information>
 <atm-cos-queue>
  <atm-cos-queue-parameters>
   <cos-forwarding-class-name>
    cos-forwarding-class-name
   </cos-forwarding-class-name>
   <cos-queue-number>
    cos-queue-number
   </cos-queue-number>
   <scheduling-priority>
    scheduling-priority
   </scheduling-priority>
   <transmit-weight-cells>
    transmit-weight-cells
   </transmit-weight-cells>
   <transmit-weight-percent>
    transmit-weight-percent
   </transmit-weight-percent>
   <epd-threshold>
    epd-threshold
   </epd-threshold>
   <epd-threshold-plp0>
    epd-threshold-plp0
   </epd-threshold-plp0>
   <epd-threshold-plp1>
    epd-threshold-plp1
   </epd-threshold-plp1>
   <linear-red-drop-profile>....</linear-red-drop-profile>
  </atm-cos-queue-parameters>
 </atm-cos-queue>
</atm-cos-information>
</virtual-circuit-information>
</logical-interface>
```

Description

<atm-cos-queue-parameters>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <cos-forwarding-class-name>
       cos-forwarding-class-name
      </cos-forwarding-class-name>
      <cos-queue-number>
       cos-queue-number
      </cos-queue-number>
      <scheduling-priority>
       scheduling-priority
      </scheduling-priority>
      <transmit-weight-cells>
```

```
                transmit-weight-cells
               </transmit-weight-cells>
               <transmit-weight-percent>
                transmit-weight-percent
               </transmit-weight-percent>
               <epd-threshold>
                epd-threshold
               </epd-threshold>
               <epd-threshold-plp0>
                epd-threshold-plp0
               </epd-threshold-plp0>
               <epd-threshold-plp1>
                epd-threshold-plp1
               </epd-threshold-plp1>
               <linear-red-drop-profile>....</linear-red-drop-profile>
              </atm-cos-queue-parameters>
             </atm-cos-queue>
            </atm-cos-information>
           </virtual-circuit-information>
          </logical-interface>
         </physical-interface>
```

Description

<atm-cos-queue-parameters>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <atm-cos-queue>
      <atm-cos-queue-parameters>
       <cos-forwarding-class-name>
        cos-forwarding-class-name
       </cos-forwarding-class-name>
       <cos-queue-number>
        cos-queue-number
       </cos-queue-number>
       <scheduling-priority>
        scheduling-priority
       </scheduling-priority>
       <transmit-weight-cells>
        transmit-weight-cells
       </transmit-weight-cells>
       <transmit-weight-percent>
        transmit-weight-percent
       </transmit-weight-percent>
       <epd-threshold>
        epd-threshold
       </epd-threshold>
       <epd-threshold-plp0>
        epd-threshold-plp0
       </epd-threshold-plp0>
```


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```
            <epd-threshold-plp1>
              epd-threshold-plp1
            </epd-threshold-plp1>
            <linear-red-drop-profile>....</linear-red-drop-profile>
          </atm-cos-queue-parameters>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <cos-forwarding-class-name>
       cos-forwarding-class-name
      </cos-forwarding-class-name>
      <cos-queue-number>
       cos-queue-number
      </cos-queue-number>
      <scheduling-priority>
       scheduling-priority
      </scheduling-priority>
      <transmit-weight-cells>
       transmit-weight-cells
      </transmit-weight-cells>
      <transmit-weight-percent>
       transmit-weight-percent
      </transmit-weight-percent>
      <epd-threshold>
       epd-threshold
      </epd-threshold>
      <epd-threshold-plp0>
       epd-threshold-plp0
      </epd-threshold-plp0>
      <epd-threshold-plp1>
       epd-threshold-plp1
      </epd-threshold-plp1>
      <linear-red-drop-profile>....</linear-red-drop-profile>
     </atm-cos-queue-parameters>
    </atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-information>
```

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Description

<atm-cos-queue-parameters>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <atm-cos-queue>
      <atm-cos-queue-parameters>
       <cos-forwarding-class-name>
        cos-forwarding-class-name
       </cos-forwarding-class-name>
       <cos-queue-number>
        cos-queue-number
       </cos-queue-number>
       <scheduling-priority>
        scheduling-priority
       </scheduling-priority>
       <transmit-weight-cells>
        transmit-weight-cells
       </transmit-weight-cells>
       <transmit-weight-percent>
        transmit-weight-percent
       </transmit-weight-percent>
       <epd-threshold>
        epd-threshold
       </epd-threshold>
       <epd-threshold-plp0>
        epd-threshold-plp0
       </epd-threshold-plp0>
       <epd-threshold-plp1>
        epd-threshold-plp1
       </epd-threshold-plp1>
       <linear-red-drop-profile>....</linear-red-drop-profile>
      </atm-cos-queue-parameters>
     </atm-cos-queue>
    </atm-cos-information>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<interface-filter-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
```


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```
                <atm-cos-queue-parameters>
                  <cos-forwarding-class-name>
                    cos-forwarding-class-name
                  </cos-forwarding-class-name>
                  <cos-queue-number>
                    cos-queue-number
                  </cos-queue-number>
                  <scheduling-priority>
                    scheduling-priority
                  </scheduling-priority>
                  <transmit-weight-cells>
                    transmit-weight-cells
                  </transmit-weight-cells>
                  <transmit-weight-percent>
                    transmit-weight-percent
                  </transmit-weight-percent>
                  <epd-threshold>
                    epd-threshold
                  </epd-threshold>
                  <epd-threshold-plp0>
                    epd-threshold-plp0
                  </epd-threshold-plp0>
                  <epd-threshold-plp1>
                    epd-threshold-plp1
                  </epd-threshold-plp1>
                  <linear-red-drop-profile>....</linear-red-drop-profile>
                </atm-cos-queue-parameters>
              </atm-cos-queue>
            </atm-cos-information>
          </virtual-circuit-information>
        </logical-interface>
      </interface-filter-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>
              <cos-forwarding-class-name>
                cos-forwarding-class-name
              </cos-forwarding-class-name>
              <cos-queue-number>
                cos-queue-number
              </cos-queue-number>
              <scheduling-priority>
                scheduling-priority
              </scheduling-priority>
              <transmit-weight-cells>
```

```
                transmit-weight-cells
               </transmit-weight-cells>
               <transmit-weight-percent>
                transmit-weight-percent
               </transmit-weight-percent>
               <epd-threshold>
                epd-threshold
               </epd-threshold>
               <epd-threshold-plp0>
                epd-threshold-plp0
               </epd-threshold-plp0>
               <epd-threshold-plp1>
                epd-threshold-plp1
               </epd-threshold-plp1>
               <linear-red-drop-profile>....</linear-red-drop-profile>
              </atm-cos-queue-parameters>
             </atm-cos-queue>
            </atm-cos-information>
           </virtual-circuit-information>
          </logical-interface>
         </physical-interface>
        </interface-policer-information>
```

Description

<atm-cos-queue-parameters>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <cos-forwarding-class-name>
       cos-forwarding-class-name
      </cos-forwarding-class-name>
      <cos-queue-number>
       cos-queue-number
      </cos-queue-number>
      <scheduling-priority>
       scheduling-priority
      </scheduling-priority>
      <transmit-weight-cells>
       transmit-weight-cells
      </transmit-weight-cells>
      <transmit-weight-percent>
       transmit-weight-percent
      </transmit-weight-percent>
      <epd-threshold>
       epd-threshold
      </epd-threshold>
      <epd-threshold-plp0>
       epd-threshold-plp0
      </epd-threshold-plp0>
```


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```
                <epd-threshold-plp1>
                  epd-threshold-plp1
                </epd-threshold-plp1>
                <linear-red-drop-profile>....</linear-red-drop-profile>
              </atm-cos-queue-parameters>
            </atm-cos-queue>
          </atm-cos-information>
        </virtual-circuit-information>
      </logical-interface>
    </interface-policer-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<atm-cos-queue-statistics>
  <atm-output-bytes>
    atm-output-bytes
  </atm-output-bytes>
  <atm-output-packets>
    atm-output-packets
  </atm-output-packets>
  <atm-packet-drops>
    atm-packet-drops
  </atm-packet-drops>
</atm-cos-queue-statistics>
```

Description

<atm-cos-queue-statistics>

Usage

```
<atm-cos-queue>
  <atm-cos-queue-statistics>
    <atm-output-bytes>
      atm-output-bytes
    </atm-output-bytes>
    <atm-output-packets>
      atm-output-packets
    </atm-output-packets>
    <atm-packet-drops>
      atm-packet-drops
    </atm-packet-drops>
  </atm-cos-queue-statistics>
</atm-cos-queue>
```

Description

<atm-cos-queue-statistics>

Usage

```
<atm-cos-information>
```

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```
<atm-cos-queue>
  <atm-cos-queue-statistics>
    <atm-output-bytes>
      atm-output-bytes
    </atm-output-bytes>
    <atm-output-packets>
      atm-output-packets
    </atm-output-packets>
    <atm-packet-drops>
      atm-packet-drops
    </atm-packet-drops>
  </atm-cos-queue-statistics>
 </atm-cos-queue>
</atm-cos-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<virtual-circuit-information>
 <atm-cos-information>
  <atm-cos-queue>
   <atm-cos-queue-statistics>
    <atm-output-bytes>
     atm-output-bytes
    </atm-output-bytes>
    <atm-output-packets>
     atm-output-packets
    </atm-output-packets>
    <atm-packet-drops>
     atm-packet-drops
    </atm-packet-drops>
   </atm-cos-queue-statistics>
  </atm-cos-queue>
 </atm-cos-information>
</virtual-circuit-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<logical-interface>
 <virtual-circuit-information>
  <atm-cos-information>
   <atm-cos-queue>
    <atm-cos-queue-statistics>
     <atm-output-bytes>
      atm-output-bytes
     </atm-output-bytes>
     <atm-output-packets>
      atm-output-packets
     </atm-output-packets>
```


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```
            <atm-packet-drops>
              atm-packet-drops
            </atm-packet-drops>
          </atm-cos-queue-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
```

Description

<atm-cos-queue-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-statistics>
            <atm-output-bytes>
              atm-output-bytes
            </atm-output-bytes>
            <atm-output-packets>
              atm-output-packets
            </atm-output-packets>
            <atm-packet-drops>
              atm-packet-drops
            </atm-packet-drops>
          </atm-cos-queue-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-statistics>
              <atm-output-bytes>
                atm-output-bytes
              </atm-output-bytes>
              <atm-output-packets>
                atm-output-packets
              </atm-output-packets>
```

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```
                    <atm-packet-drops>
                      atm-packet-drops
                    </atm-packet-drops>
                  </atm-cos-queue-statistics>
                </atm-cos-queue>
              </atm-cos-information>
            </virtual-circuit-information>
          </logical-interface>
        </physical-interface>
      </interface-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-statistics>
            <atm-output-bytes>
              atm-output-bytes
            </atm-output-bytes>
            <atm-output-packets>
              atm-output-packets
            </atm-output-packets>
            <atm-packet-drops>
              atm-packet-drops
            </atm-packet-drops>
          </atm-cos-queue-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-statistics>
              <atm-output-bytes>
                atm-output-bytes
              </atm-output-bytes>
              <atm-output-packets>
```


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```
                    atm-output-packets
                   </atm-output-packets>
                   <atm-packet-drops>
                    atm-packet-drops
                   </atm-packet-drops>
                  </atm-cos-queue-statistics>
                 </atm-cos-queue>
                </atm-cos-information>
               </virtual-circuit-information>
              </logical-interface>
             </physical-interface>
            </interface-filter-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-filter-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-statistics>
      <atm-output-bytes>
       atm-output-bytes
      </atm-output-bytes>
      <atm-output-packets>
       atm-output-packets
      </atm-output-packets>
      <atm-packet-drops>
       atm-packet-drops
      </atm-packet-drops>
     </atm-cos-queue-statistics>
    </atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-filter-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <atm-cos-queue>
      <atm-cos-queue-statistics>
       <atm-output-bytes>
        atm-output-bytes
```

```
                    </atm-output-bytes>
                    <atm-output-packets>
                      atm-output-packets
                    </atm-output-packets>
                    <atm-packet-drops>
                      atm-packet-drops
                    </atm-packet-drops>
                  </atm-cos-queue-statistics>
                </atm-cos-queue>
              </atm-cos-information>
            </virtual-circuit-information>
          </logical-interface>
        </physical-interface>
      </interface-policer-information>
```

Description

<atm-cos-queue-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-statistics>
            <atm-output-bytes>
              atm-output-bytes
            </atm-output-bytes>
            <atm-output-packets>
              atm-output-packets
            </atm-output-packets>
            <atm-packet-drops>
              atm-packet-drops
            </atm-packet-drops>
          </atm-cos-queue-statistics>
        </atm-cos-queue>
      </atm-cos-information>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description

<atm-defects>

Usage

```
<atm-information>
  <atm-defects>
    <media-alarm>....</media-alarm>
  </atm-defects>
</atm-information>
```


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Description

<atm-defects>

Usage

```
<physical-interface>
  <atm-information>
    <atm-defects>
      <media-alarm>....</media-alarm>
    </atm-defects>
  </atm-information>
</physical-interface>
```

Description

<atm-defects>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>....</media-alarm>
      </atm-defects>
    </atm-information>
  </physical-interface>
</interface-information>
```

Description

<atm-defects>

Usage

```
<interface-filter-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>....</media-alarm>
      </atm-defects>
    </atm-information>
  </physical-interface>
</interface-filter-information>
```

Description

<atm-defects>

Usage

```
<interface-policer-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>....</media-alarm>
```

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```
      </atm-defects>
    </atm-information>
  </physical-interface>
</interface-policer-information>
```

Description

<atm-information>

Usage

```
<atm-information>
  <plcp-defects>....</plcp-defects>
  <atm-defects>....</atm-defects>
  <plcp-statistics>....</plcp-statistics>
  <atm-hcs-state>
    atm-hcs-state
  </atm-hcs-state>
  <atm-loss-of-cell>
    atm-loss-of-cell
  </atm-loss-of-cell>
  <atm-statistics>....</atm-statistics>
</atm-information>
```

Description Operational information and statistics for ATM interfaces

<atm-information>

Usage

```
<physical-interface>
  <atm-information>
    <plcp-defects>....</plcp-defects>
    <atm-defects>....</atm-defects>
    <plcp-statistics>....</plcp-statistics>
    <atm-hcs-state>
      atm-hcs-state
    </atm-hcs-state>
    <atm-loss-of-cell>
      atm-loss-of-cell
    </atm-loss-of-cell>
    <atm-statistics>....</atm-statistics>
  </atm-information>
</physical-interface>
```

Description Operational information and statistics for ATM interfaces

<atm-information>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
```


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```
    <plcp-defects>....</plcp-defects>
    <atm-defects>....</atm-defects>
    <plcp-statistics>....</plcp-statistics>
    <atm-hcs-state>
     atm-hcs-state
    </atm-hcs-state>
    <atm-loss-of-cell>
     atm-loss-of-cell
    </atm-loss-of-cell>
    <atm-statistics>....</atm-statistics>
   </atm-information>
  </physical-interface>
</interface-information>
```

Description Operational information and statistics for ATM interfaces

<atm-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <atm-information>
   <plcp-defects>....</plcp-defects>
   <atm-defects>....</atm-defects>
   <plcp-statistics>....</plcp-statistics>
   <atm-hcs-state>
    atm-hcs-state
   </atm-hcs-state>
   <atm-loss-of-cell>
    atm-loss-of-cell
   </atm-loss-of-cell>
   <atm-statistics>....</atm-statistics>
  </atm-information>
 </physical-interface>
</interface-filter-information>
```

Description Operational information and statistics for ATM interfaces

<atm-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <atm-information>
   <plcp-defects>....</plcp-defects>
   <atm-defects>....</atm-defects>
   <plcp-statistics>....</plcp-statistics>
   <atm-hcs-state>
    atm-hcs-state
   </atm-hcs-state>
   <atm-loss-of-cell>
    atm-loss-of-cell
```

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```
      </atm-loss-of-cell>
      <atm-statistics>....</atm-statistics>
    </atm-information>
  </physical-interface>
</interface-policer-information>
```

Description Operational information and statistics for ATM interfaces

<atm-policer-statistics>

Usage

```
<virtual-circuit-information>
  <atm-policer-statistics>
    <non-conform-clp0-cells>
      non-conform-clp0-cells
    </non-conform-clp0-cells>
    <non-conform-clp1-cells>
      non-conform-clp1-cells
    </non-conform-clp1-cells>
    <tagged-cells>
      tagged-cells
    </tagged-cells>
  </atm-policer-statistics>
</virtual-circuit-information>
```

Description

<atm-policer-statistics>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-policer-statistics>
      <non-conform-clp0-cells>
        non-conform-clp0-cells
      </non-conform-clp0-cells>
      <non-conform-clp1-cells>
        non-conform-clp1-cells
      </non-conform-clp1-cells>
      <tagged-cells>
        tagged-cells
      </tagged-cells>
    </atm-policer-statistics>
  </virtual-circuit-information>
</logical-interface>
```

Description

<atm-policer-statistics>

Usage

```
<physical-interface>
```


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```
  <logical-interface>
    <virtual-circuit-information>
      <atm-policer-statistics>
        <non-conform-clp0-cells>
          non-conform-clp0-cells
        </non-conform-clp0-cells>
        <non-conform-clp1-cells>
          non-conform-clp1-cells
        </non-conform-clp1-cells>
        <tagged-cells>
          tagged-cells
        </tagged-cells>
      </atm-policer-statistics>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<atm-policer-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-policer-statistics>
          <non-conform-clp0-cells>
            non-conform-clp0-cells
          </non-conform-clp0-cells>
          <non-conform-clp1-cells>
            non-conform-clp1-cells
          </non-conform-clp1-cells>
          <tagged-cells>
            tagged-cells
          </tagged-cells>
        </atm-policer-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<atm-policer-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-policer-statistics>
        <non-conform-clp0-cells>
          non-conform-clp0-cells
        </non-conform-clp0-cells>
```

```
        <non-conform-clp1-cells>
          non-conform-clp1-cells
        </non-conform-clp1-cells>
        <tagged-cells>
          tagged-cells
        </tagged-cells>
      </atm-policer-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<atm-policer-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-policer-statistics>
          <non-conform-clp0-cells>
            non-conform-clp0-cells
          </non-conform-clp0-cells>
          <non-conform-clp1-cells>
            non-conform-clp1-cells
          </non-conform-clp1-cells>
          <tagged-cells>
            tagged-cells
          </tagged-cells>
        </atm-policer-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<atm-policer-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-policer-statistics>
        <non-conform-clp0-cells>
          non-conform-clp0-cells
        </non-conform-clp0-cells>
        <non-conform-clp1-cells>
          non-conform-clp1-cells
        </non-conform-clp1-cells>
        <tagged-cells>
          tagged-cells
        </tagged-cells>
```


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```
      </atm-policer-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

<atm-policer-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-policer-statistics>
          <non-conform-clp0-cells>
            non-conform-clp0-cells
          </non-conform-clp0-cells>
          <non-conform-clp1-cells>
            non-conform-clp1-cells
          </non-conform-clp1-cells>
          <tagged-cells>
            tagged-cells
          </tagged-cells>
        </atm-policer-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<atm-policer-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-policer-statistics>
        <non-conform-clp0-cells>
          non-conform-clp0-cells
        </non-conform-clp0-cells>
        <non-conform-clp1-cells>
          non-conform-clp1-cells
        </non-conform-clp1-cells>
        <tagged-cells>
          tagged-cells
        </tagged-cells>
      </atm-policer-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

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Description

<atm-statistics>

Usage

```
<atm-information>
 <atm-statistics>
  <uncorrectable-hcs-errors>
   uncorrectable-hcs-errors
  </uncorrectable-hcs-errors>
  <correctable-hcs-errors>
   correctable-hcs-errors
  </correctable-hcs-errors>
  <tx-cell-fifo-overruns>
   tx-cell-fifo-overruns
  </tx-cell-fifo-overruns>
  <rx-cell-fifo-overruns>
   rx-cell-fifo-overruns
  </rx-cell-fifo-overruns>
  <rx-cell-fifo-underruns>
   rx-cell-fifo-underruns
  </rx-cell-fifo-underruns>
  <rx-cell-count>
   rx-cell-count
  </rx-cell-count>
  <tx-cell-count>
   tx-cell-count
  </tx-cell-count>
  <tx-idle-cell-count>
   tx-idle-cell-count
  </tx-idle-cell-count>
  <vc-queue-drops>
   vc-queue-drops
  </vc-queue-drops>
  <no-buffers>
   no-buffers
  </no-buffers>
  <length-errors>
   length-errors
  </length-errors>
  <timeouts>
   timeouts
  </timeouts>
  <bundle-timeouts>
   bundle-timeouts
  </bundle-timeouts>
  <rx-invalid-vcs>
   rx-invalid-vcs
  </rx-invalid-vcs>
  <bad-crcs>
   bad-crcs
  </bad-crcs>
  <oam-cell-no-buffers>
   oam-cell-no-buffers
  </oam-cell-no-buffers>
 </atm-statistics>
```


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```
</atm-information>
```

Description

<atm-statistics>

Usage

```
<virtual-circuit-information>
 <atm-statistics>
  <uncorrectable-hcs-errors>
   uncorrectable-hcs-errors
  </uncorrectable-hcs-errors>
  <correctable-hcs-errors>
   correctable-hcs-errors
  </correctable-hcs-errors>
  <tx-cell-fifo-overruns>
   tx-cell-fifo-overruns
  </tx-cell-fifo-overruns>
  <rx-cell-fifo-overruns>
   rx-cell-fifo-overruns
  </rx-cell-fifo-overruns>
  <rx-cell-fifo-underruns>
   rx-cell-fifo-underruns
  </rx-cell-fifo-underruns>
  <rx-cell-count>
   rx-cell-count
  </rx-cell-count>
  <tx-cell-count>
   tx-cell-count
  </tx-cell-count>
  <tx-idle-cell-count>
   tx-idle-cell-count
  </tx-idle-cell-count>
  <vc-queue-drops>
   vc-queue-drops
  </vc-queue-drops>
  <no-buffers>
   no-buffers
  </no-buffers>
  <length-errors>
   length-errors
  </length-errors>
  <timeouts>
   timeouts
  </timeouts>
  <bundle-timeouts>
   bundle-timeouts
  </bundle-timeouts>
  <rx-invalid-vcs>
   rx-invalid-vcs
  </rx-invalid-vcs>
  <bad-crcs>
   bad-crcs
  </bad-crcs>
  <oam-cell-no-buffers>
```

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```
      oam-cell-no-buffers
    </oam-cell-no-buffers>
  </atm-statistics>
</virtual-circuit-information>
```

Description

<atm-statistics>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-statistics>
      <uncorrectable-hcs-errors>
        uncorrectable-hcs-errors
      </uncorrectable-hcs-errors>
      <correctable-hcs-errors>
        correctable-hcs-errors
      </correctable-hcs-errors>
      <tx-cell-fifo-overruns>
        tx-cell-fifo-overruns
      </tx-cell-fifo-overruns>
      <rx-cell-fifo-overruns>
        rx-cell-fifo-overruns
      </rx-cell-fifo-overruns>
      <rx-cell-fifo-underruns>
        rx-cell-fifo-underruns
      </rx-cell-fifo-underruns>
      <rx-cell-count>
        rx-cell-count
      </rx-cell-count>
      <tx-cell-count>
        tx-cell-count
      </tx-cell-count>
      <tx-idle-cell-count>
        tx-idle-cell-count
      </tx-idle-cell-count>
      <vc-queue-drops>
        vc-queue-drops
      </vc-queue-drops>
      <no-buffers>
        no-buffers
      </no-buffers>
      <length-errors>
        length-errors
      </length-errors>
      <timeouts>
        timeouts
      </timeouts>
      <bundle-timeouts>
        bundle-timeouts
      </bundle-timeouts>
      <rx-invalid-vcs>
        rx-invalid-vcs
      </rx-invalid-vcs>
```


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```
        <bad-crcs>
          bad-crcs
        </bad-crcs>
        <oam-cell-no-buffers>
          oam-cell-no-buffers
        </oam-cell-no-buffers>
      </atm-statistics>
    </virtual-circuit-information>
  </logical-interface>
```

Description

<atm-statistics>

Usage

```
<physical-interface>
  <atm-information>
    <atm-statistics>
      <uncorrectable-hcs-errors>
        uncorrectable-hcs-errors
      </uncorrectable-hcs-errors>
      <correctable-hcs-errors>
        correctable-hcs-errors
      </correctable-hcs-errors>
      <tx-cell-fifo-overruns>
        tx-cell-fifo-overruns
      </tx-cell-fifo-overruns>
      <rx-cell-fifo-overruns>
        rx-cell-fifo-overruns
      </rx-cell-fifo-overruns>
      <rx-cell-fifo-underruns>
        rx-cell-fifo-underruns
      </rx-cell-fifo-underruns>
      <rx-cell-count>
        rx-cell-count
      </rx-cell-count>
      <tx-cell-count>
        tx-cell-count
      </tx-cell-count>
      <tx-idle-cell-count>
        tx-idle-cell-count
      </tx-idle-cell-count>
      <vc-queue-drops>
        vc-queue-drops
      </vc-queue-drops>
      <no-buffers>
        no-buffers
      </no-buffers>
      <length-errors>
        length-errors
      </length-errors>
      <timeouts>
        timeouts
      </timeouts>
      <bundle-timeouts>
```

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```
      bundle-timeouts
    </bundle-timeouts>
    <rx-invalid-vcs>
      rx-invalid-vcs
    </rx-invalid-vcs>
    <bad-crcs>
      bad-crcs
    </bad-crcs>
    <oam-cell-no-buffers>
      oam-cell-no-buffers
    </oam-cell-no-buffers>
  </atm-statistics>
 </atm-information>
</physical-interface>
```

Description

<atm-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <atm-statistics>
    <uncorrectable-hcs-errors>
     uncorrectable-hcs-errors
    </uncorrectable-hcs-errors>
    <correctable-hcs-errors>
     correctable-hcs-errors
    </correctable-hcs-errors>
    <tx-cell-fifo-overruns>
     tx-cell-fifo-overruns
    </tx-cell-fifo-overruns>
    <rx-cell-fifo-overruns>
     rx-cell-fifo-overruns
    </rx-cell-fifo-overruns>
    <rx-cell-fifo-underruns>
     rx-cell-fifo-underruns
    </rx-cell-fifo-underruns>
    <rx-cell-count>
     rx-cell-count
    </rx-cell-count>
    <tx-cell-count>
     tx-cell-count
    </tx-cell-count>
    <tx-idle-cell-count>
     tx-idle-cell-count
    </tx-idle-cell-count>
    <vc-queue-drops>
     vc-queue-drops
    </vc-queue-drops>
    <no-buffers>
     no-buffers
    </no-buffers>
    <length-errors>
```


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```
            length-errors
          </length-errors>
          <timeouts>
            timeouts
          </timeouts>
          <bundle-timeouts>
            bundle-timeouts
          </bundle-timeouts>
          <rx-invalid-vcs>
            rx-invalid-vcs
          </rx-invalid-vcs>
          <bad-crcs>
            bad-crcs
          </bad-crcs>
          <oam-cell-no-buffers>
            oam-cell-no-buffers
          </oam-cell-no-buffers>
        </atm-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
```

Description

<atm-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <atm-statistics>
        <uncorrectable-hcs-errors>
          uncorrectable-hcs-errors
        </uncorrectable-hcs-errors>
        <correctable-hcs-errors>
          correctable-hcs-errors
        </correctable-hcs-errors>
        <tx-cell-fifo-overruns>
          tx-cell-fifo-overruns
        </tx-cell-fifo-overruns>
        <rx-cell-fifo-overruns>
          rx-cell-fifo-overruns
        </rx-cell-fifo-overruns>
        <rx-cell-fifo-underruns>
          rx-cell-fifo-underruns
        </rx-cell-fifo-underruns>
        <rx-cell-count>
          rx-cell-count
        </rx-cell-count>
        <tx-cell-count>
          tx-cell-count
        </tx-cell-count>
        <tx-idle-cell-count>
          tx-idle-cell-count
        </tx-idle-cell-count>
```

```
        <vc-queue-drops>
          vc-queue-drops
        </vc-queue-drops>
        <no-buffers>
          no-buffers
        </no-buffers>
        <length-errors>
          length-errors
        </length-errors>
        <timeouts>
          timeouts
        </timeouts>
        <bundle-timeouts>
          bundle-timeouts
        </bundle-timeouts>
        <rx-invalid-vcs>
          rx-invalid-vcs
        </rx-invalid-vcs>
        <bad-crcs>
          bad-crcs
        </bad-crcs>
        <oam-cell-no-buffers>
          oam-cell-no-buffers
        </oam-cell-no-buffers>
      </atm-statistics>
    </atm-information>
  </physical-interface>
</interface-information>
```

Description

<atm-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-statistics>
          <uncorrectable-hcs-errors>
            uncorrectable-hcs-errors
          </uncorrectable-hcs-errors>
          <correctable-hcs-errors>
            correctable-hcs-errors
          </correctable-hcs-errors>
          <tx-cell-fifo-overruns>
            tx-cell-fifo-overruns
          </tx-cell-fifo-overruns>
          <rx-cell-fifo-overruns>
            rx-cell-fifo-overruns
          </rx-cell-fifo-overruns>
          <rx-cell-fifo-underruns>
            rx-cell-fifo-underruns
          </rx-cell-fifo-underruns>
          <rx-cell-count>
```


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```
            rx-cell-count
           </rx-cell-count>
           <tx-cell-count>
            tx-cell-count
           </tx-cell-count>
           <tx-idle-cell-count>
            tx-idle-cell-count
           </tx-idle-cell-count>
           <vc-queue-drops>
            vc-queue-drops
           </vc-queue-drops>
           <no-buffers>
            no-buffers
           </no-buffers>
           <length-errors>
            length-errors
           </length-errors>
           <timeouts>
            timeouts
           </timeouts>
           <bundle-timeouts>
            bundle-timeouts
           </bundle-timeouts>
           <rx-invalid-vcs>
            rx-invalid-vcs
           </rx-invalid-vcs>
           <bad-crcs>
            bad-crcs
           </bad-crcs>
           <oam-cell-no-buffers>
            oam-cell-no-buffers
           </oam-cell-no-buffers>
          </atm-statistics>
         </virtual-circuit-information>
        </logical-interface>
       </physical-interface>
      </interface-information>
```

Description

<atm-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-statistics>
    <uncorrectable-hcs-errors>
     uncorrectable-hcs-errors
    </uncorrectable-hcs-errors>
    <correctable-hcs-errors>
     correctable-hcs-errors
    </correctable-hcs-errors>
    <tx-cell-fifo-overruns>
     tx-cell-fifo-overruns
```

```
            </tx-cell-fifo-overruns>
            <rx-cell-fifo-overruns>
              rx-cell-fifo-overruns
            </rx-cell-fifo-overruns>
            <rx-cell-fifo-underruns>
              rx-cell-fifo-underruns
            </rx-cell-fifo-underruns>
            <rx-cell-count>
              rx-cell-count
            </rx-cell-count>
            <tx-cell-count>
              tx-cell-count
            </tx-cell-count>
            <tx-idle-cell-count>
              tx-idle-cell-count
            </tx-idle-cell-count>
            <vc-queue-drops>
              vc-queue-drops
            </vc-queue-drops>
            <no-buffers>
              no-buffers
            </no-buffers>
            <length-errors>
              length-errors
            </length-errors>
            <timeouts>
              timeouts
            </timeouts>
            <bundle-timeouts>
              bundle-timeouts
            </bundle-timeouts>
            <rx-invalid-vcs>
              rx-invalid-vcs
            </rx-invalid-vcs>
            <bad-crcs>
              bad-crcs
            </bad-crcs>
            <oam-cell-no-buffers>
              oam-cell-no-buffers
            </oam-cell-no-buffers>
          </atm-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </interface-information>
```

Description

<atm-statistics>

Usage

```
    <interface-filter-information>
      <physical-interface>
        <atm-information>
          <atm-statistics>
            <uncorrectable-hcs-errors>
```


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```
      uncorrectable-hcs-errors
    </uncorrectable-hcs-errors>
    <correctable-hcs-errors>
      correctable-hcs-errors
    </correctable-hcs-errors>
    <tx-cell-fifo-overruns>
      tx-cell-fifo-overruns
    </tx-cell-fifo-overruns>
    <rx-cell-fifo-overruns>
      rx-cell-fifo-overruns
    </rx-cell-fifo-overruns>
    <rx-cell-fifo-underruns>
      rx-cell-fifo-underruns
    </rx-cell-fifo-underruns>
    <rx-cell-count>
      rx-cell-count
    </rx-cell-count>
    <tx-cell-count>
      tx-cell-count
    </tx-cell-count>
    <tx-idle-cell-count>
      tx-idle-cell-count
    </tx-idle-cell-count>
    <vc-queue-drops>
      vc-queue-drops
    </vc-queue-drops>
    <no-buffers>
      no-buffers
    </no-buffers>
    <length-errors>
      length-errors
    </length-errors>
    <timeouts>
      timeouts
    </timeouts>
    <bundle-timeouts>
      bundle-timeouts
    </bundle-timeouts>
    <rx-invalid-vcs>
      rx-invalid-vcs
    </rx-invalid-vcs>
    <bad-crcs>
      bad-crcs
    </bad-crcs>
    <oam-cell-no-buffers>
      oam-cell-no-buffers
    </oam-cell-no-buffers>
  </atm-statistics>
 </atm-information>
</physical-interface>
</interface-filter-information>
```

Description

<atm-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-statistics>
          <uncorrectable-hcs-errors>
            uncorrectable-hcs-errors
          </uncorrectable-hcs-errors>
          <correctable-hcs-errors>
            correctable-hcs-errors
          </correctable-hcs-errors>
          <tx-cell-fifo-overruns>
            tx-cell-fifo-overruns
          </tx-cell-fifo-overruns>
          <rx-cell-fifo-overruns>
            rx-cell-fifo-overruns
          </rx-cell-fifo-overruns>
          <rx-cell-fifo-underruns>
            rx-cell-fifo-underruns
          </rx-cell-fifo-underruns>
          <rx-cell-count>
            rx-cell-count
          </rx-cell-count>
          <tx-cell-count>
            tx-cell-count
          </tx-cell-count>
          <tx-idle-cell-count>
            tx-idle-cell-count
          </tx-idle-cell-count>
          <vc-queue-drops>
            vc-queue-drops
          </vc-queue-drops>
          <no-buffers>
            no-buffers
          </no-buffers>
          <length-errors>
            length-errors
          </length-errors>
          <timeouts>
            timeouts
          </timeouts>
          <bundle-timeouts>
            bundle-timeouts
          </bundle-timeouts>
          <rx-invalid-vcs>
            rx-invalid-vcs
          </rx-invalid-vcs>
          <bad-crcs>
            bad-crcs
          </bad-crcs>
          <oam-cell-no-buffers>
            oam-cell-no-buffers
```


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```
            </oam-cell-no-buffers>
           </atm-statistics>
          </virtual-circuit-information>
         </logical-interface>
        </physical-interface>
       </interface-filter-information>
```

Description

<atm-statistics>

Usage

```
<interface-filter-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-statistics>
    <uncorrectable-hcs-errors>
     uncorrectable-hcs-errors
    </uncorrectable-hcs-errors>
    <correctable-hcs-errors>
     correctable-hcs-errors
    </correctable-hcs-errors>
    <tx-cell-fifo-overruns>
     tx-cell-fifo-overruns
    </tx-cell-fifo-overruns>
    <rx-cell-fifo-overruns>
     rx-cell-fifo-overruns
    </rx-cell-fifo-overruns>
    <rx-cell-fifo-underruns>
     rx-cell-fifo-underruns
    </rx-cell-fifo-underruns>
    <rx-cell-count>
     rx-cell-count
    </rx-cell-count>
    <tx-cell-count>
     tx-cell-count
    </tx-cell-count>
    <tx-idle-cell-count>
     tx-idle-cell-count
    </tx-idle-cell-count>
    <vc-queue-drops>
     vc-queue-drops
    </vc-queue-drops>
    <no-buffers>
     no-buffers
    </no-buffers>
    <length-errors>
     length-errors
    </length-errors>
    <timeouts>
     timeouts
    </timeouts>
    <bundle-timeouts>
     bundle-timeouts
    </bundle-timeouts>
```

```
            <rx-invalid-vcs>
              rx-invalid-vcs
            </rx-invalid-vcs>
            <bad-crcs>
              bad-crcs
            </bad-crcs>
            <oam-cell-no-buffers>
              oam-cell-no-buffers
            </oam-cell-no-buffers>
          </atm-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </interface-filter-information>
```

Description

<atm-statistics>

Usage

```
    <interface-policer-information>
      <physical-interface>
        <atm-information>
          <atm-statistics>
            <uncorrectable-hcs-errors>
              uncorrectable-hcs-errors
            </uncorrectable-hcs-errors>
            <correctable-hcs-errors>
              correctable-hcs-errors
            </correctable-hcs-errors>
            <tx-cell-fifo-overruns>
              tx-cell-fifo-overruns
            </tx-cell-fifo-overruns>
            <rx-cell-fifo-overruns>
              rx-cell-fifo-overruns
            </rx-cell-fifo-overruns>
            <rx-cell-fifo-underruns>
              rx-cell-fifo-underruns
            </rx-cell-fifo-underruns>
            <rx-cell-count>
              rx-cell-count
            </rx-cell-count>
            <tx-cell-count>
              tx-cell-count
            </tx-cell-count>
            <tx-idle-cell-count>
              tx-idle-cell-count
            </tx-idle-cell-count>
            <vc-queue-drops>
              vc-queue-drops
            </vc-queue-drops>
            <no-buffers>
              no-buffers
            </no-buffers>
            <length-errors>
              length-errors
```


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```
        </length-errors>
        <timeouts>
          timeouts
        </timeouts>
        <bundle-timeouts>
          bundle-timeouts
        </bundle-timeouts>
        <rx-invalid-vcs>
          rx-invalid-vcs
        </rx-invalid-vcs>
        <bad-crcs>
          bad-crcs
        </bad-crcs>
        <oam-cell-no-buffers>
          oam-cell-no-buffers
        </oam-cell-no-buffers>
      </atm-statistics>
    </atm-information>
  </physical-interface>
</interface-policer-information>
```

Description

<atm-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-statistics>
          <uncorrectable-hcs-errors>
            uncorrectable-hcs-errors
          </uncorrectable-hcs-errors>
          <correctable-hcs-errors>
            correctable-hcs-errors
          </correctable-hcs-errors>
          <tx-cell-fifo-overruns>
            tx-cell-fifo-overruns
          </tx-cell-fifo-overruns>
          <rx-cell-fifo-overruns>
            rx-cell-fifo-overruns
          </rx-cell-fifo-overruns>
          <rx-cell-fifo-underruns>
            rx-cell-fifo-underruns
          </rx-cell-fifo-underruns>
          <rx-cell-count>
            rx-cell-count
          </rx-cell-count>
          <tx-cell-count>
            tx-cell-count
          </tx-cell-count>
          <tx-idle-cell-count>
            tx-idle-cell-count
          </tx-idle-cell-count>
```

```
                <vc-queue-drops>
                  vc-queue-drops
                </vc-queue-drops>
                <no-buffers>
                  no-buffers
                </no-buffers>
                <length-errors>
                  length-errors
                </length-errors>
                <timeouts>
                  timeouts
                </timeouts>
                <bundle-timeouts>
                  bundle-timeouts
                </bundle-timeouts>
                <rx-invalid-vcs>
                  rx-invalid-vcs
                </rx-invalid-vcs>
                <bad-crcs>
                  bad-crcs
                </bad-crcs>
                <oam-cell-no-buffers>
                  oam-cell-no-buffers
                </oam-cell-no-buffers>
              </atm-statistics>
            </virtual-circuit-information>
          </logical-interface>
        </physical-interface>
      </interface-policer-information>
```

Description

<atm-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-statistics>
        <uncorrectable-hcs-errors>
          uncorrectable-hcs-errors
        </uncorrectable-hcs-errors>
        <correctable-hcs-errors>
          correctable-hcs-errors
        </correctable-hcs-errors>
        <tx-cell-fifo-overruns>
          tx-cell-fifo-overruns
        </tx-cell-fifo-overruns>
        <rx-cell-fifo-overruns>
          rx-cell-fifo-overruns
        </rx-cell-fifo-overruns>
        <rx-cell-fifo-underruns>
          rx-cell-fifo-underruns
        </rx-cell-fifo-underruns>
        <rx-cell-count>
```


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```
        rx-cell-count
       </rx-cell-count>
       <tx-cell-count>
        tx-cell-count
       </tx-cell-count>
       <tx-idle-cell-count>
        tx-idle-cell-count
       </tx-idle-cell-count>
       <vc-queue-drops>
        vc-queue-drops
       </vc-queue-drops>
       <no-buffers>
        no-buffers
       </no-buffers>
       <length-errors>
        length-errors
       </length-errors>
       <timeouts>
        timeouts
       </timeouts>
       <bundle-timeouts>
        bundle-timeouts
       </bundle-timeouts>
       <rx-invalid-vcs>
        rx-invalid-vcs
       </rx-invalid-vcs>
       <bad-crcs>
        bad-crcs
       </bad-crcs>
       <oam-cell-no-buffers>
        oam-cell-no-buffers
       </oam-cell-no-buffers>
      </atm-statistics>
     </virtual-circuit-information>
    </logical-interface>
</interface-policer-information>
```

Description

<ber-threshold>

Usage

```
<physical-interface>
 <ber-threshold>
  <ber-sd>
   ber-sd
  </ber-sd>
  <ber-sf>
   ber-sf
  </ber-sf>
 </ber-threshold>
</physical-interface>
```

Description Bit error rate (BER) threshold for SONET interface

<ber-threshold>

Usage

```
<interface-information>
  <physical-interface>
    <ber-threshold>
      <ber-sd>
        ber-sd
      </ber-sd>
      <ber-sf>
        ber-sf
      </ber-sf>
    </ber-threshold>
  </physical-interface>
</interface-information>
```

Description Bit error rate (BER) threshold for SONET interface

<ber-threshold>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ber-threshold>
      <ber-sd>
        ber-sd
      </ber-sd>
      <ber-sf>
        ber-sf
      </ber-sf>
    </ber-threshold>
  </physical-interface>
</interface-filter-information>
```

Description Bit error rate (BER) threshold for SONET interface

<ber-threshold>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ber-threshold>
      <ber-sd>
        ber-sd
      </ber-sd>
      <ber-sf>
        ber-sf
      </ber-sf>
    </ber-threshold>
  </physical-interface>
</interface-policer-information>
```


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Description Bit error rate (BER) threshold for SONET interface

<bridge-iff-properties>

Usage

```
<bridge-iff-properties>
  <svlan-ethertype>
    svlan-ethertype
  </svlan-ethertype>
  <eth-switching-flags>....</eth-switching-flags>
</bridge-iff-properties>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<logical-interface>
  <bridge-iff-properties>
    <svlan-ethertype>
      svlan-ethertype
    </svlan-ethertype>
    <eth-switching-flags>....</eth-switching-flags>
  </bridge-iff-properties>
</logical-interface>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<physical-interface>
  <logical-interface>
    <bridge-iff-properties>
      <svlan-ethertype>
        svlan-ethertype
      </svlan-ethertype>
      <eth-switching-flags>....</eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</physical-interface>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
```

```
      <bridge-iff-properties>
       <svlan-ethertype>
        svlan-ethertype
       </svlan-ethertype>
       <eth-switching-flags>....</eth-switching-flags>
      </bridge-iff-properties>
     </logical-interface>
    </physical-interface>
</interface-information>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-information>
 <logical-interface>
  <bridge-iff-properties>
   <svlan-ethertype>
    svlan-ethertype
   </svlan-ethertype>
   <eth-switching-flags>....</eth-switching-flags>
  </bridge-iff-properties>
 </logical-interface>
</interface-information>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <bridge-iff-properties>
    <svlan-ethertype>
     svlan-ethertype
    </svlan-ethertype>
    <eth-switching-flags>....</eth-switching-flags>
   </bridge-iff-properties>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-filter-information>
 <logical-interface>
```


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```
    <bridge-iff-properties>
     <svlan-ethertype>
      svlan-ethertype
     </svlan-ethertype>
     <eth-switching-flags>....</eth-switching-flags>
    </bridge-iff-properties>
   </logical-interface>
</interface-filter-information>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <bridge-iff-properties>
    <svlan-ethertype>
     svlan-ethertype
    </svlan-ethertype>
    <eth-switching-flags>....</eth-switching-flags>
   </bridge-iff-properties>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description Information about Ethernet-switching address family

<bridge-iff-properties>

Usage

```
<interface-policer-information>
 <logical-interface>
  <bridge-iff-properties>
   <svlan-ethertype>
    svlan-ethertype
   </svlan-ethertype>
   <eth-switching-flags>....</eth-switching-flags>
  </bridge-iff-properties>
 </logical-interface>
</interface-policer-information>
```

Description Information about Ethernet-switching address family

<bundle>

Usage

```
<multilink-traffic-statistics>
 <bundle>
  <multilink-frames>....</multilink-frames>
```

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```
    <network-frames>....</network-frames>
  </bundle>
</multilink-traffic-statistics>
```

Description

<bundle>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <bundle>
    <multilink-frames>....</multilink-frames>
    <network-frames>....</network-frames>
  </bundle>
</mlfr-uni-nni-traffic-statistics>
```

Description

<bundle>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <bundle>
      <multilink-frames>....</multilink-frames>
      <network-frames>....</network-frames>
    </bundle>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<bundle>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<bundle>

Usage

```
<physical-interface>
```


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```
  <mlfr-uni-nni-traffic-statistics>
    <bundle>
      <multilink-frames>....</multilink-frames>
      <network-frames>....</network-frames>
    </bundle>
  </mlfr-uni-nni-traffic-statistics>
</physical-interface>
```

Description

<bundle>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <multilink-frames>....</multilink-frames>
          <network-frames>....</network-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<bundle>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </bundle>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-information>
```

Description

<bundle>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
```

```
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<bundle>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <multilink-frames>....</multilink-frames>
          <network-frames>....</network-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<bundle>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </bundle>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<bundle>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
```


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```
</interface-filter-information>
```

Description

<bundle>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <bundle>
     <multilink-frames>....</multilink-frames>
     <network-frames>....</network-frames>
    </bundle>
   </multilink-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<bundle>

Usage

```
<interface-policer-information>
 <physical-interface>
  <mlfr-uni-nni-traffic-statistics>
   <bundle>
    <multilink-frames>....</multilink-frames>
    <network-frames>....</network-frames>
   </bundle>
  </mlfr-uni-nni-traffic-statistics>
 </physical-interface>
</interface-policer-information>
```

Description

<bundle>

Usage

```
<interface-policer-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <bundle>
    <multilink-frames>....</multilink-frames>
    <network-frames>....</network-frames>
   </bundle>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

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Description

<bundle-detail>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <bundle-detail>
      <fragments>....</fragments>
      <non-fragments>....</non-fragments>
      <lfi>....</lfi>
    </bundle-detail>
  </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description

<bundle-detail>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <bundle-detail>
        <fragments>....</fragments>
        <non-fragments>....</non-fragments>
        <lfi>....</lfi>
      </bundle-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<bundle-detail>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
          <lfi>....</lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

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<bundle-detail>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
            <lfi>....</lfi>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<bundle-detail>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
          <lfi>....</lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<bundle-detail>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
            <lfi>....</lfi>
          </bundle-detail>
```

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```
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<bundle-detail>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
          <lfi>....</lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<bundle-detail>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
            <lfi>....</lfi>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<bundle-detail>

Usage

```
<interface-policer-information>
  <logical-interface>
```


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```
    <multilink-traffic-statistics>
     <multilink-detail-statistics>
      <bundle-detail>
       <fragments>....</fragments>
       <non-fragments>....</non-fragments>
       <lfi>....</lfi>
      </bundle-detail>
     </multilink-detail-statistics>
    </multilink-traffic-statistics>
   </logical-interface>
</interface-policer-information>
```

Description

<cds1-information>

Usage

```
<cds1-information>
  <interface-tx-queue>....</interface-tx-queue>
</cds1-information>
```

Description

<cds1-information>

Usage

```
<physical-interface>
  <cds1-information>
    <interface-tx-queue>....</interface-tx-queue>
  </cds1-information>
</physical-interface>
```

Description

<cds1-information>

Usage

```
<interface-information>
  <physical-interface>
    <cds1-information>
      <interface-tx-queue>....</interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-information>
```

Description

<cds1-information>

Usage

```
<interface-filter-information>
  <physical-interface>
```

```
    <cds1-information>
      <interface-tx-queue>....</interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-filter-information>
```

Description

<cds1-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cds1-information>
      <interface-tx-queue>....</interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-policer-information>
```

Description

<cesopsn-information>

Usage

```
<cesopsn-information>
  <ce-packetization-latency>
    ce-packetization-latency
  </ce-packetization-latency>
  <ce-idle-pattern>
    ce-idle-pattern
  </ce-idle-pattern>
  <ce-jitter-buffer-packets>
    ce-jitter-buffer-packets
  </ce-jitter-buffer-packets>
  <ce-jitter-buffer-latency>
    ce-jitter-buffer-latency
  </ce-jitter-buffer-latency>
  <ce-jitter-buffer-auto-adjust>
    ce-jitter-buffer-auto-adjust
  </ce-jitter-buffer-auto-adjust>
  <ce-excessive-packet-loss-rate-sample-period>
    ce-excessive-packet-loss-rate-sample-period
  </ce-excessive-packet-loss-rate-sample-period>
  <ce-excessive-packet-loss-rate-threshold>
    ce-excessive-packet-loss-rate-threshold
  </ce-excessive-packet-loss-rate-threshold>
</cesopsn-information>
```

Description

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<cesopsn-information>

Usage

```
<physical-interface>
  <cesopsn-information>
    <ce-packetization-latency>
      ce-packetization-latency
    </ce-packetization-latency>
    <ce-idle-pattern>
      ce-idle-pattern
    </ce-idle-pattern>
    <ce-jitter-buffer-packets>
      ce-jitter-buffer-packets
    </ce-jitter-buffer-packets>
    <ce-jitter-buffer-latency>
      ce-jitter-buffer-latency
    </ce-jitter-buffer-latency>
    <ce-jitter-buffer-auto-adjust>
      ce-jitter-buffer-auto-adjust
    </ce-jitter-buffer-auto-adjust>
    <ce-excessive-packet-loss-rate-sample-period>
      ce-excessive-packet-loss-rate-sample-period
    </ce-excessive-packet-loss-rate-sample-period>
    <ce-excessive-packet-loss-rate-threshold>
      ce-excessive-packet-loss-rate-threshold
    </ce-excessive-packet-loss-rate-threshold>
  </cesopsn-information>
</physical-interface>
```

Description

<cesopsn-information>

Usage

```
<interface-information>
  <physical-interface>
    <cesopsn-information>
      <ce-packetization-latency>
        ce-packetization-latency
      </ce-packetization-latency>
      <ce-idle-pattern>
        ce-idle-pattern
      </ce-idle-pattern>
      <ce-jitter-buffer-packets>
        ce-jitter-buffer-packets
      </ce-jitter-buffer-packets>
      <ce-jitter-buffer-latency>
        ce-jitter-buffer-latency
      </ce-jitter-buffer-latency>
      <ce-jitter-buffer-auto-adjust>
        ce-jitter-buffer-auto-adjust
      </ce-jitter-buffer-auto-adjust>
      <ce-excessive-packet-loss-rate-sample-period>
        ce-excessive-packet-loss-rate-sample-period
```

```
      </ce-excessive-packet-loss-rate-sample-period>
      <ce-excessive-packet-loss-rate-threshold>
        ce-excessive-packet-loss-rate-threshold
      </ce-excessive-packet-loss-rate-threshold>
    </cesopsn-information>
  </physical-interface>
</interface-information>
```

Description

<cesopsn-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <cesopsn-information>
      <ce-packetization-latency>
        ce-packetization-latency
      </ce-packetization-latency>
      <ce-idle-pattern>
        ce-idle-pattern
      </ce-idle-pattern>
      <ce-jitter-buffer-packets>
        ce-jitter-buffer-packets
      </ce-jitter-buffer-packets>
      <ce-jitter-buffer-latency>
        ce-jitter-buffer-latency
      </ce-jitter-buffer-latency>
      <ce-jitter-buffer-auto-adjust>
        ce-jitter-buffer-auto-adjust
      </ce-jitter-buffer-auto-adjust>
      <ce-excessive-packet-loss-rate-sample-period>
        ce-excessive-packet-loss-rate-sample-period
      </ce-excessive-packet-loss-rate-sample-period>
      <ce-excessive-packet-loss-rate-threshold>
        ce-excessive-packet-loss-rate-threshold
      </ce-excessive-packet-loss-rate-threshold>
    </cesopsn-information>
  </physical-interface>
</interface-filter-information>
```

Description

<cesopsn-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cesopsn-information>
      <ce-packetization-latency>
        ce-packetization-latency
      </ce-packetization-latency>
      <ce-idle-pattern>
        ce-idle-pattern
```


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```
    </ce-idle-pattern>
    <ce-jitter-buffer-packets>
      ce-jitter-buffer-packets
    </ce-jitter-buffer-packets>
    <ce-jitter-buffer-latency>
      ce-jitter-buffer-latency
    </ce-jitter-buffer-latency>
    <ce-jitter-buffer-auto-adjust>
      ce-jitter-buffer-auto-adjust
    </ce-jitter-buffer-auto-adjust>
    <ce-excessive-packet-loss-rate-sample-period>
      ce-excessive-packet-loss-rate-sample-period
    </ce-excessive-packet-loss-rate-sample-period>
    <ce-excessive-packet-loss-rate-threshold>
      ce-excessive-packet-loss-rate-threshold
    </ce-excessive-packet-loss-rate-threshold>
  </cesopsn-information>
 </physical-interface>
</interface-policer-information>
```

Description

<chassis-queue-counters>

Usage

```
<chassis-queue-counters>
 <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
 <queue>....</queue>
</chassis-queue-counters>
```

Description Chassis queue counter statistics

<chassis-queue-counters>

Usage

```
<physical-interface>
 <chassis-queue-counters>
  <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
  <queue>....</queue>
 </chassis-queue-counters>
</physical-interface>
```

Description Chassis queue counter statistics

<chassis-queue-counters>

Usage

```
<interface-information>
 <physical-interface>
  <chassis-queue-counters>
   <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
```

```
      <queue>....</queue>
    </chassis-queue-counters>
  </physical-interface>
</interface-information>
```

Description Chassis queue counter statistics

<chassis-queue-counters>

Usage

```
<interface-filter-information>
  <physical-interface>
    <chassis-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
    </chassis-queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Chassis queue counter statistics

<chassis-queue-counters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <chassis-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
    </chassis-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Chassis queue counter statistics

<class>

Usage

```
<multilink-traffic-statistics>
  <class>
    <class-info>....</class-info>
    <multilink-frames>....</multilink-frames>
    <network-frames>....</network-frames>
  </class>
</multilink-traffic-statistics>
```

Description Multilink class traffic statistics

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<class>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <class>
      <class-info>....</class-info>
      <multilink-frames>....</multilink-frames>
      <network-frames>....</network-frames>
    </class>
  </multilink-traffic-statistics>
</logical-interface>
```

Description Multilink class traffic statistics

<class>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>....</class-info>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Multilink class traffic statistics

<class>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>....</class-info>
          <multilink-frames>....</multilink-frames>
          <network-frames>....</network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Multilink class traffic statistics

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<class>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>....</class-info>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description Multilink class traffic statistics

<class>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>....</class-info>
          <multilink-frames>....</multilink-frames>
          <network-frames>....</network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Multilink class traffic statistics

<class>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>....</class-info>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```


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Description Multilink class traffic statistics

<class>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>....</class-info>
          <multilink-frames>....</multilink-frames>
          <network-frames>....</network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Multilink class traffic statistics

<class>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>....</class-info>
        <multilink-frames>....</multilink-frames>
        <network-frames>....</network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Multilink class traffic statistics

<class-detail>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <class-detail>
      <class-info>....</class-info>
      <fragments>....</fragments>
      <non-fragments>....</non-fragments>
    </class-detail>
  </multilink-detail-statistics>
</multilink-traffic-statistics>
```

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Description

<class-detail>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <class-detail>
        <class-info>....</class-info>
        <fragments>....</fragments>
        <non-fragments>....</non-fragments>
      </class-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<class-detail>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>....</class-info>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<class-detail>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>....</class-info>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
```


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```
  </physical-interface>
</interface-information>
```

Description

<class-detail>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>....</class-info>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<class-detail>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>....</class-info>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<class-detail>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
```

```
            <class-info>....</class-info>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
           </class-detail>
         </multilink-detail-statistics>
       </multilink-traffic-statistics>
     </logical-interface>
   </interface-filter-information>
```

Description

<class-detail>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>....</class-info>
            <fragments>....</fragments>
            <non-fragments>....</non-fragments>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<class-detail>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>....</class-info>
          <fragments>....</fragments>
          <non-fragments>....</non-fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

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<class-info>

Usage

```
<multilink-traffic-statistics>
  <class>
    <class-info>
      <multilink-class-id>
        multilink-class-id
      </multilink-class-id>
    </class-info>
  </class>
</multilink-traffic-statistics>
```

Description Multilink class information

<class-info>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <class-detail>
      <class-info>
        <multilink-class-id>
          multilink-class-id
        </multilink-class-id>
      </class-info>
    </class-detail>
  </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description Multilink class information

<class-info>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <class>
      <class-info>
        <multilink-class-id>
          multilink-class-id
        </multilink-class-id>
      </class-info>
    </class>
  </multilink-traffic-statistics>
</logical-interface>
```

Description Multilink class information

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<class-info>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <class-detail>
        <class-info>
          <multilink-class-id>
            multilink-class-id
          </multilink-class-id>
        </class-info>
      </class-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
</logical-interface>
```

Description Multilink class information

<class-info>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>
          <multilink-class-id>
            multilink-class-id
          </multilink-class-id>
        </class-info>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Multilink class information

<class-info>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class-detail>
```


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```
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Multilink class information

<class-info>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>
              <multilink-class-id>
                multilink-class-id
              </multilink-class-id>
            </class-info>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>
          <multilink-class-id>
            multilink-class-id
          </multilink-class-id>
        </class-info>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
```


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```
            </class-info>
          </class>
        </multilink-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>
              <multilink-class-id>
                multilink-class-id
              </multilink-class-id>
            </class-info>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>
          <multilink-class-id>
            multilink-class-id
          </multilink-class-id>
        </class-info>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <class-info>
```


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```
                    <multilink-class-id>
                      multilink-class-id
                    </multilink-class-id>
                  </class-info>
                </class-detail>
              </multilink-detail-statistics>
            </multilink-traffic-statistics>
          </logical-interface>
        </physical-interface>
      </interface-policer-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <class-info>
          <multilink-class-id>
            multilink-class-id
          </multilink-class-id>
        </class-info>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Multilink class information

<class-info>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <class-info>
            <multilink-class-id>
              multilink-class-id
            </multilink-class-id>
          </class-info>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

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Description Multilink class information

<clocking-mode>

Usage

```
<serial-information>
  <clocking-mode>
    <clock-mode>
      clock-mode
    </clock-mode>
  </clocking-mode>
</serial-information>
```

Description

<clocking-mode>

Usage

```
<physical-interface>
  <serial-information>
    <clocking-mode>
      <clock-mode>
        clock-mode
      </clock-mode>
    </clocking-mode>
  </serial-information>
</physical-interface>
```

Description

<clocking-mode>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <clocking-mode>
        <clock-mode>
          clock-mode
        </clock-mode>
      </clocking-mode>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<clocking-mode>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
```


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```
        <clocking-mode>
          <clock-mode>
            clock-mode
          </clock-mode>
        </clocking-mode>
      </serial-information>
    </physical-interface>
  </interface-filter-information>
```

Description

<clocking-mode>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <clocking-mode>
        <clock-mode>
          clock-mode
        </clock-mode>
      </clocking-mode>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<clocking-rate>

Usage

```
<serial-information>
  <clocking-rate>
    <clock-rate>
      clock-rate
    </clock-rate>
  </clocking-rate>
</serial-information>
```

Description

<clocking-rate>

Usage

```
<physical-interface>
  <serial-information>
    <clocking-rate>
      <clock-rate>
        clock-rate
      </clock-rate>
    </clocking-rate>
  </serial-information>
```

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```
</physical-interface>
```

Description

<clocking-rate>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <clocking-rate>
        <clock-rate>
          clock-rate
        </clock-rate>
      </clocking-rate>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<clocking-rate>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <clocking-rate>
        <clock-rate>
          clock-rate
        </clock-rate>
      </clocking-rate>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<clocking-rate>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <clocking-rate>
        <clock-rate>
          clock-rate
        </clock-rate>
      </clocking-rate>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```


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Description

<controller>

Usage

```
<controller>
  <name>
    name
  </name>
  <admin-status>
    admin-status
  </admin-status>
  <oper-status>
    oper-status
  </oper-status>
</controller>
```

Description

<controller>

Usage

```
<interface-information>
  <controller>
    <name>
      name
    </name>
    <admin-status>
      admin-status
    </admin-status>
    <oper-status>
      oper-status
    </oper-status>
  </controller>
</interface-information>
```

Description

<cos-information>

Usage

```
<cos-information>
  <cos-stream-information>....</cos-stream-information>
</cos-information>
```

Description Information about class-of-service configuration

<cos-information>

Usage

```
<physical-interface>
  <cos-information>
    <cos-stream-information>....</cos-stream-information>
```

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```
  </cos-information>
</physical-interface>
```

Description Information about class-of-service configuration

<cos-information>

Usage

```
<interface-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>....</cos-stream-information>
    </cos-information>
  </physical-interface>
</interface-information>
```

Description Information about class-of-service configuration

<cos-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>....</cos-stream-information>
    </cos-information>
  </physical-interface>
</interface-filter-information>
```

Description Information about class-of-service configuration

<cos-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>....</cos-stream-information>
    </cos-information>
  </physical-interface>
</interface-policer-information>
```

Description Information about class-of-service configuration

<cos-queue-configuration>

Usage

```
<cos-information>
  <cos-stream-information>
```


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```
<cos-queue-configuration>
 <cos-queue-number>
  cos-queue-number
 </cos-queue-number>
 <cos-queue-forwarding-class>
  cos-queue-forwarding-class
 </cos-queue-forwarding-class>
 <cos-queue-bandwidth>
  cos-queue-bandwidth
 </cos-queue-bandwidth>
 <cos-queue-bandwidth-remainder>
  cos-queue-bandwidth-remainder
 </cos-queue-bandwidth-remainder>
 <cos-queue-bandwidth-bps>
  cos-queue-bandwidth-bps
 </cos-queue-bandwidth-bps>
 <cos-queue-bandwidth-bps-remainder>
  cos-queue-bandwidth-bps-remainder
 </cos-queue-bandwidth-bps-remainder>
 <cos-queue-buffer>
  cos-queue-buffer
 </cos-queue-buffer>
 <cos-queue-buffer-remainder>
  cos-queue-buffer-remainder
 </cos-queue-buffer-remainder>
 <cos-queue-buffer-bytes>
  cos-queue-buffer-bytes
 </cos-queue-buffer-bytes>
 <cos-queue-priority>
  cos-queue-priority
 </cos-queue-priority>
 <cos-queue-limit>
  cos-queue-limit
 </cos-queue-limit>
</cos-queue-configuration>
</cos-stream-information>
</cos-information>
```

Description

<cos-queue-configuration>

Usage

```
<physical-interface>
 <cos-information>
  <cos-stream-information>
   <cos-queue-configuration>
    <cos-queue-number>
     cos-queue-number
    </cos-queue-number>
    <cos-queue-forwarding-class>
     cos-queue-forwarding-class
    </cos-queue-forwarding-class>
    <cos-queue-bandwidth>
     cos-queue-bandwidth
```

```
        </cos-queue-bandwidth>
        <cos-queue-bandwidth-remainder>
          cos-queue-bandwidth-remainder
        </cos-queue-bandwidth-remainder>
        <cos-queue-bandwidth-bps>
          cos-queue-bandwidth-bps
        </cos-queue-bandwidth-bps>
        <cos-queue-bandwidth-bps-remainder>
          cos-queue-bandwidth-bps-remainder
        </cos-queue-bandwidth-bps-remainder>
        <cos-queue-buffer>
          cos-queue-buffer
        </cos-queue-buffer>
        <cos-queue-buffer-remainder>
          cos-queue-buffer-remainder
        </cos-queue-buffer-remainder>
        <cos-queue-buffer-bytes>
          cos-queue-buffer-bytes
        </cos-queue-buffer-bytes>
        <cos-queue-priority>
          cos-queue-priority
        </cos-queue-priority>
        <cos-queue-limit>
          cos-queue-limit
        </cos-queue-limit>
      </cos-queue-configuration>
    </cos-stream-information>
  </cos-information>
</physical-interface>
```

Description

<cos-queue-configuration>

Usage

```
<interface-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
        <cos-queue-configuration>
          <cos-queue-number>
            cos-queue-number
          </cos-queue-number>
          <cos-queue-forwarding-class>
            cos-queue-forwarding-class
          </cos-queue-forwarding-class>
          <cos-queue-bandwidth>
            cos-queue-bandwidth
          </cos-queue-bandwidth>
          <cos-queue-bandwidth-remainder>
            cos-queue-bandwidth-remainder
          </cos-queue-bandwidth-remainder>
          <cos-queue-bandwidth-bps>
            cos-queue-bandwidth-bps
          </cos-queue-bandwidth-bps>
```


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```
            <cos-queue-bandwidth-bps-remainder>
              cos-queue-bandwidth-bps-remainder
            </cos-queue-bandwidth-bps-remainder>
            <cos-queue-buffer>
              cos-queue-buffer
            </cos-queue-buffer>
            <cos-queue-buffer-remainder>
              cos-queue-buffer-remainder
            </cos-queue-buffer-remainder>
            <cos-queue-buffer-bytes>
              cos-queue-buffer-bytes
            </cos-queue-buffer-bytes>
            <cos-queue-priority>
              cos-queue-priority
            </cos-queue-priority>
            <cos-queue-limit>
              cos-queue-limit
            </cos-queue-limit>
          </cos-queue-configuration>
        </cos-stream-information>
      </cos-information>
    </physical-interface>
  </interface-information>
```

Description

<cos-queue-configuration>

Usage

```
<interface-filter-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
        <cos-queue-configuration>
          <cos-queue-number>
            cos-queue-number
          </cos-queue-number>
          <cos-queue-forwarding-class>
            cos-queue-forwarding-class
          </cos-queue-forwarding-class>
          <cos-queue-bandwidth>
            cos-queue-bandwidth
          </cos-queue-bandwidth>
          <cos-queue-bandwidth-remainder>
            cos-queue-bandwidth-remainder
          </cos-queue-bandwidth-remainder>
          <cos-queue-bandwidth-bps>
            cos-queue-bandwidth-bps
          </cos-queue-bandwidth-bps>
          <cos-queue-bandwidth-bps-remainder>
            cos-queue-bandwidth-bps-remainder
          </cos-queue-bandwidth-bps-remainder>
          <cos-queue-buffer>
            cos-queue-buffer
          </cos-queue-buffer>
```

```
                <cos-queue-buffer-remainder>
                  cos-queue-buffer-remainder
                </cos-queue-buffer-remainder>
                <cos-queue-buffer-bytes>
                  cos-queue-buffer-bytes
                </cos-queue-buffer-bytes>
                <cos-queue-priority>
                  cos-queue-priority
                </cos-queue-priority>
                <cos-queue-limit>
                  cos-queue-limit
                </cos-queue-limit>
              </cos-queue-configuration>
            </cos-stream-information>
          </cos-information>
        </physical-interface>
      </interface-filter-information>
```

Description

<cos-queue-configuration>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
        <cos-queue-configuration>
          <cos-queue-number>
            cos-queue-number
          </cos-queue-number>
          <cos-queue-forwarding-class>
            cos-queue-forwarding-class
          </cos-queue-forwarding-class>
          <cos-queue-bandwidth>
            cos-queue-bandwidth
          </cos-queue-bandwidth>
          <cos-queue-bandwidth-remainder>
            cos-queue-bandwidth-remainder
          </cos-queue-bandwidth-remainder>
          <cos-queue-bandwidth-bps>
            cos-queue-bandwidth-bps
          </cos-queue-bandwidth-bps>
          <cos-queue-bandwidth-bps-remainder>
            cos-queue-bandwidth-bps-remainder
          </cos-queue-bandwidth-bps-remainder>
          <cos-queue-buffer>
            cos-queue-buffer
          </cos-queue-buffer>
          <cos-queue-buffer-remainder>
            cos-queue-buffer-remainder
          </cos-queue-buffer-remainder>
          <cos-queue-buffer-bytes>
            cos-queue-buffer-bytes
          </cos-queue-buffer-bytes>
```


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```
            <cos-queue-priority>
              cos-queue-priority
            </cos-queue-priority>
            <cos-queue-limit>
              cos-queue-limit
            </cos-queue-limit>
          </cos-queue-configuration>
        </cos-stream-information>
      </cos-information>
    </physical-interface>
  </interface-policer-information>
```

Description

<cos-stream-information>

Usage

```
<cos-information>
  <cos-stream-information>
    <cos-direction>
      cos-direction
    </cos-direction>
    <cos-queue-configuration>....</cos-queue-configuration>
  </cos-stream-information>
</cos-information>
```

Description Information about the traffic stream

<cos-stream-information>

Usage

```
<physical-interface>
  <cos-information>
    <cos-stream-information>
      <cos-direction>
        cos-direction
      </cos-direction>
      <cos-queue-configuration>....</cos-queue-configuration>
    </cos-stream-information>
  </cos-information>
</physical-interface>
```

Description Information about the traffic stream

<cos-stream-information>

Usage

```
<interface-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
```

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```
            <cos-direction>
              cos-direction
            </cos-direction>
            <cos-queue-configuration>....</cos-queue-configuration>
          </cos-stream-information>
        </cos-information>
      </physical-interface>
    </interface-information>
```

Description Information about the traffic stream

<cos-stream-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
        <cos-direction>
          cos-direction
        </cos-direction>
        <cos-queue-configuration>....</cos-queue-configuration>
      </cos-stream-information>
    </cos-information>
  </physical-interface>
</interface-filter-information>
```

Description Information about the traffic stream

<cos-stream-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cos-information>
      <cos-stream-information>
        <cos-direction>
          cos-direction
        </cos-direction>
        <cos-queue-configuration>....</cos-queue-configuration>
      </cos-stream-information>
    </cos-information>
  </physical-interface>
</interface-policer-information>
```

Description Information about the traffic stream

<crtp>

Usage

```
<multilink-traffic-statistics>
```


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```
  <crtp>
    <crtp-sessions>....</crtp-sessions>
    <crtp-statistics>....</crtp-statistics>
  </crtp>
</multilink-traffic-statistics>
```

Description

<crtp>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <crtp>
      <crtp-sessions>....</crtp-sessions>
      <crtp-statistics>....</crtp-statistics>
    </crtp>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<crtp>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>....</crtp-sessions>
        <crtp-statistics>....</crtp-statistics>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<crtp>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>....</crtp-sessions>
          <crtp-statistics>....</crtp-statistics>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
```

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```
</interface-information>
```

Description

<crtp>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>....</crtp-sessions>
        <crtp-statistics>....</crtp-statistics>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<crtp>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>....</crtp-sessions>
          <crtp-statistics>....</crtp-statistics>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<crtp>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>....</crtp-sessions>
        <crtp-statistics>....</crtp-statistics>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```


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Description

<crtp>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>....</crtp-sessions>
          <crtp-statistics>....</crtp-statistics>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<crtp>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>....</crtp-sessions>
        <crtp-statistics>....</crtp-statistics>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<crtp-sessions>

Usage

```
<multilink-traffic-statistics>
  <crtp>
    <crtp-sessions>
      <input-frames>
        input-frames
      </input-frames>
      <output-frames>
        output-frames
      </output-frames>
    </crtp-sessions>
  </crtp>
</multilink-traffic-statistics>
```

Description

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<crtp-sessions>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <crtp>
      <crtp-sessions>
        <input-frames>
          input-frames
        </input-frames>
        <output-frames>
          output-frames
        </output-frames>
      </crtp-sessions>
    </crtp>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<crtp-sessions>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>
          <input-frames>
            input-frames
          </input-frames>
          <output-frames>
            output-frames
          </output-frames>
        </crtp-sessions>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<crtp-sessions>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>
            <input-frames>
              input-frames
```


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```
            </input-frames>
            <output-frames>
              output-frames
            </output-frames>
          </crtp-sessions>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<crtp-sessions>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>
          <input-frames>
            input-frames
          </input-frames>
          <output-frames>
            output-frames
          </output-frames>
        </crtp-sessions>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<crtp-sessions>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>
            <input-frames>
              input-frames
            </input-frames>
            <output-frames>
              output-frames
            </output-frames>
          </crtp-sessions>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
```

```
  </physical-interface>
</interface-filter-information>
```

Description

<crtp-sessions>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>
          <input-frames>
            input-frames
          </input-frames>
          <output-frames>
            output-frames
          </output-frames>
        </crtp-sessions>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<crtp-sessions>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-sessions>
            <input-frames>
              input-frames
            </input-frames>
            <output-frames>
              output-frames
            </output-frames>
          </crtp-sessions>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

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<crtp-sessions>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-sessions>
          <input-frames>
            input-frames
          </input-frames>
          <output-frames>
            output-frames
          </output-frames>
        </crtp-sessions>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<crtp-statistics>

Usage

```
<multilink-traffic-statistics>
  <crtp>
    <crtp-statistics>
      <name>
        name
      </name>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-frames>
        output-frames
      </output-frames>
      <output-fps>
        output-fps
      </output-fps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
```

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```
      </output-bps>
    </crtp-statistics>
  </crtp>
</multilink-traffic-statistics>
```

Description

<crtp-statistics>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <crtp>
      <crtp-statistics>
        <name>
          name
        </name>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </crtp-statistics>
    </crtp>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<crtp-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
```


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```
<crtp>
  <crtp-statistics>
    <name>
      name
    </name>
    <input-frames>
      input-frames
    </input-frames>
    <input-fps>
      input-fps
    </input-fps>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-frames>
      output-frames
    </output-frames>
    <output-fps>
      output-fps
    </output-fps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
  </crtp-statistics>
 </crtp>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
```

Description

<crtp-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <crtp>
     <crtp-statistics>
      <name>
       name
      </name>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
```

```
                <input-bytes>
                  input-bytes
                </input-bytes>
                <input-bps>
                  input-bps
                </input-bps>
                <output-frames>
                  output-frames
                </output-frames>
                <output-fps>
                  output-fps
                </output-fps>
                <output-bytes>
                  output-bytes
                </output-bytes>
                <output-bps>
                  output-bps
                </output-bps>
              </crtp-statistics>
            </crtp>
          </multilink-traffic-statistics>
        </logical-interface>
      </physical-interface>
    </interface-information>
```

Description

<crtp-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-statistics>
          <name>
            name
          </name>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
```


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```
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </crtp-statistics>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </interface-information>
```

Description

<crtp-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <crtp>
          <crtp-statistics>
            <name>
              name
            </name>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </crtp-statistics>
        </crtp>
      </multilink-traffic-statistics>
    </logical-interface>
```

```
  </physical-interface>
</interface-filter-information>
```

Description

<crtp-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <crtp>
        <crtp-statistics>
          <name>
            name
          </name>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </crtp-statistics>
      </crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<crtp-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
```


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```
<multilink-traffic-statistics>
 <crtp>
  <crtp-statistics>
   <name>
    name
   </name>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </crtp-statistics>
 </crtp>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
</interface-policer-information>
```

Description

<crtp-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <crtp>
    <crtp-statistics>
     <name>
      name
     </name>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
```

```
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </crtp-statistics>
    </crtp>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

Description

<ct3-information>

Usage

```
<ct3-information>
 <interface-tx-queue>....</interface-tx-queue>
</ct3-information>
```

Description

<ct3-information>

Usage

```
<physical-interface>
 <ct3-information>
  <interface-tx-queue>....</interface-tx-queue>
 </ct3-information>
</physical-interface>
```

Description

<ct3-information>

Usage

```
<interface-information>
 <physical-interface>
  <ct3-information>
```


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```
      <interface-tx-queue>....</interface-tx-queue>
    </ct3-information>
  </physical-interface>
</interface-information>
```

Description

<ct3-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ct3-information>
      <interface-tx-queue>....</interface-tx-queue>
    </ct3-information>
  </physical-interface>
</interface-filter-information>
```

Description

<ct3-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ct3-information>
      <interface-tx-queue>....</interface-tx-queue>
    </ct3-information>
  </physical-interface>
</interface-policer-information>
```

Description

<data-signal>

Usage

```
<serial-information>
  <data-signal>
    <rx-clock>
      rx-clock
    </rx-clock>
  </data-signal>
</serial-information>
```

Description

<data-signal>

Usage

```
<physical-interface>
  <serial-information>
    <data-signal>
```

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```
      <rx-clock>
       rx-clock
      </rx-clock>
     </data-signal>
    </serial-information>
   </physical-interface>
```

Description

<data-signal>

Usage

```
<interface-information>
 <physical-interface>
  <serial-information>
   <data-signal>
    <rx-clock>
     rx-clock
    </rx-clock>
   </data-signal>
  </serial-information>
 </physical-interface>
</interface-information>
```

Description

<data-signal>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <data-signal>
    <rx-clock>
     rx-clock
    </rx-clock>
   </data-signal>
  </serial-information>
 </physical-interface>
</interface-filter-information>
```

Description

<data-signal>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <data-signal>
    <rx-clock>
     rx-clock
    </rx-clock>
```


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```
      </data-signal>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<demux-information>

Usage

```
<logical-interface>
  <demux-information>
    <demux-interface>....</demux-interface>
  </demux-information>
</logical-interface>
```

Description Demux information

<demux-information>

Usage

```
<physical-interface>
  <logical-interface>
    <demux-information>
      <demux-interface>....</demux-interface>
    </demux-information>
  </logical-interface>
</physical-interface>
```

Description Demux information

<demux-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <demux-information>
        <demux-interface>....</demux-interface>
      </demux-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Demux information

<demux-information>

Usage

```
<interface-information>
```

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```
<logical-interface>
  <demux-information>
    <demux-interface>....</demux-interface>
  </demux-information>
</logical-interface>
</interface-information>
```

Description Demux information

<demux-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <demux-information>
    <demux-interface>....</demux-interface>
   </demux-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Demux information

<demux-information>

Usage

```
<interface-filter-information>
 <logical-interface>
  <demux-information>
   <demux-interface>....</demux-interface>
  </demux-information>
 </logical-interface>
</interface-filter-information>
```

Description Demux information

<demux-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <demux-information>
    <demux-interface>....</demux-interface>
   </demux-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```


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Description Demux information

<demux-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <demux-information>
      <demux-interface>....</demux-interface>
    </demux-information>
  </logical-interface>
</interface-policer-information>
```

Description Demux information

<demux-interface>

Usage

```
<logical-interface>
  <demux-interface>
    <demux-underlying-interface-name>
      demux-underlying-interface-name
    </demux-underlying-interface-name>
    <demux-underlying-interface-index>
      demux-underlying-interface-index
    </demux-underlying-interface-index>
    <demux-inet-prefix-type>
      demux-inet-prefix-type
    </demux-inet-prefix-type>
    <demux-inet-prefix-count>
      demux-inet-prefix-count
    </demux-inet-prefix-count>
    <demux-inet-prefix>
      demux-inet-prefix
    </demux-inet-prefix>
    <demux-inet6-prefix-type>
      demux-inet6-prefix-type
    </demux-inet6-prefix-type>
    <demux-inet6-prefix-count>
      demux-inet6-prefix-count
    </demux-inet6-prefix-count>
    <demux-inet6-prefix>
      demux-inet6-prefix
    </demux-inet6-prefix>
  </demux-interface>
</logical-interface>
```

Description

<demux-interface>

Usage

```
<logical-interface>
```

```
  <demux-information>
    <demux-interface>
      <demux-underlying-interface-name>
        demux-underlying-interface-name
      </demux-underlying-interface-name>
      <demux-underlying-interface-index>
        demux-underlying-interface-index
      </demux-underlying-interface-index>
      <demux-inet-prefix-type>
        demux-inet-prefix-type
      </demux-inet-prefix-type>
      <demux-inet-prefix-count>
        demux-inet-prefix-count
      </demux-inet-prefix-count>
      <demux-inet-prefix>
        demux-inet-prefix
      </demux-inet-prefix>
      <demux-inet6-prefix-type>
        demux-inet6-prefix-type
      </demux-inet6-prefix-type>
      <demux-inet6-prefix-count>
        demux-inet6-prefix-count
      </demux-inet6-prefix-count>
      <demux-inet6-prefix>
        demux-inet6-prefix
      </demux-inet6-prefix>
    </demux-interface>
  </demux-information>
</logical-interface>
```

Description

<demux-interface>

Usage

```
<physical-interface>
  <logical-interface>
    <demux-interface>
      <demux-underlying-interface-name>
        demux-underlying-interface-name
      </demux-underlying-interface-name>
      <demux-underlying-interface-index>
        demux-underlying-interface-index
      </demux-underlying-interface-index>
      <demux-inet-prefix-type>
        demux-inet-prefix-type
      </demux-inet-prefix-type>
      <demux-inet-prefix-count>
        demux-inet-prefix-count
      </demux-inet-prefix-count>
      <demux-inet-prefix>
        demux-inet-prefix
      </demux-inet-prefix>
      <demux-inet6-prefix-type>
        demux-inet6-prefix-type
```


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```
      </demux-inet6-prefix-type>
      <demux-inet6-prefix-count>
       demux-inet6-prefix-count
      </demux-inet6-prefix-count>
      <demux-inet6-prefix>
       demux-inet6-prefix
      </demux-inet6-prefix>
     </demux-interface>
    </logical-interface>
   </physical-interface>
```

Description

<demux-interface>

Usage

```
<physical-interface>
 <logical-interface>
  <demux-information>
   <demux-interface>
    <demux-underlying-interface-name>
     demux-underlying-interface-name
    </demux-underlying-interface-name>
    <demux-underlying-interface-index>
     demux-underlying-interface-index
    </demux-underlying-interface-index>
    <demux-inet-prefix-type>
     demux-inet-prefix-type
    </demux-inet-prefix-type>
    <demux-inet-prefix-count>
     demux-inet-prefix-count
    </demux-inet-prefix-count>
    <demux-inet-prefix>
     demux-inet-prefix
    </demux-inet-prefix>
    <demux-inet6-prefix-type>
     demux-inet6-prefix-type
    </demux-inet6-prefix-type>
    <demux-inet6-prefix-count>
     demux-inet6-prefix-count
    </demux-inet6-prefix-count>
    <demux-inet6-prefix>
     demux-inet6-prefix
    </demux-inet6-prefix>
   </demux-interface>
  </demux-information>
 </logical-interface>
</physical-interface>
```

Description

<demux-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <demux-interface>
        <demux-underlying-interface-name>
          demux-underlying-interface-name
        </demux-underlying-interface-name>
        <demux-underlying-interface-index>
          demux-underlying-interface-index
        </demux-underlying-interface-index>
        <demux-inet-prefix-type>
          demux-inet-prefix-type
        </demux-inet-prefix-type>
        <demux-inet-prefix-count>
          demux-inet-prefix-count
        </demux-inet-prefix-count>
        <demux-inet-prefix>
          demux-inet-prefix
        </demux-inet-prefix>
        <demux-inet6-prefix-type>
          demux-inet6-prefix-type
        </demux-inet6-prefix-type>
        <demux-inet6-prefix-count>
          demux-inet6-prefix-count
        </demux-inet6-prefix-count>
        <demux-inet6-prefix>
          demux-inet6-prefix
        </demux-inet6-prefix>
      </demux-interface>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<demux-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <demux-information>
        <demux-interface>
          <demux-underlying-interface-name>
            demux-underlying-interface-name
          </demux-underlying-interface-name>
          <demux-underlying-interface-index>
            demux-underlying-interface-index
          </demux-underlying-interface-index>
          <demux-inet-prefix-type>
            demux-inet-prefix-type
```


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```
            </demux-inet-prefix-type>
            <demux-inet-prefix-count>
              demux-inet-prefix-count
            </demux-inet-prefix-count>
            <demux-inet-prefix>
              demux-inet-prefix
            </demux-inet-prefix>
            <demux-inet6-prefix-type>
              demux-inet6-prefix-type
            </demux-inet6-prefix-type>
            <demux-inet6-prefix-count>
              demux-inet6-prefix-count
            </demux-inet6-prefix-count>
            <demux-inet6-prefix>
              demux-inet6-prefix
            </demux-inet6-prefix>
          </demux-interface>
        </demux-information>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description

<demux-interface>

Usage

```
<interface-information>
  <logical-interface>
    <demux-interface>
      <demux-underlying-interface-name>
        demux-underlying-interface-name
      </demux-underlying-interface-name>
      <demux-underlying-interface-index>
        demux-underlying-interface-index
      </demux-underlying-interface-index>
      <demux-inet-prefix-type>
        demux-inet-prefix-type
      </demux-inet-prefix-type>
      <demux-inet-prefix-count>
        demux-inet-prefix-count
      </demux-inet-prefix-count>
      <demux-inet-prefix>
        demux-inet-prefix
      </demux-inet-prefix>
      <demux-inet6-prefix-type>
        demux-inet6-prefix-type
      </demux-inet6-prefix-type>
      <demux-inet6-prefix-count>
        demux-inet6-prefix-count
      </demux-inet6-prefix-count>
      <demux-inet6-prefix>
        demux-inet6-prefix
      </demux-inet6-prefix>
    </demux-interface>
```

```
  </logical-interface>
</interface-information>
```

Description

<demux-interface>

Usage

```
<interface-information>
 <logical-interface>
  <demux-information>
   <demux-interface>
    <demux-underlying-interface-name>
     demux-underlying-interface-name
    </demux-underlying-interface-name>
    <demux-underlying-interface-index>
     demux-underlying-interface-index
    </demux-underlying-interface-index>
    <demux-inet-prefix-type>
     demux-inet-prefix-type
    </demux-inet-prefix-type>
    <demux-inet-prefix-count>
     demux-inet-prefix-count
    </demux-inet-prefix-count>
    <demux-inet-prefix>
     demux-inet-prefix
    </demux-inet-prefix>
    <demux-inet6-prefix-type>
     demux-inet6-prefix-type
    </demux-inet6-prefix-type>
    <demux-inet6-prefix-count>
     demux-inet6-prefix-count
    </demux-inet6-prefix-count>
    <demux-inet6-prefix>
     demux-inet6-prefix
    </demux-inet6-prefix>
   </demux-interface>
  </demux-information>
 </logical-interface>
</interface-information>
```

Description

<demux-interface>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <demux-interface>
    <demux-underlying-interface-name>
     demux-underlying-interface-name
    </demux-underlying-interface-name>
    <demux-underlying-interface-index>
```


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```
            demux-underlying-interface-index
          </demux-underlying-interface-index>
          <demux-inet-prefix-type>
            demux-inet-prefix-type
          </demux-inet-prefix-type>
          <demux-inet-prefix-count>
            demux-inet-prefix-count
          </demux-inet-prefix-count>
          <demux-inet-prefix>
            demux-inet-prefix
          </demux-inet-prefix>
          <demux-inet6-prefix-type>
            demux-inet6-prefix-type
          </demux-inet6-prefix-type>
          <demux-inet6-prefix-count>
            demux-inet6-prefix-count
          </demux-inet6-prefix-count>
          <demux-inet6-prefix>
            demux-inet6-prefix
          </demux-inet6-prefix>
        </demux-interface>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<demux-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <demux-information>
        <demux-interface>
          <demux-underlying-interface-name>
            demux-underlying-interface-name
          </demux-underlying-interface-name>
          <demux-underlying-interface-index>
            demux-underlying-interface-index
          </demux-underlying-interface-index>
          <demux-inet-prefix-type>
            demux-inet-prefix-type
          </demux-inet-prefix-type>
          <demux-inet-prefix-count>
            demux-inet-prefix-count
          </demux-inet-prefix-count>
          <demux-inet-prefix>
            demux-inet-prefix
          </demux-inet-prefix>
          <demux-inet6-prefix-type>
            demux-inet6-prefix-type
          </demux-inet6-prefix-type>
          <demux-inet6-prefix-count>
            demux-inet6-prefix-count
```

```
            </demux-inet6-prefix-count>
            <demux-inet6-prefix>
              demux-inet6-prefix
            </demux-inet6-prefix>
          </demux-interface>
        </demux-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<demux-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <demux-interface>
      <demux-underlying-interface-name>
        demux-underlying-interface-name
      </demux-underlying-interface-name>
      <demux-underlying-interface-index>
        demux-underlying-interface-index
      </demux-underlying-interface-index>
      <demux-inet-prefix-type>
        demux-inet-prefix-type
      </demux-inet-prefix-type>
      <demux-inet-prefix-count>
        demux-inet-prefix-count
      </demux-inet-prefix-count>
      <demux-inet-prefix>
        demux-inet-prefix
      </demux-inet-prefix>
      <demux-inet6-prefix-type>
        demux-inet6-prefix-type
      </demux-inet6-prefix-type>
      <demux-inet6-prefix-count>
        demux-inet6-prefix-count
      </demux-inet6-prefix-count>
      <demux-inet6-prefix>
        demux-inet6-prefix
      </demux-inet6-prefix>
    </demux-interface>
  </logical-interface>
</interface-filter-information>
```

Description

<demux-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <demux-information>
```


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```
      <demux-interface>
        <demux-underlying-interface-name>
          demux-underlying-interface-name
        </demux-underlying-interface-name>
        <demux-underlying-interface-index>
          demux-underlying-interface-index
        </demux-underlying-interface-index>
        <demux-inet-prefix-type>
          demux-inet-prefix-type
        </demux-inet-prefix-type>
        <demux-inet-prefix-count>
          demux-inet-prefix-count
        </demux-inet-prefix-count>
        <demux-inet-prefix>
          demux-inet-prefix
        </demux-inet-prefix>
        <demux-inet6-prefix-type>
          demux-inet6-prefix-type
        </demux-inet6-prefix-type>
        <demux-inet6-prefix-count>
          demux-inet6-prefix-count
        </demux-inet6-prefix-count>
        <demux-inet6-prefix>
          demux-inet6-prefix
        </demux-inet6-prefix>
      </demux-interface>
    </demux-information>
  </logical-interface>
</interface-filter-information>
```

Description

<demux-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <demux-interface>
        <demux-underlying-interface-name>
          demux-underlying-interface-name
        </demux-underlying-interface-name>
        <demux-underlying-interface-index>
          demux-underlying-interface-index
        </demux-underlying-interface-index>
        <demux-inet-prefix-type>
          demux-inet-prefix-type
        </demux-inet-prefix-type>
        <demux-inet-prefix-count>
          demux-inet-prefix-count
        </demux-inet-prefix-count>
        <demux-inet-prefix>
          demux-inet-prefix
        </demux-inet-prefix>
        <demux-inet6-prefix-type>
```

```
            demux-inet6-prefix-type
           </demux-inet6-prefix-type>
           <demux-inet6-prefix-count>
            demux-inet6-prefix-count
           </demux-inet6-prefix-count>
           <demux-inet6-prefix>
            demux-inet6-prefix
           </demux-inet6-prefix>
          </demux-interface>
         </logical-interface>
        </physical-interface>
       </interface-policer-information>
```

Description

<demux-interface>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <demux-information>
    <demux-interface>
     <demux-underlying-interface-name>
      demux-underlying-interface-name
     </demux-underlying-interface-name>
     <demux-underlying-interface-index>
      demux-underlying-interface-index
     </demux-underlying-interface-index>
     <demux-inet-prefix-type>
      demux-inet-prefix-type
     </demux-inet-prefix-type>
     <demux-inet-prefix-count>
      demux-inet-prefix-count
     </demux-inet-prefix-count>
     <demux-inet-prefix>
      demux-inet-prefix
     </demux-inet-prefix>
     <demux-inet6-prefix-type>
      demux-inet6-prefix-type
     </demux-inet6-prefix-type>
     <demux-inet6-prefix-count>
      demux-inet6-prefix-count
     </demux-inet6-prefix-count>
     <demux-inet6-prefix>
      demux-inet6-prefix
     </demux-inet6-prefix>
    </demux-interface>
   </demux-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

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<demux-interface>

Usage

```
<interface-policer-information>
  <logical-interface>
    <demux-interface>
      <demux-underlying-interface-name>
        demux-underlying-interface-name
      </demux-underlying-interface-name>
      <demux-underlying-interface-index>
        demux-underlying-interface-index
      </demux-underlying-interface-index>
      <demux-inet-prefix-type>
        demux-inet-prefix-type
      </demux-inet-prefix-type>
      <demux-inet-prefix-count>
        demux-inet-prefix-count
      </demux-inet-prefix-count>
      <demux-inet-prefix>
        demux-inet-prefix
      </demux-inet-prefix>
      <demux-inet6-prefix-type>
        demux-inet6-prefix-type
      </demux-inet6-prefix-type>
      <demux-inet6-prefix-count>
        demux-inet6-prefix-count
      </demux-inet6-prefix-count>
      <demux-inet6-prefix>
        demux-inet6-prefix
      </demux-inet6-prefix>
    </demux-interface>
  </logical-interface>
</interface-policer-information>
```

Description

<demux-interface>

Usage

```
<interface-policer-information>
  <logical-interface>
    <demux-information>
      <demux-interface>
        <demux-underlying-interface-name>
          demux-underlying-interface-name
        </demux-underlying-interface-name>
        <demux-underlying-interface-index>
          demux-underlying-interface-index
        </demux-underlying-interface-index>
        <demux-inet-prefix-type>
          demux-inet-prefix-type
        </demux-inet-prefix-type>
        <demux-inet-prefix-count>
          demux-inet-prefix-count
```

```
        </demux-inet-prefix-count>
        <demux-inet-prefix>
          demux-inet-prefix
        </demux-inet-prefix>
        <demux-inet6-prefix-type>
          demux-inet6-prefix-type
        </demux-inet6-prefix-type>
        <demux-inet6-prefix-count>
          demux-inet6-prefix-count
        </demux-inet6-prefix-count>
        <demux-inet6-prefix>
          demux-inet6-prefix
        </demux-inet6-prefix>
      </demux-interface>
    </demux-information>
  </logical-interface>
</interface-policer-information>
```

Description

<destination-class>

Usage

```
<destination-class-statistics>
  <destination-class>
    <dcu-class-name>
      dcu-class-name
    </dcu-class-name>
    <dcu-class-packets>
      dcu-class-packets
    </dcu-class-packets>
    <dcu-class-bytes>
      dcu-class-bytes
    </dcu-class-bytes>
    <dcu-class-pps>
      dcu-class-pps
    </dcu-class-pps>
    <dcu-class-bps>
      dcu-class-bps
    </dcu-class-bps>
  </destination-class>
</destination-class-statistics>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<address-family>
  <destination-class-statistics>
    <destination-class>
      <dcu-class-name>
        dcu-class-name
```


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```
        </dcu-class-name>
        <dcu-class-packets>
          dcu-class-packets
        </dcu-class-packets>
        <dcu-class-bytes>
          dcu-class-bytes
        </dcu-class-bytes>
        <dcu-class-pps>
          dcu-class-pps
        </dcu-class-pps>
        <dcu-class-bps>
          dcu-class-bps
        </dcu-class-bps>
      </destination-class>
    </destination-class-statistics>
  </address-family>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<logical-interface>
  <address-family>
    <destination-class-statistics>
      <destination-class>
        <dcu-class-name>
          dcu-class-name
        </dcu-class-name>
        <dcu-class-packets>
          dcu-class-packets
        </dcu-class-packets>
        <dcu-class-bytes>
          dcu-class-bytes
        </dcu-class-bytes>
        <dcu-class-pps>
          dcu-class-pps
        </dcu-class-pps>
        <dcu-class-bps>
          dcu-class-bps
        </dcu-class-bps>
      </destination-class>
    </destination-class-statistics>
  </address-family>
</logical-interface>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<physical-interface>
```

```
<logical-interface>
 <address-family>
  <destination-class-statistics>
   <destination-class>
    <dcu-class-name>
     dcu-class-name
    </dcu-class-name>
    <dcu-class-packets>
     dcu-class-packets
    </dcu-class-packets>
    <dcu-class-bytes>
     dcu-class-bytes
    </dcu-class-bytes>
    <dcu-class-pps>
     dcu-class-pps
    </dcu-class-pps>
    <dcu-class-bps>
     dcu-class-bps
    </dcu-class-bps>
   </destination-class>
  </destination-class-statistics>
 </address-family>
</logical-interface>
</physical-interface>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <destination-class-statistics>
     <destination-class>
      <dcu-class-name>
       dcu-class-name
      </dcu-class-name>
      <dcu-class-packets>
       dcu-class-packets
      </dcu-class-packets>
      <dcu-class-bytes>
       dcu-class-bytes
      </dcu-class-bytes>
      <dcu-class-pps>
       dcu-class-pps
      </dcu-class-pps>
      <dcu-class-bps>
       dcu-class-bps
      </dcu-class-bps>
     </destination-class>
    </destination-class-statistics>
   </address-family>
```


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```
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>
          <dcu-class-name>
            dcu-class-name
          </dcu-class-name>
          <dcu-class-packets>
            dcu-class-packets
          </dcu-class-packets>
          <dcu-class-bytes>
            dcu-class-bytes
          </dcu-class-bytes>
          <dcu-class-pps>
            dcu-class-pps
          </dcu-class-pps>
          <dcu-class-bps>
            dcu-class-bps
          </dcu-class-bps>
        </destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
</interface-information>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <destination-class-statistics>
          <destination-class>
            <dcu-class-name>
              dcu-class-name
            </dcu-class-name>
            <dcu-class-packets>
              dcu-class-packets
            </dcu-class-packets>
```

```
            <dcu-class-bytes>
              dcu-class-bytes
            </dcu-class-bytes>
            <dcu-class-pps>
              dcu-class-pps
            </dcu-class-pps>
            <dcu-class-bps>
              dcu-class-bps
            </dcu-class-bps>
          </destination-class>
        </destination-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>
          <dcu-class-name>
            dcu-class-name
          </dcu-class-name>
          <dcu-class-packets>
            dcu-class-packets
          </dcu-class-packets>
          <dcu-class-bytes>
            dcu-class-bytes
          </dcu-class-bytes>
          <dcu-class-pps>
            dcu-class-pps
          </dcu-class-pps>
          <dcu-class-bps>
            dcu-class-bps
          </dcu-class-bps>
        </destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description DCU statistics for a single class

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<destination-class>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <destination-class-statistics>
          <destination-class>
            <dcu-class-name>
              dcu-class-name
            </dcu-class-name>
            <dcu-class-packets>
              dcu-class-packets
            </dcu-class-packets>
            <dcu-class-bytes>
              dcu-class-bytes
            </dcu-class-bytes>
            <dcu-class-pps>
              dcu-class-pps
            </dcu-class-pps>
            <dcu-class-bps>
              dcu-class-bps
            </dcu-class-bps>
          </destination-class>
        </destination-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description DCU statistics for a single class

<destination-class>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>
          <dcu-class-name>
            dcu-class-name
          </dcu-class-name>
          <dcu-class-packets>
            dcu-class-packets
          </dcu-class-packets>
          <dcu-class-bytes>
            dcu-class-bytes
          </dcu-class-bytes>
          <dcu-class-pps>
            dcu-class-pps
          </dcu-class-pps>
```

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```
                <dcu-class-bps>
                  dcu-class-bps
                </dcu-class-bps>
              </destination-class>
            </destination-class-statistics>
          </address-family>
        </logical-interface>
      </interface-policer-information>
```

Description DCU statistics for a single class

<destination-class-statistics>

Usage

```
<destination-class-statistics>
  <destination-class>....</destination-class>
</destination-class-statistics>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<address-family>
  <destination-class-statistics>
    <destination-class>....</destination-class>
  </destination-class-statistics>
</address-family>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<logical-interface>
  <address-family>
    <destination-class-statistics>
      <destination-class>....</destination-class>
    </destination-class-statistics>
  </address-family>
</logical-interface>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<physical-interface>
  <logical-interface>
```


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```
    <address-family>
      <destination-class-statistics>
        <destination-class>....</destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <destination-class-statistics>
          <destination-class>....</destination-class>
        </destination-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>....</destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
</interface-information>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <destination-class-statistics>
          <destination-class>....</destination-class>
```

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```
            </destination-class-statistics>
          </address-family>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>....</destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <destination-class-statistics>
          <destination-class>....</destination-class>
        </destination-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Destination class usage (DCU) statistics

<destination-class-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <destination-class-statistics>
        <destination-class>....</destination-class>
      </destination-class-statistics>
    </address-family>
  </logical-interface>
```


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```
</interface-policer-information>
```

Description Destination class usage (DCU) statistics

<dial-string-list>

Usage

```
<dial-string-list>
  <dial-string>
    dial-string
  </dial-string>
</dial-string-list>
```

Description

<dial-string-list>

Usage

```
<dialer-interface>
  <dial-string-list>
    <dial-string>
      dial-string
    </dial-string>
  </dial-string-list>
</dialer-interface>
```

Description

<dial-string-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <dial-string-list>
      <dial-string>
        dial-string
      </dial-string>
    </dial-string-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

<dial-string-list>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>
      <dial-string-list>
        <dial-string>
```

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```
                dial-string
              </dial-string>
            </dial-string-list>
          </dialer-interface>
        </dialer-information>
      </logical-interface>
```

Description

<dial-string-list>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dial-string-list>
          <dial-string>
            dial-string
          </dial-string>
        </dial-string-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</physical-interface>
```

Description

<dial-string-list>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dial-string-list>
            <dial-string>
              dial-string
            </dial-string>
          </dial-string-list>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<dial-string-list>

Usage

```
<interface-information>
```


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```
  <logical-interface>
   <dialer-information>
    <dialer-interface>
     <dial-string-list>
      <dial-string>
       dial-string
      </dial-string>
     </dial-string-list>
    </dialer-interface>
   </dialer-information>
  </logical-interface>
</interface-information>
```

Description

<dial-string-list>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <dialer-information>
    <dialer-interface>
     <dial-string-list>
      <dial-string>
       dial-string
      </dial-string>
     </dial-string-list>
    </dialer-interface>
   </dialer-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<dial-string-list>

Usage

```
<interface-filter-information>
 <logical-interface>
  <dialer-information>
   <dialer-interface>
    <dial-string-list>
     <dial-string>
      dial-string
     </dial-string>
    </dial-string-list>
   </dialer-interface>
  </dialer-information>
 </logical-interface>
</interface-filter-information>
```

Description

<dial-string-list>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dial-string-list>
            <dial-string>
              dial-string
            </dial-string>
          </dial-string-list>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<dial-string-list>

Usage

```
<interface-policer-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dial-string-list>
          <dial-string>
            dial-string
          </dial-string>
        </dial-string-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-policer-information>
```

Description

<dialer-information>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>....</dialer-interface>
    <dialer-time-to-disconnect>
      dialer-time-to-disconnect
    </dialer-time-to-disconnect>
  </dialer-information>
</logical-interface>
```


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Description Dialer information

<dialer-information>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>....</dialer-interface>
      <dialer-time-to-disconnect>
        dialer-time-to-disconnect
      </dialer-time-to-disconnect>
    </dialer-information>
  </logical-interface>
</physical-interface>
```

Description Dialer information

<dialer-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>....</dialer-interface>
        <dialer-time-to-disconnect>
          dialer-time-to-disconnect
        </dialer-time-to-disconnect>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Dialer information

<dialer-information>

Usage

```
<interface-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>....</dialer-interface>
      <dialer-time-to-disconnect>
        dialer-time-to-disconnect
      </dialer-time-to-disconnect>
    </dialer-information>
  </logical-interface>
</interface-information>
```

Description Dialer information

<dialer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>....</dialer-interface>
        <dialer-time-to-disconnect>
          dialer-time-to-disconnect
        </dialer-time-to-disconnect>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Dialer information

<dialer-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>....</dialer-interface>
      <dialer-time-to-disconnect>
        dialer-time-to-disconnect
      </dialer-time-to-disconnect>
    </dialer-information>
  </logical-interface>
</interface-filter-information>
```

Description Dialer information

<dialer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>....</dialer-interface>
        <dialer-time-to-disconnect>
          dialer-time-to-disconnect
        </dialer-time-to-disconnect>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```


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Description Dialer information

<dialer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>....</dialer-interface>
      <dialer-time-to-disconnect>
        dialer-time-to-disconnect
      </dialer-time-to-disconnect>
    </dialer-information>
  </logical-interface>
</interface-policer-information>
```

Description Dialer information

<dialer-interface>

Usage

```
<dialer-interface>
  <dialer-interface-name>
    dialer-interface-name
  </dialer-interface-name>
  <dialer-interface-state>
    dialer-interface-state
  </dialer-interface-state>
  <dialer-interface-flags>....</dialer-interface-flags>
  <pool-id>
    pool-id
  </pool-id>
  <primary-interface>
    primary-interface
  </primary-interface>
  <dial-string-list>....</dial-string-list>
  <sub-interface-list>....</sub-interface-list>
  <watch-list>....</watch-list>
  <activation-delay>
    activation-delay
  </activation-delay>
  <deactivation-delay>
    deactivation-delay
  </deactivation-delay>
  <activation-delay-elapsed>
    activation-delay-elapsed
  </activation-delay-elapsed>
  <deactivation-delay-elapsed>
    deactivation-delay-elapsed
  </deactivation-delay-elapsed>
  <call-idle-timeout>
    call-idle-timeout
  </call-idle-timeout>
```

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```
<initial-route-check>
  initial-route-check
</initial-route-check>
<redial-delay>
  redial-delay
</redial-delay>
<callback-wait-period>
  callback-wait-period
</callback-wait-period>
<callback-wait-period-elapsed>
  callback-wait-period-elapsed
</callback-wait-period-elapsed>
<load-threshold>
  load-threshold
</load-threshold>
<load-interval>
  load-interval
</load-interval>
</dialer-interface>
```

Description

<dialer-interface>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <dialer-interface-name>
      dialer-interface-name
    </dialer-interface-name>
    <dialer-interface-state>
      dialer-interface-state
    </dialer-interface-state>
    <dialer-interface-flags>....</dialer-interface-flags>
    <pool-id>
      pool-id
    </pool-id>
    <primary-interface>
      primary-interface
    </primary-interface>
    <dial-string-list>....</dial-string-list>
    <sub-interface-list>....</sub-interface-list>
    <watch-list>....</watch-list>
    <activation-delay>
      activation-delay
    </activation-delay>
    <deactivation-delay>
      deactivation-delay
    </deactivation-delay>
    <activation-delay-elapsed>
      activation-delay-elapsed
    </activation-delay-elapsed>
    <deactivation-delay-elapsed>
      deactivation-delay-elapsed
    </deactivation-delay-elapsed>
```


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```
    <call-idle-timeout>
      call-idle-timeout
    </call-idle-timeout>
    <initial-route-check>
      initial-route-check
    </initial-route-check>
    <redial-delay>
      redial-delay
    </redial-delay>
    <callback-wait-period>
      callback-wait-period
    </callback-wait-period>
    <callback-wait-period-elapsed>
      callback-wait-period-elapsed
    </callback-wait-period-elapsed>
    <load-threshold>
      load-threshold
    </load-threshold>
    <load-interval>
      load-interval
    </load-interval>
  </dialer-interface>
</dialer-interface-information>
```

Description

<dialer-interface>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>
      <dialer-interface-name>
        dialer-interface-name
      </dialer-interface-name>
      <dialer-interface-state>
        dialer-interface-state
      </dialer-interface-state>
      <dialer-interface-flags>....</dialer-interface-flags>
      <pool-id>
        pool-id
      </pool-id>
      <primary-interface>
        primary-interface
      </primary-interface>
      <dial-string-list>....</dial-string-list>
      <sub-interface-list>....</sub-interface-list>
      <watch-list>....</watch-list>
      <activation-delay>
        activation-delay
      </activation-delay>
      <deactivation-delay>
        deactivation-delay
      </deactivation-delay>
      <activation-delay-elapsed>
```

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```
            activation-delay-elapsed
          </activation-delay-elapsed>
          <deactivation-delay-elapsed>
            deactivation-delay-elapsed
          </deactivation-delay-elapsed>
          <call-idle-timeout>
            call-idle-timeout
          </call-idle-timeout>
          <initial-route-check>
            initial-route-check
          </initial-route-check>
          <redial-delay>
            redial-delay
          </redial-delay>
          <callback-wait-period>
            callback-wait-period
          </callback-wait-period>
          <callback-wait-period-elapsed>
            callback-wait-period-elapsed
          </callback-wait-period-elapsed>
          <load-threshold>
            load-threshold
          </load-threshold>
          <load-interval>
            load-interval
          </load-interval>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
```

Description

<dialer-interface>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dialer-interface-name>
          dialer-interface-name
        </dialer-interface-name>
        <dialer-interface-state>
          dialer-interface-state
        </dialer-interface-state>
        <dialer-interface-flags>....</dialer-interface-flags>
        <pool-id>
          pool-id
        </pool-id>
        <primary-interface>
          primary-interface
        </primary-interface>
        <dial-string-list>....</dial-string-list>
        <sub-interface-list>....</sub-interface-list>
        <watch-list>....</watch-list>
```


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```
                <activation-delay>
                  activation-delay
                </activation-delay>
                <deactivation-delay>
                  deactivation-delay
                </deactivation-delay>
                <activation-delay-elapsed>
                  activation-delay-elapsed
                </activation-delay-elapsed>
                <deactivation-delay-elapsed>
                  deactivation-delay-elapsed
                </deactivation-delay-elapsed>
                <call-idle-timeout>
                  call-idle-timeout
                </call-idle-timeout>
                <initial-route-check>
                  initial-route-check
                </initial-route-check>
                <redial-delay>
                  redial-delay
                </redial-delay>
                <callback-wait-period>
                  callback-wait-period
                </callback-wait-period>
                <callback-wait-period-elapsed>
                  callback-wait-period-elapsed
                </callback-wait-period-elapsed>
                <load-threshold>
                  load-threshold
                </load-threshold>
                <load-interval>
                  load-interval
                </load-interval>
              </dialer-interface>
            </dialer-information>
          </logical-interface>
        </physical-interface>
```

Description

<dialer-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-name>
            dialer-interface-name
          </dialer-interface-name>
          <dialer-interface-state>
            dialer-interface-state
          </dialer-interface-state>
          <dialer-interface-flags>....</dialer-interface-flags>
```

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```
                <pool-id>
                  pool-id
                </pool-id>
                <primary-interface>
                  primary-interface
                </primary-interface>
                <dial-string-list>....</dial-string-list>
                <sub-interface-list>....</sub-interface-list>
                <watch-list>....</watch-list>
                <activation-delay>
                  activation-delay
                </activation-delay>
                <deactivation-delay>
                  deactivation-delay
                </deactivation-delay>
                <activation-delay-elapsed>
                  activation-delay-elapsed
                </activation-delay-elapsed>
                <deactivation-delay-elapsed>
                  deactivation-delay-elapsed
                </deactivation-delay-elapsed>
                <call-idle-timeout>
                  call-idle-timeout
                </call-idle-timeout>
                <initial-route-check>
                  initial-route-check
                </initial-route-check>
                <redial-delay>
                  redial-delay
                </redial-delay>
                <callback-wait-period>
                  callback-wait-period
                </callback-wait-period>
                <callback-wait-period-elapsed>
                  callback-wait-period-elapsed
                </callback-wait-period-elapsed>
                <load-threshold>
                  load-threshold
                </load-threshold>
                <load-interval>
                  load-interval
                </load-interval>
              </dialer-interface>
            </dialer-information>
          </logical-interface>
        </physical-interface>
      </interface-information>
```

Description

<dialer-interface>

Usage

```
<interface-information>
  <logical-interface>
```


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```
<dialer-information>
  <dialer-interface>
    <dialer-interface-name>
      dialer-interface-name
    </dialer-interface-name>
    <dialer-interface-state>
      dialer-interface-state
    </dialer-interface-state>
    <dialer-interface-flags>....</dialer-interface-flags>
    <pool-id>
      pool-id
    </pool-id>
    <primary-interface>
      primary-interface
    </primary-interface>
    <dial-string-list>....</dial-string-list>
    <sub-interface-list>....</sub-interface-list>
    <watch-list>....</watch-list>
    <activation-delay>
      activation-delay
    </activation-delay>
    <deactivation-delay>
      deactivation-delay
    </deactivation-delay>
    <activation-delay-elapsed>
      activation-delay-elapsed
    </activation-delay-elapsed>
    <deactivation-delay-elapsed>
      deactivation-delay-elapsed
    </deactivation-delay-elapsed>
    <call-idle-timeout>
      call-idle-timeout
    </call-idle-timeout>
    <initial-route-check>
      initial-route-check
    </initial-route-check>
    <redial-delay>
      redial-delay
    </redial-delay>
    <callback-wait-period>
      callback-wait-period
    </callback-wait-period>
    <callback-wait-period-elapsed>
      callback-wait-period-elapsed
    </callback-wait-period-elapsed>
    <load-threshold>
      load-threshold
    </load-threshold>
    <load-interval>
      load-interval
    </load-interval>
  </dialer-interface>
 </dialer-information>
</logical-interface>
</interface-information>
```

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Description

<dialer-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-name>
            dialer-interface-name
          </dialer-interface-name>
          <dialer-interface-state>
            dialer-interface-state
          </dialer-interface-state>
          <dialer-interface-flags>....</dialer-interface-flags>
          <pool-id>
            pool-id
          </pool-id>
          <primary-interface>
            primary-interface
          </primary-interface>
          <dial-string-list>....</dial-string-list>
          <sub-interface-list>....</sub-interface-list>
          <watch-list>....</watch-list>
          <activation-delay>
            activation-delay
          </activation-delay>
          <deactivation-delay>
            deactivation-delay
          </deactivation-delay>
          <activation-delay-elapsed>
            activation-delay-elapsed
          </activation-delay-elapsed>
          <deactivation-delay-elapsed>
            deactivation-delay-elapsed
          </deactivation-delay-elapsed>
          <call-idle-timeout>
            call-idle-timeout
          </call-idle-timeout>
          <initial-route-check>
            initial-route-check
          </initial-route-check>
          <redial-delay>
            redial-delay
          </redial-delay>
          <callback-wait-period>
            callback-wait-period
          </callback-wait-period>
          <callback-wait-period-elapsed>
            callback-wait-period-elapsed
          </callback-wait-period-elapsed>
          <load-threshold>
            load-threshold
          </load-threshold>
```


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```
            <load-interval>
              load-interval
            </load-interval>
          </dialer-interface>
        </dialer-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<dialer-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dialer-interface-name>
          dialer-interface-name
        </dialer-interface-name>
        <dialer-interface-state>
          dialer-interface-state
        </dialer-interface-state>
        <dialer-interface-flags>....</dialer-interface-flags>
        <pool-id>
          pool-id
        </pool-id>
        <primary-interface>
          primary-interface
        </primary-interface>
        <dial-string-list>....</dial-string-list>
        <sub-interface-list>....</sub-interface-list>
        <watch-list>....</watch-list>
        <activation-delay>
          activation-delay
        </activation-delay>
        <deactivation-delay>
          deactivation-delay
        </deactivation-delay>
        <activation-delay-elapsed>
          activation-delay-elapsed
        </activation-delay-elapsed>
        <deactivation-delay-elapsed>
          deactivation-delay-elapsed
        </deactivation-delay-elapsed>
        <call-idle-timeout>
          call-idle-timeout
        </call-idle-timeout>
        <initial-route-check>
          initial-route-check
        </initial-route-check>
        <redial-delay>
          redial-delay
        </redial-delay>
```

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```
        <callback-wait-period>
          callback-wait-period
        </callback-wait-period>
        <callback-wait-period-elapsed>
          callback-wait-period-elapsed
        </callback-wait-period-elapsed>
        <load-threshold>
          load-threshold
        </load-threshold>
        <load-interval>
          load-interval
        </load-interval>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-filter-information>
```

Description

<dialer-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-name>
            dialer-interface-name
          </dialer-interface-name>
          <dialer-interface-state>
            dialer-interface-state
          </dialer-interface-state>
          <dialer-interface-flags>....</dialer-interface-flags>
          <pool-id>
            pool-id
          </pool-id>
          <primary-interface>
            primary-interface
          </primary-interface>
          <dial-string-list>....</dial-string-list>
          <sub-interface-list>....</sub-interface-list>
          <watch-list>....</watch-list>
          <activation-delay>
            activation-delay
          </activation-delay>
          <deactivation-delay>
            deactivation-delay
          </deactivation-delay>
          <activation-delay-elapsed>
            activation-delay-elapsed
          </activation-delay-elapsed>
          <deactivation-delay-elapsed>
            deactivation-delay-elapsed
          </deactivation-delay-elapsed>
```


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```
        <call-idle-timeout>
          call-idle-timeout
        </call-idle-timeout>
        <initial-route-check>
          initial-route-check
        </initial-route-check>
        <redial-delay>
          redial-delay
        </redial-delay>
        <callback-wait-period>
          callback-wait-period
        </callback-wait-period>
        <callback-wait-period-elapsed>
          callback-wait-period-elapsed
        </callback-wait-period-elapsed>
        <load-threshold>
          load-threshold
        </load-threshold>
        <load-interval>
          load-interval
        </load-interval>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<dialer-interface>

Usage

```
<interface-policer-information>
 <logical-interface>
  <dialer-information>
   <dialer-interface>
    <dialer-interface-name>
     dialer-interface-name
    </dialer-interface-name>
    <dialer-interface-state>
     dialer-interface-state
    </dialer-interface-state>
    <dialer-interface-flags>....</dialer-interface-flags>
    <pool-id>
     pool-id
    </pool-id>
    <primary-interface>
     primary-interface
    </primary-interface>
    <dial-string-list>....</dial-string-list>
    <sub-interface-list>....</sub-interface-list>
    <watch-list>....</watch-list>
    <activation-delay>
     activation-delay
    </activation-delay>
```

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```
            <deactivation-delay>
              deactivation-delay
            </deactivation-delay>
            <activation-delay-elapsed>
              activation-delay-elapsed
            </activation-delay-elapsed>
            <deactivation-delay-elapsed>
              deactivation-delay-elapsed
            </deactivation-delay-elapsed>
            <call-idle-timeout>
              call-idle-timeout
            </call-idle-timeout>
            <initial-route-check>
              initial-route-check
            </initial-route-check>
            <redial-delay>
              redial-delay
            </redial-delay>
            <callback-wait-period>
              callback-wait-period
            </callback-wait-period>
            <callback-wait-period-elapsed>
              callback-wait-period-elapsed
            </callback-wait-period-elapsed>
            <load-threshold>
              load-threshold
            </load-threshold>
            <load-interval>
              load-interval
            </load-interval>
          </dialer-interface>
        </dialer-information>
      </logical-interface>
    </interface-policer-information>
```

Description

<dialer-interface-flags>

Usage

```
<dialer-interface>
  <dialer-interface-flags>
    <backup>
      backup
    </backup>
    <multilink>
      multilink
    </multilink>
    <watchlist>
      watchlist
    </watchlist>
    <interesting-detected>
      interesting-detected
    </interesting-detected>
  </dialer-interface-flags>
```


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```
</dialer-interface>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <dialer-interface-flags>
      <backup>
        backup
      </backup>
      <multilink>
        multilink
      </multilink>
      <watchlist>
        watchlist
      </watchlist>
      <interesting-detected>
        interesting-detected
      </interesting-detected>
    </dialer-interface-flags>
  </dialer-interface>
</dialer-interface-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>
      <dialer-interface-flags>
        <backup>
          backup
        </backup>
        <multilink>
          multilink
        </multilink>
        <watchlist>
          watchlist
        </watchlist>
        <interesting-detected>
          interesting-detected
        </interesting-detected>
      </dialer-interface-flags>
    </dialer-interface>
  </dialer-information>
</logical-interface>
```

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Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dialer-interface-flags>
          <backup>
            backup
          </backup>
          <multilink>
            multilink
          </multilink>
          <watchlist>
            watchlist
          </watchlist>
          <interesting-detected>
            interesting-detected
          </interesting-detected>
        </dialer-interface-flags>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</physical-interface>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-flags>
            <backup>
              backup
            </backup>
            <multilink>
              multilink
            </multilink>
            <watchlist>
              watchlist
            </watchlist>
            <interesting-detected>
              interesting-detected
            </interesting-detected>
          </dialer-interface-flags>
        </dialer-interface>
```


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```
        </dialer-information>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dialer-interface-flags>
          <backup>
            backup
          </backup>
          <multilink>
            multilink
          </multilink>
          <watchlist>
            watchlist
          </watchlist>
          <interesting-detected>
            interesting-detected
          </interesting-detected>
        </dialer-interface-flags>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-flags>
            <backup>
              backup
            </backup>
            <multilink>
              multilink
            </multilink>
            <watchlist>
              watchlist
```

```
                </watchlist>
                <interesting-detected>
                  interesting-detected
                </interesting-detected>
              </dialer-interface-flags>
            </dialer-interface>
          </dialer-information>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <dialer-interface-flags>
          <backup>
            backup
          </backup>
          <multilink>
            multilink
          </multilink>
          <watchlist>
            watchlist
          </watchlist>
          <interesting-detected>
            interesting-detected
          </interesting-detected>
        </dialer-interface-flags>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-filter-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <dialer-interface-flags>
            <backup>
              backup
```


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```
        </backup>
        <multilink>
          multilink
        </multilink>
        <watchlist>
          watchlist
        </watchlist>
        <interesting-detected>
          interesting-detected
        </interesting-detected>
      </dialer-interface-flags>
    </dialer-interface>
  </dialer-information>
 </logical-interface>
</physical-interface>
</interface-policer-information>
```

Description Flags indicating interface configuration

<dialer-interface-flags>

Usage

```
<interface-policer-information>
 <logical-interface>
  <dialer-information>
   <dialer-interface>
    <dialer-interface-flags>
     <backup>
      backup
     </backup>
     <multilink>
      multilink
     </multilink>
     <watchlist>
      watchlist
     </watchlist>
     <interesting-detected>
      interesting-detected
     </interesting-detected>
    </dialer-interface-flags>
   </dialer-interface>
  </dialer-information>
 </logical-interface>
</interface-policer-information>
```

Description Flags indicating interface configuration

<dialer-interface-information>

Usage

```
<dialer-interface-information>
 <dialer-interface>....</dialer-interface>
```

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```
</dialer-interface-information>
```

Description

<dlci-statistics>

Usage

```
<virtual-circuit-information>
 <dlci-statistics>
  <dlci-active>
   dlci-active
  </dlci-active>
  <dlci-inactive>
   dlci-inactive
  </dlci-inactive>
 </dlci-statistics>
</virtual-circuit-information>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<logical-interface>
 <virtual-circuit-information>
  <dlci-statistics>
   <dlci-active>
    dlci-active
   </dlci-active>
   <dlci-inactive>
    dlci-inactive
   </dlci-inactive>
  </dlci-statistics>
 </virtual-circuit-information>
</logical-interface>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <dlci-statistics>
    <dlci-active>
     dlci-active
    </dlci-active>
    <dlci-inactive>
     dlci-inactive
    </dlci-inactive>
```


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```
      </dlci-statistics>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <dlci-statistics>
          <dlci-active>
            dlci-active
          </dlci-active>
          <dlci-inactive>
            dlci-inactive
          </dlci-inactive>
        </dlci-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>
        <dlci-active>
          dlci-active
        </dlci-active>
        <dlci-inactive>
          dlci-inactive
        </dlci-inactive>
      </dlci-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description DLCI statistics for an interface

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<dlci-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <dlci-statistics>
          <dlci-active>
            dlci-active
          </dlci-active>
          <dlci-inactive>
            dlci-inactive
          </dlci-inactive>
        </dlci-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>
        <dlci-active>
          dlci-active
        </dlci-active>
        <dlci-inactive>
          dlci-inactive
        </dlci-inactive>
      </dlci-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <dlci-statistics>
          <dlci-active>
            dlci-active
```


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```
            </dlci-active>
            <dlci-inactive>
              dlci-inactive
            </dlci-inactive>
          </dlci-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description DLCI statistics for an interface

<dlci-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>
        <dlci-active>
          dlci-active
        </dlci-active>
        <dlci-inactive>
          dlci-inactive
        </dlci-inactive>
      </dlci-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description DLCI statistics for an interface

<docsis-information>

Usage

```
<interface-information>
  <docsis-information>
    <docsis-status-information>....</docsis-status-information>
    <docsis-media-properties>....</docsis-media-properties>
    <docsis-security-properties>....</docsis-security-properties>
  </docsis-information>
</interface-information>
```

Description

<docsis-media-properties>

Usage

```
<interface-information>
  <docsis-information>
    <docsis-media-properties>
```

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```
        <downstream-buffers-used>
          downstream-buffers-used
        </downstream-buffers-used>
        <downstream-buffers-free>
          downstream-buffers-free
        </downstream-buffers-free>
        <upstream-buffers-used>
          upstream-buffers-used
        </upstream-buffers-used>
        <upstream-buffers-free>
          upstream-buffers-free
        </upstream-buffers-free>
        <request-opportunity-burst>
          request-opportunity-burst
        </request-opportunity-burst>
        <physical-burst>
          physical-burst
        </physical-burst>
        <tuner-frequency>
          tuner-frequency
        </tuner-frequency>
        <standard-short-grant>
          standard-short-grant
        </standard-short-grant>
        <standard-long-grant>
          standard-long-grant
        </standard-long-grant>
      </docsis-media-properties>
    </docsis-information>
  </interface-information>
```

Description Information about media properties of DOCSIS interface

<docsis-media-properties>

Usage

```
<docsis-media-properties>
  <downstream-buffers-used>
    downstream-buffers-used
  </downstream-buffers-used>
  <downstream-buffers-free>
    downstream-buffers-free
  </downstream-buffers-free>
  <upstream-buffers-used>
    upstream-buffers-used
  </upstream-buffers-used>
  <upstream-buffers-free>
    upstream-buffers-free
  </upstream-buffers-free>
  <request-opportunity-burst>
    request-opportunity-burst
  </request-opportunity-burst>
  <physical-burst>
    physical-burst
```


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```
  </physical-burst>
  <tuner-frequency>
    tuner-frequency
  </tuner-frequency>
  <standard-short-grant>
    standard-short-grant
  </standard-short-grant>
  <standard-long-grant>
    standard-long-grant
  </standard-long-grant>
</docsis-media-properties>
```

Description Information about media properties of DOCSIS interface

<docsis-security-properties>

Usage

```
<interface-information>
  <docsis-information>
    <docsis-security-properties>
      <docsis-bpi>
        docsis-bpi
      </docsis-bpi>
      <encryption-algorithm>
        encryption-algorithm
      </encryption-algorithm>
      <key-length>
        key-length
      </key-length>
    </docsis-security-properties>
  </docsis-information>
</interface-information>
```

Description Information on security related properties of DOCSIS interface

<docsis-security-properties>

Usage

```
<docsis-security-properties>
  <docsis-bpi>
    docsis-bpi
  </docsis-bpi>
  <encryption-algorithm>
    encryption-algorithm
  </encryption-algorithm>
  <key-length>
    key-length
  </key-length>
</docsis-security-properties>
```

Description Information on security related properties of DOCSIS interface

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<docsis-status-information>

Usage

```
<interface-information>
  <docsis-information>
    <docsis-status-information>
      <docsis-state>
        docsis-state
      </docsis-state>
      <docsis-mode>
        docsis-mode
      </docsis-mode>
      <docsis-upstream-speed>
        docsis-upstream-speed
      </docsis-upstream-speed>
      <downstream-scanning>
        downstream-scanning
      </downstream-scanning>
      <ranging>
        ranging
      </ranging>
      <signal-to-noise-ratio>
        signal-to-noise-ratio
      </signal-to-noise-ratio>
      <power>
        power
      </power>
    </docsis-status-information>
  </docsis-information>
</interface-information>
```

Description Status of DOCSIS interface

<docsis-status-information>

Usage

```
<docsis-status-information>
  <docsis-state>
    docsis-state
  </docsis-state>
  <docsis-mode>
    docsis-mode
  </docsis-mode>
  <docsis-upstream-speed>
    docsis-upstream-speed
  </docsis-upstream-speed>
  <downstream-scanning>
    downstream-scanning
  </downstream-scanning>
  <ranging>
    ranging
  </ranging>
  <signal-to-noise-ratio>
```


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```
    signal-to-noise-ratio
   </signal-to-noise-ratio>
   <power>
    power
   </power>
  </docsis-status-information>
```

Description Status of DOCSIS interface

<ds0-bert-information>

Usage

```
  <ds0-bert-information>
   <ds0-bert-period>
    ds0-bert-period
   </ds0-bert-period>
   <ds0-bert-elapsed>
    ds0-bert-elapsed
   </ds0-bert-elapsed>
   <ds0-bert-status>
    ds0-bert-status
   </ds0-bert-status>
   <ds0-bert-algorithm>
    ds0-bert-algorithm
   </ds0-bert-algorithm>
   <ds0-bert-error-rate>
    ds0-bert-error-rate
   </ds0-bert-error-rate>
   <ds0-bert-induced-error-rate>
    ds0-bert-induced-error-rate
   </ds0-bert-induced-error-rate>
   <ds0-bert-bit-count>
    ds0-bert-bit-count
   </ds0-bert-bit-count>
   <ds0-bert-error-bit-count>
    ds0-bert-error-bit-count
   </ds0-bert-error-bit-count>
   <ds0-bert-los-status>
    ds0-bert-los-status
   </ds0-bert-los-status>
   <ds0-bert-los-count>
    ds0-bert-los-count
   </ds0-bert-los-count>
   <ds0-bert-los-seconds>
    ds0-bert-los-seconds
   </ds0-bert-los-seconds>
  </ds0-bert-information>
```

Description DS0 BERT configuration and statistics

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<ds0-bert-information>

Usage

```
<physical-interface>
  <ds0-bert-information>
    <ds0-bert-period>
      ds0-bert-period
    </ds0-bert-period>
    <ds0-bert-elapsed>
      ds0-bert-elapsed
    </ds0-bert-elapsed>
    <ds0-bert-status>
      ds0-bert-status
    </ds0-bert-status>
    <ds0-bert-algorithm>
      ds0-bert-algorithm
    </ds0-bert-algorithm>
    <ds0-bert-error-rate>
      ds0-bert-error-rate
    </ds0-bert-error-rate>
    <ds0-bert-induced-error-rate>
      ds0-bert-induced-error-rate
    </ds0-bert-induced-error-rate>
    <ds0-bert-bit-count>
      ds0-bert-bit-count
    </ds0-bert-bit-count>
    <ds0-bert-error-bit-count>
      ds0-bert-error-bit-count
    </ds0-bert-error-bit-count>
    <ds0-bert-los-status>
      ds0-bert-los-status
    </ds0-bert-los-status>
    <ds0-bert-los-count>
      ds0-bert-los-count
    </ds0-bert-los-count>
    <ds0-bert-los-seconds>
      ds0-bert-los-seconds
    </ds0-bert-los-seconds>
  </ds0-bert-information>
</physical-interface>
```

Description DS0 BERT configuration and statistics

<ds0-bert-information>

Usage

```
<interface-information>
  <physical-interface>
    <ds0-bert-information>
      <ds0-bert-period>
        ds0-bert-period
      </ds0-bert-period>
      <ds0-bert-elapsed>
```


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```
          ds0-bert-elapsed
        </ds0-bert-elapsed>
        <ds0-bert-status>
          ds0-bert-status
        </ds0-bert-status>
        <ds0-bert-algorithm>
          ds0-bert-algorithm
        </ds0-bert-algorithm>
        <ds0-bert-error-rate>
          ds0-bert-error-rate
        </ds0-bert-error-rate>
        <ds0-bert-induced-error-rate>
          ds0-bert-induced-error-rate
        </ds0-bert-induced-error-rate>
        <ds0-bert-bit-count>
          ds0-bert-bit-count
        </ds0-bert-bit-count>
        <ds0-bert-error-bit-count>
          ds0-bert-error-bit-count
        </ds0-bert-error-bit-count>
        <ds0-bert-los-status>
          ds0-bert-los-status
        </ds0-bert-los-status>
        <ds0-bert-los-count>
          ds0-bert-los-count
        </ds0-bert-los-count>
        <ds0-bert-los-seconds>
          ds0-bert-los-seconds
        </ds0-bert-los-seconds>
      </ds0-bert-information>
    </physical-interface>
  </interface-information>
```

Description DS0 BERT configuration and statistics

<ds0-bert-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ds0-bert-information>
      <ds0-bert-period>
        ds0-bert-period
      </ds0-bert-period>
      <ds0-bert-elapsed>
        ds0-bert-elapsed
      </ds0-bert-elapsed>
      <ds0-bert-status>
        ds0-bert-status
      </ds0-bert-status>
      <ds0-bert-algorithm>
        ds0-bert-algorithm
      </ds0-bert-algorithm>
      <ds0-bert-error-rate>
```

```
                ds0-bert-error-rate
               </ds0-bert-error-rate>
               <ds0-bert-induced-error-rate>
                ds0-bert-induced-error-rate
               </ds0-bert-induced-error-rate>
               <ds0-bert-bit-count>
                ds0-bert-bit-count
               </ds0-bert-bit-count>
               <ds0-bert-error-bit-count>
                ds0-bert-error-bit-count
               </ds0-bert-error-bit-count>
               <ds0-bert-los-status>
                ds0-bert-los-status
               </ds0-bert-los-status>
               <ds0-bert-los-count>
                ds0-bert-los-count
               </ds0-bert-los-count>
               <ds0-bert-los-seconds>
                ds0-bert-los-seconds
               </ds0-bert-los-seconds>
              </ds0-bert-information>
             </physical-interface>
            </interface-filter-information>
```

Description DS0 BERT configuration and statistics

<ds0-bert-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <ds0-bert-information>
   <ds0-bert-period>
    ds0-bert-period
   </ds0-bert-period>
   <ds0-bert-elapsed>
    ds0-bert-elapsed
   </ds0-bert-elapsed>
   <ds0-bert-status>
    ds0-bert-status
   </ds0-bert-status>
   <ds0-bert-algorithm>
    ds0-bert-algorithm
   </ds0-bert-algorithm>
   <ds0-bert-error-rate>
    ds0-bert-error-rate
   </ds0-bert-error-rate>
   <ds0-bert-induced-error-rate>
    ds0-bert-induced-error-rate
   </ds0-bert-induced-error-rate>
   <ds0-bert-bit-count>
    ds0-bert-bit-count
   </ds0-bert-bit-count>
   <ds0-bert-error-bit-count>
```


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```
            ds0-bert-error-bit-count
           </ds0-bert-error-bit-count>
           <ds0-bert-los-status>
            ds0-bert-los-status
           </ds0-bert-los-status>
           <ds0-bert-los-count>
            ds0-bert-los-count
           </ds0-bert-los-count>
           <ds0-bert-los-seconds>
            ds0-bert-los-seconds
           </ds0-bert-los-seconds>
          </ds0-bert-information>
         </physical-interface>
        </interface-policer-information>
```

Description DS0 BERT configuration and statistics

<ds1-bert-information>

Usage

```
<ds1-bert-information>
 <ds1-bert-period>
  ds1-bert-period
 </ds1-bert-period>
 <ds1-bert-elapsed>
  ds1-bert-elapsed
 </ds1-bert-elapsed>
 <ds1-bert-status>
  ds1-bert-status
 </ds1-bert-status>
 <ds1-bert-algorithm>
  ds1-bert-algorithm
 </ds1-bert-algorithm>
 <ds1-bert-error-rate>
  ds1-bert-error-rate
 </ds1-bert-error-rate>
 <ds1-bert-induced-error-rate>
  ds1-bert-induced-error-rate
 </ds1-bert-induced-error-rate>
 <ds1-bert-bit-count>
  ds1-bert-bit-count
 </ds1-bert-bit-count>
 <ds1-bert-error-bit-count>
  ds1-bert-error-bit-count
 </ds1-bert-error-bit-count>
 <ds1-bert-los-status>
  ds1-bert-los-status
 </ds1-bert-los-status>
 <ds1-bert-los-count>
  ds1-bert-los-count
 </ds1-bert-los-count>
 <ds1-bert-los-seconds>
  ds1-bert-los-seconds
 </ds1-bert-los-seconds>
```

```
</ds1-bert-information>
```

Description DS1 BERT configuration and statistics

<ds1-bert-information>

Usage

```
<physical-interface>
  <ds1-bert-information>
    <ds1-bert-period>
      ds1-bert-period
    </ds1-bert-period>
    <ds1-bert-elapsed>
      ds1-bert-elapsed
    </ds1-bert-elapsed>
    <ds1-bert-status>
      ds1-bert-status
    </ds1-bert-status>
    <ds1-bert-algorithm>
      ds1-bert-algorithm
    </ds1-bert-algorithm>
    <ds1-bert-error-rate>
      ds1-bert-error-rate
    </ds1-bert-error-rate>
    <ds1-bert-induced-error-rate>
      ds1-bert-induced-error-rate
    </ds1-bert-induced-error-rate>
    <ds1-bert-bit-count>
      ds1-bert-bit-count
    </ds1-bert-bit-count>
    <ds1-bert-error-bit-count>
      ds1-bert-error-bit-count
    </ds1-bert-error-bit-count>
    <ds1-bert-los-status>
      ds1-bert-los-status
    </ds1-bert-los-status>
    <ds1-bert-los-count>
      ds1-bert-los-count
    </ds1-bert-los-count>
    <ds1-bert-los-seconds>
      ds1-bert-los-seconds
    </ds1-bert-los-seconds>
  </ds1-bert-information>
</physical-interface>
```

Description DS1 BERT configuration and statistics

<ds1-bert-information>

Usage

```
<interface-information>
  <physical-interface>
```


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```
<ds1-bert-information>
  <ds1-bert-period>
    ds1-bert-period
  </ds1-bert-period>
  <ds1-bert-elapsed>
    ds1-bert-elapsed
  </ds1-bert-elapsed>
  <ds1-bert-status>
    ds1-bert-status
  </ds1-bert-status>
  <ds1-bert-algorithm>
    ds1-bert-algorithm
  </ds1-bert-algorithm>
  <ds1-bert-error-rate>
    ds1-bert-error-rate
  </ds1-bert-error-rate>
  <ds1-bert-induced-error-rate>
    ds1-bert-induced-error-rate
  </ds1-bert-induced-error-rate>
  <ds1-bert-bit-count>
    ds1-bert-bit-count
  </ds1-bert-bit-count>
  <ds1-bert-error-bit-count>
    ds1-bert-error-bit-count
  </ds1-bert-error-bit-count>
  <ds1-bert-los-status>
    ds1-bert-los-status
  </ds1-bert-los-status>
  <ds1-bert-los-count>
    ds1-bert-los-count
  </ds1-bert-los-count>
  <ds1-bert-los-seconds>
    ds1-bert-los-seconds
  </ds1-bert-los-seconds>
</ds1-bert-information>
</physical-interface>
</interface-information>
```

Description DS1 BERT configuration and statistics

<ds1-bert-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ds1-bert-information>
      <ds1-bert-period>
        ds1-bert-period
      </ds1-bert-period>
      <ds1-bert-elapsed>
        ds1-bert-elapsed
      </ds1-bert-elapsed>
      <ds1-bert-status>
        ds1-bert-status
```

```
        </ds1-bert-status>
        <ds1-bert-algorithm>
          ds1-bert-algorithm
        </ds1-bert-algorithm>
        <ds1-bert-error-rate>
          ds1-bert-error-rate
        </ds1-bert-error-rate>
        <ds1-bert-induced-error-rate>
          ds1-bert-induced-error-rate
        </ds1-bert-induced-error-rate>
        <ds1-bert-bit-count>
          ds1-bert-bit-count
        </ds1-bert-bit-count>
        <ds1-bert-error-bit-count>
          ds1-bert-error-bit-count
        </ds1-bert-error-bit-count>
        <ds1-bert-los-status>
          ds1-bert-los-status
        </ds1-bert-los-status>
        <ds1-bert-los-count>
          ds1-bert-los-count
        </ds1-bert-los-count>
        <ds1-bert-los-seconds>
          ds1-bert-los-seconds
        </ds1-bert-los-seconds>
      </ds1-bert-information>
    </physical-interface>
  </interface-filter-information>
```

Description DS1 BERT configuration and statistics

<ds1-bert-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ds1-bert-information>
      <ds1-bert-period>
        ds1-bert-period
      </ds1-bert-period>
      <ds1-bert-elapsed>
        ds1-bert-elapsed
      </ds1-bert-elapsed>
      <ds1-bert-status>
        ds1-bert-status
      </ds1-bert-status>
      <ds1-bert-algorithm>
        ds1-bert-algorithm
      </ds1-bert-algorithm>
      <ds1-bert-error-rate>
        ds1-bert-error-rate
      </ds1-bert-error-rate>
      <ds1-bert-induced-error-rate>
        ds1-bert-induced-error-rate
```


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```
        </ds1-bert-induced-error-rate>
        <ds1-bert-bit-count>
          ds1-bert-bit-count
        </ds1-bert-bit-count>
        <ds1-bert-error-bit-count>
          ds1-bert-error-bit-count
        </ds1-bert-error-bit-count>
        <ds1-bert-los-status>
          ds1-bert-los-status
        </ds1-bert-los-status>
        <ds1-bert-los-count>
          ds1-bert-los-count
        </ds1-bert-los-count>
        <ds1-bert-los-seconds>
          ds1-bert-los-seconds
        </ds1-bert-los-seconds>
      </ds1-bert-information>
    </physical-interface>
  </interface-policer-information>
```

Description DS1 BERT configuration and statistics

<ds1-crc-alarm-threshold>

Usage

```
<physical-interface>
  <ds1-crc-alarm-threshold>
    <ds1-crc-alarm-threshold-major>
      ds1-crc-alarm-threshold-major
    </ds1-crc-alarm-threshold-major>
    <ds1-crc-alarm-threshold-minor>
      ds1-crc-alarm-threshold-minor
    </ds1-crc-alarm-threshold-minor>
  </ds1-crc-alarm-threshold>
</physical-interface>
```

Description DS1 CRC alarm thresholds

<ds1-crc-alarm-threshold>

Usage

```
<interface-information>
  <physical-interface>
    <ds1-crc-alarm-threshold>
      <ds1-crc-alarm-threshold-major>
        ds1-crc-alarm-threshold-major
      </ds1-crc-alarm-threshold-major>
      <ds1-crc-alarm-threshold-minor>
        ds1-crc-alarm-threshold-minor
      </ds1-crc-alarm-threshold-minor>
    </ds1-crc-alarm-threshold>
  </physical-interface>
```

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```
</interface-information>
```

Description DS1 CRC alarm thresholds

<ds1-crc-alarm-threshold>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ds1-crc-alarm-threshold>
      <ds1-crc-alarm-threshold-major>
        ds1-crc-alarm-threshold-major
      </ds1-crc-alarm-threshold-major>
      <ds1-crc-alarm-threshold-minor>
        ds1-crc-alarm-threshold-minor
      </ds1-crc-alarm-threshold-minor>
    </ds1-crc-alarm-threshold>
  </physical-interface>
</interface-filter-information>
```

Description DS1 CRC alarm thresholds

<ds1-crc-alarm-threshold>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ds1-crc-alarm-threshold>
      <ds1-crc-alarm-threshold-major>
        ds1-crc-alarm-threshold-major
      </ds1-crc-alarm-threshold-major>
      <ds1-crc-alarm-threshold-minor>
        ds1-crc-alarm-threshold-minor
      </ds1-crc-alarm-threshold-minor>
    </ds1-crc-alarm-threshold>
  </physical-interface>
</interface-policer-information>
```

Description DS1 CRC alarm thresholds

<ds3-bert-information>

Usage

```
<ds3-bert-information>
  <ds3-bert-period>
    ds3-bert-period
  </ds3-bert-period>
  <ds3-bert-elapsed>
    ds3-bert-elapsed
  </ds3-bert-elapsed>
  <ds3-bert-status>
```

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```
  ds3-bert-status
 </ds3-bert-status>
 <ds3-bert-algorithm>
  ds3-bert-algorithm
 </ds3-bert-algorithm>
 <ds3-bert-error-rate>
  ds3-bert-error-rate
 </ds3-bert-error-rate>
 <ds3-bert-induced-error-rate>
  ds3-bert-induced-error-rate
 </ds3-bert-induced-error-rate>
 <ds3-bert-bit-count>
  ds3-bert-bit-count
 </ds3-bert-bit-count>
 <ds3-bert-bit-count-overflow>
  ds3-bert-bit-count-overflow
 </ds3-bert-bit-count-overflow>
 <ds3-bert-error-bit-count>
  ds3-bert-error-bit-count
 </ds3-bert-error-bit-count>
 <ds3-bert-error-bit-count-overflow>
  ds3-bert-error-bit-count-overflow
 </ds3-bert-error-bit-count-overflow>
 <ds3-bert-los-status>
  ds3-bert-los-status
 </ds3-bert-los-status>
 <ds3-bert-los-count>
  ds3-bert-los-count
 </ds3-bert-los-count>
 <ds3-bert-los-seconds>
  ds3-bert-los-seconds
 </ds3-bert-los-seconds>
</ds3-bert-information>
```

Description DS3 BERT configuration and statistics

<ds3-bert-information>

Usage

```
<physical-interface>
 <ds3-bert-information>
  <ds3-bert-period>
   ds3-bert-period
  </ds3-bert-period>
  <ds3-bert-elapsed>
   ds3-bert-elapsed
  </ds3-bert-elapsed>
  <ds3-bert-status>
   ds3-bert-status
  </ds3-bert-status>
  <ds3-bert-algorithm>
   ds3-bert-algorithm
  </ds3-bert-algorithm>
  <ds3-bert-error-rate>
```

```
      ds3-bert-error-rate
    </ds3-bert-error-rate>
    <ds3-bert-induced-error-rate>
      ds3-bert-induced-error-rate
    </ds3-bert-induced-error-rate>
    <ds3-bert-bit-count>
      ds3-bert-bit-count
    </ds3-bert-bit-count>
    <ds3-bert-bit-count-overflow>
      ds3-bert-bit-count-overflow
    </ds3-bert-bit-count-overflow>
    <ds3-bert-error-bit-count>
      ds3-bert-error-bit-count
    </ds3-bert-error-bit-count>
    <ds3-bert-error-bit-count-overflow>
      ds3-bert-error-bit-count-overflow
    </ds3-bert-error-bit-count-overflow>
    <ds3-bert-los-status>
      ds3-bert-los-status
    </ds3-bert-los-status>
    <ds3-bert-los-count>
      ds3-bert-los-count
    </ds3-bert-los-count>
    <ds3-bert-los-seconds>
      ds3-bert-los-seconds
    </ds3-bert-los-seconds>
  </ds3-bert-information>
</physical-interface>
```

Description DS3 BERT configuration and statistics

<ds3-bert-information>

Usage

```
<interface-information>
  <physical-interface>
    <ds3-bert-information>
      <ds3-bert-period>
        ds3-bert-period
      </ds3-bert-period>
      <ds3-bert-elapsed>
        ds3-bert-elapsed
      </ds3-bert-elapsed>
      <ds3-bert-status>
        ds3-bert-status
      </ds3-bert-status>
      <ds3-bert-algorithm>
        ds3-bert-algorithm
      </ds3-bert-algorithm>
      <ds3-bert-error-rate>
        ds3-bert-error-rate
      </ds3-bert-error-rate>
      <ds3-bert-induced-error-rate>
        ds3-bert-induced-error-rate
```


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```
        </ds3-bert-induced-error-rate>
        <ds3-bert-bit-count>
          ds3-bert-bit-count
        </ds3-bert-bit-count>
        <ds3-bert-bit-count-overflow>
          ds3-bert-bit-count-overflow
        </ds3-bert-bit-count-overflow>
        <ds3-bert-error-bit-count>
          ds3-bert-error-bit-count
        </ds3-bert-error-bit-count>
        <ds3-bert-error-bit-count-overflow>
          ds3-bert-error-bit-count-overflow
        </ds3-bert-error-bit-count-overflow>
        <ds3-bert-los-status>
          ds3-bert-los-status
        </ds3-bert-los-status>
        <ds3-bert-los-count>
          ds3-bert-los-count
        </ds3-bert-los-count>
        <ds3-bert-los-seconds>
          ds3-bert-los-seconds
        </ds3-bert-los-seconds>
      </ds3-bert-information>
    </physical-interface>
  </interface-information>
```

Description DS3 BERT configuration and statistics

<ds3-bert-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ds3-bert-information>
      <ds3-bert-period>
        ds3-bert-period
      </ds3-bert-period>
      <ds3-bert-elapsed>
        ds3-bert-elapsed
      </ds3-bert-elapsed>
      <ds3-bert-status>
        ds3-bert-status
      </ds3-bert-status>
      <ds3-bert-algorithm>
        ds3-bert-algorithm
      </ds3-bert-algorithm>
      <ds3-bert-error-rate>
        ds3-bert-error-rate
      </ds3-bert-error-rate>
      <ds3-bert-induced-error-rate>
        ds3-bert-induced-error-rate
      </ds3-bert-induced-error-rate>
      <ds3-bert-bit-count>
        ds3-bert-bit-count
```

```
        </ds3-bert-bit-count>
        <ds3-bert-bit-count-overflow>
          ds3-bert-bit-count-overflow
        </ds3-bert-bit-count-overflow>
        <ds3-bert-error-bit-count>
          ds3-bert-error-bit-count
        </ds3-bert-error-bit-count>
        <ds3-bert-error-bit-count-overflow>
          ds3-bert-error-bit-count-overflow
        </ds3-bert-error-bit-count-overflow>
        <ds3-bert-los-status>
          ds3-bert-los-status
        </ds3-bert-los-status>
        <ds3-bert-los-count>
          ds3-bert-los-count
        </ds3-bert-los-count>
        <ds3-bert-los-seconds>
          ds3-bert-los-seconds
        </ds3-bert-los-seconds>
      </ds3-bert-information>
    </physical-interface>
  </interface-filter-information>
```

Description DS3 BERT configuration and statistics

<ds3-bert-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ds3-bert-information>
      <ds3-bert-period>
        ds3-bert-period
      </ds3-bert-period>
      <ds3-bert-elapsed>
        ds3-bert-elapsed
      </ds3-bert-elapsed>
      <ds3-bert-status>
        ds3-bert-status
      </ds3-bert-status>
      <ds3-bert-algorithm>
        ds3-bert-algorithm
      </ds3-bert-algorithm>
      <ds3-bert-error-rate>
        ds3-bert-error-rate
      </ds3-bert-error-rate>
      <ds3-bert-induced-error-rate>
        ds3-bert-induced-error-rate
      </ds3-bert-induced-error-rate>
      <ds3-bert-bit-count>
        ds3-bert-bit-count
      </ds3-bert-bit-count>
      <ds3-bert-bit-count-overflow>
        ds3-bert-bit-count-overflow
```


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```
      </ds3-bert-bit-count-overflow>
      <ds3-bert-error-bit-count>
        ds3-bert-error-bit-count
      </ds3-bert-error-bit-count>
      <ds3-bert-error-bit-count-overflow>
        ds3-bert-error-bit-count-overflow
      </ds3-bert-error-bit-count-overflow>
      <ds3-bert-los-status>
        ds3-bert-los-status
      </ds3-bert-los-status>
      <ds3-bert-los-count>
        ds3-bert-los-count
      </ds3-bert-los-count>
      <ds3-bert-los-seconds>
        ds3-bert-los-seconds
      </ds3-bert-los-seconds>
    </ds3-bert-information>
  </physical-interface>
</interface-policer-information>
```

Description DS3 BERT configuration and statistics

<dsl-chipset-information>

Usage

```
<dsl-information>
  <dsl-chipset-information>
    <atu-r-vendor-id>
      atu-r-vendor-id
    </atu-r-vendor-id>
    <atu-c-vendor-id>
      atu-c-vendor-id
    </atu-c-vendor-id>
    <atu-r-vendor-specific>
      atu-r-vendor-specific
    </atu-r-vendor-specific>
    <atu-c-vendor-specific>
      atu-c-vendor-specific
    </atu-c-vendor-specific>
    <atu-r-country-code>
      atu-r-country-code
    </atu-r-country-code>
    <atu-c-country-code>
      atu-c-country-code
    </atu-c-country-code>
  </dsl-chipset-information>
</dsl-information>
```

Description

<dsl-chipset-information>

Usage

```
<physical-interface>
  <dsl-information>
    <dsl-chipset-information>
      <atu-r-vendor-id>
        atu-r-vendor-id
      </atu-r-vendor-id>
      <atu-c-vendor-id>
        atu-c-vendor-id
      </atu-c-vendor-id>
      <atu-r-vendor-specific>
        atu-r-vendor-specific
      </atu-r-vendor-specific>
      <atu-c-vendor-specific>
        atu-c-vendor-specific
      </atu-c-vendor-specific>
      <atu-r-country-code>
        atu-r-country-code
      </atu-r-country-code>
      <atu-c-country-code>
        atu-c-country-code
      </atu-c-country-code>
    </dsl-chipset-information>
  </dsl-information>
</physical-interface>
```

Description

<dsl-chipset-information>

Usage

```
<interface-information>
  <physical-interface>
    <dsl-information>
      <dsl-chipset-information>
        <atu-r-vendor-id>
          atu-r-vendor-id
        </atu-r-vendor-id>
        <atu-c-vendor-id>
          atu-c-vendor-id
        </atu-c-vendor-id>
        <atu-r-vendor-specific>
          atu-r-vendor-specific
        </atu-r-vendor-specific>
        <atu-c-vendor-specific>
          atu-c-vendor-specific
        </atu-c-vendor-specific>
        <atu-r-country-code>
          atu-r-country-code
        </atu-r-country-code>
        <atu-c-country-code>
          atu-c-country-code
```


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```
        </atu-c-country-code>
       </dsl-chipset-information>
      </dsl-information>
     </physical-interface>
    </interface-information>
```

Description

<dsl-chipset-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <dsl-information>
   <dsl-chipset-information>
    <atu-r-vendor-id>
     atu-r-vendor-id
    </atu-r-vendor-id>
    <atu-c-vendor-id>
     atu-c-vendor-id
    </atu-c-vendor-id>
    <atu-r-vendor-specific>
     atu-r-vendor-specific
    </atu-r-vendor-specific>
    <atu-c-vendor-specific>
     atu-c-vendor-specific
    </atu-c-vendor-specific>
    <atu-r-country-code>
     atu-r-country-code
    </atu-r-country-code>
    <atu-c-country-code>
     atu-c-country-code
    </atu-c-country-code>
   </dsl-chipset-information>
  </dsl-information>
 </physical-interface>
</interface-filter-information>
```

Description

<dsl-chipset-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <dsl-information>
   <dsl-chipset-information>
    <atu-r-vendor-id>
     atu-r-vendor-id
    </atu-r-vendor-id>
    <atu-c-vendor-id>
     atu-c-vendor-id
    </atu-c-vendor-id>
    <atu-r-vendor-specific>
```

```
            atu-r-vendor-specific
           </atu-r-vendor-specific>
           <atu-c-vendor-specific>
            atu-c-vendor-specific
           </atu-c-vendor-specific>
           <atu-r-country-code>
            atu-r-country-code
           </atu-r-country-code>
           <atu-c-country-code>
            atu-c-country-code
           </atu-c-country-code>
          </dsl-chipset-information>
        </dsl-information>
      </physical-interface>
    </interface-policer-information>
```

Description

<dsl-information>

Usage

```
<dsl-information>
  <dsl-line-status>
   dsl-line-status
  </dsl-line-status>
  <dsl-line-operating-mode>
   dsl-line-operating-mode
  </dsl-line-operating-mode>
  <dsl-line-type>
   dsl-line-type
  </dsl-line-type>
  <adsl-annex-type>
   adsl-annex-type
  </adsl-annex-type>
  <adsl-last-fail-code>
   adsl-last-fail-code
  </adsl-last-fail-code>
  <adsl-subfunction>
   adsl-subfunction
  </adsl-subfunction>
  <adsl-seconds-in-showtime>
   adsl-seconds-in-showtime
  </adsl-seconds-in-showtime>
  <dsl-chipset-information>....</dsl-chipset-information>
  <dsl-statistics>....</dsl-statistics>
</dsl-information>
```

Description Operational information and statistics for ADSL interfaces

<dsl-information>

Usage

```
<physical-interface>
```


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```
<dsl-information>
  <dsl-line-status>
    dsl-line-status
  </dsl-line-status>
  <dsl-line-operating-mode>
    dsl-line-operating-mode
  </dsl-line-operating-mode>
  <dsl-line-type>
    dsl-line-type
  </dsl-line-type>
  <adsl-annex-type>
    adsl-annex-type
  </adsl-annex-type>
  <adsl-last-fail-code>
    adsl-last-fail-code
  </adsl-last-fail-code>
  <adsl-subfunction>
    adsl-subfunction
  </adsl-subfunction>
  <adsl-seconds-in-showtime>
    adsl-seconds-in-showtime
  </adsl-seconds-in-showtime>
  <dsl-chipset-information>....</dsl-chipset-information>
  <dsl-statistics>....</dsl-statistics>
 </dsl-information>
</physical-interface>
```

Description Operational information and statistics for ADSL interfaces

<dsl-information>

Usage

```
<interface-information>
 <physical-interface>
  <dsl-information>
   <dsl-line-status>
    dsl-line-status
   </dsl-line-status>
   <dsl-line-operating-mode>
    dsl-line-operating-mode
   </dsl-line-operating-mode>
   <dsl-line-type>
    dsl-line-type
   </dsl-line-type>
   <adsl-annex-type>
    adsl-annex-type
   </adsl-annex-type>
   <adsl-last-fail-code>
    adsl-last-fail-code
   </adsl-last-fail-code>
   <adsl-subfunction>
    adsl-subfunction
   </adsl-subfunction>
   <adsl-seconds-in-showtime>
```

```
        adsl-seconds-in-showtime
      </adsl-seconds-in-showtime>
      <dsl-chipset-information>....</dsl-chipset-information>
      <dsl-statistics>....</dsl-statistics>
    </dsl-information>
  </physical-interface>
</interface-information>
```

Description Operational information and statistics for ADSL interfaces

<dsl-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <dsl-information>
      <dsl-line-status>
        dsl-line-status
      </dsl-line-status>
      <dsl-line-operating-mode>
        dsl-line-operating-mode
      </dsl-line-operating-mode>
      <dsl-line-type>
        dsl-line-type
      </dsl-line-type>
      <adsl-annex-type>
        adsl-annex-type
      </adsl-annex-type>
      <adsl-last-fail-code>
        adsl-last-fail-code
      </adsl-last-fail-code>
      <adsl-subfunction>
        adsl-subfunction
      </adsl-subfunction>
      <adsl-seconds-in-showtime>
        adsl-seconds-in-showtime
      </adsl-seconds-in-showtime>
      <dsl-chipset-information>....</dsl-chipset-information>
      <dsl-statistics>....</dsl-statistics>
    </dsl-information>
  </physical-interface>
</interface-filter-information>
```

Description Operational information and statistics for ADSL interfaces

<dsl-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <dsl-information>
      <dsl-line-status>
```


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```
        dsl-line-status
       </dsl-line-status>
       <dsl-line-operating-mode>
        dsl-line-operating-mode
       </dsl-line-operating-mode>
       <dsl-line-type>
        dsl-line-type
       </dsl-line-type>
       <adsl-annex-type>
        adsl-annex-type
       </adsl-annex-type>
       <adsl-last-fail-code>
        adsl-last-fail-code
       </adsl-last-fail-code>
       <adsl-subfunction>
        adsl-subfunction
       </adsl-subfunction>
       <adsl-seconds-in-showtime>
        adsl-seconds-in-showtime
       </adsl-seconds-in-showtime>
       <dsl-chipset-information>....</dsl-chipset-information>
       <dsl-statistics>....</dsl-statistics>
      </dsl-information>
     </physical-interface>
    </interface-policer-information>
```

Description Operational information and statistics for ADSL interfaces

<dsl-statistics>

Usage

```
<dsl-information>
 <dsl-statistics>
  <near-end-attainable-bitrate>
   near-end-attainable-bitrate
  </near-end-attainable-bitrate>
  <far-end-attainable-bitrate>
   far-end-attainable-bitrate
  </far-end-attainable-bitrate>
  <near-end-attenuation>
   near-end-attenuation
  </near-end-attenuation>
  <far-end-attenuation>
   far-end-attenuation
  </far-end-attenuation>
  <near-end-capacity-used>
   near-end-capacity-used
  </near-end-capacity-used>
  <far-end-capacity-used>
   far-end-capacity-used
  </far-end-capacity-used>
  <near-end-noise-margin>
   near-end-noise-margin
  </near-end-noise-margin>
```

```
<far-end-noise-margin>
  far-end-noise-margin
</far-end-noise-margin>
<near-end-output-power>
  near-end-output-power
</near-end-output-power>
<far-end-output-power>
  far-end-output-power
</far-end-output-power>
<interleaved-rx-cells>
  interleaved-rx-cells
</interleaved-rx-cells>
<fast-rx-cells>
  fast-rx-cells
</fast-rx-cells>
<interleaved-tx-cells>
  interleaved-tx-cells
</interleaved-tx-cells>
<fast-tx-cells>
  fast-tx-cells
</fast-tx-cells>
<near-end-interleaved-bitrate>
  near-end-interleaved-bitrate
</near-end-interleaved-bitrate>
<near-end-fast-bitrate>
  near-end-fast-bitrate
</near-end-fast-bitrate>
<far-end-interleaved-bitrate>
  far-end-interleaved-bitrate
</far-end-interleaved-bitrate>
<far-end-fast-bitrate>
  far-end-fast-bitrate
</far-end-fast-bitrate>
<near-end-interleaved-crc>
  near-end-interleaved-crc
</near-end-interleaved-crc>
<near-end-fast-crc>
  near-end-fast-crc
</near-end-fast-crc>
<far-end-interleaved-crc>
  far-end-interleaved-crc
</far-end-interleaved-crc>
<far-end-fast-crc>
  far-end-fast-crc
</far-end-fast-crc>
<near-end-interleaved-hec>
  near-end-interleaved-hec
</near-end-interleaved-hec>
<near-end-fast-hec>
  near-end-fast-hec
</near-end-fast-hec>
<far-end-interleaved-hec>
  far-end-interleaved-hec
</far-end-interleaved-hec>
<far-end-fast-hec>
  far-end-fast-hec
```


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```
    </far-end-fast-hec>
    <near-end-interleaved-fec>
      near-end-interleaved-fec
    </near-end-interleaved-fec>
    <near-end-fast-fec>
      near-end-fast-fec
    </near-end-fast-fec>
    <far-end-interleaved-fec>
      far-end-interleaved-fec
    </far-end-interleaved-fec>
    <far-end-fast-fec>
      far-end-fast-fec
    </far-end-fast-fec>
    <near-end-interleaved-rx-cells>
      near-end-interleaved-rx-cells
    </near-end-interleaved-rx-cells>
    <near-end-fast-rx-cells>
      near-end-fast-rx-cells
    </near-end-fast-rx-cells>
    <near-end-interleaved-tx-cells>
      near-end-interleaved-tx-cells
    </near-end-interleaved-tx-cells>
    <near-end-fast-tx-cells>
      near-end-fast-tx-cells
    </near-end-fast-tx-cells>
  </dsl-statistics>
</dsl-information>
```

Description

<dsl-statistics>

Usage

```
<physical-interface>
  <dsl-information>
    <dsl-statistics>
      <near-end-attainable-bitrate>
        near-end-attainable-bitrate
      </near-end-attainable-bitrate>
      <far-end-attainable-bitrate>
        far-end-attainable-bitrate
      </far-end-attainable-bitrate>
      <near-end-attenuation>
        near-end-attenuation
      </near-end-attenuation>
      <far-end-attenuation>
        far-end-attenuation
      </far-end-attenuation>
      <near-end-capacity-used>
        near-end-capacity-used
      </near-end-capacity-used>
      <far-end-capacity-used>
        far-end-capacity-used
      </far-end-capacity-used>
      <near-end-noise-margin>
```

```
  near-end-noise-margin
</near-end-noise-margin>
<far-end-noise-margin>
  far-end-noise-margin
</far-end-noise-margin>
<near-end-output-power>
  near-end-output-power
</near-end-output-power>
<far-end-output-power>
  far-end-output-power
</far-end-output-power>
<interleaved-rx-cells>
  interleaved-rx-cells
</interleaved-rx-cells>
<fast-rx-cells>
  fast-rx-cells
</fast-rx-cells>
<interleaved-tx-cells>
  interleaved-tx-cells
</interleaved-tx-cells>
<fast-tx-cells>
  fast-tx-cells
</fast-tx-cells>
<near-end-interleaved-bitrate>
  near-end-interleaved-bitrate
</near-end-interleaved-bitrate>
<near-end-fast-bitrate>
  near-end-fast-bitrate
</near-end-fast-bitrate>
<far-end-interleaved-bitrate>
  far-end-interleaved-bitrate
</far-end-interleaved-bitrate>
<far-end-fast-bitrate>
  far-end-fast-bitrate
</far-end-fast-bitrate>
<near-end-interleaved-crc>
  near-end-interleaved-crc
</near-end-interleaved-crc>
<near-end-fast-crc>
  near-end-fast-crc
</near-end-fast-crc>
<far-end-interleaved-crc>
  far-end-interleaved-crc
</far-end-interleaved-crc>
<far-end-fast-crc>
  far-end-fast-crc
</far-end-fast-crc>
<near-end-interleaved-hec>
  near-end-interleaved-hec
</near-end-interleaved-hec>
<near-end-fast-hec>
  near-end-fast-hec
</near-end-fast-hec>
<far-end-interleaved-hec>
  far-end-interleaved-hec
</far-end-interleaved-hec>
```


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```
        <far-end-fast-hec>
          far-end-fast-hec
        </far-end-fast-hec>
        <near-end-interleaved-fec>
          near-end-interleaved-fec
        </near-end-interleaved-fec>
        <near-end-fast-fec>
          near-end-fast-fec
        </near-end-fast-fec>
        <far-end-interleaved-fec>
          far-end-interleaved-fec
        </far-end-interleaved-fec>
        <far-end-fast-fec>
          far-end-fast-fec
        </far-end-fast-fec>
        <near-end-interleaved-rx-cells>
          near-end-interleaved-rx-cells
        </near-end-interleaved-rx-cells>
        <near-end-fast-rx-cells>
          near-end-fast-rx-cells
        </near-end-fast-rx-cells>
        <near-end-interleaved-tx-cells>
          near-end-interleaved-tx-cells
        </near-end-interleaved-tx-cells>
        <near-end-fast-tx-cells>
          near-end-fast-tx-cells
        </near-end-fast-tx-cells>
      </dsl-statistics>
    </dsl-information>
  </physical-interface>
```

Description

<dsl-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <dsl-information>
      <dsl-statistics>
        <near-end-attainable-bitrate>
          near-end-attainable-bitrate
        </near-end-attainable-bitrate>
        <far-end-attainable-bitrate>
          far-end-attainable-bitrate
        </far-end-attainable-bitrate>
        <near-end-attenuation>
          near-end-attenuation
        </near-end-attenuation>
        <far-end-attenuation>
          far-end-attenuation
        </far-end-attenuation>
        <near-end-capacity-used>
          near-end-capacity-used
        </near-end-capacity-used>
```

```
<far-end-capacity-used>
  far-end-capacity-used
</far-end-capacity-used>
<near-end-noise-margin>
  near-end-noise-margin
</near-end-noise-margin>
<far-end-noise-margin>
  far-end-noise-margin
</far-end-noise-margin>
<near-end-output-power>
  near-end-output-power
</near-end-output-power>
<far-end-output-power>
  far-end-output-power
</far-end-output-power>
<interleaved-rx-cells>
  interleaved-rx-cells
</interleaved-rx-cells>
<fast-rx-cells>
  fast-rx-cells
</fast-rx-cells>
<interleaved-tx-cells>
  interleaved-tx-cells
</interleaved-tx-cells>
<fast-tx-cells>
  fast-tx-cells
</fast-tx-cells>
<near-end-interleaved-bitrate>
  near-end-interleaved-bitrate
</near-end-interleaved-bitrate>
<near-end-fast-bitrate>
  near-end-fast-bitrate
</near-end-fast-bitrate>
<far-end-interleaved-bitrate>
  far-end-interleaved-bitrate
</far-end-interleaved-bitrate>
<far-end-fast-bitrate>
  far-end-fast-bitrate
</far-end-fast-bitrate>
<near-end-interleaved-crc>
  near-end-interleaved-crc
</near-end-interleaved-crc>
<near-end-fast-crc>
  near-end-fast-crc
</near-end-fast-crc>
<far-end-interleaved-crc>
  far-end-interleaved-crc
</far-end-interleaved-crc>
<far-end-fast-crc>
  far-end-fast-crc
</far-end-fast-crc>
<near-end-interleaved-hec>
  near-end-interleaved-hec
</near-end-interleaved-hec>
<near-end-fast-hec>
  near-end-fast-hec
```


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```
        </near-end-fast-hec>
        <far-end-interleaved-hec>
          far-end-interleaved-hec
        </far-end-interleaved-hec>
        <far-end-fast-hec>
          far-end-fast-hec
        </far-end-fast-hec>
        <near-end-interleaved-fec>
          near-end-interleaved-fec
        </near-end-interleaved-fec>
        <near-end-fast-fec>
          near-end-fast-fec
        </near-end-fast-fec>
        <far-end-interleaved-fec>
          far-end-interleaved-fec
        </far-end-interleaved-fec>
        <far-end-fast-fec>
          far-end-fast-fec
        </far-end-fast-fec>
        <near-end-interleaved-rx-cells>
          near-end-interleaved-rx-cells
        </near-end-interleaved-rx-cells>
        <near-end-fast-rx-cells>
          near-end-fast-rx-cells
        </near-end-fast-rx-cells>
        <near-end-interleaved-tx-cells>
          near-end-interleaved-tx-cells
        </near-end-interleaved-tx-cells>
        <near-end-fast-tx-cells>
          near-end-fast-tx-cells
        </near-end-fast-tx-cells>
      </dsl-statistics>
    </dsl-information>
  </physical-interface>
</interface-information>
```

Description

<dsl-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <dsl-information>
      <dsl-statistics>
        <near-end-attainable-bitrate>
          near-end-attainable-bitrate
        </near-end-attainable-bitrate>
        <far-end-attainable-bitrate>
          far-end-attainable-bitrate
        </far-end-attainable-bitrate>
        <near-end-attenuation>
          near-end-attenuation
        </near-end-attenuation>
        <far-end-attenuation>
```

```
  far-end-attenuation
</far-end-attenuation>
<near-end-capacity-used>
  near-end-capacity-used
</near-end-capacity-used>
<far-end-capacity-used>
  far-end-capacity-used
</far-end-capacity-used>
<near-end-noise-margin>
  near-end-noise-margin
</near-end-noise-margin>
<far-end-noise-margin>
  far-end-noise-margin
</far-end-noise-margin>
<near-end-output-power>
  near-end-output-power
</near-end-output-power>
<far-end-output-power>
  far-end-output-power
</far-end-output-power>
<interleaved-rx-cells>
  interleaved-rx-cells
</interleaved-rx-cells>
<fast-rx-cells>
  fast-rx-cells
</fast-rx-cells>
<interleaved-tx-cells>
  interleaved-tx-cells
</interleaved-tx-cells>
<fast-tx-cells>
  fast-tx-cells
</fast-tx-cells>
<near-end-interleaved-bitrate>
  near-end-interleaved-bitrate
</near-end-interleaved-bitrate>
<near-end-fast-bitrate>
  near-end-fast-bitrate
</near-end-fast-bitrate>
<far-end-interleaved-bitrate>
  far-end-interleaved-bitrate
</far-end-interleaved-bitrate>
<far-end-fast-bitrate>
  far-end-fast-bitrate
</far-end-fast-bitrate>
<near-end-interleaved-crc>
  near-end-interleaved-crc
</near-end-interleaved-crc>
<near-end-fast-crc>
  near-end-fast-crc
</near-end-fast-crc>
<far-end-interleaved-crc>
  far-end-interleaved-crc
</far-end-interleaved-crc>
<far-end-fast-crc>
  far-end-fast-crc
</far-end-fast-crc>
```


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```
        <near-end-interleaved-hec>
          near-end-interleaved-hec
        </near-end-interleaved-hec>
        <near-end-fast-hec>
          near-end-fast-hec
        </near-end-fast-hec>
        <far-end-interleaved-hec>
          far-end-interleaved-hec
        </far-end-interleaved-hec>
        <far-end-fast-hec>
          far-end-fast-hec
        </far-end-fast-hec>
        <near-end-interleaved-fec>
          near-end-interleaved-fec
        </near-end-interleaved-fec>
        <near-end-fast-fec>
          near-end-fast-fec
        </near-end-fast-fec>
        <far-end-interleaved-fec>
          far-end-interleaved-fec
        </far-end-interleaved-fec>
        <far-end-fast-fec>
          far-end-fast-fec
        </far-end-fast-fec>
        <near-end-interleaved-rx-cells>
          near-end-interleaved-rx-cells
        </near-end-interleaved-rx-cells>
        <near-end-fast-rx-cells>
          near-end-fast-rx-cells
        </near-end-fast-rx-cells>
        <near-end-interleaved-tx-cells>
          near-end-interleaved-tx-cells
        </near-end-interleaved-tx-cells>
        <near-end-fast-tx-cells>
          near-end-fast-tx-cells
        </near-end-fast-tx-cells>
      </dsl-statistics>
    </dsl-information>
  </physical-interface>
</interface-filter-information>
```

Description

<dsl-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <dsl-information>
      <dsl-statistics>
        <near-end-attainable-bitrate>
          near-end-attainable-bitrate
        </near-end-attainable-bitrate>
        <far-end-attainable-bitrate>
          far-end-attainable-bitrate
```

```
</far-end-attainable-bitrate>
<near-end-attenuation>
  near-end-attenuation
</near-end-attenuation>
<far-end-attenuation>
  far-end-attenuation
</far-end-attenuation>
<near-end-capacity-used>
  near-end-capacity-used
</near-end-capacity-used>
<far-end-capacity-used>
  far-end-capacity-used
</far-end-capacity-used>
<near-end-noise-margin>
  near-end-noise-margin
</near-end-noise-margin>
<far-end-noise-margin>
  far-end-noise-margin
</far-end-noise-margin>
<near-end-output-power>
  near-end-output-power
</near-end-output-power>
<far-end-output-power>
  far-end-output-power
</far-end-output-power>
<interleaved-rx-cells>
  interleaved-rx-cells
</interleaved-rx-cells>
<fast-rx-cells>
  fast-rx-cells
</fast-rx-cells>
<interleaved-tx-cells>
  interleaved-tx-cells
</interleaved-tx-cells>
<fast-tx-cells>
  fast-tx-cells
</fast-tx-cells>
<near-end-interleaved-bitrate>
  near-end-interleaved-bitrate
</near-end-interleaved-bitrate>
<near-end-fast-bitrate>
  near-end-fast-bitrate
</near-end-fast-bitrate>
<far-end-interleaved-bitrate>
  far-end-interleaved-bitrate
</far-end-interleaved-bitrate>
<far-end-fast-bitrate>
  far-end-fast-bitrate
</far-end-fast-bitrate>
<near-end-interleaved-crc>
  near-end-interleaved-crc
</near-end-interleaved-crc>
<near-end-fast-crc>
  near-end-fast-crc
</near-end-fast-crc>
<far-end-interleaved-crc>
```


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```
        far-end-interleaved-crc
      </far-end-interleaved-crc>
      <far-end-fast-crc>
        far-end-fast-crc
      </far-end-fast-crc>
      <near-end-interleaved-hec>
        near-end-interleaved-hec
      </near-end-interleaved-hec>
      <near-end-fast-hec>
        near-end-fast-hec
      </near-end-fast-hec>
      <far-end-interleaved-hec>
        far-end-interleaved-hec
      </far-end-interleaved-hec>
      <far-end-fast-hec>
        far-end-fast-hec
      </far-end-fast-hec>
      <near-end-interleaved-fec>
        near-end-interleaved-fec
      </near-end-interleaved-fec>
      <near-end-fast-fec>
        near-end-fast-fec
      </near-end-fast-fec>
      <far-end-interleaved-fec>
        far-end-interleaved-fec
      </far-end-interleaved-fec>
      <far-end-fast-fec>
        far-end-fast-fec
      </far-end-fast-fec>
      <near-end-interleaved-rx-cells>
        near-end-interleaved-rx-cells
      </near-end-interleaved-rx-cells>
      <near-end-fast-rx-cells>
        near-end-fast-rx-cells
      </near-end-fast-rx-cells>
      <near-end-interleaved-tx-cells>
        near-end-interleaved-tx-cells
      </near-end-interleaved-tx-cells>
      <near-end-fast-tx-cells>
        near-end-fast-tx-cells
      </near-end-fast-tx-cells>
    </dsl-statistics>
  </dsl-information>
 </physical-interface>
</interface-policer-information>
```

Description

<dsu-information>

Usage

```
<dsu-information>
 <dsu-compatibility-mode>
  dsu-compatibility-mode
 </dsu-compatibility-mode>
```

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```
<dsu-scrambler>
  dsu-scrambler
</dsu-scrambler>
<dsu-subrate>
  dsu-subrate
</dsu-subrate>
<feac-loopback>
  feac-loopback
</feac-loopback>
<feac-response>
  feac-response
</feac-response>
<feac-count>
  feac-count
</feac-count>
</dsu-information>
```

Description DSU configuration and statistics

<dsu-information>

Usage

```
<physical-interface>
  <dsu-information>
    <dsu-compatibility-mode>
      dsu-compatibility-mode
    </dsu-compatibility-mode>
    <dsu-scrambler>
      dsu-scrambler
    </dsu-scrambler>
    <dsu-subrate>
      dsu-subrate
    </dsu-subrate>
    <feac-loopback>
      feac-loopback
    </feac-loopback>
    <feac-response>
      feac-response
    </feac-response>
    <feac-count>
      feac-count
    </feac-count>
  </dsu-information>
</physical-interface>
```

Description DSU configuration and statistics

<dsu-information>

Usage

```
<interface-information>
  <physical-interface>
```


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```
<dsu-information>
  <dsu-compatibility-mode>
    dsu-compatibility-mode
  </dsu-compatibility-mode>
  <dsu-scrambler>
    dsu-scrambler
  </dsu-scrambler>
  <dsu-subrate>
    dsu-subrate
  </dsu-subrate>
  <feac-loopback>
    feac-loopback
  </feac-loopback>
  <feac-response>
    feac-response
  </feac-response>
  <feac-count>
    feac-count
  </feac-count>
</dsu-information>
</physical-interface>
</interface-information>
```

Description DSU configuration and statistics

<dsu-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <dsu-information>
      <dsu-compatibility-mode>
        dsu-compatibility-mode
      </dsu-compatibility-mode>
      <dsu-scrambler>
        dsu-scrambler
      </dsu-scrambler>
      <dsu-subrate>
        dsu-subrate
      </dsu-subrate>
      <feac-loopback>
        feac-loopback
      </feac-loopback>
      <feac-response>
        feac-response
      </feac-response>
      <feac-count>
        feac-count
      </feac-count>
    </dsu-information>
  </physical-interface>
</interface-filter-information>
```

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Description DSU configuration and statistics

<dsu-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <dsu-information>
      <dsu-compatibility-mode>
        dsu-compatibility-mode
      </dsu-compatibility-mode>
      <dsu-scrambler>
        dsu-scrambler
      </dsu-scrambler>
      <dsu-subrate>
        dsu-subrate
      </dsu-subrate>
      <feac-loopback>
        feac-loopback
      </feac-loopback>
      <feac-response>
        feac-response
      </feac-response>
      <feac-count>
        feac-count
      </feac-count>
    </dsu-information>
  </physical-interface>
</interface-policer-information>
```

Description DSU configuration and statistics

<dtr-circuit>

Usage

```
<serial-information>
  <dtr-circuit>
    <dtr-circuit-mode>
      dtr-circuit-mode
    </dtr-circuit-mode>
  </dtr-circuit>
</serial-information>
```

Description

<dtr-circuit>

Usage

```
<physical-interface>
  <serial-information>
    <dtr-circuit>
      <dtr-circuit-mode>
        dtr-circuit-mode
```


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```
      </dtr-circuit-mode>
    </dtr-circuit>
  </serial-information>
</physical-interface>
```

Description

<dtr-circuit>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <dtr-circuit>
        <dtr-circuit-mode>
          dtr-circuit-mode
        </dtr-circuit-mode>
      </dtr-circuit>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<dtr-circuit>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <dtr-circuit>
        <dtr-circuit-mode>
          dtr-circuit-mode
        </dtr-circuit-mode>
      </dtr-circuit>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<dtr-circuit>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <dtr-circuit>
        <dtr-circuit-mode>
          dtr-circuit-mode
        </dtr-circuit-mode>
      </dtr-circuit>
    </serial-information>
```

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```
  </physical-interface>
</interface-policer-information>
```

Description

<e3-bert-information>

Usage

```
<e3-bert-information>
  <e3-bert-period>
    e3-bert-period
  </e3-bert-period>
  <e3-bert-elapsed>
    e3-bert-elapsed
  </e3-bert-elapsed>
  <e3-bert-status>
    e3-bert-status
  </e3-bert-status>
  <e3-bert-algorithm>
    e3-bert-algorithm
  </e3-bert-algorithm>
  <e3-bert-error-rate>
    e3-bert-error-rate
  </e3-bert-error-rate>
  <e3-bert-induced-error-rate>
    e3-bert-induced-error-rate
  </e3-bert-induced-error-rate>
  <e3-bert-bit-count>
    e3-bert-bit-count
  </e3-bert-bit-count>
  <e3-bert-bit-count-overflow>
    e3-bert-bit-count-overflow
  </e3-bert-bit-count-overflow>
  <e3-bert-error-bit-count>
    e3-bert-error-bit-count
  </e3-bert-error-bit-count>
  <e3-bert-error-bit-count-overflow>
    e3-bert-error-bit-count-overflow
  </e3-bert-error-bit-count-overflow>
  <e3-bert-los-status>
    e3-bert-los-status
  </e3-bert-los-status>
  <e3-bert-los-count>
    e3-bert-los-count
  </e3-bert-los-count>
  <e3-bert-los-seconds>
    e3-bert-los-seconds
  </e3-bert-los-seconds>
</e3-bert-information>
```

Description E3 BERT configuration and statistics

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<e3-bert-information>

Usage

```
<physical-interface>
  <e3-bert-information>
    <e3-bert-period>
      e3-bert-period
    </e3-bert-period>
    <e3-bert-elapsed>
      e3-bert-elapsed
    </e3-bert-elapsed>
    <e3-bert-status>
      e3-bert-status
    </e3-bert-status>
    <e3-bert-algorithm>
      e3-bert-algorithm
    </e3-bert-algorithm>
    <e3-bert-error-rate>
      e3-bert-error-rate
    </e3-bert-error-rate>
    <e3-bert-induced-error-rate>
      e3-bert-induced-error-rate
    </e3-bert-induced-error-rate>
    <e3-bert-bit-count>
      e3-bert-bit-count
    </e3-bert-bit-count>
    <e3-bert-bit-count-overflow>
      e3-bert-bit-count-overflow
    </e3-bert-bit-count-overflow>
    <e3-bert-error-bit-count>
      e3-bert-error-bit-count
    </e3-bert-error-bit-count>
    <e3-bert-error-bit-count-overflow>
      e3-bert-error-bit-count-overflow
    </e3-bert-error-bit-count-overflow>
    <e3-bert-los-status>
      e3-bert-los-status
    </e3-bert-los-status>
    <e3-bert-los-count>
      e3-bert-los-count
    </e3-bert-los-count>
    <e3-bert-los-seconds>
      e3-bert-los-seconds
    </e3-bert-los-seconds>
  </e3-bert-information>
</physical-interface>
```

Description E3 BERT configuration and statistics

<e3-bert-information>

Usage

```
<interface-information>
```

```
<physical-interface>
  <e3-bert-information>
    <e3-bert-period>
      e3-bert-period
    </e3-bert-period>
    <e3-bert-elapsed>
      e3-bert-elapsed
    </e3-bert-elapsed>
    <e3-bert-status>
      e3-bert-status
    </e3-bert-status>
    <e3-bert-algorithm>
      e3-bert-algorithm
    </e3-bert-algorithm>
    <e3-bert-error-rate>
      e3-bert-error-rate
    </e3-bert-error-rate>
    <e3-bert-induced-error-rate>
      e3-bert-induced-error-rate
    </e3-bert-induced-error-rate>
    <e3-bert-bit-count>
      e3-bert-bit-count
    </e3-bert-bit-count>
    <e3-bert-bit-count-overflow>
      e3-bert-bit-count-overflow
    </e3-bert-bit-count-overflow>
    <e3-bert-error-bit-count>
      e3-bert-error-bit-count
    </e3-bert-error-bit-count>
    <e3-bert-error-bit-count-overflow>
      e3-bert-error-bit-count-overflow
    </e3-bert-error-bit-count-overflow>
    <e3-bert-los-status>
      e3-bert-los-status
    </e3-bert-los-status>
    <e3-bert-los-count>
      e3-bert-los-count
    </e3-bert-los-count>
    <e3-bert-los-seconds>
      e3-bert-los-seconds
    </e3-bert-los-seconds>
  </e3-bert-information>
 </physical-interface>
</interface-information>
```

Description E3 BERT configuration and statistics

<e3-bert-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <e3-bert-information>
   <e3-bert-period>
```


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```
            e3-bert-period
          </e3-bert-period>
          <e3-bert-elapsed>
            e3-bert-elapsed
          </e3-bert-elapsed>
          <e3-bert-status>
            e3-bert-status
          </e3-bert-status>
          <e3-bert-algorithm>
            e3-bert-algorithm
          </e3-bert-algorithm>
          <e3-bert-error-rate>
            e3-bert-error-rate
          </e3-bert-error-rate>
          <e3-bert-induced-error-rate>
            e3-bert-induced-error-rate
          </e3-bert-induced-error-rate>
          <e3-bert-bit-count>
            e3-bert-bit-count
          </e3-bert-bit-count>
          <e3-bert-bit-count-overflow>
            e3-bert-bit-count-overflow
          </e3-bert-bit-count-overflow>
          <e3-bert-error-bit-count>
            e3-bert-error-bit-count
          </e3-bert-error-bit-count>
          <e3-bert-error-bit-count-overflow>
            e3-bert-error-bit-count-overflow
          </e3-bert-error-bit-count-overflow>
          <e3-bert-los-status>
            e3-bert-los-status
          </e3-bert-los-status>
          <e3-bert-los-count>
            e3-bert-los-count
          </e3-bert-los-count>
          <e3-bert-los-seconds>
            e3-bert-los-seconds
          </e3-bert-los-seconds>
        </e3-bert-information>
      </physical-interface>
    </interface-filter-information>
```

Description E3 BERT configuration and statistics

<e3-bert-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <e3-bert-information>
      <e3-bert-period>
        e3-bert-period
      </e3-bert-period>
      <e3-bert-elapsed>
```

```
            e3-bert-elapsed
           </e3-bert-elapsed>
           <e3-bert-status>
            e3-bert-status
           </e3-bert-status>
           <e3-bert-algorithm>
            e3-bert-algorithm
           </e3-bert-algorithm>
           <e3-bert-error-rate>
            e3-bert-error-rate
           </e3-bert-error-rate>
           <e3-bert-induced-error-rate>
            e3-bert-induced-error-rate
           </e3-bert-induced-error-rate>
           <e3-bert-bit-count>
            e3-bert-bit-count
           </e3-bert-bit-count>
           <e3-bert-bit-count-overflow>
            e3-bert-bit-count-overflow
           </e3-bert-bit-count-overflow>
           <e3-bert-error-bit-count>
            e3-bert-error-bit-count
           </e3-bert-error-bit-count>
           <e3-bert-error-bit-count-overflow>
            e3-bert-error-bit-count-overflow
           </e3-bert-error-bit-count-overflow>
           <e3-bert-los-status>
            e3-bert-los-status
           </e3-bert-los-status>
           <e3-bert-los-count>
            e3-bert-los-count
           </e3-bert-los-count>
           <e3-bert-los-seconds>
            e3-bert-los-seconds
           </e3-bert-los-seconds>
          </e3-bert-information>
         </physical-interface>
        </interface-policer-information>
```

Description E3 BERT configuration and statistics

<eia530-control-signal>

Usage

```
<serial-information>
 <eia530-control-signal>
  <mode>
   mode
  </mode>
  <to-dce>....</to-dce>
  <from-dce>....</from-dce>
  <to-dte>....</to-dte>
  <from-dte>....</from-dte>
 </eia530-control-signal>
```


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```
</serial-information>
```

Description

<eia530-control-signal>

Usage

```
<physical-interface>
  <serial-information>
    <eia530-control-signal>
      <mode>
        mode
      </mode>
      <to-dce>....</to-dce>
      <from-dce>....</from-dce>
      <to-dte>....</to-dte>
      <from-dte>....</from-dte>
    </eia530-control-signal>
  </serial-information>
</physical-interface>
```

Description

<eia530-control-signal>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <mode>
          mode
        </mode>
        <to-dce>....</to-dce>
        <from-dce>....</from-dce>
        <to-dte>....</to-dte>
        <from-dte>....</from-dte>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<eia530-control-signal>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <mode>
          mode
```

```
        </mode>
        <to-dce>....</to-dce>
        <from-dce>....</from-dce>
        <to-dte>....</to-dte>
        <from-dte>....</from-dte>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<eia530-control-signal>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <mode>
          mode
        </mode>
        <to-dce>....</to-dce>
        <from-dce>....</from-dce>
        <to-dte>....</to-dte>
        <from-dte>....</from-dte>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<eia530-signal-polarity>

Usage

```
<serial-information>
  <eia530-signal-polarity>
    <dtr-polarity>
      dtr-polarity
    </dtr-polarity>
    <rts-polarity>
      rts-polarity
    </rts-polarity>
    <dcd-polarity>
      dcd-polarity
    </dcd-polarity>
    <dsr-polarity>
      dsr-polarity
    </dsr-polarity>
    <cts-polarity>
      cts-polarity
    </cts-polarity>
    <tm-polarity>
```


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```
      tm-polarity
    </tm-polarity>
  </eia530-signal-polarity>
</serial-information>
```

Description

<eia530-signal-polarity>

Usage

```
<physical-interface>
  <serial-information>
    <eia530-signal-polarity>
      <dtr-polarity>
        dtr-polarity
      </dtr-polarity>
      <rts-polarity>
        rts-polarity
      </rts-polarity>
      <dcd-polarity>
        dcd-polarity
      </dcd-polarity>
      <dsr-polarity>
        dsr-polarity
      </dsr-polarity>
      <cts-polarity>
        cts-polarity
      </cts-polarity>
      <tm-polarity>
        tm-polarity
      </tm-polarity>
    </eia530-signal-polarity>
  </serial-information>
</physical-interface>
```

Description

<eia530-signal-polarity>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <eia530-signal-polarity>
        <dtr-polarity>
          dtr-polarity
        </dtr-polarity>
        <rts-polarity>
          rts-polarity
        </rts-polarity>
        <dcd-polarity>
          dcd-polarity
        </dcd-polarity>
        <dsr-polarity>
```

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```
            dsr-polarity
           </dsr-polarity>
           <cts-polarity>
            cts-polarity
           </cts-polarity>
           <tm-polarity>
            tm-polarity
           </tm-polarity>
          </eia530-signal-polarity>
         </serial-information>
        </physical-interface>
       </interface-information>
```

Description

<eia530-signal-polarity>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <eia530-signal-polarity>
    <dtr-polarity>
     dtr-polarity
    </dtr-polarity>
    <rts-polarity>
     rts-polarity
    </rts-polarity>
    <dcd-polarity>
     dcd-polarity
    </dcd-polarity>
    <dsr-polarity>
     dsr-polarity
    </dsr-polarity>
    <cts-polarity>
     cts-polarity
    </cts-polarity>
    <tm-polarity>
     tm-polarity
    </tm-polarity>
   </eia530-signal-polarity>
  </serial-information>
 </physical-interface>
</interface-filter-information>
```

Description

<eia530-signal-polarity>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <eia530-signal-polarity>
```


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```
        <dtr-polarity>
          dtr-polarity
        </dtr-polarity>
        <rts-polarity>
          rts-polarity
        </rts-polarity>
        <dcd-polarity>
          dcd-polarity
        </dcd-polarity>
        <dsr-polarity>
          dsr-polarity
        </dsr-polarity>
        <cts-polarity>
          cts-polarity
        </cts-polarity>
        <tm-polarity>
          tm-polarity
        </tm-polarity>
      </eia530-signal-polarity>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<es-ifd-stats>

Usage

```
<physical-interface>
  <es-ifd-stats>
    <total-anti-replay-count>
      total-anti-replay-count
    </total-anti-replay-count>
    <total-authentication-failure-count>
      total-authentication-failure-count
    </total-authentication-failure-count>
  </es-ifd-stats>
</physical-interface>
```

Description ES PIC statistics

<es-ifd-stats>

Usage

```
<interface-information>
  <physical-interface>
    <es-ifd-stats>
      <total-anti-replay-count>
        total-anti-replay-count
      </total-anti-replay-count>
      <total-authentication-failure-count>
        total-authentication-failure-count
      </total-authentication-failure-count>
```

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```
    </es-ifd-stats>
  </physical-interface>
</interface-information>
```

Description ES PIC statistics

<es-ifd-stats>

Usage

```
<interface-filter-information>
  <physical-interface>
    <es-ifd-stats>
      <total-anti-replay-count>
        total-anti-replay-count
      </total-anti-replay-count>
      <total-authentication-failure-count>
        total-authentication-failure-count
      </total-authentication-failure-count>
    </es-ifd-stats>
  </physical-interface>
</interface-filter-information>
```

Description ES PIC statistics

<es-ifd-stats>

Usage

```
<interface-policer-information>
  <physical-interface>
    <es-ifd-stats>
      <total-anti-replay-count>
        total-anti-replay-count
      </total-anti-replay-count>
      <total-authentication-failure-count>
        total-authentication-failure-count
      </total-authentication-failure-count>
    </es-ifd-stats>
  </physical-interface>
</interface-policer-information>
```

Description ES PIC statistics

<eth-switching-flags>

Usage

```
<bridge-iff-properties>
  <eth-switching-flags>
    <eth-switching-flags-value>
      eth-switching-flags-value
    </eth-switching-flags-value>
    <no-mac-learning-status>
```


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```
      no-mac-learning-status
    </no-mac-learning-status>
    <reflective-relay-status>
      reflective-relay-status
    </reflective-relay-status>
  </eth-switching-flags>
</bridge-iff-properties>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<logical-interface>
  <bridge-iff-properties>
    <eth-switching-flags>
      <eth-switching-flags-value>
        eth-switching-flags-value
      </eth-switching-flags-value>
      <no-mac-learning-status>
        no-mac-learning-status
      </no-mac-learning-status>
      <reflective-relay-status>
        reflective-relay-status
      </reflective-relay-status>
    </eth-switching-flags>
  </bridge-iff-properties>
</logical-interface>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<physical-interface>
  <logical-interface>
    <bridge-iff-properties>
      <eth-switching-flags>
        <eth-switching-flags-value>
          eth-switching-flags-value
        </eth-switching-flags-value>
        <no-mac-learning-status>
          no-mac-learning-status
        </no-mac-learning-status>
        <reflective-relay-status>
          reflective-relay-status
        </reflective-relay-status>
      </eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</physical-interface>
```

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Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <bridge-iff-properties>
        <eth-switching-flags>
          <eth-switching-flags-value>
            eth-switching-flags-value
          </eth-switching-flags-value>
          <no-mac-learning-status>
            no-mac-learning-status
          </no-mac-learning-status>
          <reflective-relay-status>
            reflective-relay-status
          </reflective-relay-status>
        </eth-switching-flags>
      </bridge-iff-properties>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<interface-information>
  <logical-interface>
    <bridge-iff-properties>
      <eth-switching-flags>
        <eth-switching-flags-value>
          eth-switching-flags-value
        </eth-switching-flags-value>
        <no-mac-learning-status>
          no-mac-learning-status
        </no-mac-learning-status>
        <reflective-relay-status>
          reflective-relay-status
        </reflective-relay-status>
      </eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</interface-information>
```

Description Information about Ethernet-switching family flags

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<eth-switching-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <bridge-iff-properties>
        <eth-switching-flags>
          <eth-switching-flags-value>
            eth-switching-flags-value
          </eth-switching-flags-value>
          <no-mac-learning-status>
            no-mac-learning-status
          </no-mac-learning-status>
          <reflective-relay-status>
            reflective-relay-status
          </reflective-relay-status>
        </eth-switching-flags>
      </bridge-iff-properties>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <bridge-iff-properties>
      <eth-switching-flags>
        <eth-switching-flags-value>
          eth-switching-flags-value
        </eth-switching-flags-value>
        <no-mac-learning-status>
          no-mac-learning-status
        </no-mac-learning-status>
        <reflective-relay-status>
          reflective-relay-status
        </reflective-relay-status>
      </eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</interface-filter-information>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<interface-policer-information>
```

```
<physical-interface>
  <logical-interface>
    <bridge-iff-properties>
      <eth-switching-flags>
        <eth-switching-flags-value>
          eth-switching-flags-value
        </eth-switching-flags-value>
        <no-mac-learning-status>
          no-mac-learning-status
        </no-mac-learning-status>
        <reflective-relay-status>
          reflective-relay-status
        </reflective-relay-status>
      </eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</physical-interface>
</interface-policer-information>
```

Description Information about Ethernet-switching family flags

<eth-switching-flags>

Usage

```
<interface-policer-information>
  <logical-interface>
    <bridge-iff-properties>
      <eth-switching-flags>
        <eth-switching-flags-value>
          eth-switching-flags-value
        </eth-switching-flags-value>
        <no-mac-learning-status>
          no-mac-learning-status
        </no-mac-learning-status>
        <reflective-relay-status>
          reflective-relay-status
        </reflective-relay-status>
      </eth-switching-flags>
    </bridge-iff-properties>
  </logical-interface>
</interface-policer-information>
```

Description Information about Ethernet-switching family flags

<ether-policer-list>

Usage

```
<ether-policer-list>
  <ether-policer-record>....</ether-policer-record>
</ether-policer-list>
```


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Description

<ether-policer-list>

Usage

```
<mac-policer-information>
  <ether-policer-list>
    <ether-policer-record>....</ether-policer-record>
  </ether-policer-list>
</mac-policer-information>
```

Description

<ether-policer-list>

Usage

```
<logical-interface>
  <mac-policer-information>
    <ether-policer-list>
      <ether-policer-record>....</ether-policer-record>
    </ether-policer-list>
  </mac-policer-information>
</logical-interface>
```

Description

<ether-policer-list>

Usage

```
<physical-interface>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>....</ether-policer-record>
      </ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</physical-interface>
```

Description

<ether-policer-list>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <ether-policer-list>
          <ether-policer-record>....</ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
```

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```
  </physical-interface>
</interface-information>
```

Description

<ether-policer-list>

Usage

```
<interface-information>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>....</ether-policer-record>
      </ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</interface-information>
```

Description

<ether-policer-list>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <ether-policer-list>
          <ether-policer-record>....</ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<ether-policer-list>

Usage

```
<interface-filter-information>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>....</ether-policer-record>
      </ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</interface-filter-information>
```

Description

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<ether-policer-list>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <ether-policer-list>
          <ether-policer-record>....</ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<ether-policer-list>

Usage

```
<interface-policer-information>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>....</ether-policer-record>
      </ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</interface-policer-information>
```

Description

<ether-policer-record>

Usage

```
<ether-policer-list>
  <ether-policer-record>
    <policer-type>
      policer-type
    </policer-type>
    <out-of-spec-bytes>
      out-of-spec-bytes
    </out-of-spec-bytes>
    <out-of-spec-frames>
      out-of-spec-frames
    </out-of-spec-frames>
  </ether-policer-record>
</ether-policer-list>
```

Description

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<ether-policer-record>

Usage

```
<mac-policer-information>
  <ether-policer-list>
    <ether-policer-record>
      <policer-type>
        policer-type
      </policer-type>
      <out-of-spec-bytes>
        out-of-spec-bytes
      </out-of-spec-bytes>
      <out-of-spec-frames>
        out-of-spec-frames
      </out-of-spec-frames>
    </ether-policer-record>
  </ether-policer-list>
</mac-policer-information>
```

Description

<ether-policer-record>

Usage

```
<logical-interface>
  <mac-policer-information>
    <ether-policer-list>
      <ether-policer-record>
        <policer-type>
          policer-type
        </policer-type>
        <out-of-spec-bytes>
          out-of-spec-bytes
        </out-of-spec-bytes>
        <out-of-spec-frames>
          out-of-spec-frames
        </out-of-spec-frames>
      </ether-policer-record>
    </ether-policer-list>
  </mac-policer-information>
</logical-interface>
```

Description

<ether-policer-record>

Usage

```
<physical-interface>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>
          <policer-type>
```


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```
                policer-type
               </policer-type>
               <out-of-spec-bytes>
                out-of-spec-bytes
               </out-of-spec-bytes>
               <out-of-spec-frames>
                out-of-spec-frames
               </out-of-spec-frames>
              </ether-policer-record>
             </ether-policer-list>
            </mac-policer-information>
           </logical-interface>
          </physical-interface>
```

Description

<ether-policer-record>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <mac-policer-information>
    <ether-policer-list>
     <ether-policer-record>
      <policer-type>
       policer-type
      </policer-type>
      <out-of-spec-bytes>
       out-of-spec-bytes
      </out-of-spec-bytes>
      <out-of-spec-frames>
       out-of-spec-frames
      </out-of-spec-frames>
     </ether-policer-record>
    </ether-policer-list>
   </mac-policer-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<ether-policer-record>

Usage

```
<interface-information>
 <logical-interface>
  <mac-policer-information>
   <ether-policer-list>
    <ether-policer-record>
     <policer-type>
      policer-type
     </policer-type>
```

```
            <out-of-spec-bytes>
              out-of-spec-bytes
            </out-of-spec-bytes>
            <out-of-spec-frames>
              out-of-spec-frames
            </out-of-spec-frames>
          </ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </interface-information>
```

Description

<ether-policer-record>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <ether-policer-list>
          <ether-policer-record>
            <policer-type>
              policer-type
            </policer-type>
            <out-of-spec-bytes>
              out-of-spec-bytes
            </out-of-spec-bytes>
            <out-of-spec-frames>
              out-of-spec-frames
            </out-of-spec-frames>
          </ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<ether-policer-record>

Usage

```
<interface-filter-information>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>
          <policer-type>
            policer-type
          </policer-type>
          <out-of-spec-bytes>
            out-of-spec-bytes
```


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```
            </out-of-spec-bytes>
            <out-of-spec-frames>
              out-of-spec-frames
            </out-of-spec-frames>
          </ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </interface-filter-information>
```

Description

<ether-policer-record>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <ether-policer-list>
          <ether-policer-record>
            <policer-type>
              policer-type
            </policer-type>
            <out-of-spec-bytes>
              out-of-spec-bytes
            </out-of-spec-bytes>
            <out-of-spec-frames>
              out-of-spec-frames
            </out-of-spec-frames>
          </ether-policer-record>
        </ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<ether-policer-record>

Usage

```
<interface-policer-information>
  <logical-interface>
    <mac-policer-information>
      <ether-policer-list>
        <ether-policer-record>
          <policer-type>
            policer-type
          </policer-type>
          <out-of-spec-bytes>
            out-of-spec-bytes
          </out-of-spec-bytes>
          <out-of-spec-frames>
```

```
                    out-of-spec-frames
                  </out-of-spec-frames>
                </ether-policer-record>
              </ether-policer-list>
            </mac-policer-information>
          </logical-interface>
        </interface-policer-information>
```

Description

<ethernet-autonegotiation>

Usage

```
<ethernet-autonegotiation>
  <autonegotiation-status>
    autonegotiation-status
  </autonegotiation-status>
  <link-partner-status>
    link-partner-status
  </link-partner-status>
  <link-partner-reason>
    link-partner-reason
  </link-partner-reason>
  <link-partner-duplexity>
    link-partner-duplexity
  </link-partner-duplexity>
  <link-partner-speed>
    link-partner-speed
  </link-partner-speed>
  <flow-control>
    flow-control
  </flow-control>
  <local-info>....</local-info>
</ethernet-autonegotiation>
```

Description Ethernet autonegotiation information

<ethernet-autonegotiation>

Usage

```
<jswitch-port-information>
  <jswitch-port>
    <ethernet-autonegotiation>
      <autonegotiation-status>
        autonegotiation-status
      </autonegotiation-status>
      <link-partner-status>
        link-partner-status
      </link-partner-status>
      <link-partner-reason>
        link-partner-reason
      </link-partner-reason>
      <link-partner-duplexity>
```


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```
            link-partner-duplexity
           </link-partner-duplexity>
           <link-partner-speed>
            link-partner-speed
           </link-partner-speed>
           <flow-control>
            flow-control
           </flow-control>
           <local-info>....</local-info>
          </ethernet-autonegotiation>
         </jswitch-port>
        </jswitch-port-information>
```

Description Ethernet autonegotiation information

<ethernet-autonegotiation>

Usage

```
<physical-interface>
 <ethernet-autonegotiation>
  <autonegotiation-status>
   autonegotiation-status
  </autonegotiation-status>
  <link-partner-status>
   link-partner-status
  </link-partner-status>
  <link-partner-reason>
   link-partner-reason
  </link-partner-reason>
  <link-partner-duplexity>
   link-partner-duplexity
  </link-partner-duplexity>
  <link-partner-speed>
   link-partner-speed
  </link-partner-speed>
  <flow-control>
   flow-control
  </flow-control>
  <local-info>....</local-info>
 </ethernet-autonegotiation>
</physical-interface>
```

Description Ethernet autonegotiation information

<ethernet-autonegotiation>

Usage

```
<interface-information>
 <physical-interface>
  <ethernet-autonegotiation>
   <autonegotiation-status>
    autonegotiation-status
```

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```
        </autonegotiation-status>
        <link-partner-status>
          link-partner-status
        </link-partner-status>
        <link-partner-reason>
          link-partner-reason
        </link-partner-reason>
        <link-partner-duplexity>
          link-partner-duplexity
        </link-partner-duplexity>
        <link-partner-speed>
          link-partner-speed
        </link-partner-speed>
        <flow-control>
          flow-control
        </flow-control>
        <local-info>....</local-info>
      </ethernet-autonegotiation>
    </physical-interface>
  </interface-information>
```

Description Ethernet autonegotiation information

<ethernet-autonegotiation>

Usage

```
  <interface-filter-information>
    <physical-interface>
      <ethernet-autonegotiation>
        <autonegotiation-status>
          autonegotiation-status
        </autonegotiation-status>
        <link-partner-status>
          link-partner-status
        </link-partner-status>
        <link-partner-reason>
          link-partner-reason
        </link-partner-reason>
        <link-partner-duplexity>
          link-partner-duplexity
        </link-partner-duplexity>
        <link-partner-speed>
          link-partner-speed
        </link-partner-speed>
        <flow-control>
          flow-control
        </flow-control>
        <local-info>....</local-info>
      </ethernet-autonegotiation>
    </physical-interface>
  </interface-filter-information>
```

Description Ethernet autonegotiation information

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<ethernet-autonegotiation>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-autonegotiation>
      <autonegotiation-status>
        autonegotiation-status
      </autonegotiation-status>
      <link-partner-status>
        link-partner-status
      </link-partner-status>
      <link-partner-reason>
        link-partner-reason
      </link-partner-reason>
      <link-partner-duplexity>
        link-partner-duplexity
      </link-partner-duplexity>
      <link-partner-speed>
        link-partner-speed
      </link-partner-speed>
      <flow-control>
        flow-control
      </flow-control>
      <local-info>....</local-info>
    </ethernet-autonegotiation>
  </physical-interface>
</interface-policer-information>
```

Description Ethernet autonegotiation information

<ethernet-filter-statistics>

Usage

```
<ethernet-filter-statistics>
  <input-packets>
    input-packets
  </input-packets>
  <input-reject-count>
    input-reject-count
  </input-reject-count>
  <input-reject-destination-address-count>
    input-reject-destination-address-count
  </input-reject-destination-address-count>
  <input-reject-source-address-count>
    input-reject-source-address-count
  </input-reject-source-address-count>
  <output-packets>
    output-packets
  </output-packets>
  <output-packet-pad-count>
    output-packet-pad-count
  </output-packet-pad-count>
```

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```
<output-packet-error-count>
  output-packet-error-count
</output-packet-error-count>
<cam-destination-filter-count>
  cam-destination-filter-count
</cam-destination-filter-count>
<cam-source-filter-count>
  cam-source-filter-count
</cam-source-filter-count>
</ethernet-filter-statistics>
```

Description Ethernet filter statistics

<ethernet-filter-statistics>

Usage

```
<physical-interface>
  <ethernet-filter-statistics>
    <input-packets>
      input-packets
    </input-packets>
    <input-reject-count>
      input-reject-count
    </input-reject-count>
    <input-reject-destination-address-count>
      input-reject-destination-address-count
    </input-reject-destination-address-count>
    <input-reject-source-address-count>
      input-reject-source-address-count
    </input-reject-source-address-count>
    <output-packets>
      output-packets
    </output-packets>
    <output-packet-pad-count>
      output-packet-pad-count
    </output-packet-pad-count>
    <output-packet-error-count>
      output-packet-error-count
    </output-packet-error-count>
    <cam-destination-filter-count>
      cam-destination-filter-count
    </cam-destination-filter-count>
    <cam-source-filter-count>
      cam-source-filter-count
    </cam-source-filter-count>
  </ethernet-filter-statistics>
</physical-interface>
```

Description Ethernet filter statistics

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<ethernet-filter-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <ethernet-filter-statistics>
      <input-packets>
        input-packets
      </input-packets>
      <input-reject-count>
        input-reject-count
      </input-reject-count>
      <input-reject-destination-address-count>
        input-reject-destination-address-count
      </input-reject-destination-address-count>
      <input-reject-source-address-count>
        input-reject-source-address-count
      </input-reject-source-address-count>
      <output-packets>
        output-packets
      </output-packets>
      <output-packet-pad-count>
        output-packet-pad-count
      </output-packet-pad-count>
      <output-packet-error-count>
        output-packet-error-count
      </output-packet-error-count>
      <cam-destination-filter-count>
        cam-destination-filter-count
      </cam-destination-filter-count>
      <cam-source-filter-count>
        cam-source-filter-count
      </cam-source-filter-count>
    </ethernet-filter-statistics>
  </physical-interface>
</interface-information>
```

Description Ethernet filter statistics

<ethernet-filter-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ethernet-filter-statistics>
      <input-packets>
        input-packets
      </input-packets>
      <input-reject-count>
        input-reject-count
      </input-reject-count>
      <input-reject-destination-address-count>
        input-reject-destination-address-count
```

```
        </input-reject-destination-address-count>
        <input-reject-source-address-count>
          input-reject-source-address-count
        </input-reject-source-address-count>
        <output-packets>
          output-packets
        </output-packets>
        <output-packet-pad-count>
          output-packet-pad-count
        </output-packet-pad-count>
        <output-packet-error-count>
          output-packet-error-count
        </output-packet-error-count>
        <cam-destination-filter-count>
          cam-destination-filter-count
        </cam-destination-filter-count>
        <cam-source-filter-count>
          cam-source-filter-count
        </cam-source-filter-count>
      </ethernet-filter-statistics>
    </physical-interface>
  </interface-filter-information>
```

Description Ethernet filter statistics

<ethernet-filter-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-filter-statistics>
      <input-packets>
        input-packets
      </input-packets>
      <input-reject-count>
        input-reject-count
      </input-reject-count>
      <input-reject-destination-address-count>
        input-reject-destination-address-count
      </input-reject-destination-address-count>
      <input-reject-source-address-count>
        input-reject-source-address-count
      </input-reject-source-address-count>
      <output-packets>
        output-packets
      </output-packets>
      <output-packet-pad-count>
        output-packet-pad-count
      </output-packet-pad-count>
      <output-packet-error-count>
        output-packet-error-count
      </output-packet-error-count>
      <cam-destination-filter-count>
        cam-destination-filter-count
```


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```
        </cam-destination-filter-count>
        <cam-source-filter-count>
          cam-source-filter-count
        </cam-source-filter-count>
      </ethernet-filter-statistics>
    </physical-interface>
  </interface-policer-information>
```

Description Ethernet filter statistics

<ethernet-mac-pfc-statistics>

Usage

```
<ethernet-mac-pfc-statistics>
  <input-mac-pfc-frames>
    input-mac-pfc-frames
  </input-mac-pfc-frames>
  <mac-pfc-dot1p>
    mac-pfc-dot1p
  </mac-pfc-dot1p>
  <output-mac-pfc-frames>
    output-mac-pfc-frames
  </output-mac-pfc-frames>
</ethernet-mac-pfc-statistics>
```

Description Ethernet MAC Priority Flow control Statistics

<ethernet-mac-pfc-statistics>

Usage

```
<physical-interface>
  <ethernet-mac-pfc-statistics>
    <input-mac-pfc-frames>
      input-mac-pfc-frames
    </input-mac-pfc-frames>
    <mac-pfc-dot1p>
      mac-pfc-dot1p
    </mac-pfc-dot1p>
    <output-mac-pfc-frames>
      output-mac-pfc-frames
    </output-mac-pfc-frames>
  </ethernet-mac-pfc-statistics>
</physical-interface>
```

Description Ethernet MAC Priority Flow control Statistics

<ethernet-mac-pfc-statistics>

Usage

```
<interface-information>
  <physical-interface>
```

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```
<ethernet-mac-pfc-statistics>
  <input-mac-pfc-frames>
    input-mac-pfc-frames
  </input-mac-pfc-frames>
  <mac-pfc-dot1p>
    mac-pfc-dot1p
  </mac-pfc-dot1p>
  <output-mac-pfc-frames>
    output-mac-pfc-frames
  </output-mac-pfc-frames>
</ethernet-mac-pfc-statistics>
</physical-interface>
</interface-information>
```

Description Ethernet MAC Priority Flow control Statistics

<ethernet-mac-pfc-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ethernet-mac-pfc-statistics>
      <input-mac-pfc-frames>
        input-mac-pfc-frames
      </input-mac-pfc-frames>
      <mac-pfc-dot1p>
        mac-pfc-dot1p
      </mac-pfc-dot1p>
      <output-mac-pfc-frames>
        output-mac-pfc-frames
      </output-mac-pfc-frames>
    </ethernet-mac-pfc-statistics>
  </physical-interface>
</interface-filter-information>
```

Description Ethernet MAC Priority Flow control Statistics

<ethernet-mac-pfc-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-mac-pfc-statistics>
      <input-mac-pfc-frames>
        input-mac-pfc-frames
      </input-mac-pfc-frames>
      <mac-pfc-dot1p>
        mac-pfc-dot1p
      </mac-pfc-dot1p>
      <output-mac-pfc-frames>
        output-mac-pfc-frames
      </output-mac-pfc-frames>
```


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```
    </ethernet-mac-pfc-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Ethernet MAC Priority Flow control Statistics

<ethernet-mac-statistics>

Usage

```
<ethernet-mac-statistics>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-packets>
    input-packets
  </input-packets>
  <input-unicasts>
    input-unicasts
  </input-unicasts>
  <input-broadcasts>
    input-broadcasts
  </input-broadcasts>
  <input-multicasts>
    input-multicasts
  </input-multicasts>
  <input-crc-errors>
    input-crc-errors
  </input-crc-errors>
  <input-fifo-errors>
    input-fifo-errors
  </input-fifo-errors>
  <input-mac-control-frames>
    input-mac-control-frames
  </input-mac-control-frames>
  <input-mac-pause-frames>
    input-mac-pause-frames
  </input-mac-pause-frames>
  <input-oversized-frames>
    input-oversized-frames
  </input-oversized-frames>
  <input-undersized-frames>
    input-undersized-frames
  </input-undersized-frames>
  <input-jabber-frames>
    input-jabber-frames
  </input-jabber-frames>
  <input-fragment-frames>
    input-fragment-frames
  </input-fragment-frames>
  <input-vlan-tagged-frames>
    input-vlan-tagged-frames
  </input-vlan-tagged-frames>
  <input-code-violations>
    input-code-violations
```

```
</input-code-violations>
<input-policer-frame-drops>
  input-policer-frame-drops
</input-policer-frame-drops>
<input-policer-byte-drops>
  input-policer-byte-drops
</input-policer-byte-drops>
<output-bytes>
  output-bytes
</output-bytes>
<output-packets>
  output-packets
</output-packets>
<output-unicasts>
  output-unicasts
</output-unicasts>
<output-broadcasts>
  output-broadcasts
</output-broadcasts>
<output-multicasts>
  output-multicasts
</output-multicasts>
<output-crc-errors>
  output-crc-errors
</output-crc-errors>
<output-fifo-errors>
  output-fifo-errors
</output-fifo-errors>
<output-mac-control-frames>
  output-mac-control-frames
</output-mac-control-frames>
<output-mac-pause-frames>
  output-mac-pause-frames
</output-mac-pause-frames>
</ethernet-mac-statistics>
```

Description Ethernet MAC statistics

<ethernet-mac-statistics>

Usage

```
<jswitch-port-information>
  <jswitch-port>
    <ethernet-mac-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <input-unicasts>
        input-unicasts
      </input-unicasts>
      <input-broadcasts>
```


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```
  input-broadcasts
</input-broadcasts>
<input-multicasts>
  input-multicasts
</input-multicasts>
<input-crc-errors>
  input-crc-errors
</input-crc-errors>
<input-fifo-errors>
  input-fifo-errors
</input-fifo-errors>
<input-mac-control-frames>
  input-mac-control-frames
</input-mac-control-frames>
<input-mac-pause-frames>
  input-mac-pause-frames
</input-mac-pause-frames>
<input-oversized-frames>
  input-oversized-frames
</input-oversized-frames>
<input-undersized-frames>
  input-undersized-frames
</input-undersized-frames>
<input-jabber-frames>
  input-jabber-frames
</input-jabber-frames>
<input-fragment-frames>
  input-fragment-frames
</input-fragment-frames>
<input-vlan-tagged-frames>
  input-vlan-tagged-frames
</input-vlan-tagged-frames>
<input-code-violations>
  input-code-violations
</input-code-violations>
<input-policer-frame-drops>
  input-policer-frame-drops
</input-policer-frame-drops>
<input-policer-byte-drops>
  input-policer-byte-drops
</input-policer-byte-drops>
<output-bytes>
  output-bytes
</output-bytes>
<output-packets>
  output-packets
</output-packets>
<output-unicasts>
  output-unicasts
</output-unicasts>
<output-broadcasts>
  output-broadcasts
</output-broadcasts>
<output-multicasts>
  output-multicasts
</output-multicasts>
```

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```
        <output-crc-errors>
          output-crc-errors
        </output-crc-errors>
        <output-fifo-errors>
          output-fifo-errors
        </output-fifo-errors>
        <output-mac-control-frames>
          output-mac-control-frames
        </output-mac-control-frames>
        <output-mac-pause-frames>
          output-mac-pause-frames
        </output-mac-pause-frames>
      </ethernet-mac-statistics>
    </jswitch-port>
  </jswitch-port-information>
```

Description Ethernet MAC statistics

<ethernet-mac-statistics>

Usage

```
<physical-interface>
  <ethernet-mac-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <input-unicasts>
      input-unicasts
    </input-unicasts>
    <input-broadcasts>
      input-broadcasts
    </input-broadcasts>
    <input-multicasts>
      input-multicasts
    </input-multicasts>
    <input-crc-errors>
      input-crc-errors
    </input-crc-errors>
    <input-fifo-errors>
      input-fifo-errors
    </input-fifo-errors>
    <input-mac-control-frames>
      input-mac-control-frames
    </input-mac-control-frames>
    <input-mac-pause-frames>
      input-mac-pause-frames
    </input-mac-pause-frames>
    <input-oversized-frames>
      input-oversized-frames
    </input-oversized-frames>
    <input-undersized-frames>
```


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```
    input-undersized-frames
   </input-undersized-frames>
   <input-jabber-frames>
    input-jabber-frames
   </input-jabber-frames>
   <input-fragment-frames>
    input-fragment-frames
   </input-fragment-frames>
   <input-vlan-tagged-frames>
    input-vlan-tagged-frames
   </input-vlan-tagged-frames>
   <input-code-violations>
    input-code-violations
   </input-code-violations>
   <input-policer-frame-drops>
    input-policer-frame-drops
   </input-policer-frame-drops>
   <input-policer-byte-drops>
    input-policer-byte-drops
   </input-policer-byte-drops>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-packets>
    output-packets
   </output-packets>
   <output-unicasts>
    output-unicasts
   </output-unicasts>
   <output-broadcasts>
    output-broadcasts
   </output-broadcasts>
   <output-multicasts>
    output-multicasts
   </output-multicasts>
   <output-crc-errors>
    output-crc-errors
   </output-crc-errors>
   <output-fifo-errors>
    output-fifo-errors
   </output-fifo-errors>
   <output-mac-control-frames>
    output-mac-control-frames
   </output-mac-control-frames>
   <output-mac-pause-frames>
    output-mac-pause-frames
   </output-mac-pause-frames>
  </ethernet-mac-statistics>
 </physical-interface>
```

Description Ethernet MAC statistics

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<ethernet-mac-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <ethernet-mac-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-packets>
    input-packets
   </input-packets>
   <input-unicasts>
    input-unicasts
   </input-unicasts>
   <input-broadcasts>
    input-broadcasts
   </input-broadcasts>
   <input-multicasts>
    input-multicasts
   </input-multicasts>
   <input-crc-errors>
    input-crc-errors
   </input-crc-errors>
   <input-fifo-errors>
    input-fifo-errors
   </input-fifo-errors>
   <input-mac-control-frames>
    input-mac-control-frames
   </input-mac-control-frames>
   <input-mac-pause-frames>
    input-mac-pause-frames
   </input-mac-pause-frames>
   <input-oversized-frames>
    input-oversized-frames
   </input-oversized-frames>
   <input-undersized-frames>
    input-undersized-frames
   </input-undersized-frames>
   <input-jabber-frames>
    input-jabber-frames
   </input-jabber-frames>
   <input-fragment-frames>
    input-fragment-frames
   </input-fragment-frames>
   <input-vlan-tagged-frames>
    input-vlan-tagged-frames
   </input-vlan-tagged-frames>
   <input-code-violations>
    input-code-violations
   </input-code-violations>
   <input-policer-frame-drops>
    input-policer-frame-drops
   </input-policer-frame-drops>
   <input-policer-byte-drops>
```


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```
            input-policer-byte-drops
          </input-policer-byte-drops>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-packets>
            output-packets
          </output-packets>
          <output-unicasts>
            output-unicasts
          </output-unicasts>
          <output-broadcasts>
            output-broadcasts
          </output-broadcasts>
          <output-multicasts>
            output-multicasts
          </output-multicasts>
          <output-crc-errors>
            output-crc-errors
          </output-crc-errors>
          <output-fifo-errors>
            output-fifo-errors
          </output-fifo-errors>
          <output-mac-control-frames>
            output-mac-control-frames
          </output-mac-control-frames>
          <output-mac-pause-frames>
            output-mac-pause-frames
          </output-mac-pause-frames>
        </ethernet-mac-statistics>
      </physical-interface>
    </interface-information>
```

Description Ethernet MAC statistics

<ethernet-mac-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ethernet-mac-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <input-unicasts>
        input-unicasts
      </input-unicasts>
      <input-broadcasts>
        input-broadcasts
      </input-broadcasts>
      <input-multicasts>
```

```
  input-multicasts
</input-multicasts>
<input-crc-errors>
  input-crc-errors
</input-crc-errors>
<input-fifo-errors>
  input-fifo-errors
</input-fifo-errors>
<input-mac-control-frames>
  input-mac-control-frames
</input-mac-control-frames>
<input-mac-pause-frames>
  input-mac-pause-frames
</input-mac-pause-frames>
<input-oversized-frames>
  input-oversized-frames
</input-oversized-frames>
<input-undersized-frames>
  input-undersized-frames
</input-undersized-frames>
<input-jabber-frames>
  input-jabber-frames
</input-jabber-frames>
<input-fragment-frames>
  input-fragment-frames
</input-fragment-frames>
<input-vlan-tagged-frames>
  input-vlan-tagged-frames
</input-vlan-tagged-frames>
<input-code-violations>
  input-code-violations
</input-code-violations>
<input-policer-frame-drops>
  input-policer-frame-drops
</input-policer-frame-drops>
<input-policer-byte-drops>
  input-policer-byte-drops
</input-policer-byte-drops>
<output-bytes>
  output-bytes
</output-bytes>
<output-packets>
  output-packets
</output-packets>
<output-unicasts>
  output-unicasts
</output-unicasts>
<output-broadcasts>
  output-broadcasts
</output-broadcasts>
<output-multicasts>
  output-multicasts
</output-multicasts>
<output-crc-errors>
  output-crc-errors
</output-crc-errors>
```


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```
        <output-fifo-errors>
          output-fifo-errors
        </output-fifo-errors>
        <output-mac-control-frames>
          output-mac-control-frames
        </output-mac-control-frames>
        <output-mac-pause-frames>
          output-mac-pause-frames
        </output-mac-pause-frames>
      </ethernet-mac-statistics>
    </physical-interface>
  </interface-filter-information>
```

Description Ethernet MAC statistics

<ethernet-mac-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-mac-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <input-unicasts>
        input-unicasts
      </input-unicasts>
      <input-broadcasts>
        input-broadcasts
      </input-broadcasts>
      <input-multicasts>
        input-multicasts
      </input-multicasts>
      <input-crc-errors>
        input-crc-errors
      </input-crc-errors>
      <input-fifo-errors>
        input-fifo-errors
      </input-fifo-errors>
      <input-mac-control-frames>
        input-mac-control-frames
      </input-mac-control-frames>
      <input-mac-pause-frames>
        input-mac-pause-frames
      </input-mac-pause-frames>
      <input-oversized-frames>
        input-oversized-frames
      </input-oversized-frames>
      <input-undersized-frames>
        input-undersized-frames
      </input-undersized-frames>
```

```
<input-jabber-frames>
  input-jabber-frames
</input-jabber-frames>
<input-fragment-frames>
  input-fragment-frames
</input-fragment-frames>
<input-vlan-tagged-frames>
  input-vlan-tagged-frames
</input-vlan-tagged-frames>
<input-code-violations>
  input-code-violations
</input-code-violations>
<input-policer-frame-drops>
  input-policer-frame-drops
</input-policer-frame-drops>
<input-policer-byte-drops>
  input-policer-byte-drops
</input-policer-byte-drops>
<output-bytes>
  output-bytes
</output-bytes>
<output-packets>
  output-packets
</output-packets>
<output-unicasts>
  output-unicasts
</output-unicasts>
<output-broadcasts>
  output-broadcasts
</output-broadcasts>
<output-multicasts>
  output-multicasts
</output-multicasts>
<output-crc-errors>
  output-crc-errors
</output-crc-errors>
<output-fifo-errors>
  output-fifo-errors
</output-fifo-errors>
<output-mac-control-frames>
  output-mac-control-frames
</output-mac-control-frames>
<output-mac-pause-frames>
  output-mac-pause-frames
</output-mac-pause-frames>
</ethernet-mac-statistics>
</physical-interface>
</interface-policer-information>
```

Description Ethernet MAC statistics

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<ethernet-pcs-statistics>

Usage

```
<ethernet-pcs-statistics>
  <bit-error-seconds>
    bit-error-seconds
  </bit-error-seconds>
  <errored-blocks-seconds>
    errored-blocks-seconds
  </errored-blocks-seconds>
</ethernet-pcs-statistics>
```

Description Ethernet PCS statistics

<ethernet-pcs-statistics>

Usage

```
<physical-interface>
  <ethernet-pcs-statistics>
    <bit-error-seconds>
      bit-error-seconds
    </bit-error-seconds>
    <errored-blocks-seconds>
      errored-blocks-seconds
    </errored-blocks-seconds>
  </ethernet-pcs-statistics>
</physical-interface>
```

Description Ethernet PCS statistics

<ethernet-pcs-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <ethernet-pcs-statistics>
      <bit-error-seconds>
        bit-error-seconds
      </bit-error-seconds>
      <errored-blocks-seconds>
        errored-blocks-seconds
      </errored-blocks-seconds>
    </ethernet-pcs-statistics>
  </physical-interface>
</interface-information>
```

Description Ethernet PCS statistics

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<ethernet-pcs-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ethernet-pcs-statistics>
      <bit-error-seconds>
        bit-error-seconds
      </bit-error-seconds>
      <errored-blocks-seconds>
        errored-blocks-seconds
      </errored-blocks-seconds>
    </ethernet-pcs-statistics>
  </physical-interface>
</interface-filter-information>
```

Description Ethernet PCS statistics

<ethernet-pcs-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-pcs-statistics>
      <bit-error-seconds>
        bit-error-seconds
      </bit-error-seconds>
      <errored-blocks-seconds>
        errored-blocks-seconds
      </errored-blocks-seconds>
    </ethernet-pcs-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Ethernet PCS statistics

<fibrechannel-mac-statistics>

Usage

```
<fibrechannel-mac-statistics>
  <fibrechannel-mac-statistics-generic>....</fibrechannel-mac-statistics-generic>
<fibrechannel-mac-statistics-received>....</fibrechannel-mac-statistics-received>


<fibrechannel-mac-statistics-transmitted>....</fibrechannel-mac-statistics-transmitted>

</fibrechannel-mac-statistics>
```

Description Fibre Channel MAC statistics

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<fibrechannel-mac-statistics>

Usage

```
<physical-interface>
  <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>....</fibrechannel-mac-statistics-generic>

  <fibrechannel-mac-statistics-received>....</fibrechannel-mac-statistics-received>


<fibrechannel-mac-statistics-transmitted>....</fibrechannel-mac-statistics-transmitted>

   </fibrechannel-mac-statistics>
</physical-interface>
```

Description Fibre Channel MAC statistics

<fibrechannel-mac-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>....</fibrechannel-mac-statistics-generic>


<fibrechannel-mac-statistics-received>....</fibrechannel-mac-statistics-received>

<fibrechannel-mac-statistics-transmitted>....</fibrechannel-mac-statistics-transmitted>

     </fibrechannel-mac-statistics>
  </physical-interface>
</interface-information>
```

Description Fibre Channel MAC statistics

<fibrechannel-mac-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>....</fibrechannel-mac-statistics-generic>


<fibrechannel-mac-statistics-received>....</fibrechannel-mac-statistics-received>

<fibrechannel-mac-statistics-transmitted>....</fibrechannel-mac-statistics-transmitted>

     </fibrechannel-mac-statistics>
  </physical-interface>
```

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```
</interface-filter-information>
```

Description Fibre Channel MAC statistics

<fibrechannel-mac-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>....</fibrechannel-mac-statistics-generic>


<fibrechannel-mac-statistics-received>....</fibrechannel-mac-statistics-received>

<fibrechannel-mac-statistics-transmitted>....</fibrechannel-mac-statistics-transmitted>

    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Fibre Channel MAC statistics

<fibrechannel-mac-statistics-generic>

Usage

```
<fibrechannel-mac-statistics-generic>
  <link-failures>
    link-failures
  </link-failures>
  <loss-of-sync>
    loss-of-sync
  </loss-of-sync>
  <loss-of-signal>
    loss-of-signal
  </loss-of-signal>
  <sw-link-resets>
    sw-link-resets
  </sw-link-resets>
  <buffer-to-buffer-credit-recovery-lost-frames>
    buffer-to-buffer-credit-recovery-lost-frames
  </buffer-to-buffer-credit-recovery-lost-frames>
  <buffer-to-buffer-credit-recovery-lost-rrdys>
    buffer-to-buffer-credit-recovery-lost-rrdys
  </buffer-to-buffer-credit-recovery-lost-rrdys>
</fibrechannel-mac-statistics-generic>
```

Description

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<fibrechannel-mac-statistics-generic>

Usage

```
<fibrechannel-mac-statistics>
  <fibrechannel-mac-statistics-generic>
    <link-failures>
      link-failures
    </link-failures>
    <loss-of-sync>
      loss-of-sync
    </loss-of-sync>
    <loss-of-signal>
      loss-of-signal
    </loss-of-signal>
    <sw-link-resets>
      sw-link-resets
    </sw-link-resets>
    <buffer-to-buffer-credit-recovery-lost-frames>
      buffer-to-buffer-credit-recovery-lost-frames
    </buffer-to-buffer-credit-recovery-lost-frames>
    <buffer-to-buffer-credit-recovery-lost-rrdys>
      buffer-to-buffer-credit-recovery-lost-rrdys
    </buffer-to-buffer-credit-recovery-lost-rrdys>
  </fibrechannel-mac-statistics-generic>
</fibrechannel-mac-statistics>
```

Description

<fibrechannel-mac-statistics-generic>

Usage

```
<physical-interface>
  <fibrechannel-mac-statistics>
    <fibrechannel-mac-statistics-generic>
      <link-failures>
        link-failures
      </link-failures>
      <loss-of-sync>
        loss-of-sync
      </loss-of-sync>
      <loss-of-signal>
        loss-of-signal
      </loss-of-signal>
      <sw-link-resets>
        sw-link-resets
      </sw-link-resets>
      <buffer-to-buffer-credit-recovery-lost-frames>
        buffer-to-buffer-credit-recovery-lost-frames
      </buffer-to-buffer-credit-recovery-lost-frames>
      <buffer-to-buffer-credit-recovery-lost-rrdys>
        buffer-to-buffer-credit-recovery-lost-rrdys
      </buffer-to-buffer-credit-recovery-lost-rrdys>
    </fibrechannel-mac-statistics-generic>
  </fibrechannel-mac-statistics>
```

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```
</physical-interface>
```

Description

<fibrechannel-mac-statistics-generic>

Usage

```
<interface-information>
 <physical-interface>
  <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>
    <link-failures>
     link-failures
    </link-failures>
    <loss-of-sync>
     loss-of-sync
    </loss-of-sync>
    <loss-of-signal>
     loss-of-signal
    </loss-of-signal>
    <sw-link-resets>
     sw-link-resets
    </sw-link-resets>
    <buffer-to-buffer-credit-recovery-lost-frames>
     buffer-to-buffer-credit-recovery-lost-frames
    </buffer-to-buffer-credit-recovery-lost-frames>
    <buffer-to-buffer-credit-recovery-lost-rrdys>
     buffer-to-buffer-credit-recovery-lost-rrdys
    </buffer-to-buffer-credit-recovery-lost-rrdys>
   </fibrechannel-mac-statistics-generic>
  </fibrechannel-mac-statistics>
 </physical-interface>
</interface-information>
```

Description

<fibrechannel-mac-statistics-generic>

Usage

```
<interface-filter-information>
 <physical-interface>
  <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-generic>
    <link-failures>
     link-failures
    </link-failures>
    <loss-of-sync>
     loss-of-sync
    </loss-of-sync>
    <loss-of-signal>
     loss-of-signal
    </loss-of-signal>
    <sw-link-resets>
     sw-link-resets
```


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```
        </sw-link-resets>
        <buffer-to-buffer-credit-recovery-lost-frames>
          buffer-to-buffer-credit-recovery-lost-frames
        </buffer-to-buffer-credit-recovery-lost-frames>
        <buffer-to-buffer-credit-recovery-lost-rrdys>
          buffer-to-buffer-credit-recovery-lost-rrdys
        </buffer-to-buffer-credit-recovery-lost-rrdys>
      </fibrechannel-mac-statistics-generic>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<fibrechannel-mac-statistics-generic>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
      <fibrechannel-mac-statistics-generic>
        <link-failures>
          link-failures
        </link-failures>
        <loss-of-sync>
          loss-of-sync
        </loss-of-sync>
        <loss-of-signal>
          loss-of-signal
        </loss-of-signal>
        <sw-link-resets>
          sw-link-resets
        </sw-link-resets>
        <buffer-to-buffer-credit-recovery-lost-frames>
          buffer-to-buffer-credit-recovery-lost-frames
        </buffer-to-buffer-credit-recovery-lost-frames>
        <buffer-to-buffer-credit-recovery-lost-rrdys>
          buffer-to-buffer-credit-recovery-lost-rrdys
        </buffer-to-buffer-credit-recovery-lost-rrdys>
      </fibrechannel-mac-statistics-generic>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<fibrechannel-mac-statistics-received>
  <rx-class-2-frames>
    rx-class-2-frames
  </rx-class-2-frames>
  <rx-class-3-frames>
```

```
  rx-class-3-frames
</rx-class-3-frames>
<rx-class-f-frames>
  rx-class-f-frames
</rx-class-f-frames>
<rx-class-2-octets>
  rx-class-2-octets
</rx-class-2-octets>
<rx-class-3-octets>
  rx-class-3-octets
</rx-class-3-octets>
<rx-class-f-octets>
  rx-class-f-octets
</rx-class-f-octets>
<class-2-discards>
  class-2-discards
</class-2-discards>
<class-3-discards>
  class-3-discards
</class-3-discards>
<class-f-discards>
  class-f-discards
</class-f-discards>
<rx-frames-too-long>
  rx-frames-too-long
</rx-frames-too-long>
<rx-frames-too-short>
  rx-frames-too-short
</rx-frames-too-short>
<rx-missing-eof>
  rx-missing-eof
</rx-missing-eof>
<rx-invalid-crcs>
  rx-invalid-crcs
</rx-invalid-crcs>
<rx-link-resets>
  rx-link-resets
</rx-link-resets>
<rx-link-reset-responses>
  rx-link-reset-responses
</rx-link-reset-responses>
<rx-offlines>
  rx-offlines
</rx-offlines>
<rx-not-operationals>
  rx-not-operationals
</rx-not-operationals>
<rx-invalid-tx-words>
  rx-invalid-tx-words
</rx-invalid-tx-words>
<rx-encoding-disparity-errors>
  rx-encoding-disparity-errors
</rx-encoding-disparity-errors>
<rx-delimiter-errors>
  rx-delimiter-errors
</rx-delimiter-errors>
```


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```
<rx-input-buffers-full>
  rx-input-buffers-full
</rx-input-buffers-full>
<rx-invalid-ordered-sets>
  rx-invalid-ordered-sets
</rx-invalid-ordered-sets>
<rx-prim-seq-protocol-errors>
  rx-prim-seq-protocol-errors
</rx-prim-seq-protocol-errors>
<rx-other-errors>
  rx-other-errors
</rx-other-errors>
</fibrechannel-mac-statistics-received>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<fibrechannel-mac-statistics>
  <fibrechannel-mac-statistics-received>
    <rx-class-2-frames>
      rx-class-2-frames
    </rx-class-2-frames>
    <rx-class-3-frames>
      rx-class-3-frames
    </rx-class-3-frames>
    <rx-class-f-frames>
      rx-class-f-frames
    </rx-class-f-frames>
    <rx-class-2-octets>
      rx-class-2-octets
    </rx-class-2-octets>
    <rx-class-3-octets>
      rx-class-3-octets
    </rx-class-3-octets>
    <rx-class-f-octets>
      rx-class-f-octets
    </rx-class-f-octets>
    <class-2-discards>
      class-2-discards
    </class-2-discards>
    <class-3-discards>
      class-3-discards
    </class-3-discards>
    <class-f-discards>
      class-f-discards
    </class-f-discards>
    <rx-frames-too-long>
      rx-frames-too-long
    </rx-frames-too-long>
    <rx-frames-too-short>
      rx-frames-too-short
    </rx-frames-too-short>
    <rx-missing-eof>
```

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```
      rx-missing-eof
    </rx-missing-eof>
    <rx-invalid-crcs>
      rx-invalid-crcs
    </rx-invalid-crcs>
    <rx-link-resets>
      rx-link-resets
    </rx-link-resets>
    <rx-link-reset-responses>
      rx-link-reset-responses
    </rx-link-reset-responses>
    <rx-offlines>
      rx-offlines
    </rx-offlines>
    <rx-not-operationals>
      rx-not-operationals
    </rx-not-operationals>
    <rx-invalid-tx-words>
      rx-invalid-tx-words
    </rx-invalid-tx-words>
    <rx-encoding-disparity-errors>
      rx-encoding-disparity-errors
    </rx-encoding-disparity-errors>
    <rx-delimiter-errors>
      rx-delimiter-errors
    </rx-delimiter-errors>
    <rx-input-buffers-full>
      rx-input-buffers-full
    </rx-input-buffers-full>
    <rx-invalid-ordered-sets>
      rx-invalid-ordered-sets
    </rx-invalid-ordered-sets>
    <rx-prim-seq-protocol-errors>
      rx-prim-seq-protocol-errors
    </rx-prim-seq-protocol-errors>
    <rx-other-errors>
      rx-other-errors
    </rx-other-errors>
  </fibrechannel-mac-statistics-received>
</fibrechannel-mac-statistics>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<physical-interface>
  <fibrechannel-mac-statistics>
    <fibrechannel-mac-statistics-received>
      <rx-class-2-frames>
        rx-class-2-frames
      </rx-class-2-frames>
      <rx-class-3-frames>
        rx-class-3-frames
      </rx-class-3-frames>
```


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```
<rx-class-f-frames>
  rx-class-f-frames
</rx-class-f-frames>
<rx-class-2-octets>
  rx-class-2-octets
</rx-class-2-octets>
<rx-class-3-octets>
  rx-class-3-octets
</rx-class-3-octets>
<rx-class-f-octets>
  rx-class-f-octets
</rx-class-f-octets>
<class-2-discards>
  class-2-discards
</class-2-discards>
<class-3-discards>
  class-3-discards
</class-3-discards>
<class-f-discards>
  class-f-discards
</class-f-discards>
<rx-frames-too-long>
  rx-frames-too-long
</rx-frames-too-long>
<rx-frames-too-short>
  rx-frames-too-short
</rx-frames-too-short>
<rx-missing-eof>
  rx-missing-eof
</rx-missing-eof>
<rx-invalid-crcs>
  rx-invalid-crcs
</rx-invalid-crcs>
<rx-link-resets>
  rx-link-resets
</rx-link-resets>
<rx-link-reset-responses>
  rx-link-reset-responses
</rx-link-reset-responses>
<rx-offlines>
  rx-offlines
</rx-offlines>
<rx-not-operationals>
  rx-not-operationals
</rx-not-operationals>
<rx-invalid-tx-words>
  rx-invalid-tx-words
</rx-invalid-tx-words>
<rx-encoding-disparity-errors>
  rx-encoding-disparity-errors
</rx-encoding-disparity-errors>
<rx-delimiter-errors>
  rx-delimiter-errors
</rx-delimiter-errors>
<rx-input-buffers-full>
  rx-input-buffers-full
```

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```
        </rx-input-buffers-full>
        <rx-invalid-ordered-sets>
          rx-invalid-ordered-sets
        </rx-invalid-ordered-sets>
        <rx-prim-seq-protocol-errors>
          rx-prim-seq-protocol-errors
        </rx-prim-seq-protocol-errors>
        <rx-other-errors>
          rx-other-errors
        </rx-other-errors>
      </fibrechannel-mac-statistics-received>
    </fibrechannel-mac-statistics>
  </physical-interface>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<interface-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
      <fibrechannel-mac-statistics-received>
        <rx-class-2-frames>
          rx-class-2-frames
        </rx-class-2-frames>
        <rx-class-3-frames>
          rx-class-3-frames
        </rx-class-3-frames>
        <rx-class-f-frames>
          rx-class-f-frames
        </rx-class-f-frames>
        <rx-class-2-octets>
          rx-class-2-octets
        </rx-class-2-octets>
        <rx-class-3-octets>
          rx-class-3-octets
        </rx-class-3-octets>
        <rx-class-f-octets>
          rx-class-f-octets
        </rx-class-f-octets>
        <class-2-discards>
          class-2-discards
        </class-2-discards>
        <class-3-discards>
          class-3-discards
        </class-3-discards>
        <class-f-discards>
          class-f-discards
        </class-f-discards>
        <rx-frames-too-long>
          rx-frames-too-long
        </rx-frames-too-long>
        <rx-frames-too-short>
          rx-frames-too-short
```


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```
        </rx-frames-too-short>
        <rx-missing-eof>
          rx-missing-eof
        </rx-missing-eof>
        <rx-invalid-crcs>
          rx-invalid-crcs
        </rx-invalid-crcs>
        <rx-link-resets>
          rx-link-resets
        </rx-link-resets>
        <rx-link-reset-responses>
          rx-link-reset-responses
        </rx-link-reset-responses>
        <rx-offlines>
          rx-offlines
        </rx-offlines>
        <rx-not-operationals>
          rx-not-operationals
        </rx-not-operationals>
        <rx-invalid-tx-words>
          rx-invalid-tx-words
        </rx-invalid-tx-words>
        <rx-encoding-disparity-errors>
          rx-encoding-disparity-errors
        </rx-encoding-disparity-errors>
        <rx-delimiter-errors>
          rx-delimiter-errors
        </rx-delimiter-errors>
        <rx-input-buffers-full>
          rx-input-buffers-full
        </rx-input-buffers-full>
        <rx-invalid-ordered-sets>
          rx-invalid-ordered-sets
        </rx-invalid-ordered-sets>
        <rx-prim-seq-protocol-errors>
          rx-prim-seq-protocol-errors
        </rx-prim-seq-protocol-errors>
        <rx-other-errors>
          rx-other-errors
        </rx-other-errors>
      </fibrechannel-mac-statistics-received>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-information>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<interface-filter-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
      <fibrechannel-mac-statistics-received>
        <rx-class-2-frames>
```

```
  rx-class-2-frames
</rx-class-2-frames>
<rx-class-3-frames>
  rx-class-3-frames
</rx-class-3-frames>
<rx-class-f-frames>
  rx-class-f-frames
</rx-class-f-frames>
<rx-class-2-octets>
  rx-class-2-octets
</rx-class-2-octets>
<rx-class-3-octets>
  rx-class-3-octets
</rx-class-3-octets>
<rx-class-f-octets>
  rx-class-f-octets
</rx-class-f-octets>
<class-2-discards>
  class-2-discards
</class-2-discards>
<class-3-discards>
  class-3-discards
</class-3-discards>
<class-f-discards>
  class-f-discards
</class-f-discards>
<rx-frames-too-long>
  rx-frames-too-long
</rx-frames-too-long>
<rx-frames-too-short>
  rx-frames-too-short
</rx-frames-too-short>
<rx-missing-eof>
  rx-missing-eof
</rx-missing-eof>
<rx-invalid-crcs>
  rx-invalid-crcs
</rx-invalid-crcs>
<rx-link-resets>
  rx-link-resets
</rx-link-resets>
<rx-link-reset-responses>
  rx-link-reset-responses
</rx-link-reset-responses>
<rx-offlines>
  rx-offlines
</rx-offlines>
<rx-not-operationals>
  rx-not-operationals
</rx-not-operationals>
<rx-invalid-tx-words>
  rx-invalid-tx-words
</rx-invalid-tx-words>
<rx-encoding-disparity-errors>
  rx-encoding-disparity-errors
</rx-encoding-disparity-errors>
```


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```
        <rx-delimiter-errors>
          rx-delimiter-errors
        </rx-delimiter-errors>
        <rx-input-buffers-full>
          rx-input-buffers-full
        </rx-input-buffers-full>
        <rx-invalid-ordered-sets>
          rx-invalid-ordered-sets
        </rx-invalid-ordered-sets>
        <rx-prim-seq-protocol-errors>
          rx-prim-seq-protocol-errors
        </rx-prim-seq-protocol-errors>
        <rx-other-errors>
          rx-other-errors
        </rx-other-errors>
      </fibrechannel-mac-statistics-received>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<fibrechannel-mac-statistics-received>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
      <fibrechannel-mac-statistics-received>
        <rx-class-2-frames>
          rx-class-2-frames
        </rx-class-2-frames>
        <rx-class-3-frames>
          rx-class-3-frames
        </rx-class-3-frames>
        <rx-class-f-frames>
          rx-class-f-frames
        </rx-class-f-frames>
        <rx-class-2-octets>
          rx-class-2-octets
        </rx-class-2-octets>
        <rx-class-3-octets>
          rx-class-3-octets
        </rx-class-3-octets>
        <rx-class-f-octets>
          rx-class-f-octets
        </rx-class-f-octets>
        <class-2-discards>
          class-2-discards
        </class-2-discards>
        <class-3-discards>
          class-3-discards
        </class-3-discards>
        <class-f-discards>
          class-f-discards
```

```
        </class-f-discards>
        <rx-frames-too-long>
          rx-frames-too-long
        </rx-frames-too-long>
        <rx-frames-too-short>
          rx-frames-too-short
        </rx-frames-too-short>
        <rx-missing-eof>
          rx-missing-eof
        </rx-missing-eof>
        <rx-invalid-crcs>
          rx-invalid-crcs
        </rx-invalid-crcs>
        <rx-link-resets>
          rx-link-resets
        </rx-link-resets>
        <rx-link-reset-responses>
          rx-link-reset-responses
        </rx-link-reset-responses>
        <rx-offlines>
          rx-offlines
        </rx-offlines>
        <rx-not-operationals>
          rx-not-operationals
        </rx-not-operationals>
        <rx-invalid-tx-words>
          rx-invalid-tx-words
        </rx-invalid-tx-words>
        <rx-encoding-disparity-errors>
          rx-encoding-disparity-errors
        </rx-encoding-disparity-errors>
        <rx-delimiter-errors>
          rx-delimiter-errors
        </rx-delimiter-errors>
        <rx-input-buffers-full>
          rx-input-buffers-full
        </rx-input-buffers-full>
        <rx-invalid-ordered-sets>
          rx-invalid-ordered-sets
        </rx-invalid-ordered-sets>
        <rx-prim-seq-protocol-errors>
          rx-prim-seq-protocol-errors
        </rx-prim-seq-protocol-errors>
        <rx-other-errors>
          rx-other-errors
        </rx-other-errors>
      </fibrechannel-mac-statistics-received>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

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<fibrechannel-mac-statistics-transmitted>

Usage

```
<fibrechannel-mac-statistics-transmitted>
  <tx-class-2-frames>
    tx-class-2-frames
  </tx-class-2-frames>
  <tx-class-3-frames>
    tx-class-3-frames
  </tx-class-3-frames>
  <tx-class-f-frames>
    tx-class-f-frames
  </tx-class-f-frames>
  <tx-class-2-octets>
    tx-class-2-octets
  </tx-class-2-octets>
  <tx-class-3-octets>
    tx-class-3-octets
  </tx-class-3-octets>
  <tx-class-f-octets>
    tx-class-f-octets
  </tx-class-f-octets>
  <tx-link-resets>
    tx-link-resets
  </tx-link-resets>
  <tx-link-reset-responses>
    tx-link-reset-responses
  </tx-link-reset-responses>
  <tx-offlines>
    tx-offlines
  </tx-offlines>
  <tx-not-operationals>
    tx-not-operationals
  </tx-not-operationals>
  <tx-bb-credit-zeroes>
    tx-bb-credit-zeroes
  </tx-bb-credit-zeroes>
  <tx-other-errors>
    tx-other-errors
  </tx-other-errors>
</fibrechannel-mac-statistics-transmitted>
```

Description

<fibrechannel-mac-statistics-transmitted>

Usage

```
<fibrechannel-mac-statistics>
  <fibrechannel-mac-statistics-transmitted>
    <tx-class-2-frames>
      tx-class-2-frames
    </tx-class-2-frames>
    <tx-class-3-frames>
      tx-class-3-frames
```

```
    </tx-class-3-frames>
    <tx-class-f-frames>
      tx-class-f-frames
    </tx-class-f-frames>
    <tx-class-2-octets>
      tx-class-2-octets
    </tx-class-2-octets>
    <tx-class-3-octets>
      tx-class-3-octets
    </tx-class-3-octets>
    <tx-class-f-octets>
      tx-class-f-octets
    </tx-class-f-octets>
    <tx-link-resets>
      tx-link-resets
    </tx-link-resets>
    <tx-link-reset-responses>
      tx-link-reset-responses
    </tx-link-reset-responses>
    <tx-offlines>
      tx-offlines
    </tx-offlines>
    <tx-not-operationals>
      tx-not-operationals
    </tx-not-operationals>
    <tx-bb-credit-zeroes>
      tx-bb-credit-zeroes
    </tx-bb-credit-zeroes>
    <tx-other-errors>
      tx-other-errors
    </tx-other-errors>
  </fibrechannel-mac-statistics-transmitted>
</fibrechannel-mac-statistics>
```

Description

<fibrechannel-mac-statistics-transmitted>

Usage

```
<physical-interface>
  <fibrechannel-mac-statistics>
    <fibrechannel-mac-statistics-transmitted>
      <tx-class-2-frames>
        tx-class-2-frames
      </tx-class-2-frames>
      <tx-class-3-frames>
        tx-class-3-frames
      </tx-class-3-frames>
      <tx-class-f-frames>
        tx-class-f-frames
      </tx-class-f-frames>
      <tx-class-2-octets>
        tx-class-2-octets
      </tx-class-2-octets>
      <tx-class-3-octets>
```


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```
        tx-class-3-octets
       </tx-class-3-octets>
       <tx-class-f-octets>
        tx-class-f-octets
       </tx-class-f-octets>
       <tx-link-resets>
        tx-link-resets
       </tx-link-resets>
       <tx-link-reset-responses>
        tx-link-reset-responses
       </tx-link-reset-responses>
       <tx-offlines>
        tx-offlines
       </tx-offlines>
       <tx-not-operationals>
        tx-not-operationals
       </tx-not-operationals>
       <tx-bb-credit-zeroes>
        tx-bb-credit-zeroes
       </tx-bb-credit-zeroes>
       <tx-other-errors>
        tx-other-errors
       </tx-other-errors>
      </fibrechannel-mac-statistics-transmitted>
     </fibrechannel-mac-statistics>
    </physical-interface>
```

Description

<fibrechannel-mac-statistics-transmitted>

Usage

```
<interface-information>
 <physical-interface>
  <fibrechannel-mac-statistics>
   <fibrechannel-mac-statistics-transmitted>
    <tx-class-2-frames>
     tx-class-2-frames
    </tx-class-2-frames>
    <tx-class-3-frames>
     tx-class-3-frames
    </tx-class-3-frames>
    <tx-class-f-frames>
     tx-class-f-frames
    </tx-class-f-frames>
    <tx-class-2-octets>
     tx-class-2-octets
    </tx-class-2-octets>
    <tx-class-3-octets>
     tx-class-3-octets
    </tx-class-3-octets>
    <tx-class-f-octets>
     tx-class-f-octets
    </tx-class-f-octets>
    <tx-link-resets>
```

```
            tx-link-resets
          </tx-link-resets>
          <tx-link-reset-responses>
            tx-link-reset-responses
          </tx-link-reset-responses>
          <tx-offlines>
            tx-offlines
          </tx-offlines>
          <tx-not-operationals>
            tx-not-operationals
          </tx-not-operationals>
          <tx-bb-credit-zeroes>
            tx-bb-credit-zeroes
          </tx-bb-credit-zeroes>
          <tx-other-errors>
            tx-other-errors
          </tx-other-errors>
        </fibrechannel-mac-statistics-transmitted>
      </fibrechannel-mac-statistics>
    </physical-interface>
  </interface-information>
```

Description

<fibrechannel-mac-statistics-transmitted>

Usage

```
  <interface-filter-information>
    <physical-interface>
      <fibrechannel-mac-statistics>
        <fibrechannel-mac-statistics-transmitted>
          <tx-class-2-frames>
            tx-class-2-frames
          </tx-class-2-frames>
          <tx-class-3-frames>
            tx-class-3-frames
          </tx-class-3-frames>
          <tx-class-f-frames>
            tx-class-f-frames
          </tx-class-f-frames>
          <tx-class-2-octets>
            tx-class-2-octets
          </tx-class-2-octets>
          <tx-class-3-octets>
            tx-class-3-octets
          </tx-class-3-octets>
          <tx-class-f-octets>
            tx-class-f-octets
          </tx-class-f-octets>
          <tx-link-resets>
            tx-link-resets
          </tx-link-resets>
          <tx-link-reset-responses>
            tx-link-reset-responses
          </tx-link-reset-responses>
```


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```
        <tx-offlines>
          tx-offlines
        </tx-offlines>
        <tx-not-operationals>
          tx-not-operationals
        </tx-not-operationals>
        <tx-bb-credit-zeroes>
          tx-bb-credit-zeroes
        </tx-bb-credit-zeroes>
        <tx-other-errors>
          tx-other-errors
        </tx-other-errors>
      </fibrechannel-mac-statistics-transmitted>
    </fibrechannel-mac-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<fibrechannel-mac-statistics-transmitted>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-mac-statistics>
      <fibrechannel-mac-statistics-transmitted>
        <tx-class-2-frames>
          tx-class-2-frames
        </tx-class-2-frames>
        <tx-class-3-frames>
          tx-class-3-frames
        </tx-class-3-frames>
        <tx-class-f-frames>
          tx-class-f-frames
        </tx-class-f-frames>
        <tx-class-2-octets>
          tx-class-2-octets
        </tx-class-2-octets>
        <tx-class-3-octets>
          tx-class-3-octets
        </tx-class-3-octets>
        <tx-class-f-octets>
          tx-class-f-octets
        </tx-class-f-octets>
        <tx-link-resets>
          tx-link-resets
        </tx-link-resets>
        <tx-link-reset-responses>
          tx-link-reset-responses
        </tx-link-reset-responses>
        <tx-offlines>
          tx-offlines
        </tx-offlines>
        <tx-not-operationals>
          tx-not-operationals
```

```
            </tx-not-operationals>
            <tx-bb-credit-zeroes>
              tx-bb-credit-zeroes
            </tx-bb-credit-zeroes>
            <tx-other-errors>
              tx-other-errors
            </tx-other-errors>
          </fibrechannel-mac-statistics-transmitted>
        </fibrechannel-mac-statistics>
      </physical-interface>
    </interface-policer-information>
```

Description

<fibrechannel-port-flow-control>

Usage

```
<fibrechannel-port-flow-control>
  <fibrechannel-port-flow-control-mode>
    fibrechannel-port-flow-control-mode
  </fibrechannel-port-flow-control-mode>

<fibrechannel-port-flow-control-credits>....</fibrechannel-port-flow-control-credits>
  </fibrechannel-port-flow-control>
```

Description Fibre Channel interface flow control

<fibrechannel-port-flow-control>

Usage

```
<physical-interface>
  <fibrechannel-port-flow-control>
    <fibrechannel-port-flow-control-mode>
      fibrechannel-port-flow-control-mode
    </fibrechannel-port-flow-control-mode>

<fibrechannel-port-flow-control-credits>....</fibrechannel-port-flow-control-credits>
  </fibrechannel-port-flow-control>
</physical-interface>
```

Description Fibre Channel interface flow control

<fibrechannel-port-flow-control>

Usage

```
<interface-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
      <fibrechannel-port-flow-control-mode>
        fibrechannel-port-flow-control-mode
      </fibrechannel-port-flow-control-mode>
```


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```
<fibrechannel-port-flow-control-credits>....</fibrechannel-port-flow-control-credits>
        </fibrechannel-port-flow-control>
      </physical-interface>
    </interface-information>
```

Description Fibre Channel interface flow control

<fibrechannel-port-flow-control>

Usage

```
<interface-filter-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
      <fibrechannel-port-flow-control-mode>
        fibrechannel-port-flow-control-mode
      </fibrechannel-port-flow-control-mode>

<fibrechannel-port-flow-control-credits>....</fibrechannel-port-flow-control-credits>
        </fibrechannel-port-flow-control>
      </physical-interface>
    </interface-filter-information>
```

Description Fibre Channel interface flow control

<fibrechannel-port-flow-control>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
      <fibrechannel-port-flow-control-mode>
        fibrechannel-port-flow-control-mode
      </fibrechannel-port-flow-control-mode>

<fibrechannel-port-flow-control-credits>....</fibrechannel-port-flow-control-credits>
        </fibrechannel-port-flow-control>
      </physical-interface>
    </interface-policer-information>
```

Description Fibre Channel interface flow control

<fibrechannel-port-flow-control-credits>

Usage

```
<fibrechannel-port-flow-control-credits>
  <fibrechannel-port-flow-control-credits-subject>
    fibrechannel-port-flow-control-credits-subject
  </fibrechannel-port-flow-control-credits-subject>
  <fibrechannel-port-flow-control-credits-assigned>
    fibrechannel-port-flow-control-credits-assigned
```

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```
    </fibrechannel-port-flow-control-credits-assigned>
    <fibrechannel-port-flow-control-credits-available>
      fibrechannel-port-flow-control-credits-available
    </fibrechannel-port-flow-control-credits-available>
  </fibrechannel-port-flow-control-credits>
```

Description Generic flow control credits

<fibrechannel-port-flow-control-credits>

Usage

```
<fibrechannel-port-flow-control>
  <fibrechannel-port-flow-control-credits>
    <fibrechannel-port-flow-control-credits-subject>
      fibrechannel-port-flow-control-credits-subject
    </fibrechannel-port-flow-control-credits-subject>
    <fibrechannel-port-flow-control-credits-assigned>
      fibrechannel-port-flow-control-credits-assigned
    </fibrechannel-port-flow-control-credits-assigned>
    <fibrechannel-port-flow-control-credits-available>
      fibrechannel-port-flow-control-credits-available
    </fibrechannel-port-flow-control-credits-available>
  </fibrechannel-port-flow-control-credits>
</fibrechannel-port-flow-control>
```

Description Generic flow control credits

<fibrechannel-port-flow-control-credits>

Usage

```
<physical-interface>
  <fibrechannel-port-flow-control>
    <fibrechannel-port-flow-control-credits>
      <fibrechannel-port-flow-control-credits-subject>
        fibrechannel-port-flow-control-credits-subject
      </fibrechannel-port-flow-control-credits-subject>
      <fibrechannel-port-flow-control-credits-assigned>
        fibrechannel-port-flow-control-credits-assigned
      </fibrechannel-port-flow-control-credits-assigned>
      <fibrechannel-port-flow-control-credits-available>
        fibrechannel-port-flow-control-credits-available
      </fibrechannel-port-flow-control-credits-available>
    </fibrechannel-port-flow-control-credits>
  </fibrechannel-port-flow-control>
</physical-interface>
```

Description Generic flow control credits

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<fibrechannel-port-flow-control-credits>

Usage

```
<interface-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
      <fibrechannel-port-flow-control-credits>
        <fibrechannel-port-flow-control-credits-subject>
          fibrechannel-port-flow-control-credits-subject
        </fibrechannel-port-flow-control-credits-subject>
        <fibrechannel-port-flow-control-credits-assigned>
          fibrechannel-port-flow-control-credits-assigned
        </fibrechannel-port-flow-control-credits-assigned>
        <fibrechannel-port-flow-control-credits-available>
          fibrechannel-port-flow-control-credits-available
        </fibrechannel-port-flow-control-credits-available>
      </fibrechannel-port-flow-control-credits>
    </fibrechannel-port-flow-control>
  </physical-interface>
</interface-information>
```

Description Generic flow control credits

<fibrechannel-port-flow-control-credits>

Usage

```
<interface-filter-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
      <fibrechannel-port-flow-control-credits>
        <fibrechannel-port-flow-control-credits-subject>
          fibrechannel-port-flow-control-credits-subject
        </fibrechannel-port-flow-control-credits-subject>
        <fibrechannel-port-flow-control-credits-assigned>
          fibrechannel-port-flow-control-credits-assigned
        </fibrechannel-port-flow-control-credits-assigned>
        <fibrechannel-port-flow-control-credits-available>
          fibrechannel-port-flow-control-credits-available
        </fibrechannel-port-flow-control-credits-available>
      </fibrechannel-port-flow-control-credits>
    </fibrechannel-port-flow-control>
  </physical-interface>
</interface-filter-information>
```

Description Generic flow control credits

<fibrechannel-port-flow-control-credits>

Usage

```
<interface-policer-information>
  <physical-interface>
    <fibrechannel-port-flow-control>
```

```
        <fibrechannel-port-flow-control-credits>
          <fibrechannel-port-flow-control-credits-subject>
            fibrechannel-port-flow-control-credits-subject
          </fibrechannel-port-flow-control-credits-subject>
          <fibrechannel-port-flow-control-credits-assigned>
            fibrechannel-port-flow-control-credits-assigned
          </fibrechannel-port-flow-control-credits-assigned>
          <fibrechannel-port-flow-control-credits-available>
            fibrechannel-port-flow-control-credits-available
          </fibrechannel-port-flow-control-credits-available>
        </fibrechannel-port-flow-control-credits>
      </fibrechannel-port-flow-control>
    </physical-interface>
  </interface-policer-information>
```

Description Generic flow control credits

<filter-information>

Usage

```
<filter-information>
  <filter-family>
    filter-family
  </filter-family>
  <filter-input>
    filter-input
  </filter-input>
  <filter-input-precedence>
    filter-input-precedence
  </filter-input-precedence>
  <filter-output>
    filter-output
  </filter-output>
  <filter-output-precedence>
    filter-output-precedence
  </filter-output-precedence>
</filter-information>
```

Description

<filter-information>

Usage

```
<address-family>
  <filter-information>
    <filter-family>
      filter-family
    </filter-family>
    <filter-input>
      filter-input
    </filter-input>
    <filter-input-precedence>
      filter-input-precedence
```


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```
    </filter-input-precedence>
    <filter-output>
      filter-output
    </filter-output>
    <filter-output-precedence>
      filter-output-precedence
    </filter-output-precedence>
  </filter-information>
</address-family>
```

Description

<filter-information>

Usage

```
<logical-interface>
  <filter-information>
    <filter-family>
      filter-family
    </filter-family>
    <filter-input>
      filter-input
    </filter-input>
    <filter-input-precedence>
      filter-input-precedence
    </filter-input-precedence>
    <filter-output>
      filter-output
    </filter-output>
    <filter-output-precedence>
      filter-output-precedence
    </filter-output-precedence>
  </filter-information>
</logical-interface>
```

Description

<filter-information>

Usage

```
<logical-interface>
  <address-family>
    <filter-information>
      <filter-family>
        filter-family
      </filter-family>
      <filter-input>
        filter-input
      </filter-input>
      <filter-input-precedence>
        filter-input-precedence
      </filter-input-precedence>
      <filter-output>
        filter-output
```

```
      </filter-output>
      <filter-output-precedence>
        filter-output-precedence
      </filter-output-precedence>
    </filter-information>
  </address-family>
</logical-interface>
```

Description

<filter-information>

Usage

```
<physical-interface>
  <logical-interface>
    <filter-information>
      <filter-family>
        filter-family
      </filter-family>
      <filter-input>
        filter-input
      </filter-input>
      <filter-input-precedence>
        filter-input-precedence
      </filter-input-precedence>
      <filter-output>
        filter-output
      </filter-output>
      <filter-output-precedence>
        filter-output-precedence
      </filter-output-precedence>
    </filter-information>
  </logical-interface>
</physical-interface>
```

Description

<filter-information>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
```


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```
            filter-output
          </filter-output>
          <filter-output-precedence>
            filter-output-precedence
          </filter-output-precedence>
        </filter-information>
      </address-family>
    </logical-interface>
  </physical-interface>
```

Description

<filter-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<filter-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <filter-information>
          <filter-family>
            filter-family
          </filter-family>
          <filter-input>
            filter-input
```

```
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </address-family>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<filter-information>

Usage

```
<interface-information>
 <logical-interface>
  <filter-information>
   <filter-family>
    filter-family
   </filter-family>
   <filter-input>
    filter-input
   </filter-input>
   <filter-input-precedence>
    filter-input-precedence
   </filter-input-precedence>
   <filter-output>
    filter-output
   </filter-output>
   <filter-output-precedence>
    filter-output-precedence
   </filter-output-precedence>
  </filter-information>
 </logical-interface>
</interface-information>
```

Description

<filter-information>

Usage

```
<interface-information>
 <logical-interface>
  <address-family>
   <filter-information>
    <filter-family>
     filter-family
```


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```
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </address-family>
  </logical-interface>
</interface-information>
```

Description

<filter-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<filter-information>

Usage

```
<interface-filter-information>
  <physical-interface>
```

```
    <logical-interface>
      <address-family>
        <filter-information>
          <filter-family>
            filter-family
          </filter-family>
          <filter-input>
            filter-input
          </filter-input>
          <filter-input-precedence>
            filter-input-precedence
          </filter-input-precedence>
          <filter-output>
            filter-output
          </filter-output>
          <filter-output-precedence>
            filter-output-precedence
          </filter-output-precedence>
        </filter-information>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<filter-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <filter-information>
      <filter-family>
        filter-family
      </filter-family>
      <filter-input>
        filter-input
      </filter-input>
      <filter-input-precedence>
        filter-input-precedence
      </filter-input-precedence>
      <filter-output>
        filter-output
      </filter-output>
      <filter-output-precedence>
        filter-output-precedence
      </filter-output-precedence>
    </filter-information>
  </logical-interface>
</interface-filter-information>
```

Description

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<filter-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description

<filter-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </logical-interface>
  </physical-interface>
```

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```
</interface-policer-information>
```

Description

<filter-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <filter-information>
     <filter-family>
      filter-family
     </filter-family>
     <filter-input>
      filter-input
     </filter-input>
     <filter-input-precedence>
      filter-input-precedence
     </filter-input-precedence>
     <filter-output>
      filter-output
     </filter-output>
     <filter-output-precedence>
      filter-output-precedence
     </filter-output-precedence>
    </filter-information>
   </address-family>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<filter-information>

Usage

```
<interface-policer-information>
 <logical-interface>
  <filter-information>
   <filter-family>
    filter-family
   </filter-family>
   <filter-input>
    filter-input
   </filter-input>
   <filter-input-precedence>
    filter-input-precedence
   </filter-input-precedence>
   <filter-output>
    filter-output
   </filter-output>
   <filter-output-precedence>
```


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```
            filter-output-precedence
          </filter-output-precedence>
        </filter-information>
      </logical-interface>
    </interface-policer-information>
```

Description

<filter-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <filter-information>
        <filter-family>
          filter-family
        </filter-family>
        <filter-input>
          filter-input
        </filter-input>
        <filter-input-precedence>
          filter-input-precedence
        </filter-input-precedence>
        <filter-output>
          filter-output
        </filter-output>
        <filter-output-precedence>
          filter-output-precedence
        </filter-output-precedence>
      </filter-information>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description

<fragments>

Usage

```
<fragments>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
```

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```
  output-frames
 </output-frames>
 <output-fps>
  output-fps
 </output-fps>
 <output-bytes>
  output-bytes
 </output-bytes>
 <output-bps>
  output-bps
 </output-bps>
</fragments>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<multilink-traffic-statistics>
 <multilink-detail-statistics>
  <bundle-detail>
   <fragments>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-frames>
     output-frames
    </output-frames>
    <output-fps>
     output-fps
    </output-fps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </fragments>
  </bundle-detail>
 </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description Fragment statistics for multilink bundles and classes

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<fragments>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <class-detail>
      <fragments>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </fragments>
    </class-detail>
  </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <bundle-detail>
        <fragments>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
```

```
                    input-bytes
                   </input-bytes>
                   <input-bps>
                    input-bps
                   </input-bps>
                   <output-frames>
                    output-frames
                   </output-frames>
                   <output-fps>
                    output-fps
                   </output-fps>
                   <output-bytes>
                    output-bytes
                   </output-bytes>
                   <output-bps>
                    output-bps
                   </output-bps>
                  </fragments>
                 </bundle-detail>
                </multilink-detail-statistics>
               </multilink-traffic-statistics>
              </logical-interface>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<logical-interface>
 <multilink-traffic-statistics>
  <multilink-detail-statistics>
   <class-detail>
    <fragments>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
      output-bytes
     </output-bytes>
```


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```
            <output-bps>
              output-bps
            </output-bps>
          </fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </fragments>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Fragment statistics for multilink bundles and classes

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<fragments>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <fragments>
              <input-frames>
```


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```
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </fragments>
      </bundle-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
 </logical-interface>
</physical-interface>
</interface-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <multilink-detail-statistics>
     <class-detail>
      <fragments>
       <input-frames>
        input-frames
       </input-frames>
       <input-fps>
        input-fps
       </input-fps>
       <input-bytes>
        input-bytes
       </input-bytes>
       <input-bps>
        input-bps
```

```
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
```


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```
                output-bps
               </output-bps>
              </fragments>
             </bundle-detail>
            </multilink-detail-statistics>
           </multilink-traffic-statistics>
          </logical-interface>
         </interface-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <class-detail>
     <fragments>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-frames>
       output-frames
      </output-frames>
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
     </fragments>
    </class-detail>
   </multilink-detail-statistics>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description Fragment statistics for multilink bundles and classes

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<fragments>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <fragments>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </fragments>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
```


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```
<fragments>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
    output-frames
  </output-frames>
  <output-fps>
    output-fps
  </output-fps>
  <output-bytes>
    output-bytes
  </output-bytes>
  <output-bps>
    output-bps
  </output-bps>
</fragments>
</class-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
</interface-filter-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
```

```
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </fragments>
      </bundle-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <class-detail>
     <fragments>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-frames>
       output-frames
      </output-frames>
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
```

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```
                output-bps
               </output-bps>
              </fragments>
             </class-detail>
            </multilink-detail-statistics>
           </multilink-traffic-statistics>
          </logical-interface>
         </interface-filter-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <multilink-detail-statistics>
     <bundle-detail>
      <fragments>
       <input-frames>
        input-frames
       </input-frames>
       <input-fps>
        input-fps
       </input-fps>
       <input-bytes>
        input-bytes
       </input-bytes>
       <input-bps>
        input-bps
       </input-bps>
       <output-frames>
        output-frames
       </output-frames>
       <output-fps>
        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </fragments>
     </bundle-detail>
    </multilink-detail-statistics>
   </multilink-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

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Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <fragments>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </fragments>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
```


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```
<bundle-detail>
 <fragments>
  <input-frames>
   input-frames
  </input-frames>
  <input-fps>
   input-fps
  </input-fps>
  <input-bytes>
   input-bytes
  </input-bytes>
  <input-bps>
   input-bps
  </input-bps>
  <output-frames>
   output-frames
  </output-frames>
  <output-fps>
   output-fps
  </output-fps>
  <output-bytes>
   output-bytes
  </output-bytes>
  <output-bps>
   output-bps
  </output-bps>
 </fragments>
</bundle-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
</interface-policer-information>
```

Description Fragment statistics for multilink bundles and classes

<fragments>

Usage

```
<interface-policer-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <class-detail>
     <fragments>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
```

```
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </fragments>
      </class-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

Description Fragment statistics for multilink bundles and classes

<from-dce>

Usage

```
<serial-information>
 <eia530-control-signal>
  <from-dce>
   <dtr>
    dtr
   </dtr>
   <rts>
    rts
   </rts>
   <cts>
    cts
   </cts>
   <dcd>
    dcd
   </dcd>
   <dsr>
    dsr
   </dsr>
   <tm>
    tm
   </tm>
  </from-dce>
 </eia530-control-signal>
</serial-information>
```

Description

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<from-dce>

Usage

```
<physical-interface>
  <serial-information>
    <eia530-control-signal>
      <from-dce>
        <dtr>
          dtr
        </dtr>
        <rts>
          rts
        </rts>
        <cts>
          cts
        </cts>
        <dcd>
          dcd
        </dcd>
        <dsr>
          dsr
        </dsr>
        <tm>
          tm
        </tm>
      </from-dce>
    </eia530-control-signal>
  </serial-information>
</physical-interface>
```

Description

<from-dce>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <from-dce>
          <dtr>
            dtr
          </dtr>
          <rts>
            rts
          </rts>
          <cts>
            cts
          </cts>
          <dcd>
            dcd
          </dcd>
          <dsr>
            dsr
```

```
            </dsr>
            <tm>
              tm
            </tm>
          </from-dce>
        </eia530-control-signal>
      </serial-information>
    </physical-interface>
  </interface-information>
```

Description

<from-dce>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <from-dce>
          <dtr>
            dtr
          </dtr>
          <rts>
            rts
          </rts>
          <cts>
            cts
          </cts>
          <dcd>
            dcd
          </dcd>
          <dsr>
            dsr
          </dsr>
          <tm>
            tm
          </tm>
        </from-dce>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<from-dce>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <from-dce>
```


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```
            <dtr>
              dtr
            </dtr>
            <rts>
              rts
            </rts>
            <cts>
              cts
            </cts>
            <dcd>
              dcd
            </dcd>
            <dsr>
              dsr
            </dsr>
            <tm>
              tm
            </tm>
          </from-dce>
        </eia530-control-signal>
      </serial-information>
    </physical-interface>
  </interface-policer-information>
```

Description

<from-dte>

Usage

```
<serial-information>
  <eia530-control-signal>
    <from-dte>
      <dtr>
        dtr
      </dtr>
      <rts>
        rts
      </rts>
      <cts>
        cts
      </cts>
      <dcd>
        dcd
      </dcd>
      <dsr>
        dsr
      </dsr>
      <tm>
        tm
      </tm>
    </from-dte>
  </eia530-control-signal>
</serial-information>
```

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Description

<from-dte>

Usage

```
<physical-interface>
 <serial-information>
  <eia530-control-signal>
   <from-dte>
    <dtr>
     dtr
    </dtr>
    <rts>
     rts
    </rts>
    <cts>
     cts
    </cts>
    <dcd>
     dcd
    </dcd>
    <dsr>
     dsr
    </dsr>
    <tm>
     tm
    </tm>
   </from-dte>
  </eia530-control-signal>
 </serial-information>
</physical-interface>
```

Description

<from-dte>

Usage

```
<interface-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
    <from-dte>
     <dtr>
      dtr
     </dtr>
     <rts>
      rts
     </rts>
     <cts>
      cts
     </cts>
     <dcd>
      dcd
     </dcd>
     <dsr>
```


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```
            dsr
           </dsr>
           <tm>
            tm
           </tm>
          </from-dte>
         </eia530-control-signal>
        </serial-information>
       </physical-interface>
      </interface-information>
```

Description

<from-dte>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
    <from-dte>
     <dtr>
      dtr
     </dtr>
     <rts>
      rts
     </rts>
     <cts>
      cts
     </cts>
     <dcd>
      dcd
     </dcd>
     <dsr>
      dsr
     </dsr>
     <tm>
      tm
     </tm>
    </from-dte>
   </eia530-control-signal>
  </serial-information>
 </physical-interface>
</interface-filter-information>
```

Description

<from-dte>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
```

```
            <from-dte>
              <dtr>
                dtr
              </dtr>
              <rts>
                rts
              </rts>
              <cts>
                cts
              </cts>
              <dcd>
                dcd
              </dcd>
              <dsr>
                dsr
              </dsr>
              <tm>
                tm
              </tm>
            </from-dte>
          </eia530-control-signal>
        </serial-information>
      </physical-interface>
    </interface-policer-information>
```

Description

<hdlc-information>

Usage

```
    <hdlc-information>
      <hdlc-rx-bucket-state>
        hdlc-rx-bucket-state
      </hdlc-rx-bucket-state>
      <hdlc-rx-bit-rate>
        hdlc-rx-bit-rate
      </hdlc-rx-bit-rate>
      <hdlc-rx-threshold>
        hdlc-rx-threshold
      </hdlc-rx-threshold>
      <hdlc-tx-bit-rate>
        hdlc-tx-bit-rate
      </hdlc-tx-bit-rate>
      <hdlc-tx-bucket-state>
        hdlc-tx-bucket-state
      </hdlc-tx-bucket-state>
      <hdlc-tx-threshold>
        hdlc-tx-threshold
      </hdlc-tx-threshold>
      <hdlc-giant-threshold>
        hdlc-giant-threshold
      </hdlc-giant-threshold>
      <hdlc-runt-threshold>
        hdlc-runt-threshold
      </hdlc-runt-threshold>
```


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```
</hdlc-information>
```

Description

<hdlc-information>

Usage

```
<physical-interface>
  <hdlc-information>
    <hdlc-rx-bucket-state>
      hdlc-rx-bucket-state
    </hdlc-rx-bucket-state>
    <hdlc-rx-bit-rate>
      hdlc-rx-bit-rate
    </hdlc-rx-bit-rate>
    <hdlc-rx-threshold>
      hdlc-rx-threshold
    </hdlc-rx-threshold>
    <hdlc-tx-bit-rate>
      hdlc-tx-bit-rate
    </hdlc-tx-bit-rate>
    <hdlc-tx-bucket-state>
      hdlc-tx-bucket-state
    </hdlc-tx-bucket-state>
    <hdlc-tx-threshold>
      hdlc-tx-threshold
    </hdlc-tx-threshold>
    <hdlc-giant-threshold>
      hdlc-giant-threshold
    </hdlc-giant-threshold>
    <hdlc-runt-threshold>
      hdlc-runt-threshold
    </hdlc-runt-threshold>
  </hdlc-information>
</physical-interface>
```

Description

<hdlc-information>

Usage

```
<interface-information>
  <physical-interface>
    <hdlc-information>
      <hdlc-rx-bucket-state>
        hdlc-rx-bucket-state
      </hdlc-rx-bucket-state>
      <hdlc-rx-bit-rate>
        hdlc-rx-bit-rate
      </hdlc-rx-bit-rate>
      <hdlc-rx-threshold>
        hdlc-rx-threshold
      </hdlc-rx-threshold>
      <hdlc-tx-bit-rate>
```

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```
            hdlc-tx-bit-rate
           </hdlc-tx-bit-rate>
           <hdlc-tx-bucket-state>
            hdlc-tx-bucket-state
           </hdlc-tx-bucket-state>
           <hdlc-tx-threshold>
            hdlc-tx-threshold
           </hdlc-tx-threshold>
           <hdlc-giant-threshold>
            hdlc-giant-threshold
           </hdlc-giant-threshold>
           <hdlc-runt-threshold>
            hdlc-runt-threshold
           </hdlc-runt-threshold>
          </hdlc-information>
         </physical-interface>
        </interface-information>
```

Description

<hdlc-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <hdlc-information>
   <hdlc-rx-bucket-state>
    hdlc-rx-bucket-state
   </hdlc-rx-bucket-state>
   <hdlc-rx-bit-rate>
    hdlc-rx-bit-rate
   </hdlc-rx-bit-rate>
   <hdlc-rx-threshold>
    hdlc-rx-threshold
   </hdlc-rx-threshold>
   <hdlc-tx-bit-rate>
    hdlc-tx-bit-rate
   </hdlc-tx-bit-rate>
   <hdlc-tx-bucket-state>
    hdlc-tx-bucket-state
   </hdlc-tx-bucket-state>
   <hdlc-tx-threshold>
    hdlc-tx-threshold
   </hdlc-tx-threshold>
   <hdlc-giant-threshold>
    hdlc-giant-threshold
   </hdlc-giant-threshold>
   <hdlc-runt-threshold>
    hdlc-runt-threshold
   </hdlc-runt-threshold>
  </hdlc-information>
 </physical-interface>
</interface-filter-information>
```


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Description

<hdlc-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <hdlc-information>
      <hdlc-rx-bucket-state>
        hdlc-rx-bucket-state
      </hdlc-rx-bucket-state>
      <hdlc-rx-bit-rate>
        hdlc-rx-bit-rate
      </hdlc-rx-bit-rate>
      <hdlc-rx-threshold>
        hdlc-rx-threshold
      </hdlc-rx-threshold>
      <hdlc-tx-bit-rate>
        hdlc-tx-bit-rate
      </hdlc-tx-bit-rate>
      <hdlc-tx-bucket-state>
        hdlc-tx-bucket-state
      </hdlc-tx-bucket-state>
      <hdlc-tx-threshold>
        hdlc-tx-threshold
      </hdlc-tx-threshold>
      <hdlc-giant-threshold>
        hdlc-giant-threshold
      </hdlc-giant-threshold>
      <hdlc-runt-threshold>
        hdlc-runt-threshold
      </hdlc-runt-threshold>
    </hdlc-information>
  </physical-interface>
</interface-policer-information>
```

Description

<if-config-flags>

Usage

```
<if-config-flags>
  <iff-none>
    iff-none
  </iff-none>
  <iff-hardware-down>
    iff-hardware-down
  </iff-hardware-down>
  <iff-down>
    iff-down
  </iff-down>
  <iff-up>
    iff-up
  </iff-up>
  <iff-admin-down>
```

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```
  iff-admin-down
</iff-admin-down>
<iff-admin-up>
  iff-admin-up
</iff-admin-up>
<iff-link-down>
  iff-link-down
</iff-link-down>
<iff-device-down>
  iff-device-down
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
```


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```
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
<iff-looped>
  iff-looped
</iff-looped>
<iff-framing-conflict>
  iff-framing-conflict
</iff-framing-conflict>
<internal-flags>
  internal-flags
</internal-flags>
</if-config-flags>
```

Description

<if-config-flags>

Usage

```
<logical-interface>
  <if-config-flags>
    <iff-none>
      iff-none
    </iff-none>
    <iff-hardware-down>
      iff-hardware-down
    </iff-hardware-down>
    <iff-down>
      iff-down
    </iff-down>
    <iff-up>
      iff-up
    </iff-up>
    <iff-admin-down>
      iff-admin-down
    </iff-admin-down>
    <iff-admin-up>
      iff-admin-up
    </iff-admin-up>
    <iff-link-down>
      iff-link-down
    </iff-link-down>
    <iff-device-down>
      iff-device-down
    </iff-device-down>
    <iff-point-to-point>
```

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```
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
```


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```
        <iff-looped>
          iff-looped
        </iff-looped>
        <iff-framing-conflict>
          iff-framing-conflict
        </iff-framing-conflict>
        <internal-flags>
          internal-flags
        </internal-flags>
      </if-config-flags>
    </logical-interface>
```

Description

<if-config-flags>

Usage

```
    <physical-interface>
      <if-config-flags>
        <iff-none>
          iff-none
        </iff-none>
        <iff-hardware-down>
          iff-hardware-down
        </iff-hardware-down>
        <iff-down>
          iff-down
        </iff-down>
        <iff-up>
          iff-up
        </iff-up>
        <iff-admin-down>
          iff-admin-down
        </iff-admin-down>
        <iff-admin-up>
          iff-admin-up
        </iff-admin-up>
        <iff-link-down>
          iff-link-down
        </iff-link-down>
        <iff-device-down>
          iff-device-down
        </iff-device-down>
        <iff-point-to-point>
          iff-point-to-point
        </iff-point-to-point>
        <iff-point-to-multipoint>
          iff-point-to-multipoint
        </iff-point-to-multipoint>
        <plp-to-clp>
          plp-to-clp
        </plp-to-clp>
        <iff-multiaccess>
          iff-multiaccess
        </iff-multiaccess>
```

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```
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
<iff-looped>
  iff-looped
</iff-looped>
<iff-framing-conflict>
  iff-framing-conflict
</iff-framing-conflict>
<internal-flags>
  internal-flags
</internal-flags>
</if-config-flags>
```


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```
</physical-interface>
```

Description

<if-config-flags>

Usage

```
<physical-interface>
 <logical-interface>
  <if-config-flags>
   <iff-none>
    iff-none
   </iff-none>
   <iff-hardware-down>
    iff-hardware-down
   </iff-hardware-down>
   <iff-down>
    iff-down
   </iff-down>
   <iff-up>
    iff-up
   </iff-up>
   <iff-admin-down>
    iff-admin-down
   </iff-admin-down>
   <iff-admin-up>
    iff-admin-up
   </iff-admin-up>
   <iff-link-down>
    iff-link-down
   </iff-link-down>
   <iff-device-down>
    iff-device-down
   </iff-device-down>
   <iff-point-to-point>
    iff-point-to-point
   </iff-point-to-point>
   <iff-point-to-multipoint>
    iff-point-to-multipoint
   </iff-point-to-multipoint>
   <plp-to-clp>
    plp-to-clp
   </plp-to-clp>
   <iff-multiaccess>
    iff-multiaccess
   </iff-multiaccess>
   <iff-change>
    iff-change
   </iff-change>
   <iff-inverse-arp>
    iff-inverse-arp
   </iff-inverse-arp>
   <iff-no-multicast>
    iff-no-multicast
   </iff-no-multicast>
```

```
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
<iff-looped>
  iff-looped
</iff-looped>
<iff-framing-conflict>
  iff-framing-conflict
</iff-framing-conflict>
<internal-flags>
  internal-flags
</internal-flags>
</if-config-flags>
</logical-interface>
</physical-interface>
```

Description

<if-config-flags>

Usage

<interface-information>

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```
<physical-interface>
  <if-config-flags>
    <iff-none>
      iff-none
    </iff-none>
    <iff-hardware-down>
      iff-hardware-down
    </iff-hardware-down>
    <iff-down>
      iff-down
    </iff-down>
    <iff-up>
      iff-up
    </iff-up>
    <iff-admin-down>
      iff-admin-down
    </iff-admin-down>
    <iff-admin-up>
      iff-admin-up
    </iff-admin-up>
    <iff-link-down>
      iff-link-down
    </iff-link-down>
    <iff-device-down>
      iff-device-down
    </iff-device-down>
    <iff-point-to-point>
      iff-point-to-point
    </iff-point-to-point>
    <iff-point-to-multipoint>
      iff-point-to-multipoint
    </iff-point-to-multipoint>
    <plp-to-clp>
      plp-to-clp
    </plp-to-clp>
    <iff-multiaccess>
      iff-multiaccess
    </iff-multiaccess>
    <iff-change>
      iff-change
    </iff-change>
    <iff-inverse-arp>
      iff-inverse-arp
    </iff-inverse-arp>
    <iff-no-multicast>
      iff-no-multicast
    </iff-no-multicast>
    <iff-multicast>
      iff-multicast
    </iff-multicast>
    <iff-promiscuous>
      iff-promiscuous
    </iff-promiscuous>
    <iff-all-multicast>
      iff-all-multicast
    </iff-all-multicast>
```

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```
            <iff-snmp-traps>
              iff-snmp-traps
            </iff-snmp-traps>
            <iff-rx-passive>
              iff-rx-passive
            </iff-rx-passive>
            <iff-tx-passive>
              iff-tx-passive
            </iff-tx-passive>
            <iff-ccc-down>
              iff-ccc-down
            </iff-ccc-down>
            <iff-clear-df>
              iff-clear-df
            </iff-clear-df>
            <iff-tunnel-reassembly>
              iff-tunnel-reassembly
            </iff-tunnel-reassembly>
            <iff-acfc>
              iff-acfc
            </iff-acfc>
            <iff-pfc>
              iff-pfc
            </iff-pfc>
            <iff-rdd>
              iff-rdd
            </iff-rdd>
            <iff-looped>
              iff-looped
            </iff-looped>
            <iff-framing-conflict>
              iff-framing-conflict
            </iff-framing-conflict>
            <internal-flags>
              internal-flags
            </internal-flags>
          </if-config-flags>
        </physical-interface>
      </interface-information>
```

Description

<if-config-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <if-config-flags>
        <iff-none>
          iff-none
        </iff-none>
        <iff-hardware-down>
          iff-hardware-down
        </iff-hardware-down>
```


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```
<iff-down>
  iff-down
</iff-down>
<iff-up>
  iff-up
</iff-up>
<iff-admin-down>
  iff-admin-down
</iff-admin-down>
<iff-admin-up>
  iff-admin-up
</iff-admin-up>
<iff-link-down>
  iff-link-down
</iff-link-down>
<iff-device-down>
  iff-device-down
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
```

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```
        </iff-tx-passive>
        <iff-ccc-down>
          iff-ccc-down
        </iff-ccc-down>
        <iff-clear-df>
          iff-clear-df
        </iff-clear-df>
        <iff-tunnel-reassembly>
          iff-tunnel-reassembly
        </iff-tunnel-reassembly>
        <iff-acfc>
          iff-acfc
        </iff-acfc>
        <iff-pfc>
          iff-pfc
        </iff-pfc>
        <iff-rdd>
          iff-rdd
        </iff-rdd>
        <iff-looped>
          iff-looped
        </iff-looped>
        <iff-framing-conflict>
          iff-framing-conflict
        </iff-framing-conflict>
        <internal-flags>
          internal-flags
        </internal-flags>
      </if-config-flags>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<if-config-flags>

Usage

```
<interface-information>
  <logical-interface>
    <if-config-flags>
      <iff-none>
        iff-none
      </iff-none>
      <iff-hardware-down>
        iff-hardware-down
      </iff-hardware-down>
      <iff-down>
        iff-down
      </iff-down>
      <iff-up>
        iff-up
      </iff-up>
      <iff-admin-down>
        iff-admin-down
```


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```
</iff-admin-down>
<iff-admin-up>
  iff-admin-up
</iff-admin-up>
<iff-link-down>
  iff-link-down
</iff-link-down>
<iff-device-down>
  iff-device-down
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
```

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```
        iff-tunnel-reassembly
       </iff-tunnel-reassembly>
       <iff-acfc>
        iff-acfc
       </iff-acfc>
       <iff-pfc>
        iff-pfc
       </iff-pfc>
       <iff-rdd>
        iff-rdd
       </iff-rdd>
       <iff-looped>
        iff-looped
       </iff-looped>
       <iff-framing-conflict>
        iff-framing-conflict
       </iff-framing-conflict>
       <internal-flags>
        internal-flags
       </internal-flags>
      </if-config-flags>
     </logical-interface>
    </interface-information>
```

Description

<if-config-flags>

Usage

```
<interface-filter-information>
 <physical-interface>
  <if-config-flags>
   <iff-none>
    iff-none
   </iff-none>
   <iff-hardware-down>
    iff-hardware-down
   </iff-hardware-down>
   <iff-down>
    iff-down
   </iff-down>
   <iff-up>
    iff-up
   </iff-up>
   <iff-admin-down>
    iff-admin-down
   </iff-admin-down>
   <iff-admin-up>
    iff-admin-up
   </iff-admin-up>
   <iff-link-down>
    iff-link-down
   </iff-link-down>
   <iff-device-down>
    iff-device-down
```


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```
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
```

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```
      iff-rdd
     </iff-rdd>
     <iff-looped>
      iff-looped
     </iff-looped>
     <iff-framing-conflict>
      iff-framing-conflict
     </iff-framing-conflict>
     <internal-flags>
      internal-flags
     </internal-flags>
    </if-config-flags>
   </physical-interface>
</interface-filter-information>
```

Description

<if-config-flags>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <if-config-flags>
    <iff-none>
     iff-none
    </iff-none>
    <iff-hardware-down>
     iff-hardware-down
    </iff-hardware-down>
    <iff-down>
     iff-down
    </iff-down>
    <iff-up>
     iff-up
    </iff-up>
    <iff-admin-down>
     iff-admin-down
    </iff-admin-down>
    <iff-admin-up>
     iff-admin-up
    </iff-admin-up>
    <iff-link-down>
     iff-link-down
    </iff-link-down>
    <iff-device-down>
     iff-device-down
    </iff-device-down>
    <iff-point-to-point>
     iff-point-to-point
    </iff-point-to-point>
    <iff-point-to-multipoint>
     iff-point-to-multipoint
    </iff-point-to-multipoint>
    <plp-to-clp>
```


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```
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
<iff-looped>
  iff-looped
</iff-looped>
<iff-framing-conflict>
  iff-framing-conflict
</iff-framing-conflict>
```

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```
            <internal-flags>
              internal-flags
            </internal-flags>
          </if-config-flags>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description

<if-config-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <if-config-flags>
      <iff-none>
        iff-none
      </iff-none>
      <iff-hardware-down>
        iff-hardware-down
      </iff-hardware-down>
      <iff-down>
        iff-down
      </iff-down>
      <iff-up>
        iff-up
      </iff-up>
      <iff-admin-down>
        iff-admin-down
      </iff-admin-down>
      <iff-admin-up>
        iff-admin-up
      </iff-admin-up>
      <iff-link-down>
        iff-link-down
      </iff-link-down>
      <iff-device-down>
        iff-device-down
      </iff-device-down>
      <iff-point-to-point>
        iff-point-to-point
      </iff-point-to-point>
      <iff-point-to-multipoint>
        iff-point-to-multipoint
      </iff-point-to-multipoint>
      <plp-to-clp>
        plp-to-clp
      </plp-to-clp>
      <iff-multiaccess>
        iff-multiaccess
      </iff-multiaccess>
      <iff-change>
        iff-change
      </iff-change>
```


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```
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
  iff-ccc-down
</iff-ccc-down>
<iff-clear-df>
  iff-clear-df
</iff-clear-df>
<iff-tunnel-reassembly>
  iff-tunnel-reassembly
</iff-tunnel-reassembly>
<iff-acfc>
  iff-acfc
</iff-acfc>
<iff-pfc>
  iff-pfc
</iff-pfc>
<iff-rdd>
  iff-rdd
</iff-rdd>
<iff-looped>
  iff-looped
</iff-looped>
<iff-framing-conflict>
  iff-framing-conflict
</iff-framing-conflict>
<internal-flags>
  internal-flags
</internal-flags>
</if-config-flags>
</logical-interface>
</interface-filter-information>
```

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Description

<if-config-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <if-config-flags>
      <iff-none>
        iff-none
      </iff-none>
      <iff-hardware-down>
        iff-hardware-down
      </iff-hardware-down>
      <iff-down>
        iff-down
      </iff-down>
      <iff-up>
        iff-up
      </iff-up>
      <iff-admin-down>
        iff-admin-down
      </iff-admin-down>
      <iff-admin-up>
        iff-admin-up
      </iff-admin-up>
      <iff-link-down>
        iff-link-down
      </iff-link-down>
      <iff-device-down>
        iff-device-down
      </iff-device-down>
      <iff-point-to-point>
        iff-point-to-point
      </iff-point-to-point>
      <iff-point-to-multipoint>
        iff-point-to-multipoint
      </iff-point-to-multipoint>
      <plp-to-clp>
        plp-to-clp
      </plp-to-clp>
      <iff-multiaccess>
        iff-multiaccess
      </iff-multiaccess>
      <iff-change>
        iff-change
      </iff-change>
      <iff-inverse-arp>
        iff-inverse-arp
      </iff-inverse-arp>
      <iff-no-multicast>
        iff-no-multicast
      </iff-no-multicast>
      <iff-multicast>
        iff-multicast
      </iff-multicast>
```


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```
            <iff-promiscuous>
              iff-promiscuous
            </iff-promiscuous>
            <iff-all-multicast>
              iff-all-multicast
            </iff-all-multicast>
            <iff-snmp-traps>
              iff-snmp-traps
            </iff-snmp-traps>
            <iff-rx-passive>
              iff-rx-passive
            </iff-rx-passive>
            <iff-tx-passive>
              iff-tx-passive
            </iff-tx-passive>
            <iff-ccc-down>
              iff-ccc-down
            </iff-ccc-down>
            <iff-clear-df>
              iff-clear-df
            </iff-clear-df>
            <iff-tunnel-reassembly>
              iff-tunnel-reassembly
            </iff-tunnel-reassembly>
            <iff-acfc>
              iff-acfc
            </iff-acfc>
            <iff-pfc>
              iff-pfc
            </iff-pfc>
            <iff-rdd>
              iff-rdd
            </iff-rdd>
            <iff-looped>
              iff-looped
            </iff-looped>
            <iff-framing-conflict>
              iff-framing-conflict
            </iff-framing-conflict>
            <internal-flags>
              internal-flags
            </internal-flags>
          </if-config-flags>
        </physical-interface>
      </interface-policer-information>
```

Description

<if-config-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <if-config-flags>
```

```
<iff-none>
  iff-none
</iff-none>
<iff-hardware-down>
  iff-hardware-down
</iff-hardware-down>
<iff-down>
  iff-down
</iff-down>
<iff-up>
  iff-up
</iff-up>
<iff-admin-down>
  iff-admin-down
</iff-admin-down>
<iff-admin-up>
  iff-admin-up
</iff-admin-up>
<iff-link-down>
  iff-link-down
</iff-link-down>
<iff-device-down>
  iff-device-down
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
```


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```
        </iff-snmp-traps>
        <iff-rx-passive>
          iff-rx-passive
        </iff-rx-passive>
        <iff-tx-passive>
          iff-tx-passive
        </iff-tx-passive>
        <iff-ccc-down>
          iff-ccc-down
        </iff-ccc-down>
        <iff-clear-df>
          iff-clear-df
        </iff-clear-df>
        <iff-tunnel-reassembly>
          iff-tunnel-reassembly
        </iff-tunnel-reassembly>
        <iff-acfc>
          iff-acfc
        </iff-acfc>
        <iff-pfc>
          iff-pfc
        </iff-pfc>
        <iff-rdd>
          iff-rdd
        </iff-rdd>
        <iff-looped>
          iff-looped
        </iff-looped>
        <iff-framing-conflict>
          iff-framing-conflict
        </iff-framing-conflict>
        <internal-flags>
          internal-flags
        </internal-flags>
      </if-config-flags>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<if-config-flags>

Usage

```
<interface-policer-information>
  <logical-interface>
    <if-config-flags>
      <iff-none>
        iff-none
      </iff-none>
      <iff-hardware-down>
        iff-hardware-down
      </iff-hardware-down>
      <iff-down>
        iff-down
```

```
</iff-down>
<iff-up>
  iff-up
</iff-up>
<iff-admin-down>
  iff-admin-down
</iff-admin-down>
<iff-admin-up>
  iff-admin-up
</iff-admin-up>
<iff-link-down>
  iff-link-down
</iff-link-down>
<iff-device-down>
  iff-device-down
</iff-device-down>
<iff-point-to-point>
  iff-point-to-point
</iff-point-to-point>
<iff-point-to-multipoint>
  iff-point-to-multipoint
</iff-point-to-multipoint>
<plp-to-clp>
  plp-to-clp
</plp-to-clp>
<iff-multiaccess>
  iff-multiaccess
</iff-multiaccess>
<iff-change>
  iff-change
</iff-change>
<iff-inverse-arp>
  iff-inverse-arp
</iff-inverse-arp>
<iff-no-multicast>
  iff-no-multicast
</iff-no-multicast>
<iff-multicast>
  iff-multicast
</iff-multicast>
<iff-promiscuous>
  iff-promiscuous
</iff-promiscuous>
<iff-all-multicast>
  iff-all-multicast
</iff-all-multicast>
<iff-snmp-traps>
  iff-snmp-traps
</iff-snmp-traps>
<iff-rx-passive>
  iff-rx-passive
</iff-rx-passive>
<iff-tx-passive>
  iff-tx-passive
</iff-tx-passive>
<iff-ccc-down>
```


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```
        iff-ccc-down
       </iff-ccc-down>
       <iff-clear-df>
        iff-clear-df
       </iff-clear-df>
       <iff-tunnel-reassembly>
        iff-tunnel-reassembly
       </iff-tunnel-reassembly>
       <iff-acfc>
        iff-acfc
       </iff-acfc>
       <iff-pfc>
        iff-pfc
       </iff-pfc>
       <iff-rdd>
        iff-rdd
       </iff-rdd>
       <iff-looped>
        iff-looped
       </iff-looped>
       <iff-framing-conflict>
        iff-framing-conflict
       </iff-framing-conflict>
       <internal-flags>
        internal-flags
       </internal-flags>
      </if-config-flags>
     </logical-interface>
    </interface-policer-information>
```

Description

<if-device-flags>

Usage

```
<if-device-flags>
 <ifdf-none>
  ifdf-none
 </ifdf-none>
 <ifdf-present>
  ifdf-present
 </ifdf-present>
 <ifdf-running>
  ifdf-running
 </ifdf-running>
 <ifdf-duplex>
  ifdf-duplex
 </ifdf-duplex>
 <ifdf-down>
  ifdf-down
 </ifdf-down>
 <ifdf-no-carrier>
  ifdf-no-carrier
 </ifdf-no-carrier>
 <ifdf-error1>
```

```
    ifdf-error1
  </ifdf-error1>
  <ifdf-error2>
    ifdf-error2
  </ifdf-error2>
  <ifdf-no-multicast>
    ifdf-no-multicast
  </ifdf-no-multicast>
  <ifdf-loopback>
    ifdf-loopback
  </ifdf-loopback>
  <ifdf-quench>
    ifdf-quench
  </ifdf-quench>
  <ifdf-recv-all-multicasts>
    ifdf-recv-all-multicasts
  </ifdf-recv-all-multicasts>
  <ifdf-promiscuous>
    ifdf-promiscuous
  </ifdf-promiscuous>
  <ifdf-link-layer-down>
    ifdf-link-layer-down
  </ifdf-link-layer-down>
  <ifdf-loop-detected>
    ifdf-loop-detected
  </ifdf-loop-detected>
  <ifdf-pfe-gone>
    ifdf-pfe-gone
  </ifdf-pfe-gone>
  <generic-value>
    generic-value
  </generic-value>
</if-device-flags>
```

Description

<if-device-flags>

Usage

```
<physical-interface>
  <if-device-flags>
    <ifdf-none>
      ifdf-none
    </ifdf-none>
    <ifdf-present>
      ifdf-present
    </ifdf-present>
    <ifdf-running>
      ifdf-running
    </ifdf-running>
    <ifdf-duplex>
      ifdf-duplex
    </ifdf-duplex>
    <ifdf-down>
      ifdf-down
```


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```
    </ifdf-down>
    <ifdf-no-carrier>
      ifdf-no-carrier
    </ifdf-no-carrier>
    <ifdf-error1>
      ifdf-error1
    </ifdf-error1>
    <ifdf-error2>
      ifdf-error2
    </ifdf-error2>
    <ifdf-no-multicast>
      ifdf-no-multicast
    </ifdf-no-multicast>
    <ifdf-loopback>
      ifdf-loopback
    </ifdf-loopback>
    <ifdf-quench>
      ifdf-quench
    </ifdf-quench>
    <ifdf-recv-all-multicasts>
      ifdf-recv-all-multicasts
    </ifdf-recv-all-multicasts>
    <ifdf-promiscuous>
      ifdf-promiscuous
    </ifdf-promiscuous>
    <ifdf-link-layer-down>
      ifdf-link-layer-down
    </ifdf-link-layer-down>
    <ifdf-loop-detected>
      ifdf-loop-detected
    </ifdf-loop-detected>
    <ifdf-pfe-gone>
      ifdf-pfe-gone
    </ifdf-pfe-gone>
    <generic-value>
      generic-value
    </generic-value>
  </if-device-flags>
</physical-interface>
```

Description

<if-device-flags>

Usage

```
<interface-information>
  <physical-interface>
    <if-device-flags>
      <ifdf-none>
        ifdf-none
      </ifdf-none>
      <ifdf-present>
        ifdf-present
      </ifdf-present>
      <ifdf-running>
```

```
            ifdf-running
          </ifdf-running>
          <ifdf-duplex>
            ifdf-duplex
          </ifdf-duplex>
          <ifdf-down>
            ifdf-down
          </ifdf-down>
          <ifdf-no-carrier>
            ifdf-no-carrier
          </ifdf-no-carrier>
          <ifdf-error1>
            ifdf-error1
          </ifdf-error1>
          <ifdf-error2>
            ifdf-error2
          </ifdf-error2>
          <ifdf-no-multicast>
            ifdf-no-multicast
          </ifdf-no-multicast>
          <ifdf-loopback>
            ifdf-loopback
          </ifdf-loopback>
          <ifdf-quench>
            ifdf-quench
          </ifdf-quench>
          <ifdf-recv-all-multicasts>
            ifdf-recv-all-multicasts
          </ifdf-recv-all-multicasts>
          <ifdf-promiscuous>
            ifdf-promiscuous
          </ifdf-promiscuous>
          <ifdf-link-layer-down>
            ifdf-link-layer-down
          </ifdf-link-layer-down>
          <ifdf-loop-detected>
            ifdf-loop-detected
          </ifdf-loop-detected>
          <ifdf-pfe-gone>
            ifdf-pfe-gone
          </ifdf-pfe-gone>
          <generic-value>
            generic-value
          </generic-value>
        </if-device-flags>
      </physical-interface>
    </interface-information>
```

Description

<if-device-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
```


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```
<if-device-flags>
  <ifdf-none>
    ifdf-none
  </ifdf-none>
  <ifdf-present>
    ifdf-present
  </ifdf-present>
  <ifdf-running>
    ifdf-running
  </ifdf-running>
  <ifdf-duplex>
    ifdf-duplex
  </ifdf-duplex>
  <ifdf-down>
    ifdf-down
  </ifdf-down>
  <ifdf-no-carrier>
    ifdf-no-carrier
  </ifdf-no-carrier>
  <ifdf-error1>
    ifdf-error1
  </ifdf-error1>
  <ifdf-error2>
    ifdf-error2
  </ifdf-error2>
  <ifdf-no-multicast>
    ifdf-no-multicast
  </ifdf-no-multicast>
  <ifdf-loopback>
    ifdf-loopback
  </ifdf-loopback>
  <ifdf-quench>
    ifdf-quench
  </ifdf-quench>
  <ifdf-recv-all-multicasts>
    ifdf-recv-all-multicasts
  </ifdf-recv-all-multicasts>
  <ifdf-promiscuous>
    ifdf-promiscuous
  </ifdf-promiscuous>
  <ifdf-link-layer-down>
    ifdf-link-layer-down
  </ifdf-link-layer-down>
  <ifdf-loop-detected>
    ifdf-loop-detected
  </ifdf-loop-detected>
  <ifdf-pfe-gone>
    ifdf-pfe-gone
  </ifdf-pfe-gone>
  <generic-value>
    generic-value
  </generic-value>
 </if-device-flags>
</physical-interface>
</interface-filter-information>
```

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Description

<if-device-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <if-device-flags>
      <ifdf-none>
        ifdf-none
      </ifdf-none>
      <ifdf-present>
        ifdf-present
      </ifdf-present>
      <ifdf-running>
        ifdf-running
      </ifdf-running>
      <ifdf-duplex>
        ifdf-duplex
      </ifdf-duplex>
      <ifdf-down>
        ifdf-down
      </ifdf-down>
      <ifdf-no-carrier>
        ifdf-no-carrier
      </ifdf-no-carrier>
      <ifdf-error1>
        ifdf-error1
      </ifdf-error1>
      <ifdf-error2>
        ifdf-error2
      </ifdf-error2>
      <ifdf-no-multicast>
        ifdf-no-multicast
      </ifdf-no-multicast>
      <ifdf-loopback>
        ifdf-loopback
      </ifdf-loopback>
      <ifdf-quench>
        ifdf-quench
      </ifdf-quench>
      <ifdf-recv-all-multicasts>
        ifdf-recv-all-multicasts
      </ifdf-recv-all-multicasts>
      <ifdf-promiscuous>
        ifdf-promiscuous
      </ifdf-promiscuous>
      <ifdf-link-layer-down>
        ifdf-link-layer-down
      </ifdf-link-layer-down>
      <ifdf-loop-detected>
        ifdf-loop-detected
      </ifdf-loop-detected>
      <ifdf-pfe-gone>
        ifdf-pfe-gone
      </ifdf-pfe-gone>
```


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```
        <generic-value>
          generic-value
        </generic-value>
      </if-device-flags>
    </physical-interface>
  </interface-policer-information>
```

Description

<if-media-flags>

Usage

```
<if-media-flags>
  <ifmf-none>
    ifmf-none
  </ifmf-none>
  <ifmf-autoselect>
    ifmf-autoselect
  </ifmf-autoselect>
  <ifmf-scheduler>
    ifmf-scheduler
  </ifmf-scheduler>
  <ifmf-shared-scheduler>
    ifmf-shared-scheduler
  </ifmf-shared-scheduler>
  <ifmf-keepalives>
    ifmf-keepalives
  </ifmf-keepalives>
  <ifmf-no-keepalives>
    ifmf-no-keepalives
  </ifmf-no-keepalives>
  <ifmf-give-up>
    ifmf-give-up
  </ifmf-give-up>
  <ifmf-loose-lcp>
    ifmf-loose-lcp
  </ifmf-loose-lcp>
  <ifmf-loose-ncp>
    ifmf-loose-ncp
  </ifmf-loose-ncp>
  <ifmf-ppp-acfc>
    ifmf-ppp-acfc
  </ifmf-ppp-acfc>
  <ifmf-ppp-pfc>
    ifmf-ppp-pfc
  </ifmf-ppp-pfc>
  <ifmf-loose-lmi>
    ifmf-loose-lmi
  </ifmf-loose-lmi>
  <ifmf-dce>
    ifmf-dce
  </ifmf-dce>
  <ifmf-dte>
    ifmf-dte
  </ifmf-dte>
```

```
<generic-value>
  generic-value
</generic-value>
</if-media-flags>
```

Description

<if-media-flags>

Usage

```
<physical-interface>
  <if-media-flags>
    <ifmf-none>
      ifmf-none
    </ifmf-none>
    <ifmf-autoselect>
      ifmf-autoselect
    </ifmf-autoselect>
    <ifmf-scheduler>
      ifmf-scheduler
    </ifmf-scheduler>
    <ifmf-shared-scheduler>
      ifmf-shared-scheduler
    </ifmf-shared-scheduler>
    <ifmf-keepalives>
      ifmf-keepalives
    </ifmf-keepalives>
    <ifmf-no-keepalives>
      ifmf-no-keepalives
    </ifmf-no-keepalives>
    <ifmf-give-up>
      ifmf-give-up
    </ifmf-give-up>
    <ifmf-loose-lcp>
      ifmf-loose-lcp
    </ifmf-loose-lcp>
    <ifmf-loose-ncp>
      ifmf-loose-ncp
    </ifmf-loose-ncp>
    <ifmf-ppp-acfc>
      ifmf-ppp-acfc
    </ifmf-ppp-acfc>
    <ifmf-ppp-pfc>
      ifmf-ppp-pfc
    </ifmf-ppp-pfc>
    <ifmf-loose-lmi>
      ifmf-loose-lmi
    </ifmf-loose-lmi>
    <ifmf-dce>
      ifmf-dce
    </ifmf-dce>
    <ifmf-dte>
      ifmf-dte
    </ifmf-dte>
    <generic-value>
```


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```
        generic-value
      </generic-value>
    </if-media-flags>
  </physical-interface>
```

Description

<if-media-flags>

Usage

```
<interface-information>
  <physical-interface>
    <if-media-flags>
      <ifmf-none>
        ifmf-none
      </ifmf-none>
      <ifmf-autoselect>
        ifmf-autoselect
      </ifmf-autoselect>
      <ifmf-scheduler>
        ifmf-scheduler
      </ifmf-scheduler>
      <ifmf-shared-scheduler>
        ifmf-shared-scheduler
      </ifmf-shared-scheduler>
      <ifmf-keepalives>
        ifmf-keepalives
      </ifmf-keepalives>
      <ifmf-no-keepalives>
        ifmf-no-keepalives
      </ifmf-no-keepalives>
      <ifmf-give-up>
        ifmf-give-up
      </ifmf-give-up>
      <ifmf-loose-lcp>
        ifmf-loose-lcp
      </ifmf-loose-lcp>
      <ifmf-loose-ncp>
        ifmf-loose-ncp
      </ifmf-loose-ncp>
      <ifmf-ppp-acfc>
        ifmf-ppp-acfc
      </ifmf-ppp-acfc>
      <ifmf-ppp-pfc>
        ifmf-ppp-pfc
      </ifmf-ppp-pfc>
      <ifmf-loose-lmi>
        ifmf-loose-lmi
      </ifmf-loose-lmi>
      <ifmf-dce>
        ifmf-dce
      </ifmf-dce>
      <ifmf-dte>
        ifmf-dte
      </ifmf-dte>
```

```
        <generic-value>
          generic-value
        </generic-value>
      </if-media-flags>
    </physical-interface>
  </interface-information>
```

Description

<if-media-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <if-media-flags>
      <ifmf-none>
        ifmf-none
      </ifmf-none>
      <ifmf-autoselect>
        ifmf-autoselect
      </ifmf-autoselect>
      <ifmf-scheduler>
        ifmf-scheduler
      </ifmf-scheduler>
      <ifmf-shared-scheduler>
        ifmf-shared-scheduler
      </ifmf-shared-scheduler>
      <ifmf-keepalives>
        ifmf-keepalives
      </ifmf-keepalives>
      <ifmf-no-keepalives>
        ifmf-no-keepalives
      </ifmf-no-keepalives>
      <ifmf-give-up>
        ifmf-give-up
      </ifmf-give-up>
      <ifmf-loose-lcp>
        ifmf-loose-lcp
      </ifmf-loose-lcp>
      <ifmf-loose-ncp>
        ifmf-loose-ncp
      </ifmf-loose-ncp>
      <ifmf-ppp-acfc>
        ifmf-ppp-acfc
      </ifmf-ppp-acfc>
      <ifmf-ppp-pfc>
        ifmf-ppp-pfc
      </ifmf-ppp-pfc>
      <ifmf-loose-lmi>
        ifmf-loose-lmi
      </ifmf-loose-lmi>
      <ifmf-dce>
        ifmf-dce
      </ifmf-dce>
      <ifmf-dte>
```


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```
        ifmf-dte
       </ifmf-dte>
       <generic-value>
        generic-value
       </generic-value>
      </if-media-flags>
     </physical-interface>
    </interface-filter-information>
```

Description

<if-media-flags>

Usage

```
<interface-policer-information>
 <physical-interface>
  <if-media-flags>
   <ifmf-none>
    ifmf-none
   </ifmf-none>
   <ifmf-autoselect>
    ifmf-autoselect
   </ifmf-autoselect>
   <ifmf-scheduler>
    ifmf-scheduler
   </ifmf-scheduler>
   <ifmf-shared-scheduler>
    ifmf-shared-scheduler
   </ifmf-shared-scheduler>
   <ifmf-keepalives>
    ifmf-keepalives
   </ifmf-keepalives>
   <ifmf-no-keepalives>
    ifmf-no-keepalives
   </ifmf-no-keepalives>
   <ifmf-give-up>
    ifmf-give-up
   </ifmf-give-up>
   <ifmf-loose-lcp>
    ifmf-loose-lcp
   </ifmf-loose-lcp>
   <ifmf-loose-ncp>
    ifmf-loose-ncp
   </ifmf-loose-ncp>
   <ifmf-ppp-acfc>
    ifmf-ppp-acfc
   </ifmf-ppp-acfc>
   <ifmf-ppp-pfc>
    ifmf-ppp-pfc
   </ifmf-ppp-pfc>
   <ifmf-loose-lmi>
    ifmf-loose-lmi
   </ifmf-loose-lmi>
   <ifmf-dce>
    ifmf-dce
```

```
      </ifmf-dce>
      <ifmf-dte>
       ifmf-dte
      </ifmf-dte>
      <generic-value>
       generic-value
      </generic-value>
     </if-media-flags>
    </physical-interface>
</interface-policer-information>
```

Description

<ifa-flags>

Usage

```
<ifa-flags>
  <ifaf-none>
   ifaf-none
  </ifaf-none>
  <ifaf-primary>
   ifaf-primary
  </ifaf-primary>
  <ifaf-preferred>
   ifaf-preferred
  </ifaf-preferred>
  <ifaf-master-only>
   ifaf-master-only
  </ifaf-master-only>
  <ifaf-down>
   ifaf-down
  </ifaf-down>
  <ifaf-kernel>
   ifaf-kernel
  </ifaf-kernel>
  <ifaf-current-default>
   ifaf-current-default
  </ifaf-current-default>
  <ifaf-current-preferred>
   ifaf-current-preferred
  </ifaf-current-preferred>
  <ifaf-current-primary>
   ifaf-current-primary
  </ifaf-current-primary>
  <ifaf-duplicate>
   ifaf-duplicate
  </ifaf-duplicate>
  <ifaf-webauth-http>
   ifaf-webauth-http
  </ifaf-webauth-http>
  <generic-value>
   generic-value
  </generic-value>
</ifa-flags>
```


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Description

<ifa-flags>

Usage

```
<interface-address>
  <ifa-flags>
    <ifaf-none>
      ifaf-none
    </ifaf-none>
    <ifaf-primary>
      ifaf-primary
    </ifaf-primary>
    <ifaf-preferred>
      ifaf-preferred
    </ifaf-preferred>
    <ifaf-master-only>
      ifaf-master-only
    </ifaf-master-only>
    <ifaf-down>
      ifaf-down
    </ifaf-down>
    <ifaf-kernel>
      ifaf-kernel
    </ifaf-kernel>
    <ifaf-current-default>
      ifaf-current-default
    </ifaf-current-default>
    <ifaf-current-preferred>
      ifaf-current-preferred
    </ifaf-current-preferred>
    <ifaf-current-primary>
      ifaf-current-primary
    </ifaf-current-primary>
    <ifaf-duplicate>
      ifaf-duplicate
    </ifaf-duplicate>
    <ifaf-webauth-http>
      ifaf-webauth-http
    </ifaf-webauth-http>
    <generic-value>
      generic-value
    </generic-value>
  </ifa-flags>
</interface-address>
```

Description

<ifa-flags>

Usage

```
<address-family>
  <interface-address>
    <ifa-flags>
      <ifaf-none>
```

```
      ifaf-none
     </ifaf-none>
     <ifaf-primary>
      ifaf-primary
     </ifaf-primary>
     <ifaf-preferred>
      ifaf-preferred
     </ifaf-preferred>
     <ifaf-master-only>
      ifaf-master-only
     </ifaf-master-only>
     <ifaf-down>
      ifaf-down
     </ifaf-down>
     <ifaf-kernel>
      ifaf-kernel
     </ifaf-kernel>
     <ifaf-current-default>
      ifaf-current-default
     </ifaf-current-default>
     <ifaf-current-preferred>
      ifaf-current-preferred
     </ifaf-current-preferred>
     <ifaf-current-primary>
      ifaf-current-primary
     </ifaf-current-primary>
     <ifaf-duplicate>
      ifaf-duplicate
     </ifaf-duplicate>
     <ifaf-webauth-http>
      ifaf-webauth-http
     </ifaf-webauth-http>
     <generic-value>
      generic-value
     </generic-value>
    </ifa-flags>
   </interface-address>
</address-family>
```

Description

<ifa-flags>

Usage

```
<logical-interface>
 <address-family>
  <interface-address>
   <ifa-flags>
    <ifaf-none>
     ifaf-none
    </ifaf-none>
    <ifaf-primary>
     ifaf-primary
    </ifaf-primary>
    <ifaf-preferred>
```


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```
            ifaf-preferred
           </ifaf-preferred>
           <ifaf-master-only>
            ifaf-master-only
           </ifaf-master-only>
           <ifaf-down>
            ifaf-down
           </ifaf-down>
           <ifaf-kernel>
            ifaf-kernel
           </ifaf-kernel>
           <ifaf-current-default>
            ifaf-current-default
           </ifaf-current-default>
           <ifaf-current-preferred>
            ifaf-current-preferred
           </ifaf-current-preferred>
           <ifaf-current-primary>
            ifaf-current-primary
           </ifaf-current-primary>
           <ifaf-duplicate>
            ifaf-duplicate
           </ifaf-duplicate>
           <ifaf-webauth-http>
            ifaf-webauth-http
           </ifaf-webauth-http>
           <generic-value>
            generic-value
           </generic-value>
          </ifa-flags>
         </interface-address>
        </address-family>
       </logical-interface>
```

Description

<ifa-flags>

Usage

```
<physical-interface>
 <logical-interface>
  <address-family>
   <interface-address>
    <ifa-flags>
     <ifaf-none>
      ifaf-none
     </ifaf-none>
     <ifaf-primary>
      ifaf-primary
     </ifaf-primary>
     <ifaf-preferred>
      ifaf-preferred
     </ifaf-preferred>
     <ifaf-master-only>
      ifaf-master-only
```

```
        </ifaf-master-only>
        <ifaf-down>
          ifaf-down
        </ifaf-down>
        <ifaf-kernel>
          ifaf-kernel
        </ifaf-kernel>
        <ifaf-current-default>
          ifaf-current-default
        </ifaf-current-default>
        <ifaf-current-preferred>
          ifaf-current-preferred
        </ifaf-current-preferred>
        <ifaf-current-primary>
          ifaf-current-primary
        </ifaf-current-primary>
        <ifaf-duplicate>
          ifaf-duplicate
        </ifaf-duplicate>
        <ifaf-webauth-http>
          ifaf-webauth-http
        </ifaf-webauth-http>
        <generic-value>
          generic-value
        </generic-value>
      </ifa-flags>
    </interface-address>
  </address-family>
 </logical-interface>
</physical-interface>
```

Description

<ifa-flags>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <interface-address>
     <ifa-flags>
      <ifaf-none>
       ifaf-none
      </ifaf-none>
      <ifaf-primary>
       ifaf-primary
      </ifaf-primary>
      <ifaf-preferred>
       ifaf-preferred
      </ifaf-preferred>
      <ifaf-master-only>
       ifaf-master-only
      </ifaf-master-only>
      <ifaf-down>
```


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```
            ifaf-down
           </ifaf-down>
           <ifaf-kernel>
            ifaf-kernel
           </ifaf-kernel>
           <ifaf-current-default>
            ifaf-current-default
           </ifaf-current-default>
           <ifaf-current-preferred>
            ifaf-current-preferred
           </ifaf-current-preferred>
           <ifaf-current-primary>
            ifaf-current-primary
           </ifaf-current-primary>
           <ifaf-duplicate>
            ifaf-duplicate
           </ifaf-duplicate>
           <ifaf-webauth-http>
            ifaf-webauth-http
           </ifaf-webauth-http>
           <generic-value>
            generic-value
           </generic-value>
          </ifa-flags>
         </interface-address>
        </address-family>
       </logical-interface>
      </physical-interface>
     </interface-information>
```

Description

<ifa-flags>

Usage

```
<interface-information>
 <logical-interface>
  <address-family>
   <interface-address>
    <ifa-flags>
     <ifaf-none>
      ifaf-none
     </ifaf-none>
     <ifaf-primary>
      ifaf-primary
     </ifaf-primary>
     <ifaf-preferred>
      ifaf-preferred
     </ifaf-preferred>
     <ifaf-master-only>
      ifaf-master-only
     </ifaf-master-only>
     <ifaf-down>
      ifaf-down
     </ifaf-down>
```

```
                <ifaf-kernel>
                  ifaf-kernel
                </ifaf-kernel>
                <ifaf-current-default>
                  ifaf-current-default
                </ifaf-current-default>
                <ifaf-current-preferred>
                  ifaf-current-preferred
                </ifaf-current-preferred>
                <ifaf-current-primary>
                  ifaf-current-primary
                </ifaf-current-primary>
                <ifaf-duplicate>
                  ifaf-duplicate
                </ifaf-duplicate>
                <ifaf-webauth-http>
                  ifaf-webauth-http
                </ifaf-webauth-http>
                <generic-value>
                  generic-value
                </generic-value>
              </ifa-flags>
            </interface-address>
          </address-family>
        </logical-interface>
      </interface-information>
```

Description

<ifa-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <interface-address>
          <ifa-flags>
            <ifaf-none>
              ifaf-none
            </ifaf-none>
            <ifaf-primary>
              ifaf-primary
            </ifaf-primary>
            <ifaf-preferred>
              ifaf-preferred
            </ifaf-preferred>
            <ifaf-master-only>
              ifaf-master-only
            </ifaf-master-only>
            <ifaf-down>
              ifaf-down
            </ifaf-down>
            <ifaf-kernel>
              ifaf-kernel
```


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```
            </ifaf-kernel>
            <ifaf-current-default>
              ifaf-current-default
            </ifaf-current-default>
            <ifaf-current-preferred>
              ifaf-current-preferred
            </ifaf-current-preferred>
            <ifaf-current-primary>
              ifaf-current-primary
            </ifaf-current-primary>
            <ifaf-duplicate>
              ifaf-duplicate
            </ifaf-duplicate>
            <ifaf-webauth-http>
              ifaf-webauth-http
            </ifaf-webauth-http>
            <generic-value>
              generic-value
            </generic-value>
          </ifa-flags>
        </interface-address>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<ifa-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <ifa-flags>
          <ifaf-none>
            ifaf-none
          </ifaf-none>
          <ifaf-primary>
            ifaf-primary
          </ifaf-primary>
          <ifaf-preferred>
            ifaf-preferred
          </ifaf-preferred>
          <ifaf-master-only>
            ifaf-master-only
          </ifaf-master-only>
          <ifaf-down>
            ifaf-down
          </ifaf-down>
          <ifaf-kernel>
            ifaf-kernel
          </ifaf-kernel>
          <ifaf-current-default>
```

```
                ifaf-current-default
              </ifaf-current-default>
              <ifaf-current-preferred>
                ifaf-current-preferred
              </ifaf-current-preferred>
              <ifaf-current-primary>
                ifaf-current-primary
              </ifaf-current-primary>
              <ifaf-duplicate>
                ifaf-duplicate
              </ifaf-duplicate>
              <ifaf-webauth-http>
                ifaf-webauth-http
              </ifaf-webauth-http>
              <generic-value>
                generic-value
              </generic-value>
            </ifa-flags>
          </interface-address>
        </address-family>
      </logical-interface>
    </interface-filter-information>
```

Description

<ifa-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <interface-address>
          <ifa-flags>
            <ifaf-none>
              ifaf-none
            </ifaf-none>
            <ifaf-primary>
              ifaf-primary
            </ifaf-primary>
            <ifaf-preferred>
              ifaf-preferred
            </ifaf-preferred>
            <ifaf-master-only>
              ifaf-master-only
            </ifaf-master-only>
            <ifaf-down>
              ifaf-down
            </ifaf-down>
            <ifaf-kernel>
              ifaf-kernel
            </ifaf-kernel>
            <ifaf-current-default>
              ifaf-current-default
            </ifaf-current-default>
```


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```
                <ifaf-current-preferred>
                  ifaf-current-preferred
                </ifaf-current-preferred>
                <ifaf-current-primary>
                  ifaf-current-primary
                </ifaf-current-primary>
                <ifaf-duplicate>
                  ifaf-duplicate
                </ifaf-duplicate>
                <ifaf-webauth-http>
                  ifaf-webauth-http
                </ifaf-webauth-http>
                <generic-value>
                  generic-value
                </generic-value>
              </ifa-flags>
            </interface-address>
          </address-family>
        </logical-interface>
      </physical-interface>
    </interface-policer-information>
```

Description

<ifa-flags>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <ifa-flags>
          <ifaf-none>
            ifaf-none
          </ifaf-none>
          <ifaf-primary>
            ifaf-primary
          </ifaf-primary>
          <ifaf-preferred>
            ifaf-preferred
          </ifaf-preferred>
          <ifaf-master-only>
            ifaf-master-only
          </ifaf-master-only>
          <ifaf-down>
            ifaf-down
          </ifaf-down>
          <ifaf-kernel>
            ifaf-kernel
          </ifaf-kernel>
          <ifaf-current-default>
            ifaf-current-default
          </ifaf-current-default>
          <ifaf-current-preferred>
            ifaf-current-preferred
```

```
        </ifaf-current-preferred>
        <ifaf-current-primary>
          ifaf-current-primary
        </ifaf-current-primary>
        <ifaf-duplicate>
          ifaf-duplicate
        </ifaf-duplicate>
        <ifaf-webauth-http>
          ifaf-webauth-http
        </ifaf-webauth-http>
        <generic-value>
          generic-value
        </generic-value>
      </ifa-flags>
    </interface-address>
  </address-family>
 </logical-interface>
</interface-policer-information>
```

Description

<ifvc-flags>

Usage

```
<ifvc-flags>
  <ifvc-down>
    ifvc-down
  </ifvc-down>
  <ifvc-none>
    ifvc-none
  </ifvc-none>
  <ifvc-active>
    ifvc-active
  </ifvc-active>
  <ifvc-closed>
    ifvc-closed
  </ifvc-closed>
  <ifvc-inverse-arp>
    ifvc-inverse-arp
  </ifvc-inverse-arp>
  <ifvc-ilmi>
    ifvc-ilmi
  </ifvc-ilmi>
  <ifvc-oam>
    ifvc-oam
  </ifvc-oam>
  <ifvc-shaping>
    ifvc-shaping
  </ifvc-shaping>
  <ifvc-passiveoam>
    ifvc-passiveoam
  </ifvc-passiveoam>
  <ifvc-multicast>
    ifvc-multicast
  </ifvc-multicast>
```


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```
<ifvc-ccc-down>
  ifvc-ccc-down
</ifvc-ccc-down>
<ifvc-configured>
  ifvc-configured
</ifvc-configured>
<ifvc-unconfigured>
  ifvc-unconfigured
</ifvc-unconfigured>
<generic-value>
  generic-value
</generic-value>
</ifvc-flags>
```

Description

<ifvc-flags>

Usage

```
<virtual-circuit-information>
  <ifvc-flags>
    <ifvc-down>
      ifvc-down
    </ifvc-down>
    <ifvc-none>
      ifvc-none
    </ifvc-none>
    <ifvc-active>
      ifvc-active
    </ifvc-active>
    <ifvc-closed>
      ifvc-closed
    </ifvc-closed>
    <ifvc-inverse-arp>
      ifvc-inverse-arp
    </ifvc-inverse-arp>
    <ifvc-ilmi>
      ifvc-ilmi
    </ifvc-ilmi>
    <ifvc-oam>
      ifvc-oam
    </ifvc-oam>
    <ifvc-shaping>
      ifvc-shaping
    </ifvc-shaping>
    <ifvc-passiveoam>
      ifvc-passiveoam
    </ifvc-passiveoam>
    <ifvc-multicast>
      ifvc-multicast
    </ifvc-multicast>
    <ifvc-ccc-down>
      ifvc-ccc-down
    </ifvc-ccc-down>
    <ifvc-configured>
```

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```
      ifvc-configured
    </ifvc-configured>
    <ifvc-unconfigured>
      ifvc-unconfigured
    </ifvc-unconfigured>
    <generic-value>
      generic-value
    </generic-value>
  </ifvc-flags>
</virtual-circuit-information>
```

Description

<ifvc-flags>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <ifvc-flags>
      <ifvc-down>
        ifvc-down
      </ifvc-down>
      <ifvc-none>
        ifvc-none
      </ifvc-none>
      <ifvc-active>
        ifvc-active
      </ifvc-active>
      <ifvc-closed>
        ifvc-closed
      </ifvc-closed>
      <ifvc-inverse-arp>
        ifvc-inverse-arp
      </ifvc-inverse-arp>
      <ifvc-ilmi>
        ifvc-ilmi
      </ifvc-ilmi>
      <ifvc-oam>
        ifvc-oam
      </ifvc-oam>
      <ifvc-shaping>
        ifvc-shaping
      </ifvc-shaping>
      <ifvc-passiveoam>
        ifvc-passiveoam
      </ifvc-passiveoam>
      <ifvc-multicast>
        ifvc-multicast
      </ifvc-multicast>
      <ifvc-ccc-down>
        ifvc-ccc-down
      </ifvc-ccc-down>
      <ifvc-configured>
        ifvc-configured
      </ifvc-configured>
```


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```
        <ifvc-unconfigured>
          ifvc-unconfigured
        </ifvc-unconfigured>
        <generic-value>
          generic-value
        </generic-value>
      </ifvc-flags>
    </virtual-circuit-information>
  </logical-interface>
```

Description

<ifvc-flags>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-flags>
        <ifvc-down>
          ifvc-down
        </ifvc-down>
        <ifvc-none>
          ifvc-none
        </ifvc-none>
        <ifvc-active>
          ifvc-active
        </ifvc-active>
        <ifvc-closed>
          ifvc-closed
        </ifvc-closed>
        <ifvc-inverse-arp>
          ifvc-inverse-arp
        </ifvc-inverse-arp>
        <ifvc-ilmi>
          ifvc-ilmi
        </ifvc-ilmi>
        <ifvc-oam>
          ifvc-oam
        </ifvc-oam>
        <ifvc-shaping>
          ifvc-shaping
        </ifvc-shaping>
        <ifvc-passiveoam>
          ifvc-passiveoam
        </ifvc-passiveoam>
        <ifvc-multicast>
          ifvc-multicast
        </ifvc-multicast>
        <ifvc-ccc-down>
          ifvc-ccc-down
        </ifvc-ccc-down>
        <ifvc-configured>
          ifvc-configured
        </ifvc-configured>
```

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```
            <ifvc-unconfigured>
              ifvc-unconfigured
            </ifvc-unconfigured>
            <generic-value>
              generic-value
            </generic-value>
          </ifvc-flags>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
```

Description

<ifvc-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-flags>
          <ifvc-down>
            ifvc-down
          </ifvc-down>
          <ifvc-none>
            ifvc-none
          </ifvc-none>
          <ifvc-active>
            ifvc-active
          </ifvc-active>
          <ifvc-closed>
            ifvc-closed
          </ifvc-closed>
          <ifvc-inverse-arp>
            ifvc-inverse-arp
          </ifvc-inverse-arp>
          <ifvc-ilmi>
            ifvc-ilmi
          </ifvc-ilmi>
          <ifvc-oam>
            ifvc-oam
          </ifvc-oam>
          <ifvc-shaping>
            ifvc-shaping
          </ifvc-shaping>
          <ifvc-passiveoam>
            ifvc-passiveoam
          </ifvc-passiveoam>
          <ifvc-multicast>
            ifvc-multicast
          </ifvc-multicast>
          <ifvc-ccc-down>
            ifvc-ccc-down
          </ifvc-ccc-down>
          <ifvc-configured>
```


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```
                ifvc-configured
               </ifvc-configured>
               <ifvc-unconfigured>
                ifvc-unconfigured
               </ifvc-unconfigured>
               <generic-value>
                generic-value
               </generic-value>
              </ifvc-flags>
             </virtual-circuit-information>
            </logical-interface>
           </physical-interface>
          </interface-information>
```

Description

<ifvc-flags>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <ifvc-flags>
    <ifvc-down>
     ifvc-down
    </ifvc-down>
    <ifvc-none>
     ifvc-none
    </ifvc-none>
    <ifvc-active>
     ifvc-active
    </ifvc-active>
    <ifvc-closed>
     ifvc-closed
    </ifvc-closed>
    <ifvc-inverse-arp>
     ifvc-inverse-arp
    </ifvc-inverse-arp>
    <ifvc-ilmi>
     ifvc-ilmi
    </ifvc-ilmi>
    <ifvc-oam>
     ifvc-oam
    </ifvc-oam>
    <ifvc-shaping>
     ifvc-shaping
    </ifvc-shaping>
    <ifvc-passiveoam>
     ifvc-passiveoam
    </ifvc-passiveoam>
    <ifvc-multicast>
     ifvc-multicast
    </ifvc-multicast>
    <ifvc-ccc-down>
     ifvc-ccc-down
```

```
        </ifvc-ccc-down>
        <ifvc-configured>
          ifvc-configured
        </ifvc-configured>
        <ifvc-unconfigured>
          ifvc-unconfigured
        </ifvc-unconfigured>
        <generic-value>
          generic-value
        </generic-value>
      </ifvc-flags>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<ifvc-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-flags>
          <ifvc-down>
            ifvc-down
          </ifvc-down>
          <ifvc-none>
            ifvc-none
          </ifvc-none>
          <ifvc-active>
            ifvc-active
          </ifvc-active>
          <ifvc-closed>
            ifvc-closed
          </ifvc-closed>
          <ifvc-inverse-arp>
            ifvc-inverse-arp
          </ifvc-inverse-arp>
          <ifvc-ilmi>
            ifvc-ilmi
          </ifvc-ilmi>
          <ifvc-oam>
            ifvc-oam
          </ifvc-oam>
          <ifvc-shaping>
            ifvc-shaping
          </ifvc-shaping>
          <ifvc-passiveoam>
            ifvc-passiveoam
          </ifvc-passiveoam>
          <ifvc-multicast>
            ifvc-multicast
          </ifvc-multicast>
```


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```
            <ifvc-ccc-down>
              ifvc-ccc-down
            </ifvc-ccc-down>
            <ifvc-configured>
              ifvc-configured
            </ifvc-configured>
            <ifvc-unconfigured>
              ifvc-unconfigured
            </ifvc-unconfigured>
            <generic-value>
              generic-value
            </generic-value>
          </ifvc-flags>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<ifvc-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-flags>
        <ifvc-down>
          ifvc-down
        </ifvc-down>
        <ifvc-none>
          ifvc-none
        </ifvc-none>
        <ifvc-active>
          ifvc-active
        </ifvc-active>
        <ifvc-closed>
          ifvc-closed
        </ifvc-closed>
        <ifvc-inverse-arp>
          ifvc-inverse-arp
        </ifvc-inverse-arp>
        <ifvc-ilmi>
          ifvc-ilmi
        </ifvc-ilmi>
        <ifvc-oam>
          ifvc-oam
        </ifvc-oam>
        <ifvc-shaping>
          ifvc-shaping
        </ifvc-shaping>
        <ifvc-passiveoam>
          ifvc-passiveoam
        </ifvc-passiveoam>
        <ifvc-multicast>
```

```
            ifvc-multicast
          </ifvc-multicast>
          <ifvc-ccc-down>
            ifvc-ccc-down
          </ifvc-ccc-down>
          <ifvc-configured>
            ifvc-configured
          </ifvc-configured>
          <ifvc-unconfigured>
            ifvc-unconfigured
          </ifvc-unconfigured>
          <generic-value>
            generic-value
          </generic-value>
        </ifvc-flags>
      </virtual-circuit-information>
    </logical-interface>
  </interface-filter-information>
```

Description

<ifvc-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-flags>
          <ifvc-down>
            ifvc-down
          </ifvc-down>
          <ifvc-none>
            ifvc-none
          </ifvc-none>
          <ifvc-active>
            ifvc-active
          </ifvc-active>
          <ifvc-closed>
            ifvc-closed
          </ifvc-closed>
          <ifvc-inverse-arp>
            ifvc-inverse-arp
          </ifvc-inverse-arp>
          <ifvc-ilmi>
            ifvc-ilmi
          </ifvc-ilmi>
          <ifvc-oam>
            ifvc-oam
          </ifvc-oam>
          <ifvc-shaping>
            ifvc-shaping
          </ifvc-shaping>
          <ifvc-passiveoam>
            ifvc-passiveoam
```


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```
        </ifvc-passiveoam>
        <ifvc-multicast>
          ifvc-multicast
        </ifvc-multicast>
        <ifvc-ccc-down>
          ifvc-ccc-down
        </ifvc-ccc-down>
        <ifvc-configured>
          ifvc-configured
        </ifvc-configured>
        <ifvc-unconfigured>
          ifvc-unconfigured
        </ifvc-unconfigured>
        <generic-value>
          generic-value
        </generic-value>
      </ifvc-flags>
    </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<ifvc-flags>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <ifvc-flags>
    <ifvc-down>
     ifvc-down
    </ifvc-down>
    <ifvc-none>
     ifvc-none
    </ifvc-none>
    <ifvc-active>
     ifvc-active
    </ifvc-active>
    <ifvc-closed>
     ifvc-closed
    </ifvc-closed>
    <ifvc-inverse-arp>
     ifvc-inverse-arp
    </ifvc-inverse-arp>
    <ifvc-ilmi>
     ifvc-ilmi
    </ifvc-ilmi>
    <ifvc-oam>
     ifvc-oam
    </ifvc-oam>
    <ifvc-shaping>
     ifvc-shaping
    </ifvc-shaping>
```

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```
                <ifvc-passiveoam>
                  ifvc-passiveoam
                </ifvc-passiveoam>
                <ifvc-multicast>
                  ifvc-multicast
                </ifvc-multicast>
                <ifvc-ccc-down>
                  ifvc-ccc-down
                </ifvc-ccc-down>
                <ifvc-configured>
                  ifvc-configured
                </ifvc-configured>
                <ifvc-unconfigured>
                  ifvc-unconfigured
                </ifvc-unconfigured>
                <generic-value>
                  generic-value
                </generic-value>
              </ifvc-flags>
            </virtual-circuit-information>
          </logical-interface>
        </interface-policer-information>
```

Description

<ifvc-multipoint-destination>

Usage

```
<virtual-circuit-information>
  <ifvc-multipoint-destination>
    <multipoint-address>
      multipoint-address
    </multipoint-address>
  </ifvc-multipoint-destination>
</virtual-circuit-information>
```

Description

<ifvc-multipoint-destination>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <ifvc-multipoint-destination>
      <multipoint-address>
        multipoint-address
      </multipoint-address>
    </ifvc-multipoint-destination>
  </virtual-circuit-information>
</logical-interface>
```

Description

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<ifvc-multipoint-destination>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-multipoint-destination>
        <multipoint-address>
          multipoint-address
        </multipoint-address>
      </ifvc-multipoint-destination>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<ifvc-multipoint-destination>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-multipoint-destination>
          <multipoint-address>
            multipoint-address
          </multipoint-address>
        </ifvc-multipoint-destination>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<ifvc-multipoint-destination>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-multipoint-destination>
        <multipoint-address>
          multipoint-address
        </multipoint-address>
      </ifvc-multipoint-destination>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

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<ifvc-multipoint-destination>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-multipoint-destination>
          <multipoint-address>
            multipoint-address
          </multipoint-address>
        </ifvc-multipoint-destination>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<ifvc-multipoint-destination>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-multipoint-destination>
        <multipoint-address>
          multipoint-address
        </multipoint-address>
      </ifvc-multipoint-destination>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

<ifvc-multipoint-destination>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <ifvc-multipoint-destination>
          <multipoint-address>
            multipoint-address
          </multipoint-address>
        </ifvc-multipoint-destination>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```


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Description

<ifvc-multipoint-destination>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <ifvc-multipoint-destination>
        <multipoint-address>
          multipoint-address
        </multipoint-address>
      </ifvc-multipoint-destination>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description

<ifvp-flags>

Usage

```
<ifvp-flags>
  <ifvp-down>
    ifvp-down
  </ifvp-down>
  <ifvp-none>
    ifvp-none
  </ifvp-none>
  <ifvp-active>
    ifvp-active
  </ifvp-active>
  <ifvp-closed>
    ifvp-closed
  </ifvp-closed>
  <ifvp-oam>
    ifvp-oam
  </ifvp-oam>
  <ifvp-shaping>
    ifvp-shaping
  </ifvp-shaping>
  <ifvp-passiveoam>
    ifvp-passiveoam
  </ifvp-passiveoam>
  <ifvp-tunnel>
    ifvp-tunnel
  </ifvp-tunnel>
  <generic-value>
    generic-value
  </generic-value>
</ifvp-flags>
```

Description

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<ifvp-flags>

Usage

```
<virtual-path-information>
  <ifvp-flags>
    <ifvp-down>
      ifvp-down
    </ifvp-down>
    <ifvp-none>
      ifvp-none
    </ifvp-none>
    <ifvp-active>
      ifvp-active
    </ifvp-active>
    <ifvp-closed>
      ifvp-closed
    </ifvp-closed>
    <ifvp-oam>
      ifvp-oam
    </ifvp-oam>
    <ifvp-shaping>
      ifvp-shaping
    </ifvp-shaping>
    <ifvp-passiveoam>
      ifvp-passiveoam
    </ifvp-passiveoam>
    <ifvp-tunnel>
      ifvp-tunnel
    </ifvp-tunnel>
    <generic-value>
      generic-value
    </generic-value>
  </ifvp-flags>
</virtual-path-information>
```

Description

<ifvp-flags>

Usage

```
<physical-interface>
  <virtual-path-information>
    <ifvp-flags>
      <ifvp-down>
        ifvp-down
      </ifvp-down>
      <ifvp-none>
        ifvp-none
      </ifvp-none>
      <ifvp-active>
        ifvp-active
      </ifvp-active>
      <ifvp-closed>
        ifvp-closed
```


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```
        </ifvp-closed>
        <ifvp-oam>
          ifvp-oam
        </ifvp-oam>
        <ifvp-shaping>
          ifvp-shaping
        </ifvp-shaping>
        <ifvp-passiveoam>
          ifvp-passiveoam
        </ifvp-passiveoam>
        <ifvp-tunnel>
          ifvp-tunnel
        </ifvp-tunnel>
        <generic-value>
          generic-value
        </generic-value>
      </ifvp-flags>
    </virtual-path-information>
  </physical-interface>
```

Description

<ifvp-flags>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <ifvp-flags>
        <ifvp-down>
          ifvp-down
        </ifvp-down>
        <ifvp-none>
          ifvp-none
        </ifvp-none>
        <ifvp-active>
          ifvp-active
        </ifvp-active>
        <ifvp-closed>
          ifvp-closed
        </ifvp-closed>
        <ifvp-oam>
          ifvp-oam
        </ifvp-oam>
        <ifvp-shaping>
          ifvp-shaping
        </ifvp-shaping>
        <ifvp-passiveoam>
          ifvp-passiveoam
        </ifvp-passiveoam>
        <ifvp-tunnel>
          ifvp-tunnel
        </ifvp-tunnel>
        <generic-value>
          generic-value
```

```
        </generic-value>
       </ifvp-flags>
      </virtual-path-information>
     </physical-interface>
    </interface-information>
```

Description

<ifvp-flags>

Usage

```
<interface-filter-information>
 <physical-interface>
  <virtual-path-information>
   <ifvp-flags>
    <ifvp-down>
     ifvp-down
    </ifvp-down>
    <ifvp-none>
     ifvp-none
    </ifvp-none>
    <ifvp-active>
     ifvp-active
    </ifvp-active>
    <ifvp-closed>
     ifvp-closed
    </ifvp-closed>
    <ifvp-oam>
     ifvp-oam
    </ifvp-oam>
    <ifvp-shaping>
     ifvp-shaping
    </ifvp-shaping>
    <ifvp-passiveoam>
     ifvp-passiveoam
    </ifvp-passiveoam>
    <ifvp-tunnel>
     ifvp-tunnel
    </ifvp-tunnel>
    <generic-value>
     generic-value
    </generic-value>
   </ifvp-flags>
  </virtual-path-information>
 </physical-interface>
</interface-filter-information>
```

Description

<ifvp-flags>

Usage

```
<interface-policer-information>
 <physical-interface>
```


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```
<virtual-path-information>
  <ifvp-flags>
    <ifvp-down>
      ifvp-down
    </ifvp-down>
    <ifvp-none>
      ifvp-none
    </ifvp-none>
    <ifvp-active>
      ifvp-active
    </ifvp-active>
    <ifvp-closed>
      ifvp-closed
    </ifvp-closed>
    <ifvp-oam>
      ifvp-oam
    </ifvp-oam>
    <ifvp-shaping>
      ifvp-shaping
    </ifvp-shaping>
    <ifvp-passiveoam>
      ifvp-passiveoam
    </ifvp-passiveoam>
    <ifvp-tunnel>
      ifvp-tunnel
    </ifvp-tunnel>
    <generic-value>
      generic-value
    </generic-value>
  </ifvp-flags>
 </virtual-path-information>
</physical-interface>
</interface-policer-information>
```

Description

<ima-group-information>

Usage

```
<ima-group-information>
  <media-alarm>....</media-alarm>
</ima-group-information>
```

Description IMA group alarms

<ima-group-information>

Usage

```
<physical-interface>
  <ima-group-information>
    <media-alarm>....</media-alarm>
  </ima-group-information>
```

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```
</physical-interface>
```

Description IMA group alarms

<ima-group-information>

Usage

```
<interface-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>....</media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-information>
```

Description IMA group alarms

<ima-group-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>....</media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-filter-information>
```

Description IMA group alarms

<ima-group-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>....</media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-policer-information>
```

Description IMA group alarms

<ima-group-properties>

Usage

```
<ima-group-properties>
  <ima-version>
    ima-version
```


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```
</ima-version>
<ima-frame-length>
  ima-frame-length
</ima-frame-length>
<ima-differential-delay>
  ima-differential-delay
</ima-differential-delay>
<ima-symmetry>
  ima-symmetry
</ima-symmetry>
<ima-transmit-clock>
  ima-transmit-clock
</ima-transmit-clock>
<ima-tx-minimum-links>
  ima-tx-minimum-links
</ima-tx-minimum-links>
<ima-rx-minimum-links>
  ima-rx-minimum-links
</ima-rx-minimum-links>
<ima-frame-sync-alpha>
  ima-frame-sync-alpha
</ima-frame-sync-alpha>
<ima-frame-sync-beta>
  ima-frame-sync-beta
</ima-frame-sync-beta>
<ima-frame-sync-gamma>
  ima-frame-sync-gamma
</ima-frame-sync-gamma>
<ima-group-link-enumerator>
  ima-group-link-enumerator
</ima-group-link-enumerator>
<ima-group-link-information>
  ima-group-link-information
</ima-group-link-information>
<ima-test-period>
  ima-test-period
</ima-test-period>
<ima-test-elapsed>
  ima-test-elapsed
</ima-test-elapsed>
<ima-test-status>
  ima-test-status
</ima-test-status>
<ima-test-pattern>
  ima-test-pattern
</ima-test-pattern>
<ima-test-link>
  ima-test-link
</ima-test-link>
<ima-test-result-pattern>
  ima-test-result-pattern
</ima-test-result-pattern>
<ima-test-result-status>
  ima-test-result-status
</ima-test-result-status>
<ima-test-result-miscon>
```

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```
    ima-test-result-miscon
   </ima-test-result-miscon>
   <ima-test-result-mispat>
    ima-test-result-mispat
   </ima-test-result-mispat>
  </ima-group-properties>
```

Description

<ima-group-properties>

Usage

```
<physical-interface>
 <ima-group-properties>
  <ima-version>
   ima-version
  </ima-version>
  <ima-frame-length>
   ima-frame-length
  </ima-frame-length>
  <ima-differential-delay>
   ima-differential-delay
  </ima-differential-delay>
  <ima-symmetry>
   ima-symmetry
  </ima-symmetry>
  <ima-transmit-clock>
   ima-transmit-clock
  </ima-transmit-clock>
  <ima-tx-minimum-links>
   ima-tx-minimum-links
  </ima-tx-minimum-links>
  <ima-rx-minimum-links>
   ima-rx-minimum-links
  </ima-rx-minimum-links>
  <ima-frame-sync-alpha>
   ima-frame-sync-alpha
  </ima-frame-sync-alpha>
  <ima-frame-sync-beta>
   ima-frame-sync-beta
  </ima-frame-sync-beta>
  <ima-frame-sync-gamma>
   ima-frame-sync-gamma
  </ima-frame-sync-gamma>
  <ima-group-link-enumerator>
   ima-group-link-enumerator
  </ima-group-link-enumerator>
  <ima-group-link-information>
   ima-group-link-information
  </ima-group-link-information>
  <ima-test-period>
   ima-test-period
  </ima-test-period>
  <ima-test-elapsed>
   ima-test-elapsed
```


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```
    </ima-test-elapsed>
    <ima-test-status>
      ima-test-status
    </ima-test-status>
    <ima-test-pattern>
      ima-test-pattern
    </ima-test-pattern>
    <ima-test-link>
      ima-test-link
    </ima-test-link>
    <ima-test-result-pattern>
      ima-test-result-pattern
    </ima-test-result-pattern>
    <ima-test-result-status>
      ima-test-result-status
    </ima-test-result-status>
    <ima-test-result-miscon>
      ima-test-result-miscon
    </ima-test-result-miscon>
    <ima-test-result-mispat>
      ima-test-result-mispat
    </ima-test-result-mispat>
  </ima-group-properties>
</physical-interface>
```

Description

<ima-group-properties>

Usage

```
<interface-information>
  <physical-interface>
    <ima-group-properties>
      <ima-version>
        ima-version
      </ima-version>
      <ima-frame-length>
        ima-frame-length
      </ima-frame-length>
      <ima-differential-delay>
        ima-differential-delay
      </ima-differential-delay>
      <ima-symmetry>
        ima-symmetry
      </ima-symmetry>
      <ima-transmit-clock>
        ima-transmit-clock
      </ima-transmit-clock>
      <ima-tx-minimum-links>
        ima-tx-minimum-links
      </ima-tx-minimum-links>
      <ima-rx-minimum-links>
        ima-rx-minimum-links
      </ima-rx-minimum-links>
      <ima-frame-sync-alpha>
```

```
            ima-frame-sync-alpha
           </ima-frame-sync-alpha>
           <ima-frame-sync-beta>
            ima-frame-sync-beta
           </ima-frame-sync-beta>
           <ima-frame-sync-gamma>
            ima-frame-sync-gamma
           </ima-frame-sync-gamma>
           <ima-group-link-enumerator>
            ima-group-link-enumerator
           </ima-group-link-enumerator>
           <ima-group-link-information>
            ima-group-link-information
           </ima-group-link-information>
           <ima-test-period>
            ima-test-period
           </ima-test-period>
           <ima-test-elapsed>
            ima-test-elapsed
           </ima-test-elapsed>
           <ima-test-status>
            ima-test-status
           </ima-test-status>
           <ima-test-pattern>
            ima-test-pattern
           </ima-test-pattern>
           <ima-test-link>
            ima-test-link
           </ima-test-link>
           <ima-test-result-pattern>
            ima-test-result-pattern
           </ima-test-result-pattern>
           <ima-test-result-status>
            ima-test-result-status
           </ima-test-result-status>
           <ima-test-result-miscon>
            ima-test-result-miscon
           </ima-test-result-miscon>
           <ima-test-result-mispat>
            ima-test-result-mispat
           </ima-test-result-mispat>
          </ima-group-properties>
         </physical-interface>
        </interface-information>
```

Description

<ima-group-properties>

Usage

```
<interface-filter-information>
 <physical-interface>
  <ima-group-properties>
   <ima-version>
    ima-version
```


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```
</ima-version>
<ima-frame-length>
  ima-frame-length
</ima-frame-length>
<ima-differential-delay>
  ima-differential-delay
</ima-differential-delay>
<ima-symmetry>
  ima-symmetry
</ima-symmetry>
<ima-transmit-clock>
  ima-transmit-clock
</ima-transmit-clock>
<ima-tx-minimum-links>
  ima-tx-minimum-links
</ima-tx-minimum-links>
<ima-rx-minimum-links>
  ima-rx-minimum-links
</ima-rx-minimum-links>
<ima-frame-sync-alpha>
  ima-frame-sync-alpha
</ima-frame-sync-alpha>
<ima-frame-sync-beta>
  ima-frame-sync-beta
</ima-frame-sync-beta>
<ima-frame-sync-gamma>
  ima-frame-sync-gamma
</ima-frame-sync-gamma>
<ima-group-link-enumerator>
  ima-group-link-enumerator
</ima-group-link-enumerator>
<ima-group-link-information>
  ima-group-link-information
</ima-group-link-information>
<ima-test-period>
  ima-test-period
</ima-test-period>
<ima-test-elapsed>
  ima-test-elapsed
</ima-test-elapsed>
<ima-test-status>
  ima-test-status
</ima-test-status>
<ima-test-pattern>
  ima-test-pattern
</ima-test-pattern>
<ima-test-link>
  ima-test-link
</ima-test-link>
<ima-test-result-pattern>
  ima-test-result-pattern
</ima-test-result-pattern>
<ima-test-result-status>
  ima-test-result-status
</ima-test-result-status>
<ima-test-result-miscon>
```

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```
        ima-test-result-miscon
       </ima-test-result-miscon>
       <ima-test-result-mispat>
        ima-test-result-mispat
       </ima-test-result-mispat>
      </ima-group-properties>
     </physical-interface>
    </interface-filter-information>
```

Description

<ima-group-properties>

Usage

```
<interface-policer-information>
 <physical-interface>
  <ima-group-properties>
   <ima-version>
    ima-version
   </ima-version>
   <ima-frame-length>
    ima-frame-length
   </ima-frame-length>
   <ima-differential-delay>
    ima-differential-delay
   </ima-differential-delay>
   <ima-symmetry>
    ima-symmetry
   </ima-symmetry>
   <ima-transmit-clock>
    ima-transmit-clock
   </ima-transmit-clock>
   <ima-tx-minimum-links>
    ima-tx-minimum-links
   </ima-tx-minimum-links>
   <ima-rx-minimum-links>
    ima-rx-minimum-links
   </ima-rx-minimum-links>
   <ima-frame-sync-alpha>
    ima-frame-sync-alpha
   </ima-frame-sync-alpha>
   <ima-frame-sync-beta>
    ima-frame-sync-beta
   </ima-frame-sync-beta>
   <ima-frame-sync-gamma>
    ima-frame-sync-gamma
   </ima-frame-sync-gamma>
   <ima-group-link-enumerator>
    ima-group-link-enumerator
   </ima-group-link-enumerator>
   <ima-group-link-information>
    ima-group-link-information
   </ima-group-link-information>
   <ima-test-period>
    ima-test-period
```


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```
        </ima-test-period>
        <ima-test-elapsed>
          ima-test-elapsed
        </ima-test-elapsed>
        <ima-test-status>
          ima-test-status
        </ima-test-status>
        <ima-test-pattern>
          ima-test-pattern
        </ima-test-pattern>
        <ima-test-link>
          ima-test-link
        </ima-test-link>
        <ima-test-result-pattern>
          ima-test-result-pattern
        </ima-test-result-pattern>
        <ima-test-result-status>
          ima-test-result-status
        </ima-test-result-status>
        <ima-test-result-miscon>
          ima-test-result-miscon
        </ima-test-result-miscon>
        <ima-test-result-mispat>
          ima-test-result-mispat
        </ima-test-result-mispat>
      </ima-group-properties>
    </physical-interface>
  </interface-policer-information>
```

Description

<ima-link-information>

Usage

```
<ima-link-information>
  <media-alarm>....</media-alarm>
</ima-link-information>
```

Description IMA link alarms

<ima-link-information>

Usage

```
<physical-interface>
  <ima-link-information>
    <media-alarm>....</media-alarm>
  </ima-link-information>
</physical-interface>
```

Description IMA link alarms

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<ima-link-information>

Usage

```
<interface-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>....</media-alarm>
    </ima-link-information>
  </physical-interface>
</interface-information>
```

Description IMA link alarms

<ima-link-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>....</media-alarm>
    </ima-link-information>
  </physical-interface>
</interface-filter-information>
```

Description IMA link alarms

<ima-link-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>....</media-alarm>
    </ima-link-information>
  </physical-interface>
</interface-policer-information>
```

Description IMA link alarms

<ima-link-properties>

Usage

```
<ima-link-properties>
  <ima-group-id>
    ima-group-id
  </ima-group-id>
  <ima-link-direction>
    ima-link-direction
  </ima-link-direction>
```


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```
</ima-link-properties>
```

Description

<ima-link-properties>

Usage

```
<physical-interface>
  <ima-link-properties>
    <ima-group-id>
      ima-group-id
    </ima-group-id>
    <ima-link-direction>
      ima-link-direction
    </ima-link-direction>
  </ima-link-properties>
</physical-interface>
```

Description

<ima-link-properties>

Usage

```
<interface-information>
  <physical-interface>
    <ima-link-properties>
      <ima-group-id>
        ima-group-id
      </ima-group-id>
      <ima-link-direction>
        ima-link-direction
      </ima-link-direction>
    </ima-link-properties>
  </physical-interface>
</interface-information>
```

Description

<ima-link-properties>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ima-link-properties>
      <ima-group-id>
        ima-group-id
      </ima-group-id>
      <ima-link-direction>
        ima-link-direction
      </ima-link-direction>
    </ima-link-properties>
  </physical-interface>
```

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```
</interface-filter-information>
```

Description

<ima-link-properties>

Usage

```
<interface-policer-information>
 <physical-interface>
  <ima-link-properties>
   <ima-group-id>
    ima-group-id
   </ima-group-id>
   <ima-link-direction>
    ima-link-direction
   </ima-link-direction>
  </ima-link-properties>
 </physical-interface>
</interface-policer-information>
```

Description

<ima-state>

Usage

```
<ima-state>
 <media-type>
  media-type
 </media-type>
 <ima-state-line>
  ima-state-line
 </ima-state-line>
 <ima-state-near-end>
  ima-state-near-end
 </ima-state-near-end>
 <ima-state-far-end>
  ima-state-far-end
 </ima-state-far-end>
</ima-state>
```

Description

<ima-state>

Usage

```
<physical-interface>
 <ima-state>
  <media-type>
   media-type
  </media-type>
  <ima-state-line>
   ima-state-line
  </ima-state-line>
```


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```
    <ima-state-near-end>
     ima-state-near-end
    </ima-state-near-end>
    <ima-state-far-end>
     ima-state-far-end
    </ima-state-far-end>
   </ima-state>
</physical-interface>
```

Description

<ima-state>

Usage

```
<interface-information>
 <physical-interface>
  <ima-state>
   <media-type>
    media-type
   </media-type>
   <ima-state-line>
    ima-state-line
   </ima-state-line>
   <ima-state-near-end>
    ima-state-near-end
   </ima-state-near-end>
   <ima-state-far-end>
    ima-state-far-end
   </ima-state-far-end>
  </ima-state>
 </physical-interface>
</interface-information>
```

Description

<ima-state>

Usage

```
<interface-filter-information>
 <physical-interface>
  <ima-state>
   <media-type>
    media-type
   </media-type>
   <ima-state-line>
    ima-state-line
   </ima-state-line>
   <ima-state-near-end>
    ima-state-near-end
   </ima-state-near-end>
   <ima-state-far-end>
    ima-state-far-end
   </ima-state-far-end>
  </ima-state>
```

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```
  </physical-interface>
</interface-filter-information>
```

Description

<ima-state>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ima-state>
      <media-type>
        media-type
      </media-type>
      <ima-state-line>
        ima-state-line
      </ima-state-line>
      <ima-state-near-end>
        ima-state-near-end
      </ima-state-near-end>
      <ima-state-far-end>
        ima-state-far-end
      </ima-state-far-end>
    </ima-state>
  </physical-interface>
</interface-policer-information>
```

Description

<in-arp-statistics>

Usage

```
<virtual-circuit-information>
  <in-arp-statistics>
    <received-count>
      received-count
    </received-count>
    <transmitted-count>
      transmitted-count
    </transmitted-count>
    <denied-count>
      denied-count
    </denied-count>
    <operation-not-supported-count>
      operation-not-supported-count
    </operation-not-supported-count>
    <bad-packet-length-count>
      bad-packet-length-count
    </bad-packet-length-count>
    <bad-protocol-count>
      bad-protocol-count
    </bad-protocol-count>
    <bad-protocol-length-count>
      bad-protocol-length-count
```


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```
    </bad-protocol-length-count>
    <bad-hardware-length-count>
     bad-hardware-length-count
    </bad-hardware-length-count>
    <dropped-count>
     dropped-count
    </dropped-count>
    <last-received>
     last-received
    </last-received>
    <last-transmitted>
     last-transmitted
    </last-transmitted>
   </in-arp-statistics>
  </virtual-circuit-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<logical-interface>
 <virtual-circuit-information>
  <in-arp-statistics>
   <received-count>
    received-count
   </received-count>
   <transmitted-count>
    transmitted-count
   </transmitted-count>
   <denied-count>
    denied-count
   </denied-count>
   <operation-not-supported-count>
    operation-not-supported-count
   </operation-not-supported-count>
   <bad-packet-length-count>
    bad-packet-length-count
   </bad-packet-length-count>
   <bad-protocol-count>
    bad-protocol-count
   </bad-protocol-count>
   <bad-protocol-length-count>
    bad-protocol-length-count
   </bad-protocol-length-count>
   <bad-hardware-length-count>
    bad-hardware-length-count
   </bad-hardware-length-count>
   <dropped-count>
    dropped-count
   </dropped-count>
   <last-received>
    last-received
   </last-received>
```

```
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<logical-interface>
  <in-arp-statistics>
    <received-count>
      received-count
    </received-count>
    <transmitted-count>
      transmitted-count
    </transmitted-count>
    <denied-count>
      denied-count
    </denied-count>
    <operation-not-supported-count>
      operation-not-supported-count
    </operation-not-supported-count>
    <bad-packet-length-count>
      bad-packet-length-count
    </bad-packet-length-count>
    <bad-protocol-count>
      bad-protocol-count
    </bad-protocol-count>
    <bad-protocol-length-count>
      bad-protocol-length-count
    </bad-protocol-length-count>
    <bad-hardware-length-count>
      bad-hardware-length-count
    </bad-hardware-length-count>
    <dropped-count>
      dropped-count
    </dropped-count>
    <last-received>
      last-received
    </last-received>
    <last-transmitted>
      last-transmitted
    </last-transmitted>
  </in-arp-statistics>
</logical-interface>
```

Description Container tag for ARP statistics

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<in-arp-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <in-arp-statistics>
        <received-count>
          received-count
        </received-count>
        <transmitted-count>
          transmitted-count
        </transmitted-count>
        <denied-count>
          denied-count
        </denied-count>
        <operation-not-supported-count>
          operation-not-supported-count
        </operation-not-supported-count>
        <bad-packet-length-count>
          bad-packet-length-count
        </bad-packet-length-count>
        <bad-protocol-count>
          bad-protocol-count
        </bad-protocol-count>
        <bad-protocol-length-count>
          bad-protocol-length-count
        </bad-protocol-length-count>
        <bad-hardware-length-count>
          bad-hardware-length-count
        </bad-hardware-length-count>
        <dropped-count>
          dropped-count
        </dropped-count>
        <last-received>
          last-received
        </last-received>
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <in-arp-statistics>
```

```
                <received-count>
                  received-count
                </received-count>
                <transmitted-count>
                  transmitted-count
                </transmitted-count>
                <denied-count>
                  denied-count
                </denied-count>
                <operation-not-supported-count>
                  operation-not-supported-count
                </operation-not-supported-count>
                <bad-packet-length-count>
                  bad-packet-length-count
                </bad-packet-length-count>
                <bad-protocol-count>
                  bad-protocol-count
                </bad-protocol-count>
                <bad-protocol-length-count>
                  bad-protocol-length-count
                </bad-protocol-length-count>
                <bad-hardware-length-count>
                  bad-hardware-length-count
                </bad-hardware-length-count>
                <dropped-count>
                  dropped-count
                </dropped-count>
                <last-received>
                  last-received
                </last-received>
                <last-transmitted>
                  last-transmitted
                </last-transmitted>
              </in-arp-statistics>
            </logical-interface>
          </physical-interface>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <in-arp-statistics>
          <received-count>
            received-count
          </received-count>
          <transmitted-count>
            transmitted-count
          </transmitted-count>
          <denied-count>
```


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```
        denied-count
      </denied-count>
      <operation-not-supported-count>
        operation-not-supported-count
      </operation-not-supported-count>
      <bad-packet-length-count>
        bad-packet-length-count
      </bad-packet-length-count>
      <bad-protocol-count>
        bad-protocol-count
      </bad-protocol-count>
      <bad-protocol-length-count>
        bad-protocol-length-count
      </bad-protocol-length-count>
      <bad-hardware-length-count>
        bad-hardware-length-count
      </bad-hardware-length-count>
      <dropped-count>
        dropped-count
      </dropped-count>
      <last-received>
        last-received
      </last-received>
      <last-transmitted>
        last-transmitted
      </last-transmitted>
    </in-arp-statistics>
  </virtual-circuit-information>
 </logical-interface>
</physical-interface>
</interface-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <in-arp-statistics>
    <received-count>
     received-count
    </received-count>
    <transmitted-count>
     transmitted-count
    </transmitted-count>
    <denied-count>
     denied-count
    </denied-count>
    <operation-not-supported-count>
     operation-not-supported-count
    </operation-not-supported-count>
    <bad-packet-length-count>
```

```
            bad-packet-length-count
          </bad-packet-length-count>
          <bad-protocol-count>
            bad-protocol-count
          </bad-protocol-count>
          <bad-protocol-length-count>
            bad-protocol-length-count
          </bad-protocol-length-count>
          <bad-hardware-length-count>
            bad-hardware-length-count
          </bad-hardware-length-count>
          <dropped-count>
            dropped-count
          </dropped-count>
          <last-received>
            last-received
          </last-received>
          <last-transmitted>
            last-transmitted
          </last-transmitted>
        </in-arp-statistics>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <in-arp-statistics>
        <received-count>
          received-count
        </received-count>
        <transmitted-count>
          transmitted-count
        </transmitted-count>
        <denied-count>
          denied-count
        </denied-count>
        <operation-not-supported-count>
          operation-not-supported-count
        </operation-not-supported-count>
        <bad-packet-length-count>
          bad-packet-length-count
        </bad-packet-length-count>
        <bad-protocol-count>
          bad-protocol-count
        </bad-protocol-count>
        <bad-protocol-length-count>
          bad-protocol-length-count
```


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```
        </bad-protocol-length-count>
        <bad-hardware-length-count>
          bad-hardware-length-count
        </bad-hardware-length-count>
        <dropped-count>
          dropped-count
        </dropped-count>
        <last-received>
          last-received
        </last-received>
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <in-arp-statistics>
      <received-count>
        received-count
      </received-count>
      <transmitted-count>
        transmitted-count
      </transmitted-count>
      <denied-count>
        denied-count
      </denied-count>
      <operation-not-supported-count>
        operation-not-supported-count
      </operation-not-supported-count>
      <bad-packet-length-count>
        bad-packet-length-count
      </bad-packet-length-count>
      <bad-protocol-count>
        bad-protocol-count
      </bad-protocol-count>
      <bad-protocol-length-count>
        bad-protocol-length-count
      </bad-protocol-length-count>
      <bad-hardware-length-count>
        bad-hardware-length-count
      </bad-hardware-length-count>
      <dropped-count>
        dropped-count
      </dropped-count>
      <last-received>
```

```
                last-received
              </last-received>
              <last-transmitted>
                last-transmitted
              </last-transmitted>
            </in-arp-statistics>
          </logical-interface>
        </interface-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <in-arp-statistics>
          <received-count>
            received-count
          </received-count>
          <transmitted-count>
            transmitted-count
          </transmitted-count>
          <denied-count>
            denied-count
          </denied-count>
          <operation-not-supported-count>
            operation-not-supported-count
          </operation-not-supported-count>
          <bad-packet-length-count>
            bad-packet-length-count
          </bad-packet-length-count>
          <bad-protocol-count>
            bad-protocol-count
          </bad-protocol-count>
          <bad-protocol-length-count>
            bad-protocol-length-count
          </bad-protocol-length-count>
          <bad-hardware-length-count>
            bad-hardware-length-count
          </bad-hardware-length-count>
          <dropped-count>
            dropped-count
          </dropped-count>
          <last-received>
            last-received
          </last-received>
          <last-transmitted>
            last-transmitted
          </last-transmitted>
        </in-arp-statistics>
      </virtual-circuit-information>
```


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```
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <in-arp-statistics>
        <received-count>
          received-count
        </received-count>
        <transmitted-count>
          transmitted-count
        </transmitted-count>
        <denied-count>
          denied-count
        </denied-count>
        <operation-not-supported-count>
          operation-not-supported-count
        </operation-not-supported-count>
        <bad-packet-length-count>
          bad-packet-length-count
        </bad-packet-length-count>
        <bad-protocol-count>
          bad-protocol-count
        </bad-protocol-count>
        <bad-protocol-length-count>
          bad-protocol-length-count
        </bad-protocol-length-count>
        <bad-hardware-length-count>
          bad-hardware-length-count
        </bad-hardware-length-count>
        <dropped-count>
          dropped-count
        </dropped-count>
        <last-received>
          last-received
        </last-received>
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <in-arp-statistics>
        <received-count>
          received-count
        </received-count>
        <transmitted-count>
          transmitted-count
        </transmitted-count>
        <denied-count>
          denied-count
        </denied-count>
        <operation-not-supported-count>
          operation-not-supported-count
        </operation-not-supported-count>
        <bad-packet-length-count>
          bad-packet-length-count
        </bad-packet-length-count>
        <bad-protocol-count>
          bad-protocol-count
        </bad-protocol-count>
        <bad-protocol-length-count>
          bad-protocol-length-count
        </bad-protocol-length-count>
        <bad-hardware-length-count>
          bad-hardware-length-count
        </bad-hardware-length-count>
        <dropped-count>
          dropped-count
        </dropped-count>
        <last-received>
          last-received
        </last-received>
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <in-arp-statistics>
```


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```
<received-count>
  received-count
</received-count>
<transmitted-count>
  transmitted-count
</transmitted-count>
<denied-count>
  denied-count
</denied-count>
<operation-not-supported-count>
  operation-not-supported-count
</operation-not-supported-count>
<bad-packet-length-count>
  bad-packet-length-count
</bad-packet-length-count>
<bad-protocol-count>
  bad-protocol-count
</bad-protocol-count>
<bad-protocol-length-count>
  bad-protocol-length-count
</bad-protocol-length-count>
<bad-hardware-length-count>
  bad-hardware-length-count
</bad-hardware-length-count>
<dropped-count>
  dropped-count
</dropped-count>
<last-received>
  last-received
</last-received>
<last-transmitted>
  last-transmitted
</last-transmitted>
</in-arp-statistics>
</logical-interface>
</interface-filter-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <in-arp-statistics>
          <received-count>
            received-count
          </received-count>
          <transmitted-count>
            transmitted-count
          </transmitted-count>
          <denied-count>
```

```
                denied-count
              </denied-count>
              <operation-not-supported-count>
                operation-not-supported-count
              </operation-not-supported-count>
              <bad-packet-length-count>
                bad-packet-length-count
              </bad-packet-length-count>
              <bad-protocol-count>
                bad-protocol-count
              </bad-protocol-count>
              <bad-protocol-length-count>
                bad-protocol-length-count
              </bad-protocol-length-count>
              <bad-hardware-length-count>
                bad-hardware-length-count
              </bad-hardware-length-count>
              <dropped-count>
                dropped-count
              </dropped-count>
              <last-received>
                last-received
              </last-received>
              <last-transmitted>
                last-transmitted
              </last-transmitted>
            </in-arp-statistics>
          </virtual-circuit-information>
        </logical-interface>
      </physical-interface>
    </interface-policer-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <in-arp-statistics>
        <received-count>
          received-count
        </received-count>
        <transmitted-count>
          transmitted-count
        </transmitted-count>
        <denied-count>
          denied-count
        </denied-count>
        <operation-not-supported-count>
          operation-not-supported-count
        </operation-not-supported-count>
        <bad-packet-length-count>
```


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```
      bad-packet-length-count
    </bad-packet-length-count>
    <bad-protocol-count>
      bad-protocol-count
    </bad-protocol-count>
    <bad-protocol-length-count>
      bad-protocol-length-count
    </bad-protocol-length-count>
    <bad-hardware-length-count>
      bad-hardware-length-count
    </bad-hardware-length-count>
    <dropped-count>
      dropped-count
    </dropped-count>
    <last-received>
      last-received
    </last-received>
    <last-transmitted>
      last-transmitted
    </last-transmitted>
   </in-arp-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <in-arp-statistics>
    <received-count>
     received-count
    </received-count>
    <transmitted-count>
     transmitted-count
    </transmitted-count>
    <denied-count>
     denied-count
    </denied-count>
    <operation-not-supported-count>
     operation-not-supported-count
    </operation-not-supported-count>
    <bad-packet-length-count>
     bad-packet-length-count
    </bad-packet-length-count>
    <bad-protocol-count>
     bad-protocol-count
    </bad-protocol-count>
    <bad-protocol-length-count>
     bad-protocol-length-count
```

```
        </bad-protocol-length-count>
        <bad-hardware-length-count>
          bad-hardware-length-count
        </bad-hardware-length-count>
        <dropped-count>
          dropped-count
        </dropped-count>
        <last-received>
          last-received
        </last-received>
        <last-transmitted>
          last-transmitted
        </last-transmitted>
      </in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description Container tag for ARP statistics

<in-arp-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <in-arp-statistics>
      <received-count>
        received-count
      </received-count>
      <transmitted-count>
        transmitted-count
      </transmitted-count>
      <denied-count>
        denied-count
      </denied-count>
      <operation-not-supported-count>
        operation-not-supported-count
      </operation-not-supported-count>
      <bad-packet-length-count>
        bad-packet-length-count
      </bad-packet-length-count>
      <bad-protocol-count>
        bad-protocol-count
      </bad-protocol-count>
      <bad-protocol-length-count>
        bad-protocol-length-count
      </bad-protocol-length-count>
      <bad-hardware-length-count>
        bad-hardware-length-count
      </bad-hardware-length-count>
      <dropped-count>
        dropped-count
      </dropped-count>
      <last-received>
```


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```
        last-received
       </last-received>
       <last-transmitted>
        last-transmitted
       </last-transmitted>
      </in-arp-statistics>
     </logical-interface>
    </interface-policer-information>
```

Description Container tag for ARP statistics

<in6-addr-flags>

Usage

```
<in6-addr-flags>
 <in6-anycast>
  in6-anycast
 </in6-anycast>
 <in6-tentative>
  in6-tentative
 </in6-tentative>
 <in6-duplicate>
  in6-duplicate
 </in6-duplicate>
 <in6-detached>
  in6-detached
 </in6-detached>
 <in6-deprecated>
  in6-deprecated
 </in6-deprecated>
 <in6-nodad>
  in6-nodad
 </in6-nodad>
 <in6-temporary>
  in6-temporary
 </in6-temporary>
 <in6-autoconf>
  in6-autoconf
 </in6-autoconf>
 <in6-nopfxmgmt>
  in6-nopfxmgmt
 </in6-nopfxmgmt>
</in6-addr-flags>
```

Description

<in6-addr-flags>

Usage

```
<interface-address>
 <in6-addr-flags>
  <in6-anycast>
   in6-anycast
```

```
      </in6-anycast>
      <in6-tentative>
        in6-tentative
      </in6-tentative>
      <in6-duplicate>
        in6-duplicate
      </in6-duplicate>
      <in6-detached>
        in6-detached
      </in6-detached>
      <in6-deprecated>
        in6-deprecated
      </in6-deprecated>
      <in6-nodad>
        in6-nodad
      </in6-nodad>
      <in6-temporary>
        in6-temporary
      </in6-temporary>
      <in6-autoconf>
        in6-autoconf
      </in6-autoconf>
      <in6-nopfxmgmt>
        in6-nopfxmgmt
      </in6-nopfxmgmt>
    </in6-addr-flags>
  </interface-address>
```

Description

<in6-addr-flags>

Usage

```
<address-family>
  <interface-address>
    <in6-addr-flags>
      <in6-anycast>
        in6-anycast
      </in6-anycast>
      <in6-tentative>
        in6-tentative
      </in6-tentative>
      <in6-duplicate>
        in6-duplicate
      </in6-duplicate>
      <in6-detached>
        in6-detached
      </in6-detached>
      <in6-deprecated>
        in6-deprecated
      </in6-deprecated>
      <in6-nodad>
        in6-nodad
      </in6-nodad>
      <in6-temporary>
```


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```
            in6-temporary
           </in6-temporary>
           <in6-autoconf>
            in6-autoconf
           </in6-autoconf>
           <in6-nopfxmgmt>
            in6-nopfxmgmt
           </in6-nopfxmgmt>
          </in6-addr-flags>
         </interface-address>
        </address-family>
```

Description

<in6-addr-flags>

Usage

```
<logical-interface>
 <address-family>
  <interface-address>
   <in6-addr-flags>
    <in6-anycast>
     in6-anycast
    </in6-anycast>
    <in6-tentative>
     in6-tentative
    </in6-tentative>
    <in6-duplicate>
     in6-duplicate
    </in6-duplicate>
    <in6-detached>
     in6-detached
    </in6-detached>
    <in6-deprecated>
     in6-deprecated
    </in6-deprecated>
    <in6-nodad>
     in6-nodad
    </in6-nodad>
    <in6-temporary>
     in6-temporary
    </in6-temporary>
    <in6-autoconf>
     in6-autoconf
    </in6-autoconf>
    <in6-nopfxmgmt>
     in6-nopfxmgmt
    </in6-nopfxmgmt>
   </in6-addr-flags>
  </interface-address>
 </address-family>
</logical-interface>
```

Description

<in6-addr-flags>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <interface-address>
        <in6-addr-flags>
          <in6-anycast>
            in6-anycast
          </in6-anycast>
          <in6-tentative>
            in6-tentative
          </in6-tentative>
          <in6-duplicate>
            in6-duplicate
          </in6-duplicate>
          <in6-detached>
            in6-detached
          </in6-detached>
          <in6-deprecated>
            in6-deprecated
          </in6-deprecated>
          <in6-nodad>
            in6-nodad
          </in6-nodad>
          <in6-temporary>
            in6-temporary
          </in6-temporary>
          <in6-autoconf>
            in6-autoconf
          </in6-autoconf>
          <in6-nopfxmgmt>
            in6-nopfxmgmt
          </in6-nopfxmgmt>
        </in6-addr-flags>
      </interface-address>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description

<in6-addr-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <interface-address>
          <in6-addr-flags>
            <in6-anycast>
              in6-anycast
```


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```
                </in6-anycast>
                <in6-tentative>
                  in6-tentative
                </in6-tentative>
                <in6-duplicate>
                  in6-duplicate
                </in6-duplicate>
                <in6-detached>
                  in6-detached
                </in6-detached>
                <in6-deprecated>
                  in6-deprecated
                </in6-deprecated>
                <in6-nodad>
                  in6-nodad
                </in6-nodad>
                <in6-temporary>
                  in6-temporary
                </in6-temporary>
                <in6-autoconf>
                  in6-autoconf
                </in6-autoconf>
                <in6-nopfxmgmt>
                  in6-nopfxmgmt
                </in6-nopfxmgmt>
              </in6-addr-flags>
            </interface-address>
          </address-family>
        </logical-interface>
      </physical-interface>
    </interface-information>
```

Description

<in6-addr-flags>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <in6-addr-flags>
          <in6-anycast>
            in6-anycast
          </in6-anycast>
          <in6-tentative>
            in6-tentative
          </in6-tentative>
          <in6-duplicate>
            in6-duplicate
          </in6-duplicate>
          <in6-detached>
            in6-detached
          </in6-detached>
          <in6-deprecated>
```

```
                    in6-deprecated
                   </in6-deprecated>
                   <in6-nodad>
                    in6-nodad
                   </in6-nodad>
                   <in6-temporary>
                    in6-temporary
                   </in6-temporary>
                   <in6-autoconf>
                    in6-autoconf
                   </in6-autoconf>
                   <in6-nopfxmgmt>
                    in6-nopfxmgmt
                   </in6-nopfxmgmt>
                  </in6-addr-flags>
                 </interface-address>
                </address-family>
               </logical-interface>
              </interface-information>
```

Description

<in6-addr-flags>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <interface-address>
     <in6-addr-flags>
      <in6-anycast>
       in6-anycast
      </in6-anycast>
      <in6-tentative>
       in6-tentative
      </in6-tentative>
      <in6-duplicate>
       in6-duplicate
      </in6-duplicate>
      <in6-detached>
       in6-detached
      </in6-detached>
      <in6-deprecated>
       in6-deprecated
      </in6-deprecated>
      <in6-nodad>
       in6-nodad
      </in6-nodad>
      <in6-temporary>
       in6-temporary
      </in6-temporary>
      <in6-autoconf>
       in6-autoconf
      </in6-autoconf>
```


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```
            <in6-nopfxmgmt>
              in6-nopfxmgmt
            </in6-nopfxmgmt>
          </in6-addr-flags>
        </interface-address>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<in6-addr-flags>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <in6-addr-flags>
          <in6-anycast>
            in6-anycast
          </in6-anycast>
          <in6-tentative>
            in6-tentative
          </in6-tentative>
          <in6-duplicate>
            in6-duplicate
          </in6-duplicate>
          <in6-detached>
            in6-detached
          </in6-detached>
          <in6-deprecated>
            in6-deprecated
          </in6-deprecated>
          <in6-nodad>
            in6-nodad
          </in6-nodad>
          <in6-temporary>
            in6-temporary
          </in6-temporary>
          <in6-autoconf>
            in6-autoconf
          </in6-autoconf>
          <in6-nopfxmgmt>
            in6-nopfxmgmt
          </in6-nopfxmgmt>
        </in6-addr-flags>
      </interface-address>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description

<in6-addr-flags>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <interface-address>
          <in6-addr-flags>
            <in6-anycast>
              in6-anycast
            </in6-anycast>
            <in6-tentative>
              in6-tentative
            </in6-tentative>
            <in6-duplicate>
              in6-duplicate
            </in6-duplicate>
            <in6-detached>
              in6-detached
            </in6-detached>
            <in6-deprecated>
              in6-deprecated
            </in6-deprecated>
            <in6-nodad>
              in6-nodad
            </in6-nodad>
            <in6-temporary>
              in6-temporary
            </in6-temporary>
            <in6-autoconf>
              in6-autoconf
            </in6-autoconf>
            <in6-nopfxmgmt>
              in6-nopfxmgmt
            </in6-nopfxmgmt>
          </in6-addr-flags>
        </interface-address>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<in6-addr-flags>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <in6-addr-flags>
          <in6-anycast>
```


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```
                in6-anycast
               </in6-anycast>
               <in6-tentative>
                in6-tentative
               </in6-tentative>
               <in6-duplicate>
                in6-duplicate
               </in6-duplicate>
               <in6-detached>
                in6-detached
               </in6-detached>
               <in6-deprecated>
                in6-deprecated
               </in6-deprecated>
               <in6-nodad>
                in6-nodad
               </in6-nodad>
               <in6-temporary>
                in6-temporary
               </in6-temporary>
               <in6-autoconf>
                in6-autoconf
               </in6-autoconf>
               <in6-nopfxmgmt>
                in6-nopfxmgmt
               </in6-nopfxmgmt>
              </in6-addr-flags>
             </interface-address>
            </address-family>
           </logical-interface>
          </interface-policer-information>
```

Description

<ingress-queue-counters>

Usage

```
<ingress-queue-counters>
  <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
  <queue>....</queue>
  <interface-cos-summary>....</interface-cos-summary>
  <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

</ingress-queue-counters>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<logical-interface>
```

```
<ingress-queue-counters>
  <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
  <queue>....</queue>
  <interface-cos-summary>....</interface-cos-summary>
  <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

</ingress-queue-counters>
</logical-interface>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </logical-interface>
</physical-interface>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<physical-interface>
  <ingress-queue-counters>
    <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
    <queue>....</queue>
    <interface-cos-summary>....</interface-cos-summary>
    <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

  </ingress-queue-counters>
</physical-interface>
```

Description Ingress queue counter statistics

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<ingress-queue-counters>

Usage

```
<interface-set>
  <interface-set-queue-information>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </interface-set-queue-information>
</interface-set>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
        <queue>....</queue>
        <interface-cos-summary>....</interface-cos-summary>
        <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>
```

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```
    </ingress-queue-counters>
  </physical-interface>
</interface-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </logical-interface>
</interface-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
        <queue>....</queue>
        <interface-cos-summary>....</interface-cos-summary>
        <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

      </ingress-queue-counters>
    </interface-set-queue-information>
  </interface-set>
</interface-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-filter-information>
```


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```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </logical-interface>
```

```
</interface-filter-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
        <queue>....</queue>
        <interface-cos-summary>....</interface-cos-summary>
        <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
      <queue>....</queue>
      <interface-cos-summary>....</interface-cos-summary>
      <interface-cos-short-summary>....</interface-cos-short-summary>

<queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

    </ingress-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Ingress queue counter statistics

<ingress-queue-counters>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>....</interface-chassis-cos-summary>
```


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```
            <queue>....</queue>
            <interface-cos-summary>....</interface-cos-summary>
            <interface-cos-short-summary>....</interface-cos-short-summary>

        <queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

          </ingress-queue-counters>
        </logical-interface>
      </interface-policer-information>
```

Description Ingress queue counter statistics

<ingress-traffic-statistics>

Usage

```
<ingress-traffic-statistics>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <input-packets>
    input-packets
  </input-packets>
  <input-pps>
    input-pps
  </input-pps>
  <input-drop-bytes>
    input-drop-bytes
  </input-drop-bytes>
  <input-drop-packets>
    input-drop-packets
  </input-drop-packets>
  <input-drop-bps>
    input-drop-bps
  </input-drop-bps>
  <input-drop-pps>
    input-drop-pps
  </input-drop-pps>
</ingress-traffic-statistics>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<logical-interface>
  <ingress-traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
```

```
<input-bps>
  input-bps
</input-bps>
<input-packets>
  input-packets
</input-packets>
<input-pps>
  input-pps
</input-pps>
<input-drop-bytes>
  input-drop-bytes
</input-drop-bytes>
<input-drop-packets>
  input-drop-packets
</input-drop-packets>
<input-drop-bps>
  input-drop-bps
</input-drop-bps>
<input-drop-pps>
  input-drop-pps
</input-drop-pps>
</ingress-traffic-statistics>
</logical-interface>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<physical-interface>
  <ingress-traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <input-packets>
      input-packets
    </input-packets>
    <input-pps>
      input-pps
    </input-pps>
    <input-drop-bytes>
      input-drop-bytes
    </input-drop-bytes>
    <input-drop-packets>
      input-drop-packets
    </input-drop-packets>
    <input-drop-bps>
      input-drop-bps
    </input-drop-bps>
    <input-drop-pps>
      input-drop-pps
```


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```
    </input-drop-pps>
  </ingress-traffic-statistics>
</physical-interface>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <input-drop-bytes>
        input-drop-bytes
      </input-drop-bytes>
      <input-drop-packets>
        input-drop-packets
      </input-drop-packets>
      <input-drop-bps>
        input-drop-bps
      </input-drop-bps>
      <input-drop-pps>
        input-drop-pps
      </input-drop-pps>
    </ingress-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
```

```
                input-bps
               </input-bps>
               <input-packets>
                input-packets
               </input-packets>
               <input-pps>
                input-pps
               </input-pps>
               <input-drop-bytes>
                input-drop-bytes
               </input-drop-bytes>
               <input-drop-packets>
                input-drop-packets
               </input-drop-packets>
               <input-drop-bps>
                input-drop-bps
               </input-drop-bps>
               <input-drop-pps>
                input-drop-pps
               </input-drop-pps>
              </ingress-traffic-statistics>
             </physical-interface>
            </interface-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <ingress-traffic-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-drop-bytes>
     input-drop-bytes
    </input-drop-bytes>
    <input-drop-packets>
     input-drop-packets
    </input-drop-packets>
    <input-drop-bps>
     input-drop-bps
    </input-drop-bps>
```


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```
        <input-drop-pps>
          input-drop-pps
        </input-drop-pps>
      </ingress-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <ingress-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <input-drop-bytes>
        input-drop-bytes
      </input-drop-bytes>
      <input-drop-packets>
        input-drop-packets
      </input-drop-packets>
      <input-drop-bps>
        input-drop-bps
      </input-drop-bps>
      <input-drop-pps>
        input-drop-pps
      </input-drop-pps>
    </ingress-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ingress-traffic-statistics>
```

```
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-drop-bytes>
              input-drop-bytes
            </input-drop-bytes>
            <input-drop-packets>
              input-drop-packets
            </input-drop-packets>
            <input-drop-bps>
              input-drop-bps
            </input-drop-bps>
            <input-drop-pps>
              input-drop-pps
            </input-drop-pps>
          </ingress-traffic-statistics>
        </physical-interface>
      </interface-filter-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ingress-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <input-drop-bytes>
          input-drop-bytes
        </input-drop-bytes>
        <input-drop-packets>
          input-drop-packets
```


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```
      </input-drop-packets>
      <input-drop-bps>
        input-drop-bps
      </input-drop-bps>
      <input-drop-pps>
        input-drop-pps
      </input-drop-pps>
    </ingress-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-filter-information>
 <logical-interface>
  <ingress-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
   <input-drop-bytes>
    input-drop-bytes
   </input-drop-bytes>
   <input-drop-packets>
    input-drop-packets
   </input-drop-packets>
   <input-drop-bps>
    input-drop-bps
   </input-drop-bps>
   <input-drop-pps>
    input-drop-pps
   </input-drop-pps>
  </ingress-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

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<ingress-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ingress-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <input-drop-bytes>
        input-drop-bytes
      </input-drop-bytes>
      <input-drop-packets>
        input-drop-packets
      </input-drop-packets>
      <input-drop-bps>
        input-drop-bps
      </input-drop-bps>
      <input-drop-pps>
        input-drop-pps
      </input-drop-pps>
    </ingress-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ingress-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
```


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```
            input-pps
           </input-pps>
           <input-drop-bytes>
            input-drop-bytes
           </input-drop-bytes>
           <input-drop-packets>
            input-drop-packets
           </input-drop-packets>
           <input-drop-bps>
            input-drop-bps
           </input-drop-bps>
           <input-drop-pps>
            input-drop-pps
           </input-drop-pps>
          </ingress-traffic-statistics>
         </logical-interface>
        </physical-interface>
       </interface-policer-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<ingress-traffic-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <ingress-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
   <input-drop-bytes>
    input-drop-bytes
   </input-drop-bytes>
   <input-drop-packets>
    input-drop-packets
   </input-drop-packets>
   <input-drop-bps>
    input-drop-bps
   </input-drop-bps>
   <input-drop-pps>
    input-drop-pps
   </input-drop-pps>
  </ingress-traffic-statistics>
 </logical-interface>
```

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```
</interface-policer-information>
```

Description Traffic statistics at ingress before entering Packet Forwarding Engine

<input-error-list>

Usage

```
<input-error-list>
  <input-errors>
    input-errors
  </input-errors>
  <input-drops>
    input-drops
  </input-drops>
  <invalid-vcs>
    invalid-vcs
  </invalid-vcs>
  <framing-errors>
    framing-errors
  </framing-errors>
  <input-runts>
    input-runts
  </input-runts>
  <input-giants>
    input-giants
  </input-giants>
  <input-bucket-drops>
    input-bucket-drops
  </input-bucket-drops>
  <input-discards>
    input-discards
  </input-discards>
  <input-l3-incompletes>
    input-l3-incompletes
  </input-l3-incompletes>
  <input-l2-channel-errors>
    input-l2-channel-errors
  </input-l2-channel-errors>
  <input-l2-mismatch-timeouts>
    input-l2-mismatch-timeouts
  </input-l2-mismatch-timeouts>
  <input-fifo-errors>
    input-fifo-errors
  </input-fifo-errors>
  <hs-link-crc-errors>
    hs-link-crc-errors
  </hs-link-crc-errors>
  <hs-link-fifo-overflows>
    hs-link-fifo-overflows
  </hs-link-fifo-overflows>
  <sram-errors>
    sram-errors
  </sram-errors>
  <input-resource-errors>
```


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```
      input-resource-errors
    </input-resource-errors>
  </input-error-list>
```

Description Input errors on this interface

<input-error-list>

Usage

```
<physical-interface>
  <input-error-list>
    <input-errors>
      input-errors
    </input-errors>
    <input-drops>
      input-drops
    </input-drops>
    <invalid-vcs>
      invalid-vcs
    </invalid-vcs>
    <framing-errors>
      framing-errors
    </framing-errors>
    <input-runts>
      input-runts
    </input-runts>
    <input-giants>
      input-giants
    </input-giants>
    <input-bucket-drops>
      input-bucket-drops
    </input-bucket-drops>
    <input-discards>
      input-discards
    </input-discards>
    <input-l3-incompletes>
      input-l3-incompletes
    </input-l3-incompletes>
    <input-l2-channel-errors>
      input-l2-channel-errors
    </input-l2-channel-errors>
    <input-l2-mismatch-timeouts>
      input-l2-mismatch-timeouts
    </input-l2-mismatch-timeouts>
    <input-fifo-errors>
      input-fifo-errors
    </input-fifo-errors>
    <hs-link-crc-errors>
      hs-link-crc-errors
    </hs-link-crc-errors>
    <hs-link-fifo-overflows>
      hs-link-fifo-overflows
    </hs-link-fifo-overflows>
    <sram-errors>
```

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```
            sram-errors
           </sram-errors>
           <input-resource-errors>
            input-resource-errors
           </input-resource-errors>
          </input-error-list>
         </physical-interface>
```

Description Input errors on this interface

<input-error-list>

Usage

```
<interface-information>
 <physical-interface>
  <input-error-list>
   <input-errors>
    input-errors
   </input-errors>
   <input-drops>
    input-drops
   </input-drops>
   <invalid-vcs>
    invalid-vcs
   </invalid-vcs>
   <framing-errors>
    framing-errors
   </framing-errors>
   <input-runts>
    input-runts
   </input-runts>
   <input-giants>
    input-giants
   </input-giants>
   <input-bucket-drops>
    input-bucket-drops
   </input-bucket-drops>
   <input-discards>
    input-discards
   </input-discards>
   <input-l3-incompletes>
    input-l3-incompletes
   </input-l3-incompletes>
   <input-l2-channel-errors>
    input-l2-channel-errors
   </input-l2-channel-errors>
   <input-l2-mismatch-timeouts>
    input-l2-mismatch-timeouts
   </input-l2-mismatch-timeouts>
   <input-fifo-errors>
    input-fifo-errors
   </input-fifo-errors>
   <hs-link-crc-errors>
    hs-link-crc-errors
```


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```
        </hs-link-crc-errors>
        <hs-link-fifo-overflows>
          hs-link-fifo-overflows
        </hs-link-fifo-overflows>
        <sram-errors>
          sram-errors
        </sram-errors>
        <input-resource-errors>
          input-resource-errors
        </input-resource-errors>
      </input-error-list>
    </physical-interface>
  </interface-information>
```

Description Input errors on this interface

<input-error-list>

Usage

```
<interface-filter-information>
  <physical-interface>
    <input-error-list>
      <input-errors>
        input-errors
      </input-errors>
      <input-drops>
        input-drops
      </input-drops>
      <invalid-vcs>
        invalid-vcs
      </invalid-vcs>
      <framing-errors>
        framing-errors
      </framing-errors>
      <input-runts>
        input-runts
      </input-runts>
      <input-giants>
        input-giants
      </input-giants>
      <input-bucket-drops>
        input-bucket-drops
      </input-bucket-drops>
      <input-discards>
        input-discards
      </input-discards>
      <input-l3-incompletes>
        input-l3-incompletes
      </input-l3-incompletes>
      <input-l2-channel-errors>
        input-l2-channel-errors
      </input-l2-channel-errors>
      <input-l2-mismatch-timeouts>
        input-l2-mismatch-timeouts
```

```
        </input-l2-mismatch-timeouts>
        <input-fifo-errors>
          input-fifo-errors
        </input-fifo-errors>
        <hs-link-crc-errors>
          hs-link-crc-errors
        </hs-link-crc-errors>
        <hs-link-fifo-overflows>
          hs-link-fifo-overflows
        </hs-link-fifo-overflows>
        <sram-errors>
          sram-errors
        </sram-errors>
        <input-resource-errors>
          input-resource-errors
        </input-resource-errors>
      </input-error-list>
    </physical-interface>
  </interface-filter-information>
```

Description Input errors on this interface

<input-error-list>

Usage

```
<interface-policer-information>
  <physical-interface>
    <input-error-list>
      <input-errors>
        input-errors
      </input-errors>
      <input-drops>
        input-drops
      </input-drops>
      <invalid-vcs>
        invalid-vcs
      </invalid-vcs>
      <framing-errors>
        framing-errors
      </framing-errors>
      <input-runts>
        input-runts
      </input-runts>
      <input-giants>
        input-giants
      </input-giants>
      <input-bucket-drops>
        input-bucket-drops
      </input-bucket-drops>
      <input-discards>
        input-discards
      </input-discards>
      <input-l3-incompletes>
        input-l3-incompletes
```


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```
      </input-l3-incompletes>
      <input-l2-channel-errors>
        input-l2-channel-errors
      </input-l2-channel-errors>
      <input-l2-mismatch-timeouts>
        input-l2-mismatch-timeouts
      </input-l2-mismatch-timeouts>
      <input-fifo-errors>
        input-fifo-errors
      </input-fifo-errors>
      <hs-link-crc-errors>
        hs-link-crc-errors
      </hs-link-crc-errors>
      <hs-link-fifo-overflows>
        hs-link-fifo-overflows
      </hs-link-fifo-overflows>
      <sram-errors>
        sram-errors
      </sram-errors>
      <input-resource-errors>
        input-resource-errors
      </input-resource-errors>
    </input-error-list>
  </physical-interface>
</interface-policer-information>
```

Description Input errors on this interface

<interface-address>

Usage

```
<interface-address>
  <ifa-flags>....</ifa-flags>
  <generation>
    generation
  </generation>
  <ifa-destination>
    ifa-destination
  </ifa-destination>
  <ifa-local>
    ifa-local
  </ifa-local>
  <in6-addr-flags>....</in6-addr-flags>
  <ifa-broadcast>
    ifa-broadcast
  </ifa-broadcast>
  <ifa-primary-dns>
    ifa-primary-dns
  </ifa-primary-dns>
  <ifa-primary-nbns>
    ifa-primary-nbns
  </ifa-primary-nbns>
  <ifa-secondary-dns>
    ifa-secondary-dns
```

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```
  </ifa-secondary-dns>
  <ifa-secondary-nbns>
   ifa-secondary-nbns
  </ifa-secondary-nbns>
  <ifa-address-pool>
   ifa-address-pool
  </ifa-address-pool>
</interface-address>
```

Description

<interface-address>

Usage

```
<address-family>
  <interface-address>
    <ifa-flags>....</ifa-flags>
    <generation>
     generation
    </generation>
    <ifa-destination>
     ifa-destination
    </ifa-destination>
    <ifa-local>
     ifa-local
    </ifa-local>
    <in6-addr-flags>....</in6-addr-flags>
    <ifa-broadcast>
     ifa-broadcast
    </ifa-broadcast>
    <ifa-primary-dns>
     ifa-primary-dns
    </ifa-primary-dns>
    <ifa-primary-nbns>
     ifa-primary-nbns
    </ifa-primary-nbns>
    <ifa-secondary-dns>
     ifa-secondary-dns
    </ifa-secondary-dns>
    <ifa-secondary-nbns>
     ifa-secondary-nbns
    </ifa-secondary-nbns>
    <ifa-address-pool>
     ifa-address-pool
    </ifa-address-pool>
  </interface-address>
</address-family>
```

Description

<interface-address>

Usage

```
<logical-interface>
```


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```
<address-family>
  <interface-address>
    <ifa-flags>....</ifa-flags>
    <generation>
      generation
    </generation>
    <ifa-destination>
      ifa-destination
    </ifa-destination>
    <ifa-local>
      ifa-local
    </ifa-local>
    <in6-addr-flags>....</in6-addr-flags>
    <ifa-broadcast>
      ifa-broadcast
    </ifa-broadcast>
    <ifa-primary-dns>
      ifa-primary-dns
    </ifa-primary-dns>
    <ifa-primary-nbns>
      ifa-primary-nbns
    </ifa-primary-nbns>
    <ifa-secondary-dns>
      ifa-secondary-dns
    </ifa-secondary-dns>
    <ifa-secondary-nbns>
      ifa-secondary-nbns
    </ifa-secondary-nbns>
    <ifa-address-pool>
      ifa-address-pool
    </ifa-address-pool>
  </interface-address>
 </address-family>
</logical-interface>
```

Description

<interface-address>

Usage

```
<physical-interface>
 <logical-interface>
  <address-family>
    <interface-address>
      <ifa-flags>....</ifa-flags>
      <generation>
        generation
      </generation>
      <ifa-destination>
        ifa-destination
      </ifa-destination>
      <ifa-local>
        ifa-local
      </ifa-local>
      <in6-addr-flags>....</in6-addr-flags>
```

```
            <ifa-broadcast>
              ifa-broadcast
            </ifa-broadcast>
            <ifa-primary-dns>
              ifa-primary-dns
            </ifa-primary-dns>
            <ifa-primary-nbns>
              ifa-primary-nbns
            </ifa-primary-nbns>
            <ifa-secondary-dns>
              ifa-secondary-dns
            </ifa-secondary-dns>
            <ifa-secondary-nbns>
              ifa-secondary-nbns
            </ifa-secondary-nbns>
            <ifa-address-pool>
              ifa-address-pool
            </ifa-address-pool>
          </interface-address>
        </address-family>
      </logical-interface>
    </physical-interface>
```

Description

<interface-address>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <interface-address>
          <ifa-flags>....</ifa-flags>
          <generation>
            generation
          </generation>
          <ifa-destination>
            ifa-destination
          </ifa-destination>
          <ifa-local>
            ifa-local
          </ifa-local>
          <in6-addr-flags>....</in6-addr-flags>
          <ifa-broadcast>
            ifa-broadcast
          </ifa-broadcast>
          <ifa-primary-dns>
            ifa-primary-dns
          </ifa-primary-dns>
          <ifa-primary-nbns>
            ifa-primary-nbns
          </ifa-primary-nbns>
          <ifa-secondary-dns>
            ifa-secondary-dns
```


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```
            </ifa-secondary-dns>
            <ifa-secondary-nbns>
              ifa-secondary-nbns
            </ifa-secondary-nbns>
            <ifa-address-pool>
              ifa-address-pool
            </ifa-address-pool>
          </interface-address>
        </address-family>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description

<interface-address>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <ifa-flags>....</ifa-flags>
        <generation>
          generation
        </generation>
        <ifa-destination>
          ifa-destination
        </ifa-destination>
        <ifa-local>
          ifa-local
        </ifa-local>
        <in6-addr-flags>....</in6-addr-flags>
        <ifa-broadcast>
          ifa-broadcast
        </ifa-broadcast>
        <ifa-primary-dns>
          ifa-primary-dns
        </ifa-primary-dns>
        <ifa-primary-nbns>
          ifa-primary-nbns
        </ifa-primary-nbns>
        <ifa-secondary-dns>
          ifa-secondary-dns
        </ifa-secondary-dns>
        <ifa-secondary-nbns>
          ifa-secondary-nbns
        </ifa-secondary-nbns>
        <ifa-address-pool>
          ifa-address-pool
        </ifa-address-pool>
      </interface-address>
    </address-family>
  </logical-interface>
```

```
</interface-information>
```

Description

<interface-address>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <interface-address>
     <ifa-flags>....</ifa-flags>
     <generation>
      generation
     </generation>
     <ifa-destination>
      ifa-destination
     </ifa-destination>
     <ifa-local>
      ifa-local
     </ifa-local>
     <in6-addr-flags>....</in6-addr-flags>
     <ifa-broadcast>
      ifa-broadcast
     </ifa-broadcast>
     <ifa-primary-dns>
      ifa-primary-dns
     </ifa-primary-dns>
     <ifa-primary-nbns>
      ifa-primary-nbns
     </ifa-primary-nbns>
     <ifa-secondary-dns>
      ifa-secondary-dns
     </ifa-secondary-dns>
     <ifa-secondary-nbns>
      ifa-secondary-nbns
     </ifa-secondary-nbns>
     <ifa-address-pool>
      ifa-address-pool
     </ifa-address-pool>
    </interface-address>
   </address-family>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<interface-address>

Usage

```
<interface-filter-information>
 <logical-interface>
```


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```
      <address-family>
       <interface-address>
        <ifa-flags>....</ifa-flags>
        <generation>
         generation
        </generation>
        <ifa-destination>
         ifa-destination
        </ifa-destination>
        <ifa-local>
         ifa-local
        </ifa-local>
        <in6-addr-flags>....</in6-addr-flags>
        <ifa-broadcast>
         ifa-broadcast
        </ifa-broadcast>
        <ifa-primary-dns>
         ifa-primary-dns
        </ifa-primary-dns>
        <ifa-primary-nbns>
         ifa-primary-nbns
        </ifa-primary-nbns>
        <ifa-secondary-dns>
         ifa-secondary-dns
        </ifa-secondary-dns>
        <ifa-secondary-nbns>
         ifa-secondary-nbns
        </ifa-secondary-nbns>
        <ifa-address-pool>
         ifa-address-pool
        </ifa-address-pool>
       </interface-address>
      </address-family>
     </logical-interface>
    </interface-filter-information>
```

Description

<interface-address>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <interface-address>
     <ifa-flags>....</ifa-flags>
     <generation>
      generation
     </generation>
     <ifa-destination>
      ifa-destination
     </ifa-destination>
     <ifa-local>
      ifa-local
```

```
            </ifa-local>
            <in6-addr-flags>....</in6-addr-flags>
            <ifa-broadcast>
              ifa-broadcast
            </ifa-broadcast>
            <ifa-primary-dns>
              ifa-primary-dns
            </ifa-primary-dns>
            <ifa-primary-nbns>
              ifa-primary-nbns
            </ifa-primary-nbns>
            <ifa-secondary-dns>
              ifa-secondary-dns
            </ifa-secondary-dns>
            <ifa-secondary-nbns>
              ifa-secondary-nbns
            </ifa-secondary-nbns>
            <ifa-address-pool>
              ifa-address-pool
            </ifa-address-pool>
          </interface-address>
        </address-family>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description

<interface-address>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <interface-address>
        <ifa-flags>....</ifa-flags>
        <generation>
          generation
        </generation>
        <ifa-destination>
          ifa-destination
        </ifa-destination>
        <ifa-local>
          ifa-local
        </ifa-local>
        <in6-addr-flags>....</in6-addr-flags>
        <ifa-broadcast>
          ifa-broadcast
        </ifa-broadcast>
        <ifa-primary-dns>
          ifa-primary-dns
        </ifa-primary-dns>
        <ifa-primary-nbns>
          ifa-primary-nbns
        </ifa-primary-nbns>
```


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```
        <ifa-secondary-dns>
          ifa-secondary-dns
        </ifa-secondary-dns>
        <ifa-secondary-nbns>
          ifa-secondary-nbns
        </ifa-secondary-nbns>
        <ifa-address-pool>
          ifa-address-pool
        </ifa-address-pool>
      </interface-address>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description

<interface-alarms>

Usage

```
<interface-alarms>
  <alarm-not-present>
    alarm-not-present
  </alarm-not-present>
  <sonet-alarm-lol>
    sonet-alarm-lol
  </sonet-alarm-lol>
  <sonet-alarm-pll>
    sonet-alarm-pll
  </sonet-alarm-pll>
  <sonet-alarm-lof>
    sonet-alarm-lof
  </sonet-alarm-lof>
  <sonet-alarm-los>
    sonet-alarm-los
  </sonet-alarm-los>
  <sonet-alarm-sef>
    sonet-alarm-sef
  </sonet-alarm-sef>
  <sonet-alarm-lais>
    sonet-alarm-lais
  </sonet-alarm-lais>
  <sonet-alarm-pais>
    sonet-alarm-pais
  </sonet-alarm-pais>
  <sonet-alarm-lop>
    sonet-alarm-lop
  </sonet-alarm-lop>
  <sonet-alarm-berr-sd>
    sonet-alarm-berr-sd
  </sonet-alarm-berr-sd>
  <sonet-alarm-berr-sf>
    sonet-alarm-berr-sf
  </sonet-alarm-berr-sf>
  <sonet-alarm-lrdi>
    sonet-alarm-lrdi
```

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```
</sonet-alarm-lrdi>
<sonet-alarm-prdi>
  sonet-alarm-prdi
</sonet-alarm-prdi>
<sonet-alarm-rei>
  sonet-alarm-rei
</sonet-alarm-rei>
<sonet-alarm-uneq>
  sonet-alarm-uneq
</sonet-alarm-uneq>
<sonet-alarm-pmis>
  sonet-alarm-pmis
</sonet-alarm-pmis>
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  sonet-alarm-loc
</sonet-alarm-loc>
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  sonet-alarm-vais
</sonet-alarm-vais>
<sonet-alarm-vlop>
  sonet-alarm-vlop
</sonet-alarm-vlop>
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  sonet-alarm-vrdi
</sonet-alarm-vrdi>
<sonet-alarm-vuneq>
  sonet-alarm-vuneq
</sonet-alarm-vuneq>
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</sonet-alarm-vmis>
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  sdh-alarm-los
</sdh-alarm-los>
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  sdh-alarm-oof
</sdh-alarm-oof>
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  sdh-alarm-msais
</sdh-alarm-msais>
<sdh-alarm-hpais>
  sdh-alarm-hpais
</sdh-alarm-hpais>
<sdh-alarm-lop>
```


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  sdh-alarm-lop
</sdh-alarm-lop>
<sdh-alarm-berr-sd>
  sdh-alarm-berr-sd
</sdh-alarm-berr-sd>
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  sdh-alarm-msferf
</sdh-alarm-msferf>
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  sdh-alarm-hpferf
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  sdh-alarm-hpfebe
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</sdh-alarm-tuais>
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</ds3-alarm-pll>
<ds3-alarm-ais>
  ds3-alarm-ais
</ds3-alarm-ais>
<ds3-alarm-lof>
  ds3-alarm-lof
</ds3-alarm-lof>
<ds3-alarm-los>
  ds3-alarm-los
</ds3-alarm-los>
```

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</ds3-alarm-ylw>
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  ds3-alarm-idle
</ds3-alarm-idle>
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  ds1-alarm-ais
</ds1-alarm-ais>
<ds1-alarm-lof>
  ds1-alarm-lof
</ds1-alarm-lof>
<ds1-alarm-los>
  ds1-alarm-los
</ds1-alarm-los>
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  ds1-alarm-ylw
</ds1-alarm-ylw>
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  ds1-alarm-crc-major
</ds1-alarm-crc-major>
<ds1-alarm-crc-minor>
  ds1-alarm-crc-minor
</ds1-alarm-crc-minor>
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  dsl-alarm-lof
</dsl-alarm-lof>
<dsl-alarm-los>
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</dsl-alarm-lom>
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</dsl-alarm-locdi>
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</dsl-alarm-locdni>
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  dsl-alarm-lop
</dsl-alarm-lop>
<dsl-alarm-far-lof>
  dsl-alarm-far-lof
</dsl-alarm-far-lof>
<dsl-alarm-far-los>
  dsl-alarm-far-los

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</dsl-alarm-far-locdi>
<dsl-alarm-far-locdni>
  dsl-alarm-far-locdni
</dsl-alarm-far-locdni>
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  fibrechannel-alarm-link-down
</fibrechannel-alarm-link-down>
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  ethernet-alarm-link-down
</ethernet-alarm-link-down>
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</ethernet-alarm-lcdp>
<isdn-alarm-los>
  isdn-alarm-los
</isdn-alarm-los>
<isdn-alarm-lof>
  isdn-alarm-lof
</isdn-alarm-lof>
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  shdsl-alarm-line1-losd
</shdsl-alarm-line1-losd>
<shdsl-alarm-line1-losw>
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</shdsl-alarm-line1-losw>
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  shdsl-alarm-line2-losd
</shdsl-alarm-line2-losd>
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  otn-alarm-lof
</otn-alarm-lof>
<otn-alarm-lom>
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</otn-alarm-lom>
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  otn-alarm-wavelength-lock
</otn-alarm-wavelength-lock>
<otn-alarm-otu-ais>
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<otn-alarm-otu-bdi>
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  otn-alarm-otu-bdi
</otn-alarm-otu-bdi>
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  otn-alarm-otu-ttim
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  otn-alarm-odu-rx-aps-change
</otn-alarm-odu-rx-aps-change>
```


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<otn-alarm-odu-threshold-es>
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</otn-alarm-odu-threshold-es>
<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
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  ima-alarm-startup-fe
</ima-alarm-startup-fe>
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  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
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</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
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<ima-alarm-insufficient-links-fe>
  ima-alarm-insufficient-links-fe
</ima-alarm-insufficient-links-fe>
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  ima-alarm-blocked
</ima-alarm-blocked>
<ima-alarm-blocked-fe>
  ima-alarm-blocked-fe
</ima-alarm-blocked-fe>
<ima-alarm-timing-mismatch>
  ima-alarm-timing-mismatch
</ima-alarm-timing-mismatch>
<ima-alarm-version-mismatch>
  ima-alarm-version-mismatch
</ima-alarm-version-mismatch>
<ima-alarm-lif>
  ima-alarm-lif
</ima-alarm-lif>
<ima-alarm-lods>
  ima-alarm-lods
</ima-alarm-lods>
<ima-alarm-rdi>
  ima-alarm-rdi
</ima-alarm-rdi>
<ima-alarm-tx-misconnected>
  ima-alarm-tx-misconnected
</ima-alarm-tx-misconnected>
<ima-alarm-rx-misconnected>
  ima-alarm-rx-misconnected
```

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```
</ima-alarm-rx-misconnected>
<ima-alarm-fault>
  ima-alarm-fault
</ima-alarm-fault>
<ima-alarm-tx-unusable-fe>
  ima-alarm-tx-unusable-fe
</ima-alarm-tx-unusable-fe>
<ima-alarm-rx-unusable-fe>
  ima-alarm-rx-unusable-fe
</ima-alarm-rx-unusable-fe>
<generic-value>
  generic-value
</generic-value>
</interface-alarms>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

```
<physical-interface>
  <active-alarms>
    <interface-alarms>
      <alarm-not-present>
        alarm-not-present
      </alarm-not-present>
      <sonet-alarm-lol>
        sonet-alarm-lol
      </sonet-alarm-lol>
      <sonet-alarm-pll>
        sonet-alarm-pll
      </sonet-alarm-pll>
      <sonet-alarm-lof>
        sonet-alarm-lof
      </sonet-alarm-lof>
      <sonet-alarm-los>
        sonet-alarm-los
      </sonet-alarm-los>
      <sonet-alarm-sef>
        sonet-alarm-sef
      </sonet-alarm-sef>
      <sonet-alarm-lais>
        sonet-alarm-lais
      </sonet-alarm-lais>
      <sonet-alarm-pais>
        sonet-alarm-pais
      </sonet-alarm-pais>
      <sonet-alarm-lop>
        sonet-alarm-lop
      </sonet-alarm-lop>
      <sonet-alarm-berr-sd>
        sonet-alarm-berr-sd
      </sonet-alarm-berr-sd>
      <sonet-alarm-berr-sf>
```


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</sonet-alarm-berr-sf>
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</sonet-alarm-lrdi>
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  sdh-alarm-oof
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  sdh-alarm-msais
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  ds3-alarm-pll
</ds3-alarm-pll>
<ds3-alarm-ais>
  ds3-alarm-ais
</ds3-alarm-ais>
<ds3-alarm-lof>
  ds3-alarm-lof
```


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</ds3-alarm-lof>
<ds3-alarm-los>
  ds3-alarm-los
</ds3-alarm-los>
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  ds3-alarm-exz
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  ds3-alarm-ferf
</ds3-alarm-ferf>
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</ds1-alarm-lof>
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</ds1-alarm-los>
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</dsl-alarm-los>
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  dsl-alarm-lom
</dsl-alarm-lom>
<dsl-alarm-locdi>
  dsl-alarm-locdi
</dsl-alarm-locdi>
<dsl-alarm-locdni>
  dsl-alarm-locdni
</dsl-alarm-locdni>
<dsl-alarm-lop>
  dsl-alarm-lop
</dsl-alarm-lop>
<dsl-alarm-far-lof>
```

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  dsl-alarm-far-lof
</dsl-alarm-far-lof>
<dsl-alarm-far-los>
  dsl-alarm-far-los
</dsl-alarm-far-los>
<dsl-alarm-far-locdi>
  dsl-alarm-far-locdi
</dsl-alarm-far-locdi>
<dsl-alarm-far-locdni>
  dsl-alarm-far-locdni
</dsl-alarm-far-locdni>
<fibrechannel-alarm-link-down>
  fibrechannel-alarm-link-down
</fibrechannel-alarm-link-down>
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</ethernet-alarm-link-down>
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  ethernet-alarm-lcdp
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<otn-alarm-otu-ais>
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<ima-alarm-config-abort-fe>
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<ima-alarm-version-mismatch>
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</ima-alarm-lif>
<ima-alarm-lods>
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</ima-alarm-lods>
<ima-alarm-rdi>
  ima-alarm-rdi
</ima-alarm-rdi>
<ima-alarm-tx-misconnected>
```


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      ima-alarm-tx-misconnected
     </ima-alarm-tx-misconnected>
     <ima-alarm-rx-misconnected>
      ima-alarm-rx-misconnected
     </ima-alarm-rx-misconnected>
     <ima-alarm-fault>
      ima-alarm-fault
     </ima-alarm-fault>
     <ima-alarm-tx-unusable-fe>
      ima-alarm-tx-unusable-fe
     </ima-alarm-tx-unusable-fe>
     <ima-alarm-rx-unusable-fe>
      ima-alarm-rx-unusable-fe
     </ima-alarm-rx-unusable-fe>
     <generic-value>
      generic-value
     </generic-value>
    </interface-alarms>
   </active-alarms>
</physical-interface>
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Description Container tag for interface alarms

<interface-alarms>

Usage

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 <active-defects>
  <interface-alarms>
   <alarm-not-present>
    alarm-not-present
   </alarm-not-present>
   <sonet-alarm-lol>
    sonet-alarm-lol
   </sonet-alarm-lol>
   <sonet-alarm-pll>
    sonet-alarm-pll
   </sonet-alarm-pll>
   <sonet-alarm-lof>
    sonet-alarm-lof
   </sonet-alarm-lof>
   <sonet-alarm-los>
    sonet-alarm-los
   </sonet-alarm-los>
   <sonet-alarm-sef>
    sonet-alarm-sef
   </sonet-alarm-sef>
   <sonet-alarm-lais>
    sonet-alarm-lais
   </sonet-alarm-lais>
   <sonet-alarm-pais>
    sonet-alarm-pais
   </sonet-alarm-pais>
   <sonet-alarm-lop>
```

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  sonet-alarm-lop
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<sonet-alarm-berr-sd>
  sonet-alarm-berr-sd
</sonet-alarm-berr-sd>
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  ima-alarm-blocked-fe
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<ima-alarm-version-mismatch>
  ima-alarm-version-mismatch
</ima-alarm-version-mismatch>
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  ima-alarm-lif
</ima-alarm-lif>
<ima-alarm-lods>
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            ima-alarm-lods
           </ima-alarm-lods>
           <ima-alarm-rdi>
            ima-alarm-rdi
           </ima-alarm-rdi>
           <ima-alarm-tx-misconnected>
            ima-alarm-tx-misconnected
           </ima-alarm-tx-misconnected>
           <ima-alarm-rx-misconnected>
            ima-alarm-rx-misconnected
           </ima-alarm-rx-misconnected>
           <ima-alarm-fault>
            ima-alarm-fault
           </ima-alarm-fault>
           <ima-alarm-tx-unusable-fe>
            ima-alarm-tx-unusable-fe
           </ima-alarm-tx-unusable-fe>
           <ima-alarm-rx-unusable-fe>
            ima-alarm-rx-unusable-fe
           </ima-alarm-rx-unusable-fe>
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           </generic-value>
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         </active-defects>
        </physical-interface>
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Description Container tag for interface alarms

<interface-alarms>

Usage

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    alarm-not-present
   </alarm-not-present>
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   </sonet-alarm-lol>
   <sonet-alarm-pll>
    sonet-alarm-pll
   </sonet-alarm-pll>
   <sonet-alarm-lof>
    sonet-alarm-lof
   </sonet-alarm-lof>
   <sonet-alarm-los>
    sonet-alarm-los
   </sonet-alarm-los>
   <sonet-alarm-sef>
    sonet-alarm-sef
   </sonet-alarm-sef>
   <sonet-alarm-lais>
```


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  sonet-alarm-lais
</sonet-alarm-lais>
<sonet-alarm-pais>
  sonet-alarm-pais
</sonet-alarm-pais>
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</otn-alarm-otu-threshold-uas>
<otn-alarm-odu-ais>
  otn-alarm-odu-ais
```


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</otn-alarm-odu-ais>
<otn-alarm-odu-oci>
  otn-alarm-odu-oci
</otn-alarm-odu-oci>
<otn-alarm-odu-lck>
  otn-alarm-odu-lck
</otn-alarm-odu-lck>
<otn-alarm-odu-bdi>
  otn-alarm-odu-bdi
</otn-alarm-odu-bdi>
<otn-alarm-odu-ttim>
  otn-alarm-odu-ttim
</otn-alarm-odu-ttim>
<otn-alarm-odu-sd>
  otn-alarm-odu-sd
</otn-alarm-odu-sd>
<otn-alarm-odu-sf>
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</otn-alarm-odu-sf>
<otn-alarm-odu-rx-aps-change>
  otn-alarm-odu-rx-aps-change
</otn-alarm-odu-rx-aps-change>
<otn-alarm-odu-threshold-bbe>
  otn-alarm-odu-threshold-bbe
</otn-alarm-odu-threshold-bbe>
<otn-alarm-odu-threshold-es>
  otn-alarm-odu-threshold-es
</otn-alarm-odu-threshold-es>
<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
  otn-alarm-odu-threshold-uas
</otn-alarm-odu-threshold-uas>
<otn-alarm-opu-pmi>
  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
<ima-alarm-startup-fe>
  ima-alarm-startup-fe
</ima-alarm-startup-fe>
<ima-alarm-config-abort>
  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
  ima-alarm-insufficient-links
</ima-alarm-insufficient-links>
<ima-alarm-insufficient-links-fe>
  ima-alarm-insufficient-links-fe
</ima-alarm-insufficient-links-fe>
<ima-alarm-blocked>
  ima-alarm-blocked
</ima-alarm-blocked>
<ima-alarm-blocked-fe>
```

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            ima-alarm-blocked-fe
          </ima-alarm-blocked-fe>
          <ima-alarm-timing-mismatch>
            ima-alarm-timing-mismatch
          </ima-alarm-timing-mismatch>
          <ima-alarm-version-mismatch>
            ima-alarm-version-mismatch
          </ima-alarm-version-mismatch>
          <ima-alarm-lif>
            ima-alarm-lif
          </ima-alarm-lif>
          <ima-alarm-lods>
            ima-alarm-lods
          </ima-alarm-lods>
          <ima-alarm-rdi>
            ima-alarm-rdi
          </ima-alarm-rdi>
          <ima-alarm-tx-misconnected>
            ima-alarm-tx-misconnected
          </ima-alarm-tx-misconnected>
          <ima-alarm-rx-misconnected>
            ima-alarm-rx-misconnected
          </ima-alarm-rx-misconnected>
          <ima-alarm-fault>
            ima-alarm-fault
          </ima-alarm-fault>
          <ima-alarm-tx-unusable-fe>
            ima-alarm-tx-unusable-fe
          </ima-alarm-tx-unusable-fe>
          <ima-alarm-rx-unusable-fe>
            ima-alarm-rx-unusable-fe
          </ima-alarm-rx-unusable-fe>
          <generic-value>
            generic-value
          </generic-value>
        </interface-alarms>
      </active-defects-otn>
    </physical-interface>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <active-alarms>
        <interface-alarms>
          <alarm-not-present>
            alarm-not-present
          </alarm-not-present>
          <sonet-alarm-lol>
            sonet-alarm-lol
```


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</sonet-alarm-lol>
<sonet-alarm-pll>
  sonet-alarm-pll
</sonet-alarm-pll>
<sonet-alarm-lof>
  sonet-alarm-lof
</sonet-alarm-lof>
<sonet-alarm-los>
  sonet-alarm-los
</sonet-alarm-los>
<sonet-alarm-sef>
  sonet-alarm-sef
</sonet-alarm-sef>
<sonet-alarm-lais>
  sonet-alarm-lais
</sonet-alarm-lais>
<sonet-alarm-pais>
  sonet-alarm-pais
</sonet-alarm-pais>
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  sonet-alarm-lop
</sonet-alarm-lop>
<sonet-alarm-berr-sd>
  sonet-alarm-berr-sd
</sonet-alarm-berr-sd>
<sonet-alarm-berr-sf>
  sonet-alarm-berr-sf
</sonet-alarm-berr-sf>
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</sonet-alarm-pmis>
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</sonet-alarm-loc>
<sonet-alarm-vais>
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</sonet-alarm-vais>
<sonet-alarm-vlop>
  sonet-alarm-vlop
</sonet-alarm-vlop>
<sonet-alarm-vrdi>
  sonet-alarm-vrdi
</sonet-alarm-vrdi>
<sonet-alarm-vuneq>
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  sonet-alarm-vuneq
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<sonet-alarm-vmis>
  sonet-alarm-vmis
</sonet-alarm-vmis>
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</sdh-alarm-lol>
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<sdh-alarm-lof>
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</sdh-alarm-lof>
<sdh-alarm-los>
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</sdh-alarm-los>
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</sdh-alarm-oof>
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</sdh-alarm-msais>
<sdh-alarm-hpais>
  sdh-alarm-hpais
</sdh-alarm-hpais>
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</sdh-alarm-hpplm>
<sdh-alarm-loc>
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</sdh-alarm-loc>
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<sdh-alarm-tuais>
  sdh-alarm-tuais
</sdh-alarm-tuais>
<sdh-alarm-tulop>
  sdh-alarm-tulop
</sdh-alarm-tulop>
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</ds3-alarm-ais>
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</ds1-alarm-lof>
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</ds1-alarm-los>
<ds1-alarm-ylw>
  ds1-alarm-ylw
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  dsl-alarm-locdi
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</dsl-alarm-lop>
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  dsl-alarm-far-lof
</dsl-alarm-far-lof>
<dsl-alarm-far-los>
  dsl-alarm-far-los
</dsl-alarm-far-los>
<dsl-alarm-far-locdi>
  dsl-alarm-far-locdi
</dsl-alarm-far-locdi>
<dsl-alarm-far-locdni>
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</dsl-alarm-far-locdni>
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<isdn-alarm-lof>
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<shdsl-alarm-losd>
  shdsl-alarm-losd
</shdsl-alarm-losd>
<shdsl-alarm-losw>
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  shdsl-alarm-losw
</shdsl-alarm-losw>
<shdsl-alarm-line1-losd>
  shdsl-alarm-line1-losd
</shdsl-alarm-line1-losd>
<shdsl-alarm-line1-losw>
  shdsl-alarm-line1-losw
</shdsl-alarm-line1-losw>
<shdsl-alarm-line2-losd>
  shdsl-alarm-line2-losd
</shdsl-alarm-line2-losd>
<shdsl-alarm-line2-losw>
  shdsl-alarm-line2-losw
</shdsl-alarm-line2-losw>
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  otn-alarm-los
</otn-alarm-los>
<otn-alarm-lof>
  otn-alarm-lof
</otn-alarm-lof>
<otn-alarm-lom>
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  otn-alarm-otu-bdi
</otn-alarm-otu-bdi>
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  otn-alarm-otu-sd
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<otn-alarm-otu-sf>
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</otn-alarm-otu-sf>
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  otn-alarm-otu-fec-excessive
</otn-alarm-otu-fec-excessive>
<otn-alarm-otu-fec-degraded>
  otn-alarm-otu-fec-degraded
</otn-alarm-otu-fec-degraded>
<otn-alarm-otu-threshold-bbe>
  otn-alarm-otu-threshold-bbe
</otn-alarm-otu-threshold-bbe>
<otn-alarm-otu-threshold-es>
  otn-alarm-otu-threshold-es
</otn-alarm-otu-threshold-es>
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<otn-alarm-otu-threshold-ses>
  otn-alarm-otu-threshold-ses
</otn-alarm-otu-threshold-ses>
<otn-alarm-otu-threshold-uas>
  otn-alarm-otu-threshold-uas
</otn-alarm-otu-threshold-uas>
<otn-alarm-odu-ais>
  otn-alarm-odu-ais
</otn-alarm-odu-ais>
<otn-alarm-odu-oci>
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</otn-alarm-odu-oci>
<otn-alarm-odu-lck>
  otn-alarm-odu-lck
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<otn-alarm-odu-bdi>
  otn-alarm-odu-bdi
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  otn-alarm-odu-rx-aps-change
</otn-alarm-odu-rx-aps-change>
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  otn-alarm-odu-threshold-bbe
</otn-alarm-odu-threshold-bbe>
<otn-alarm-odu-threshold-es>
  otn-alarm-odu-threshold-es
</otn-alarm-odu-threshold-es>
<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
  otn-alarm-odu-threshold-uas
</otn-alarm-odu-threshold-uas>
<otn-alarm-opu-pmi>
  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
<ima-alarm-startup-fe>
  ima-alarm-startup-fe
</ima-alarm-startup-fe>
<ima-alarm-config-abort>
  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
  ima-alarm-insufficient-links

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            </ima-alarm-insufficient-links>
            <ima-alarm-insufficient-links-fe>
              ima-alarm-insufficient-links-fe
            </ima-alarm-insufficient-links-fe>
            <ima-alarm-blocked>
              ima-alarm-blocked
            </ima-alarm-blocked>
            <ima-alarm-blocked-fe>
              ima-alarm-blocked-fe
            </ima-alarm-blocked-fe>
            <ima-alarm-timing-mismatch>
              ima-alarm-timing-mismatch
            </ima-alarm-timing-mismatch>
            <ima-alarm-version-mismatch>
              ima-alarm-version-mismatch
            </ima-alarm-version-mismatch>
            <ima-alarm-lif>
              ima-alarm-lif
            </ima-alarm-lif>
            <ima-alarm-lods>
              ima-alarm-lods
            </ima-alarm-lods>
            <ima-alarm-rdi>
              ima-alarm-rdi
            </ima-alarm-rdi>
            <ima-alarm-tx-misconnected>
              ima-alarm-tx-misconnected
            </ima-alarm-tx-misconnected>
            <ima-alarm-rx-misconnected>
              ima-alarm-rx-misconnected
            </ima-alarm-rx-misconnected>
            <ima-alarm-fault>
              ima-alarm-fault
            </ima-alarm-fault>
            <ima-alarm-tx-unusable-fe>
              ima-alarm-tx-unusable-fe
            </ima-alarm-tx-unusable-fe>
            <ima-alarm-rx-unusable-fe>
              ima-alarm-rx-unusable-fe
            </ima-alarm-rx-unusable-fe>
            <generic-value>
              generic-value
            </generic-value>
          </interface-alarms>
        </active-alarms>
      </link-entry>
    </links>
  </physical-interface>
```

Description Container tag for interface alarms

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<interface-alarms>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <active-defects>
        <interface-alarms>
          <alarm-not-present>
            alarm-not-present
          </alarm-not-present>
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            sonet-alarm-lol
          </sonet-alarm-lol>
          <sonet-alarm-pll>
            sonet-alarm-pll
          </sonet-alarm-pll>
          <sonet-alarm-lof>
            sonet-alarm-lof
          </sonet-alarm-lof>
          <sonet-alarm-los>
            sonet-alarm-los
          </sonet-alarm-los>
          <sonet-alarm-sef>
            sonet-alarm-sef
          </sonet-alarm-sef>
          <sonet-alarm-lais>
            sonet-alarm-lais
          </sonet-alarm-lais>
          <sonet-alarm-pais>
            sonet-alarm-pais
          </sonet-alarm-pais>
          <sonet-alarm-lop>
            sonet-alarm-lop
          </sonet-alarm-lop>
          <sonet-alarm-berr-sd>
            sonet-alarm-berr-sd
          </sonet-alarm-berr-sd>
          <sonet-alarm-berr-sf>
            sonet-alarm-berr-sf
          </sonet-alarm-berr-sf>
          <sonet-alarm-lrdi>
            sonet-alarm-lrdi
          </sonet-alarm-lrdi>
          <sonet-alarm-prdi>
            sonet-alarm-prdi
          </sonet-alarm-prdi>
          <sonet-alarm-rei>
            sonet-alarm-rei
          </sonet-alarm-rei>
          <sonet-alarm-uneq>
            sonet-alarm-uneq
          </sonet-alarm-uneq>
          <sonet-alarm-pmis>
            sonet-alarm-pmis
```


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</sonet-alarm-pmis>
<sonet-alarm-loc>
  sonet-alarm-loc
</sonet-alarm-loc>
<sonet-alarm-vais>
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<sdh-alarm-msferf>
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</sdh-alarm-msferf>
<sdh-alarm-hpferf>
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  sdh-alarm-hpferf
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</sdh-alarm-hpfebe>
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Description Container tag for interface alarms

<interface-alarms>

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  ima-alarm-lif
</ima-alarm-lif>
<ima-alarm-lods>
  ima-alarm-lods
</ima-alarm-lods>
<ima-alarm-rdi>
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</ima-alarm-rdi>
<ima-alarm-tx-misconnected>
  ima-alarm-tx-misconnected
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<ima-alarm-rx-misconnected>
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</ima-alarm-rx-misconnected>
<ima-alarm-fault>
  ima-alarm-fault
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        </ima-alarm-fault>
        <ima-alarm-tx-unusable-fe>
          ima-alarm-tx-unusable-fe
        </ima-alarm-tx-unusable-fe>
        <ima-alarm-rx-unusable-fe>
          ima-alarm-rx-unusable-fe
        </ima-alarm-rx-unusable-fe>
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        </generic-value>
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  </physical-interface>
</interface-information>
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Description Container tag for interface alarms

<interface-alarms>

Usage

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          alarm-not-present
        </alarm-not-present>
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        </sonet-alarm-pll>
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        </sonet-alarm-lof>
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          sonet-alarm-los
        </sonet-alarm-los>
        <sonet-alarm-sef>
          sonet-alarm-sef
        </sonet-alarm-sef>
        <sonet-alarm-lais>
          sonet-alarm-lais
        </sonet-alarm-lais>
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        </sonet-alarm-pais>
        <sonet-alarm-lop>
          sonet-alarm-lop
        </sonet-alarm-lop>
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          sonet-alarm-berr-sd
        </sonet-alarm-berr-sd>
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</sdh-alarm-oof>
<sdh-alarm-msais>
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  ds3-alarm-ais
</ds3-alarm-ais>
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</dsl-alarm-locdni>
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</dsl-alarm-lop>
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</dsl-alarm-far-lof>
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</dsl-alarm-far-los>
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</dsl-alarm-far-locdi>
<dsl-alarm-far-locdni>
  dsl-alarm-far-locdni
</dsl-alarm-far-locdni>
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<otn-alarm-lom>
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</otn-alarm-lom>
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</otn-alarm-wavelength-lock>
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</otn-alarm-odu-sd>
<otn-alarm-odu-sf>
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  otn-alarm-odu-sf
</otn-alarm-odu-sf>
<otn-alarm-odu-rx-aps-change>
  otn-alarm-odu-rx-aps-change
</otn-alarm-odu-rx-aps-change>
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<ima-alarm-rdi>
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</ima-alarm-rdi>
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                  ima-alarm-tx-misconnected
                </ima-alarm-tx-misconnected>
                <ima-alarm-rx-misconnected>
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                </ima-alarm-rx-misconnected>
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                </ima-alarm-fault>
                <ima-alarm-tx-unusable-fe>
                  ima-alarm-tx-unusable-fe
                </ima-alarm-tx-unusable-fe>
                <ima-alarm-rx-unusable-fe>
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        </interface-information>
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Description Container tag for interface alarms

<interface-alarms>

Usage

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          sonet-alarm-lof
        </sonet-alarm-lof>
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          sonet-alarm-los
        </sonet-alarm-los>
        <sonet-alarm-sef>
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        </sonet-alarm-sef>
        <sonet-alarm-lais>
          sonet-alarm-lais
        </sonet-alarm-lais>
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</dsl-alarm-lom>
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  dsl-alarm-locdni
</dsl-alarm-locdni>
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  dsl-alarm-far-lof
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<dsl-alarm-far-los>
  dsl-alarm-far-los
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</otn-alarm-los>
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  otn-alarm-lom
</otn-alarm-lom>
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  otn-alarm-wavelength-lock
</otn-alarm-wavelength-lock>
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</otn-alarm-otu-ais>
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  otn-alarm-otu-bdi
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  otn-alarm-otu-threshold-uas
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</otn-alarm-odu-oci>
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  otn-alarm-odu-lck
</otn-alarm-odu-lck>
<otn-alarm-odu-bdi>
  otn-alarm-odu-bdi
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</otn-alarm-odu-ttim>
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</otn-alarm-odu-sf>
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</otn-alarm-odu-rx-aps-change>
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  otn-alarm-odu-threshold-bbe
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  otn-alarm-odu-threshold-es
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</otn-alarm-odu-threshold-uas>
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  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
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  ima-alarm-startup-fe
</ima-alarm-startup-fe>
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  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
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  ima-alarm-insufficient-links-fe
</ima-alarm-insufficient-links-fe>
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</ima-alarm-blocked>
<ima-alarm-blocked-fe>
  ima-alarm-blocked-fe
</ima-alarm-blocked-fe>
<ima-alarm-timing-mismatch>
  ima-alarm-timing-mismatch
</ima-alarm-timing-mismatch>
<ima-alarm-version-mismatch>
  ima-alarm-version-mismatch
</ima-alarm-version-mismatch>
<ima-alarm-lif>
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            ima-alarm-lif
          </ima-alarm-lif>
          <ima-alarm-lods>
            ima-alarm-lods
          </ima-alarm-lods>
          <ima-alarm-rdi>
            ima-alarm-rdi
          </ima-alarm-rdi>
          <ima-alarm-tx-misconnected>
            ima-alarm-tx-misconnected
          </ima-alarm-tx-misconnected>
          <ima-alarm-rx-misconnected>
            ima-alarm-rx-misconnected
          </ima-alarm-rx-misconnected>
          <ima-alarm-fault>
            ima-alarm-fault
          </ima-alarm-fault>
          <ima-alarm-tx-unusable-fe>
            ima-alarm-tx-unusable-fe
          </ima-alarm-tx-unusable-fe>
          <ima-alarm-rx-unusable-fe>
            ima-alarm-rx-unusable-fe
          </ima-alarm-rx-unusable-fe>
          <generic-value>
            generic-value
          </generic-value>
        </interface-alarms>
      </active-alarms-otn>
    </physical-interface>
  </interface-information>
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Description Container tag for interface alarms

<interface-alarms>

Usage

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<interface-information>
  <physical-interface>
    <active-defects-otn>
      <interface-alarms>
        <alarm-not-present>
          alarm-not-present
        </alarm-not-present>
        <sonet-alarm-lol>
          sonet-alarm-lol
        </sonet-alarm-lol>
        <sonet-alarm-pll>
          sonet-alarm-pll
        </sonet-alarm-pll>
        <sonet-alarm-lof>
          sonet-alarm-lof
        </sonet-alarm-lof>
        <sonet-alarm-los>
          sonet-alarm-los
```


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</sonet-alarm-los>
<sonet-alarm-sef>
  sonet-alarm-sef
</sonet-alarm-sef>
<sonet-alarm-lais>
  sonet-alarm-lais
</sonet-alarm-lais>
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  sonet-alarm-pais
</sonet-alarm-pais>
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  sonet-alarm-lop
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</sonet-alarm-vloc>
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  sdh-alarm-lol
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</sdh-alarm-pll>
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</sdh-alarm-tulop>
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</sdh-alarm-turdi>
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</shdsl-alarm-line1-losd>
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</shdsl-alarm-line1-losw>
<shdsl-alarm-line2-losd>
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  shdsl-alarm-line2-losd
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<shdsl-alarm-line2-losw>
  shdsl-alarm-line2-losw
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  otn-alarm-otu-threshold-uas
</otn-alarm-otu-threshold-uas>
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</otn-alarm-odu-ais>
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<otn-alarm-odu-oci>
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</otn-alarm-odu-oci>
<otn-alarm-odu-lck>
  otn-alarm-odu-lck
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  otn-alarm-odu-rx-aps-change
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  otn-alarm-odu-threshold-uas
</otn-alarm-odu-threshold-uas>
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</ima-alarm-startup-fe>
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</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
  ima-alarm-insufficient-links
</ima-alarm-insufficient-links>
<ima-alarm-insufficient-links-fe>
  ima-alarm-insufficient-links-fe
</ima-alarm-insufficient-links-fe>
<ima-alarm-blocked>
  ima-alarm-blocked
</ima-alarm-blocked>
<ima-alarm-blocked-fe>
  ima-alarm-blocked-fe
```


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        </ima-alarm-blocked-fe>
        <ima-alarm-timing-mismatch>
          ima-alarm-timing-mismatch
        </ima-alarm-timing-mismatch>
        <ima-alarm-version-mismatch>
          ima-alarm-version-mismatch
        </ima-alarm-version-mismatch>
        <ima-alarm-lif>
          ima-alarm-lif
        </ima-alarm-lif>
        <ima-alarm-lods>
          ima-alarm-lods
        </ima-alarm-lods>
        <ima-alarm-rdi>
          ima-alarm-rdi
        </ima-alarm-rdi>
        <ima-alarm-tx-misconnected>
          ima-alarm-tx-misconnected
        </ima-alarm-tx-misconnected>
        <ima-alarm-rx-misconnected>
          ima-alarm-rx-misconnected
        </ima-alarm-rx-misconnected>
        <ima-alarm-fault>
          ima-alarm-fault
        </ima-alarm-fault>
        <ima-alarm-tx-unusable-fe>
          ima-alarm-tx-unusable-fe
        </ima-alarm-tx-unusable-fe>
        <ima-alarm-rx-unusable-fe>
          ima-alarm-rx-unusable-fe
        </ima-alarm-rx-unusable-fe>
        <generic-value>
          generic-value
        </generic-value>
      </interface-alarms>
    </active-defects-otn>
  </physical-interface>
</interface-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-alarms>
          <interface-alarms>
            <alarm-not-present>
              alarm-not-present
            </alarm-not-present>
            <sonet-alarm-lol>
```

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  sonet-alarm-lol
</sonet-alarm-lol>
<sonet-alarm-pll>
  sonet-alarm-pll
</sonet-alarm-pll>
<sonet-alarm-lof>
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</sonet-alarm-lof>
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<sonet-alarm-berr-sf>
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Description Container tag for interface alarms

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<interface-alarms>

Usage

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  otn-alarm-odu-threshold-es
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<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
  otn-alarm-odu-threshold-uas
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</otn-alarm-odu-threshold-uas>
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  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
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</ima-alarm-startup-fe>
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</ima-alarm-config-abort>
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  ima-alarm-config-abort-fe
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</ima-alarm-rx-misconnected>
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  ima-alarm-tx-unusable-fe
</ima-alarm-tx-unusable-fe>
<ima-alarm-rx-unusable-fe>
  ima-alarm-rx-unusable-fe
</ima-alarm-rx-unusable-fe>
<generic-value>
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                    generic-value
                  </generic-value>
                </interface-alarms>
              </active-defects>
            </link-entry>
          </links>
        </physical-interface>
      </interface-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

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          alarm-not-present
        </alarm-not-present>
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          sonet-alarm-lol
        </sonet-alarm-lol>
        <sonet-alarm-pll>
          sonet-alarm-pll
        </sonet-alarm-pll>
        <sonet-alarm-lof>
          sonet-alarm-lof
        </sonet-alarm-lof>
        <sonet-alarm-los>
          sonet-alarm-los
        </sonet-alarm-los>
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        </sonet-alarm-sef>
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        <sonet-alarm-pais>
          sonet-alarm-pais
        </sonet-alarm-pais>
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          sonet-alarm-lop
        </sonet-alarm-lop>
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          sonet-alarm-berr-sd
        </sonet-alarm-berr-sd>
        <sonet-alarm-berr-sf>
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        </sonet-alarm-berr-sf>
        <sonet-alarm-lrdi>
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  sdh-alarm-hpais
</sdh-alarm-hpais>
<sdh-alarm-lop>
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<dsl-alarm-far-los>
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  ima-alarm-tx-misconnected
</ima-alarm-tx-misconnected>
<ima-alarm-rx-misconnected>
  ima-alarm-rx-misconnected
</ima-alarm-rx-misconnected>
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            <ima-alarm-fault>
              ima-alarm-fault
            </ima-alarm-fault>
            <ima-alarm-tx-unusable-fe>
              ima-alarm-tx-unusable-fe
            </ima-alarm-tx-unusable-fe>
            <ima-alarm-rx-unusable-fe>
              ima-alarm-rx-unusable-fe
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            </generic-value>
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        </active-alarms>
      </physical-interface>
    </interface-filter-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

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        </sonet-alarm-pais>
        <sonet-alarm-lop>
          sonet-alarm-lop
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        <sonet-alarm-berr-sd>
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  sonet-alarm-berr-sd
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Description Container tag for interface alarms

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<ima-alarm-config-abort>
  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
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</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
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  ima-alarm-timing-mismatch
</ima-alarm-timing-mismatch>
<ima-alarm-version-mismatch>
  ima-alarm-version-mismatch
```


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        </ima-alarm-version-mismatch>
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        </ima-alarm-lif>
        <ima-alarm-lods>
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        </ima-alarm-lods>
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        </ima-alarm-rdi>
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          ima-alarm-tx-misconnected
        </ima-alarm-tx-misconnected>
        <ima-alarm-rx-misconnected>
          ima-alarm-rx-misconnected
        </ima-alarm-rx-misconnected>
        <ima-alarm-fault>
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        </ima-alarm-fault>
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          ima-alarm-tx-unusable-fe
        </ima-alarm-tx-unusable-fe>
        <ima-alarm-rx-unusable-fe>
          ima-alarm-rx-unusable-fe
        </ima-alarm-rx-unusable-fe>
        <generic-value>
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        </generic-value>
      </interface-alarms>
    </active-alarms-otn>
  </physical-interface>
</interface-filter-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

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<interface-filter-information>
  <physical-interface>
    <active-defects-otn>
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          alarm-not-present
        </alarm-not-present>
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        </sonet-alarm-lol>
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          sonet-alarm-pll
        </sonet-alarm-pll>
        <sonet-alarm-lof>
          sonet-alarm-lof
        </sonet-alarm-lof>
```

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</sonet-alarm-vmis>
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</ds1-alarm-crc-major>
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</shdsl-alarm-line2-losd>
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  otn-alarm-otu-threshold-ses
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<otn-alarm-odu-oci>
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  ima-alarm-config-abort
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<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
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  ima-alarm-insufficient-links
</ima-alarm-insufficient-links>
<ima-alarm-insufficient-links-fe>
  ima-alarm-insufficient-links-fe
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<ima-alarm-blocked>
  ima-alarm-blocked
</ima-alarm-blocked>
```

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                <ima-alarm-blocked-fe>
                  ima-alarm-blocked-fe
                </ima-alarm-blocked-fe>
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                  ima-alarm-timing-mismatch
                </ima-alarm-timing-mismatch>
                <ima-alarm-version-mismatch>
                  ima-alarm-version-mismatch
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                  ima-alarm-rdi
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                  ima-alarm-tx-misconnected
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                </ima-alarm-rx-misconnected>
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                  ima-alarm-fault
                </ima-alarm-fault>
                <ima-alarm-tx-unusable-fe>
                  ima-alarm-tx-unusable-fe
                </ima-alarm-tx-unusable-fe>
                <ima-alarm-rx-unusable-fe>
                  ima-alarm-rx-unusable-fe
                </ima-alarm-rx-unusable-fe>
                <generic-value>
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                </generic-value>
              </interface-alarms>
            </active-defects-otn>
          </physical-interface>
        </interface-filter-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-alarms>
          <interface-alarms>
            <alarm-not-present>
              alarm-not-present
```


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</ds1-alarm-crc-minor>
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<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
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        </ima-alarm-tx-unusable-fe>
        <ima-alarm-rx-unusable-fe>
          ima-alarm-rx-unusable-fe
        </ima-alarm-rx-unusable-fe>
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          generic-value
        </generic-value>
      </interface-alarms>
    </active-alarms>
  </link-entry>
 </links>
</physical-interface>
</interface-filter-information>
```

Description Container tag for interface alarms

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<interface-alarms>

Usage

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<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-defects>
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              alarm-not-present
            </alarm-not-present>
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<ima-alarm-config-abort-fe>
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<ima-alarm-rx-unusable-fe>
  ima-alarm-rx-unusable-fe
</ima-alarm-rx-unusable-fe>
<generic-value>
```


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                    generic-value
                   </generic-value>
                  </interface-alarms>
                 </active-defects>
                </link-entry>
               </links>
              </physical-interface>
             </interface-filter-information>
```

Description Container tag for interface alarms

<interface-alarms>

Usage

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    </alarm-not-present>
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    </sonet-alarm-lol>
    <sonet-alarm-pll>
     sonet-alarm-pll
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Description Container tag for interface alarms

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Usage

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Description Container tag for interface alarms

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Usage

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Description Container tag for interface alarms

<interface-alarms>

Usage

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Description Container tag for interface alarms

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Usage

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</otn-alarm-odu-threshold-es>
<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
  otn-alarm-odu-threshold-uas
</otn-alarm-odu-threshold-uas>
<otn-alarm-opu-pmi>
  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
<ima-alarm-startup-fe>
  ima-alarm-startup-fe
</ima-alarm-startup-fe>
<ima-alarm-config-abort>
  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
```

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```
        </ima-alarm-config-abort-fe>
        <ima-alarm-insufficient-links>
          ima-alarm-insufficient-links
        </ima-alarm-insufficient-links>
        <ima-alarm-insufficient-links-fe>
          ima-alarm-insufficient-links-fe
        </ima-alarm-insufficient-links-fe>
        <ima-alarm-blocked>
          ima-alarm-blocked
        </ima-alarm-blocked>
        <ima-alarm-blocked-fe>
          ima-alarm-blocked-fe
        </ima-alarm-blocked-fe>
        <ima-alarm-timing-mismatch>
          ima-alarm-timing-mismatch
        </ima-alarm-timing-mismatch>
        <ima-alarm-version-mismatch>
          ima-alarm-version-mismatch
        </ima-alarm-version-mismatch>
        <ima-alarm-lif>
          ima-alarm-lif
        </ima-alarm-lif>
        <ima-alarm-lods>
          ima-alarm-lods
        </ima-alarm-lods>
        <ima-alarm-rdi>
          ima-alarm-rdi
        </ima-alarm-rdi>
        <ima-alarm-tx-misconnected>
          ima-alarm-tx-misconnected
        </ima-alarm-tx-misconnected>
        <ima-alarm-rx-misconnected>
          ima-alarm-rx-misconnected
        </ima-alarm-rx-misconnected>
        <ima-alarm-fault>
          ima-alarm-fault
        </ima-alarm-fault>
        <ima-alarm-tx-unusable-fe>
          ima-alarm-tx-unusable-fe
        </ima-alarm-tx-unusable-fe>
        <ima-alarm-rx-unusable-fe>
          ima-alarm-rx-unusable-fe
        </ima-alarm-rx-unusable-fe>
        <generic-value>
          generic-value
        </generic-value>
      </interface-alarms>
    </active-alarms>
  </link-entry>
 </links>
</physical-interface>
</interface-policer-information>
```

Description Container tag for interface alarms

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<interface-alarms>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <active-defects>
          <interface-alarms>
            <alarm-not-present>
              alarm-not-present
            </alarm-not-present>
            <sonet-alarm-lol>
              sonet-alarm-lol
            </sonet-alarm-lol>
            <sonet-alarm-pll>
              sonet-alarm-pll
            </sonet-alarm-pll>
            <sonet-alarm-lof>
              sonet-alarm-lof
            </sonet-alarm-lof>
            <sonet-alarm-los>
              sonet-alarm-los
            </sonet-alarm-los>
            <sonet-alarm-sef>
              sonet-alarm-sef
            </sonet-alarm-sef>
            <sonet-alarm-lais>
              sonet-alarm-lais
            </sonet-alarm-lais>
            <sonet-alarm-pais>
              sonet-alarm-pais
            </sonet-alarm-pais>
            <sonet-alarm-lop>
              sonet-alarm-lop
            </sonet-alarm-lop>
            <sonet-alarm-berr-sd>
              sonet-alarm-berr-sd
            </sonet-alarm-berr-sd>
            <sonet-alarm-berr-sf>
              sonet-alarm-berr-sf
            </sonet-alarm-berr-sf>
            <sonet-alarm-lrdi>
              sonet-alarm-lrdi
            </sonet-alarm-lrdi>
            <sonet-alarm-prdi>
              sonet-alarm-prdi
            </sonet-alarm-prdi>
            <sonet-alarm-rei>
              sonet-alarm-rei
            </sonet-alarm-rei>
            <sonet-alarm-uneq>
              sonet-alarm-uneq
            </sonet-alarm-uneq>
            <sonet-alarm-pmis>
```

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```
  sonet-alarm-pmis
</sonet-alarm-pmis>
<sonet-alarm-loc>
  sonet-alarm-loc
</sonet-alarm-loc>
<sonet-alarm-vais>
  sonet-alarm-vais
</sonet-alarm-vais>
<sonet-alarm-vlop>
  sonet-alarm-vlop
</sonet-alarm-vlop>
<sonet-alarm-vrdi>
  sonet-alarm-vrdi
</sonet-alarm-vrdi>
<sonet-alarm-vuneq>
  sonet-alarm-vuneq
</sonet-alarm-vuneq>
<sonet-alarm-vmis>
  sonet-alarm-vmis
</sonet-alarm-vmis>
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</sonet-alarm-vloc>
<sdh-alarm-lol>
  sdh-alarm-lol
</sdh-alarm-lol>
<sdh-alarm-pll>
  sdh-alarm-pll
</sdh-alarm-pll>
<sdh-alarm-lof>
  sdh-alarm-lof
</sdh-alarm-lof>
<sdh-alarm-los>
  sdh-alarm-los
</sdh-alarm-los>
<sdh-alarm-oof>
  sdh-alarm-oof
</sdh-alarm-oof>
<sdh-alarm-msais>
  sdh-alarm-msais
</sdh-alarm-msais>
<sdh-alarm-hpais>
  sdh-alarm-hpais
</sdh-alarm-hpais>
<sdh-alarm-lop>
  sdh-alarm-lop
</sdh-alarm-lop>
<sdh-alarm-berr-sd>
  sdh-alarm-berr-sd
</sdh-alarm-berr-sd>
<sdh-alarm-berr-sf>
  sdh-alarm-berr-sf
</sdh-alarm-berr-sf>
<sdh-alarm-msferf>
  sdh-alarm-msferf
</sdh-alarm-msferf>
```


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<sdh-alarm-hpferf>
  sdh-alarm-hpferf
</sdh-alarm-hpferf>
<sdh-alarm-hpfebe>
  sdh-alarm-hpfebe
</sdh-alarm-hpfebe>
<sdh-alarm-hpuneq>
  sdh-alarm-hpuneq
</sdh-alarm-hpuneq>
<sdh-alarm-hpplm>
  sdh-alarm-hpplm
</sdh-alarm-hpplm>
<sdh-alarm-loc>
  sdh-alarm-loc
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<sdh-alarm-tuais>
  sdh-alarm-tuais
</sdh-alarm-tuais>
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  sdh-alarm-tulop
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<sdh-alarm-turdi>
  sdh-alarm-turdi
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<sdh-alarm-tuuneq>
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</sdh-alarm-tumis>
<sdh-alarm-tuloc>
  sdh-alarm-tuloc
</sdh-alarm-tuloc>
<ds3-alarm-pll>
  ds3-alarm-pll
</ds3-alarm-pll>
<ds3-alarm-ais>
  ds3-alarm-ais
</ds3-alarm-ais>
<ds3-alarm-lof>
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</ds3-alarm-lof>
<ds3-alarm-los>
  ds3-alarm-los
</ds3-alarm-los>
<ds3-alarm-lcv>
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</ds3-alarm-lcv>
<ds3-alarm-exz>
  ds3-alarm-exz
</ds3-alarm-exz>
<ds3-alarm-ferf>
  ds3-alarm-ferf
</ds3-alarm-ferf>
<ds3-alarm-ylw>
  ds3-alarm-ylw
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</ds3-alarm-ylw>
<ds3-alarm-idle>
  ds3-alarm-idle
</ds3-alarm-idle>
<ds1-alarm-ais>
  ds1-alarm-ais
</ds1-alarm-ais>
<ds1-alarm-lof>
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</ds1-alarm-lof>
<ds1-alarm-los>
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</ds1-alarm-los>
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<ds1-alarm-crc-major>
  ds1-alarm-crc-major
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<ds1-alarm-crc-minor>
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  dsl-alarm-lof
</dsl-alarm-lof>
<dsl-alarm-los>
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</dsl-alarm-lom>
<dsl-alarm-locdi>
  dsl-alarm-locdi
</dsl-alarm-locdi>
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</dsl-alarm-locdni>
<dsl-alarm-lop>
  dsl-alarm-lop
</dsl-alarm-lop>
<dsl-alarm-far-lof>
  dsl-alarm-far-lof
</dsl-alarm-far-lof>
<dsl-alarm-far-los>
  dsl-alarm-far-los
</dsl-alarm-far-los>
<dsl-alarm-far-locdi>
  dsl-alarm-far-locdi
</dsl-alarm-far-locdi>
<dsl-alarm-far-locdni>
  dsl-alarm-far-locdni
</dsl-alarm-far-locdni>
<fibrechannel-alarm-link-down>
  fibrechannel-alarm-link-down
</fibrechannel-alarm-link-down>
<ethernet-alarm-link-down>
```


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  ethernet-alarm-link-down
</ethernet-alarm-link-down>
<ethernet-alarm-lcdp>
  ethernet-alarm-lcdp
</ethernet-alarm-lcdp>
<isdn-alarm-los>
  isdn-alarm-los
</isdn-alarm-los>
<isdn-alarm-lof>
  isdn-alarm-lof
</isdn-alarm-lof>
<shdsl-alarm-losd>
  shdsl-alarm-losd
</shdsl-alarm-losd>
<shdsl-alarm-losw>
  shdsl-alarm-losw
</shdsl-alarm-losw>
<shdsl-alarm-line1-losd>
  shdsl-alarm-line1-losd
</shdsl-alarm-line1-losd>
<shdsl-alarm-line1-losw>
  shdsl-alarm-line1-losw
</shdsl-alarm-line1-losw>
<shdsl-alarm-line2-losd>
  shdsl-alarm-line2-losd
</shdsl-alarm-line2-losd>
<shdsl-alarm-line2-losw>
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</shdsl-alarm-line2-losw>
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<otn-alarm-otu-ais>
  otn-alarm-otu-ais
</otn-alarm-otu-ais>
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  otn-alarm-otu-bdi
</otn-alarm-otu-bdi>
<otn-alarm-otu-ttim>
  otn-alarm-otu-ttim
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<otn-alarm-otu-iae>
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</otn-alarm-otu-iae>
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  otn-alarm-otu-sd
</otn-alarm-otu-sd>
```

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<otn-alarm-otu-sf>
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</otn-alarm-otu-sf>
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  otn-alarm-otu-fec-excessive
</otn-alarm-otu-fec-excessive>
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  otn-alarm-otu-fec-degraded
</otn-alarm-otu-fec-degraded>
<otn-alarm-otu-threshold-bbe>
  otn-alarm-otu-threshold-bbe
</otn-alarm-otu-threshold-bbe>
<otn-alarm-otu-threshold-es>
  otn-alarm-otu-threshold-es
</otn-alarm-otu-threshold-es>
<otn-alarm-otu-threshold-ses>
  otn-alarm-otu-threshold-ses
</otn-alarm-otu-threshold-ses>
<otn-alarm-otu-threshold-uas>
  otn-alarm-otu-threshold-uas
</otn-alarm-otu-threshold-uas>
<otn-alarm-odu-ais>
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  otn-alarm-odu-oci
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<otn-alarm-odu-sd>
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</otn-alarm-odu-rx-aps-change>
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  otn-alarm-odu-threshold-bbe
</otn-alarm-odu-threshold-bbe>
<otn-alarm-odu-threshold-es>
  otn-alarm-odu-threshold-es
</otn-alarm-odu-threshold-es>
<otn-alarm-odu-threshold-ses>
  otn-alarm-odu-threshold-ses
</otn-alarm-odu-threshold-ses>
<otn-alarm-odu-threshold-uas>
  otn-alarm-odu-threshold-uas
```


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```
</otn-alarm-odu-threshold-uas>
<otn-alarm-opu-pmi>
  otn-alarm-opu-pmi
</otn-alarm-opu-pmi>
<ima-alarm-startup-fe>
  ima-alarm-startup-fe
</ima-alarm-startup-fe>
<ima-alarm-config-abort>
  ima-alarm-config-abort
</ima-alarm-config-abort>
<ima-alarm-config-abort-fe>
  ima-alarm-config-abort-fe
</ima-alarm-config-abort-fe>
<ima-alarm-insufficient-links>
  ima-alarm-insufficient-links
</ima-alarm-insufficient-links>
<ima-alarm-insufficient-links-fe>
  ima-alarm-insufficient-links-fe
</ima-alarm-insufficient-links-fe>
<ima-alarm-blocked>
  ima-alarm-blocked
</ima-alarm-blocked>
<ima-alarm-blocked-fe>
  ima-alarm-blocked-fe
</ima-alarm-blocked-fe>
<ima-alarm-timing-mismatch>
  ima-alarm-timing-mismatch
</ima-alarm-timing-mismatch>
<ima-alarm-version-mismatch>
  ima-alarm-version-mismatch
</ima-alarm-version-mismatch>
<ima-alarm-lif>
  ima-alarm-lif
</ima-alarm-lif>
<ima-alarm-lods>
  ima-alarm-lods
</ima-alarm-lods>
<ima-alarm-rdi>
  ima-alarm-rdi
</ima-alarm-rdi>
<ima-alarm-tx-misconnected>
  ima-alarm-tx-misconnected
</ima-alarm-tx-misconnected>
<ima-alarm-rx-misconnected>
  ima-alarm-rx-misconnected
</ima-alarm-rx-misconnected>
<ima-alarm-fault>
  ima-alarm-fault
</ima-alarm-fault>
<ima-alarm-tx-unusable-fe>
  ima-alarm-tx-unusable-fe
</ima-alarm-tx-unusable-fe>
<ima-alarm-rx-unusable-fe>
  ima-alarm-rx-unusable-fe
</ima-alarm-rx-unusable-fe>
<generic-value>
```

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```
                    generic-value
                  </generic-value>
                </interface-alarms>
              </active-defects>
            </link-entry>
          </links>
        </physical-interface>
      </interface-policer-information>
```

Description Container tag for interface alarms

<interface-chassis-cos-summary>

Usage

```
<interface-chassis-cos-summary>
  <intf-cos-chassis-num-queues-supported>
    intf-cos-chassis-num-queues-supported
  </intf-cos-chassis-num-queues-supported>
  <intf-cos-chassis-num-queues-in-use>
    intf-cos-chassis-num-queues-in-use
  </intf-cos-chassis-num-queues-in-use>
</interface-chassis-cos-summary>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<chassis-queue-counters>
  <interface-chassis-cos-summary>
    <intf-cos-chassis-num-queues-supported>
      intf-cos-chassis-num-queues-supported
    </intf-cos-chassis-num-queues-supported>
    <intf-cos-chassis-num-queues-in-use>
      intf-cos-chassis-num-queues-in-use
    </intf-cos-chassis-num-queues-in-use>
  </interface-chassis-cos-summary>
</chassis-queue-counters>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<ingress-queue-counters>
  <interface-chassis-cos-summary>
    <intf-cos-chassis-num-queues-supported>
      intf-cos-chassis-num-queues-supported
    </intf-cos-chassis-num-queues-supported>
    <intf-cos-chassis-num-queues-in-use>
      intf-cos-chassis-num-queues-in-use
```


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```
    </intf-cos-chassis-num-queues-in-use>
  </interface-chassis-cos-summary>
</ingress-queue-counters>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<logical-interface>
  <ingress-queue-counters>
    <interface-chassis-cos-summary>
      <intf-cos-chassis-num-queues-supported>
        intf-cos-chassis-num-queues-supported
      </intf-cos-chassis-num-queues-supported>
      <intf-cos-chassis-num-queues-in-use>
        intf-cos-chassis-num-queues-in-use
      </intf-cos-chassis-num-queues-in-use>
    </interface-chassis-cos-summary>
  </ingress-queue-counters>
</logical-interface>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</physical-interface>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<physical-interface>
  <chassis-queue-counters>
    <interface-chassis-cos-summary>
      <intf-cos-chassis-num-queues-supported>
```

```
        intf-cos-chassis-num-queues-supported
       </intf-cos-chassis-num-queues-supported>
       <intf-cos-chassis-num-queues-in-use>
        intf-cos-chassis-num-queues-in-use
       </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
     </chassis-queue-counters>
    </physical-interface>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<physical-interface>
 <ingress-queue-counters>
  <interface-chassis-cos-summary>
   <intf-cos-chassis-num-queues-supported>
    intf-cos-chassis-num-queues-supported
   </intf-cos-chassis-num-queues-supported>
   <intf-cos-chassis-num-queues-in-use>
    intf-cos-chassis-num-queues-in-use
   </intf-cos-chassis-num-queues-in-use>
  </interface-chassis-cos-summary>
 </ingress-queue-counters>
</physical-interface>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-set>
 <interface-set-queue-information>
  <ingress-queue-counters>
   <interface-chassis-cos-summary>
    <intf-cos-chassis-num-queues-supported>
     intf-cos-chassis-num-queues-supported
    </intf-cos-chassis-num-queues-supported>
    <intf-cos-chassis-num-queues-in-use>
     intf-cos-chassis-num-queues-in-use
    </intf-cos-chassis-num-queues-in-use>
   </interface-chassis-cos-summary>
  </ingress-queue-counters>
 </interface-set-queue-information>
</interface-set>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

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<interface-chassis-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>
          <intf-cos-chassis-num-queues-supported>
            intf-cos-chassis-num-queues-supported
          </intf-cos-chassis-num-queues-supported>
          <intf-cos-chassis-num-queues-in-use>
            intf-cos-chassis-num-queues-in-use
          </intf-cos-chassis-num-queues-in-use>
        </interface-chassis-cos-summary>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <chassis-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </chassis-queue-counters>
  </physical-interface>
</interface-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
```

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```
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>
          <intf-cos-chassis-num-queues-supported>
            intf-cos-chassis-num-queues-supported
          </intf-cos-chassis-num-queues-supported>
          <intf-cos-chassis-num-queues-in-use>
            intf-cos-chassis-num-queues-in-use
          </intf-cos-chassis-num-queues-in-use>
        </interface-chassis-cos-summary>
      </ingress-queue-counters>
    </interface-set-queue-information>
  </interface-set>
</interface-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

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<interface-chassis-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>
          <intf-cos-chassis-num-queues-supported>
            intf-cos-chassis-num-queues-supported
          </intf-cos-chassis-num-queues-supported>
          <intf-cos-chassis-num-queues-in-use>
            intf-cos-chassis-num-queues-in-use
          </intf-cos-chassis-num-queues-in-use>
        </interface-chassis-cos-summary>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <chassis-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </chassis-queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
```

```
            <intf-cos-chassis-num-queues-in-use>
              intf-cos-chassis-num-queues-in-use
            </intf-cos-chassis-num-queues-in-use>
          </interface-chassis-cos-summary>
        </ingress-queue-counters>
      </physical-interface>
    </interface-filter-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-filter-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-chassis-cos-summary>
          <intf-cos-chassis-num-queues-supported>
            intf-cos-chassis-num-queues-supported
          </intf-cos-chassis-num-queues-supported>
          <intf-cos-chassis-num-queues-in-use>
            intf-cos-chassis-num-queues-in-use
          </intf-cos-chassis-num-queues-in-use>
        </interface-chassis-cos-summary>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

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<interface-chassis-cos-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <chassis-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </chassis-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
        </intf-cos-chassis-num-queues-in-use>
      </interface-chassis-cos-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-chassis-cos-summary>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-chassis-cos-summary>
        <intf-cos-chassis-num-queues-supported>
          intf-cos-chassis-num-queues-supported
        </intf-cos-chassis-num-queues-supported>
        <intf-cos-chassis-num-queues-in-use>
          intf-cos-chassis-num-queues-in-use
```

```
            </intf-cos-chassis-num-queues-in-use>
          </interface-chassis-cos-summary>
        </ingress-queue-counters>
      </logical-interface>
    </interface-policer-information>
```

Description Packet Forwarding Engine chassis forwarding class and queue information for an interface

<interface-cos-short-summary>

Usage

```
<interface-cos-short-summary>
  <intf-cos-queue-type>
    intf-cos-queue-type
  </intf-cos-queue-type>
  <intf-cos-num-queues-supported>
    intf-cos-num-queues-supported
  </intf-cos-num-queues-supported>
  <intf-cos-num-queues-in-use>
    intf-cos-num-queues-in-use
  </intf-cos-num-queues-in-use>
</interface-cos-short-summary>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<queue-counters>
  <interface-cos-short-summary>
    <intf-cos-queue-type>
      intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
  </interface-cos-short-summary>
</queue-counters>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<ingress-queue-counters>
  <interface-cos-short-summary>
    <intf-cos-queue-type>
      intf-cos-queue-type
```


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```
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
   </interface-cos-short-summary>
  </ingress-queue-counters>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<logical-interface>
 <queue-counters>
  <interface-cos-short-summary>
   <intf-cos-queue-type>
    intf-cos-queue-type
   </intf-cos-queue-type>
   <intf-cos-num-queues-supported>
    intf-cos-num-queues-supported
   </intf-cos-num-queues-supported>
   <intf-cos-num-queues-in-use>
    intf-cos-num-queues-in-use
   </intf-cos-num-queues-in-use>
  </interface-cos-short-summary>
 </queue-counters>
</logical-interface>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<logical-interface>
 <ingress-queue-counters>
  <interface-cos-short-summary>
   <intf-cos-queue-type>
    intf-cos-queue-type
   </intf-cos-queue-type>
   <intf-cos-num-queues-supported>
    intf-cos-num-queues-supported
   </intf-cos-num-queues-supported>
   <intf-cos-num-queues-in-use>
    intf-cos-num-queues-in-use
   </intf-cos-num-queues-in-use>
  </interface-cos-short-summary>
 </ingress-queue-counters>
</logical-interface>
```

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Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<physical-interface>
  <queue-counters>
    <interface-cos-short-summary>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
    </interface-cos-short-summary>
  </queue-counters>
</physical-interface>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </queue-counters>
  </logical-interface>
</physical-interface>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
```


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```
      <interface-cos-short-summary>
       <intf-cos-queue-type>
        intf-cos-queue-type
       </intf-cos-queue-type>
       <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
       </intf-cos-num-queues-supported>
       <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
       </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
     </ingress-queue-counters>
    </logical-interface>
   </physical-interface>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<physical-interface>
 <ingress-queue-counters>
  <interface-cos-short-summary>
   <intf-cos-queue-type>
    intf-cos-queue-type
   </intf-cos-queue-type>
   <intf-cos-num-queues-supported>
    intf-cos-num-queues-supported
   </intf-cos-num-queues-supported>
   <intf-cos-num-queues-in-use>
    intf-cos-num-queues-in-use
   </intf-cos-num-queues-in-use>
  </interface-cos-short-summary>
 </ingress-queue-counters>
</physical-interface>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-set>
 <interface-set-queue-information>
  <queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
```

```
            intf-cos-num-queues-in-use
           </intf-cos-num-queues-in-use>
          </interface-cos-short-summary>
         </queue-counters>
        </interface-set-queue-information>
       </interface-set>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-set>
 <interface-set-queue-information>
  <ingress-queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
   </interface-cos-short-summary>
  </ingress-queue-counters>
 </interface-set-queue-information>
</interface-set>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
 <physical-interface>
  <queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
   </interface-cos-short-summary>
  </queue-counters>
 </physical-interface>
```


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```
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <interface-cos-short-summary>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
          </intf-cos-num-queues-in-use>
        </interface-cos-short-summary>
      </queue-counters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-cos-short-summary>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
          </intf-cos-num-queues-in-use>
        </interface-cos-short-summary>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

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Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
  <logical-interface>
    <queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </queue-counters>
  </logical-interface>
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
```


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```
<logical-interface>
  <ingress-queue-counters>
    <interface-cos-short-summary>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
    </interface-cos-short-summary>
  </ingress-queue-counters>
 </logical-interface>
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
 <interface-set>
  <interface-set-queue-information>
   <queue-counters>
    <interface-cos-short-summary>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
    </interface-cos-short-summary>
   </queue-counters>
  </interface-set-queue-information>
 </interface-set>
</interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-information>
 <interface-set>
  <interface-set-queue-information>
   <ingress-queue-counters>
    <interface-cos-short-summary>
```

```
                <intf-cos-queue-type>
                  intf-cos-queue-type
                </intf-cos-queue-type>
                <intf-cos-num-queues-supported>
                  intf-cos-num-queues-supported
                </intf-cos-num-queues-supported>
                <intf-cos-num-queues-in-use>
                  intf-cos-num-queues-in-use
                </intf-cos-num-queues-in-use>
              </interface-cos-short-summary>
            </ingress-queue-counters>
          </interface-set-queue-information>
        </interface-set>
      </interface-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <interface-cos-short-summary>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
```


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```
                intf-cos-num-queues-supported
               </intf-cos-num-queues-supported>
               <intf-cos-num-queues-in-use>
                intf-cos-num-queues-in-use
               </intf-cos-num-queues-in-use>
              </interface-cos-short-summary>
             </queue-counters>
            </logical-interface>
           </physical-interface>
          </interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <ingress-queue-counters>
    <interface-cos-short-summary>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
    </interface-cos-short-summary>
   </ingress-queue-counters>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
 <physical-interface>
  <ingress-queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
```

```
                intf-cos-num-queues-in-use
               </intf-cos-num-queues-in-use>
              </interface-cos-short-summary>
             </ingress-queue-counters>
            </physical-interface>
           </interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
 <logical-interface>
  <queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
   </interface-cos-short-summary>
  </queue-counters>
 </logical-interface>
</interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-filter-information>
 <logical-interface>
  <ingress-queue-counters>
   <interface-cos-short-summary>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
   </interface-cos-short-summary>
  </ingress-queue-counters>
 </logical-interface>
```


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```
</interface-filter-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <interface-cos-short-summary>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
          </intf-cos-num-queues-in-use>
        </interface-cos-short-summary>
      </queue-counters>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

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<interface-cos-short-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <interface-cos-short-summary>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
          </intf-cos-num-queues-in-use>
        </interface-cos-short-summary>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-policer-information>
```


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```
<logical-interface>
  <queue-counters>
    <interface-cos-short-summary>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
    </interface-cos-short-summary>
  </queue-counters>
</logical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

<interface-cos-short-summary>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-cos-short-summary>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
      </interface-cos-short-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-policer-information>
```

Description Summary of queue information on an interface

<interface-cos-summary>

Usage

```
<interface-cos-summary>
  <intf-cos-forwarding-classes-supported>
    intf-cos-forwarding-classes-supported
  </intf-cos-forwarding-classes-supported>
  <intf-cos-forwarding-classes-in-use>
    intf-cos-forwarding-classes-in-use
  </intf-cos-forwarding-classes-in-use>
```

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```
<intf-cos-queue-type>
  intf-cos-queue-type
</intf-cos-queue-type>
<intf-cos-num-queues-supported>
  intf-cos-num-queues-supported
</intf-cos-num-queues-supported>
<intf-cos-num-queues-in-use>
  intf-cos-num-queues-in-use
</intf-cos-num-queues-in-use>
<intf-cos-burst-size-for-ifl>
  intf-cos-burst-size-for-ifl
</intf-cos-burst-size-for-ifl>
</interface-cos-summary>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<queue-counters>
  <interface-cos-summary>
    <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
    </intf-cos-forwarding-classes-supported>
    <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
    </intf-cos-forwarding-classes-in-use>
    <intf-cos-queue-type>
      intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
    <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
    </intf-cos-burst-size-for-ifl>
  </interface-cos-summary>
</queue-counters>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<ingress-queue-counters>
  <interface-cos-summary>
    <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
    </intf-cos-forwarding-classes-supported>
```


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```
    <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
    </intf-cos-forwarding-classes-in-use>
    <intf-cos-queue-type>
      intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
    <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
    </intf-cos-burst-size-for-ifl>
  </interface-cos-summary>
</ingress-queue-counters>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<logical-interface>
  <queue-counters>
    <interface-cos-summary>
      <intf-cos-forwarding-classes-supported>
        intf-cos-forwarding-classes-supported
      </intf-cos-forwarding-classes-supported>
      <intf-cos-forwarding-classes-in-use>
        intf-cos-forwarding-classes-in-use
      </intf-cos-forwarding-classes-in-use>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
      <intf-cos-burst-size-for-ifl>
        intf-cos-burst-size-for-ifl
      </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
  </queue-counters>
</logical-interface>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<logical-interface>
  <ingress-queue-counters>
    <interface-cos-summary>
      <intf-cos-forwarding-classes-supported>
        intf-cos-forwarding-classes-supported
      </intf-cos-forwarding-classes-supported>
      <intf-cos-forwarding-classes-in-use>
        intf-cos-forwarding-classes-in-use
      </intf-cos-forwarding-classes-in-use>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
      <intf-cos-burst-size-for-ifl>
        intf-cos-burst-size-for-ifl
      </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
  </ingress-queue-counters>
</logical-interface>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<physical-interface>
  <queue-counters>
    <interface-cos-summary>
      <intf-cos-forwarding-classes-supported>
        intf-cos-forwarding-classes-supported
      </intf-cos-forwarding-classes-supported>
      <intf-cos-forwarding-classes-in-use>
        intf-cos-forwarding-classes-in-use
      </intf-cos-forwarding-classes-in-use>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
      <intf-cos-burst-size-for-ifl>
        intf-cos-burst-size-for-ifl
```


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```
      </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
  </queue-counters>
</physical-interface>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </queue-counters>
  </logical-interface>
</physical-interface>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
```

```
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</physical-interface>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<physical-interface>
  <ingress-queue-counters>
    <interface-cos-summary>
      <intf-cos-forwarding-classes-supported>
        intf-cos-forwarding-classes-supported
      </intf-cos-forwarding-classes-supported>
      <intf-cos-forwarding-classes-in-use>
        intf-cos-forwarding-classes-in-use
      </intf-cos-forwarding-classes-in-use>
      <intf-cos-queue-type>
        intf-cos-queue-type
      </intf-cos-queue-type>
      <intf-cos-num-queues-supported>
        intf-cos-num-queues-supported
      </intf-cos-num-queues-supported>
      <intf-cos-num-queues-in-use>
        intf-cos-num-queues-in-use
      </intf-cos-num-queues-in-use>
      <intf-cos-burst-size-for-ifl>
        intf-cos-burst-size-for-ifl
      </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
  </ingress-queue-counters>
</physical-interface>
```

Description Summary of forwarding class and queue information on an interface

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<interface-cos-summary>

Usage

```
<interface-set>
 <interface-set-queue-information>
  <queue-counters>
   <interface-cos-summary>
    <intf-cos-forwarding-classes-supported>
     intf-cos-forwarding-classes-supported
    </intf-cos-forwarding-classes-supported>
    <intf-cos-forwarding-classes-in-use>
     intf-cos-forwarding-classes-in-use
    </intf-cos-forwarding-classes-in-use>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
    <intf-cos-burst-size-for-ifl>
     intf-cos-burst-size-for-ifl
    </intf-cos-burst-size-for-ifl>
   </interface-cos-summary>
  </queue-counters>
 </interface-set-queue-information>
</interface-set>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-set>
 <interface-set-queue-information>
  <ingress-queue-counters>
   <interface-cos-summary>
    <intf-cos-forwarding-classes-supported>
     intf-cos-forwarding-classes-supported
    </intf-cos-forwarding-classes-supported>
    <intf-cos-forwarding-classes-in-use>
     intf-cos-forwarding-classes-in-use
    </intf-cos-forwarding-classes-in-use>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
```

```
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </interface-set-queue-information>
</interface-set>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </queue-counters>
  </physical-interface>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <interface-cos-summary>
          <intf-cos-forwarding-classes-supported>
```


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```
            intf-cos-forwarding-classes-supported
           </intf-cos-forwarding-classes-supported>
           <intf-cos-forwarding-classes-in-use>
            intf-cos-forwarding-classes-in-use
           </intf-cos-forwarding-classes-in-use>
           <intf-cos-queue-type>
            intf-cos-queue-type
           </intf-cos-queue-type>
           <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
           </intf-cos-num-queues-supported>
           <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
           </intf-cos-num-queues-in-use>
           <intf-cos-burst-size-for-ifl>
            intf-cos-burst-size-for-ifl
           </intf-cos-burst-size-for-ifl>
          </interface-cos-summary>
         </queue-counters>
        </logical-interface>
       </physical-interface>
      </interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <ingress-queue-counters>
    <interface-cos-summary>
     <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
     </intf-cos-forwarding-classes-supported>
     <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
     </intf-cos-forwarding-classes-in-use>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
     <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
     </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
   </ingress-queue-counters>
  </logical-interface>
```

```
  </physical-interface>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
  <logical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
```


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```
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </queue-counters>
  </logical-interface>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

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<interface-cos-summary>

Usage

```
<interface-information>
 <interface-set>
  <interface-set-queue-information>
   <queue-counters>
    <interface-cos-summary>
     <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
     </intf-cos-forwarding-classes-supported>
     <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
     </intf-cos-forwarding-classes-in-use>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
     <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
     </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
   </queue-counters>
  </interface-set-queue-information>
 </interface-set>
</interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-information>
 <interface-set>
  <interface-set-queue-information>
   <ingress-queue-counters>
    <interface-cos-summary>
     <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
     </intf-cos-forwarding-classes-supported>
     <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
     </intf-cos-forwarding-classes-in-use>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
```


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```
            </intf-cos-num-queues-supported>
            <intf-cos-num-queues-in-use>
              intf-cos-num-queues-in-use
            </intf-cos-num-queues-in-use>
            <intf-cos-burst-size-for-ifl>
              intf-cos-burst-size-for-ifl
            </intf-cos-burst-size-for-ifl>
          </interface-cos-summary>
        </ingress-queue-counters>
      </interface-set-queue-information>
    </interface-set>
  </interface-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
```

```
<logical-interface>
 <queue-counters>
  <interface-cos-summary>
   <intf-cos-forwarding-classes-supported>
    intf-cos-forwarding-classes-supported
   </intf-cos-forwarding-classes-supported>
   <intf-cos-forwarding-classes-in-use>
    intf-cos-forwarding-classes-in-use
   </intf-cos-forwarding-classes-in-use>
   <intf-cos-queue-type>
    intf-cos-queue-type
   </intf-cos-queue-type>
   <intf-cos-num-queues-supported>
    intf-cos-num-queues-supported
   </intf-cos-num-queues-supported>
   <intf-cos-num-queues-in-use>
    intf-cos-num-queues-in-use
   </intf-cos-num-queues-in-use>
   <intf-cos-burst-size-for-ifl>
    intf-cos-burst-size-for-ifl
   </intf-cos-burst-size-for-ifl>
  </interface-cos-summary>
 </queue-counters>
</logical-interface>
</physical-interface>
</interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <ingress-queue-counters>
    <interface-cos-summary>
     <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
     </intf-cos-forwarding-classes-supported>
     <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
     </intf-cos-forwarding-classes-in-use>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
     <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
```


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```
            </intf-cos-burst-size-for-ifl>
          </interface-cos-summary>
        </ingress-queue-counters>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
  <logical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
```

```
            intf-cos-forwarding-classes-in-use
          </intf-cos-forwarding-classes-in-use>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
            intf-cos-num-queues-in-use
          </intf-cos-num-queues-in-use>
          <intf-cos-burst-size-for-ifl>
            intf-cos-burst-size-for-ifl
          </intf-cos-burst-size-for-ifl>
        </interface-cos-summary>
      </queue-counters>
    </logical-interface>
  </interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-filter-information>
```

Description Summary of forwarding class and queue information on an interface

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<interface-cos-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <interface-cos-summary>
          <intf-cos-forwarding-classes-supported>
            intf-cos-forwarding-classes-supported
          </intf-cos-forwarding-classes-supported>
          <intf-cos-forwarding-classes-in-use>
            intf-cos-forwarding-classes-in-use
          </intf-cos-forwarding-classes-in-use>
          <intf-cos-queue-type>
            intf-cos-queue-type
          </intf-cos-queue-type>
          <intf-cos-num-queues-supported>
            intf-cos-num-queues-supported
          </intf-cos-num-queues-supported>
          <intf-cos-num-queues-in-use>
```

```
                intf-cos-num-queues-in-use
               </intf-cos-num-queues-in-use>
               <intf-cos-burst-size-for-ifl>
                intf-cos-burst-size-for-ifl
               </intf-cos-burst-size-for-ifl>
              </interface-cos-summary>
             </queue-counters>
            </logical-interface>
           </physical-interface>
          </interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <ingress-queue-counters>
    <interface-cos-summary>
     <intf-cos-forwarding-classes-supported>
      intf-cos-forwarding-classes-supported
     </intf-cos-forwarding-classes-supported>
     <intf-cos-forwarding-classes-in-use>
      intf-cos-forwarding-classes-in-use
     </intf-cos-forwarding-classes-in-use>
     <intf-cos-queue-type>
      intf-cos-queue-type
     </intf-cos-queue-type>
     <intf-cos-num-queues-supported>
      intf-cos-num-queues-supported
     </intf-cos-num-queues-supported>
     <intf-cos-num-queues-in-use>
      intf-cos-num-queues-in-use
     </intf-cos-num-queues-in-use>
     <intf-cos-burst-size-for-ifl>
      intf-cos-burst-size-for-ifl
     </intf-cos-burst-size-for-ifl>
    </interface-cos-summary>
   </ingress-queue-counters>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-policer-information>
 <physical-interface>
```


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```
<ingress-queue-counters>
 <interface-cos-summary>
  <intf-cos-forwarding-classes-supported>
   intf-cos-forwarding-classes-supported
  </intf-cos-forwarding-classes-supported>
  <intf-cos-forwarding-classes-in-use>
   intf-cos-forwarding-classes-in-use
  </intf-cos-forwarding-classes-in-use>
  <intf-cos-queue-type>
   intf-cos-queue-type
  </intf-cos-queue-type>
  <intf-cos-num-queues-supported>
   intf-cos-num-queues-supported
  </intf-cos-num-queues-supported>
  <intf-cos-num-queues-in-use>
   intf-cos-num-queues-in-use
  </intf-cos-num-queues-in-use>
  <intf-cos-burst-size-for-ifl>
   intf-cos-burst-size-for-ifl
  </intf-cos-burst-size-for-ifl>
 </interface-cos-summary>
</ingress-queue-counters>
</physical-interface>
</interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-policer-information>
 <logical-interface>
  <queue-counters>
   <interface-cos-summary>
    <intf-cos-forwarding-classes-supported>
     intf-cos-forwarding-classes-supported
    </intf-cos-forwarding-classes-supported>
    <intf-cos-forwarding-classes-in-use>
     intf-cos-forwarding-classes-in-use
    </intf-cos-forwarding-classes-in-use>
    <intf-cos-queue-type>
     intf-cos-queue-type
    </intf-cos-queue-type>
    <intf-cos-num-queues-supported>
     intf-cos-num-queues-supported
    </intf-cos-num-queues-supported>
    <intf-cos-num-queues-in-use>
     intf-cos-num-queues-in-use
    </intf-cos-num-queues-in-use>
    <intf-cos-burst-size-for-ifl>
     intf-cos-burst-size-for-ifl
    </intf-cos-burst-size-for-ifl>
   </interface-cos-summary>
  </queue-counters>
```

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```
  </logical-interface>
</interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-cos-summary>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <interface-cos-summary>
        <intf-cos-forwarding-classes-supported>
          intf-cos-forwarding-classes-supported
        </intf-cos-forwarding-classes-supported>
        <intf-cos-forwarding-classes-in-use>
          intf-cos-forwarding-classes-in-use
        </intf-cos-forwarding-classes-in-use>
        <intf-cos-queue-type>
          intf-cos-queue-type
        </intf-cos-queue-type>
        <intf-cos-num-queues-supported>
          intf-cos-num-queues-supported
        </intf-cos-num-queues-supported>
        <intf-cos-num-queues-in-use>
          intf-cos-num-queues-in-use
        </intf-cos-num-queues-in-use>
        <intf-cos-burst-size-for-ifl>
          intf-cos-burst-size-for-ifl
        </intf-cos-burst-size-for-ifl>
      </interface-cos-summary>
    </ingress-queue-counters>
  </logical-interface>
</interface-policer-information>
```

Description Summary of forwarding class and queue information on an interface

<interface-filter-information>

Usage

```
<interface-filter-information>
  <physical-interface>....</physical-interface>
  <logical-interface>....</logical-interface>
</interface-filter-information>
```

Description

<interface-information>

Usage

```
<interface-information>
```


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```
  <physical-interface>....</physical-interface>
  <logical-interface>....</logical-interface>
  <controller>....</controller>
  <interface-set>....</interface-set>
  <docsis-information>....</docsis-information>
</interface-information>
```

Description

<interface-location-name-information>

Usage

```
<interface-location-name-information>
  <location-name-information>....</location-name-information>
</interface-location-name-information>
```

Description

<interface-location-slot-information>

Usage

```
<interface-location-slot-information>
  <location-slot-information>....</location-slot-information>
</interface-location-slot-information>
```

Description

<interface-policer-information>

Usage

```
<interface-policer-information>
  <physical-interface>....</physical-interface>
  <logical-interface>....</logical-interface>
</interface-policer-information>
```

Description

<interface-set>

Usage

```
<interface-set>
  <name>
    name
  </name>
  <interface-set-index>
    interface-set-index
  </interface-set-index>
  <interface-set-member-list>....</interface-set-member-list>
  <traffic-statistics>....</traffic-statistics>
  <interface-set-queue-information>....</interface-set-queue-information>
</interface-set>
```

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Description

<interface-set>

Usage

```
<interface-information>
  <interface-set>
    <name>
      name
    </name>
    <interface-set-index>
      interface-set-index
    </interface-set-index>
    <interface-set-member-list>....</interface-set-member-list>
    <traffic-statistics>....</traffic-statistics>
    <interface-set-queue-information>....</interface-set-queue-information>
  </interface-set>
</interface-information>
```

Description

<interface-set-member-list>

Usage

```
<interface-set>
  <interface-set-member-list>
    <interface-set-member>
      interface-set-member
    </interface-set-member>
  </interface-set-member-list>
</interface-set>
```

Description

<interface-set-member-list>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-member-list>
      <interface-set-member>
        interface-set-member
      </interface-set-member>
    </interface-set-member-list>
  </interface-set>
</interface-information>
```

Description

<interface-set-queue-information>

Usage

```
<interface-set>
```


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```
  <interface-set-queue-information>
    <queue-counters>....</queue-counters>
    <ingress-queue-counters>....</ingress-queue-counters>
  </interface-set-queue-information>
</interface-set>
```

Description

<interface-set-queue-information>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <queue-counters>....</queue-counters>
      <ingress-queue-counters>....</ingress-queue-counters>
    </interface-set-queue-information>
  </interface-set>
</interface-information>
```

Description

<interface-tx-queue>

Usage

```
<ct3-information>
  <interface-tx-queue>
    <name>
      name
    </name>
    <bandwidth>
      bandwidth
    </bandwidth>
    <wrr>
      wrr
    </wrr>
    <output-packets>
      output-packets
    </output-packets>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-drops>
      output-drops
    </output-drops>
    <output-drops-bytes>
      output-drops-bytes
    </output-drops-bytes>
    <output-errors>
      output-errors
    </output-errors>
  </interface-tx-queue>
</ct3-information>
```

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Description

<interface-tx-queue>

Usage

```
<cds1-information>
  <interface-tx-queue>
    <name>
      name
    </name>
    <bandwidth>
      bandwidth
    </bandwidth>
    <wrr>
      wrr
    </wrr>
    <output-packets>
      output-packets
    </output-packets>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-drops>
      output-drops
    </output-drops>
    <output-drops-bytes>
      output-drops-bytes
    </output-drops-bytes>
    <output-errors>
      output-errors
    </output-errors>
  </interface-tx-queue>
</cds1-information>
```

Description

<interface-tx-queue>

Usage

```
<nxds0-information>
  <interface-tx-queue>
    <name>
      name
    </name>
    <bandwidth>
      bandwidth
    </bandwidth>
    <wrr>
      wrr
    </wrr>
    <output-packets>
      output-packets
    </output-packets>
    <output-bytes>
      output-bytes
```


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```
    </output-bytes>
    <output-drops>
     output-drops
    </output-drops>
    <output-drops-bytes>
     output-drops-bytes
    </output-drops-bytes>
    <output-errors>
     output-errors
    </output-errors>
   </interface-tx-queue>
</nxds0-information>
```

Description

<interface-tx-queue>

Usage

```
<physical-interface>
 <ct3-information>
  <interface-tx-queue>
   <name>
    name
   </name>
   <bandwidth>
    bandwidth
   </bandwidth>
   <wrr>
    wrr
   </wrr>
   <output-packets>
    output-packets
   </output-packets>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-drops>
    output-drops
   </output-drops>
   <output-drops-bytes>
    output-drops-bytes
   </output-drops-bytes>
   <output-errors>
    output-errors
   </output-errors>
  </interface-tx-queue>
 </ct3-information>
</physical-interface>
```

Description

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<interface-tx-queue>

Usage

```
<physical-interface>
  <cds1-information>
    <interface-tx-queue>
      <name>
        name
      </name>
      <bandwidth>
        bandwidth
      </bandwidth>
      <wrr>
        wrr
      </wrr>
      <output-packets>
        output-packets
      </output-packets>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-drops>
        output-drops
      </output-drops>
      <output-drops-bytes>
        output-drops-bytes
      </output-drops-bytes>
      <output-errors>
        output-errors
      </output-errors>
    </interface-tx-queue>
  </cds1-information>
</physical-interface>
```

Description

<interface-tx-queue>

Usage

```
<physical-interface>
  <nxds0-information>
    <interface-tx-queue>
      <name>
        name
      </name>
      <bandwidth>
        bandwidth
      </bandwidth>
      <wrr>
        wrr
      </wrr>
      <output-packets>
        output-packets
      </output-packets>
```


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```
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-drops>
        output-drops
      </output-drops>
      <output-drops-bytes>
        output-drops-bytes
      </output-drops-bytes>
      <output-errors>
        output-errors
      </output-errors>
    </interface-tx-queue>
  </nxds0-information>
</physical-interface>
```

Description

<interface-tx-queue>

Usage

```
<interface-information>
  <physical-interface>
    <ct3-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </ct3-information>
  </physical-interface>
</interface-information>
```

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Description

<interface-tx-queue>

Usage

```
<interface-information>
  <physical-interface>
    <cds1-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-information>
  <physical-interface>
    <nxds0-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
```


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```
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </nxds0-information>
  </physical-interface>
</interface-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ct3-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
```

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```
    </ct3-information>
  </physical-interface>
</interface-filter-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-filter-information>
  <physical-interface>
    <cds1-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-filter-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-filter-information>
  <physical-interface>
    <nxds0-information>
      <interface-tx-queue>
        <name>
          name
        </name>
```


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```
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </nxds0-information>
  </physical-interface>
</interface-filter-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ct3-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
```

```
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </ct3-information>
  </physical-interface>
</interface-policer-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-policer-information>
  <physical-interface>
    <cds1-information>
      <interface-tx-queue>
        <name>
          name
        </name>
        <bandwidth>
          bandwidth
        </bandwidth>
        <wrr>
          wrr
        </wrr>
        <output-packets>
          output-packets
        </output-packets>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-drops>
          output-drops
        </output-drops>
        <output-drops-bytes>
          output-drops-bytes
        </output-drops-bytes>
        <output-errors>
          output-errors
        </output-errors>
      </interface-tx-queue>
    </cds1-information>
  </physical-interface>
</interface-policer-information>
```

Description

<interface-tx-queue>

Usage

```
<interface-policer-information>
  <physical-interface>
```


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```
<nxds0-information>
  <interface-tx-queue>
    <name>
      name
    </name>
    <bandwidth>
      bandwidth
    </bandwidth>
    <wrr>
      wrr
    </wrr>
    <output-packets>
      output-packets
    </output-packets>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-drops>
      output-drops
    </output-drops>
    <output-drops-bytes>
      output-drops-bytes
    </output-drops-bytes>
    <output-errors>
      output-errors
    </output-errors>
  </interface-tx-queue>
 </nxds0-information>
</physical-interface>
</interface-policer-information>
```

Description

<interval>

Usage

```
<interval-information>
  <interval>
    <range>
      range
    </range>
    <media-alarm>....</media-alarm>
  </interval>
</interval-information>
```

Description Statistics for a single interval

<interval>

Usage

```
<physical-interface>
  <interval-information>
    <interval>
```

```
      <range>
       range
      </range>
      <media-alarm>....</media-alarm>
     </interval>
    </interval-information>
   </physical-interface>
```

Description Statistics for a single interval

<interval>

Usage

```
<interface-information>
 <physical-interface>
  <interval-information>
   <interval>
    <range>
     range
    </range>
    <media-alarm>....</media-alarm>
   </interval>
  </interval-information>
 </physical-interface>
</interface-information>
```

Description Statistics for a single interval

<interval>

Usage

```
<interface-filter-information>
 <physical-interface>
  <interval-information>
   <interval>
    <range>
     range
    </range>
    <media-alarm>....</media-alarm>
   </interval>
  </interval-information>
 </physical-interface>
</interface-filter-information>
```

Description Statistics for a single interval

<interval>

Usage

```
<interface-policer-information>
 <physical-interface>
```


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```
    <interval-information>
     <interval>
      <range>
       range
      </range>
      <media-alarm>....</media-alarm>
     </interval>
    </interval-information>
   </physical-interface>
</interface-policer-information>
```

Description Statistics for a single interval

<interval-information>

Usage

```
<interval-information>
 <interval>....</interval>
</interval-information>
```

Description

<interval-information>

Usage

```
<physical-interface>
 <interval-information>
  <interval>....</interval>
 </interval-information>
</physical-interface>
```

Description

<interval-information>

Usage

```
<interface-information>
 <physical-interface>
  <interval-information>
   <interval>....</interval>
  </interval-information>
 </physical-interface>
</interface-information>
```

Description

<interval-information>

Usage

```
<interface-filter-information>
 <physical-interface>
```

```
    <interval-information>
      <interval>....</interval>
    </interval-information>
  </physical-interface>
</interface-filter-information>
```

Description

<interval-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <interval-information>
      <interval>....</interval>
    </interval-information>
  </physical-interface>
</interface-policer-information>
```

Description

<ipv4-multicast-statistics>

Usage

```
<multicast-statistics>
  <ipv4-multicast-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-packets>
      output-packets
    </output-packets>
    <output-pps>
      output-pps
    </output-pps>
  </ipv4-multicast-statistics>
</multicast-statistics>
```


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Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<logical-interface>
  <multicast-statistics>
    <ipv4-multicast-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-packets>
        output-packets
      </output-packets>
      <output-pps>
        output-pps
      </output-pps>
    </ipv4-multicast-statistics>
  </multicast-statistics>
</logical-interface>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<physical-interface>
  <multicast-statistics>
    <ipv4-multicast-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bytes>
        output-bytes
      </output-bytes>
```

```
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-packets>
        output-packets
      </output-packets>
      <output-pps>
        output-pps
      </output-pps>
    </ipv4-multicast-statistics>
  </multicast-statistics>
</physical-interface>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multicast-statistics>
      <ipv4-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv4-multicast-statistics>
    </multicast-statistics>
```


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```
  </logical-interface>
</physical-interface>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <multicast-statistics>
      <ipv4-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv4-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv4-multicast-statistics>
          <input-bytes>
```

```
                    input-bytes
                   </input-bytes>
                   <input-bps>
                    input-bps
                   </input-bps>
                   <output-bytes>
                    output-bytes
                   </output-bytes>
                   <output-bps>
                    output-bps
                   </output-bps>
                   <input-packets>
                    input-packets
                   </input-packets>
                   <input-pps>
                    input-pps
                   </input-pps>
                   <output-packets>
                    output-packets
                   </output-packets>
                   <output-pps>
                    output-pps
                   </output-pps>
                  </ipv4-multicast-statistics>
                 </multicast-statistics>
                </logical-interface>
               </physical-interface>
              </interface-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <multicast-statistics>
   <ipv4-multicast-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
```


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```
            input-pps
           </input-pps>
           <output-packets>
            output-packets
           </output-packets>
           <output-pps>
            output-pps
           </output-pps>
          </ipv4-multicast-statistics>
         </multicast-statistics>
        </logical-interface>
       </interface-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <multicast-statistics>
   <ipv4-multicast-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
   </ipv4-multicast-statistics>
  </multicast-statistics>
 </physical-interface>
</interface-filter-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv4-multicast-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
        </ipv4-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multicast-statistics>
      <ipv4-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
```


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```
                <output-bytes>
                  output-bytes
                </output-bytes>
                <output-bps>
                  output-bps
                </output-bps>
                <input-packets>
                  input-packets
                </input-packets>
                <input-pps>
                  input-pps
                </input-pps>
                <output-packets>
                  output-packets
                </output-packets>
                <output-pps>
                  output-pps
                </output-pps>
              </ipv4-multicast-statistics>
            </multicast-statistics>
          </logical-interface>
        </interface-filter-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <multicast-statistics>
      <ipv4-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
```

```
                output-pps
              </output-pps>
            </ipv4-multicast-statistics>
          </multicast-statistics>
        </physical-interface>
      </interface-policer-information>
```

Description IPV4 multicast statistics for interface

<ipv4-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv4-multicast-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
        </ipv4-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description IPV4 multicast statistics for interface

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<ipv4-multicast-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multicast-statistics>
      <ipv4-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv4-multicast-statistics>
    </multicast-statistics>
  </logical-interface>
</interface-policer-information>
```

Description IPV4 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<multicast-statistics>
  <ipv6-multicast-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
```

```
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-packets>
      output-packets
    </output-packets>
    <output-pps>
      output-pps
    </output-pps>
  </ipv6-multicast-statistics>
</multicast-statistics>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<logical-interface>
  <multicast-statistics>
    <ipv6-multicast-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-packets>
        output-packets
      </output-packets>
      <output-pps>
        output-pps
      </output-pps>
    </ipv6-multicast-statistics>
  </multicast-statistics>
</logical-interface>
```


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Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<physical-interface>
  <multicast-statistics>
    <ipv6-multicast-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-packets>
        output-packets
      </output-packets>
      <output-pps>
        output-pps
      </output-pps>
    </ipv6-multicast-statistics>
  </multicast-statistics>
</physical-interface>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multicast-statistics>
      <ipv6-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
```

```
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
          </ipv6-multicast-statistics>
        </multicast-statistics>
      </logical-interface>
    </physical-interface>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <multicast-statistics>
      <ipv6-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
```


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```
      </ipv6-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv6-multicast-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
        </ipv6-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-information>
  <logical-interface>
```

```
<multicast-statistics>
 <ipv6-multicast-statistics>
  <input-bytes>
   input-bytes
  </input-bytes>
  <input-bps>
   input-bps
  </input-bps>
  <output-bytes>
   output-bytes
  </output-bytes>
  <output-bps>
   output-bps
  </output-bps>
  <input-packets>
   input-packets
  </input-packets>
  <input-pps>
   input-pps
  </input-pps>
  <output-packets>
   output-packets
  </output-packets>
  <output-pps>
   output-pps
  </output-pps>
 </ipv6-multicast-statistics>
</multicast-statistics>
</logical-interface>
</interface-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <multicast-statistics>
   <ipv6-multicast-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
```


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```
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv6-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-filter-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv6-multicast-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
        </ipv6-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
```

```
</interface-filter-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multicast-statistics>
      <ipv6-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv6-multicast-statistics>
    </multicast-statistics>
  </logical-interface>
</interface-filter-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <multicast-statistics>
      <ipv6-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
```


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```
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv6-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-policer-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <ipv6-multicast-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
```

```
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
          </ipv6-multicast-statistics>
        </multicast-statistics>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description IPV6 multicast statistics for interface

<ipv6-multicast-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multicast-statistics>
      <ipv6-multicast-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
      </ipv6-multicast-statistics>
    </multicast-statistics>
  </logical-interface>
</interface-policer-information>
```

Description IPV6 multicast statistics for interface

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<ipv6-total-statistics>

Usage

```
<traffic-statistics>
  <ipv6-total-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
  </ipv6-total-statistics>
</traffic-statistics>
```

Description

<ipv6-total-statistics>

Usage

```
<transit-traffic-statistics>
  <ipv6-total-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
  </ipv6-total-statistics>
</transit-traffic-statistics>
```

Description

<ipv6-total-statistics>

Usage

```
<virtual-circuit-information>
  <traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
```

```
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </traffic-statistics>
</virtual-circuit-information>
```

Description

<ipv6-total-statistics>

Usage

```
<virtual-path-information>
  <traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </traffic-statistics>
</virtual-path-information>
```

Description

<ipv6-total-statistics>

Usage

```
<logical-interface>
  <traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
```


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```
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </traffic-statistics>
</logical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<logical-interface>
  <transit-traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </transit-traffic-statistics>
</logical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
```

```
  </virtual-circuit-information>
</logical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<physical-interface>
  <traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </traffic-statistics>
</physical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<physical-interface>
  <virtual-path-information>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
  </virtual-path-information>
</physical-interface>
```


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Description

<ipv6-total-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

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<ipv6-total-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-set>
  <traffic-statistics>
    <ipv6-total-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-total-statistics>
  </traffic-statistics>
</interface-set>
```

Description

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<ipv6-total-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
  </physical-interface>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <transit-traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </transit-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```


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Description

<ipv6-total-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <ipv6-total-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
     </ipv6-total-statistics>
    </traffic-statistics>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <traffic-statistics>
   <ipv6-total-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-total-statistics>
  </traffic-statistics>
 </logical-interface>
```

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```
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <transit-traffic-statistics>
   <ipv6-total-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-total-statistics>
  </transit-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <traffic-statistics>
    <ipv6-total-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-total-statistics>
   </traffic-statistics>
  </virtual-circuit-information>
 </logical-interface>
```


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```
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-information>
 <interface-set>
  <traffic-statistics>
   <ipv6-total-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-total-statistics>
  </traffic-statistics>
 </interface-set>
</interface-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <traffic-statistics>
   <ipv6-total-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-total-statistics>
  </traffic-statistics>
 </physical-interface>
</interface-filter-information>
```

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Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </logical-interface>
  </physical-interface>
```


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```
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <transit-traffic-statistics>
    <ipv6-total-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-total-statistics>
   </transit-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <ipv6-total-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
     </ipv6-total-statistics>
```

```
        </traffic-statistics>
       </virtual-circuit-information>
     </logical-interface>
   </physical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
```


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```
    </transit-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
```

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```
    </traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
```


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```
        </ipv6-total-statistics>
       </traffic-statistics>
      </logical-interface>
     </physical-interface>
    </interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <transit-traffic-statistics>
    <ipv6-total-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-total-statistics>
   </transit-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <ipv6-total-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
```

```
                <output-packets>
                  output-packets
                </output-packets>
              </ipv6-total-statistics>
            </traffic-statistics>
          </virtual-circuit-information>
        </logical-interface>
      </physical-interface>
    </interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-total-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
```


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```
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-total-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<ipv6-total-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-total-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<traffic-statistics>
  <ipv6-transit-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
```

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```
    </output-packets>
  </ipv6-transit-statistics>
</traffic-statistics>
```

Description

<ipv6-transit-statistics>

Usage

```
<transit-traffic-statistics>
  <ipv6-transit-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
  </ipv6-transit-statistics>
</transit-traffic-statistics>
```

Description

<ipv6-transit-statistics>

Usage

```
<virtual-circuit-information>
  <traffic-statistics>
    <ipv6-transit-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-transit-statistics>
  </traffic-statistics>
</virtual-circuit-information>
```

Description

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<ipv6-transit-statistics>

Usage

```
<virtual-path-information>
  <traffic-statistics>
    <ipv6-transit-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-transit-statistics>
  </traffic-statistics>
</virtual-path-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<logical-interface>
  <traffic-statistics>
    <ipv6-transit-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </ipv6-transit-statistics>
  </traffic-statistics>
</logical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<logical-interface>
  <transit-traffic-statistics>
```

```
    <ipv6-transit-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-transit-statistics>
   </transit-traffic-statistics>
</logical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<logical-interface>
 <virtual-circuit-information>
  <traffic-statistics>
   <ipv6-transit-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-transit-statistics>
  </traffic-statistics>
 </virtual-circuit-information>
</logical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<physical-interface>
 <traffic-statistics>
  <ipv6-transit-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
```


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```
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
     </ipv6-transit-statistics>
    </traffic-statistics>
   </physical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<physical-interface>
 <virtual-path-information>
  <traffic-statistics>
   <ipv6-transit-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-transit-statistics>
  </traffic-statistics>
 </virtual-path-information>
</physical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <traffic-statistics>
   <ipv6-transit-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
```

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```
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
```


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```
            input-packets
           </input-packets>
           <output-packets>
            output-packets
           </output-packets>
          </ipv6-transit-statistics>
         </traffic-statistics>
        </virtual-circuit-information>
       </logical-interface>
      </physical-interface>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-set>
 <traffic-statistics>
  <ipv6-transit-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
  </ipv6-transit-statistics>
 </traffic-statistics>
</interface-set>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <traffic-statistics>
   <ipv6-transit-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
```

```
                output-packets
              </output-packets>
            </ipv6-transit-statistics>
          </traffic-statistics>
        </physical-interface>
      </interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-transit-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
```


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```
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <transit-traffic-statistics>
    <ipv6-transit-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-transit-statistics>
   </transit-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <ipv6-transit-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
```

```
                <input-packets>
                  input-packets
                </input-packets>
                <output-packets>
                  output-packets
                </output-packets>
              </ipv6-transit-statistics>
            </traffic-statistics>
          </virtual-circuit-information>
        </logical-interface>
      </physical-interface>
    </interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
```


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```
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-transit-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-information>
  <interface-set>
    <traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
```

```
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </interface-set>
</interface-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
```


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```
            input-packets
           </input-packets>
           <output-packets>
            output-packets
           </output-packets>
          </ipv6-transit-statistics>
         </traffic-statistics>
        </virtual-path-information>
       </physical-interface>
      </interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <traffic-statistics>
    <ipv6-transit-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
    </ipv6-transit-statistics>
   </traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <transit-traffic-statistics>
    <ipv6-transit-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
```

```
            </output-bytes>
            <input-packets>
              input-packets
            </input-packets>
            <output-packets>
              output-packets
            </output-packets>
          </ipv6-transit-statistics>
        </transit-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <traffic-statistics>
          <ipv6-transit-statistics>
            <input-bytes>
              input-bytes
            </input-bytes>
            <output-bytes>
              output-bytes
            </output-bytes>
            <input-packets>
              input-packets
            </input-packets>
            <output-packets>
              output-packets
            </output-packets>
          </ipv6-transit-statistics>
        </traffic-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
```


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```
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <transit-traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
```

```
            <output-bytes>
              output-bytes
            </output-bytes>
            <input-packets>
              input-packets
            </input-packets>
            <output-packets>
              output-packets
            </output-packets>
          </ipv6-transit-statistics>
        </traffic-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </interface-filter-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <traffic-statistics>
      <ipv6-transit-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
      </ipv6-transit-statistics>
    </traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
```


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```
            <output-bytes>
              output-bytes
            </output-bytes>
            <input-packets>
              input-packets
            </input-packets>
            <output-packets>
              output-packets
            </output-packets>
          </ipv6-transit-statistics>
        </traffic-statistics>
      </virtual-path-information>
    </physical-interface>
  </interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-transit-statistics>
      </traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <transit-traffic-statistics>
        <ipv6-transit-statistics>
          <input-bytes>
```

```
                input-bytes
               </input-bytes>
               <output-bytes>
                output-bytes
               </output-bytes>
               <input-packets>
                input-packets
               </input-packets>
               <output-packets>
                output-packets
               </output-packets>
              </ipv6-transit-statistics>
             </transit-traffic-statistics>
            </logical-interface>
           </physical-interface>
          </interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <ipv6-transit-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
     </ipv6-transit-statistics>
    </traffic-statistics>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
```


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```
    <traffic-statistics>
     <ipv6-transit-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
     </ipv6-transit-statistics>
    </traffic-statistics>
   </logical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <transit-traffic-statistics>
   <ipv6-transit-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
   </ipv6-transit-statistics>
  </transit-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

Description

<ipv6-transit-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <traffic-statistics>
```

```
        <ipv6-transit-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
        </ipv6-transit-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description

<irb-domain>

Usage

```
<irb-domain>
  <irb-routing-instance>
    irb-routing-instance
  </irb-routing-instance>
  <irb-bridge>
    irb-bridge
  </irb-bridge>
</irb-domain>
```

Description

<irb-domain>

Usage

```
<logical-interface>
  <irb-domain>
    <irb-routing-instance>
      irb-routing-instance
    </irb-routing-instance>
    <irb-bridge>
      irb-bridge
    </irb-bridge>
  </irb-domain>
</logical-interface>
```

Description

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<irb-domain>

Usage

```
<physical-interface>
  <logical-interface>
    <irb-domain>
      <irb-routing-instance>
        irb-routing-instance
      </irb-routing-instance>
      <irb-bridge>
        irb-bridge
      </irb-bridge>
    </irb-domain>
  </logical-interface>
</physical-interface>
```

Description

<irb-domain>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <irb-domain>
        <irb-routing-instance>
          irb-routing-instance
        </irb-routing-instance>
        <irb-bridge>
          irb-bridge
        </irb-bridge>
      </irb-domain>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<irb-domain>

Usage

```
<interface-information>
  <logical-interface>
    <irb-domain>
      <irb-routing-instance>
        irb-routing-instance
      </irb-routing-instance>
      <irb-bridge>
        irb-bridge
      </irb-bridge>
    </irb-domain>
  </logical-interface>
```

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```
</interface-information>
```

Description

<irb-domain>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <irb-domain>
        <irb-routing-instance>
          irb-routing-instance
        </irb-routing-instance>
        <irb-bridge>
          irb-bridge
        </irb-bridge>
      </irb-domain>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<irb-domain>

Usage

```
<interface-filter-information>
  <logical-interface>
    <irb-domain>
      <irb-routing-instance>
        irb-routing-instance
      </irb-routing-instance>
      <irb-bridge>
        irb-bridge
      </irb-bridge>
    </irb-domain>
  </logical-interface>
</interface-filter-information>
```

Description

<irb-domain>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <irb-domain>
        <irb-routing-instance>
          irb-routing-instance
        </irb-routing-instance>
        <irb-bridge>
```


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```
            irb-bridge
          </irb-bridge>
        </irb-domain>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description

<irb-domain>

Usage

```
<interface-policer-information>
  <logical-interface>
    <irb-domain>
      <irb-routing-instance>
        irb-routing-instance
      </irb-routing-instance>
      <irb-bridge>
        irb-bridge
      </irb-bridge>
    </irb-domain>
  </logical-interface>
</interface-policer-information>
```

Description

<jswitch-port>

Usage

```
<jswitch-port-information>
  <jswitch-port>
    <physical-interface-name>
      physical-interface-name
    </physical-interface-name>
    <port>
      port
    </port>
    <admin-state>
      admin-state
    </admin-state>
    <physical-link>
      physical-link
    </physical-link>
    <link-speed>
      link-speed
    </link-speed>
    <auto-negotiation>
      auto-negotiation
    </auto-negotiation>
    <link-duplexity>
      link-duplexity
    </link-duplexity>
    <port-mtu>
```

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```
    port-mtu
   </port-mtu>
   <ethernet-mac-statistics>....</ethernet-mac-statistics>
   <ethernet-autonegotiation>....</ethernet-autonegotiation>
   <vlan-id>
    vlan-id
   </vlan-id>
   <default-vlan-id>
    default-vlan-id
   </default-vlan-id>
   <cascade-port>
    cascade-port
   </cascade-port>
  </jswitch-port>
</jswitch-port-information>
```

Description

<jswitch-port-information>

Usage

```
<jswitch-port-information>
  <jswitch-port>....</jswitch-port>
</jswitch-port-information>
```

Description

<keepalive-config>

Usage

```
<keepalive-config>
  <keepalive-interval>
    keepalive-interval
  </keepalive-interval>
  <keepalive-up-count>
    keepalive-up-count
  </keepalive-up-count>
  <keepalive-down-count>
    keepalive-down-count
  </keepalive-down-count>
</keepalive-config>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<logical-interface>
  <keepalive-config>
    <keepalive-interval>
      keepalive-interval
    </keepalive-interval>
```


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```
    <keepalive-up-count>
     keepalive-up-count
    </keepalive-up-count>
    <keepalive-down-count>
     keepalive-down-count
    </keepalive-down-count>
   </keepalive-config>
  </logical-interface>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<physical-interface>
 <keepalive-config>
  <keepalive-interval>
   keepalive-interval
  </keepalive-interval>
  <keepalive-up-count>
   keepalive-up-count
  </keepalive-up-count>
  <keepalive-down-count>
   keepalive-down-count
  </keepalive-down-count>
 </keepalive-config>
</physical-interface>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<physical-interface>
 <logical-interface>
  <keepalive-config>
   <keepalive-interval>
    keepalive-interval
   </keepalive-interval>
   <keepalive-up-count>
    keepalive-up-count
   </keepalive-up-count>
   <keepalive-down-count>
    keepalive-down-count
   </keepalive-down-count>
  </keepalive-config>
 </logical-interface>
</physical-interface>
```

Description Configured keepalive settings on this interface

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<keepalive-config>

Usage

```
<interface-information>
  <physical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </physical-interface>
</interface-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <keepalive-config>
        <keepalive-interval>
          keepalive-interval
        </keepalive-interval>
        <keepalive-up-count>
          keepalive-up-count
        </keepalive-up-count>
        <keepalive-down-count>
          keepalive-down-count
        </keepalive-down-count>
      </keepalive-config>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-information>
  <logical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
```


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```
        </keepalive-interval>
        <keepalive-up-count>
          keepalive-up-count
        </keepalive-up-count>
        <keepalive-down-count>
          keepalive-down-count
        </keepalive-down-count>
      </keepalive-config>
    </logical-interface>
  </interface-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-filter-information>
  <physical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </physical-interface>
</interface-filter-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <keepalive-config>
        <keepalive-interval>
          keepalive-interval
        </keepalive-interval>
        <keepalive-up-count>
          keepalive-up-count
        </keepalive-up-count>
        <keepalive-down-count>
          keepalive-down-count
        </keepalive-down-count>
      </keepalive-config>
    </logical-interface>
```

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```
  </physical-interface>
</interface-filter-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-filter-information>
  <logical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </logical-interface>
</interface-filter-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-policer-information>
  <physical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </physical-interface>
</interface-policer-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-policer-information>
```


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```
<physical-interface>
  <logical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </logical-interface>
</physical-interface>
</interface-policer-information>
```

Description Configured keepalive settings on this interface

<keepalive-config>

Usage

```
<interface-policer-information>
  <logical-interface>
    <keepalive-config>
      <keepalive-interval>
        keepalive-interval
      </keepalive-interval>
      <keepalive-up-count>
        keepalive-up-count
      </keepalive-up-count>
      <keepalive-down-count>
        keepalive-down-count
      </keepalive-down-count>
    </keepalive-config>
  </logical-interface>
</interface-policer-information>
```

Description Configured keepalive settings on this interface

<keepalive-statistics>

Usage

```
<keepalive-statistics>
  <keepalive-lmi-descriptor>
    keepalive-lmi-descriptor
  </keepalive-lmi-descriptor>
  <keepalive-input-count>
    keepalive-input-count
  </keepalive-input-count>
  <keepalive-input-time>
    keepalive-input-time
```

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```
  </keepalive-input-time>
  <keepalive-output-count>
   keepalive-output-count
  </keepalive-output-count>
  <keepalive-output-time>
   keepalive-output-time
  </keepalive-output-time>
</keepalive-statistics>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<logical-interface>
  <keepalive-statistics>
    <keepalive-lmi-descriptor>
      keepalive-lmi-descriptor
    </keepalive-lmi-descriptor>
    <keepalive-input-count>
      keepalive-input-count
    </keepalive-input-count>
    <keepalive-input-time>
      keepalive-input-time
    </keepalive-input-time>
    <keepalive-output-count>
      keepalive-output-count
    </keepalive-output-count>
    <keepalive-output-time>
      keepalive-output-time
    </keepalive-output-time>
  </keepalive-statistics>
</logical-interface>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<physical-interface>
  <keepalive-statistics>
    <keepalive-lmi-descriptor>
      keepalive-lmi-descriptor
    </keepalive-lmi-descriptor>
    <keepalive-input-count>
      keepalive-input-count
    </keepalive-input-count>
    <keepalive-input-time>
      keepalive-input-time
    </keepalive-input-time>
    <keepalive-output-count>
      keepalive-output-count
```


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```
      </keepalive-output-count>
      <keepalive-output-time>
       keepalive-output-time
      </keepalive-output-time>
     </keepalive-statistics>
    </physical-interface>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <keepalive-statistics>
   <keepalive-lmi-descriptor>
    keepalive-lmi-descriptor
   </keepalive-lmi-descriptor>
   <keepalive-input-count>
    keepalive-input-count
   </keepalive-input-count>
   <keepalive-input-time>
    keepalive-input-time
   </keepalive-input-time>
   <keepalive-output-count>
    keepalive-output-count
   </keepalive-output-count>
   <keepalive-output-time>
    keepalive-output-time
   </keepalive-output-time>
  </keepalive-statistics>
 </logical-interface>
</physical-interface>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <keepalive-statistics>
   <keepalive-lmi-descriptor>
    keepalive-lmi-descriptor
   </keepalive-lmi-descriptor>
   <keepalive-input-count>
    keepalive-input-count
   </keepalive-input-count>
   <keepalive-input-time>
    keepalive-input-time
   </keepalive-input-time>
   <keepalive-output-count>
```

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```
            keepalive-output-count
           </keepalive-output-count>
           <keepalive-output-time>
            keepalive-output-time
           </keepalive-output-time>
          </keepalive-statistics>
         </physical-interface>
        </interface-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <keepalive-statistics>
    <keepalive-lmi-descriptor>
     keepalive-lmi-descriptor
    </keepalive-lmi-descriptor>
    <keepalive-input-count>
     keepalive-input-count
    </keepalive-input-count>
    <keepalive-input-time>
     keepalive-input-time
    </keepalive-input-time>
    <keepalive-output-count>
     keepalive-output-count
    </keepalive-output-count>
    <keepalive-output-time>
     keepalive-output-time
    </keepalive-output-time>
   </keepalive-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <keepalive-statistics>
   <keepalive-lmi-descriptor>
    keepalive-lmi-descriptor
   </keepalive-lmi-descriptor>
   <keepalive-input-count>
    keepalive-input-count
   </keepalive-input-count>
```


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```
        <keepalive-input-time>
          keepalive-input-time
        </keepalive-input-time>
        <keepalive-output-count>
          keepalive-output-count
        </keepalive-output-count>
        <keepalive-output-time>
          keepalive-output-time
        </keepalive-output-time>
      </keepalive-statistics>
    </logical-interface>
  </interface-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <keepalive-statistics>
      <keepalive-lmi-descriptor>
        keepalive-lmi-descriptor
      </keepalive-lmi-descriptor>
      <keepalive-input-count>
        keepalive-input-count
      </keepalive-input-count>
      <keepalive-input-time>
        keepalive-input-time
      </keepalive-input-time>
      <keepalive-output-count>
        keepalive-output-count
      </keepalive-output-count>
      <keepalive-output-time>
        keepalive-output-time
      </keepalive-output-time>
    </keepalive-statistics>
  </physical-interface>
</interface-filter-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <keepalive-statistics>
        <keepalive-lmi-descriptor>
          keepalive-lmi-descriptor
        </keepalive-lmi-descriptor>
```

```
            <keepalive-input-count>
              keepalive-input-count
            </keepalive-input-count>
            <keepalive-input-time>
              keepalive-input-time
            </keepalive-input-time>
            <keepalive-output-count>
              keepalive-output-count
            </keepalive-output-count>
            <keepalive-output-time>
              keepalive-output-time
            </keepalive-output-time>
          </keepalive-statistics>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <keepalive-statistics>
      <keepalive-lmi-descriptor>
        keepalive-lmi-descriptor
      </keepalive-lmi-descriptor>
      <keepalive-input-count>
        keepalive-input-count
      </keepalive-input-count>
      <keepalive-input-time>
        keepalive-input-time
      </keepalive-input-time>
      <keepalive-output-count>
        keepalive-output-count
      </keepalive-output-count>
      <keepalive-output-time>
        keepalive-output-time
      </keepalive-output-time>
    </keepalive-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <keepalive-statistics>
```


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```
        <keepalive-lmi-descriptor>
          keepalive-lmi-descriptor
        </keepalive-lmi-descriptor>
        <keepalive-input-count>
          keepalive-input-count
        </keepalive-input-count>
        <keepalive-input-time>
          keepalive-input-time
        </keepalive-input-time>
        <keepalive-output-count>
          keepalive-output-count
        </keepalive-output-count>
        <keepalive-output-time>
          keepalive-output-time
        </keepalive-output-time>
      </keepalive-statistics>
    </physical-interface>
  </interface-policer-information>
```

Description Keepalive statistics for this interface

<keepalive-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <keepalive-statistics>
        <keepalive-lmi-descriptor>
          keepalive-lmi-descriptor
        </keepalive-lmi-descriptor>
        <keepalive-input-count>
          keepalive-input-count
        </keepalive-input-count>
        <keepalive-input-time>
          keepalive-input-time
        </keepalive-input-time>
        <keepalive-output-count>
          keepalive-output-count
        </keepalive-output-count>
        <keepalive-output-time>
          keepalive-output-time
        </keepalive-output-time>
      </keepalive-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Keepalive statistics for this interface

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<keepalive-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <keepalive-statistics>
      <keepalive-lmi-descriptor>
        keepalive-lmi-descriptor
      </keepalive-lmi-descriptor>
      <keepalive-input-count>
        keepalive-input-count
      </keepalive-input-count>
      <keepalive-input-time>
        keepalive-input-time
      </keepalive-input-time>
      <keepalive-output-count>
        keepalive-output-count
      </keepalive-output-count>
      <keepalive-output-time>
        keepalive-output-time
      </keepalive-output-time>
    </keepalive-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Keepalive statistics for this interface

<l2circuit-info>

Usage

```
<l2circuit-info>
  <cell-bundle-size>
    cell-bundle-size
  </cell-bundle-size>
  <cell-bundle-timeout>
    cell-bundle-timeout
  </cell-bundle-timeout>
  <cell-timeout-count>
    cell-timeout-count
  </cell-timeout-count>
  <out-of-sequence>
    out-of-sequence
  </out-of-sequence>
</l2circuit-info>
```

Description

<l2circuit-info>

Usage

```
<logical-interface>
  <l2circuit-info>
    <cell-bundle-size>
```


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```
      cell-bundle-size
    </cell-bundle-size>
    <cell-bundle-timeout>
      cell-bundle-timeout
    </cell-bundle-timeout>
    <cell-timeout-count>
      cell-timeout-count
    </cell-timeout-count>
    <out-of-sequence>
      out-of-sequence
    </out-of-sequence>
  </l2circuit-info>
</logical-interface>
```

Description

<l2circuit-info>

Usage

```
<physical-interface>
  <logical-interface>
    <l2circuit-info>
      <cell-bundle-size>
        cell-bundle-size
      </cell-bundle-size>
      <cell-bundle-timeout>
        cell-bundle-timeout
      </cell-bundle-timeout>
      <cell-timeout-count>
        cell-timeout-count
      </cell-timeout-count>
      <out-of-sequence>
        out-of-sequence
      </out-of-sequence>
    </l2circuit-info>
  </logical-interface>
</physical-interface>
```

Description

<l2circuit-info>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <l2circuit-info>
        <cell-bundle-size>
          cell-bundle-size
        </cell-bundle-size>
        <cell-bundle-timeout>
          cell-bundle-timeout
        </cell-bundle-timeout>
        <cell-timeout-count>
```

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```
                cell-timeout-count
              </cell-timeout-count>
              <out-of-sequence>
                out-of-sequence
              </out-of-sequence>
            </l2circuit-info>
          </logical-interface>
        </physical-interface>
      </interface-information>
```

Description

<l2circuit-info>

Usage

```
<interface-information>
  <logical-interface>
    <l2circuit-info>
      <cell-bundle-size>
        cell-bundle-size
      </cell-bundle-size>
      <cell-bundle-timeout>
        cell-bundle-timeout
      </cell-bundle-timeout>
      <cell-timeout-count>
        cell-timeout-count
      </cell-timeout-count>
      <out-of-sequence>
        out-of-sequence
      </out-of-sequence>
    </l2circuit-info>
  </logical-interface>
</interface-information>
```

Description

<l2circuit-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <l2circuit-info>
        <cell-bundle-size>
          cell-bundle-size
        </cell-bundle-size>
        <cell-bundle-timeout>
          cell-bundle-timeout
        </cell-bundle-timeout>
        <cell-timeout-count>
          cell-timeout-count
        </cell-timeout-count>
        <out-of-sequence>
          out-of-sequence
```


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```
        </out-of-sequence>
       </l2circuit-info>
      </logical-interface>
     </physical-interface>
    </interface-filter-information>
```

Description

<l2circuit-info>

Usage

```
<interface-filter-information>
 <logical-interface>
  <l2circuit-info>
   <cell-bundle-size>
    cell-bundle-size
   </cell-bundle-size>
   <cell-bundle-timeout>
    cell-bundle-timeout
   </cell-bundle-timeout>
   <cell-timeout-count>
    cell-timeout-count
   </cell-timeout-count>
   <out-of-sequence>
    out-of-sequence
   </out-of-sequence>
  </l2circuit-info>
 </logical-interface>
</interface-filter-information>
```

Description

<l2circuit-info>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <l2circuit-info>
    <cell-bundle-size>
     cell-bundle-size
    </cell-bundle-size>
    <cell-bundle-timeout>
     cell-bundle-timeout
    </cell-bundle-timeout>
    <cell-timeout-count>
     cell-timeout-count
    </cell-timeout-count>
    <out-of-sequence>
     out-of-sequence
    </out-of-sequence>
   </l2circuit-info>
  </logical-interface>
 </physical-interface>
```

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```
</interface-policer-information>
```

Description

<l2circuit-info>

Usage

```
<interface-policer-information>
 <logical-interface>
  <l2circuit-info>
   <cell-bundle-size>
    cell-bundle-size
   </cell-bundle-size>
   <cell-bundle-timeout>
    cell-bundle-timeout
   </cell-bundle-timeout>
   <cell-timeout-count>
    cell-timeout-count
   </cell-timeout-count>
   <out-of-sequence>
    out-of-sequence
   </out-of-sequence>
  </l2circuit-info>
 </logical-interface>
</interface-policer-information>
```

Description

<lag-bundle>

Usage

```
<lag-traffic-statistics>
 <lag-bundle>
  <input-packets>
   input-packets
  </input-packets>
  <input-pps>
   input-pps
  </input-pps>
  <input-bytes>
   input-bytes
  </input-bytes>
  <input-bps>
   input-bps
  </input-bps>
  <output-packets>
   output-packets
  </output-packets>
  <output-pps>
   output-pps
  </output-pps>
  <output-bytes>
   output-bytes
  </output-bytes>
```


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```
    <output-bps>
     output-bps
    </output-bps>
   </lag-bundle>
</lag-traffic-statistics>
```

Description

<lag-bundle>

Usage

```
<logical-interface>
 <lag-traffic-statistics>
  <lag-bundle>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-packets>
    output-packets
   </output-packets>
   <output-pps>
    output-pps
   </output-pps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </lag-bundle>
 </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-bundle>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-bundle>
    <input-packets>
     input-packets
    </input-packets>
```

```
        <input-pps>
          input-pps
        </input-pps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </lag-bundle>
    </lag-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<lag-bundle>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-bundle>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
```


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```
                output-bytes
               </output-bytes>
               <output-bps>
                output-bps
               </output-bps>
              </lag-bundle>
             </lag-traffic-statistics>
            </logical-interface>
           </physical-interface>
          </interface-information>
```

Description

<lag-bundle>

Usage

```
<interface-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-bundle>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </lag-bundle>
  </lag-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description

<lag-bundle>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-bundle>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </lag-bundle>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-bundle>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-bundle>
        <input-packets>
          input-packets
        </input-packets>
        <input-pps>
          input-pps
        </input-pps>
        <input-bytes>
```


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```
            input-bytes
           </input-bytes>
           <input-bps>
            input-bps
           </input-bps>
           <output-packets>
            output-packets
           </output-packets>
           <output-pps>
            output-pps
           </output-pps>
           <output-bytes>
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </lag-bundle>
         </lag-traffic-statistics>
        </logical-interface>
       </interface-filter-information>
```

Description

<lag-bundle>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-bundle>
     <input-packets>
      input-packets
     </input-packets>
     <input-pps>
      input-pps
     </input-pps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-packets>
      output-packets
     </output-packets>
     <output-pps>
      output-pps
     </output-pps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
```

```
            </output-bps>
           </lag-bundle>
          </lag-traffic-statistics>
         </logical-interface>
        </physical-interface>
       </interface-policer-information>
```

Description

<lag-bundle>

Usage

```
<interface-policer-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-bundle>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </lag-bundle>
  </lag-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<lag-traffic-statistics>
 <lag-multicast-statistics>
  <lag-ipv4-multicast-statistics>
   <input-packets>
```


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```
      input-packets
     </input-packets>
     <input-pps>
      input-pps
     </input-pps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-packets>
      output-packets
     </output-packets>
     <output-pps>
      output-pps
     </output-pps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </lag-ipv4-multicast-statistics>
   </lag-multicast-statistics>
  </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<logical-interface>
 <lag-traffic-statistics>
  <lag-multicast-statistics>
   <lag-ipv4-multicast-statistics>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
    <output-bytes>
```

```
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </lag-ipv4-multicast-statistics>
         </lag-multicast-statistics>
        </lag-traffic-statistics>
       </logical-interface>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-multicast-statistics>
    <lag-ipv4-multicast-statistics>
     <input-packets>
      input-packets
     </input-packets>
     <input-pps>
      input-pps
     </input-pps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-packets>
      output-packets
     </output-packets>
     <output-pps>
      output-pps
     </output-pps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </lag-ipv4-multicast-statistics>
   </lag-multicast-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</physical-interface>
```

Description

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<lag-ipv4-multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-ipv4-multicast-statistics>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-ipv4-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-ipv4-multicast-statistics>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
```

```
                input-pps
              </input-pps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-packets>
                output-packets
              </output-packets>
              <output-pps>
                output-pps
              </output-pps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </lag-ipv4-multicast-statistics>
          </lag-multicast-statistics>
        </lag-traffic-statistics>
      </logical-interface>
    </interface-information>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-ipv4-multicast-statistics>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
```


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```
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-ipv4-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-ipv4-multicast-statistics>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </lag-ipv4-multicast-statistics>
      </lag-multicast-statistics>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

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<lag-ipv4-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-ipv4-multicast-statistics>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-ipv4-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<lag-ipv4-multicast-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-ipv4-multicast-statistics>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
```


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```
            input-pps
           </input-pps>
           <input-bytes>
            input-bytes
           </input-bytes>
           <input-bps>
            input-bps
           </input-bps>
           <output-packets>
            output-packets
           </output-packets>
           <output-pps>
            output-pps
           </output-pps>
           <output-bytes>
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </lag-ipv4-multicast-statistics>
         </lag-multicast-statistics>
        </lag-traffic-statistics>
       </logical-interface>
      </interface-policer-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<lag-traffic-statistics>
 <lag-multicast-statistics>
  <lag-ipv6-multicast-statistics>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-packets>
    output-packets
   </output-packets>
   <output-pps>
    output-pps
   </output-pps>
   <output-bytes>
    output-bytes
   </output-bytes>
```

```
      <output-bps>
       output-bps
      </output-bps>
     </lag-ipv6-multicast-statistics>
    </lag-multicast-statistics>
   </lag-traffic-statistics>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<logical-interface>
 <lag-traffic-statistics>
  <lag-multicast-statistics>
   <lag-ipv6-multicast-statistics>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </lag-ipv6-multicast-statistics>
  </lag-multicast-statistics>
 </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-multicast-statistics>
```


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```
<lag-ipv6-multicast-statistics>
 <input-packets>
  input-packets
 </input-packets>
 <input-pps>
  input-pps
 </input-pps>
 <input-bytes>
  input-bytes
 </input-bytes>
 <input-bps>
  input-bps
 </input-bps>
 <output-packets>
  output-packets
 </output-packets>
 <output-pps>
  output-pps
 </output-pps>
 <output-bytes>
  output-bytes
 </output-bytes>
 <output-bps>
  output-bps
 </output-bps>
</lag-ipv6-multicast-statistics>
</lag-multicast-statistics>
</lag-traffic-statistics>
</logical-interface>
</physical-interface>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-multicast-statistics>
     <lag-ipv6-multicast-statistics>
      <input-packets>
       input-packets
      </input-packets>
      <input-pps>
       input-pps
      </input-pps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-packets>
```

```
            output-packets
           </output-packets>
           <output-pps>
            output-pps
           </output-pps>
           <output-bytes>
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </lag-ipv6-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-ipv6-multicast-statistics>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </lag-ipv6-multicast-statistics>
      </lag-multicast-statistics>
    </lag-traffic-statistics>
```


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```
  </logical-interface>
</interface-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-ipv6-multicast-statistics>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-packets>
              output-packets
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-ipv6-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
```

```
                <lag-ipv6-multicast-statistics>
                  <input-packets>
                    input-packets
                  </input-packets>
                  <input-pps>
                    input-pps
                  </input-pps>
                  <input-bytes>
                    input-bytes
                  </input-bytes>
                  <input-bps>
                    input-bps
                  </input-bps>
                  <output-packets>
                    output-packets
                  </output-packets>
                  <output-pps>
                    output-pps
                  </output-pps>
                  <output-bytes>
                    output-bytes
                  </output-bytes>
                  <output-bps>
                    output-bps
                  </output-bps>
                </lag-ipv6-multicast-statistics>
              </lag-multicast-statistics>
            </lag-traffic-statistics>
          </logical-interface>
        </interface-filter-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-ipv6-multicast-statistics>
            <input-packets>
              input-packets
            </input-packets>
            <input-pps>
              input-pps
            </input-pps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-packets>
```


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```
        output-packets
       </output-packets>
       <output-pps>
        output-pps
       </output-pps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </lag-ipv6-multicast-statistics>
     </lag-multicast-statistics>
    </lag-traffic-statistics>
   </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<lag-ipv6-multicast-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-multicast-statistics>
    <lag-ipv6-multicast-statistics>
     <input-packets>
      input-packets
     </input-packets>
     <input-pps>
      input-pps
     </input-pps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-packets>
      output-packets
     </output-packets>
     <output-pps>
      output-pps
     </output-pps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </lag-ipv6-multicast-statistics>
   </lag-multicast-statistics>
  </lag-traffic-statistics>
```

```
  </logical-interface>
</interface-policer-information>
```

Description

<lag-lacp-info>

Usage

```
<lag-lacp-info>
  <name>
    name
  </name>
  <lacp-role>
    lacp-role
  </lacp-role>
  <lacp-sys-priority>
    lacp-sys-priority
  </lacp-sys-priority>
  <lacp-system-id>
    lacp-system-id
  </lacp-system-id>
  <lacp-port-priority>
    lacp-port-priority
  </lacp-port-priority>
  <lacp-port-number>
    lacp-port-number
  </lacp-port-number>
  <lacp-port-key>
    lacp-port-key
  </lacp-port-key>
</lag-lacp-info>
```

Description LACP information

<lag-lacp-info>

Usage

```
<lag-traffic-statistics>
  <lag-lacp-info>
    <name>
      name
    </name>
    <lacp-role>
      lacp-role
    </lacp-role>
    <lacp-sys-priority>
      lacp-sys-priority
    </lacp-sys-priority>
    <lacp-system-id>
      lacp-system-id
    </lacp-system-id>
    <lacp-port-priority>
      lacp-port-priority
```


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```
    </lacp-port-priority>
    <lacp-port-number>
     lacp-port-number
    </lacp-port-number>
    <lacp-port-key>
     lacp-port-key
    </lacp-port-key>
   </lag-lacp-info>
</lag-traffic-statistics>
```

Description LACP information

<lag-lacp-info>

Usage

```
<logical-interface>
 <lag-traffic-statistics>
  <lag-lacp-info>
   <name>
    name
   </name>
   <lacp-role>
    lacp-role
   </lacp-role>
   <lacp-sys-priority>
    lacp-sys-priority
   </lacp-sys-priority>
   <lacp-system-id>
    lacp-system-id
   </lacp-system-id>
   <lacp-port-priority>
    lacp-port-priority
   </lacp-port-priority>
   <lacp-port-number>
    lacp-port-number
   </lacp-port-number>
   <lacp-port-key>
    lacp-port-key
   </lacp-port-key>
  </lag-lacp-info>
 </lag-traffic-statistics>
</logical-interface>
```

Description LACP information

<lag-lacp-info>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-info>
```

```
            <name>
              name
            </name>
            <lacp-role>
              lacp-role
            </lacp-role>
            <lacp-sys-priority>
              lacp-sys-priority
            </lacp-sys-priority>
            <lacp-system-id>
              lacp-system-id
            </lacp-system-id>
            <lacp-port-priority>
              lacp-port-priority
            </lacp-port-priority>
            <lacp-port-number>
              lacp-port-number
            </lacp-port-number>
            <lacp-port-key>
              lacp-port-key
            </lacp-port-key>
          </lag-lacp-info>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
```

Description LACP information

<lag-lacp-info>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-info>
          <name>
            name
          </name>
          <lacp-role>
            lacp-role
          </lacp-role>
          <lacp-sys-priority>
            lacp-sys-priority
          </lacp-sys-priority>
          <lacp-system-id>
            lacp-system-id
          </lacp-system-id>
          <lacp-port-priority>
            lacp-port-priority
          </lacp-port-priority>
          <lacp-port-number>
            lacp-port-number
          </lacp-port-number>
```


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```
            <lacp-port-key>
              lacp-port-key
            </lacp-port-key>
          </lag-lacp-info>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description LACP information

<lag-lacp-info>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-info>
        <name>
          name
        </name>
        <lacp-role>
          lacp-role
        </lacp-role>
        <lacp-sys-priority>
          lacp-sys-priority
        </lacp-sys-priority>
        <lacp-system-id>
          lacp-system-id
        </lacp-system-id>
        <lacp-port-priority>
          lacp-port-priority
        </lacp-port-priority>
        <lacp-port-number>
          lacp-port-number
        </lacp-port-number>
        <lacp-port-key>
          lacp-port-key
        </lacp-port-key>
      </lag-lacp-info>
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description LACP information

<lag-lacp-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
```

```
<lag-traffic-statistics>
  <lag-lacp-info>
    <name>
      name
    </name>
    <lacp-role>
      lacp-role
    </lacp-role>
    <lacp-sys-priority>
      lacp-sys-priority
    </lacp-sys-priority>
    <lacp-system-id>
      lacp-system-id
    </lacp-system-id>
    <lacp-port-priority>
      lacp-port-priority
    </lacp-port-priority>
    <lacp-port-number>
      lacp-port-number
    </lacp-port-number>
    <lacp-port-key>
      lacp-port-key
    </lacp-port-key>
  </lag-lacp-info>
 </lag-traffic-statistics>
</logical-interface>
</physical-interface>
</interface-filter-information>
```

Description LACP information

<lag-lacp-info>

Usage

```
<interface-filter-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-info>
    <name>
     name
    </name>
    <lacp-role>
     lacp-role
    </lacp-role>
    <lacp-sys-priority>
     lacp-sys-priority
    </lacp-sys-priority>
    <lacp-system-id>
     lacp-system-id
    </lacp-system-id>
    <lacp-port-priority>
     lacp-port-priority
    </lacp-port-priority>
    <lacp-port-number>
```


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```
            lacp-port-number
           </lacp-port-number>
           <lacp-port-key>
            lacp-port-key
           </lacp-port-key>
          </lag-lacp-info>
         </lag-traffic-statistics>
        </logical-interface>
       </interface-filter-information>
```

Description LACP information

<lag-lacp-info>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-lacp-info>
     <name>
      name
     </name>
     <lacp-role>
      lacp-role
     </lacp-role>
     <lacp-sys-priority>
      lacp-sys-priority
     </lacp-sys-priority>
     <lacp-system-id>
      lacp-system-id
     </lacp-system-id>
     <lacp-port-priority>
      lacp-port-priority
     </lacp-port-priority>
     <lacp-port-number>
      lacp-port-number
     </lacp-port-number>
     <lacp-port-key>
      lacp-port-key
     </lacp-port-key>
    </lag-lacp-info>
   </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description LACP information

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<lag-lacp-info>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-info>
        <name>
          name
        </name>
        <lacp-role>
          lacp-role
        </lacp-role>
        <lacp-sys-priority>
          lacp-sys-priority
        </lacp-sys-priority>
        <lacp-system-id>
          lacp-system-id
        </lacp-system-id>
        <lacp-port-priority>
          lacp-port-priority
        </lacp-port-priority>
        <lacp-port-number>
          lacp-port-number
        </lacp-port-number>
        <lacp-port-key>
          lacp-port-key
        </lacp-port-key>
      </lag-lacp-info>
    </lag-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description LACP information

<lag-lacp-protocol>

Usage

```
<lag-lacp-protocol>
  <name>
    name
  </name>
  <lacp-receive-state>
    lacp-receive-state
  </lacp-receive-state>
  <lacp-transmit-state>
    lacp-transmit-state
  </lacp-transmit-state>
  <lacp-mux-state>
    lacp-mux-state
  </lacp-mux-state>
</lag-lacp-protocol>
```


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Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<lag-traffic-statistics>
  <lag-lacp-protocol>
    <name>
      name
    </name>
    <lacp-receive-state>
      lacp-receive-state
    </lacp-receive-state>
    <lacp-transmit-state>
      lacp-transmit-state
    </lacp-transmit-state>
    <lacp-mux-state>
      lacp-mux-state
    </lacp-mux-state>
  </lag-lacp-protocol>
</lag-traffic-statistics>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-lacp-protocol>
      <name>
        name
      </name>
      <lacp-receive-state>
        lacp-receive-state
      </lacp-receive-state>
      <lacp-transmit-state>
        lacp-transmit-state
      </lacp-transmit-state>
      <lacp-mux-state>
        lacp-mux-state
      </lacp-mux-state>
    </lag-lacp-protocol>
  </lag-traffic-statistics>
</logical-interface>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<physical-interface>
```

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```
<logical-interface>
 <lag-traffic-statistics>
  <lag-lacp-protocol>
   <name>
    name
   </name>
   <lacp-receive-state>
    lacp-receive-state
   </lacp-receive-state>
   <lacp-transmit-state>
    lacp-transmit-state
   </lacp-transmit-state>
   <lacp-mux-state>
    lacp-mux-state
   </lacp-mux-state>
  </lag-lacp-protocol>
 </lag-traffic-statistics>
</logical-interface>
</physical-interface>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-lacp-protocol>
     <name>
      name
     </name>
     <lacp-receive-state>
      lacp-receive-state
     </lacp-receive-state>
     <lacp-transmit-state>
      lacp-transmit-state
     </lacp-transmit-state>
     <lacp-mux-state>
      lacp-mux-state
     </lacp-mux-state>
    </lag-lacp-protocol>
   </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description LACP protocol information

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<lag-lacp-protocol>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-protocol>
        <name>
          name
        </name>
        <lacp-receive-state>
          lacp-receive-state
        </lacp-receive-state>
        <lacp-transmit-state>
          lacp-transmit-state
        </lacp-transmit-state>
        <lacp-mux-state>
          lacp-mux-state
        </lacp-mux-state>
      </lag-lacp-protocol>
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-protocol>
          <name>
            name
          </name>
          <lacp-receive-state>
            lacp-receive-state
          </lacp-receive-state>
          <lacp-transmit-state>
            lacp-transmit-state
          </lacp-transmit-state>
          <lacp-mux-state>
            lacp-mux-state
          </lacp-mux-state>
        </lag-lacp-protocol>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

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Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-protocol>
        <name>
          name
        </name>
        <lacp-receive-state>
          lacp-receive-state
        </lacp-receive-state>
        <lacp-transmit-state>
          lacp-transmit-state
        </lacp-transmit-state>
        <lacp-mux-state>
          lacp-mux-state
        </lacp-mux-state>
      </lag-lacp-protocol>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-protocol>
          <name>
            name
          </name>
          <lacp-receive-state>
            lacp-receive-state
          </lacp-receive-state>
          <lacp-transmit-state>
            lacp-transmit-state
          </lacp-transmit-state>
          <lacp-mux-state>
            lacp-mux-state
          </lacp-mux-state>
        </lag-lacp-protocol>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
```


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```
</interface-policer-information>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-protocol>
        <name>
          name
        </name>
        <lacp-receive-state>
          lacp-receive-state
        </lacp-receive-state>
        <lacp-transmit-state>
          lacp-transmit-state
        </lacp-transmit-state>
        <lacp-mux-state>
          lacp-mux-state
        </lacp-mux-state>
      </lag-lacp-protocol>
    </lag-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description LACP protocol information

<lag-lacp-state>

Usage

```
<lag-lacp-state>
  <name>
    name
  </name>
  <lacp-role>
    lacp-role
  </lacp-role>
  <lacp-expired>
    lacp-expired
  </lacp-expired>
  <lacp-defaulted>
    lacp-defaulted
  </lacp-defaulted>
  <lacp-distributing>
    lacp-distributing
  </lacp-distributing>
  <lacp-collecting>
    lacp-collecting
  </lacp-collecting>
```

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```
<lacp-synchronization>
  lacp-synchronization
</lacp-synchronization>
<lacp-aggregation>
  lacp-aggregation
</lacp-aggregation>
<lacp-timeout>
  lacp-timeout
</lacp-timeout>
<lacp-activity>
  lacp-activity
</lacp-activity>
</lag-lacp-state>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<lag-traffic-statistics>
  <lag-lacp-state>
    <name>
      name
    </name>
    <lacp-role>
      lacp-role
    </lacp-role>
    <lacp-expired>
      lacp-expired
    </lacp-expired>
    <lacp-defaulted>
      lacp-defaulted
    </lacp-defaulted>
    <lacp-distributing>
      lacp-distributing
    </lacp-distributing>
    <lacp-collecting>
      lacp-collecting
    </lacp-collecting>
    <lacp-synchronization>
      lacp-synchronization
    </lacp-synchronization>
    <lacp-aggregation>
      lacp-aggregation
    </lacp-aggregation>
    <lacp-timeout>
      lacp-timeout
    </lacp-timeout>
    <lacp-activity>
      lacp-activity
    </lacp-activity>
  </lag-lacp-state>
</lag-traffic-statistics>
```


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Description LACP protocol state information

<lag-lacp-state>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-lacp-state>
      <name>
        name
      </name>
      <lacp-role>
        lacp-role
      </lacp-role>
      <lacp-expired>
        lacp-expired
      </lacp-expired>
      <lacp-defaulted>
        lacp-defaulted
      </lacp-defaulted>
      <lacp-distributing>
        lacp-distributing
      </lacp-distributing>
      <lacp-collecting>
        lacp-collecting
      </lacp-collecting>
      <lacp-synchronization>
        lacp-synchronization
      </lacp-synchronization>
      <lacp-aggregation>
        lacp-aggregation
      </lacp-aggregation>
      <lacp-timeout>
        lacp-timeout
      </lacp-timeout>
      <lacp-activity>
        lacp-activity
      </lacp-activity>
    </lag-lacp-state>
  </lag-traffic-statistics>
</logical-interface>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<physical-interface>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-state>
        <name>
          name
```

```
        </name>
        <lacp-role>
          lacp-role
        </lacp-role>
        <lacp-expired>
          lacp-expired
        </lacp-expired>
        <lacp-defaulted>
          lacp-defaulted
        </lacp-defaulted>
        <lacp-distributing>
          lacp-distributing
        </lacp-distributing>
        <lacp-collecting>
          lacp-collecting
        </lacp-collecting>
        <lacp-synchronization>
          lacp-synchronization
        </lacp-synchronization>
        <lacp-aggregation>
          lacp-aggregation
        </lacp-aggregation>
        <lacp-timeout>
          lacp-timeout
        </lacp-timeout>
        <lacp-activity>
          lacp-activity
        </lacp-activity>
      </lag-lacp-state>
    </lag-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-state>
          <name>
            name
          </name>
          <lacp-role>
            lacp-role
          </lacp-role>
          <lacp-expired>
            lacp-expired
          </lacp-expired>
          <lacp-defaulted>
            lacp-defaulted
```


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```
            </lacp-defaulted>
            <lacp-distributing>
              lacp-distributing
            </lacp-distributing>
            <lacp-collecting>
              lacp-collecting
            </lacp-collecting>
            <lacp-synchronization>
              lacp-synchronization
            </lacp-synchronization>
            <lacp-aggregation>
              lacp-aggregation
            </lacp-aggregation>
            <lacp-timeout>
              lacp-timeout
            </lacp-timeout>
            <lacp-activity>
              lacp-activity
            </lacp-activity>
          </lag-lacp-state>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-state>
        <name>
          name
        </name>
        <lacp-role>
          lacp-role
        </lacp-role>
        <lacp-expired>
          lacp-expired
        </lacp-expired>
        <lacp-defaulted>
          lacp-defaulted
        </lacp-defaulted>
        <lacp-distributing>
          lacp-distributing
        </lacp-distributing>
        <lacp-collecting>
          lacp-collecting
        </lacp-collecting>
        <lacp-synchronization>
          lacp-synchronization
```

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```
        </lacp-synchronization>
        <lacp-aggregation>
          lacp-aggregation
        </lacp-aggregation>
        <lacp-timeout>
          lacp-timeout
        </lacp-timeout>
        <lacp-activity>
          lacp-activity
        </lacp-activity>
      </lag-lacp-state>
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-state>
          <name>
            name
          </name>
          <lacp-role>
            lacp-role
          </lacp-role>
          <lacp-expired>
            lacp-expired
          </lacp-expired>
          <lacp-defaulted>
            lacp-defaulted
          </lacp-defaulted>
          <lacp-distributing>
            lacp-distributing
          </lacp-distributing>
          <lacp-collecting>
            lacp-collecting
          </lacp-collecting>
          <lacp-synchronization>
            lacp-synchronization
          </lacp-synchronization>
          <lacp-aggregation>
            lacp-aggregation
          </lacp-aggregation>
          <lacp-timeout>
            lacp-timeout
          </lacp-timeout>
          <lacp-activity>
            lacp-activity
```


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```
            </lacp-activity>
          </lag-lacp-state>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-state>
        <name>
          name
        </name>
        <lacp-role>
          lacp-role
        </lacp-role>
        <lacp-expired>
          lacp-expired
        </lacp-expired>
        <lacp-defaulted>
          lacp-defaulted
        </lacp-defaulted>
        <lacp-distributing>
          lacp-distributing
        </lacp-distributing>
        <lacp-collecting>
          lacp-collecting
        </lacp-collecting>
        <lacp-synchronization>
          lacp-synchronization
        </lacp-synchronization>
        <lacp-aggregation>
          lacp-aggregation
        </lacp-aggregation>
        <lacp-timeout>
          lacp-timeout
        </lacp-timeout>
        <lacp-activity>
          lacp-activity
        </lacp-activity>
      </lag-lacp-state>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description LACP protocol state information

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<lag-lacp-state>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-lacp-state>
          <name>
            name
          </name>
          <lacp-role>
            lacp-role
          </lacp-role>
          <lacp-expired>
            lacp-expired
          </lacp-expired>
          <lacp-defaulted>
            lacp-defaulted
          </lacp-defaulted>
          <lacp-distributing>
            lacp-distributing
          </lacp-distributing>
          <lacp-collecting>
            lacp-collecting
          </lacp-collecting>
          <lacp-synchronization>
            lacp-synchronization
          </lacp-synchronization>
          <lacp-aggregation>
            lacp-aggregation
          </lacp-aggregation>
          <lacp-timeout>
            lacp-timeout
          </lacp-timeout>
          <lacp-activity>
            lacp-activity
          </lacp-activity>
        </lag-lacp-state>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description LACP protocol state information

<lag-lacp-state>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-lacp-state>
```


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```
            <name>
              name
            </name>
            <lacp-role>
              lacp-role
            </lacp-role>
            <lacp-expired>
              lacp-expired
            </lacp-expired>
            <lacp-defaulted>
              lacp-defaulted
            </lacp-defaulted>
            <lacp-distributing>
              lacp-distributing
            </lacp-distributing>
            <lacp-collecting>
              lacp-collecting
            </lacp-collecting>
            <lacp-synchronization>
              lacp-synchronization
            </lacp-synchronization>
            <lacp-aggregation>
              lacp-aggregation
            </lacp-aggregation>
            <lacp-timeout>
              lacp-timeout
            </lacp-timeout>
            <lacp-activity>
              lacp-activity
            </lacp-activity>
          </lag-lacp-state>
        </lag-traffic-statistics>
      </logical-interface>
    </interface-policer-information>
```

Description LACP protocol state information

<lag-lacp-statistics>

Usage

```
<lag-lacp-statistics>
  <name>
    name
  </name>
  <lacp-rx-packets>
    lacp-rx-packets
  </lacp-rx-packets>
  <lacp-tx-packets>
    lacp-tx-packets
  </lacp-tx-packets>
  <unknown-rx-packets>
    unknown-rx-packets
  </unknown-rx-packets>
  <illegal-rx-packets>
```

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```
      illegal-rx-packets
    </illegal-rx-packets>
  </lag-lacp-statistics>
```

Description

<lag-lacp-statistics>

Usage

```
<lag-traffic-statistics>
  <lag-lacp-statistics>
    <name>
      name
    </name>
    <lacp-rx-packets>
      lacp-rx-packets
    </lacp-rx-packets>
    <lacp-tx-packets>
      lacp-tx-packets
    </lacp-tx-packets>
    <unknown-rx-packets>
      unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
      illegal-rx-packets
    </illegal-rx-packets>
  </lag-lacp-statistics>
</lag-traffic-statistics>
```

Description

<lag-lacp-statistics>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-lacp-statistics>
      <name>
        name
      </name>
      <lacp-rx-packets>
        lacp-rx-packets
      </lacp-rx-packets>
      <lacp-tx-packets>
        lacp-tx-packets
      </lacp-tx-packets>
      <unknown-rx-packets>
        unknown-rx-packets
      </unknown-rx-packets>
      <illegal-rx-packets>
        illegal-rx-packets
      </illegal-rx-packets>
    </lag-lacp-statistics>
  </lag-traffic-statistics>
```


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```
</logical-interface>
```

Description

<lag-lacp-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-statistics>
    <name>
     name
    </name>
    <lacp-rx-packets>
     lacp-rx-packets
    </lacp-rx-packets>
    <lacp-tx-packets>
     lacp-tx-packets
    </lacp-tx-packets>
    <unknown-rx-packets>
     unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
     illegal-rx-packets
    </illegal-rx-packets>
   </lag-lacp-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</physical-interface>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-lacp-statistics>
     <name>
      name
     </name>
     <lacp-rx-packets>
      lacp-rx-packets
     </lacp-rx-packets>
     <lacp-tx-packets>
      lacp-tx-packets
     </lacp-tx-packets>
     <unknown-rx-packets>
      unknown-rx-packets
     </unknown-rx-packets>
     <illegal-rx-packets>
```

```
                illegal-rx-packets
               </illegal-rx-packets>
              </lag-lacp-statistics>
             </lag-traffic-statistics>
            </logical-interface>
           </physical-interface>
          </interface-information>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-statistics>
    <name>
     name
    </name>
    <lacp-rx-packets>
     lacp-rx-packets
    </lacp-rx-packets>
    <lacp-tx-packets>
     lacp-tx-packets
    </lacp-tx-packets>
    <unknown-rx-packets>
     unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
     illegal-rx-packets
    </illegal-rx-packets>
   </lag-lacp-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-lacp-statistics>
     <name>
      name
     </name>
     <lacp-rx-packets>
      lacp-rx-packets
     </lacp-rx-packets>
     <lacp-tx-packets>
```


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```
                lacp-tx-packets
               </lacp-tx-packets>
               <unknown-rx-packets>
                unknown-rx-packets
               </unknown-rx-packets>
               <illegal-rx-packets>
                illegal-rx-packets
               </illegal-rx-packets>
              </lag-lacp-statistics>
             </lag-traffic-statistics>
            </logical-interface>
           </physical-interface>
          </interface-filter-information>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-filter-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-statistics>
    <name>
     name
    </name>
    <lacp-rx-packets>
     lacp-rx-packets
    </lacp-rx-packets>
    <lacp-tx-packets>
     lacp-tx-packets
    </lacp-tx-packets>
    <unknown-rx-packets>
     unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
     illegal-rx-packets
    </illegal-rx-packets>
   </lag-lacp-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-lacp-statistics>
     <name>
```

```
        name
       </name>
       <lacp-rx-packets>
        lacp-rx-packets
       </lacp-rx-packets>
       <lacp-tx-packets>
        lacp-tx-packets
       </lacp-tx-packets>
       <unknown-rx-packets>
        unknown-rx-packets
       </unknown-rx-packets>
       <illegal-rx-packets>
        illegal-rx-packets
       </illegal-rx-packets>
      </lag-lacp-statistics>
     </lag-traffic-statistics>
    </logical-interface>
   </physical-interface>
</interface-policer-information>
```

Description

<lag-lacp-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-lacp-statistics>
    <name>
     name
    </name>
    <lacp-rx-packets>
     lacp-rx-packets
    </lacp-rx-packets>
    <lacp-tx-packets>
     lacp-tx-packets
    </lacp-tx-packets>
    <unknown-rx-packets>
     unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
     illegal-rx-packets
    </illegal-rx-packets>
   </lag-lacp-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</interface-policer-information>
```

Description

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<lag-link>

Usage

```
<lag-traffic-statistics>
  <lag-link>
    <name>
      name
    </name>
    <down>
      down
    </down>
    <input-packets>
      input-packets
    </input-packets>
    <input-pps>
      input-pps
    </input-pps>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-packets>
      output-packets
    </output-packets>
    <output-pps>
      output-pps
    </output-pps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
  </lag-link>
</lag-traffic-statistics>
```

Description

<lag-link>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-link>
      <name>
        name
      </name>
      <down>
        down
      </down>
      <input-packets>
        input-packets
```

```
      </input-packets>
      <input-pps>
       input-pps
      </input-pps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-packets>
       output-packets
      </output-packets>
      <output-pps>
       output-pps
      </output-pps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
     </lag-link>
    </lag-traffic-statistics>
  </logical-interface>
```

Description

<lag-link>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-link>
    <name>
     name
    </name>
    <down>
     down
    </down>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
```


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```
            </output-packets>
            <output-pps>
              output-pps
            </output-pps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-link>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
```

Description

<lag-link>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-link>
          <name>
            name
          </name>
          <down>
            down
          </down>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
```

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```
        </lag-link>
       </lag-traffic-statistics>
      </logical-interface>
     </physical-interface>
    </interface-information>
```

Description

<lag-link>

Usage

```
<interface-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-link>
    <name>
     name
    </name>
    <down>
     down
    </down>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
    <output-pps>
     output-pps
    </output-pps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </lag-link>
  </lag-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description

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<lag-link>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-link>
          <name>
            name
          </name>
          <down>
            down
          </down>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </lag-link>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-link>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-link>
        <name>
```

```
            name
          </name>
          <down>
            down
          </down>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
          </input-pps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-packets>
            output-packets
          </output-packets>
          <output-pps>
            output-pps
          </output-pps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </lag-link>
      </lag-traffic-statistics>
    </logical-interface>
  </interface-filter-information>
```

Description

<lag-link>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-link>
          <name>
            name
          </name>
          <down>
            down
          </down>
          <input-packets>
            input-packets
          </input-packets>
          <input-pps>
            input-pps
```


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```
        </input-pps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-packets>
          output-packets
        </output-packets>
        <output-pps>
          output-pps
        </output-pps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </lag-link>
    </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<lag-link>

Usage

```
<interface-policer-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-link>
    <name>
     name
    </name>
    <down>
     down
    </down>
    <input-packets>
     input-packets
    </input-packets>
    <input-pps>
     input-pps
    </input-pps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-packets>
     output-packets
    </output-packets>
```

```
            <output-pps>
              output-pps
            </output-pps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lag-link>
        </lag-traffic-statistics>
      </logical-interface>
    </interface-policer-information>
```

Description

<lag-marker>

Usage

```
<lag-traffic-statistics>
  <lag-marker>
    <name>
      name
    </name>
    <marker-rx-packets>
      marker-rx-packets
    </marker-rx-packets>
    <marker-response-tx-packets>
      marker-response-tx-packets
    </marker-response-tx-packets>
    <unknown-rx-packets>
      unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
      illegal-rx-packets
    </illegal-rx-packets>
  </lag-marker>
</lag-traffic-statistics>
```

Description

<lag-marker>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-marker>
      <name>
        name
      </name>
      <marker-rx-packets>
        marker-rx-packets
      </marker-rx-packets>
      <marker-response-tx-packets>
```


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```
        marker-response-tx-packets
       </marker-response-tx-packets>
       <unknown-rx-packets>
        unknown-rx-packets
       </unknown-rx-packets>
       <illegal-rx-packets>
        illegal-rx-packets
       </illegal-rx-packets>
      </lag-marker>
     </lag-traffic-statistics>
    </logical-interface>
```

Description

<lag-marker>

Usage

```
<physical-interface>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-marker>
    <name>
     name
    </name>
    <marker-rx-packets>
     marker-rx-packets
    </marker-rx-packets>
    <marker-response-tx-packets>
     marker-response-tx-packets
    </marker-response-tx-packets>
    <unknown-rx-packets>
     unknown-rx-packets
    </unknown-rx-packets>
    <illegal-rx-packets>
     illegal-rx-packets
    </illegal-rx-packets>
   </lag-marker>
  </lag-traffic-statistics>
 </logical-interface>
</physical-interface>
```

Description

<lag-marker>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-marker>
     <name>
      name
     </name>
```

```
            <marker-rx-packets>
              marker-rx-packets
            </marker-rx-packets>
            <marker-response-tx-packets>
              marker-response-tx-packets
            </marker-response-tx-packets>
            <unknown-rx-packets>
              unknown-rx-packets
            </unknown-rx-packets>
            <illegal-rx-packets>
              illegal-rx-packets
            </illegal-rx-packets>
          </lag-marker>
        </lag-traffic-statistics>
      </logical-interface>
    </physical-interface>
</interface-information>
```

Description

<lag-marker>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-marker>
        <name>
          name
        </name>
        <marker-rx-packets>
          marker-rx-packets
        </marker-rx-packets>
        <marker-response-tx-packets>
          marker-response-tx-packets
        </marker-response-tx-packets>
        <unknown-rx-packets>
          unknown-rx-packets
        </unknown-rx-packets>
        <illegal-rx-packets>
          illegal-rx-packets
        </illegal-rx-packets>
      </lag-marker>
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<lag-marker>

Usage

```
<interface-filter-information>
  <physical-interface>
```


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```
    <logical-interface>
      <lag-traffic-statistics>
        <lag-marker>
          <name>
            name
          </name>
          <marker-rx-packets>
            marker-rx-packets
          </marker-rx-packets>
          <marker-response-tx-packets>
            marker-response-tx-packets
          </marker-response-tx-packets>
          <unknown-rx-packets>
            unknown-rx-packets
          </unknown-rx-packets>
          <illegal-rx-packets>
            illegal-rx-packets
          </illegal-rx-packets>
        </lag-marker>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-marker>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-marker>
        <name>
          name
        </name>
        <marker-rx-packets>
          marker-rx-packets
        </marker-rx-packets>
        <marker-response-tx-packets>
          marker-response-tx-packets
        </marker-response-tx-packets>
        <unknown-rx-packets>
          unknown-rx-packets
        </unknown-rx-packets>
        <illegal-rx-packets>
          illegal-rx-packets
        </illegal-rx-packets>
      </lag-marker>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

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<lag-marker>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-marker>
          <name>
            name
          </name>
          <marker-rx-packets>
            marker-rx-packets
          </marker-rx-packets>
          <marker-response-tx-packets>
            marker-response-tx-packets
          </marker-response-tx-packets>
          <unknown-rx-packets>
            unknown-rx-packets
          </unknown-rx-packets>
          <illegal-rx-packets>
            illegal-rx-packets
          </illegal-rx-packets>
        </lag-marker>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<lag-marker>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-marker>
        <name>
          name
        </name>
        <marker-rx-packets>
          marker-rx-packets
        </marker-rx-packets>
        <marker-response-tx-packets>
          marker-response-tx-packets
        </marker-response-tx-packets>
        <unknown-rx-packets>
          unknown-rx-packets
        </unknown-rx-packets>
        <illegal-rx-packets>
          illegal-rx-packets
        </illegal-rx-packets>
      </lag-marker>
```


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```
    </lag-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<lag-multicast-statistics>

Usage

```
<lag-traffic-statistics>
  <lag-multicast-statistics>
    <lag-multicast-statistics-header>
      lag-multicast-statistics-header
    </lag-multicast-statistics-header>
    <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
    <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
  </lag-multicast-statistics>
</lag-traffic-statistics>
```

Description

<lag-multicast-statistics>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-multicast-statistics>
      <lag-multicast-statistics-header>
        lag-multicast-statistics-header
      </lag-multicast-statistics-header>
      <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
      <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
    </lag-multicast-statistics>
  </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-multicast-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-multicast-statistics-header>
          lag-multicast-statistics-header
        </lag-multicast-statistics-header>
        <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
        <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
      </lag-multicast-statistics>
    </lag-traffic-statistics>
  </logical-interface>
```

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```
</physical-interface>
```

Description

<lag-multicast-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-multicast-statistics>
     <lag-multicast-statistics-header>
      lag-multicast-statistics-header
     </lag-multicast-statistics-header>
     <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
     <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
    </lag-multicast-statistics>
   </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<lag-multicast-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-multicast-statistics>
    <lag-multicast-statistics-header>
     lag-multicast-statistics-header
    </lag-multicast-statistics-header>
    <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
    <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
   </lag-multicast-statistics>
  </lag-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description

<lag-multicast-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-multicast-statistics>
     <lag-multicast-statistics-header>
```


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```
            lag-multicast-statistics-header
          </lag-multicast-statistics-header>
          <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
          <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-multicast-statistics-header>
          lag-multicast-statistics-header
        </lag-multicast-statistics-header>
        <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
        <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
      </lag-multicast-statistics>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<lag-multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-multicast-statistics>
          <lag-multicast-statistics-header>
            lag-multicast-statistics-header
          </lag-multicast-statistics-header>
          <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
          <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
        </lag-multicast-statistics>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

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<lag-multicast-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-multicast-statistics>
        <lag-multicast-statistics-header>
          lag-multicast-statistics-header
        </lag-multicast-statistics-header>
        <lag-ipv4-multicast-statistics>....</lag-ipv4-multicast-statistics>
        <lag-ipv6-multicast-statistics>....</lag-ipv6-multicast-statistics>
      </lag-multicast-statistics>
    </lag-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<lag-targeting-summary>

Usage

```
<lag-traffic-statistics>
  <lag-targeting-summary>
    <targeting-intf-name>
      targeting-intf-name
    </targeting-intf-name>
    <targeting-intf-type>
      targeting-intf-type
    </targeting-intf-type>
    <targeting-intf-link-state>
      targeting-intf-link-state
    </targeting-intf-link-state>
  </lag-targeting-summary>
</lag-traffic-statistics>
```

Description

<lag-targeting-summary>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-targeting-summary>
      <targeting-intf-name>
        targeting-intf-name
      </targeting-intf-name>
      <targeting-intf-type>
        targeting-intf-type
      </targeting-intf-type>
      <targeting-intf-link-state>
        targeting-intf-link-state
      </targeting-intf-link-state>
```


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```
    </lag-targeting-summary>
  </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-targeting-summary>

Usage

```
<physical-interface>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-targeting-summary>
        <targeting-intf-name>
          targeting-intf-name
        </targeting-intf-name>
        <targeting-intf-type>
          targeting-intf-type
        </targeting-intf-type>
        <targeting-intf-link-state>
          targeting-intf-link-state
        </targeting-intf-link-state>
      </lag-targeting-summary>
    </lag-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<lag-targeting-summary>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-targeting-summary>
          <targeting-intf-name>
            targeting-intf-name
          </targeting-intf-name>
          <targeting-intf-type>
            targeting-intf-type
          </targeting-intf-type>
          <targeting-intf-link-state>
            targeting-intf-link-state
          </targeting-intf-link-state>
        </lag-targeting-summary>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

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<lag-targeting-summary>

Usage

```
<interface-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-targeting-summary>
        <targeting-intf-name>
          targeting-intf-name
        </targeting-intf-name>
        <targeting-intf-type>
          targeting-intf-type
        </targeting-intf-type>
        <targeting-intf-link-state>
          targeting-intf-link-state
        </targeting-intf-link-state>
      </lag-targeting-summary>
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<lag-targeting-summary>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-targeting-summary>
          <targeting-intf-name>
            targeting-intf-name
          </targeting-intf-name>
          <targeting-intf-type>
            targeting-intf-type
          </targeting-intf-type>
          <targeting-intf-link-state>
            targeting-intf-link-state
          </targeting-intf-link-state>
        </lag-targeting-summary>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-targeting-summary>

Usage

```
<interface-filter-information>
  <logical-interface>
```


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```
    <lag-traffic-statistics>
     <lag-targeting-summary>
      <targeting-intf-name>
       targeting-intf-name
      </targeting-intf-name>
      <targeting-intf-type>
       targeting-intf-type
      </targeting-intf-type>
      <targeting-intf-link-state>
       targeting-intf-link-state
      </targeting-intf-link-state>
     </lag-targeting-summary>
    </lag-traffic-statistics>
   </logical-interface>
  </interface-filter-information>
```

Description

<lag-targeting-summary>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-targeting-summary>
     <targeting-intf-name>
      targeting-intf-name
     </targeting-intf-name>
     <targeting-intf-type>
      targeting-intf-type
     </targeting-intf-type>
     <targeting-intf-link-state>
      targeting-intf-link-state
     </targeting-intf-link-state>
    </lag-targeting-summary>
   </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<lag-targeting-summary>

Usage

```
<interface-policer-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-targeting-summary>
    <targeting-intf-name>
     targeting-intf-name
    </targeting-intf-name>
    <targeting-intf-type>
```

```
            targeting-intf-type
          </targeting-intf-type>
          <targeting-intf-link-state>
            targeting-intf-link-state
          </targeting-intf-link-state>
        </lag-targeting-summary>
      </lag-traffic-statistics>
    </logical-interface>
</interface-policer-information>
```

Description

<lag-traffic-statistics>

Usage

```
<lag-traffic-statistics>
  <lag-bundle>....</lag-bundle>
  <lag-multicast-statistics>....</lag-multicast-statistics>
  <lag-link>....</lag-link>
  <lag-targeting-summary>....</lag-targeting-summary>
  <lag-marker>....</lag-marker>
  <lag-lacp-statistics>....</lag-lacp-statistics>
  <lag-lacp-info>....</lag-lacp-info>
  <lag-lacp-state>....</lag-lacp-state>
  <lag-lacp-protocol>....</lag-lacp-protocol>
</lag-traffic-statistics>
```

Description

<lag-traffic-statistics>

Usage

```
<logical-interface>
  <lag-traffic-statistics>
    <lag-bundle>....</lag-bundle>
    <lag-multicast-statistics>....</lag-multicast-statistics>
    <lag-link>....</lag-link>
    <lag-targeting-summary>....</lag-targeting-summary>
    <lag-marker>....</lag-marker>
    <lag-lacp-statistics>....</lag-lacp-statistics>
    <lag-lacp-info>....</lag-lacp-info>
    <lag-lacp-state>....</lag-lacp-state>
    <lag-lacp-protocol>....</lag-lacp-protocol>
  </lag-traffic-statistics>
</logical-interface>
```

Description

<lag-traffic-statistics>

Usage

```
<physical-interface>
  <logical-interface>
```


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```
    <lag-traffic-statistics>
     <lag-bundle>....</lag-bundle>
     <lag-multicast-statistics>....</lag-multicast-statistics>
     <lag-link>....</lag-link>
     <lag-targeting-summary>....</lag-targeting-summary>
     <lag-marker>....</lag-marker>
     <lag-lacp-statistics>....</lag-lacp-statistics>
     <lag-lacp-info>....</lag-lacp-info>
     <lag-lacp-state>....</lag-lacp-state>
     <lag-lacp-protocol>....</lag-lacp-protocol>
    </lag-traffic-statistics>
   </logical-interface>
</physical-interface>
```

Description

<lag-traffic-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <lag-traffic-statistics>
    <lag-bundle>....</lag-bundle>
    <lag-multicast-statistics>....</lag-multicast-statistics>
    <lag-link>....</lag-link>
    <lag-targeting-summary>....</lag-targeting-summary>
    <lag-marker>....</lag-marker>
    <lag-lacp-statistics>....</lag-lacp-statistics>
    <lag-lacp-info>....</lag-lacp-info>
    <lag-lacp-state>....</lag-lacp-state>
    <lag-lacp-protocol>....</lag-lacp-protocol>
   </lag-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<lag-traffic-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <lag-traffic-statistics>
   <lag-bundle>....</lag-bundle>
   <lag-multicast-statistics>....</lag-multicast-statistics>
   <lag-link>....</lag-link>
   <lag-targeting-summary>....</lag-targeting-summary>
   <lag-marker>....</lag-marker>
   <lag-lacp-statistics>....</lag-lacp-statistics>
   <lag-lacp-info>....</lag-lacp-info>
   <lag-lacp-state>....</lag-lacp-state>
   <lag-lacp-protocol>....</lag-lacp-protocol>
```

```
    </lag-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<lag-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-bundle>....</lag-bundle>
        <lag-multicast-statistics>....</lag-multicast-statistics>
        <lag-link>....</lag-link>
        <lag-targeting-summary>....</lag-targeting-summary>
        <lag-marker>....</lag-marker>
        <lag-lacp-statistics>....</lag-lacp-statistics>
        <lag-lacp-info>....</lag-lacp-info>
        <lag-lacp-state>....</lag-lacp-state>
        <lag-lacp-protocol>....</lag-lacp-protocol>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<lag-traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-bundle>....</lag-bundle>
      <lag-multicast-statistics>....</lag-multicast-statistics>
      <lag-link>....</lag-link>
      <lag-targeting-summary>....</lag-targeting-summary>
      <lag-marker>....</lag-marker>
      <lag-lacp-statistics>....</lag-lacp-statistics>
      <lag-lacp-info>....</lag-lacp-info>
      <lag-lacp-state>....</lag-lacp-state>
      <lag-lacp-protocol>....</lag-lacp-protocol>
    </lag-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

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<lag-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <lag-traffic-statistics>
        <lag-bundle>....</lag-bundle>
        <lag-multicast-statistics>....</lag-multicast-statistics>
        <lag-link>....</lag-link>
        <lag-targeting-summary>....</lag-targeting-summary>
        <lag-marker>....</lag-marker>
        <lag-lacp-statistics>....</lag-lacp-statistics>
        <lag-lacp-info>....</lag-lacp-info>
        <lag-lacp-state>....</lag-lacp-state>
        <lag-lacp-protocol>....</lag-lacp-protocol>
      </lag-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<lag-traffic-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <lag-traffic-statistics>
      <lag-bundle>....</lag-bundle>
      <lag-multicast-statistics>....</lag-multicast-statistics>
      <lag-link>....</lag-link>
      <lag-targeting-summary>....</lag-targeting-summary>
      <lag-marker>....</lag-marker>
      <lag-lacp-statistics>....</lag-lacp-statistics>
      <lag-lacp-info>....</lag-lacp-info>
      <lag-lacp-state>....</lag-lacp-state>
      <lag-lacp-protocol>....</lag-lacp-protocol>
    </lag-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<layer2-input-policer-information>

Usage

```
<layer2-input-policer-information>
  <layer2-input-policer>
    layer2-input-policer
  </layer2-input-policer>
</layer2-input-policer-information>
```

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Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<logical-interface>
  <layer2-input-policer-information>
    <layer2-input-policer>
      layer2-input-policer
    </layer2-input-policer>
  </layer2-input-policer-information>
</logical-interface>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<physical-interface>
  <logical-interface>
    <layer2-input-policer-information>
      <layer2-input-policer>
        layer2-input-policer
      </layer2-input-policer>
    </layer2-input-policer-information>
  </logical-interface>
</physical-interface>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <layer2-input-policer-information>
        <layer2-input-policer>
          layer2-input-policer
        </layer2-input-policer>
      </layer2-input-policer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Information about Layer 2 input policer for interface

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<layer2-input-policer-information>

Usage

```
<interface-information>
  <logical-interface>
    <layer2-input-policer-information>
      <layer2-input-policer>
        layer2-input-policer
      </layer2-input-policer>
    </layer2-input-policer-information>
  </logical-interface>
</interface-information>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <layer2-input-policer-information>
        <layer2-input-policer>
          layer2-input-policer
        </layer2-input-policer>
      </layer2-input-policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <layer2-input-policer-information>
      <layer2-input-policer>
        layer2-input-policer
      </layer2-input-policer>
    </layer2-input-policer-information>
  </logical-interface>
</interface-filter-information>
```

Description Information about Layer 2 input policer for interface

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<layer2-input-policer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <layer2-input-policer-information>
        <layer2-input-policer>
          layer2-input-policer
        </layer2-input-policer>
      </layer2-input-policer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <layer2-input-policer-information>
      <layer2-input-policer>
        layer2-input-policer
      </layer2-input-policer>
    </layer2-input-policer-information>
  </logical-interface>
</interface-policer-information>
```

Description Information about Layer 2 input policer for interface

<layer2-input-policer-statistics>

Usage

```
<layer2-input-policer-statistics>
  <policer-low-iq2-frames>
    policer-low-iq2-frames
  </policer-low-iq2-frames>
  <policer-medium-low-iq2-frames>
    policer-medium-low-iq2-frames
  </policer-medium-low-iq2-frames>
  <policer-medium-high-iq2-frames>
    policer-medium-high-iq2-frames
  </policer-medium-high-iq2-frames>
  <policer-high-iq2-frames>
    policer-high-iq2-frames
  </policer-high-iq2-frames>
  <policer-dropped-iq2-frames>
    policer-dropped-iq2-frames
  </policer-dropped-iq2-frames>
  <policer-low-frames>
```


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```
  policer-low-frames
 </policer-low-frames>
 <policer-medium-low-frames>
  policer-medium-low-frames
 </policer-medium-low-frames>
 <policer-medium-high-frames>
  policer-medium-high-frames
 </policer-medium-high-frames>
 <policer-high-frames>
  policer-high-frames
 </policer-high-frames>
 <policer-dropped-frames>
  policer-dropped-frames
 </policer-dropped-frames>
 <policer-low-bytes>
  policer-low-bytes
 </policer-low-bytes>
 <policer-medium-low-bytes>
  policer-medium-low-bytes
 </policer-medium-low-bytes>
 <policer-medium-high-bytes>
  policer-medium-high-bytes
 </policer-medium-high-bytes>
 <policer-high-bytes>
  policer-high-bytes
 </policer-high-bytes>
 <policer-dropped-bytes>
  policer-dropped-bytes
 </policer-dropped-bytes>
 <policer-low-rate>
  policer-low-rate
 </policer-low-rate>
 <policer-medium-low-rate>
  policer-medium-low-rate
 </policer-medium-low-rate>
 <policer-medium-high-rate>
  policer-medium-high-rate
 </policer-medium-high-rate>
 <policer-high-rate>
  policer-high-rate
 </policer-high-rate>
 <policer-dropped-rate>
  policer-dropped-rate
 </policer-dropped-rate>
</layer2-input-policer-statistics>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<logical-interface>
 <layer2-input-policer-statistics>
  <policer-low-iq2-frames>
```

```
  policer-low-iq2-frames
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate
</policer-high-rate>
```


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```
      <policer-dropped-rate>
       policer-dropped-rate
      </policer-dropped-rate>
     </layer2-input-policer-statistics>
    </logical-interface>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <layer2-input-policer-statistics>
   <policer-low-iq2-frames>
    policer-low-iq2-frames
   </policer-low-iq2-frames>
   <policer-medium-low-iq2-frames>
    policer-medium-low-iq2-frames
   </policer-medium-low-iq2-frames>
   <policer-medium-high-iq2-frames>
    policer-medium-high-iq2-frames
   </policer-medium-high-iq2-frames>
   <policer-high-iq2-frames>
    policer-high-iq2-frames
   </policer-high-iq2-frames>
   <policer-dropped-iq2-frames>
    policer-dropped-iq2-frames
   </policer-dropped-iq2-frames>
   <policer-low-frames>
    policer-low-frames
   </policer-low-frames>
   <policer-medium-low-frames>
    policer-medium-low-frames
   </policer-medium-low-frames>
   <policer-medium-high-frames>
    policer-medium-high-frames
   </policer-medium-high-frames>
   <policer-high-frames>
    policer-high-frames
   </policer-high-frames>
   <policer-dropped-frames>
    policer-dropped-frames
   </policer-dropped-frames>
   <policer-low-bytes>
    policer-low-bytes
   </policer-low-bytes>
   <policer-medium-low-bytes>
    policer-medium-low-bytes
   </policer-medium-low-bytes>
   <policer-medium-high-bytes>
    policer-medium-high-bytes
   </policer-medium-high-bytes>
   <policer-high-bytes>
```

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```
            policer-high-bytes
           </policer-high-bytes>
           <policer-dropped-bytes>
            policer-dropped-bytes
           </policer-dropped-bytes>
           <policer-low-rate>
            policer-low-rate
           </policer-low-rate>
           <policer-medium-low-rate>
            policer-medium-low-rate
           </policer-medium-low-rate>
           <policer-medium-high-rate>
            policer-medium-high-rate
           </policer-medium-high-rate>
           <policer-high-rate>
            policer-high-rate
           </policer-high-rate>
           <policer-dropped-rate>
            policer-dropped-rate
           </policer-dropped-rate>
          </layer2-input-policer-statistics>
         </logical-interface>
        </physical-interface>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <layer2-input-policer-statistics>
    <policer-low-iq2-frames>
     policer-low-iq2-frames
    </policer-low-iq2-frames>
    <policer-medium-low-iq2-frames>
     policer-medium-low-iq2-frames
    </policer-medium-low-iq2-frames>
    <policer-medium-high-iq2-frames>
     policer-medium-high-iq2-frames
    </policer-medium-high-iq2-frames>
    <policer-high-iq2-frames>
     policer-high-iq2-frames
    </policer-high-iq2-frames>
    <policer-dropped-iq2-frames>
     policer-dropped-iq2-frames
    </policer-dropped-iq2-frames>
    <policer-low-frames>
     policer-low-frames
    </policer-low-frames>
    <policer-medium-low-frames>
     policer-medium-low-frames
    </policer-medium-low-frames>
```


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```
            <policer-medium-high-frames>
              policer-medium-high-frames
            </policer-medium-high-frames>
            <policer-high-frames>
              policer-high-frames
            </policer-high-frames>
            <policer-dropped-frames>
              policer-dropped-frames
            </policer-dropped-frames>
            <policer-low-bytes>
              policer-low-bytes
            </policer-low-bytes>
            <policer-medium-low-bytes>
              policer-medium-low-bytes
            </policer-medium-low-bytes>
            <policer-medium-high-bytes>
              policer-medium-high-bytes
            </policer-medium-high-bytes>
            <policer-high-bytes>
              policer-high-bytes
            </policer-high-bytes>
            <policer-dropped-bytes>
              policer-dropped-bytes
            </policer-dropped-bytes>
            <policer-low-rate>
              policer-low-rate
            </policer-low-rate>
            <policer-medium-low-rate>
              policer-medium-low-rate
            </policer-medium-low-rate>
            <policer-medium-high-rate>
              policer-medium-high-rate
            </policer-medium-high-rate>
            <policer-high-rate>
              policer-high-rate
            </policer-high-rate>
            <policer-dropped-rate>
              policer-dropped-rate
            </policer-dropped-rate>
          </layer2-input-policer-statistics>
        </logical-interface>
      </physical-interface>
    </interface-information>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <layer2-input-policer-statistics>
      <policer-low-iq2-frames>
        policer-low-iq2-frames
```

```
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate
</policer-high-rate>
<policer-dropped-rate>
```


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```
            policer-dropped-rate
           </policer-dropped-rate>
          </layer2-input-policer-statistics>
         </logical-interface>
        </interface-information>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <layer2-input-policer-statistics>
    <policer-low-iq2-frames>
     policer-low-iq2-frames
    </policer-low-iq2-frames>
    <policer-medium-low-iq2-frames>
     policer-medium-low-iq2-frames
    </policer-medium-low-iq2-frames>
    <policer-medium-high-iq2-frames>
     policer-medium-high-iq2-frames
    </policer-medium-high-iq2-frames>
    <policer-high-iq2-frames>
     policer-high-iq2-frames
    </policer-high-iq2-frames>
    <policer-dropped-iq2-frames>
     policer-dropped-iq2-frames
    </policer-dropped-iq2-frames>
    <policer-low-frames>
     policer-low-frames
    </policer-low-frames>
    <policer-medium-low-frames>
     policer-medium-low-frames
    </policer-medium-low-frames>
    <policer-medium-high-frames>
     policer-medium-high-frames
    </policer-medium-high-frames>
    <policer-high-frames>
     policer-high-frames
    </policer-high-frames>
    <policer-dropped-frames>
     policer-dropped-frames
    </policer-dropped-frames>
    <policer-low-bytes>
     policer-low-bytes
    </policer-low-bytes>
    <policer-medium-low-bytes>
     policer-medium-low-bytes
    </policer-medium-low-bytes>
    <policer-medium-high-bytes>
     policer-medium-high-bytes
    </policer-medium-high-bytes>
```

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```
            <policer-high-bytes>
              policer-high-bytes
            </policer-high-bytes>
            <policer-dropped-bytes>
              policer-dropped-bytes
            </policer-dropped-bytes>
            <policer-low-rate>
              policer-low-rate
            </policer-low-rate>
            <policer-medium-low-rate>
              policer-medium-low-rate
            </policer-medium-low-rate>
            <policer-medium-high-rate>
              policer-medium-high-rate
            </policer-medium-high-rate>
            <policer-high-rate>
              policer-high-rate
            </policer-high-rate>
            <policer-dropped-rate>
              policer-dropped-rate
            </policer-dropped-rate>
          </layer2-input-policer-statistics>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <layer2-input-policer-statistics>
      <policer-low-iq2-frames>
        policer-low-iq2-frames
      </policer-low-iq2-frames>
      <policer-medium-low-iq2-frames>
        policer-medium-low-iq2-frames
      </policer-medium-low-iq2-frames>
      <policer-medium-high-iq2-frames>
        policer-medium-high-iq2-frames
      </policer-medium-high-iq2-frames>
      <policer-high-iq2-frames>
        policer-high-iq2-frames
      </policer-high-iq2-frames>
      <policer-dropped-iq2-frames>
        policer-dropped-iq2-frames
      </policer-dropped-iq2-frames>
      <policer-low-frames>
        policer-low-frames
      </policer-low-frames>
      <policer-medium-low-frames>
        policer-medium-low-frames
```


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```
        </policer-medium-low-frames>
        <policer-medium-high-frames>
          policer-medium-high-frames
        </policer-medium-high-frames>
        <policer-high-frames>
          policer-high-frames
        </policer-high-frames>
        <policer-dropped-frames>
          policer-dropped-frames
        </policer-dropped-frames>
        <policer-low-bytes>
          policer-low-bytes
        </policer-low-bytes>
        <policer-medium-low-bytes>
          policer-medium-low-bytes
        </policer-medium-low-bytes>
        <policer-medium-high-bytes>
          policer-medium-high-bytes
        </policer-medium-high-bytes>
        <policer-high-bytes>
          policer-high-bytes
        </policer-high-bytes>
        <policer-dropped-bytes>
          policer-dropped-bytes
        </policer-dropped-bytes>
        <policer-low-rate>
          policer-low-rate
        </policer-low-rate>
        <policer-medium-low-rate>
          policer-medium-low-rate
        </policer-medium-low-rate>
        <policer-medium-high-rate>
          policer-medium-high-rate
        </policer-medium-high-rate>
        <policer-high-rate>
          policer-high-rate
        </policer-high-rate>
        <policer-dropped-rate>
          policer-dropped-rate
        </policer-dropped-rate>
      </layer2-input-policer-statistics>
    </logical-interface>
  </interface-filter-information>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <layer2-input-policer-statistics>
        <policer-low-iq2-frames>
```

```
  policer-low-iq2-frames
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate
</policer-high-rate>
```


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```
        <policer-dropped-rate>
          policer-dropped-rate
        </policer-dropped-rate>
      </layer2-input-policer-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Layer 2 input policer statistics for interface

<layer2-input-policer-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <layer2-input-policer-statistics>
      <policer-low-iq2-frames>
        policer-low-iq2-frames
      </policer-low-iq2-frames>
      <policer-medium-low-iq2-frames>
        policer-medium-low-iq2-frames
      </policer-medium-low-iq2-frames>
      <policer-medium-high-iq2-frames>
        policer-medium-high-iq2-frames
      </policer-medium-high-iq2-frames>
      <policer-high-iq2-frames>
        policer-high-iq2-frames
      </policer-high-iq2-frames>
      <policer-dropped-iq2-frames>
        policer-dropped-iq2-frames
      </policer-dropped-iq2-frames>
      <policer-low-frames>
        policer-low-frames
      </policer-low-frames>
      <policer-medium-low-frames>
        policer-medium-low-frames
      </policer-medium-low-frames>
      <policer-medium-high-frames>
        policer-medium-high-frames
      </policer-medium-high-frames>
      <policer-high-frames>
        policer-high-frames
      </policer-high-frames>
      <policer-dropped-frames>
        policer-dropped-frames
      </policer-dropped-frames>
      <policer-low-bytes>
        policer-low-bytes
      </policer-low-bytes>
      <policer-medium-low-bytes>
        policer-medium-low-bytes
      </policer-medium-low-bytes>
      <policer-medium-high-bytes>
        policer-medium-high-bytes
```

```
    </policer-medium-high-bytes>
    <policer-high-bytes>
      policer-high-bytes
    </policer-high-bytes>
    <policer-dropped-bytes>
      policer-dropped-bytes
    </policer-dropped-bytes>
    <policer-low-rate>
      policer-low-rate
    </policer-low-rate>
    <policer-medium-low-rate>
      policer-medium-low-rate
    </policer-medium-low-rate>
    <policer-medium-high-rate>
      policer-medium-high-rate
    </policer-medium-high-rate>
    <policer-high-rate>
      policer-high-rate
    </policer-high-rate>
    <policer-dropped-rate>
      policer-dropped-rate
    </policer-dropped-rate>
  </layer2-input-policer-statistics>
 </logical-interface>
</interface-policer-information>
```

Description Layer 2 input policer statistics for interface

<layer2-output-policer-information>

Usage

```
<layer2-output-policer-information>
 <layer2-output-policer>
  layer2-output-policer
 </layer2-output-policer>
</layer2-output-policer-information>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-information>

Usage

```
<logical-interface>
 <layer2-output-policer-information>
  <layer2-output-policer>
   layer2-output-policer
  </layer2-output-policer>
 </layer2-output-policer-information>
</logical-interface>
```

Description Information about Layer 2 output policer for interface

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<layer2-output-policer-information>

Usage

```
<physical-interface>
  <logical-interface>
    <layer2-output-policer-information>
      <layer2-output-policer>
        layer2-output-policer
      </layer2-output-policer>
    </layer2-output-policer-information>
  </logical-interface>
</physical-interface>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-information>
        <layer2-output-policer>
          layer2-output-policer
        </layer2-output-policer>
      </layer2-output-policer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-information>

Usage

```
<interface-information>
  <logical-interface>
    <layer2-output-policer-information>
      <layer2-output-policer>
        layer2-output-policer
      </layer2-output-policer>
    </layer2-output-policer-information>
  </logical-interface>
</interface-information>
```

Description Information about Layer 2 output policer for interface

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<layer2-output-policer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-information>
        <layer2-output-policer>
          layer2-output-policer
        </layer2-output-policer>
      </layer2-output-policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <layer2-output-policer-information>
      <layer2-output-policer>
        layer2-output-policer
      </layer2-output-policer>
    </layer2-output-policer-information>
  </logical-interface>
</interface-filter-information>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-information>
        <layer2-output-policer>
          layer2-output-policer
        </layer2-output-policer>
      </layer2-output-policer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Information about Layer 2 output policer for interface

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<layer2-output-policer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <layer2-output-policer-information>
      <layer2-output-policer>
        layer2-output-policer
      </layer2-output-policer>
    </layer2-output-policer-information>
  </logical-interface>
</interface-policer-information>
```

Description Information about Layer 2 output policer for interface

<layer2-output-policer-statistics>

Usage

```
<layer2-output-policer-statistics>
  <policer-low-iq2-frames>
    policer-low-iq2-frames
  </policer-low-iq2-frames>
  <policer-medium-low-iq2-frames>
    policer-medium-low-iq2-frames
  </policer-medium-low-iq2-frames>
  <policer-medium-high-iq2-frames>
    policer-medium-high-iq2-frames
  </policer-medium-high-iq2-frames>
  <policer-high-iq2-frames>
    policer-high-iq2-frames
  </policer-high-iq2-frames>
  <policer-dropped-iq2-frames>
    policer-dropped-iq2-frames
  </policer-dropped-iq2-frames>
  <policer-low-frames>
    policer-low-frames
  </policer-low-frames>
  <policer-medium-low-frames>
    policer-medium-low-frames
  </policer-medium-low-frames>
  <policer-medium-high-frames>
    policer-medium-high-frames
  </policer-medium-high-frames>
  <policer-high-frames>
    policer-high-frames
  </policer-high-frames>
  <policer-dropped-frames>
    policer-dropped-frames
  </policer-dropped-frames>
  <policer-low-bytes>
    policer-low-bytes
  </policer-low-bytes>
  <policer-medium-low-bytes>
```

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```
  policer-medium-low-bytes
 </policer-medium-low-bytes>
 <policer-medium-high-bytes>
  policer-medium-high-bytes
 </policer-medium-high-bytes>
 <policer-high-bytes>
  policer-high-bytes
 </policer-high-bytes>
 <policer-dropped-bytes>
  policer-dropped-bytes
 </policer-dropped-bytes>
 <policer-low-rate>
  policer-low-rate
 </policer-low-rate>
 <policer-medium-low-rate>
  policer-medium-low-rate
 </policer-medium-low-rate>
 <policer-medium-high-rate>
  policer-medium-high-rate
 </policer-medium-high-rate>
 <policer-high-rate>
  policer-high-rate
 </policer-high-rate>
 <policer-dropped-rate>
  policer-dropped-rate
 </policer-dropped-rate>
</layer2-output-policer-statistics>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<logical-interface>
 <layer2-output-policer-statistics>
  <policer-low-iq2-frames>
   policer-low-iq2-frames
  </policer-low-iq2-frames>
  <policer-medium-low-iq2-frames>
   policer-medium-low-iq2-frames
  </policer-medium-low-iq2-frames>
  <policer-medium-high-iq2-frames>
   policer-medium-high-iq2-frames
  </policer-medium-high-iq2-frames>
  <policer-high-iq2-frames>
   policer-high-iq2-frames
  </policer-high-iq2-frames>
  <policer-dropped-iq2-frames>
   policer-dropped-iq2-frames
  </policer-dropped-iq2-frames>
  <policer-low-frames>
   policer-low-frames
  </policer-low-frames>
  <policer-medium-low-frames>
```


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```
    policer-medium-low-frames
   </policer-medium-low-frames>
   <policer-medium-high-frames>
    policer-medium-high-frames
   </policer-medium-high-frames>
   <policer-high-frames>
    policer-high-frames
   </policer-high-frames>
   <policer-dropped-frames>
    policer-dropped-frames
   </policer-dropped-frames>
   <policer-low-bytes>
    policer-low-bytes
   </policer-low-bytes>
   <policer-medium-low-bytes>
    policer-medium-low-bytes
   </policer-medium-low-bytes>
   <policer-medium-high-bytes>
    policer-medium-high-bytes
   </policer-medium-high-bytes>
   <policer-high-bytes>
    policer-high-bytes
   </policer-high-bytes>
   <policer-dropped-bytes>
    policer-dropped-bytes
   </policer-dropped-bytes>
   <policer-low-rate>
    policer-low-rate
   </policer-low-rate>
   <policer-medium-low-rate>
    policer-medium-low-rate
   </policer-medium-low-rate>
   <policer-medium-high-rate>
    policer-medium-high-rate
   </policer-medium-high-rate>
   <policer-high-rate>
    policer-high-rate
   </policer-high-rate>
   <policer-dropped-rate>
    policer-dropped-rate
   </policer-dropped-rate>
  </layer2-output-policer-statistics>
</logical-interface>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <layer2-output-policer-statistics>
   <policer-low-iq2-frames>
    policer-low-iq2-frames
```

```
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate
</policer-high-rate>
<policer-dropped-rate>
```


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```
            policer-dropped-rate
          </policer-dropped-rate>
        </layer2-output-policer-statistics>
      </logical-interface>
    </physical-interface>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-statistics>
        <policer-low-iq2-frames>
          policer-low-iq2-frames
        </policer-low-iq2-frames>
        <policer-medium-low-iq2-frames>
          policer-medium-low-iq2-frames
        </policer-medium-low-iq2-frames>
        <policer-medium-high-iq2-frames>
          policer-medium-high-iq2-frames
        </policer-medium-high-iq2-frames>
        <policer-high-iq2-frames>
          policer-high-iq2-frames
        </policer-high-iq2-frames>
        <policer-dropped-iq2-frames>
          policer-dropped-iq2-frames
        </policer-dropped-iq2-frames>
        <policer-low-frames>
          policer-low-frames
        </policer-low-frames>
        <policer-medium-low-frames>
          policer-medium-low-frames
        </policer-medium-low-frames>
        <policer-medium-high-frames>
          policer-medium-high-frames
        </policer-medium-high-frames>
        <policer-high-frames>
          policer-high-frames
        </policer-high-frames>
        <policer-dropped-frames>
          policer-dropped-frames
        </policer-dropped-frames>
        <policer-low-bytes>
          policer-low-bytes
        </policer-low-bytes>
        <policer-medium-low-bytes>
          policer-medium-low-bytes
        </policer-medium-low-bytes>
        <policer-medium-high-bytes>
          policer-medium-high-bytes
        </policer-medium-high-bytes>
```

```
        <policer-high-bytes>
          policer-high-bytes
        </policer-high-bytes>
        <policer-dropped-bytes>
          policer-dropped-bytes
        </policer-dropped-bytes>
        <policer-low-rate>
          policer-low-rate
        </policer-low-rate>
        <policer-medium-low-rate>
          policer-medium-low-rate
        </policer-medium-low-rate>
        <policer-medium-high-rate>
          policer-medium-high-rate
        </policer-medium-high-rate>
        <policer-high-rate>
          policer-high-rate
        </policer-high-rate>
        <policer-dropped-rate>
          policer-dropped-rate
        </policer-dropped-rate>
      </layer2-output-policer-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <layer2-output-policer-statistics>
      <policer-low-iq2-frames>
        policer-low-iq2-frames
      </policer-low-iq2-frames>
      <policer-medium-low-iq2-frames>
        policer-medium-low-iq2-frames
      </policer-medium-low-iq2-frames>
      <policer-medium-high-iq2-frames>
        policer-medium-high-iq2-frames
      </policer-medium-high-iq2-frames>
      <policer-high-iq2-frames>
        policer-high-iq2-frames
      </policer-high-iq2-frames>
      <policer-dropped-iq2-frames>
        policer-dropped-iq2-frames
      </policer-dropped-iq2-frames>
      <policer-low-frames>
        policer-low-frames
      </policer-low-frames>
      <policer-medium-low-frames>
        policer-medium-low-frames
```


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```
        </policer-medium-low-frames>
        <policer-medium-high-frames>
          policer-medium-high-frames
        </policer-medium-high-frames>
        <policer-high-frames>
          policer-high-frames
        </policer-high-frames>
        <policer-dropped-frames>
          policer-dropped-frames
        </policer-dropped-frames>
        <policer-low-bytes>
          policer-low-bytes
        </policer-low-bytes>
        <policer-medium-low-bytes>
          policer-medium-low-bytes
        </policer-medium-low-bytes>
        <policer-medium-high-bytes>
          policer-medium-high-bytes
        </policer-medium-high-bytes>
        <policer-high-bytes>
          policer-high-bytes
        </policer-high-bytes>
        <policer-dropped-bytes>
          policer-dropped-bytes
        </policer-dropped-bytes>
        <policer-low-rate>
          policer-low-rate
        </policer-low-rate>
        <policer-medium-low-rate>
          policer-medium-low-rate
        </policer-medium-low-rate>
        <policer-medium-high-rate>
          policer-medium-high-rate
        </policer-medium-high-rate>
        <policer-high-rate>
          policer-high-rate
        </policer-high-rate>
        <policer-dropped-rate>
          policer-dropped-rate
        </policer-dropped-rate>
      </layer2-output-policer-statistics>
    </logical-interface>
  </interface-information>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-statistics>
        <policer-low-iq2-frames>
```

```
  policer-low-iq2-frames
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate
</policer-high-rate>
```


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```
            <policer-dropped-rate>
              policer-dropped-rate
            </policer-dropped-rate>
          </layer2-output-policer-statistics>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <layer2-output-policer-statistics>
      <policer-low-iq2-frames>
        policer-low-iq2-frames
      </policer-low-iq2-frames>
      <policer-medium-low-iq2-frames>
        policer-medium-low-iq2-frames
      </policer-medium-low-iq2-frames>
      <policer-medium-high-iq2-frames>
        policer-medium-high-iq2-frames
      </policer-medium-high-iq2-frames>
      <policer-high-iq2-frames>
        policer-high-iq2-frames
      </policer-high-iq2-frames>
      <policer-dropped-iq2-frames>
        policer-dropped-iq2-frames
      </policer-dropped-iq2-frames>
      <policer-low-frames>
        policer-low-frames
      </policer-low-frames>
      <policer-medium-low-frames>
        policer-medium-low-frames
      </policer-medium-low-frames>
      <policer-medium-high-frames>
        policer-medium-high-frames
      </policer-medium-high-frames>
      <policer-high-frames>
        policer-high-frames
      </policer-high-frames>
      <policer-dropped-frames>
        policer-dropped-frames
      </policer-dropped-frames>
      <policer-low-bytes>
        policer-low-bytes
      </policer-low-bytes>
      <policer-medium-low-bytes>
        policer-medium-low-bytes
      </policer-medium-low-bytes>
      <policer-medium-high-bytes>
        policer-medium-high-bytes
```

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```
      </policer-medium-high-bytes>
      <policer-high-bytes>
        policer-high-bytes
      </policer-high-bytes>
      <policer-dropped-bytes>
        policer-dropped-bytes
      </policer-dropped-bytes>
      <policer-low-rate>
        policer-low-rate
      </policer-low-rate>
      <policer-medium-low-rate>
        policer-medium-low-rate
      </policer-medium-low-rate>
      <policer-medium-high-rate>
        policer-medium-high-rate
      </policer-medium-high-rate>
      <policer-high-rate>
        policer-high-rate
      </policer-high-rate>
      <policer-dropped-rate>
        policer-dropped-rate
      </policer-dropped-rate>
    </layer2-output-policer-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <layer2-output-policer-statistics>
        <policer-low-iq2-frames>
          policer-low-iq2-frames
        </policer-low-iq2-frames>
        <policer-medium-low-iq2-frames>
          policer-medium-low-iq2-frames
        </policer-medium-low-iq2-frames>
        <policer-medium-high-iq2-frames>
          policer-medium-high-iq2-frames
        </policer-medium-high-iq2-frames>
        <policer-high-iq2-frames>
          policer-high-iq2-frames
        </policer-high-iq2-frames>
        <policer-dropped-iq2-frames>
          policer-dropped-iq2-frames
        </policer-dropped-iq2-frames>
        <policer-low-frames>
          policer-low-frames
        </policer-low-frames>
        <policer-medium-low-frames>
```


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```
            policer-medium-low-frames
          </policer-medium-low-frames>
          <policer-medium-high-frames>
            policer-medium-high-frames
          </policer-medium-high-frames>
          <policer-high-frames>
            policer-high-frames
          </policer-high-frames>
          <policer-dropped-frames>
            policer-dropped-frames
          </policer-dropped-frames>
          <policer-low-bytes>
            policer-low-bytes
          </policer-low-bytes>
          <policer-medium-low-bytes>
            policer-medium-low-bytes
          </policer-medium-low-bytes>
          <policer-medium-high-bytes>
            policer-medium-high-bytes
          </policer-medium-high-bytes>
          <policer-high-bytes>
            policer-high-bytes
          </policer-high-bytes>
          <policer-dropped-bytes>
            policer-dropped-bytes
          </policer-dropped-bytes>
          <policer-low-rate>
            policer-low-rate
          </policer-low-rate>
          <policer-medium-low-rate>
            policer-medium-low-rate
          </policer-medium-low-rate>
          <policer-medium-high-rate>
            policer-medium-high-rate
          </policer-medium-high-rate>
          <policer-high-rate>
            policer-high-rate
          </policer-high-rate>
          <policer-dropped-rate>
            policer-dropped-rate
          </policer-dropped-rate>
        </layer2-output-policer-statistics>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description Layer 2 output policer statistics for interface

<layer2-output-policer-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <layer2-output-policer-statistics>
```

<policer-low-iq2-frames>
  policer-low-iq2-frames
</policer-low-iq2-frames>
<policer-medium-low-iq2-frames>
  policer-medium-low-iq2-frames
</policer-medium-low-iq2-frames>
<policer-medium-high-iq2-frames>
  policer-medium-high-iq2-frames
</policer-medium-high-iq2-frames>
<policer-high-iq2-frames>
  policer-high-iq2-frames
</policer-high-iq2-frames>
<policer-dropped-iq2-frames>
  policer-dropped-iq2-frames
</policer-dropped-iq2-frames>
<policer-low-frames>
  policer-low-frames
</policer-low-frames>
<policer-medium-low-frames>
  policer-medium-low-frames
</policer-medium-low-frames>
<policer-medium-high-frames>
  policer-medium-high-frames
</policer-medium-high-frames>
<policer-high-frames>
  policer-high-frames
</policer-high-frames>
<policer-dropped-frames>
  policer-dropped-frames
</policer-dropped-frames>
<policer-low-bytes>
  policer-low-bytes
</policer-low-bytes>
<policer-medium-low-bytes>
  policer-medium-low-bytes
</policer-medium-low-bytes>
<policer-medium-high-bytes>
  policer-medium-high-bytes
</policer-medium-high-bytes>
<policer-high-bytes>
  policer-high-bytes
</policer-high-bytes>
<policer-dropped-bytes>
  policer-dropped-bytes
</policer-dropped-bytes>
<policer-low-rate>
  policer-low-rate
</policer-low-rate>
<policer-medium-low-rate>
  policer-medium-low-rate
</policer-medium-low-rate>
<policer-medium-high-rate>
  policer-medium-high-rate
</policer-medium-high-rate>
<policer-high-rate>
  policer-high-rate

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```
      </policer-high-rate>
      <policer-dropped-rate>
        policer-dropped-rate
      </policer-dropped-rate>
    </layer2-output-policer-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Layer 2 output policer statistics for interface

<lfi>

Usage

```
<lfi>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
    output-frames
  </output-frames>
  <output-fps>
    output-fps
  </output-fps>
  <output-bytes>
    output-bytes
  </output-bytes>
  <output-bps>
    output-bps
  </output-bps>
</lfi>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <bundle-detail>
      <lfi>
        <input-frames>
          input-frames
        </input-frames>
```

```
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <bundle-detail>
        <lfi>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
```


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```
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <lfi>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

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Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <lfi>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </lfi>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
```


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```
            <bundle-detail>
              <lfi>
                <input-frames>
                  input-frames
                </input-frames>
                <input-fps>
                  input-fps
                </input-fps>
                <input-bytes>
                  input-bytes
                </input-bytes>
                <input-bps>
                  input-bps
                </input-bps>
                <output-frames>
                  output-frames
                </output-frames>
                <output-fps>
                  output-fps
                </output-fps>
                <output-bytes>
                  output-bytes
                </output-bytes>
                <output-bps>
                  output-bps
                </output-bps>
              </lfi>
            </bundle-detail>
          </multilink-detail-statistics>
        </multilink-traffic-statistics>
      </logical-interface>
    </interface-information>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <lfi>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
```

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```
                <input-bps>
                  input-bps
                </input-bps>
                <output-frames>
                  output-frames
                </output-frames>
                <output-fps>
                  output-fps
                </output-fps>
                <output-bytes>
                  output-bytes
                </output-bytes>
                <output-bps>
                  output-bps
                </output-bps>
              </lfi>
            </bundle-detail>
          </multilink-detail-statistics>
        </multilink-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <lfi>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
```


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```
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <lfi>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </lfi>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
```

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```
</interface-policer-information>
```

Description LFI frame statistics for multilink bundles and classes

<lfi>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <lfi>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </lfi>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description LFI frame statistics for multilink bundles and classes

<line-protocol>

Usage

```
<serial-information>
  <line-protocol>
    <line-protocol-mode>
```


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```
        line-protocol-mode
      </line-protocol-mode>
    </line-protocol>
  </serial-information>
```

Description

<line-protocol>

Usage

```
<physical-interface>
  <serial-information>
    <line-protocol>
      <line-protocol-mode>
        line-protocol-mode
      </line-protocol-mode>
    </line-protocol>
  </serial-information>
</physical-interface>
```

Description

<line-protocol>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <line-protocol>
        <line-protocol-mode>
          line-protocol-mode
        </line-protocol-mode>
      </line-protocol>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<line-protocol>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <line-protocol>
        <line-protocol-mode>
          line-protocol-mode
        </line-protocol-mode>
      </line-protocol>
    </serial-information>
  </physical-interface>
```

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```
</interface-filter-information>
```

Description

<line-protocol>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <line-protocol>
        <line-protocol-mode>
          line-protocol-mode
        </line-protocol-mode>
      </line-protocol>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<linear-red-drop-profile>

Usage

```
<atm-cos-queue-parameters>
  <linear-red-drop-profile>
    <queue-depth>
      queue-depth
    </queue-depth>
    <low-red>
      low-red
    </low-red>
    <high-red>
      high-red
    </high-red>
    <max-low-red>
      max-low-red
    </max-low-red>
    <max-high-red>
      max-high-red
    </max-high-red>
  </linear-red-drop-profile>
</atm-cos-queue-parameters>
```

Description

<linear-red-drop-profile>

Usage

```
<atm-cos-queue>
  <atm-cos-queue-parameters>
    <linear-red-drop-profile>
      <queue-depth>
```


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```
      queue-depth
     </queue-depth>
     <low-red>
      low-red
     </low-red>
     <high-red>
      high-red
     </high-red>
     <max-low-red>
      max-low-red
     </max-low-red>
     <max-high-red>
      max-high-red
     </max-high-red>
    </linear-red-drop-profile>
   </atm-cos-queue-parameters>
  </atm-cos-queue>
```

Description

<linear-red-drop-profile>

Usage

```
<atm-cos-information>
 <atm-cos-queue>
  <atm-cos-queue-parameters>
   <linear-red-drop-profile>
    <queue-depth>
     queue-depth
    </queue-depth>
    <low-red>
     low-red
    </low-red>
    <high-red>
     high-red
    </high-red>
    <max-low-red>
     max-low-red
    </max-low-red>
    <max-high-red>
     max-high-red
    </max-high-red>
   </linear-red-drop-profile>
  </atm-cos-queue-parameters>
 </atm-cos-queue>
</atm-cos-information>
```

Description

<linear-red-drop-profile>

Usage

```
<virtual-circuit-information>
 <atm-cos-information>
```

```
      <atm-cos-queue>
        <atm-cos-queue-parameters>
          <linear-red-drop-profile>
            <queue-depth>
              queue-depth
            </queue-depth>
            <low-red>
              low-red
            </low-red>
            <high-red>
              high-red
            </high-red>
            <max-low-red>
              max-low-red
            </max-low-red>
            <max-high-red>
              max-high-red
            </max-high-red>
          </linear-red-drop-profile>
        </atm-cos-queue-parameters>
      </atm-cos-queue>
    </atm-cos-information>
  </virtual-circuit-information>
```

Description

<linear-red-drop-profile>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <atm-cos-information>
      <atm-cos-queue>
        <atm-cos-queue-parameters>
          <linear-red-drop-profile>
            <queue-depth>
              queue-depth
            </queue-depth>
            <low-red>
              low-red
            </low-red>
            <high-red>
              high-red
            </high-red>
            <max-low-red>
              max-low-red
            </max-low-red>
            <max-high-red>
              max-high-red
            </max-high-red>
          </linear-red-drop-profile>
        </atm-cos-queue-parameters>
      </atm-cos-queue>
    </atm-cos-information>
  </virtual-circuit-information>
```


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```
</logical-interface>
```

Description

<linear-red-drop-profile>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <linear-red-drop-profile>
       <queue-depth>
        queue-depth
       </queue-depth>
       <low-red>
        low-red
       </low-red>
       <high-red>
        high-red
       </high-red>
       <max-low-red>
        max-low-red
       </max-low-red>
       <max-high-red>
        max-high-red
       </max-high-red>
      </linear-red-drop-profile>
     </atm-cos-queue-parameters>
    </atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</physical-interface>
```

Description

<linear-red-drop-profile>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <atm-cos-information>
     <atm-cos-queue>
      <atm-cos-queue-parameters>
       <linear-red-drop-profile>
        <queue-depth>
         queue-depth
        </queue-depth>
        <low-red>
```

```
            low-red
           </low-red>
           <high-red>
            high-red
           </high-red>
           <max-low-red>
            max-low-red
           </max-low-red>
           <max-high-red>
            max-high-red
           </max-high-red>
          </linear-red-drop-profile>
         </atm-cos-queue-parameters>
        </atm-cos-queue>
       </atm-cos-information>
      </virtual-circuit-information>
     </logical-interface>
    </physical-interface>
</interface-information>
```

Description

<linear-red-drop-profile>

Usage

```
<interface-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <linear-red-drop-profile>
       <queue-depth>
        queue-depth
       </queue-depth>
       <low-red>
        low-red
       </low-red>
       <high-red>
        high-red
       </high-red>
       <max-low-red>
        max-low-red
       </max-low-red>
       <max-high-red>
        max-high-red
       </max-high-red>
      </linear-red-drop-profile>
     </atm-cos-queue-parameters>
    </atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-information>
```


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Description

<linear-red-drop-profile>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>
              <linear-red-drop-profile>
                <queue-depth>
                  queue-depth
                </queue-depth>
                <low-red>
                  low-red
                </low-red>
                <high-red>
                  high-red
                </high-red>
                <max-low-red>
                  max-low-red
                </max-low-red>
                <max-high-red>
                  max-high-red
                </max-high-red>
              </linear-red-drop-profile>
            </atm-cos-queue-parameters>
          </atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<linear-red-drop-profile>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <atm-cos-information>
        <atm-cos-queue>
          <atm-cos-queue-parameters>
            <linear-red-drop-profile>
              <queue-depth>
                queue-depth
              </queue-depth>
              <low-red>
                low-red
              </low-red>
```

```
                    <high-red>
                      high-red
                    </high-red>
                    <max-low-red>
                      max-low-red
                    </max-low-red>
                    <max-high-red>
                      max-high-red
                    </max-high-red>
                  </linear-red-drop-profile>
                </atm-cos-queue-parameters>
              </atm-cos-queue>
            </atm-cos-information>
          </virtual-circuit-information>
        </logical-interface>
      </interface-filter-information>
```

Description

<linear-red-drop-profile>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <atm-cos-information>
          <atm-cos-queue>
            <atm-cos-queue-parameters>
              <linear-red-drop-profile>
                <queue-depth>
                  queue-depth
                </queue-depth>
                <low-red>
                  low-red
                </low-red>
                <high-red>
                  high-red
                </high-red>
                <max-low-red>
                  max-low-red
                </max-low-red>
                <max-high-red>
                  max-high-red
                </max-high-red>
              </linear-red-drop-profile>
            </atm-cos-queue-parameters>
          </atm-cos-queue>
        </atm-cos-information>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```


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Description

<linear-red-drop-profile>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <atm-cos-information>
    <atm-cos-queue>
     <atm-cos-queue-parameters>
      <linear-red-drop-profile>
       <queue-depth>
        queue-depth
       </queue-depth>
       <low-red>
        low-red
       </low-red>
       <high-red>
        high-red
       </high-red>
       <max-low-red>
        max-low-red
       </max-low-red>
       <max-high-red>
        max-high-red
       </max-high-red>
      </linear-red-drop-profile>
     </atm-cos-queue-parameters>
    </atm-cos-queue>
   </atm-cos-information>
  </virtual-circuit-information>
 </logical-interface>
</interface-policer-information>
```

Description

<link>

Usage

```
<multilink-traffic-statistics>
 <link>
  <name>
   name
  </name>
  <down>
   down
  </down>
  <link-uptime>
   link-uptime
  </link-uptime>
  <input-frames>
   input-frames
  </input-frames>
  <input-fps>
```

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```
      input-fps
    </input-fps>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-frames>
      output-frames
    </output-frames>
    <output-fps>
      output-fps
    </output-fps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
  </link>
</multilink-traffic-statistics>
```

Description

<link>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <link>
      <name>
        name
      </name>
      <down>
        down
      </down>
      <link-uptime>
        link-uptime
      </link-uptime>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-frames>
        output-frames
      </output-frames>
```


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```
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
     </link>
    </multilink-traffic-statistics>
   </logical-interface>
```

Description

<link>

Usage

```
<physical-interface>
 <logical-interface>
  <multilink-traffic-statistics>
   <link>
    <name>
     name
    </name>
    <down>
     down
    </down>
    <link-uptime>
     link-uptime
    </link-uptime>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-frames>
     output-frames
    </output-frames>
    <output-fps>
     output-fps
    </output-fps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
```

```
      </link>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<link>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <link>
          <name>
            name
          </name>
          <down>
            down
          </down>
          <link-uptime>
            link-uptime
          </link-uptime>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </link>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```


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Description

<link>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <link>
        <name>
          name
        </name>
        <down>
          down
        </down>
        <link-uptime>
          link-uptime
        </link-uptime>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </link>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<link>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
```

```
            <multilink-traffic-statistics>
              <link>
                <name>
                  name
                </name>
                <down>
                  down
                </down>
                <link-uptime>
                  link-uptime
                </link-uptime>
                <input-frames>
                  input-frames
                </input-frames>
                <input-fps>
                  input-fps
                </input-fps>
                <input-bytes>
                  input-bytes
                </input-bytes>
                <input-bps>
                  input-bps
                </input-bps>
                <output-frames>
                  output-frames
                </output-frames>
                <output-fps>
                  output-fps
                </output-fps>
                <output-bytes>
                  output-bytes
                </output-bytes>
                <output-bps>
                  output-bps
                </output-bps>
              </link>
            </multilink-traffic-statistics>
          </logical-interface>
        </physical-interface>
      </interface-filter-information>
```

Description

<link>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <link>
        <name>
          name
        </name>
        <down>
          down
```


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```
        </down>
        <link-uptime>
          link-uptime
        </link-uptime>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </link>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<link>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <link>
          <name>
            name
          </name>
          <down>
            down
          </down>
          <link-uptime>
            link-uptime
          </link-uptime>
          <input-frames>
            input-frames
          </input-frames>
```

```
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </link>
        </multilink-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description

<link>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <link>
        <name>
          name
        </name>
        <down>
          down
        </down>
        <link-uptime>
          link-uptime
        </link-uptime>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
```


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```
        input-bps
       </input-bps>
       <output-frames>
        output-frames
       </output-frames>
       <output-fps>
        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </link>
     </multilink-traffic-statistics>
    </logical-interface>
</interface-policer-information>
```

Description

<link-entry>

Usage

```
<physical-interface>
 <links>
  <link-entry>
   <link-id>
    link-id
   </link-id>
   <active-alarms>....</active-alarms>
   <active-defects>....</active-defects>
   <sonet-errors>....</sonet-errors>
   <sonet-physical-information>....</sonet-physical-information>
   <sonet-section-information>....</sonet-section-information>
   <sonet-line-information>....</sonet-line-information>
   <sonet-path-information>....</sonet-path-information>
  <sonet-payload-pointer-information>....</sonet-payload-pointer-information>

   <sonet-payload-pointer-curptr>
    sonet-payload-pointer-curptr
   </sonet-payload-pointer-curptr>
   <sonet-payload-pointer-ptrinc-count>
    sonet-payload-pointer-ptrinc-count
   </sonet-payload-pointer-ptrinc-count>
   <sonet-payload-pointer-ptrdec-count>
    sonet-payload-pointer-ptrdec-count
   </sonet-payload-pointer-ptrdec-count>
   <sonet-payload-pointer-newptr-ndf-count>
    sonet-payload-pointer-newptr-ndf-count
   </sonet-payload-pointer-newptr-ndf-count>
   <sonet-vt-information>....</sonet-vt-information>
   <sonet-rx-overhead>
    sonet-rx-overhead
   </sonet-rx-overhead>
```

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```
      <sonet-tx-overhead>
        sonet-tx-overhead
      </sonet-tx-overhead>
      <sonet-rx-path-trace>
        sonet-rx-path-trace
      </sonet-rx-path-trace>
      <sonet-tx-path-trace>
        sonet-tx-path-trace
      </sonet-tx-path-trace>
      <optics-diagnostics>....</optics-diagnostics>
    </link-entry>
  </links>
</physical-interface>
```

Description SONET/SDH link information

<link-entry>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <link-id>
          link-id
        </link-id>
        <active-alarms>....</active-alarms>
        <active-defects>....</active-defects>
        <sonet-errors>....</sonet-errors>
        <sonet-physical-information>....</sonet-physical-information>
        <sonet-section-information>....</sonet-section-information>
        <sonet-line-information>....</sonet-line-information>
        <sonet-path-information>....</sonet-path-information>
      <sonet-payload-pointer-information>....</sonet-payload-pointer-information>

        <sonet-payload-pointer-curptr>
          sonet-payload-pointer-curptr
        </sonet-payload-pointer-curptr>
        <sonet-payload-pointer-ptrinc-count>
          sonet-payload-pointer-ptrinc-count
        </sonet-payload-pointer-ptrinc-count>
        <sonet-payload-pointer-ptrdec-count>
          sonet-payload-pointer-ptrdec-count
        </sonet-payload-pointer-ptrdec-count>
        <sonet-payload-pointer-newptr-ndf-count>
          sonet-payload-pointer-newptr-ndf-count
        </sonet-payload-pointer-newptr-ndf-count>
        <sonet-vt-information>....</sonet-vt-information>
        <sonet-rx-overhead>
          sonet-rx-overhead
        </sonet-rx-overhead>
        <sonet-tx-overhead>
          sonet-tx-overhead
        </sonet-tx-overhead>
```


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```
        <sonet-rx-path-trace>
          sonet-rx-path-trace
        </sonet-rx-path-trace>
        <sonet-tx-path-trace>
          sonet-tx-path-trace
        </sonet-tx-path-trace>
        <optics-diagnostics>....</optics-diagnostics>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description SONET/SDH link information

<link-entry>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <link-id>
          link-id
        </link-id>
        <active-alarms>....</active-alarms>
        <active-defects>....</active-defects>
        <sonet-errors>....</sonet-errors>
        <sonet-physical-information>....</sonet-physical-information>
        <sonet-section-information>....</sonet-section-information>
        <sonet-line-information>....</sonet-line-information>
        <sonet-path-information>....</sonet-path-information>
      <sonet-payload-pointer-information>....</sonet-payload-pointer-information>

        <sonet-payload-pointer-curptr>
          sonet-payload-pointer-curptr
        </sonet-payload-pointer-curptr>
        <sonet-payload-pointer-ptrinc-count>
          sonet-payload-pointer-ptrinc-count
        </sonet-payload-pointer-ptrinc-count>
        <sonet-payload-pointer-ptrdec-count>
          sonet-payload-pointer-ptrdec-count
        </sonet-payload-pointer-ptrdec-count>
        <sonet-payload-pointer-newptr-ndf-count>
          sonet-payload-pointer-newptr-ndf-count
        </sonet-payload-pointer-newptr-ndf-count>
        <sonet-vt-information>....</sonet-vt-information>
        <sonet-rx-overhead>
          sonet-rx-overhead
        </sonet-rx-overhead>
        <sonet-tx-overhead>
          sonet-tx-overhead
        </sonet-tx-overhead>
        <sonet-rx-path-trace>
          sonet-rx-path-trace
```

```
        </sonet-rx-path-trace>
        <sonet-tx-path-trace>
          sonet-tx-path-trace
        </sonet-tx-path-trace>
        <optics-diagnostics>....</optics-diagnostics>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description SONET/SDH link information

<link-entry>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <link-id>
          link-id
        </link-id>
        <active-alarms>....</active-alarms>
        <active-defects>....</active-defects>
        <sonet-errors>....</sonet-errors>
        <sonet-physical-information>....</sonet-physical-information>
        <sonet-section-information>....</sonet-section-information>
        <sonet-line-information>....</sonet-line-information>
        <sonet-path-information>....</sonet-path-information>
       <sonet-payload-pointer-information>....</sonet-payload-pointer-information>

        <sonet-payload-pointer-curptr>
          sonet-payload-pointer-curptr
        </sonet-payload-pointer-curptr>
        <sonet-payload-pointer-ptrinc-count>
          sonet-payload-pointer-ptrinc-count
        </sonet-payload-pointer-ptrinc-count>
        <sonet-payload-pointer-ptrdec-count>
          sonet-payload-pointer-ptrdec-count
        </sonet-payload-pointer-ptrdec-count>
        <sonet-payload-pointer-newptr-ndf-count>
          sonet-payload-pointer-newptr-ndf-count
        </sonet-payload-pointer-newptr-ndf-count>
        <sonet-vt-information>....</sonet-vt-information>
        <sonet-rx-overhead>
          sonet-rx-overhead
        </sonet-rx-overhead>
        <sonet-tx-overhead>
          sonet-tx-overhead
        </sonet-tx-overhead>
        <sonet-rx-path-trace>
          sonet-rx-path-trace
        </sonet-rx-path-trace>
        <sonet-tx-path-trace>
```


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```
                    sonet-tx-path-trace
                  </sonet-tx-path-trace>
                  <optics-diagnostics>....</optics-diagnostics>
                 </link-entry>
                </links>
               </physical-interface>
              </interface-policer-information>
```

Description SONET/SDH link information

<links>

Usage

```
<physical-interface>
 <links>
  <link-entry>....</link-entry>
 </links>
</physical-interface>
```

Description Aggregated SONET/SDH link information

<links>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>....</link-entry>
  </links>
 </physical-interface>
</interface-information>
```

Description Aggregated SONET/SDH link information

<links>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>....</link-entry>
  </links>
 </physical-interface>
</interface-filter-information>
```

Description Aggregated SONET/SDH link information

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<links>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>....</link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description Aggregated SONET/SDH link information

<lmi-dce-config>

Usage

```
<physical-interface>
  <lmi-dce-config>
    <lmi-type>
      lmi-type
    </lmi-type>
    <lmi-n392dce>
      lmi-n392dce
    </lmi-n392dce>
    <lmi-n393dce>
      lmi-n393dce
    </lmi-n393dce>
    <lmi-t392dce>
      lmi-t392dce
    </lmi-t392dce>
  </lmi-dce-config>
</physical-interface>
```

Description Configured LMI DCE setting on this interface

<lmi-dce-config>

Usage

```
<interface-information>
  <physical-interface>
    <lmi-dce-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n392dce>
        lmi-n392dce
      </lmi-n392dce>
      <lmi-n393dce>
        lmi-n393dce
      </lmi-n393dce>
      <lmi-t392dce>
        lmi-t392dce
```


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```
      </lmi-t392dce>
    </lmi-dce-config>
  </physical-interface>
</interface-information>
```

Description Configured LMI DCE setting on this interface

<lmi-dce-config>

Usage

```
<interface-filter-information>
  <physical-interface>
    <lmi-dce-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n392dce>
        lmi-n392dce
      </lmi-n392dce>
      <lmi-n393dce>
        lmi-n393dce
      </lmi-n393dce>
      <lmi-t392dce>
        lmi-t392dce
      </lmi-t392dce>
    </lmi-dce-config>
  </physical-interface>
</interface-filter-information>
```

Description Configured LMI DCE setting on this interface

<lmi-dce-config>

Usage

```
<interface-policer-information>
  <physical-interface>
    <lmi-dce-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n392dce>
        lmi-n392dce
      </lmi-n392dce>
      <lmi-n393dce>
        lmi-n393dce
      </lmi-n393dce>
      <lmi-t392dce>
        lmi-t392dce
      </lmi-t392dce>
    </lmi-dce-config>
  </physical-interface>
```

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```
</interface-policer-information>
```

Description Configured LMI DCE setting on this interface

<lmi-dte-config>

Usage

```
<physical-interface>
  <lmi-dte-config>
    <lmi-type>
      lmi-type
    </lmi-type>
    <lmi-n391dte>
      lmi-n391dte
    </lmi-n391dte>
    <lmi-n392dte>
      lmi-n392dte
    </lmi-n392dte>
    <lmi-n393dte>
      lmi-n393dte
    </lmi-n393dte>
    <lmi-t391dte>
      lmi-t391dte
    </lmi-t391dte>
  </lmi-dte-config>
</physical-interface>
```

Description Configured LMI DTE setting on this interface

<lmi-dte-config>

Usage

```
<interface-information>
  <physical-interface>
    <lmi-dte-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n391dte>
        lmi-n391dte
      </lmi-n391dte>
      <lmi-n392dte>
        lmi-n392dte
      </lmi-n392dte>
      <lmi-n393dte>
        lmi-n393dte
      </lmi-n393dte>
      <lmi-t391dte>
        lmi-t391dte
      </lmi-t391dte>
    </lmi-dte-config>
  </physical-interface>
```


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```
</interface-information>
```

Description Configured LMI DTE setting on this interface

<lmi-dte-config>

Usage

```
<interface-filter-information>
  <physical-interface>
    <lmi-dte-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n391dte>
        lmi-n391dte
      </lmi-n391dte>
      <lmi-n392dte>
        lmi-n392dte
      </lmi-n392dte>
      <lmi-n393dte>
        lmi-n393dte
      </lmi-n393dte>
      <lmi-t391dte>
        lmi-t391dte
      </lmi-t391dte>
    </lmi-dte-config>
  </physical-interface>
</interface-filter-information>
```

Description Configured LMI DTE setting on this interface

<lmi-dte-config>

Usage

```
<interface-policer-information>
  <physical-interface>
    <lmi-dte-config>
      <lmi-type>
        lmi-type
      </lmi-type>
      <lmi-n391dte>
        lmi-n391dte
      </lmi-n391dte>
      <lmi-n392dte>
        lmi-n392dte
      </lmi-n392dte>
      <lmi-n393dte>
        lmi-n393dte
      </lmi-n393dte>
      <lmi-t391dte>
        lmi-t391dte
      </lmi-t391dte>
```

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```
    </lmi-dte-config>
  </physical-interface>
</interface-policer-information>
```

Description Configured LMI DTE setting on this interface

<lmi-statistics>

Usage

```
<lmi-statistics>
  <lmi-statistics-dte-descriptor>
    lmi-statistics-dte-descriptor
  </lmi-statistics-dte-descriptor>
  <lmi-enquiries-sent>
    lmi-enquiries-sent
  </lmi-enquiries-sent>
  <lmi-full-enquiries-sent>
    lmi-full-enquiries-sent
  </lmi-full-enquiries-sent>
  <lmi-enquiry-responses-received>
    lmi-enquiry-responses-received
  </lmi-enquiry-responses-received>
  <lmi-full-enquiry-responses-received>
    lmi-full-enquiry-responses-received
  </lmi-full-enquiry-responses-received>
  <lmi-statistics-dce-descriptor>
    lmi-statistics-dce-descriptor
  </lmi-statistics-dce-descriptor>
  <lmi-enquiries-received>
    lmi-enquiries-received
  </lmi-enquiries-received>
  <lmi-full-enquiries-received>
    lmi-full-enquiries-received
  </lmi-full-enquiries-received>
  <lmi-enquiry-responses-sent>
    lmi-enquiry-responses-sent
  </lmi-enquiry-responses-sent>
  <lmi-full-enquiry-responses-sent>
    lmi-full-enquiry-responses-sent
  </lmi-full-enquiry-responses-sent>
  <lmi-statistics-common-descriptor>
    lmi-statistics-common-descriptor
  </lmi-statistics-common-descriptor>
  <lmi-unknown-messages-received>
    lmi-unknown-messages-received
  </lmi-unknown-messages-received>
  <lmi-asynchronous-updates-received>
    lmi-asynchronous-updates-received
  </lmi-asynchronous-updates-received>
  <lmi-out-of-sequence>
    lmi-out-of-sequence
  </lmi-out-of-sequence>
  <lmi-keepalive-responses-timeout>
    lmi-keepalive-responses-timeout
```


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```
  </lmi-keepalive-responses-timeout>
</lmi-statistics>
```

Description LMI statistics for an interface

<lmi-statistics>

Usage

```
<physical-interface>
  <lmi-statistics>
    <lmi-statistics-dte-descriptor>
      lmi-statistics-dte-descriptor
    </lmi-statistics-dte-descriptor>
    <lmi-enquiries-sent>
      lmi-enquiries-sent
    </lmi-enquiries-sent>
    <lmi-full-enquiries-sent>
      lmi-full-enquiries-sent
    </lmi-full-enquiries-sent>
    <lmi-enquiry-responses-received>
      lmi-enquiry-responses-received
    </lmi-enquiry-responses-received>
    <lmi-full-enquiry-responses-received>
      lmi-full-enquiry-responses-received
    </lmi-full-enquiry-responses-received>
    <lmi-statistics-dce-descriptor>
      lmi-statistics-dce-descriptor
    </lmi-statistics-dce-descriptor>
    <lmi-enquiries-received>
      lmi-enquiries-received
    </lmi-enquiries-received>
    <lmi-full-enquiries-received>
      lmi-full-enquiries-received
    </lmi-full-enquiries-received>
    <lmi-enquiry-responses-sent>
      lmi-enquiry-responses-sent
    </lmi-enquiry-responses-sent>
    <lmi-full-enquiry-responses-sent>
      lmi-full-enquiry-responses-sent
    </lmi-full-enquiry-responses-sent>
    <lmi-statistics-common-descriptor>
      lmi-statistics-common-descriptor
    </lmi-statistics-common-descriptor>
    <lmi-unknown-messages-received>
      lmi-unknown-messages-received
    </lmi-unknown-messages-received>
    <lmi-asynchronous-updates-received>
      lmi-asynchronous-updates-received
    </lmi-asynchronous-updates-received>
    <lmi-out-of-sequence>
      lmi-out-of-sequence
    </lmi-out-of-sequence>
    <lmi-keepalive-responses-timeout>
      lmi-keepalive-responses-timeout
```

```
    </lmi-keepalive-responses-timeout>
  </lmi-statistics>
</physical-interface>
```

Description LMI statistics for an interface

<lmi-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <lmi-statistics>
      <lmi-statistics-dte-descriptor>
        lmi-statistics-dte-descriptor
      </lmi-statistics-dte-descriptor>
      <lmi-enquiries-sent>
        lmi-enquiries-sent
      </lmi-enquiries-sent>
      <lmi-full-enquiries-sent>
        lmi-full-enquiries-sent
      </lmi-full-enquiries-sent>
      <lmi-enquiry-responses-received>
        lmi-enquiry-responses-received
      </lmi-enquiry-responses-received>
      <lmi-full-enquiry-responses-received>
        lmi-full-enquiry-responses-received
      </lmi-full-enquiry-responses-received>
      <lmi-statistics-dce-descriptor>
        lmi-statistics-dce-descriptor
      </lmi-statistics-dce-descriptor>
      <lmi-enquiries-received>
        lmi-enquiries-received
      </lmi-enquiries-received>
      <lmi-full-enquiries-received>
        lmi-full-enquiries-received
      </lmi-full-enquiries-received>
      <lmi-enquiry-responses-sent>
        lmi-enquiry-responses-sent
      </lmi-enquiry-responses-sent>
      <lmi-full-enquiry-responses-sent>
        lmi-full-enquiry-responses-sent
      </lmi-full-enquiry-responses-sent>
      <lmi-statistics-common-descriptor>
        lmi-statistics-common-descriptor
      </lmi-statistics-common-descriptor>
      <lmi-unknown-messages-received>
        lmi-unknown-messages-received
      </lmi-unknown-messages-received>
      <lmi-asynchronous-updates-received>
        lmi-asynchronous-updates-received
      </lmi-asynchronous-updates-received>
      <lmi-out-of-sequence>
        lmi-out-of-sequence
      </lmi-out-of-sequence>
```


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```
        <lmi-keepalive-responses-timeout>
          lmi-keepalive-responses-timeout
        </lmi-keepalive-responses-timeout>
      </lmi-statistics>
    </physical-interface>
  </interface-information>
```

Description LMI statistics for an interface

<lmi-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <lmi-statistics>
      <lmi-statistics-dte-descriptor>
        lmi-statistics-dte-descriptor
      </lmi-statistics-dte-descriptor>
      <lmi-enquiries-sent>
        lmi-enquiries-sent
      </lmi-enquiries-sent>
      <lmi-full-enquiries-sent>
        lmi-full-enquiries-sent
      </lmi-full-enquiries-sent>
      <lmi-enquiry-responses-received>
        lmi-enquiry-responses-received
      </lmi-enquiry-responses-received>
      <lmi-full-enquiry-responses-received>
        lmi-full-enquiry-responses-received
      </lmi-full-enquiry-responses-received>
      <lmi-statistics-dce-descriptor>
        lmi-statistics-dce-descriptor
      </lmi-statistics-dce-descriptor>
      <lmi-enquiries-received>
        lmi-enquiries-received
      </lmi-enquiries-received>
      <lmi-full-enquiries-received>
        lmi-full-enquiries-received
      </lmi-full-enquiries-received>
      <lmi-enquiry-responses-sent>
        lmi-enquiry-responses-sent
      </lmi-enquiry-responses-sent>
      <lmi-full-enquiry-responses-sent>
        lmi-full-enquiry-responses-sent
      </lmi-full-enquiry-responses-sent>
      <lmi-statistics-common-descriptor>
        lmi-statistics-common-descriptor
      </lmi-statistics-common-descriptor>
      <lmi-unknown-messages-received>
        lmi-unknown-messages-received
      </lmi-unknown-messages-received>
      <lmi-asynchronous-updates-received>
        lmi-asynchronous-updates-received
      </lmi-asynchronous-updates-received>
```

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```
        <lmi-out-of-sequence>
          lmi-out-of-sequence
        </lmi-out-of-sequence>
        <lmi-keepalive-responses-timeout>
          lmi-keepalive-responses-timeout
        </lmi-keepalive-responses-timeout>
      </lmi-statistics>
    </physical-interface>
  </interface-filter-information>
```

Description LMI statistics for an interface

<lmi-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <lmi-statistics>
      <lmi-statistics-dte-descriptor>
        lmi-statistics-dte-descriptor
      </lmi-statistics-dte-descriptor>
      <lmi-enquiries-sent>
        lmi-enquiries-sent
      </lmi-enquiries-sent>
      <lmi-full-enquiries-sent>
        lmi-full-enquiries-sent
      </lmi-full-enquiries-sent>
      <lmi-enquiry-responses-received>
        lmi-enquiry-responses-received
      </lmi-enquiry-responses-received>
      <lmi-full-enquiry-responses-received>
        lmi-full-enquiry-responses-received
      </lmi-full-enquiry-responses-received>
      <lmi-statistics-dce-descriptor>
        lmi-statistics-dce-descriptor
      </lmi-statistics-dce-descriptor>
      <lmi-enquiries-received>
        lmi-enquiries-received
      </lmi-enquiries-received>
      <lmi-full-enquiries-received>
        lmi-full-enquiries-received
      </lmi-full-enquiries-received>
      <lmi-enquiry-responses-sent>
        lmi-enquiry-responses-sent
      </lmi-enquiry-responses-sent>
      <lmi-full-enquiry-responses-sent>
        lmi-full-enquiry-responses-sent
      </lmi-full-enquiry-responses-sent>
      <lmi-statistics-common-descriptor>
        lmi-statistics-common-descriptor
      </lmi-statistics-common-descriptor>
      <lmi-unknown-messages-received>
        lmi-unknown-messages-received
      </lmi-unknown-messages-received>
```


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```
        <lmi-asynchronous-updates-received>
          lmi-asynchronous-updates-received
        </lmi-asynchronous-updates-received>
        <lmi-out-of-sequence>
          lmi-out-of-sequence
        </lmi-out-of-sequence>
        <lmi-keepalive-responses-timeout>
          lmi-keepalive-responses-timeout
        </lmi-keepalive-responses-timeout>
      </lmi-statistics>
    </physical-interface>
  </interface-policer-information>
```

Description LMI statistics for an interface

<local-info>

Usage

```
<ethernet-autonegotiation>
  <local-info>
    <local-flow-control>
      local-flow-control
    </local-flow-control>
    <local-remote-fault>
      local-remote-fault
    </local-remote-fault>
    <local-link-speed>
      local-link-speed
    </local-link-speed>
    <local-link-duplexity>
      local-link-duplexity
    </local-link-duplexity>
  </local-info>
</ethernet-autonegotiation>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<jswitch-port-information>
  <jswitch-port>
    <ethernet-autonegotiation>
      <local-info>
        <local-flow-control>
          local-flow-control
        </local-flow-control>
        <local-remote-fault>
          local-remote-fault
        </local-remote-fault>
        <local-link-speed>
          local-link-speed
```

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```
            </local-link-speed>
            <local-link-duplexity>
              local-link-duplexity
            </local-link-duplexity>
          </local-info>
        </ethernet-autonegotiation>
      </jswitch-port>
    </jswitch-port-information>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<physical-interface>
  <ethernet-autonegotiation>
    <local-info>
      <local-flow-control>
        local-flow-control
      </local-flow-control>
      <local-remote-fault>
        local-remote-fault
      </local-remote-fault>
      <local-link-speed>
        local-link-speed
      </local-link-speed>
      <local-link-duplexity>
        local-link-duplexity
      </local-link-duplexity>
    </local-info>
  </ethernet-autonegotiation>
</physical-interface>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<physical-interface>
  <local-info>
    <local-flow-control>
      local-flow-control
    </local-flow-control>
    <local-remote-fault>
      local-remote-fault
    </local-remote-fault>
    <local-link-speed>
      local-link-speed
    </local-link-speed>
    <local-link-duplexity>
      local-link-duplexity
    </local-link-duplexity>
```


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```
  </local-info>
</physical-interface>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-information>
  <physical-interface>
    <ethernet-autonegotiation>
      <local-info>
        <local-flow-control>
          local-flow-control
        </local-flow-control>
        <local-remote-fault>
          local-remote-fault
        </local-remote-fault>
        <local-link-speed>
          local-link-speed
        </local-link-speed>
        <local-link-duplexity>
          local-link-duplexity
        </local-link-duplexity>
      </local-info>
    </ethernet-autonegotiation>
  </physical-interface>
</interface-information>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-information>
  <physical-interface>
    <local-info>
      <local-flow-control>
        local-flow-control
      </local-flow-control>
      <local-remote-fault>
        local-remote-fault
      </local-remote-fault>
      <local-link-speed>
        local-link-speed
      </local-link-speed>
      <local-link-duplexity>
        local-link-duplexity
      </local-link-duplexity>
    </local-info>
  </physical-interface>
```

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```
</interface-information>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ethernet-autonegotiation>
      <local-info>
        <local-flow-control>
          local-flow-control
        </local-flow-control>
        <local-remote-fault>
          local-remote-fault
        </local-remote-fault>
        <local-link-speed>
          local-link-speed
        </local-link-speed>
        <local-link-duplexity>
          local-link-duplexity
        </local-link-duplexity>
      </local-info>
    </ethernet-autonegotiation>
  </physical-interface>
</interface-filter-information>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-filter-information>
  <physical-interface>
    <local-info>
      <local-flow-control>
        local-flow-control
      </local-flow-control>
      <local-remote-fault>
        local-remote-fault
      </local-remote-fault>
      <local-link-speed>
        local-link-speed
      </local-link-speed>
      <local-link-duplexity>
        local-link-duplexity
      </local-link-duplexity>
    </local-info>
  </physical-interface>
</interface-filter-information>
```


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Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ethernet-autonegotiation>
      <local-info>
        <local-flow-control>
          local-flow-control
        </local-flow-control>
        <local-remote-fault>
          local-remote-fault
        </local-remote-fault>
        <local-link-speed>
          local-link-speed
        </local-link-speed>
        <local-link-duplexity>
          local-link-duplexity
        </local-link-duplexity>
      </local-info>
    </ethernet-autonegotiation>
  </physical-interface>
</interface-policer-information>
```

Description Auto-negotiation status of local partner

<local-info>

Usage

```
<interface-policer-information>
  <physical-interface>
    <local-info>
      <local-flow-control>
        local-flow-control
      </local-flow-control>
      <local-remote-fault>
        local-remote-fault
      </local-remote-fault>
      <local-link-speed>
        local-link-speed
      </local-link-speed>
      <local-link-duplexity>
        local-link-duplexity
      </local-link-duplexity>
    </local-info>
  </physical-interface>
</interface-policer-information>
```

Description Auto-negotiation status of local partner

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<local-traffic-statistics>

Usage

```
<local-traffic-statistics>
  <input-bytes>
    input-bytes
  </input-bytes>
  <output-bytes>
    output-bytes
  </output-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-bps>
    output-bps
  </output-bps>
  <input-packets>
    input-packets
  </input-packets>
  <output-packets>
    output-packets
  </output-packets>
  <input-pps>
    input-pps
  </input-pps>
  <output-pps>
    output-pps
  </output-pps>
</local-traffic-statistics>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<logical-interface>
  <local-traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
```


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```
      output-packets
    </output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
  </local-traffic-statistics>
</logical-interface>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <local-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-pps>
        output-pps
      </output-pps>
    </local-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Statistics for locally originated traffic

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<local-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <local-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
      </local-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <local-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
```


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```
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
      </local-traffic-statistics>
    </logical-interface>
  </interface-information>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <local-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
      </local-traffic-statistics>
    </logical-interface>
```

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```
  </physical-interface>
</interface-filter-information>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <local-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-pps>
        output-pps
      </output-pps>
    </local-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <local-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
```


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```
        output-bytes
       </output-bytes>
       <input-bps>
        input-bps
       </input-bps>
       <output-bps>
        output-bps
       </output-bps>
       <input-packets>
        input-packets
       </input-packets>
       <output-packets>
        output-packets
       </output-packets>
       <input-pps>
        input-pps
       </input-pps>
       <output-pps>
        output-pps
       </output-pps>
      </local-traffic-statistics>
     </logical-interface>
    </physical-interface>
</interface-policer-information>
```

Description Statistics for locally originated traffic

<local-traffic-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <local-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
```

```
        <output-pps>
          output-pps
        </output-pps>
      </local-traffic-statistics>
    </logical-interface>
  </interface-policer-information>
```

Description Statistics for locally originated traffic

<location-name-information>

Usage

```
<location-name-information>
  <interface-name>
    interface-name
  </interface-name>
  <fpc-number>
    fpc-number
  </fpc-number>
  <lcc-number>
    lcc-number
  </lcc-number>
</location-name-information>
```

Description

<location-name-information>

Usage

```
<interface-location-name-information>
  <location-name-information>
    <interface-name>
      interface-name
    </interface-name>
    <fpc-number>
      fpc-number
    </fpc-number>
    <lcc-number>
      lcc-number
    </lcc-number>
  </location-name-information>
</interface-location-name-information>
```

Description

<location-slot-information>

Usage

```
<location-slot-information>
  <global-fpc-number>
    global-fpc-number
  </global-fpc-number>
```


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```
</location-slot-information>
```

Description

<location-slot-information>

Usage

```
<interface-location-slot-information>
  <location-slot-information>
    <global-fpc-number>
      global-fpc-number
    </global-fpc-number>
  </location-slot-information>
</interface-location-slot-information>
```

Description

<logical-interface>

Usage

```
<logical-interface>
  <name>
    name
  </name>
  <admin-status>
    admin-status
  </admin-status>
  <oper-status>
    oper-status
  </oper-status>
  <vrfname>
    vrfname
  </vrfname>
  <local-index>
    local-index
  </local-index>
  <hardware-token>
    hardware-token
  </hardware-token>
  <snmp-index>
    snmp-index
  </snmp-index>
  <generation>
    generation
  </generation>
  <description>
    description
  </description>
  <if-config-flags>....</if-config-flags>
  <multilink-flapped>
    multilink-flapped
  </multilink-flapped>
  <link-address>
    link-address
```

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```
</link-address>
<encapsulation>
  encapsulation
</encapsulation>
<interface-set-name>
  interface-set-name
</interface-set-name>
<demux-table-type>
  demux-table-type
</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
<copy-tos-to-outer-ip-header>
  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
<redundant-logical-interface-name>
  redundant-logical-interface-name
</redundant-logical-interface-name>
<layer2-input-policer-information>....</layer2-input-policer-information>
<layer2-output-policer-information>....</layer2-output-policer-information>
<pppoe-information>....</pppoe-information>
<pppoe-underlying-information>....</pppoe-underlying-information>
<demux-interface>....</demux-interface>
<demux-information>....</demux-information>
<dialer-time-to-disconnect>
  dialer-time-to-disconnect
</dialer-time-to-disconnect>
<dialer-information>....</dialer-information>
<shared-interface-information>....</shared-interface-information>
<logical-interface-mac>
  logical-interface-mac
</logical-interface-mac>
<mac-database>....</mac-database>
<logical-interface-bandwidth>
  logical-interface-bandwidth
</logical-interface-bandwidth>
<queue-counters>....</queue-counters>
<ingress-queue-counters>....</ingress-queue-counters>
<multilink-bundle-link-information>....</multilink-bundle-link-information>
<multilink-bundle-options>....</multilink-bundle-options>
<multilink-bundle-errors>....</multilink-bundle-errors>
<multilink-traffic-statistics>....</multilink-traffic-statistics>
<traffic-statistics>....</traffic-statistics>
<multicast-statistics>....</multicast-statistics>
<ingress-traffic-statistics>....</ingress-traffic-statistics>
<local-traffic-statistics>....</local-traffic-statistics>
<transit-traffic-statistics>....</transit-traffic-statistics>
<keepalive-config>....</keepalive-config>
<keepalive-statistics>....</keepalive-statistics>
<ppp-flags>....</ppp-flags>
<lcp-state>
  lcp-state
```


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```
</lcp-state>
<ncp-information>....</ncp-information>
<chap-state>
 chap-state
</chap-state>
<pap-state>
 pap-state
</pap-state>
<virtual-circuit-information>....</virtual-circuit-information>
<filter-information>....</filter-information>
<policer-information>....</policer-information>
<address-family>....</address-family>
<bridge-iff-properties>....</bridge-iff-properties>
<in-arp-statistics>....</in-arp-statistics>
<l2circuit-info>....</l2circuit-info>
<irb-domain>....</irb-domain>
<media-information>....</media-information>
<multilink-bundle-status>....</multilink-bundle-status>
<multilink-bundle-class>....</multilink-bundle-class>
<lag-traffic-statistics>....</lag-traffic-statistics>
<layer2-input-policer-statistics>....</layer2-input-policer-statistics>
<layer2-output-policer-statistics>....</layer2-output-policer-statistics>
<mac-policer-information>....</mac-policer-information>
<ppp-parameters>....</ppp-parameters>
</logical-interface>
```

Description Information about a single logical interface

<logical-interface>

Usage

```
<physical-interface>
 <logical-interface>
  <name>
   name
  </name>
  <admin-status>
   admin-status
  </admin-status>
  <oper-status>
   oper-status
  </oper-status>
  <vrfname>
   vrfname
  </vrfname>
  <local-index>
   local-index
  </local-index>
  <hardware-token>
   hardware-token
  </hardware-token>
  <snmp-index>
   snmp-index
  </snmp-index>
```

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```
<generation>
  generation
</generation>
<description>
  description
</description>
<if-config-flags>....</if-config-flags>
<multilink-flapped>
  multilink-flapped
</multilink-flapped>
<link-address>
  link-address
</link-address>
<encapsulation>
  encapsulation
</encapsulation>
<interface-set-name>
  interface-set-name
</interface-set-name>
<demux-table-type>
  demux-table-type
</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
<copy-tos-to-outer-ip-header>
  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
<redundant-logical-interface-name>
  redundant-logical-interface-name
</redundant-logical-interface-name>
<layer2-input-policer-information>....</layer2-input-policer-information>
<layer2-output-policer-information>....</layer2-output-policer-information>
<pppoe-information>....</pppoe-information>
<pppoe-underlying-information>....</pppoe-underlying-information>
<demux-interface>....</demux-interface>
<demux-information>....</demux-information>
<dialer-time-to-disconnect>
  dialer-time-to-disconnect
</dialer-time-to-disconnect>
<dialer-information>....</dialer-information>
<shared-interface-information>....</shared-interface-information>
<logical-interface-mac>
  logical-interface-mac
</logical-interface-mac>
<mac-database>....</mac-database>
<logical-interface-bandwidth>
  logical-interface-bandwidth
</logical-interface-bandwidth>
<queue-counters>....</queue-counters>
<ingress-queue-counters>....</ingress-queue-counters>
<multilink-bundle-link-information>....</multilink-bundle-link-information>
<multilink-bundle-options>....</multilink-bundle-options>
```


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```
        <multilink-bundle-errors>....</multilink-bundle-errors>
        <multilink-traffic-statistics>....</multilink-traffic-statistics>
        <traffic-statistics>....</traffic-statistics>
        <multicast-statistics>....</multicast-statistics>
        <ingress-traffic-statistics>....</ingress-traffic-statistics>
        <local-traffic-statistics>....</local-traffic-statistics>
        <transit-traffic-statistics>....</transit-traffic-statistics>
        <keepalive-config>....</keepalive-config>
        <keepalive-statistics>....</keepalive-statistics>
        <ppp-flags>....</ppp-flags>
        <lcp-state>
          lcp-state
        </lcp-state>
        <ncp-information>....</ncp-information>
        <chap-state>
          chap-state
        </chap-state>
        <pap-state>
          pap-state
        </pap-state>
        <virtual-circuit-information>....</virtual-circuit-information>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <address-family>....</address-family>
        <bridge-iff-properties>....</bridge-iff-properties>
        <in-arp-statistics>....</in-arp-statistics>
        <l2circuit-info>....</l2circuit-info>
        <irb-domain>....</irb-domain>
        <media-information>....</media-information>
        <multilink-bundle-status>....</multilink-bundle-status>
        <multilink-bundle-class>....</multilink-bundle-class>
        <lag-traffic-statistics>....</lag-traffic-statistics>
        <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
        <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
        <mac-policer-information>....</mac-policer-information>
        <ppp-parameters>....</ppp-parameters>
      </logical-interface>
    </physical-interface>
```

Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <name>
        name
      </name>
      <admin-status>
        admin-status
      </admin-status>
      <oper-status>
```

```
  oper-status
</oper-status>
<vrfname>
  vrfname
</vrfname>
<local-index>
  local-index
</local-index>
<hardware-token>
  hardware-token
</hardware-token>
<snmp-index>
  snmp-index
</snmp-index>
<generation>
  generation
</generation>
<description>
  description
</description>
<if-config-flags>....</if-config-flags>
<multilink-flapped>
  multilink-flapped
</multilink-flapped>
<link-address>
  link-address
</link-address>
<encapsulation>
  encapsulation
</encapsulation>
<interface-set-name>
  interface-set-name
</interface-set-name>
<demux-table-type>
  demux-table-type
</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
<copy-tos-to-outer-ip-header>
  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
<redundant-logical-interface-name>
  redundant-logical-interface-name
</redundant-logical-interface-name>
<layer2-input-policer-information>....</layer2-input-policer-information>
<layer2-output-policer-information>....</layer2-output-policer-information>
<pppoe-information>....</pppoe-information>
<pppoe-underlying-information>....</pppoe-underlying-information>
<demux-interface>....</demux-interface>
<demux-information>....</demux-information>
<dialer-time-to-disconnect>
  dialer-time-to-disconnect
```


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```
        </dialer-time-to-disconnect>
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        </logical-interface-mac>
        <mac-database>....</mac-database>
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        </logical-interface-bandwidth>
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        <ingress-traffic-statistics>....</ingress-traffic-statistics>
        <local-traffic-statistics>....</local-traffic-statistics>
        <transit-traffic-statistics>....</transit-traffic-statistics>
        <keepalive-config>....</keepalive-config>
        <keepalive-statistics>....</keepalive-statistics>
        <ppp-flags>....</ppp-flags>
        <lcp-state>
          lcp-state
        </lcp-state>
        <ncp-information>....</ncp-information>
        <chap-state>
          chap-state
        </chap-state>
        <pap-state>
          pap-state
        </pap-state>
        <virtual-circuit-information>....</virtual-circuit-information>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <address-family>....</address-family>
        <bridge-iff-properties>....</bridge-iff-properties>
        <in-arp-statistics>....</in-arp-statistics>
        <l2circuit-info>....</l2circuit-info>
        <irb-domain>....</irb-domain>
        <media-information>....</media-information>
        <multilink-bundle-status>....</multilink-bundle-status>
        <multilink-bundle-class>....</multilink-bundle-class>
        <lag-traffic-statistics>....</lag-traffic-statistics>
        <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
        <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
        <mac-policer-information>....</mac-policer-information>
        <ppp-parameters>....</ppp-parameters>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

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Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-information>
  <logical-interface>
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      name
    </name>
    <admin-status>
      admin-status
    </admin-status>
    <oper-status>
      oper-status
    </oper-status>
    <vrfname>
      vrfname
    </vrfname>
    <local-index>
      local-index
    </local-index>
    <hardware-token>
      hardware-token
    </hardware-token>
    <snmp-index>
      snmp-index
    </snmp-index>
    <generation>
      generation
    </generation>
    <description>
      description
    </description>
    <if-config-flags>....</if-config-flags>
    <multilink-flapped>
      multilink-flapped
    </multilink-flapped>
    <link-address>
      link-address
    </link-address>
    <encapsulation>
      encapsulation
    </encapsulation>
    <interface-set-name>
      interface-set-name
    </interface-set-name>
    <demux-table-type>
      demux-table-type
    </demux-table-type>
    <gre-keepalive-configured>
      gre-keepalive-configured
    </gre-keepalive-configured>
    <gre-keepalive-adj-state>
      gre-keepalive-adj-state
```


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</gre-keepalive-adj-state>
<copy-tos-to-outer-ip-header>
  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
<redundant-logical-interface-name>
  redundant-logical-interface-name
</redundant-logical-interface-name>
<layer2-input-policer-information>....</layer2-input-policer-information>
<layer2-output-policer-information>....</layer2-output-policer-information>
<pppoe-information>....</pppoe-information>
<pppoe-underlying-information>....</pppoe-underlying-information>
<demux-interface>....</demux-interface>
<demux-information>....</demux-information>
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</dialer-time-to-disconnect>
<dialer-information>....</dialer-information>
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<mac-database>....</mac-database>
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</logical-interface-bandwidth>
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<ingress-queue-counters>....</ingress-queue-counters>
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<multicast-statistics>....</multicast-statistics>
<ingress-traffic-statistics>....</ingress-traffic-statistics>
<local-traffic-statistics>....</local-traffic-statistics>
<transit-traffic-statistics>....</transit-traffic-statistics>
<keepalive-config>....</keepalive-config>
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<ppp-flags>....</ppp-flags>
<lcp-state>
  lcp-state
</lcp-state>
<ncp-information>....</ncp-information>
<chap-state>
  chap-state
</chap-state>
<pap-state>
  pap-state
</pap-state>
<virtual-circuit-information>....</virtual-circuit-information>
<filter-information>....</filter-information>
<policer-information>....</policer-information>
<address-family>....</address-family>
<bridge-iff-properties>....</bridge-iff-properties>
<in-arp-statistics>....</in-arp-statistics>
<l2circuit-info>....</l2circuit-info>
```

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    <irb-domain>....</irb-domain>
    <media-information>....</media-information>
    <multilink-bundle-status>....</multilink-bundle-status>
    <multilink-bundle-class>....</multilink-bundle-class>
    <lag-traffic-statistics>....</lag-traffic-statistics>
    <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
    <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
    <mac-policer-information>....</mac-policer-information>
    <ppp-parameters>....</ppp-parameters>
  </logical-interface>
</interface-information>
```

Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <name>
        name
      </name>
      <admin-status>
        admin-status
      </admin-status>
      <oper-status>
        oper-status
      </oper-status>
      <vrfname>
        vrfname
      </vrfname>
      <local-index>
        local-index
      </local-index>
      <hardware-token>
        hardware-token
      </hardware-token>
      <snmp-index>
        snmp-index
      </snmp-index>
      <generation>
        generation
      </generation>
      <description>
        description
      </description>
      <if-config-flags>....</if-config-flags>
      <multilink-flapped>
        multilink-flapped
      </multilink-flapped>
      <link-address>
        link-address
      </link-address>
```


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  encapsulation
</encapsulation>
<interface-set-name>
  interface-set-name
</interface-set-name>
<demux-table-type>
  demux-table-type
</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
<copy-tos-to-outer-ip-header>
  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
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</redundant-logical-interface-name>
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<pppoe-underlying-information>....</pppoe-underlying-information>
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<demux-information>....</demux-information>
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</dialer-time-to-disconnect>
<dialer-information>....</dialer-information>
<shared-interface-information>....</shared-interface-information>
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</logical-interface-mac>
<mac-database>....</mac-database>
<logical-interface-bandwidth>
  logical-interface-bandwidth
</logical-interface-bandwidth>
<queue-counters>....</queue-counters>
<ingress-queue-counters>....</ingress-queue-counters>
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<multilink-bundle-options>....</multilink-bundle-options>
<multilink-bundle-errors>....</multilink-bundle-errors>
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<multicast-statistics>....</multicast-statistics>
<ingress-traffic-statistics>....</ingress-traffic-statistics>
<local-traffic-statistics>....</local-traffic-statistics>
<transit-traffic-statistics>....</transit-traffic-statistics>
<keepalive-config>....</keepalive-config>
<keepalive-statistics>....</keepalive-statistics>
<ppp-flags>....</ppp-flags>
<lcp-state>
  lcp-state
</lcp-state>
```

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        <ncp-information>....</ncp-information>
        <chap-state>
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        </chap-state>
        <pap-state>
          pap-state
        </pap-state>
        <virtual-circuit-information>....</virtual-circuit-information>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <address-family>....</address-family>
        <bridge-iff-properties>....</bridge-iff-properties>
        <in-arp-statistics>....</in-arp-statistics>
        <l2circuit-info>....</l2circuit-info>
        <irb-domain>....</irb-domain>
        <media-information>....</media-information>
        <multilink-bundle-status>....</multilink-bundle-status>
        <multilink-bundle-class>....</multilink-bundle-class>
        <lag-traffic-statistics>....</lag-traffic-statistics>
        <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
        <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
        <mac-policer-information>....</mac-policer-information>
        <ppp-parameters>....</ppp-parameters>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <name>
      name
    </name>
    <admin-status>
      admin-status
    </admin-status>
    <oper-status>
      oper-status
    </oper-status>
    <vrfname>
      vrfname
    </vrfname>
    <local-index>
      local-index
    </local-index>
    <hardware-token>
      hardware-token
    </hardware-token>
    <snmp-index>
      snmp-index
```


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</snmp-index>
<generation>
  generation
</generation>
<description>
  description
</description>
<if-config-flags>....</if-config-flags>
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  multilink-flapped
</multilink-flapped>
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  link-address
</link-address>
<encapsulation>
  encapsulation
</encapsulation>
<interface-set-name>
  interface-set-name
</interface-set-name>
<demux-table-type>
  demux-table-type
</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
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  copy-tos-to-outer-ip-header
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  redundant-logical-interface-name
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<mac-database>....</mac-database>
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</logical-interface-bandwidth>
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<ingress-queue-counters>....</ingress-queue-counters>
<multilink-bundle-link-information>....</multilink-bundle-link-information>
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        <multilink-bundle-options>....</multilink-bundle-options>
        <multilink-bundle-errors>....</multilink-bundle-errors>
        <multilink-traffic-statistics>....</multilink-traffic-statistics>
        <traffic-statistics>....</traffic-statistics>
        <multicast-statistics>....</multicast-statistics>
        <ingress-traffic-statistics>....</ingress-traffic-statistics>
        <local-traffic-statistics>....</local-traffic-statistics>
        <transit-traffic-statistics>....</transit-traffic-statistics>
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        <keepalive-statistics>....</keepalive-statistics>
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          lcp-state
        </lcp-state>
        <ncp-information>....</ncp-information>
        <chap-state>
          chap-state
        </chap-state>
        <pap-state>
          pap-state
        </pap-state>
        <virtual-circuit-information>....</virtual-circuit-information>
        <filter-information>....</filter-information>
        <policer-information>....</policer-information>
        <address-family>....</address-family>
        <bridge-iff-properties>....</bridge-iff-properties>
        <in-arp-statistics>....</in-arp-statistics>
        <l2circuit-info>....</l2circuit-info>
        <irb-domain>....</irb-domain>
        <media-information>....</media-information>
        <multilink-bundle-status>....</multilink-bundle-status>
        <multilink-bundle-class>....</multilink-bundle-class>
        <lag-traffic-statistics>....</lag-traffic-statistics>
        <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
        <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
        <mac-policer-information>....</mac-policer-information>
        <ppp-parameters>....</ppp-parameters>
      </logical-interface>
    </interface-filter-information>
```

Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <name>
        name
      </name>
      <admin-status>
        admin-status
      </admin-status>
```


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<oper-status>
  oper-status
</oper-status>
<vrfname>
  vrfname
</vrfname>
<local-index>
  local-index
</local-index>
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</hardware-token>
<snmp-index>
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</snmp-index>
<generation>
  generation
</generation>
<description>
  description
</description>
<if-config-flags>....</if-config-flags>
<multilink-flapped>
  multilink-flapped
</multilink-flapped>
<link-address>
  link-address
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<encapsulation>
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</encapsulation>
<interface-set-name>
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</interface-set-name>
<demux-table-type>
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</demux-table-type>
<gre-keepalive-configured>
  gre-keepalive-configured
</gre-keepalive-configured>
<gre-keepalive-adj-state>
  gre-keepalive-adj-state
</gre-keepalive-adj-state>
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<pppoe-underlying-information>....</pppoe-underlying-information>
<demux-interface>....</demux-interface>
<demux-information>....</demux-information>
<dialer-time-to-disconnect>
```

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      dialer-time-to-disconnect
    </dialer-time-to-disconnect>
    <dialer-information>....</dialer-information>
    <shared-interface-information>....</shared-interface-information>
    <logical-interface-mac>
      logical-interface-mac
    </logical-interface-mac>
    <mac-database>....</mac-database>
    <logical-interface-bandwidth>
      logical-interface-bandwidth
    </logical-interface-bandwidth>
    <queue-counters>....</queue-counters>
    <ingress-queue-counters>....</ingress-queue-counters>
    <multilink-bundle-link-information>....</multilink-bundle-link-information>
    <multilink-bundle-options>....</multilink-bundle-options>
    <multilink-bundle-errors>....</multilink-bundle-errors>
    <multilink-traffic-statistics>....</multilink-traffic-statistics>
    <traffic-statistics>....</traffic-statistics>
    <multicast-statistics>....</multicast-statistics>
    <ingress-traffic-statistics>....</ingress-traffic-statistics>
    <local-traffic-statistics>....</local-traffic-statistics>
    <transit-traffic-statistics>....</transit-traffic-statistics>
    <keepalive-config>....</keepalive-config>
    <keepalive-statistics>....</keepalive-statistics>
    <ppp-flags>....</ppp-flags>
    <lcp-state>
      lcp-state
    </lcp-state>
    <ncp-information>....</ncp-information>
    <chap-state>
      chap-state
    </chap-state>
    <pap-state>
      pap-state
    </pap-state>
    <virtual-circuit-information>....</virtual-circuit-information>
    <filter-information>....</filter-information>
    <policer-information>....</policer-information>
    <address-family>....</address-family>
    <bridge-iff-properties>....</bridge-iff-properties>
    <in-arp-statistics>....</in-arp-statistics>
    <l2circuit-info>....</l2circuit-info>
    <irb-domain>....</irb-domain>
    <media-information>....</media-information>
    <multilink-bundle-status>....</multilink-bundle-status>
    <multilink-bundle-class>....</multilink-bundle-class>
    <lag-traffic-statistics>....</lag-traffic-statistics>
    <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
    <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
    <mac-policer-information>....</mac-policer-information>
    <ppp-parameters>....</ppp-parameters>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```


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Description Information about a single logical interface

<logical-interface>

Usage

```
<interface-policer-information>
  <logical-interface>
    <name>
      name
    </name>
    <admin-status>
      admin-status
    </admin-status>
    <oper-status>
      oper-status
    </oper-status>
    <vrfname>
      vrfname
    </vrfname>
    <local-index>
      local-index
    </local-index>
    <hardware-token>
      hardware-token
    </hardware-token>
    <snmp-index>
      snmp-index
    </snmp-index>
    <generation>
      generation
    </generation>
    <description>
      description
    </description>
    <if-config-flags>....</if-config-flags>
    <multilink-flapped>
      multilink-flapped
    </multilink-flapped>
    <link-address>
      link-address
    </link-address>
    <encapsulation>
      encapsulation
    </encapsulation>
    <interface-set-name>
      interface-set-name
    </interface-set-name>
    <demux-table-type>
      demux-table-type
    </demux-table-type>
    <gre-keepalive-configured>
      gre-keepalive-configured
    </gre-keepalive-configured>
    <gre-keepalive-adj-state>
      gre-keepalive-adj-state
```

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  copy-tos-to-outer-ip-header
</copy-tos-to-outer-ip-header>
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<demux-information>....</demux-information>
<dialer-time-to-disconnect>
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<shared-interface-information>....</shared-interface-information>
<logical-interface-mac>
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</logical-interface-mac>
<mac-database>....</mac-database>
<logical-interface-bandwidth>
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<ingress-queue-counters>....</ingress-queue-counters>
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<transit-traffic-statistics>....</transit-traffic-statistics>
<keepalive-config>....</keepalive-config>
<keepalive-statistics>....</keepalive-statistics>
<ppp-flags>....</ppp-flags>
<lcp-state>
  lcp-state
</lcp-state>
<ncp-information>....</ncp-information>
<chap-state>
  chap-state
</chap-state>
<pap-state>
  pap-state
</pap-state>
<virtual-circuit-information>....</virtual-circuit-information>
<filter-information>....</filter-information>
<policer-information>....</policer-information>
<address-family>....</address-family>
<bridge-iff-properties>....</bridge-iff-properties>
<in-arp-statistics>....</in-arp-statistics>
<l2circuit-info>....</l2circuit-info>
```


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```
    <irb-domain>....</irb-domain>
    <media-information>....</media-information>
    <multilink-bundle-status>....</multilink-bundle-status>
    <multilink-bundle-class>....</multilink-bundle-class>
    <lag-traffic-statistics>....</lag-traffic-statistics>
    <layer2-input-policer-statistics>....</layer2-input-policer-statistics>
    <layer2-output-policer-statistics>....</layer2-output-policer-statistics>
    <mac-policer-information>....</mac-policer-information>
    <ppp-parameters>....</ppp-parameters>
  </logical-interface>
</interface-policer-information>
```

Description Information about a single logical interface

<lsi-traffic-statistics>

Usage

```
<lsi-traffic-statistics>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <input-packets>
    input-packets
  </input-packets>
  <input-pps>
    input-pps
  </input-pps>
</lsi-traffic-statistics>
```

Description

<lsi-traffic-statistics>

Usage

```
<physical-interface>
  <lsi-traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <input-packets>
      input-packets
    </input-packets>
    <input-pps>
      input-pps
    </input-pps>
  </lsi-traffic-statistics>
```

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```
</physical-interface>
```

Description

<lsi-traffic-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <lsi-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
  </lsi-traffic-statistics>
 </physical-interface>
</interface-information>
```

Description

<lsi-traffic-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <lsi-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <input-packets>
    input-packets
   </input-packets>
   <input-pps>
    input-pps
   </input-pps>
  </lsi-traffic-statistics>
 </physical-interface>
</interface-filter-information>
```

Description

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<lsi-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <lsi-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <input-packets>
        input-packets
      </input-packets>
      <input-pps>
        input-pps
      </input-pps>
    </lsi-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<mac-database>

Usage

```
<mac-database>
  <mac-record>....</mac-record>
  <number-of-mac-record>
    number-of-mac-record
  </number-of-mac-record>
</mac-database>
```

Description

<mac-database>

Usage

```
<logical-interface>
  <mac-database>
    <mac-record>....</mac-record>
    <number-of-mac-record>
      number-of-mac-record
    </number-of-mac-record>
  </mac-database>
</logical-interface>
```

Description

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<mac-database>

Usage

```
<physical-interface>
  <mac-database>
    <mac-record>....</mac-record>
    <number-of-mac-record>
      number-of-mac-record
    </number-of-mac-record>
  </mac-database>
</physical-interface>
```

Description

<mac-database>

Usage

```
<physical-interface>
  <logical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </logical-interface>
</physical-interface>
```

Description

<mac-database>

Usage

```
<interface-information>
  <physical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </physical-interface>
</interface-information>
```

Description

<mac-database>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
```


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```
      <mac-database>
        <mac-record>....</mac-record>
        <number-of-mac-record>
          number-of-mac-record
        </number-of-mac-record>
      </mac-database>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<mac-database>

Usage

```
<interface-information>
  <logical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </logical-interface>
</interface-information>
```

Description

<mac-database>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </physical-interface>
</interface-filter-information>
```

Description

<mac-database>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <mac-database>
        <mac-record>....</mac-record>
        <number-of-mac-record>
```

```
                number-of-mac-record
              </number-of-mac-record>
            </mac-database>
          </logical-interface>
        </physical-interface>
      </interface-filter-information>
```

Description

<mac-database>

Usage

```
<interface-filter-information>
  <logical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </logical-interface>
</interface-filter-information>
```

Description

<mac-database>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </physical-interface>
</interface-policer-information>
```

Description

<mac-database>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <mac-database>
        <mac-record>....</mac-record>
        <number-of-mac-record>
          number-of-mac-record
        </number-of-mac-record>
      </mac-database>
```


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```
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<mac-database>

Usage

```
<interface-policer-information>
  <logical-interface>
    <mac-database>
      <mac-record>....</mac-record>
      <number-of-mac-record>
        number-of-mac-record
      </number-of-mac-record>
    </mac-database>
  </logical-interface>
</interface-policer-information>
```

Description

<mac-policer-information>

Usage

```
<mac-policer-information>
  <mac-address>
    mac-address
  </mac-address>
  <mac-entry-type>
    mac-entry-type
  </mac-entry-type>
  <receive-bytes>
    receive-bytes
  </receive-bytes>
  <transmit-bytes>
    transmit-bytes
  </transmit-bytes>
  <receive-frames>
    receive-frames
  </receive-frames>
  <transmit-frames>
    transmit-frames
  </transmit-frames>
  <ether-policer-list>....</ether-policer-list>
</mac-policer-information>
```

Description

<mac-policer-information>

Usage

```
<logical-interface>
```

```
<mac-policer-information>
  <mac-address>
    mac-address
  </mac-address>
  <mac-entry-type>
    mac-entry-type
  </mac-entry-type>
  <receive-bytes>
    receive-bytes
  </receive-bytes>
  <transmit-bytes>
    transmit-bytes
  </transmit-bytes>
  <receive-frames>
    receive-frames
  </receive-frames>
  <transmit-frames>
    transmit-frames
  </transmit-frames>
  <ether-policer-list>....</ether-policer-list>
 </mac-policer-information>
</logical-interface>
```

Description

<mac-policer-information>

Usage

```
<physical-interface>
 <logical-interface>
  <mac-policer-information>
   <mac-address>
    mac-address
   </mac-address>
   <mac-entry-type>
    mac-entry-type
   </mac-entry-type>
   <receive-bytes>
    receive-bytes
   </receive-bytes>
   <transmit-bytes>
    transmit-bytes
   </transmit-bytes>
   <receive-frames>
    receive-frames
   </receive-frames>
   <transmit-frames>
    transmit-frames
   </transmit-frames>
   <ether-policer-list>....</ether-policer-list>
  </mac-policer-information>
 </logical-interface>
</physical-interface>
```


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Description

<mac-policer-information>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <mac-policer-information>
    <mac-address>
     mac-address
    </mac-address>
    <mac-entry-type>
     mac-entry-type
    </mac-entry-type>
    <receive-bytes>
     receive-bytes
    </receive-bytes>
    <transmit-bytes>
     transmit-bytes
    </transmit-bytes>
    <receive-frames>
     receive-frames
    </receive-frames>
    <transmit-frames>
     transmit-frames
    </transmit-frames>
    <ether-policer-list>....</ether-policer-list>
   </mac-policer-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<mac-policer-information>

Usage

```
<interface-information>
 <logical-interface>
  <mac-policer-information>
   <mac-address>
    mac-address
   </mac-address>
   <mac-entry-type>
    mac-entry-type
   </mac-entry-type>
   <receive-bytes>
    receive-bytes
   </receive-bytes>
   <transmit-bytes>
    transmit-bytes
   </transmit-bytes>
   <receive-frames>
    receive-frames
```

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```
      </receive-frames>
      <transmit-frames>
        transmit-frames
      </transmit-frames>
      <ether-policer-list>....</ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</interface-information>
```

Description

<mac-policer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <mac-policer-information>
        <mac-address>
          mac-address
        </mac-address>
        <mac-entry-type>
          mac-entry-type
        </mac-entry-type>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
        <receive-frames>
          receive-frames
        </receive-frames>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <ether-policer-list>....</ether-policer-list>
      </mac-policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<mac-policer-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <mac-policer-information>
      <mac-address>
        mac-address
      </mac-address>
      <mac-entry-type>
```


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```
        mac-entry-type
       </mac-entry-type>
       <receive-bytes>
        receive-bytes
       </receive-bytes>
       <transmit-bytes>
        transmit-bytes
       </transmit-bytes>
       <receive-frames>
        receive-frames
       </receive-frames>
       <transmit-frames>
        transmit-frames
       </transmit-frames>
       <ether-policer-list>....</ether-policer-list>
      </mac-policer-information>
     </logical-interface>
    </interface-filter-information>
```

Description

<mac-policer-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <mac-policer-information>
    <mac-address>
     mac-address
    </mac-address>
    <mac-entry-type>
     mac-entry-type
    </mac-entry-type>
    <receive-bytes>
     receive-bytes
    </receive-bytes>
    <transmit-bytes>
     transmit-bytes
    </transmit-bytes>
    <receive-frames>
     receive-frames
    </receive-frames>
    <transmit-frames>
     transmit-frames
    </transmit-frames>
    <ether-policer-list>....</ether-policer-list>
   </mac-policer-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

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<mac-policer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <mac-policer-information>
      <mac-address>
        mac-address
      </mac-address>
      <mac-entry-type>
        mac-entry-type
      </mac-entry-type>
      <receive-bytes>
        receive-bytes
      </receive-bytes>
      <transmit-bytes>
        transmit-bytes
      </transmit-bytes>
      <receive-frames>
        receive-frames
      </receive-frames>
      <transmit-frames>
        transmit-frames
      </transmit-frames>
      <ether-policer-list>....</ether-policer-list>
    </mac-policer-information>
  </logical-interface>
</interface-policer-information>
```

Description

<mac-record>

Usage

```
<mac-database>
  <mac-record>
    <mac-address>
      mac-address
    </mac-address>
    <receive-frames>
      receive-frames
    </receive-frames>
    <receive-bytes>
      receive-bytes
    </receive-bytes>
    <transmit-frames>
      transmit-frames
    </transmit-frames>
    <transmit-bytes>
      transmit-bytes
    </transmit-bytes>
  </mac-record>
</mac-database>
```


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Description

<mac-record>

Usage

```
<logical-interface>
  <mac-database>
    <mac-record>
      <mac-address>
        mac-address
      </mac-address>
      <receive-frames>
        receive-frames
      </receive-frames>
      <receive-bytes>
        receive-bytes
      </receive-bytes>
      <transmit-frames>
        transmit-frames
      </transmit-frames>
      <transmit-bytes>
        transmit-bytes
      </transmit-bytes>
    </mac-record>
  </mac-database>
</logical-interface>
```

Description

<mac-record>

Usage

```
<physical-interface>
  <mac-database>
    <mac-record>
      <mac-address>
        mac-address
      </mac-address>
      <receive-frames>
        receive-frames
      </receive-frames>
      <receive-bytes>
        receive-bytes
      </receive-bytes>
      <transmit-frames>
        transmit-frames
      </transmit-frames>
      <transmit-bytes>
        transmit-bytes
      </transmit-bytes>
    </mac-record>
  </mac-database>
</physical-interface>
```

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Description

<mac-record>

Usage

```
<physical-interface>
  <logical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
  </logical-interface>
</physical-interface>
```

Description

<mac-record>

Usage

```
<interface-information>
  <physical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
```


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```
  </physical-interface>
</interface-information>
```

Description

<mac-record>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <mac-database>
        <mac-record>
          <mac-address>
            mac-address
          </mac-address>
          <receive-frames>
            receive-frames
          </receive-frames>
          <receive-bytes>
            receive-bytes
          </receive-bytes>
          <transmit-frames>
            transmit-frames
          </transmit-frames>
          <transmit-bytes>
            transmit-bytes
          </transmit-bytes>
        </mac-record>
      </mac-database>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<mac-record>

Usage

```
<interface-information>
  <logical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
```

```
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
  </logical-interface>
</interface-information>
```

Description

<mac-record>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
  </physical-interface>
</interface-filter-information>
```

Description

<mac-record>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <mac-database>
        <mac-record>
          <mac-address>
            mac-address
          </mac-address>
          <receive-frames>
            receive-frames
          </receive-frames>
```


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```
            <receive-bytes>
              receive-bytes
            </receive-bytes>
            <transmit-frames>
              transmit-frames
            </transmit-frames>
            <transmit-bytes>
              transmit-bytes
            </transmit-bytes>
          </mac-record>
        </mac-database>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<mac-record>

Usage

```
<interface-filter-information>
  <logical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
  </logical-interface>
</interface-filter-information>
```

Description

<mac-record>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
```

```
            mac-address
           </mac-address>
           <receive-frames>
            receive-frames
           </receive-frames>
           <receive-bytes>
            receive-bytes
           </receive-bytes>
           <transmit-frames>
            transmit-frames
           </transmit-frames>
           <transmit-bytes>
            transmit-bytes
           </transmit-bytes>
          </mac-record>
         </mac-database>
        </physical-interface>
       </interface-policer-information>
```

Description

<mac-record>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <mac-database>
    <mac-record>
     <mac-address>
      mac-address
     </mac-address>
     <receive-frames>
      receive-frames
     </receive-frames>
     <receive-bytes>
      receive-bytes
     </receive-bytes>
     <transmit-frames>
      transmit-frames
     </transmit-frames>
     <transmit-bytes>
      transmit-bytes
     </transmit-bytes>
    </mac-record>
   </mac-database>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

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<mac-record>

Usage

```
<interface-policer-information>
  <logical-interface>
    <mac-database>
      <mac-record>
        <mac-address>
          mac-address
        </mac-address>
        <receive-frames>
          receive-frames
        </receive-frames>
        <receive-bytes>
          receive-bytes
        </receive-bytes>
        <transmit-frames>
          transmit-frames
        </transmit-frames>
        <transmit-bytes>
          transmit-bytes
        </transmit-bytes>
      </mac-record>
    </mac-database>
  </logical-interface>
</interface-policer-information>
```

Description

<mac-validate-statistics>

Usage

```
<mac-validate-statistics>
  <mac-validate-packets>
    mac-validate-packets
  </mac-validate-packets>
  <mac-validate-bytes>
    mac-validate-bytes
  </mac-validate-bytes>
</mac-validate-statistics>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<address-family>
  <mac-validate-statistics>
    <mac-validate-packets>
      mac-validate-packets
    </mac-validate-packets>
    <mac-validate-bytes>
      mac-validate-bytes
```

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```
      </mac-validate-bytes>
    </mac-validate-statistics>
  </address-family>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<logical-interface>
  <address-family>
    <mac-validate-statistics>
      <mac-validate-packets>
        mac-validate-packets
      </mac-validate-packets>
      <mac-validate-bytes>
        mac-validate-bytes
      </mac-validate-bytes>
    </mac-validate-statistics>
  </address-family>
</logical-interface>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <mac-validate-statistics>
        <mac-validate-packets>
          mac-validate-packets
        </mac-validate-packets>
        <mac-validate-bytes>
          mac-validate-bytes
        </mac-validate-bytes>
      </mac-validate-statistics>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
```


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```
                <mac-validate-statistics>
                 <mac-validate-packets>
                  mac-validate-packets
                 </mac-validate-packets>
                 <mac-validate-bytes>
                  mac-validate-bytes
                 </mac-validate-bytes>
                </mac-validate-statistics>
               </address-family>
              </logical-interface>
             </physical-interface>
            </interface-information>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <address-family>
   <mac-validate-statistics>
    <mac-validate-packets>
     mac-validate-packets
    </mac-validate-packets>
    <mac-validate-bytes>
     mac-validate-bytes
    </mac-validate-bytes>
   </mac-validate-statistics>
  </address-family>
 </logical-interface>
</interface-information>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <mac-validate-statistics>
     <mac-validate-packets>
      mac-validate-packets
     </mac-validate-packets>
     <mac-validate-bytes>
      mac-validate-bytes
     </mac-validate-bytes>
    </mac-validate-statistics>
   </address-family>
  </logical-interface>
```

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```
    </physical-interface>
  </interface-filter-information>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <mac-validate-statistics>
        <mac-validate-packets>
          mac-validate-packets
        </mac-validate-packets>
        <mac-validate-bytes>
          mac-validate-bytes
        </mac-validate-bytes>
      </mac-validate-statistics>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <mac-validate-statistics>
          <mac-validate-packets>
            mac-validate-packets
          </mac-validate-packets>
          <mac-validate-bytes>
            mac-validate-bytes
          </mac-validate-bytes>
        </mac-validate-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description SRC MAC validate statistics

<mac-validate-statistics>

Usage

```
<interface-policer-information>
```


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```
<logical-interface>
  <address-family>
    <mac-validate-statistics>
      <mac-validate-packets>
        mac-validate-packets
      </mac-validate-packets>
      <mac-validate-bytes>
        mac-validate-bytes
      </mac-validate-bytes>
    </mac-validate-statistics>
  </address-family>
 </logical-interface>
</interface-policer-information>
```

Description SRC MAC validate statistics

<media-alarm>

Usage

```
<media-alarm>
  <media-alarm-name>
    media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
    media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
    media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
    media-alarm-state
  </media-alarm-state>
  <ce-counter-name>
    ce-counter-name
  </ce-counter-name>
  <ce-counter-packets>
    ce-counter-packets
  </ce-counter-packets>
  <ce-counter-bytes>
    ce-counter-bytes
  </ce-counter-bytes>
  <ce-counter-count>
    ce-counter-count
  </ce-counter-count>
</media-alarm>
```

Description

<media-alarm>

Usage

```
<interval-information>
  <interval>
```

```
      <media-alarm>
       <media-alarm-name>
        media-alarm-name
       </media-alarm-name>
       <media-alarm-seconds>
        media-alarm-seconds
       </media-alarm-seconds>
       <media-alarm-count>
        media-alarm-count
       </media-alarm-count>
       <media-alarm-state>
        media-alarm-state
       </media-alarm-state>
       <ce-counter-name>
        ce-counter-name
       </ce-counter-name>
       <ce-counter-packets>
        ce-counter-packets
       </ce-counter-packets>
       <ce-counter-bytes>
        ce-counter-bytes
       </ce-counter-bytes>
       <ce-counter-count>
        ce-counter-count
       </ce-counter-count>
      </media-alarm>
     </interval>
    </interval-information>
```

Description

<media-alarm>

Usage

```
    <sonet-errors>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
```


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```
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</sonet-errors>
```

Description

<media-alarm>

Usage

```
<sonet-physical-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</sonet-physical-information>
```

Description

<media-alarm>

Usage

```
<sonet-section-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
```

```
    </media-alarm-seconds>
    <media-alarm-count>
     media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
     media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
     ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
     ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
     ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
     ce-counter-count
    </ce-counter-count>
   </media-alarm>
</sonet-section-information>
```

Description

<media-alarm>

Usage

```
<sonet-line-information>
 <media-alarm>
  <media-alarm-name>
   media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
   media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
   media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
   media-alarm-state
  </media-alarm-state>
  <ce-counter-name>
   ce-counter-name
  </ce-counter-name>
  <ce-counter-packets>
   ce-counter-packets
  </ce-counter-packets>
  <ce-counter-bytes>
   ce-counter-bytes
  </ce-counter-bytes>
  <ce-counter-count>
   ce-counter-count
  </ce-counter-count>
 </media-alarm>
```


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```
</sonet-line-information>
```

Description

<media-alarm>

Usage

```
<sonet-path-information>
 <media-alarm>
  <media-alarm-name>
   media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
   media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
   media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
   media-alarm-state
  </media-alarm-state>
  <ce-counter-name>
   ce-counter-name
  </ce-counter-name>
  <ce-counter-packets>
   ce-counter-packets
  </ce-counter-packets>
  <ce-counter-bytes>
   ce-counter-bytes
  </ce-counter-bytes>
  <ce-counter-count>
   ce-counter-count
  </ce-counter-count>
 </media-alarm>
</sonet-path-information>
```

Description

<media-alarm>

Usage

```
<sonet-vt-information>
 <media-alarm>
  <media-alarm-name>
   media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
   media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
   media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
   media-alarm-state
```

```
    </media-alarm-state>
    <ce-counter-name>
     ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
     ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
     ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
     ce-counter-count
    </ce-counter-count>
   </media-alarm>
</sonet-vt-information>
```

Description

<media-alarm>

Usage

```
<atm-information>
 <plcp-defects>
  <media-alarm>
   <media-alarm-name>
    media-alarm-name
   </media-alarm-name>
   <media-alarm-seconds>
    media-alarm-seconds
   </media-alarm-seconds>
   <media-alarm-count>
    media-alarm-count
   </media-alarm-count>
   <media-alarm-state>
    media-alarm-state
   </media-alarm-state>
   <ce-counter-name>
    ce-counter-name
   </ce-counter-name>
   <ce-counter-packets>
    ce-counter-packets
   </ce-counter-packets>
   <ce-counter-bytes>
    ce-counter-bytes
   </ce-counter-bytes>
   <ce-counter-count>
    ce-counter-count
   </ce-counter-count>
  </media-alarm>
 </plcp-defects>
</atm-information>
```

Description

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<media-alarm>

Usage

```
<atm-information>
  <atm-defects>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </atm-defects>
</atm-information>
```

Description

<media-alarm>

Usage

```
<media-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
```

```
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</media-information>
```

Description

<media-alarm>

Usage

```
<otn-errors>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</otn-errors>
```

Description

<media-alarm>

Usage

```
<otn-oc-information>
```


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```
<media-alarm>
  <media-alarm-name>
    media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
    media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
    media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
    media-alarm-state
  </media-alarm-state>
  <ce-counter-name>
    ce-counter-name
  </ce-counter-name>
  <ce-counter-packets>
    ce-counter-packets
  </ce-counter-packets>
  <ce-counter-bytes>
    ce-counter-bytes
  </ce-counter-bytes>
  <ce-counter-count>
    ce-counter-count
  </ce-counter-count>
 </media-alarm>
</otn-oc-information>
```

Description

<media-alarm>

Usage

```
<otn-otu-information>
 <media-alarm>
  <media-alarm-name>
    media-alarm-name
  </media-alarm-name>
  <media-alarm-seconds>
    media-alarm-seconds
  </media-alarm-seconds>
  <media-alarm-count>
    media-alarm-count
  </media-alarm-count>
  <media-alarm-state>
    media-alarm-state
  </media-alarm-state>
  <ce-counter-name>
    ce-counter-name
  </ce-counter-name>
  <ce-counter-packets>
    ce-counter-packets
  </ce-counter-packets>
  <ce-counter-bytes>
    ce-counter-bytes
```

```
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</otn-otu-information>
```

Description

<media-alarm>

Usage

```
<otn-fec-alarms>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</otn-fec-alarms>
```

Description

<media-alarm>

Usage

```
<otn-odu-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
```


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```
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</otn-odu-information>
```

Description

<media-alarm>

Usage

```
<ima-group-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</ima-group-information>
```

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Description

<media-alarm>

Usage

```
<ima-link-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
</ima-link-information>
```

Description

<media-alarm>

Usage

```
<logical-interface>
  <media-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
```


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```
        ce-counter-name
       </ce-counter-name>
       <ce-counter-packets>
        ce-counter-packets
       </ce-counter-packets>
       <ce-counter-bytes>
        ce-counter-bytes
       </ce-counter-bytes>
       <ce-counter-count>
        ce-counter-count
       </ce-counter-count>
      </media-alarm>
     </media-information>
    </logical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <sonet-errors>
  <media-alarm>
   <media-alarm-name>
    media-alarm-name
   </media-alarm-name>
   <media-alarm-seconds>
    media-alarm-seconds
   </media-alarm-seconds>
   <media-alarm-count>
    media-alarm-count
   </media-alarm-count>
   <media-alarm-state>
    media-alarm-state
   </media-alarm-state>
   <ce-counter-name>
    ce-counter-name
   </ce-counter-name>
   <ce-counter-packets>
    ce-counter-packets
   </ce-counter-packets>
   <ce-counter-bytes>
    ce-counter-bytes
   </ce-counter-bytes>
   <ce-counter-count>
    ce-counter-count
   </ce-counter-count>
  </media-alarm>
 </sonet-errors>
</physical-interface>
```

Description

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<media-alarm>

Usage

```
<physical-interface>
  <sonet-physical-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-physical-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <sonet-section-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
```


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```
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-section-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <sonet-line-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-line-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <sonet-path-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-path-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <sonet-vt-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
```


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```
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-vt-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <otn-errors>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-errors>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <otn-fec-alarms>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-fec-alarms>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <media-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
```


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```
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </media-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <atm-information>
    <plcp-defects>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </plcp-defects>
  </atm-information>
</physical-interface>
```

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Description

<media-alarm>

Usage

```
<physical-interface>
  <atm-information>
    <atm-defects>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </atm-defects>
  </atm-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <logical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
```


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```
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </media-information>
      </logical-interface>
    </physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-errors>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
```

```
        </media-alarm>
      </sonet-errors>
    </link-entry>
  </links>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-physical-information>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </sonet-physical-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <links>
    <link-entry>
```


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```
      <sonet-section-information>
       <media-alarm>
        <media-alarm-name>
         media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
         media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
         media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
         media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
         ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
         ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
         ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
         ce-counter-count
        </ce-counter-count>
       </media-alarm>
      </sonet-section-information>
     </link-entry>
    </links>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <links>
  <link-entry>
   <sonet-line-information>
    <media-alarm>
     <media-alarm-name>
      media-alarm-name
     </media-alarm-name>
     <media-alarm-seconds>
      media-alarm-seconds
     </media-alarm-seconds>
     <media-alarm-count>
      media-alarm-count
     </media-alarm-count>
     <media-alarm-state>
      media-alarm-state
     </media-alarm-state>
     <ce-counter-name>
```

```
            ce-counter-name
           </ce-counter-name>
           <ce-counter-packets>
            ce-counter-packets
           </ce-counter-packets>
           <ce-counter-bytes>
            ce-counter-bytes
           </ce-counter-bytes>
           <ce-counter-count>
            ce-counter-count
           </ce-counter-count>
          </media-alarm>
         </sonet-line-information>
        </link-entry>
       </links>
      </physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <links>
  <link-entry>
   <sonet-path-information>
    <media-alarm>
     <media-alarm-name>
      media-alarm-name
     </media-alarm-name>
     <media-alarm-seconds>
      media-alarm-seconds
     </media-alarm-seconds>
     <media-alarm-count>
      media-alarm-count
     </media-alarm-count>
     <media-alarm-state>
      media-alarm-state
     </media-alarm-state>
     <ce-counter-name>
      ce-counter-name
     </ce-counter-name>
     <ce-counter-packets>
      ce-counter-packets
     </ce-counter-packets>
     <ce-counter-bytes>
      ce-counter-bytes
     </ce-counter-bytes>
     <ce-counter-count>
      ce-counter-count
     </ce-counter-count>
    </media-alarm>
   </sonet-path-information>
  </link-entry>
 </links>
```


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```
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <links>
  <link-entry>
   <sonet-vt-information>
    <media-alarm>
     <media-alarm-name>
      media-alarm-name
     </media-alarm-name>
     <media-alarm-seconds>
      media-alarm-seconds
     </media-alarm-seconds>
     <media-alarm-count>
      media-alarm-count
     </media-alarm-count>
     <media-alarm-state>
      media-alarm-state
     </media-alarm-state>
     <ce-counter-name>
      ce-counter-name
     </ce-counter-name>
     <ce-counter-packets>
      ce-counter-packets
     </ce-counter-packets>
     <ce-counter-bytes>
      ce-counter-bytes
     </ce-counter-bytes>
     <ce-counter-count>
      ce-counter-count
     </ce-counter-count>
    </media-alarm>
   </sonet-vt-information>
  </link-entry>
 </links>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <otn-oc-information>
  <media-alarm>
   <media-alarm-name>
    media-alarm-name
   </media-alarm-name>
   <media-alarm-seconds>
```

```
            media-alarm-seconds
           </media-alarm-seconds>
           <media-alarm-count>
            media-alarm-count
           </media-alarm-count>
           <media-alarm-state>
            media-alarm-state
           </media-alarm-state>
           <ce-counter-name>
            ce-counter-name
           </ce-counter-name>
           <ce-counter-packets>
            ce-counter-packets
           </ce-counter-packets>
           <ce-counter-bytes>
            ce-counter-bytes
           </ce-counter-bytes>
           <ce-counter-count>
            ce-counter-count
           </ce-counter-count>
          </media-alarm>
         </otn-oc-information>
        </physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
 <otn-otu-information>
  <media-alarm>
   <media-alarm-name>
    media-alarm-name
   </media-alarm-name>
   <media-alarm-seconds>
    media-alarm-seconds
   </media-alarm-seconds>
   <media-alarm-count>
    media-alarm-count
   </media-alarm-count>
   <media-alarm-state>
    media-alarm-state
   </media-alarm-state>
   <ce-counter-name>
    ce-counter-name
   </ce-counter-name>
   <ce-counter-packets>
    ce-counter-packets
   </ce-counter-packets>
   <ce-counter-bytes>
    ce-counter-bytes
   </ce-counter-bytes>
   <ce-counter-count>
    ce-counter-count
```


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```
      </ce-counter-count>
    </media-alarm>
  </otn-otu-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <otn-odu-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-odu-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <ima-group-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
```

```
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </ima-group-information>
  </physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <ima-link-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
```


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```
    </media-alarm>
  </ima-link-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<physical-interface>
  <interval-information>
    <interval>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </interval>
  </interval-information>
</physical-interface>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
```

```
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-errors>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
```


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```
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-physical-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
```

```
<sonet-line-information>
  <media-alarm>
    <media-alarm-name>
      media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
      media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
      media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
      media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
      ce-counter-name
    </ce-counter-name>
    <ce-counter-packets>
      ce-counter-packets
    </ce-counter-packets>
    <ce-counter-bytes>
      ce-counter-bytes
    </ce-counter-bytes>
    <ce-counter-count>
      ce-counter-count
    </ce-counter-count>
  </media-alarm>
 </sonet-line-information>
</physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
 <physical-interface>
  <sonet-path-information>
   <media-alarm>
    <media-alarm-name>
     media-alarm-name
    </media-alarm-name>
    <media-alarm-seconds>
     media-alarm-seconds
    </media-alarm-seconds>
    <media-alarm-count>
     media-alarm-count
    </media-alarm-count>
    <media-alarm-state>
     media-alarm-state
    </media-alarm-state>
    <ce-counter-name>
     ce-counter-name
    </ce-counter-name>
```


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```
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-path-information>
      </physical-interface>
    </interface-information>
```

Description

<media-alarm>

Usage

```
    <interface-information>
      <physical-interface>
        <sonet-vt-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-vt-information>
      </physical-interface>
    </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <otn-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-errors>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```


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```
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </otn-fec-alarms>
      </physical-interface>
    </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
```

```
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <plcp-defects>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>
          <media-alarm-name>
```


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```
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </atm-defects>
    </atm-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <media-information>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
```

```
                ce-counter-packets
               </ce-counter-packets>
               <ce-counter-bytes>
                ce-counter-bytes
               </ce-counter-bytes>
               <ce-counter-count>
                ce-counter-count
               </ce-counter-count>
              </media-alarm>
             </media-information>
            </logical-interface>
           </physical-interface>
          </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-errors>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-errors>
   </link-entry>
  </links>
 </physical-interface>
```


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```
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-physical-information>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-physical-information>
   </link-entry>
  </links>
 </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-section-information>
```

```
            <media-alarm>
              <media-alarm-name>
                media-alarm-name
              </media-alarm-name>
              <media-alarm-seconds>
                media-alarm-seconds
              </media-alarm-seconds>
              <media-alarm-count>
                media-alarm-count
              </media-alarm-count>
              <media-alarm-state>
                media-alarm-state
              </media-alarm-state>
              <ce-counter-name>
                ce-counter-name
              </ce-counter-name>
              <ce-counter-packets>
                ce-counter-packets
              </ce-counter-packets>
              <ce-counter-bytes>
                ce-counter-bytes
              </ce-counter-bytes>
              <ce-counter-count>
                ce-counter-count
              </ce-counter-count>
            </media-alarm>
          </sonet-section-information>
        </link-entry>
      </links>
    </physical-interface>
  </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
```


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```
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
```

```
        </sonet-path-information>
       </link-entry>
      </links>
     </physical-interface>
    </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-vt-information>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-vt-information>
   </link-entry>
  </links>
 </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
```


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```
<physical-interface>
  <otn-oc-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-oc-information>
 </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
```

```
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <otn-odu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-information>
```

Description

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<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```

```
                <media-alarm-state>
                  media-alarm-state
                </media-alarm-state>
                <ce-counter-name>
                  ce-counter-name
                </ce-counter-name>
                <ce-counter-packets>
                  ce-counter-packets
                </ce-counter-packets>
                <ce-counter-bytes>
                  ce-counter-bytes
                </ce-counter-bytes>
                <ce-counter-count>
                  ce-counter-count
                </ce-counter-count>
              </media-alarm>
            </ima-link-information>
          </physical-interface>
        </interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <physical-interface>
    <interval-information>
      <interval>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
```


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```
      </interval>
    </interval-information>
  </physical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-information>
  <logical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
  </logical-interface>
</interface-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
```

```
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-errors>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
```


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```
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </sonet-physical-information>
    </physical-interface>
  </interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
```

```
<physical-interface>
  <sonet-line-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-line-information>
 </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-path-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
```


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```
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-path-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-vt-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-vt-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-errors>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```


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```
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-fec-alarms>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
```

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```
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <atm-information>
      <plcp-defects>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>
          <media-alarm-name>
```


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```
                media-alarm-name
               </media-alarm-name>
               <media-alarm-seconds>
                media-alarm-seconds
               </media-alarm-seconds>
               <media-alarm-count>
                media-alarm-count
               </media-alarm-count>
               <media-alarm-state>
                media-alarm-state
               </media-alarm-state>
               <ce-counter-name>
                ce-counter-name
               </ce-counter-name>
               <ce-counter-packets>
                ce-counter-packets
               </ce-counter-packets>
               <ce-counter-bytes>
                ce-counter-bytes
               </ce-counter-bytes>
               <ce-counter-count>
                ce-counter-count
               </ce-counter-count>
              </media-alarm>
             </atm-defects>
            </atm-information>
           </physical-interface>
          </interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <media-information>
    <media-alarm>
     <media-alarm-name>
      media-alarm-name
     </media-alarm-name>
     <media-alarm-seconds>
      media-alarm-seconds
     </media-alarm-seconds>
     <media-alarm-count>
      media-alarm-count
     </media-alarm-count>
     <media-alarm-state>
      media-alarm-state
     </media-alarm-state>
     <ce-counter-name>
      ce-counter-name
     </ce-counter-name>
     <ce-counter-packets>
```

```
                ce-counter-packets
               </ce-counter-packets>
               <ce-counter-bytes>
                ce-counter-bytes
               </ce-counter-bytes>
               <ce-counter-count>
                ce-counter-count
               </ce-counter-count>
              </media-alarm>
             </media-information>
            </logical-interface>
           </physical-interface>
          </interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-errors>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-errors>
   </link-entry>
  </links>
 </physical-interface>
```


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```
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-physical-information>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-physical-information>
   </link-entry>
  </links>
 </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-section-information>
```

```
            <media-alarm>
              <media-alarm-name>
                media-alarm-name
              </media-alarm-name>
              <media-alarm-seconds>
                media-alarm-seconds
              </media-alarm-seconds>
              <media-alarm-count>
                media-alarm-count
              </media-alarm-count>
              <media-alarm-state>
                media-alarm-state
              </media-alarm-state>
              <ce-counter-name>
                ce-counter-name
              </ce-counter-name>
              <ce-counter-packets>
                ce-counter-packets
              </ce-counter-packets>
              <ce-counter-bytes>
                ce-counter-bytes
              </ce-counter-bytes>
              <ce-counter-count>
                ce-counter-count
              </ce-counter-count>
            </media-alarm>
          </sonet-section-information>
        </link-entry>
      </links>
    </physical-interface>
  </interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
```


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```
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
```

```
        </sonet-path-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-vt-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-vt-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
```


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```
<physical-interface>
  <otn-oc-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-oc-information>
 </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
```

```
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-odu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-filter-information>
```

Description

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<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```

```
                <media-alarm-state>
                  media-alarm-state
                </media-alarm-state>
                <ce-counter-name>
                  ce-counter-name
                </ce-counter-name>
                <ce-counter-packets>
                  ce-counter-packets
                </ce-counter-packets>
                <ce-counter-bytes>
                  ce-counter-bytes
                </ce-counter-bytes>
                <ce-counter-count>
                  ce-counter-count
                </ce-counter-count>
              </media-alarm>
            </ima-link-information>
          </physical-interface>
        </interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <physical-interface>
    <interval-information>
      <interval>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
```


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```
      </interval>
    </interval-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-filter-information>
  <logical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
  </logical-interface>
</interface-filter-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
```

```
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-errors>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
```


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```
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </sonet-physical-information>
    </physical-interface>
  </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
```

```
<physical-interface>
  <sonet-line-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </sonet-line-information>
 </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-path-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
```


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```
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-path-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-vt-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </sonet-vt-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-errors>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-errors>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```


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```
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </otn-fec-alarms>
      </physical-interface>
    </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
```

```
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <atm-information>
      <plcp-defects>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <atm-information>
      <atm-defects>
        <media-alarm>
          <media-alarm-name>
```


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```
                media-alarm-name
               </media-alarm-name>
               <media-alarm-seconds>
                media-alarm-seconds
               </media-alarm-seconds>
               <media-alarm-count>
                media-alarm-count
               </media-alarm-count>
               <media-alarm-state>
                media-alarm-state
               </media-alarm-state>
               <ce-counter-name>
                ce-counter-name
               </ce-counter-name>
               <ce-counter-packets>
                ce-counter-packets
               </ce-counter-packets>
               <ce-counter-bytes>
                ce-counter-bytes
               </ce-counter-bytes>
               <ce-counter-count>
                ce-counter-count
               </ce-counter-count>
              </media-alarm>
             </atm-defects>
            </atm-information>
           </physical-interface>
          </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <media-information>
    <media-alarm>
     <media-alarm-name>
      media-alarm-name
     </media-alarm-name>
     <media-alarm-seconds>
      media-alarm-seconds
     </media-alarm-seconds>
     <media-alarm-count>
      media-alarm-count
     </media-alarm-count>
     <media-alarm-state>
      media-alarm-state
     </media-alarm-state>
     <ce-counter-name>
      ce-counter-name
     </ce-counter-name>
     <ce-counter-packets>
```

```
                ce-counter-packets
               </ce-counter-packets>
               <ce-counter-bytes>
                ce-counter-bytes
               </ce-counter-bytes>
               <ce-counter-count>
                ce-counter-count
               </ce-counter-count>
              </media-alarm>
             </media-information>
            </logical-interface>
           </physical-interface>
          </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-errors>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-errors>
   </link-entry>
  </links>
 </physical-interface>
```


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```
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-physical-information>
     <media-alarm>
      <media-alarm-name>
       media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
       media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
       media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
       media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
       ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
       ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
       ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
       ce-counter-count
      </ce-counter-count>
     </media-alarm>
    </sonet-physical-information>
   </link-entry>
  </links>
 </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
 <physical-interface>
  <links>
   <link-entry>
    <sonet-section-information>
```

```
            <media-alarm>
              <media-alarm-name>
                media-alarm-name
              </media-alarm-name>
              <media-alarm-seconds>
                media-alarm-seconds
              </media-alarm-seconds>
              <media-alarm-count>
                media-alarm-count
              </media-alarm-count>
              <media-alarm-state>
                media-alarm-state
              </media-alarm-state>
              <ce-counter-name>
                ce-counter-name
              </ce-counter-name>
              <ce-counter-packets>
                ce-counter-packets
              </ce-counter-packets>
              <ce-counter-bytes>
                ce-counter-bytes
              </ce-counter-bytes>
              <ce-counter-count>
                ce-counter-count
              </ce-counter-count>
            </media-alarm>
          </sonet-section-information>
        </link-entry>
      </links>
    </physical-interface>
  </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
```


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```
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
```

```
        </sonet-path-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-vt-information>
          <media-alarm>
            <media-alarm-name>
              media-alarm-name
            </media-alarm-name>
            <media-alarm-seconds>
              media-alarm-seconds
            </media-alarm-seconds>
            <media-alarm-count>
              media-alarm-count
            </media-alarm-count>
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </sonet-vt-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
```


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```
<physical-interface>
  <otn-oc-information>
    <media-alarm>
      <media-alarm-name>
        media-alarm-name
      </media-alarm-name>
      <media-alarm-seconds>
        media-alarm-seconds
      </media-alarm-seconds>
      <media-alarm-count>
        media-alarm-count
      </media-alarm-count>
      <media-alarm-state>
        media-alarm-state
      </media-alarm-state>
      <ce-counter-name>
        ce-counter-name
      </ce-counter-name>
      <ce-counter-packets>
        ce-counter-packets
      </ce-counter-packets>
      <ce-counter-bytes>
        ce-counter-bytes
      </ce-counter-bytes>
      <ce-counter-count>
        ce-counter-count
      </ce-counter-count>
    </media-alarm>
  </otn-oc-information>
 </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
```

```
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-odu-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ima-group-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </ima-group-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ima-link-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
```

```
            <media-alarm-state>
              media-alarm-state
            </media-alarm-state>
            <ce-counter-name>
              ce-counter-name
            </ce-counter-name>
            <ce-counter-packets>
              ce-counter-packets
            </ce-counter-packets>
            <ce-counter-bytes>
              ce-counter-bytes
            </ce-counter-bytes>
            <ce-counter-count>
              ce-counter-count
            </ce-counter-count>
          </media-alarm>
        </ima-link-information>
      </physical-interface>
    </interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <physical-interface>
    <interval-information>
      <interval>
        <media-alarm>
          <media-alarm-name>
            media-alarm-name
          </media-alarm-name>
          <media-alarm-seconds>
            media-alarm-seconds
          </media-alarm-seconds>
          <media-alarm-count>
            media-alarm-count
          </media-alarm-count>
          <media-alarm-state>
            media-alarm-state
          </media-alarm-state>
          <ce-counter-name>
            ce-counter-name
          </ce-counter-name>
          <ce-counter-packets>
            ce-counter-packets
          </ce-counter-packets>
          <ce-counter-bytes>
            ce-counter-bytes
          </ce-counter-bytes>
          <ce-counter-count>
            ce-counter-count
          </ce-counter-count>
        </media-alarm>
```


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```
      </interval>
    </interval-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-alarm>

Usage

```
<interface-policer-information>
  <logical-interface>
    <media-information>
      <media-alarm>
        <media-alarm-name>
          media-alarm-name
        </media-alarm-name>
        <media-alarm-seconds>
          media-alarm-seconds
        </media-alarm-seconds>
        <media-alarm-count>
          media-alarm-count
        </media-alarm-count>
        <media-alarm-state>
          media-alarm-state
        </media-alarm-state>
        <ce-counter-name>
          ce-counter-name
        </ce-counter-name>
        <ce-counter-packets>
          ce-counter-packets
        </ce-counter-packets>
        <ce-counter-bytes>
          ce-counter-bytes
        </ce-counter-bytes>
        <ce-counter-count>
          ce-counter-count
        </ce-counter-count>
      </media-alarm>
    </media-information>
  </logical-interface>
</interface-policer-information>
```

Description

<media-information>

Usage

```
<media-information>
  <media-alarm>....</media-alarm>
  <ds1-timeslots>
    ds1-timeslots
  </ds1-timeslots>
  <ds1-line-encoding>
```

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```
    ds1-line-encoding
  </ds1-line-encoding>
  <ds1-byte-encoding>
    ds1-byte-encoding
  </ds1-byte-encoding>
  <ds1-data-inversion>
    ds1-data-inversion
  </ds1-data-inversion>
  <ds1-buildout>
    ds1-buildout
  </ds1-buildout>
  <ds0-byte-encoding>
    ds0-byte-encoding
  </ds0-byte-encoding>
  <ds0-data-inversion>
    ds0-data-inversion
  </ds0-data-inversion>
  <idle-cycle-flag>
    idle-cycle-flag
  </idle-cycle-flag>
  <start-end-flag>
    start-end-flag
  </start-end-flag>
  <e3-data-inversion>
    e3-data-inversion
  </e3-data-inversion>
  <media-type>
    media-type
  </media-type>
</media-information>
```

Description Information about media alarms

<media-information>

Usage

```
<logical-interface>
  <media-information>
    <media-alarm>....</media-alarm>
    <ds1-timeslots>
      ds1-timeslots
    </ds1-timeslots>
    <ds1-line-encoding>
      ds1-line-encoding
    </ds1-line-encoding>
    <ds1-byte-encoding>
      ds1-byte-encoding
    </ds1-byte-encoding>
    <ds1-data-inversion>
      ds1-data-inversion
    </ds1-data-inversion>
    <ds1-buildout>
      ds1-buildout
    </ds1-buildout>
```


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```
        <ds0-byte-encoding>
          ds0-byte-encoding
        </ds0-byte-encoding>
        <ds0-data-inversion>
          ds0-data-inversion
        </ds0-data-inversion>
        <idle-cycle-flag>
          idle-cycle-flag
        </idle-cycle-flag>
        <start-end-flag>
          start-end-flag
        </start-end-flag>
        <e3-data-inversion>
          e3-data-inversion
        </e3-data-inversion>
        <media-type>
          media-type
        </media-type>
      </media-information>
    </logical-interface>
```

Description Information about media alarms

<media-information>

Usage

```
<physical-interface>
  <media-information>
    <media-alarm>....</media-alarm>
    <ds1-timeslots>
      ds1-timeslots
    </ds1-timeslots>
    <ds1-line-encoding>
      ds1-line-encoding
    </ds1-line-encoding>
    <ds1-byte-encoding>
      ds1-byte-encoding
    </ds1-byte-encoding>
    <ds1-data-inversion>
      ds1-data-inversion
    </ds1-data-inversion>
    <ds1-buildout>
      ds1-buildout
    </ds1-buildout>
    <ds0-byte-encoding>
      ds0-byte-encoding
    </ds0-byte-encoding>
    <ds0-data-inversion>
      ds0-data-inversion
    </ds0-data-inversion>
    <idle-cycle-flag>
      idle-cycle-flag
    </idle-cycle-flag>
    <start-end-flag>
```

```
      start-end-flag
    </start-end-flag>
    <e3-data-inversion>
      e3-data-inversion
    </e3-data-inversion>
    <media-type>
      media-type
    </media-type>
  </media-information>
</physical-interface>
```

Description Information about media alarms

<media-information>

Usage

```
<physical-interface>
  <logical-interface>
    <media-information>
      <media-alarm>....</media-alarm>
      <ds1-timeslots>
        ds1-timeslots
      </ds1-timeslots>
      <ds1-line-encoding>
        ds1-line-encoding
      </ds1-line-encoding>
      <ds1-byte-encoding>
        ds1-byte-encoding
      </ds1-byte-encoding>
      <ds1-data-inversion>
        ds1-data-inversion
      </ds1-data-inversion>
      <ds1-buildout>
        ds1-buildout
      </ds1-buildout>
      <ds0-byte-encoding>
        ds0-byte-encoding
      </ds0-byte-encoding>
      <ds0-data-inversion>
        ds0-data-inversion
      </ds0-data-inversion>
      <idle-cycle-flag>
        idle-cycle-flag
      </idle-cycle-flag>
      <start-end-flag>
        start-end-flag
      </start-end-flag>
      <e3-data-inversion>
        e3-data-inversion
      </e3-data-inversion>
      <media-type>
        media-type
      </media-type>
    </media-information>
```


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```
  </logical-interface>
</physical-interface>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-information>
  <physical-interface>
    <media-information>
      <media-alarm>....</media-alarm>
      <ds1-timeslots>
        ds1-timeslots
      </ds1-timeslots>
      <ds1-line-encoding>
        ds1-line-encoding
      </ds1-line-encoding>
      <ds1-byte-encoding>
        ds1-byte-encoding
      </ds1-byte-encoding>
      <ds1-data-inversion>
        ds1-data-inversion
      </ds1-data-inversion>
      <ds1-buildout>
        ds1-buildout
      </ds1-buildout>
      <ds0-byte-encoding>
        ds0-byte-encoding
      </ds0-byte-encoding>
      <ds0-data-inversion>
        ds0-data-inversion
      </ds0-data-inversion>
      <idle-cycle-flag>
        idle-cycle-flag
      </idle-cycle-flag>
      <start-end-flag>
        start-end-flag
      </start-end-flag>
      <e3-data-inversion>
        e3-data-inversion
      </e3-data-inversion>
      <media-type>
        media-type
      </media-type>
    </media-information>
  </physical-interface>
</interface-information>
```

Description Information about media alarms

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<media-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <media-information>
        <media-alarm>....</media-alarm>
        <ds1-timeslots>
          ds1-timeslots
        </ds1-timeslots>
        <ds1-line-encoding>
          ds1-line-encoding
        </ds1-line-encoding>
        <ds1-byte-encoding>
          ds1-byte-encoding
        </ds1-byte-encoding>
        <ds1-data-inversion>
          ds1-data-inversion
        </ds1-data-inversion>
        <ds1-buildout>
          ds1-buildout
        </ds1-buildout>
        <ds0-byte-encoding>
          ds0-byte-encoding
        </ds0-byte-encoding>
        <ds0-data-inversion>
          ds0-data-inversion
        </ds0-data-inversion>
        <idle-cycle-flag>
          idle-cycle-flag
        </idle-cycle-flag>
        <start-end-flag>
          start-end-flag
        </start-end-flag>
        <e3-data-inversion>
          e3-data-inversion
        </e3-data-inversion>
        <media-type>
          media-type
        </media-type>
      </media-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-information>
  <logical-interface>
```


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```
<media-information>
  <media-alarm>....</media-alarm>
  <ds1-timeslots>
    ds1-timeslots
  </ds1-timeslots>
  <ds1-line-encoding>
    ds1-line-encoding
  </ds1-line-encoding>
  <ds1-byte-encoding>
    ds1-byte-encoding
  </ds1-byte-encoding>
  <ds1-data-inversion>
    ds1-data-inversion
  </ds1-data-inversion>
  <ds1-buildout>
    ds1-buildout
  </ds1-buildout>
  <ds0-byte-encoding>
    ds0-byte-encoding
  </ds0-byte-encoding>
  <ds0-data-inversion>
    ds0-data-inversion
  </ds0-data-inversion>
  <idle-cycle-flag>
    idle-cycle-flag
  </idle-cycle-flag>
  <start-end-flag>
    start-end-flag
  </start-end-flag>
  <e3-data-inversion>
    e3-data-inversion
  </e3-data-inversion>
  <media-type>
    media-type
  </media-type>
 </media-information>
</logical-interface>
</interface-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <media-information>
   <media-alarm>....</media-alarm>
   <ds1-timeslots>
    ds1-timeslots
   </ds1-timeslots>
   <ds1-line-encoding>
    ds1-line-encoding
   </ds1-line-encoding>
```

```
        <ds1-byte-encoding>
          ds1-byte-encoding
        </ds1-byte-encoding>
        <ds1-data-inversion>
          ds1-data-inversion
        </ds1-data-inversion>
        <ds1-buildout>
          ds1-buildout
        </ds1-buildout>
        <ds0-byte-encoding>
          ds0-byte-encoding
        </ds0-byte-encoding>
        <ds0-data-inversion>
          ds0-data-inversion
        </ds0-data-inversion>
        <idle-cycle-flag>
          idle-cycle-flag
        </idle-cycle-flag>
        <start-end-flag>
          start-end-flag
        </start-end-flag>
        <e3-data-inversion>
          e3-data-inversion
        </e3-data-inversion>
        <media-type>
          media-type
        </media-type>
      </media-information>
    </physical-interface>
  </interface-filter-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <media-information>
        <media-alarm>....</media-alarm>
        <ds1-timeslots>
          ds1-timeslots
        </ds1-timeslots>
        <ds1-line-encoding>
          ds1-line-encoding
        </ds1-line-encoding>
        <ds1-byte-encoding>
          ds1-byte-encoding
        </ds1-byte-encoding>
        <ds1-data-inversion>
          ds1-data-inversion
        </ds1-data-inversion>
        <ds1-buildout>
```


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```
      ds1-buildout
     </ds1-buildout>
     <ds0-byte-encoding>
      ds0-byte-encoding
     </ds0-byte-encoding>
     <ds0-data-inversion>
      ds0-data-inversion
     </ds0-data-inversion>
     <idle-cycle-flag>
      idle-cycle-flag
     </idle-cycle-flag>
     <start-end-flag>
      start-end-flag
     </start-end-flag>
     <e3-data-inversion>
      e3-data-inversion
     </e3-data-inversion>
     <media-type>
      media-type
     </media-type>
    </media-information>
   </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-filter-information>
 <logical-interface>
  <media-information>
   <media-alarm>....</media-alarm>
   <ds1-timeslots>
    ds1-timeslots
   </ds1-timeslots>
   <ds1-line-encoding>
    ds1-line-encoding
   </ds1-line-encoding>
   <ds1-byte-encoding>
    ds1-byte-encoding
   </ds1-byte-encoding>
   <ds1-data-inversion>
    ds1-data-inversion
   </ds1-data-inversion>
   <ds1-buildout>
    ds1-buildout
   </ds1-buildout>
   <ds0-byte-encoding>
    ds0-byte-encoding
   </ds0-byte-encoding>
   <ds0-data-inversion>
    ds0-data-inversion
```

```
</ds0-data-inversion>
<idle-cycle-flag>
  idle-cycle-flag
</idle-cycle-flag>
<start-end-flag>
  start-end-flag
</start-end-flag>
<e3-data-inversion>
  e3-data-inversion
</e3-data-inversion>
<media-type>
  media-type
</media-type>
</media-information>
</logical-interface>
</interface-filter-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <media-information>
      <media-alarm>....</media-alarm>
      <ds1-timeslots>
        ds1-timeslots
      </ds1-timeslots>
      <ds1-line-encoding>
        ds1-line-encoding
      </ds1-line-encoding>
      <ds1-byte-encoding>
        ds1-byte-encoding
      </ds1-byte-encoding>
      <ds1-data-inversion>
        ds1-data-inversion
      </ds1-data-inversion>
      <ds1-buildout>
        ds1-buildout
      </ds1-buildout>
      <ds0-byte-encoding>
        ds0-byte-encoding
      </ds0-byte-encoding>
      <ds0-data-inversion>
        ds0-data-inversion
      </ds0-data-inversion>
      <idle-cycle-flag>
        idle-cycle-flag
      </idle-cycle-flag>
      <start-end-flag>
        start-end-flag
      </start-end-flag>
      <e3-data-inversion>
```


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```
            e3-data-inversion
           </e3-data-inversion>
           <media-type>
            media-type
           </media-type>
          </media-information>
         </physical-interface>
        </interface-policer-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <media-information>
    <media-alarm>....</media-alarm>
    <ds1-timeslots>
     ds1-timeslots
    </ds1-timeslots>
    <ds1-line-encoding>
     ds1-line-encoding
    </ds1-line-encoding>
    <ds1-byte-encoding>
     ds1-byte-encoding
    </ds1-byte-encoding>
    <ds1-data-inversion>
     ds1-data-inversion
    </ds1-data-inversion>
    <ds1-buildout>
     ds1-buildout
    </ds1-buildout>
    <ds0-byte-encoding>
     ds0-byte-encoding
    </ds0-byte-encoding>
    <ds0-data-inversion>
     ds0-data-inversion
    </ds0-data-inversion>
    <idle-cycle-flag>
     idle-cycle-flag
    </idle-cycle-flag>
    <start-end-flag>
     start-end-flag
    </start-end-flag>
    <e3-data-inversion>
     e3-data-inversion
    </e3-data-inversion>
    <media-type>
     media-type
    </media-type>
   </media-information>
  </logical-interface>
```

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```
  </physical-interface>
</interface-policer-information>
```

Description Information about media alarms

<media-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <media-information>
      <media-alarm>....</media-alarm>
      <ds1-timeslots>
        ds1-timeslots
      </ds1-timeslots>
      <ds1-line-encoding>
        ds1-line-encoding
      </ds1-line-encoding>
      <ds1-byte-encoding>
        ds1-byte-encoding
      </ds1-byte-encoding>
      <ds1-data-inversion>
        ds1-data-inversion
      </ds1-data-inversion>
      <ds1-buildout>
        ds1-buildout
      </ds1-buildout>
      <ds0-byte-encoding>
        ds0-byte-encoding
      </ds0-byte-encoding>
      <ds0-data-inversion>
        ds0-data-inversion
      </ds0-data-inversion>
      <idle-cycle-flag>
        idle-cycle-flag
      </idle-cycle-flag>
      <start-end-flag>
        start-end-flag
      </start-end-flag>
      <e3-data-inversion>
        e3-data-inversion
      </e3-data-inversion>
      <media-type>
        media-type
      </media-type>
    </media-information>
  </logical-interface>
</interface-policer-information>
```

Description Information about media alarms

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<media-state>

Usage

```
<physical-interface>
  <media-state-information>
    <media-state>
      <media-state-name>
        media-state-name
      </media-state-name>
      <media-state-state>
        media-state-state
      </media-state-state>
    </media-state>
  </media-state-information>
</physical-interface>
```

Description

<media-state>

Usage

```
<interface-information>
  <physical-interface>
    <media-state-information>
      <media-state>
        <media-state-name>
          media-state-name
        </media-state-name>
        <media-state-state>
          media-state-state
        </media-state-state>
      </media-state>
    </media-state-information>
  </physical-interface>
</interface-information>
```

Description

<media-state>

Usage

```
<interface-filter-information>
  <physical-interface>
    <media-state-information>
      <media-state>
        <media-state-name>
          media-state-name
        </media-state-name>
        <media-state-state>
          media-state-state
        </media-state-state>
      </media-state>
    </media-state-information>
```

```
  </physical-interface>
</interface-filter-information>
```

Description

<media-state>

Usage

```
<interface-policer-information>
  <physical-interface>
    <media-state-information>
      <media-state>
        <media-state-name>
          media-state-name
        </media-state-name>
        <media-state-state>
          media-state-state
        </media-state-state>
      </media-state>
    </media-state-information>
  </physical-interface>
</interface-policer-information>
```

Description

<media-state-information>

Usage

```
<physical-interface>
  <media-state-information>
    <media-type>
      media-type
    </media-type>
    <media-state>....</media-state>
  </media-state-information>
</physical-interface>
```

Description

<media-state-information>

Usage

```
<interface-information>
  <physical-interface>
    <media-state-information>
      <media-type>
        media-type
      </media-type>
      <media-state>....</media-state>
    </media-state-information>
  </physical-interface>
</interface-information>
```


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Description

<media-state-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <media-state-information>
      <media-type>
        media-type
      </media-type>
      <media-state>....</media-state>
    </media-state-information>
  </physical-interface>
</interface-filter-information>
```

Description

<media-state-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <media-state-information>
      <media-type>
        media-type
      </media-type>
      <media-state>....</media-state>
    </media-state-information>
  </physical-interface>
</interface-policer-information>
```

Description

<mlfr-uni-nni-bundle-options>

Usage

```
<mlfr-uni-nni-bundle-options>
  <mlfr-uni-nni-device-type>
    mlfr-uni-nni-device-type
  </mlfr-uni-nni-device-type>
  <mlfr-uni-nni-mrru>
    mlfr-uni-nni-mrru
  </mlfr-uni-nni-mrru>
  <mlfr-uni-nni-bandwidth>
    mlfr-uni-nni-bandwidth
  </mlfr-uni-nni-bandwidth>
  <red-differential-delay>
    red-differential-delay
  </red-differential-delay>
  <red-differential-delay-action>
    red-differential-delay-action
  </red-differential-delay-action>
  <yellow-differential-delay>
```

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```
    yellow-differential-delay
  </yellow-differential-delay>
  <lip-hello-timer>
    lip-hello-timer
  </lip-hello-timer>
  <lip-ack-timer>
    lip-ack-timer
  </lip-ack-timer>
  <lip-ack-retries>
    lip-ack-retries
  </lip-ack-retries>
  <bundle-class>
    bundle-class
  </bundle-class>
  <mlfr-uni-nni-drop-timeout>
    mlfr-uni-nni-drop-timeout
  </mlfr-uni-nni-drop-timeout>
  <mlfr-uni-nni-link-layer-overhead>
    mlfr-uni-nni-link-layer-overhead
  </mlfr-uni-nni-link-layer-overhead>
  <mlfr-uni-nni-lmi-type>
    mlfr-uni-nni-lmi-type
  </mlfr-uni-nni-lmi-type>
  <mlfr-uni-nni-fragment-threshold>
    mlfr-uni-nni-fragment-threshold
  </mlfr-uni-nni-fragment-threshold>
  <mlfr-uni-nni-minimum-links>
    mlfr-uni-nni-minimum-links
  </mlfr-uni-nni-minimum-links>
  <t391>
    t391
  </t391>
  <t392>
    t392
  </t392>
  <n391>
    n391
  </n391>
  <n392>
    n392
  </n392>
  <n393>
    n393
  </n393>
</mlfr-uni-nni-bundle-options>
```

Description

<mlfr-uni-nni-bundle-options>

Usage

```
<physical-interface>
  <mlfr-uni-nni-bundle-options>
    <mlfr-uni-nni-device-type>
      mlfr-uni-nni-device-type
```


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```
</mlfr-uni-nni-device-type>
<mlfr-uni-nni-mrru>
  mlfr-uni-nni-mrru
</mlfr-uni-nni-mrru>
<mlfr-uni-nni-bandwidth>
  mlfr-uni-nni-bandwidth
</mlfr-uni-nni-bandwidth>
<red-differential-delay>
  red-differential-delay
</red-differential-delay>
<red-differential-delay-action>
  red-differential-delay-action
</red-differential-delay-action>
<yellow-differential-delay>
  yellow-differential-delay
</yellow-differential-delay>
<lip-hello-timer>
  lip-hello-timer
</lip-hello-timer>
<lip-ack-timer>
  lip-ack-timer
</lip-ack-timer>
<lip-ack-retries>
  lip-ack-retries
</lip-ack-retries>
<bundle-class>
  bundle-class
</bundle-class>
<mlfr-uni-nni-drop-timeout>
  mlfr-uni-nni-drop-timeout
</mlfr-uni-nni-drop-timeout>
<mlfr-uni-nni-link-layer-overhead>
  mlfr-uni-nni-link-layer-overhead
</mlfr-uni-nni-link-layer-overhead>
<mlfr-uni-nni-lmi-type>
  mlfr-uni-nni-lmi-type
</mlfr-uni-nni-lmi-type>
<mlfr-uni-nni-fragment-threshold>
  mlfr-uni-nni-fragment-threshold
</mlfr-uni-nni-fragment-threshold>
<mlfr-uni-nni-minimum-links>
  mlfr-uni-nni-minimum-links
</mlfr-uni-nni-minimum-links>
<t391>
  t391
</t391>
<t392>
  t392
</t392>
<n391>
  n391
</n391>
<n392>
  n392
</n392>
<n393>
```

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```
      n393
    </n393>
  </mlfr-uni-nni-bundle-options>
</physical-interface>
```

Description

<mlfr-uni-nni-bundle-options>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-bundle-options>
      <mlfr-uni-nni-device-type>
        mlfr-uni-nni-device-type
      </mlfr-uni-nni-device-type>
      <mlfr-uni-nni-mrru>
        mlfr-uni-nni-mrru
      </mlfr-uni-nni-mrru>
      <mlfr-uni-nni-bandwidth>
        mlfr-uni-nni-bandwidth
      </mlfr-uni-nni-bandwidth>
      <red-differential-delay>
        red-differential-delay
      </red-differential-delay>
      <red-differential-delay-action>
        red-differential-delay-action
      </red-differential-delay-action>
      <yellow-differential-delay>
        yellow-differential-delay
      </yellow-differential-delay>
      <lip-hello-timer>
        lip-hello-timer
      </lip-hello-timer>
      <lip-ack-timer>
        lip-ack-timer
      </lip-ack-timer>
      <lip-ack-retries>
        lip-ack-retries
      </lip-ack-retries>
      <bundle-class>
        bundle-class
      </bundle-class>
      <mlfr-uni-nni-drop-timeout>
        mlfr-uni-nni-drop-timeout
      </mlfr-uni-nni-drop-timeout>
      <mlfr-uni-nni-link-layer-overhead>
        mlfr-uni-nni-link-layer-overhead
      </mlfr-uni-nni-link-layer-overhead>
      <mlfr-uni-nni-lmi-type>
        mlfr-uni-nni-lmi-type
      </mlfr-uni-nni-lmi-type>
      <mlfr-uni-nni-fragment-threshold>
        mlfr-uni-nni-fragment-threshold
      </mlfr-uni-nni-fragment-threshold>
```


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```
        <mlfr-uni-nni-minimum-links>
          mlfr-uni-nni-minimum-links
        </mlfr-uni-nni-minimum-links>
        <t391>
          t391
        </t391>
        <t392>
          t392
        </t392>
        <n391>
          n391
        </n391>
        <n392>
          n392
        </n392>
        <n393>
          n393
        </n393>
      </mlfr-uni-nni-bundle-options>
    </physical-interface>
  </interface-information>
```

Description

<mlfr-uni-nni-bundle-options>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mlfr-uni-nni-bundle-options>
      <mlfr-uni-nni-device-type>
        mlfr-uni-nni-device-type
      </mlfr-uni-nni-device-type>
      <mlfr-uni-nni-mrru>
        mlfr-uni-nni-mrru
      </mlfr-uni-nni-mrru>
      <mlfr-uni-nni-bandwidth>
        mlfr-uni-nni-bandwidth
      </mlfr-uni-nni-bandwidth>
      <red-differential-delay>
        red-differential-delay
      </red-differential-delay>
      <red-differential-delay-action>
        red-differential-delay-action
      </red-differential-delay-action>
      <yellow-differential-delay>
        yellow-differential-delay
      </yellow-differential-delay>
      <lip-hello-timer>
        lip-hello-timer
      </lip-hello-timer>
      <lip-ack-timer>
        lip-ack-timer
      </lip-ack-timer>
      <lip-ack-retries>
```

```
      lip-ack-retries
    </lip-ack-retries>
    <bundle-class>
      bundle-class
    </bundle-class>
    <mlfr-uni-nni-drop-timeout>
      mlfr-uni-nni-drop-timeout
    </mlfr-uni-nni-drop-timeout>
    <mlfr-uni-nni-link-layer-overhead>
      mlfr-uni-nni-link-layer-overhead
    </mlfr-uni-nni-link-layer-overhead>
    <mlfr-uni-nni-lmi-type>
      mlfr-uni-nni-lmi-type
    </mlfr-uni-nni-lmi-type>
    <mlfr-uni-nni-fragment-threshold>
      mlfr-uni-nni-fragment-threshold
    </mlfr-uni-nni-fragment-threshold>
    <mlfr-uni-nni-minimum-links>
      mlfr-uni-nni-minimum-links
    </mlfr-uni-nni-minimum-links>
    <t391>
      t391
    </t391>
    <t392>
      t392
    </t392>
    <n391>
      n391
    </n391>
    <n392>
      n392
    </n392>
    <n393>
      n393
    </n393>
  </mlfr-uni-nni-bundle-options>
 </physical-interface>
</interface-filter-information>
```

Description

<mlfr-uni-nni-bundle-options>

Usage

```
<interface-policer-information>
 <physical-interface>
  <mlfr-uni-nni-bundle-options>
   <mlfr-uni-nni-device-type>
    mlfr-uni-nni-device-type
   </mlfr-uni-nni-device-type>
   <mlfr-uni-nni-mrru>
    mlfr-uni-nni-mrru
   </mlfr-uni-nni-mrru>
   <mlfr-uni-nni-bandwidth>
    mlfr-uni-nni-bandwidth
```


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```
        </mlfr-uni-nni-bandwidth>
        <red-differential-delay>
          red-differential-delay
        </red-differential-delay>
        <red-differential-delay-action>
          red-differential-delay-action
        </red-differential-delay-action>
        <yellow-differential-delay>
          yellow-differential-delay
        </yellow-differential-delay>
        <lip-hello-timer>
          lip-hello-timer
        </lip-hello-timer>
        <lip-ack-timer>
          lip-ack-timer
        </lip-ack-timer>
        <lip-ack-retries>
          lip-ack-retries
        </lip-ack-retries>
        <bundle-class>
          bundle-class
        </bundle-class>
        <mlfr-uni-nni-drop-timeout>
          mlfr-uni-nni-drop-timeout
        </mlfr-uni-nni-drop-timeout>
        <mlfr-uni-nni-link-layer-overhead>
          mlfr-uni-nni-link-layer-overhead
        </mlfr-uni-nni-link-layer-overhead>
        <mlfr-uni-nni-lmi-type>
          mlfr-uni-nni-lmi-type
        </mlfr-uni-nni-lmi-type>
        <mlfr-uni-nni-fragment-threshold>
          mlfr-uni-nni-fragment-threshold
        </mlfr-uni-nni-fragment-threshold>
        <mlfr-uni-nni-minimum-links>
          mlfr-uni-nni-minimum-links
        </mlfr-uni-nni-minimum-links>
        <t391>
          t391
        </t391>
        <t392>
          t392
        </t392>
        <n391>
          n391
        </n391>
        <n392>
          n392
        </n392>
        <n393>
          n393
        </n393>
      </mlfr-uni-nni-bundle-options>
    </physical-interface>
  </interface-policer-information>
```

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Description

<mlfr-uni-nni-link>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <mlfr-uni-nni-link>
    <name>
      name
    </name>
    <down>
      down
    </down>
    <link-uptime>
      link-uptime
    </link-uptime>
    <input-frames>
      input-frames
    </input-frames>
    <input-fps>
      input-fps
    </input-fps>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-frames>
      output-frames
    </output-frames>
    <output-fps>
      output-fps
    </output-fps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
    <lip-header-string>
      lip-header-string
    </lip-header-string>
    <current-differential-delay>
      current-differential-delay
    </current-differential-delay>
    <recent-high-differential-delay>
      recent-high-differential-delay
    </recent-high-differential-delay>
    <over-red-differential>
      over-red-differential
    </over-red-differential>
    <over-yellow-differential>
      over-yellow-differential
    </over-yellow-differential>
    <rcv-lip-addlink>
```


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```
        rcv-lip-addlink
       </rcv-lip-addlink>
       <rcv-lip-link-ack>
        rcv-lip-link-ack
       </rcv-lip-link-ack>
       <rcv-lip-link-rej>
        rcv-lip-link-rej
       </rcv-lip-link-rej>
       <rcv-lip-hello>
        rcv-lip-hello
       </rcv-lip-hello>
       <rcv-lip-hello-ack>
        rcv-lip-hello-ack
       </rcv-lip-hello-ack>
       <rcv-lip-link-rem>
        rcv-lip-link-rem
       </rcv-lip-link-rem>
       <rcv-lip-rem-ack>
        rcv-lip-rem-ack
       </rcv-lip-rem-ack>
       <xmt-lip-addlink>
        xmt-lip-addlink
       </xmt-lip-addlink>
       <xmt-lip-link-ack>
        xmt-lip-link-ack
       </xmt-lip-link-ack>
       <xmt-lip-link-rej>
        xmt-lip-link-rej
       </xmt-lip-link-rej>
       <xmt-lip-hello>
        xmt-lip-hello
       </xmt-lip-hello>
       <xmt-lip-hello-ack>
        xmt-lip-hello-ack
       </xmt-lip-hello-ack>
       <xmt-lip-link-rem>
        xmt-lip-link-rem
       </xmt-lip-link-rem>
       <xmt-lip-rem-ack>
        xmt-lip-rem-ack
       </xmt-lip-rem-ack>
      </mlfr-uni-nni-link>
     </mlfr-uni-nni-traffic-statistics>
```

Description

<mlfr-uni-nni-link>

Usage

```
<physical-interface>
 <mlfr-uni-nni-traffic-statistics>
  <mlfr-uni-nni-link>
   <name>
    name
   </name>
```

```
<down>
  down
</down>
<link-uptime>
  link-uptime
</link-uptime>
<input-frames>
  input-frames
</input-frames>
<input-fps>
  input-fps
</input-fps>
<input-bytes>
  input-bytes
</input-bytes>
<input-bps>
  input-bps
</input-bps>
<output-frames>
  output-frames
</output-frames>
<output-fps>
  output-fps
</output-fps>
<output-bytes>
  output-bytes
</output-bytes>
<output-bps>
  output-bps
</output-bps>
<lip-header-string>
  lip-header-string
</lip-header-string>
<current-differential-delay>
  current-differential-delay
</current-differential-delay>
<recent-high-differential-delay>
  recent-high-differential-delay
</recent-high-differential-delay>
<over-red-differential>
  over-red-differential
</over-red-differential>
<over-yellow-differential>
  over-yellow-differential
</over-yellow-differential>
<rcv-lip-addlink>
  rcv-lip-addlink
</rcv-lip-addlink>
<rcv-lip-link-ack>
  rcv-lip-link-ack
</rcv-lip-link-ack>
<rcv-lip-link-rej>
  rcv-lip-link-rej
</rcv-lip-link-rej>
<rcv-lip-hello>
  rcv-lip-hello
```


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```
        </rcv-lip-hello>
        <rcv-lip-hello-ack>
          rcv-lip-hello-ack
        </rcv-lip-hello-ack>
        <rcv-lip-link-rem>
          rcv-lip-link-rem
        </rcv-lip-link-rem>
        <rcv-lip-rem-ack>
          rcv-lip-rem-ack
        </rcv-lip-rem-ack>
        <xmt-lip-addlink>
          xmt-lip-addlink
        </xmt-lip-addlink>
        <xmt-lip-link-ack>
          xmt-lip-link-ack
        </xmt-lip-link-ack>
        <xmt-lip-link-rej>
          xmt-lip-link-rej
        </xmt-lip-link-rej>
        <xmt-lip-hello>
          xmt-lip-hello
        </xmt-lip-hello>
        <xmt-lip-hello-ack>
          xmt-lip-hello-ack
        </xmt-lip-hello-ack>
        <xmt-lip-link-rem>
          xmt-lip-link-rem
        </xmt-lip-link-rem>
        <xmt-lip-rem-ack>
          xmt-lip-rem-ack
        </xmt-lip-rem-ack>
      </mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
```

Description

<mlfr-uni-nni-link>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <mlfr-uni-nni-link>
        <name>
          name
        </name>
        <down>
          down
        </down>
        <link-uptime>
          link-uptime
        </link-uptime>
        <input-frames>
          input-frames
```

```
</input-frames>
<input-fps>
  input-fps
</input-fps>
<input-bytes>
  input-bytes
</input-bytes>
<input-bps>
  input-bps
</input-bps>
<output-frames>
  output-frames
</output-frames>
<output-fps>
  output-fps
</output-fps>
<output-bytes>
  output-bytes
</output-bytes>
<output-bps>
  output-bps
</output-bps>
<lip-header-string>
  lip-header-string
</lip-header-string>
<current-differential-delay>
  current-differential-delay
</current-differential-delay>
<recent-high-differential-delay>
  recent-high-differential-delay
</recent-high-differential-delay>
<over-red-differential>
  over-red-differential
</over-red-differential>
<over-yellow-differential>
  over-yellow-differential
</over-yellow-differential>
<rcv-lip-addlink>
  rcv-lip-addlink
</rcv-lip-addlink>
<rcv-lip-link-ack>
  rcv-lip-link-ack
</rcv-lip-link-ack>
<rcv-lip-link-rej>
  rcv-lip-link-rej
</rcv-lip-link-rej>
<rcv-lip-hello>
  rcv-lip-hello
</rcv-lip-hello>
<rcv-lip-hello-ack>
  rcv-lip-hello-ack
</rcv-lip-hello-ack>
<rcv-lip-link-rem>
  rcv-lip-link-rem
</rcv-lip-link-rem>
<rcv-lip-rem-ack>
```


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```
            rcv-lip-rem-ack
           </rcv-lip-rem-ack>
           <xmt-lip-addlink>
            xmt-lip-addlink
           </xmt-lip-addlink>
           <xmt-lip-link-ack>
            xmt-lip-link-ack
           </xmt-lip-link-ack>
           <xmt-lip-link-rej>
            xmt-lip-link-rej
           </xmt-lip-link-rej>
           <xmt-lip-hello>
            xmt-lip-hello
           </xmt-lip-hello>
           <xmt-lip-hello-ack>
            xmt-lip-hello-ack
           </xmt-lip-hello-ack>
           <xmt-lip-link-rem>
            xmt-lip-link-rem
           </xmt-lip-link-rem>
           <xmt-lip-rem-ack>
            xmt-lip-rem-ack
           </xmt-lip-rem-ack>
          </mlfr-uni-nni-link>
         </mlfr-uni-nni-traffic-statistics>
        </physical-interface>
       </interface-information>
```

Description

<mlfr-uni-nni-link>

Usage

```
<interface-filter-information>
 <physical-interface>
  <mlfr-uni-nni-traffic-statistics>
   <mlfr-uni-nni-link>
    <name>
     name
    </name>
    <down>
     down
    </down>
    <link-uptime>
     link-uptime
    </link-uptime>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
```

<input-bps>
  input-bps
</input-bps>
<output-frames>
  output-frames
</output-frames>
<output-fps>
  output-fps
</output-fps>
<output-bytes>
  output-bytes
</output-bytes>
<output-bps>
  output-bps
</output-bps>
<lip-header-string>
  lip-header-string
</lip-header-string>
<current-differential-delay>
  current-differential-delay
</current-differential-delay>
<recent-high-differential-delay>
  recent-high-differential-delay
</recent-high-differential-delay>
<over-red-differential>
  over-red-differential
</over-red-differential>
<over-yellow-differential>
  over-yellow-differential
</over-yellow-differential>
<rcv-lip-addlink>
  rcv-lip-addlink
</rcv-lip-addlink>
<rcv-lip-link-ack>
  rcv-lip-link-ack
</rcv-lip-link-ack>
<rcv-lip-link-rej>
  rcv-lip-link-rej
</rcv-lip-link-rej>
<rcv-lip-hello>
  rcv-lip-hello
</rcv-lip-hello>
<rcv-lip-hello-ack>
  rcv-lip-hello-ack
</rcv-lip-hello-ack>
<rcv-lip-link-rem>
  rcv-lip-link-rem
</rcv-lip-link-rem>
<rcv-lip-rem-ack>
  rcv-lip-rem-ack
</rcv-lip-rem-ack>
<xmt-lip-addlink>
  xmt-lip-addlink
</xmt-lip-addlink>
<xmt-lip-link-ack>
  xmt-lip-link-ack

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```
        </xmt-lip-link-ack>
        <xmt-lip-link-rej>
          xmt-lip-link-rej
        </xmt-lip-link-rej>
        <xmt-lip-hello>
          xmt-lip-hello
        </xmt-lip-hello>
        <xmt-lip-hello-ack>
          xmt-lip-hello-ack
        </xmt-lip-hello-ack>
        <xmt-lip-link-rem>
          xmt-lip-link-rem
        </xmt-lip-link-rem>
        <xmt-lip-rem-ack>
          xmt-lip-rem-ack
        </xmt-lip-rem-ack>
      </mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<mlfr-uni-nni-link>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <mlfr-uni-nni-link>
        <name>
          name
        </name>
        <down>
          down
        </down>
        <link-uptime>
          link-uptime
        </link-uptime>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
```

```
  output-fps
</output-fps>
<output-bytes>
  output-bytes
</output-bytes>
<output-bps>
  output-bps
</output-bps>
<lip-header-string>
  lip-header-string
</lip-header-string>
<current-differential-delay>
  current-differential-delay
</current-differential-delay>
<recent-high-differential-delay>
  recent-high-differential-delay
</recent-high-differential-delay>
<over-red-differential>
  over-red-differential
</over-red-differential>
<over-yellow-differential>
  over-yellow-differential
</over-yellow-differential>
<rcv-lip-addlink>
  rcv-lip-addlink
</rcv-lip-addlink>
<rcv-lip-link-ack>
  rcv-lip-link-ack
</rcv-lip-link-ack>
<rcv-lip-link-rej>
  rcv-lip-link-rej
</rcv-lip-link-rej>
<rcv-lip-hello>
  rcv-lip-hello
</rcv-lip-hello>
<rcv-lip-hello-ack>
  rcv-lip-hello-ack
</rcv-lip-hello-ack>
<rcv-lip-link-rem>
  rcv-lip-link-rem
</rcv-lip-link-rem>
<rcv-lip-rem-ack>
  rcv-lip-rem-ack
</rcv-lip-rem-ack>
<xmt-lip-addlink>
  xmt-lip-addlink
</xmt-lip-addlink>
<xmt-lip-link-ack>
  xmt-lip-link-ack
</xmt-lip-link-ack>
<xmt-lip-link-rej>
  xmt-lip-link-rej
</xmt-lip-link-rej>
<xmt-lip-hello>
  xmt-lip-hello
</xmt-lip-hello>
```


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```
        <xmt-lip-hello-ack>
          xmt-lip-hello-ack
        </xmt-lip-hello-ack>
        <xmt-lip-link-rem>
          xmt-lip-link-rem
        </xmt-lip-link-rem>
        <xmt-lip-rem-ack>
          xmt-lip-rem-ack
        </xmt-lip-rem-ack>
      </mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<mlfr-uni-nni-link-information>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <mlfr-uni-nni-link-information>
    <active-bundle-links>
      active-bundle-links
    </active-bundle-links>
    <removed-bundle-links>
      removed-bundle-links
    </removed-bundle-links>
    <disabled-bundle-links>
      disabled-bundle-links
    </disabled-bundle-links>
  </mlfr-uni-nni-link-information>
</mlfr-uni-nni-traffic-statistics>
```

Description

<mlfr-uni-nni-link-information>

Usage

```
<physical-interface>
  <mlfr-uni-nni-traffic-statistics>
    <mlfr-uni-nni-link-information>
      <active-bundle-links>
        active-bundle-links
      </active-bundle-links>
      <removed-bundle-links>
        removed-bundle-links
      </removed-bundle-links>
      <disabled-bundle-links>
        disabled-bundle-links
      </disabled-bundle-links>
    </mlfr-uni-nni-link-information>
  </mlfr-uni-nni-traffic-statistics>
</physical-interface>
```

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Description

<mlfr-uni-nni-link-information>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <mlfr-uni-nni-link-information>
        <active-bundle-links>
          active-bundle-links
        </active-bundle-links>
        <removed-bundle-links>
          removed-bundle-links
        </removed-bundle-links>
        <disabled-bundle-links>
          disabled-bundle-links
        </disabled-bundle-links>
      </mlfr-uni-nni-link-information>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-information>
```

Description

<mlfr-uni-nni-link-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <mlfr-uni-nni-link-information>
        <active-bundle-links>
          active-bundle-links
        </active-bundle-links>
        <removed-bundle-links>
          removed-bundle-links
        </removed-bundle-links>
        <disabled-bundle-links>
          disabled-bundle-links
        </disabled-bundle-links>
      </mlfr-uni-nni-link-information>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<mlfr-uni-nni-link-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
```


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```
      <mlfr-uni-nni-link-information>
        <active-bundle-links>
          active-bundle-links
        </active-bundle-links>
        <removed-bundle-links>
          removed-bundle-links
        </removed-bundle-links>
        <disabled-bundle-links>
          disabled-bundle-links
        </disabled-bundle-links>
      </mlfr-uni-nni-link-information>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<mlfr-uni-nni-traffic-statistics>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <bundle>....</bundle>
  <mlfr-uni-nni-link-information>....</mlfr-uni-nni-link-information>
  <mlfr-uni-nni-link>....</mlfr-uni-nni-link>
</mlfr-uni-nni-traffic-statistics>
```

Description

<mlfr-uni-nni-traffic-statistics>

Usage

```
<physical-interface>
  <mlfr-uni-nni-traffic-statistics>
    <bundle>....</bundle>
    <mlfr-uni-nni-link-information>....</mlfr-uni-nni-link-information>
    <mlfr-uni-nni-link>....</mlfr-uni-nni-link>
  </mlfr-uni-nni-traffic-statistics>
</physical-interface>
```

Description

<mlfr-uni-nni-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>....</bundle>
      <mlfr-uni-nni-link-information>....</mlfr-uni-nni-link-information>
      <mlfr-uni-nni-link>....</mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
```

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```
</interface-information>
```

Description

<mlfr-uni-nni-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>....</bundle>
      <mlfr-uni-nni-link-information>....</mlfr-uni-nni-link-information>
      <mlfr-uni-nni-link>....</mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<mlfr-uni-nni-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>....</bundle>
      <mlfr-uni-nni-link-information>....</mlfr-uni-nni-link-information>
      <mlfr-uni-nni-link>....</mlfr-uni-nni-link>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<modem-information>

Usage

```
<modem-information>
  <modem-type>
    modem-type
  </modem-type>
  <init-command-str>
    init-command-str
  </init-command-str>
  <init-status>
    init-status
  </init-status>
  <baud-rate>
    baud-rate
  </baud-rate>
  <call-status>
    call-status
  </call-status>
```


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```
<error-code>
  error-code
</error-code>
<call-duration>
  call-duration
</call-duration>
<call-direction>
  call-direction
</call-direction>
</modem-information>
```

Description Operational information for MODEM interfaces

<modem-information>

Usage

```
<physical-interface>
  <modem-information>
    <modem-type>
      modem-type
    </modem-type>
    <init-command-str>
      init-command-str
    </init-command-str>
    <init-status>
      init-status
    </init-status>
    <baud-rate>
      baud-rate
    </baud-rate>
    <call-status>
      call-status
    </call-status>
    <error-code>
      error-code
    </error-code>
    <call-duration>
      call-duration
    </call-duration>
    <call-direction>
      call-direction
    </call-direction>
  </modem-information>
</physical-interface>
```

Description Operational information for MODEM interfaces

<modem-information>

Usage

```
<interface-information>
  <physical-interface>
```

```
<modem-information>
  <modem-type>
    modem-type
  </modem-type>
  <init-command-str>
    init-command-str
  </init-command-str>
  <init-status>
    init-status
  </init-status>
  <baud-rate>
    baud-rate
  </baud-rate>
  <call-status>
    call-status
  </call-status>
  <error-code>
    error-code
  </error-code>
  <call-duration>
    call-duration
  </call-duration>
  <call-direction>
    call-direction
  </call-direction>
</modem-information>
</physical-interface>
</interface-information>
```

Description Operational information for MODEM interfaces

<modem-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <modem-information>
      <modem-type>
        modem-type
      </modem-type>
      <init-command-str>
        init-command-str
      </init-command-str>
      <init-status>
        init-status
      </init-status>
      <baud-rate>
        baud-rate
      </baud-rate>
      <call-status>
        call-status
      </call-status>
      <error-code>
        error-code
```


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```
      </error-code>
      <call-duration>
        call-duration
      </call-duration>
      <call-direction>
        call-direction
      </call-direction>
    </modem-information>
  </physical-interface>
</interface-filter-information>
```

Description Operational information for MODEM interfaces

<modem-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <modem-information>
      <modem-type>
        modem-type
      </modem-type>
      <init-command-str>
        init-command-str
      </init-command-str>
      <init-status>
        init-status
      </init-status>
      <baud-rate>
        baud-rate
      </baud-rate>
      <call-status>
        call-status
      </call-status>
      <error-code>
        error-code
      </error-code>
      <call-duration>
        call-duration
      </call-duration>
      <call-direction>
        call-direction
      </call-direction>
    </modem-information>
  </physical-interface>
</interface-policer-information>
```

Description Operational information for MODEM interfaces

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<multicast-statistics>

Usage

```
<multicast-statistics>
  <multicast-statistics-header>
    multicast-statistics-header
  </multicast-statistics-header>
  <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
  <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
</multicast-statistics>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<logical-interface>
  <multicast-statistics>
    <multicast-statistics-header>
      multicast-statistics-header
    </multicast-statistics-header>
    <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
    <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
  </multicast-statistics>
</logical-interface>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<physical-interface>
  <multicast-statistics>
    <multicast-statistics-header>
      multicast-statistics-header
    </multicast-statistics-header>
    <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
    <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
  </multicast-statistics>
</physical-interface>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multicast-statistics>
      <multicast-statistics-header>
```


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```
                multicast-statistics-header
              </multicast-statistics-header>
              <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
              <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
            </multicast-statistics>
          </logical-interface>
        </physical-interface>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <multicast-statistics>
      <multicast-statistics-header>
        multicast-statistics-header
      </multicast-statistics-header>
      <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
      <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <multicast-statistics-header>
          multicast-statistics-header
        </multicast-statistics-header>
        <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
        <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-information>
  <logical-interface>
```

```
<multicast-statistics>
 <multicast-statistics-header>
  multicast-statistics-header
 </multicast-statistics-header>
 <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
 <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
</multicast-statistics>
</logical-interface>
</interface-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <multicast-statistics>
   <multicast-statistics-header>
    multicast-statistics-header
   </multicast-statistics-header>
   <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
   <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
  </multicast-statistics>
 </physical-interface>
</interface-filter-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <multicast-statistics>
    <multicast-statistics-header>
     multicast-statistics-header
    </multicast-statistics-header>
    <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
    <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
   </multicast-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Multicast statistics for interface

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<multicast-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multicast-statistics>
      <multicast-statistics-header>
        multicast-statistics-header
      </multicast-statistics-header>
      <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
      <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
    </multicast-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <multicast-statistics>
      <multicast-statistics-header>
        multicast-statistics-header
      </multicast-statistics-header>
      <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
      <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
    </multicast-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multicast-statistics>
        <multicast-statistics-header>
          multicast-statistics-header
        </multicast-statistics-header>
        <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
        <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
      </multicast-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

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Description Multicast statistics for interface

<multicast-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multicast-statistics>
      <multicast-statistics-header>
        multicast-statistics-header
      </multicast-statistics-header>
      <ipv4-multicast-statistics>....</ipv4-multicast-statistics>
      <ipv6-multicast-statistics>....</ipv6-multicast-statistics>
    </multicast-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Multicast statistics for interface

<multilink-bundle-class>

Usage

```
<multilink-bundle-class>
  <multilink-class-id>
    multilink-class-id
  </multilink-class-id>
  <rx-sequence-number>
    rx-sequence-number
  </rx-sequence-number>
  <tx-sequence-number>
    tx-sequence-number
  </tx-sequence-number>
  <packet-drops>
    packet-drops
  </packet-drops>
  <packet-drop-bytes>
    packet-drop-bytes
  </packet-drop-bytes>
  <fragment-drops>
    fragment-drops
  </fragment-drops>
  <fragment-drop-bytes>
    fragment-drop-bytes
  </fragment-drop-bytes>
  <mrru-exceeded>
    mrru-exceeded
  </mrru-exceeded>
  <processing-errors>
    processing-errors
  </processing-errors>
  <fragment-timeout>
    fragment-timeout
  </fragment-timeout>
```


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```
<sequence-number-missing>
  sequence-number-missing
</sequence-number-missing>
<out-of-order-sequence-number>
  out-of-order-sequence-number
</out-of-order-sequence-number>
<out-of-range-sequence-number>
  out-of-range-sequence-number
</out-of-range-sequence-number>
<packet-buffer-overflow>
  packet-buffer-overflow
</packet-buffer-overflow>
<fragment-buffer-overflow>
  fragment-buffer-overflow
</fragment-buffer-overflow>
<multilink-class-drop-timeout>
  multilink-class-drop-timeout
</multilink-class-drop-timeout>
</multilink-bundle-class>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<logical-interface>
  <multilink-bundle-class>
    <multilink-class-id>
      multilink-class-id
    </multilink-class-id>
    <rx-sequence-number>
      rx-sequence-number
    </rx-sequence-number>
    <tx-sequence-number>
      tx-sequence-number
    </tx-sequence-number>
    <packet-drops>
      packet-drops
    </packet-drops>
    <packet-drop-bytes>
      packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
      fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
      fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
      mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
      processing-errors
    </processing-errors>
```

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```
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
          out-of-order-sequence-number
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
        </out-of-range-sequence-number>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
        <multilink-class-drop-timeout>
          multilink-class-drop-timeout
        </multilink-class-drop-timeout>
      </multilink-bundle-class>
    </logical-interface>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-bundle-class>
      <multilink-class-id>
        multilink-class-id
      </multilink-class-id>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
      </tx-sequence-number>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
```


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```
            mrru-exceeded
           </mrru-exceeded>
           <processing-errors>
            processing-errors
           </processing-errors>
           <fragment-timeout>
            fragment-timeout
           </fragment-timeout>
           <sequence-number-missing>
            sequence-number-missing
           </sequence-number-missing>
           <out-of-order-sequence-number>
            out-of-order-sequence-number
           </out-of-order-sequence-number>
           <out-of-range-sequence-number>
            out-of-range-sequence-number
           </out-of-range-sequence-number>
           <packet-buffer-overflow>
            packet-buffer-overflow
           </packet-buffer-overflow>
           <fragment-buffer-overflow>
            fragment-buffer-overflow
           </fragment-buffer-overflow>
           <multilink-class-drop-timeout>
            multilink-class-drop-timeout
           </multilink-class-drop-timeout>
          </multilink-bundle-class>
         </logical-interface>
        </physical-interface>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <multilink-bundle-class>
    <multilink-class-id>
     multilink-class-id
    </multilink-class-id>
    <rx-sequence-number>
     rx-sequence-number
    </rx-sequence-number>
    <tx-sequence-number>
     tx-sequence-number
    </tx-sequence-number>
    <packet-drops>
     packet-drops
    </packet-drops>
    <packet-drop-bytes>
     packet-drop-bytes
    </packet-drop-bytes>
```

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```
<fragment-drops>
  fragment-drops
</fragment-drops>
<fragment-drop-bytes>
  fragment-drop-bytes
</fragment-drop-bytes>
<mrru-exceeded>
  mrru-exceeded
</mrru-exceeded>
<processing-errors>
  processing-errors
</processing-errors>
<fragment-timeout>
  fragment-timeout
</fragment-timeout>
<sequence-number-missing>
  sequence-number-missing
</sequence-number-missing>
<out-of-order-sequence-number>
  out-of-order-sequence-number
</out-of-order-sequence-number>
<out-of-range-sequence-number>
  out-of-range-sequence-number
</out-of-range-sequence-number>
<packet-buffer-overflow>
  packet-buffer-overflow
</packet-buffer-overflow>
<fragment-buffer-overflow>
  fragment-buffer-overflow
</fragment-buffer-overflow>
<multilink-class-drop-timeout>
  multilink-class-drop-timeout
</multilink-class-drop-timeout>
</multilink-bundle-class>
</logical-interface>
</physical-interface>
</interface-information>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-bundle-class>
      <multilink-class-id>
        multilink-class-id
      </multilink-class-id>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
```


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```
        </tx-sequence-number>
        <packet-drops>
          packet-drops
        </packet-drops>
        <packet-drop-bytes>
          packet-drop-bytes
        </packet-drop-bytes>
        <fragment-drops>
          fragment-drops
        </fragment-drops>
        <fragment-drop-bytes>
          fragment-drop-bytes
        </fragment-drop-bytes>
        <mrru-exceeded>
          mrru-exceeded
        </mrru-exceeded>
        <processing-errors>
          processing-errors
        </processing-errors>
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
          out-of-order-sequence-number
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
        </out-of-range-sequence-number>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
        <multilink-class-drop-timeout>
          multilink-class-drop-timeout
        </multilink-class-drop-timeout>
      </multilink-bundle-class>
    </logical-interface>
  </interface-information>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-class>
        <multilink-class-id>
```

```
            multilink-class-id
          </multilink-class-id>
          <rx-sequence-number>
            rx-sequence-number
          </rx-sequence-number>
          <tx-sequence-number>
            tx-sequence-number
          </tx-sequence-number>
          <packet-drops>
            packet-drops
          </packet-drops>
          <packet-drop-bytes>
            packet-drop-bytes
          </packet-drop-bytes>
          <fragment-drops>
            fragment-drops
          </fragment-drops>
          <fragment-drop-bytes>
            fragment-drop-bytes
          </fragment-drop-bytes>
          <mrru-exceeded>
            mrru-exceeded
          </mrru-exceeded>
          <processing-errors>
            processing-errors
          </processing-errors>
          <fragment-timeout>
            fragment-timeout
          </fragment-timeout>
          <sequence-number-missing>
            sequence-number-missing
          </sequence-number-missing>
          <out-of-order-sequence-number>
            out-of-order-sequence-number
          </out-of-order-sequence-number>
          <out-of-range-sequence-number>
            out-of-range-sequence-number
          </out-of-range-sequence-number>
          <packet-buffer-overflow>
            packet-buffer-overflow
          </packet-buffer-overflow>
          <fragment-buffer-overflow>
            fragment-buffer-overflow
          </fragment-buffer-overflow>
          <multilink-class-drop-timeout>
            multilink-class-drop-timeout
          </multilink-class-drop-timeout>
        </multilink-bundle-class>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description Multilink class status

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<multilink-bundle-class>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-bundle-class>
      <multilink-class-id>
        multilink-class-id
      </multilink-class-id>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
      </tx-sequence-number>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
        out-of-range-sequence-number
      </out-of-range-sequence-number>
      <packet-buffer-overflow>
        packet-buffer-overflow
      </packet-buffer-overflow>
      <fragment-buffer-overflow>
        fragment-buffer-overflow
      </fragment-buffer-overflow>
      <multilink-class-drop-timeout>
        multilink-class-drop-timeout
      </multilink-class-drop-timeout>
    </multilink-bundle-class>
```

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```
  </logical-interface>
</interface-filter-information>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-class>
        <multilink-class-id>
          multilink-class-id
        </multilink-class-id>
        <rx-sequence-number>
          rx-sequence-number
        </rx-sequence-number>
        <tx-sequence-number>
          tx-sequence-number
        </tx-sequence-number>
        <packet-drops>
          packet-drops
        </packet-drops>
        <packet-drop-bytes>
          packet-drop-bytes
        </packet-drop-bytes>
        <fragment-drops>
          fragment-drops
        </fragment-drops>
        <fragment-drop-bytes>
          fragment-drop-bytes
        </fragment-drop-bytes>
        <mrru-exceeded>
          mrru-exceeded
        </mrru-exceeded>
        <processing-errors>
          processing-errors
        </processing-errors>
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
          out-of-order-sequence-number
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
        </out-of-range-sequence-number>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
```


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```
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
        <multilink-class-drop-timeout>
          multilink-class-drop-timeout
        </multilink-class-drop-timeout>
      </multilink-bundle-class>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Multilink class status

<multilink-bundle-class>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-bundle-class>
      <multilink-class-id>
        multilink-class-id
      </multilink-class-id>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
      </tx-sequence-number>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
```

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```
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
        out-of-range-sequence-number
      </out-of-range-sequence-number>
      <packet-buffer-overflow>
        packet-buffer-overflow
      </packet-buffer-overflow>
      <fragment-buffer-overflow>
        fragment-buffer-overflow
      </fragment-buffer-overflow>
      <multilink-class-drop-timeout>
        multilink-class-drop-timeout
      </multilink-class-drop-timeout>
    </multilink-bundle-class>
  </logical-interface>
</interface-policer-information>
```

Description Multilink class status

<multilink-bundle-errors>

Usage

```
<multilink-bundle-errors>
  <packet-drops>
    packet-drops
  </packet-drops>
  <packet-drop-bytes>
    packet-drop-bytes
  </packet-drop-bytes>
  <fragment-drops>
    fragment-drops
  </fragment-drops>
  <fragment-drop-bytes>
    fragment-drop-bytes
  </fragment-drop-bytes>
  <mrru-exceeded>
    mrru-exceeded
  </mrru-exceeded>
  <processing-errors>
    processing-errors
  </processing-errors>
</multilink-bundle-errors>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<logical-interface>
  <multilink-bundle-errors>
    <packet-drops>
      packet-drops
```


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```
    </packet-drops>
    <packet-drop-bytes>
      packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
      fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
      fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
      mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
      processing-errors
    </processing-errors>
  </multilink-bundle-errors>
</logical-interface>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<physical-interface>
  <multilink-bundle-errors>
    <packet-drops>
      packet-drops
    </packet-drops>
    <packet-drop-bytes>
      packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
      fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
      fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
      mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
      processing-errors
    </processing-errors>
  </multilink-bundle-errors>
</physical-interface>
```

Description Multilink bundle errors

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<multilink-bundle-errors>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-bundle-errors>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
    </multilink-bundle-errors>
  </logical-interface>
</physical-interface>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-information>
  <physical-interface>
    <multilink-bundle-errors>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
```


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```
      </processing-errors>
     </multilink-bundle-errors>
    </physical-interface>
   </interface-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <multilink-bundle-errors>
    <packet-drops>
     packet-drops
    </packet-drops>
    <packet-drop-bytes>
     packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
     fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
     fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
     mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
     processing-errors
    </processing-errors>
   </multilink-bundle-errors>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-bundle-errors>
   <packet-drops>
    packet-drops
   </packet-drops>
   <packet-drop-bytes>
    packet-drop-bytes
   </packet-drop-bytes>
   <fragment-drops>
```

```
            fragment-drops
          </fragment-drops>
          <fragment-drop-bytes>
            fragment-drop-bytes
          </fragment-drop-bytes>
          <mrru-exceeded>
            mrru-exceeded
          </mrru-exceeded>
          <processing-errors>
            processing-errors
          </processing-errors>
        </multilink-bundle-errors>
      </logical-interface>
    </interface-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
    <multilink-bundle-errors>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
    </multilink-bundle-errors>
  </physical-interface>
</interface-filter-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
```


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```
<logical-interface>
 <multilink-bundle-errors>
  <packet-drops>
   packet-drops
  </packet-drops>
  <packet-drop-bytes>
   packet-drop-bytes
  </packet-drop-bytes>
  <fragment-drops>
   fragment-drops
  </fragment-drops>
  <fragment-drop-bytes>
   fragment-drop-bytes
  </fragment-drop-bytes>
  <mrru-exceeded>
   mrru-exceeded
  </mrru-exceeded>
  <processing-errors>
   processing-errors
  </processing-errors>
 </multilink-bundle-errors>
</logical-interface>
</physical-interface>
</interface-filter-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-bundle-errors>
   <packet-drops>
    packet-drops
   </packet-drops>
   <packet-drop-bytes>
    packet-drop-bytes
   </packet-drop-bytes>
   <fragment-drops>
    fragment-drops
   </fragment-drops>
   <fragment-drop-bytes>
    fragment-drop-bytes
   </fragment-drop-bytes>
   <mrru-exceeded>
    mrru-exceeded
   </mrru-exceeded>
   <processing-errors>
    processing-errors
   </processing-errors>
  </multilink-bundle-errors>
 </logical-interface>
```

```
</interface-filter-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-policer-information>
  <physical-interface>
    <multilink-bundle-errors>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
    </multilink-bundle-errors>
  </physical-interface>
</interface-policer-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-errors>
        <packet-drops>
          packet-drops
        </packet-drops>
        <packet-drop-bytes>
          packet-drop-bytes
        </packet-drop-bytes>
        <fragment-drops>
          fragment-drops
        </fragment-drops>
        <fragment-drop-bytes>
          fragment-drop-bytes
```


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```
        </fragment-drop-bytes>
        <mrru-exceeded>
          mrru-exceeded
        </mrru-exceeded>
        <processing-errors>
          processing-errors
        </processing-errors>
      </multilink-bundle-errors>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Multilink bundle errors

<multilink-bundle-errors>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-bundle-errors>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
    </multilink-bundle-errors>
  </logical-interface>
</interface-policer-information>
```

Description Multilink bundle errors

<multilink-bundle-link-information>

Usage

```
<multilink-bundle-link-information>
  <multilink-active-bundle-links>
    multilink-active-bundle-links
  </multilink-active-bundle-links>
  <multilink-removed-bundle-links>
```

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```
    multilink-removed-bundle-links
   </multilink-removed-bundle-links>
   <multilink-disabled-bundle-links>
    multilink-disabled-bundle-links
   </multilink-disabled-bundle-links>
</multilink-bundle-link-information>
```

Description

<multilink-bundle-link-information>

Usage

```
<logical-interface>
 <multilink-bundle-link-information>
  <multilink-active-bundle-links>
   multilink-active-bundle-links
  </multilink-active-bundle-links>
  <multilink-removed-bundle-links>
   multilink-removed-bundle-links
  </multilink-removed-bundle-links>
  <multilink-disabled-bundle-links>
   multilink-disabled-bundle-links
  </multilink-disabled-bundle-links>
 </multilink-bundle-link-information>
</logical-interface>
```

Description

<multilink-bundle-link-information>

Usage

```
<physical-interface>
 <logical-interface>
  <multilink-bundle-link-information>
   <multilink-active-bundle-links>
    multilink-active-bundle-links
   </multilink-active-bundle-links>
   <multilink-removed-bundle-links>
    multilink-removed-bundle-links
   </multilink-removed-bundle-links>
   <multilink-disabled-bundle-links>
    multilink-disabled-bundle-links
   </multilink-disabled-bundle-links>
  </multilink-bundle-link-information>
 </logical-interface>
</physical-interface>
```

Description

<multilink-bundle-link-information>

Usage

```
<interface-information>
```


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```
<physical-interface>
  <logical-interface>
    <multilink-bundle-link-information>
      <multilink-active-bundle-links>
        multilink-active-bundle-links
      </multilink-active-bundle-links>
      <multilink-removed-bundle-links>
        multilink-removed-bundle-links
      </multilink-removed-bundle-links>
      <multilink-disabled-bundle-links>
        multilink-disabled-bundle-links
      </multilink-disabled-bundle-links>
    </multilink-bundle-link-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<multilink-bundle-link-information>

Usage

```
<interface-information>
 <logical-interface>
   <multilink-bundle-link-information>
     <multilink-active-bundle-links>
       multilink-active-bundle-links
     </multilink-active-bundle-links>
     <multilink-removed-bundle-links>
       multilink-removed-bundle-links
     </multilink-removed-bundle-links>
     <multilink-disabled-bundle-links>
       multilink-disabled-bundle-links
     </multilink-disabled-bundle-links>
   </multilink-bundle-link-information>
 </logical-interface>
</interface-information>
```

Description

<multilink-bundle-link-information>

Usage

```
<interface-filter-information>
 <physical-interface>
   <logical-interface>
     <multilink-bundle-link-information>
       <multilink-active-bundle-links>
         multilink-active-bundle-links
       </multilink-active-bundle-links>
       <multilink-removed-bundle-links>
         multilink-removed-bundle-links
       </multilink-removed-bundle-links>
       <multilink-disabled-bundle-links>
```

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```
            multilink-disabled-bundle-links
          </multilink-disabled-bundle-links>
        </multilink-bundle-link-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<multilink-bundle-link-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-bundle-link-information>
      <multilink-active-bundle-links>
        multilink-active-bundle-links
      </multilink-active-bundle-links>
      <multilink-removed-bundle-links>
        multilink-removed-bundle-links
      </multilink-removed-bundle-links>
      <multilink-disabled-bundle-links>
        multilink-disabled-bundle-links
      </multilink-disabled-bundle-links>
    </multilink-bundle-link-information>
  </logical-interface>
</interface-filter-information>
```

Description

<multilink-bundle-link-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-link-information>
        <multilink-active-bundle-links>
          multilink-active-bundle-links
        </multilink-active-bundle-links>
        <multilink-removed-bundle-links>
          multilink-removed-bundle-links
        </multilink-removed-bundle-links>
        <multilink-disabled-bundle-links>
          multilink-disabled-bundle-links
        </multilink-disabled-bundle-links>
      </multilink-bundle-link-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

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<multilink-bundle-link-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-bundle-link-information>
      <multilink-active-bundle-links>
        multilink-active-bundle-links
      </multilink-active-bundle-links>
      <multilink-removed-bundle-links>
        multilink-removed-bundle-links
      </multilink-removed-bundle-links>
      <multilink-disabled-bundle-links>
        multilink-disabled-bundle-links
      </multilink-disabled-bundle-links>
    </multilink-bundle-link-information>
  </logical-interface>
</interface-policer-information>
```

Description

<multilink-bundle-options>

Usage

```
<multilink-bundle-options>
  <mrru>
    mrru
  </mrru>
  <remote-mrru>
    remote-mrru
  </remote-mrru>
  <drop-timeout>
    drop-timeout
  </drop-timeout>
  <mlppp-inner-ppp-pfc>
    mlppp-inner-ppp-pfc
  </mlppp-inner-ppp-pfc>
  <sequence-number-format>
    sequence-number-format
  </sequence-number-format>
  <fragment-threshold>
    fragment-threshold
  </fragment-threshold>
  <minimum-links>
    minimum-links
  </minimum-links>
  <interleave-fragments>
    interleave-fragments
  </interleave-fragments>
  <multilink-classes>
    multilink-classes
  </multilink-classes>
  <link-layer-overhead>
    link-layer-overhead
```

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```
  </link-layer-overhead>
</multilink-bundle-options>
```

Description

<multilink-bundle-options>

Usage

```
<logical-interface>
  <multilink-bundle-options>
    <mrru>
      mrru
    </mrru>
    <remote-mrru>
      remote-mrru
    </remote-mrru>
    <drop-timeout>
      drop-timeout
    </drop-timeout>
    <mlppp-inner-ppp-pfc>
      mlppp-inner-ppp-pfc
    </mlppp-inner-ppp-pfc>
    <sequence-number-format>
      sequence-number-format
    </sequence-number-format>
    <fragment-threshold>
      fragment-threshold
    </fragment-threshold>
    <minimum-links>
      minimum-links
    </minimum-links>
    <interleave-fragments>
      interleave-fragments
    </interleave-fragments>
    <multilink-classes>
      multilink-classes
    </multilink-classes>
    <link-layer-overhead>
      link-layer-overhead
    </link-layer-overhead>
  </multilink-bundle-options>
</logical-interface>
```

Description

<multilink-bundle-options>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-bundle-options>
      <mrru>
        mrru
      </mrru>
```


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```
      <remote-mrru>
        remote-mrru
      </remote-mrru>
      <drop-timeout>
        drop-timeout
      </drop-timeout>
      <mlppp-inner-ppp-pfc>
        mlppp-inner-ppp-pfc
      </mlppp-inner-ppp-pfc>
      <sequence-number-format>
        sequence-number-format
      </sequence-number-format>
      <fragment-threshold>
        fragment-threshold
      </fragment-threshold>
      <minimum-links>
        minimum-links
      </minimum-links>
      <interleave-fragments>
        interleave-fragments
      </interleave-fragments>
      <multilink-classes>
        multilink-classes
      </multilink-classes>
      <link-layer-overhead>
        link-layer-overhead
      </link-layer-overhead>
    </multilink-bundle-options>
  </logical-interface>
</physical-interface>
```

Description

<multilink-bundle-options>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-options>
        <mrru>
          mrru
        </mrru>
        <remote-mrru>
          remote-mrru
        </remote-mrru>
        <drop-timeout>
          drop-timeout
        </drop-timeout>
        <mlppp-inner-ppp-pfc>
          mlppp-inner-ppp-pfc
        </mlppp-inner-ppp-pfc>
        <sequence-number-format>
          sequence-number-format
        </sequence-number-format>
```

```
        <fragment-threshold>
          fragment-threshold
        </fragment-threshold>
        <minimum-links>
          minimum-links
        </minimum-links>
        <interleave-fragments>
          interleave-fragments
        </interleave-fragments>
        <multilink-classes>
          multilink-classes
        </multilink-classes>
        <link-layer-overhead>
          link-layer-overhead
        </link-layer-overhead>
      </multilink-bundle-options>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<multilink-bundle-options>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-bundle-options>
      <mrru>
        mrru
      </mrru>
      <remote-mrru>
        remote-mrru
      </remote-mrru>
      <drop-timeout>
        drop-timeout
      </drop-timeout>
      <mlppp-inner-ppp-pfc>
        mlppp-inner-ppp-pfc
      </mlppp-inner-ppp-pfc>
      <sequence-number-format>
        sequence-number-format
      </sequence-number-format>
      <fragment-threshold>
        fragment-threshold
      </fragment-threshold>
      <minimum-links>
        minimum-links
      </minimum-links>
      <interleave-fragments>
        interleave-fragments
      </interleave-fragments>
      <multilink-classes>
        multilink-classes
      </multilink-classes>
```


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```
      <link-layer-overhead>
       link-layer-overhead
      </link-layer-overhead>
     </multilink-bundle-options>
    </logical-interface>
   </interface-information>
```

Description

<multilink-bundle-options>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <multilink-bundle-options>
    <mrru>
     mrru
    </mrru>
    <remote-mrru>
     remote-mrru
    </remote-mrru>
    <drop-timeout>
     drop-timeout
    </drop-timeout>
    <mlppp-inner-ppp-pfc>
     mlppp-inner-ppp-pfc
    </mlppp-inner-ppp-pfc>
    <sequence-number-format>
     sequence-number-format
    </sequence-number-format>
    <fragment-threshold>
     fragment-threshold
    </fragment-threshold>
    <minimum-links>
     minimum-links
    </minimum-links>
    <interleave-fragments>
     interleave-fragments
    </interleave-fragments>
    <multilink-classes>
     multilink-classes
    </multilink-classes>
    <link-layer-overhead>
     link-layer-overhead
    </link-layer-overhead>
   </multilink-bundle-options>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description

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<multilink-bundle-options>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-bundle-options>
      <mrru>
        mrru
      </mrru>
      <remote-mrru>
        remote-mrru
      </remote-mrru>
      <drop-timeout>
        drop-timeout
      </drop-timeout>
      <mlppp-inner-ppp-pfc>
        mlppp-inner-ppp-pfc
      </mlppp-inner-ppp-pfc>
      <sequence-number-format>
        sequence-number-format
      </sequence-number-format>
      <fragment-threshold>
        fragment-threshold
      </fragment-threshold>
      <minimum-links>
        minimum-links
      </minimum-links>
      <interleave-fragments>
        interleave-fragments
      </interleave-fragments>
      <multilink-classes>
        multilink-classes
      </multilink-classes>
      <link-layer-overhead>
        link-layer-overhead
      </link-layer-overhead>
    </multilink-bundle-options>
  </logical-interface>
</interface-filter-information>
```

Description

<multilink-bundle-options>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-options>
        <mrru>
          mrru
        </mrru>
        <remote-mrru>
          remote-mrru
```


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```
        </remote-mrru>
        <drop-timeout>
          drop-timeout
        </drop-timeout>
        <mlppp-inner-ppp-pfc>
          mlppp-inner-ppp-pfc
        </mlppp-inner-ppp-pfc>
        <sequence-number-format>
          sequence-number-format
        </sequence-number-format>
        <fragment-threshold>
          fragment-threshold
        </fragment-threshold>
        <minimum-links>
          minimum-links
        </minimum-links>
        <interleave-fragments>
          interleave-fragments
        </interleave-fragments>
        <multilink-classes>
          multilink-classes
        </multilink-classes>
        <link-layer-overhead>
          link-layer-overhead
        </link-layer-overhead>
      </multilink-bundle-options>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<multilink-bundle-options>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-bundle-options>
      <mrru>
        mrru
      </mrru>
      <remote-mrru>
        remote-mrru
      </remote-mrru>
      <drop-timeout>
        drop-timeout
      </drop-timeout>
      <mlppp-inner-ppp-pfc>
        mlppp-inner-ppp-pfc
      </mlppp-inner-ppp-pfc>
      <sequence-number-format>
        sequence-number-format
      </sequence-number-format>
      <fragment-threshold>
        fragment-threshold
```

```
      </fragment-threshold>
      <minimum-links>
        minimum-links
      </minimum-links>
      <interleave-fragments>
        interleave-fragments
      </interleave-fragments>
      <multilink-classes>
        multilink-classes
      </multilink-classes>
      <link-layer-overhead>
        link-layer-overhead
      </link-layer-overhead>
    </multilink-bundle-options>
  </logical-interface>
</interface-policer-information>
```

Description

<multilink-bundle-status>

Usage

```
<multilink-bundle-status>
  <rx-sequence-number>
    rx-sequence-number
  </rx-sequence-number>
  <tx-sequence-number>
    tx-sequence-number
  </tx-sequence-number>
  <packet-drops>
    packet-drops
  </packet-drops>
  <packet-drop-bytes>
    packet-drop-bytes
  </packet-drop-bytes>
  <fragment-drops>
    fragment-drops
  </fragment-drops>
  <fragment-drop-bytes>
    fragment-drop-bytes
  </fragment-drop-bytes>
  <mrru-exceeded>
    mrru-exceeded
  </mrru-exceeded>
  <processing-errors>
    processing-errors
  </processing-errors>
  <fragment-timeout>
    fragment-timeout
  </fragment-timeout>
  <sequence-number-missing>
    sequence-number-missing
  </sequence-number-missing>
  <out-of-order-sequence-number>
    out-of-order-sequence-number
```


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```
  </out-of-order-sequence-number>
  <out-of-range-sequence-number>
   out-of-range-sequence-number
  </out-of-range-sequence-number>
  <packet-buffer-overflow>
   packet-buffer-overflow
  </packet-buffer-overflow>
  <fragment-buffer-overflow>
   fragment-buffer-overflow
  </fragment-buffer-overflow>
</multilink-bundle-status>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<logical-interface>
  <multilink-bundle-status>
    <rx-sequence-number>
     rx-sequence-number
    </rx-sequence-number>
    <tx-sequence-number>
     tx-sequence-number
    </tx-sequence-number>
    <packet-drops>
     packet-drops
    </packet-drops>
    <packet-drop-bytes>
     packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
     fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
     fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
     mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
     processing-errors
    </processing-errors>
    <fragment-timeout>
     fragment-timeout
    </fragment-timeout>
    <sequence-number-missing>
     sequence-number-missing
    </sequence-number-missing>
    <out-of-order-sequence-number>
     out-of-order-sequence-number
    </out-of-order-sequence-number>
    <out-of-range-sequence-number>
     out-of-range-sequence-number
```

```
    </out-of-range-sequence-number>
    <packet-buffer-overflow>
     packet-buffer-overflow
    </packet-buffer-overflow>
    <fragment-buffer-overflow>
     fragment-buffer-overflow
    </fragment-buffer-overflow>
   </multilink-bundle-status>
  </logical-interface>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<physical-interface>
 <logical-interface>
  <multilink-bundle-status>
   <rx-sequence-number>
    rx-sequence-number
   </rx-sequence-number>
   <tx-sequence-number>
    tx-sequence-number
   </tx-sequence-number>
   <packet-drops>
    packet-drops
   </packet-drops>
   <packet-drop-bytes>
    packet-drop-bytes
   </packet-drop-bytes>
   <fragment-drops>
    fragment-drops
   </fragment-drops>
   <fragment-drop-bytes>
    fragment-drop-bytes
   </fragment-drop-bytes>
   <mrru-exceeded>
    mrru-exceeded
   </mrru-exceeded>
   <processing-errors>
    processing-errors
   </processing-errors>
   <fragment-timeout>
    fragment-timeout
   </fragment-timeout>
   <sequence-number-missing>
    sequence-number-missing
   </sequence-number-missing>
   <out-of-order-sequence-number>
    out-of-order-sequence-number
   </out-of-order-sequence-number>
   <out-of-range-sequence-number>
    out-of-range-sequence-number
   </out-of-range-sequence-number>
```


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```
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
      </multilink-bundle-status>
    </logical-interface>
  </physical-interface>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-status>
        <rx-sequence-number>
          rx-sequence-number
        </rx-sequence-number>
        <tx-sequence-number>
          tx-sequence-number
        </tx-sequence-number>
        <packet-drops>
          packet-drops
        </packet-drops>
        <packet-drop-bytes>
          packet-drop-bytes
        </packet-drop-bytes>
        <fragment-drops>
          fragment-drops
        </fragment-drops>
        <fragment-drop-bytes>
          fragment-drop-bytes
        </fragment-drop-bytes>
        <mrru-exceeded>
          mrru-exceeded
        </mrru-exceeded>
        <processing-errors>
          processing-errors
        </processing-errors>
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
          out-of-order-sequence-number
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
```

```
        </out-of-range-sequence-number>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
      </multilink-bundle-status>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-bundle-status>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
      </tx-sequence-number>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
```


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```
            out-of-range-sequence-number
           </out-of-range-sequence-number>
           <packet-buffer-overflow>
            packet-buffer-overflow
           </packet-buffer-overflow>
           <fragment-buffer-overflow>
            fragment-buffer-overflow
           </fragment-buffer-overflow>
          </multilink-bundle-status>
         </logical-interface>
        </interface-information>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <multilink-bundle-status>
    <rx-sequence-number>
     rx-sequence-number
    </rx-sequence-number>
    <tx-sequence-number>
     tx-sequence-number
    </tx-sequence-number>
    <packet-drops>
     packet-drops
    </packet-drops>
    <packet-drop-bytes>
     packet-drop-bytes
    </packet-drop-bytes>
    <fragment-drops>
     fragment-drops
    </fragment-drops>
    <fragment-drop-bytes>
     fragment-drop-bytes
    </fragment-drop-bytes>
    <mrru-exceeded>
     mrru-exceeded
    </mrru-exceeded>
    <processing-errors>
     processing-errors
    </processing-errors>
    <fragment-timeout>
     fragment-timeout
    </fragment-timeout>
    <sequence-number-missing>
     sequence-number-missing
    </sequence-number-missing>
    <out-of-order-sequence-number>
     out-of-order-sequence-number
    </out-of-order-sequence-number>
```

```
            <out-of-range-sequence-number>
              out-of-range-sequence-number
            </out-of-range-sequence-number>
            <packet-buffer-overflow>
              packet-buffer-overflow
            </packet-buffer-overflow>
            <fragment-buffer-overflow>
              fragment-buffer-overflow
            </fragment-buffer-overflow>
          </multilink-bundle-status>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-bundle-status>
      <rx-sequence-number>
        rx-sequence-number
      </rx-sequence-number>
      <tx-sequence-number>
        tx-sequence-number
      </tx-sequence-number>
      <packet-drops>
        packet-drops
      </packet-drops>
      <packet-drop-bytes>
        packet-drop-bytes
      </packet-drop-bytes>
      <fragment-drops>
        fragment-drops
      </fragment-drops>
      <fragment-drop-bytes>
        fragment-drop-bytes
      </fragment-drop-bytes>
      <mrru-exceeded>
        mrru-exceeded
      </mrru-exceeded>
      <processing-errors>
        processing-errors
      </processing-errors>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
```


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```
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
        </out-of-range-sequence-number>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
      </multilink-bundle-status>
    </logical-interface>
  </interface-filter-information>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-bundle-status>
        <rx-sequence-number>
          rx-sequence-number
        </rx-sequence-number>
        <tx-sequence-number>
          tx-sequence-number
        </tx-sequence-number>
        <packet-drops>
          packet-drops
        </packet-drops>
        <packet-drop-bytes>
          packet-drop-bytes
        </packet-drop-bytes>
        <fragment-drops>
          fragment-drops
        </fragment-drops>
        <fragment-drop-bytes>
          fragment-drop-bytes
        </fragment-drop-bytes>
        <mrru-exceeded>
          mrru-exceeded
        </mrru-exceeded>
        <processing-errors>
          processing-errors
        </processing-errors>
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
```

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```
            out-of-order-sequence-number
           </out-of-order-sequence-number>
           <out-of-range-sequence-number>
            out-of-range-sequence-number
           </out-of-range-sequence-number>
           <packet-buffer-overflow>
            packet-buffer-overflow
           </packet-buffer-overflow>
           <fragment-buffer-overflow>
            fragment-buffer-overflow
           </fragment-buffer-overflow>
          </multilink-bundle-status>
         </logical-interface>
        </physical-interface>
       </interface-policer-information>
```

Description Multilink bundle status

<multilink-bundle-status>

Usage

```
<interface-policer-information>
 <logical-interface>
  <multilink-bundle-status>
   <rx-sequence-number>
    rx-sequence-number
   </rx-sequence-number>
   <tx-sequence-number>
    tx-sequence-number
   </tx-sequence-number>
   <packet-drops>
    packet-drops
   </packet-drops>
   <packet-drop-bytes>
    packet-drop-bytes
   </packet-drop-bytes>
   <fragment-drops>
    fragment-drops
   </fragment-drops>
   <fragment-drop-bytes>
    fragment-drop-bytes
   </fragment-drop-bytes>
   <mrru-exceeded>
    mrru-exceeded
   </mrru-exceeded>
   <processing-errors>
    processing-errors
   </processing-errors>
   <fragment-timeout>
    fragment-timeout
   </fragment-timeout>
   <sequence-number-missing>
    sequence-number-missing
   </sequence-number-missing>
```


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```
      <out-of-order-sequence-number>
        out-of-order-sequence-number
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
        out-of-range-sequence-number
      </out-of-range-sequence-number>
      <packet-buffer-overflow>
        packet-buffer-overflow
      </packet-buffer-overflow>
      <fragment-buffer-overflow>
        fragment-buffer-overflow
      </fragment-buffer-overflow>
    </multilink-bundle-status>
  </logical-interface>
</interface-policer-information>
```

Description Multilink bundle status

<multilink-detail-statistics>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <bundle-detail>....</bundle-detail>
    <class-detail>....</class-detail>
  </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description

<multilink-detail-statistics>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <multilink-detail-statistics>
      <bundle-detail>....</bundle-detail>
      <class-detail>....</class-detail>
    </multilink-detail-statistics>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

<multilink-detail-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>....</bundle-detail>
```

```
        <class-detail>....</class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>....</bundle-detail>
          <class-detail>....</class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>....</bundle-detail>
        <class-detail>....</class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>....</bundle-detail>
          <class-detail>....</class-detail>
        </multilink-detail-statistics>
```


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```
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>....</bundle-detail>
        <class-detail>....</class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>....</bundle-detail>
          <class-detail>....</class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<multilink-detail-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>....</bundle-detail>
        <class-detail>....</class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
```

```
</interface-policer-information>
```

Description

<multilink-frames>

Usage

```
<multilink-frames>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
    output-frames
  </output-frames>
  <output-fps>
    output-fps
  </output-fps>
  <output-bytes>
    output-bytes
  </output-bytes>
  <output-bps>
    output-bps
  </output-bps>
</multilink-frames>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<multilink-traffic-statistics>
  <bundle>
    <multilink-frames>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
```


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```
    </input-bps>
    <output-frames>
      output-frames
    </output-frames>
    <output-fps>
      output-fps
    </output-fps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
  </multilink-frames>
 </bundle>
</multilink-traffic-statistics>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<multilink-traffic-statistics>
 <class>
  <multilink-frames>
    <input-frames>
      input-frames
    </input-frames>
    <input-fps>
      input-fps
    </input-fps>
    <input-bytes>
      input-bytes
    </input-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-frames>
      output-frames
    </output-frames>
    <output-fps>
      output-fps
    </output-fps>
    <output-bytes>
      output-bytes
    </output-bytes>
    <output-bps>
      output-bps
    </output-bps>
  </multilink-frames>
 </class>
</multilink-traffic-statistics>
```

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Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <bundle>
    <multilink-frames>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-frames>
        output-frames
      </output-frames>
      <output-fps>
        output-fps
      </output-fps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
      </output-bps>
    </multilink-frames>
  </bundle>
</mlfr-uni-nni-traffic-statistics>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <bundle>
      <multilink-frames>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
```


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```
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </multilink-frames>
    </bundle>
  </multilink-traffic-statistics>
</logical-interface>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <class>
      <multilink-frames>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
```

```
      </multilink-frames>
    </class>
  </multilink-traffic-statistics>
</logical-interface>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </multilink-frames>
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<physical-interface>
  <logical-interface>
```


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```
<multilink-traffic-statistics>
 <class>
  <multilink-frames>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </multilink-frames>
 </class>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<physical-interface>
 <mlfr-uni-nni-traffic-statistics>
  <bundle>
   <multilink-frames>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
```

```
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </multilink-frames>
        </bundle>
      </mlfr-uni-nni-traffic-statistics>
    </physical-interface>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <multilink-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </multilink-frames>
        </bundle>
```


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```
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <multilink-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </multilink-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <multilink-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </multilink-frames>
      </bundle>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
```


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```
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </multilink-frames>
    </bundle>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <class>
    <multilink-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
```

```
                output-bytes
               </output-bytes>
               <output-bps>
                output-bps
               </output-bps>
              </multilink-frames>
             </class>
            </multilink-traffic-statistics>
           </logical-interface>
          </interface-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <bundle>
     <multilink-frames>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-frames>
       output-frames
      </output-frames>
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
     </multilink-frames>
    </bundle>
   </multilink-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```


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Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <multilink-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </multilink-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-filter-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <multilink-frames>
          <input-frames>
```

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```
            input-frames
           </input-frames>
           <input-fps>
            input-fps
           </input-fps>
           <input-bytes>
            input-bytes
           </input-bytes>
           <input-bps>
            input-bps
           </input-bps>
           <output-frames>
            output-frames
           </output-frames>
           <output-fps>
            output-fps
           </output-fps>
           <output-bytes>
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </multilink-frames>
         </bundle>
        </mlfr-uni-nni-traffic-statistics>
       </physical-interface>
      </interface-filter-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <bundle>
    <multilink-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
```


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```
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </multilink-frames>
    </bundle>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <class>
    <multilink-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </multilink-frames>
   </class>
  </multilink-traffic-statistics>
 </logical-interface>
```

```
</interface-filter-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <multilink-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </multilink-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
```


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```
<multilink-traffic-statistics>
 <class>
  <multilink-frames>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </multilink-frames>
 </class>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
</interface-policer-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-policer-information>
 <physical-interface>
  <mlfr-uni-nni-traffic-statistics>
   <bundle>
    <multilink-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
```

```
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </multilink-frames>
      </bundle>
    </mlfr-uni-nni-traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <multilink-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
```


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```
        </multilink-frames>
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-frames>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <multilink-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </multilink-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Link-pic bound frame statistics for multilink bundles and classes

<multilink-interface-errors>

Usage

```
<multilink-interface-errors>
```

```
<oversized-frames>
  oversized-frames
</oversized-frames>
<input-error-frames>
  input-error-frames
</input-error-frames>
<input-disabled-bundle>
  input-disabled-bundle
</input-disabled-bundle>
<output-disabled-bundle>
  output-disabled-bundle
</output-disabled-bundle>
<queuing-drops>
  queuing-drops
</queuing-drops>
<packet-buffer-overflow>
  packet-buffer-overflow
</packet-buffer-overflow>
<fragment-buffer-overflow>
  fragment-buffer-overflow
</fragment-buffer-overflow>
<fragment-timeout>
  fragment-timeout
</fragment-timeout>
<sequence-number-missing>
  sequence-number-missing
</sequence-number-missing>
<out-of-order-sequence-number>
  out-of-order-sequence-number
</out-of-order-sequence-number>
<out-of-range-sequence-number>
  out-of-range-sequence-number
</out-of-range-sequence-number>
<data-memory-error>
  data-memory-error
</data-memory-error>
<control-memory-error>
  control-memory-error
</control-memory-error>
</multilink-interface-errors>
```

Description

<multilink-interface-errors>

Usage

```
<physical-interface>
  <multilink-interface-errors>
    <oversized-frames>
      oversized-frames
    </oversized-frames>
    <input-error-frames>
      input-error-frames
    </input-error-frames>
    <input-disabled-bundle>
```


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```
        input-disabled-bundle
      </input-disabled-bundle>
      <output-disabled-bundle>
        output-disabled-bundle
      </output-disabled-bundle>
      <queuing-drops>
        queuing-drops
      </queuing-drops>
      <packet-buffer-overflow>
        packet-buffer-overflow
      </packet-buffer-overflow>
      <fragment-buffer-overflow>
        fragment-buffer-overflow
      </fragment-buffer-overflow>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
        out-of-range-sequence-number
      </out-of-range-sequence-number>
      <data-memory-error>
        data-memory-error
      </data-memory-error>
      <control-memory-error>
        control-memory-error
      </control-memory-error>
    </multilink-interface-errors>
  </physical-interface>
```

Description

<multilink-interface-errors>

Usage

```
<interface-information>
  <physical-interface>
    <multilink-interface-errors>
      <oversized-frames>
        oversized-frames
      </oversized-frames>
      <input-error-frames>
        input-error-frames
      </input-error-frames>
      <input-disabled-bundle>
        input-disabled-bundle
      </input-disabled-bundle>
      <output-disabled-bundle>
        output-disabled-bundle
      </output-disabled-bundle>
```

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```
        <queuing-drops>
          queuing-drops
        </queuing-drops>
        <packet-buffer-overflow>
          packet-buffer-overflow
        </packet-buffer-overflow>
        <fragment-buffer-overflow>
          fragment-buffer-overflow
        </fragment-buffer-overflow>
        <fragment-timeout>
          fragment-timeout
        </fragment-timeout>
        <sequence-number-missing>
          sequence-number-missing
        </sequence-number-missing>
        <out-of-order-sequence-number>
          out-of-order-sequence-number
        </out-of-order-sequence-number>
        <out-of-range-sequence-number>
          out-of-range-sequence-number
        </out-of-range-sequence-number>
        <data-memory-error>
          data-memory-error
        </data-memory-error>
        <control-memory-error>
          control-memory-error
        </control-memory-error>
      </multilink-interface-errors>
    </physical-interface>
  </interface-information>
```

Description

<multilink-interface-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
    <multilink-interface-errors>
      <oversized-frames>
        oversized-frames
      </oversized-frames>
      <input-error-frames>
        input-error-frames
      </input-error-frames>
      <input-disabled-bundle>
        input-disabled-bundle
      </input-disabled-bundle>
      <output-disabled-bundle>
        output-disabled-bundle
      </output-disabled-bundle>
      <queuing-drops>
        queuing-drops
      </queuing-drops>
      <packet-buffer-overflow>
```


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```
      packet-buffer-overflow
     </packet-buffer-overflow>
     <fragment-buffer-overflow>
      fragment-buffer-overflow
     </fragment-buffer-overflow>
     <fragment-timeout>
      fragment-timeout
     </fragment-timeout>
     <sequence-number-missing>
      sequence-number-missing
     </sequence-number-missing>
     <out-of-order-sequence-number>
      out-of-order-sequence-number
     </out-of-order-sequence-number>
     <out-of-range-sequence-number>
      out-of-range-sequence-number
     </out-of-range-sequence-number>
     <data-memory-error>
      data-memory-error
     </data-memory-error>
     <control-memory-error>
      control-memory-error
     </control-memory-error>
    </multilink-interface-errors>
   </physical-interface>
</interface-filter-information>
```

Description

<multilink-interface-errors>

Usage

```
<interface-policer-information>
 <physical-interface>
  <multilink-interface-errors>
   <oversized-frames>
    oversized-frames
   </oversized-frames>
   <input-error-frames>
    input-error-frames
   </input-error-frames>
   <input-disabled-bundle>
    input-disabled-bundle
   </input-disabled-bundle>
   <output-disabled-bundle>
    output-disabled-bundle
   </output-disabled-bundle>
   <queuing-drops>
    queuing-drops
   </queuing-drops>
   <packet-buffer-overflow>
    packet-buffer-overflow
   </packet-buffer-overflow>
   <fragment-buffer-overflow>
    fragment-buffer-overflow
```

```
      </fragment-buffer-overflow>
      <fragment-timeout>
        fragment-timeout
      </fragment-timeout>
      <sequence-number-missing>
        sequence-number-missing
      </sequence-number-missing>
      <out-of-order-sequence-number>
        out-of-order-sequence-number
      </out-of-order-sequence-number>
      <out-of-range-sequence-number>
        out-of-range-sequence-number
      </out-of-range-sequence-number>
      <data-memory-error>
        data-memory-error
      </data-memory-error>
      <control-memory-error>
        control-memory-error
      </control-memory-error>
    </multilink-interface-errors>
  </physical-interface>
</interface-policer-information>
```

Description

<multilink-traffic-statistics>

Usage

```
<multilink-traffic-statistics>
  <bundle>....</bundle>
  <class>....</class>
  <link>....</link>
  <multilink-detail-statistics>....</multilink-detail-statistics>
  <crtp>....</crtp>
</multilink-traffic-statistics>
```

Description

<multilink-traffic-statistics>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <bundle>....</bundle>
    <class>....</class>
    <link>....</link>
    <multilink-detail-statistics>....</multilink-detail-statistics>
    <crtp>....</crtp>
  </multilink-traffic-statistics>
</logical-interface>
```

Description

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<multilink-traffic-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>....</bundle>
      <class>....</class>
      <link>....</link>
      <multilink-detail-statistics>....</multilink-detail-statistics>
      <crtp>....</crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description

<multilink-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>....</bundle>
        <class>....</class>
        <link>....</link>
        <multilink-detail-statistics>....</multilink-detail-statistics>
        <crtp>....</crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<multilink-traffic-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>....</bundle>
      <class>....</class>
      <link>....</link>
      <multilink-detail-statistics>....</multilink-detail-statistics>
      <crtp>....</crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description

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<multilink-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>....</bundle>
        <class>....</class>
        <link>....</link>
        <multilink-detail-statistics>....</multilink-detail-statistics>
        <crtp>....</crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<multilink-traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>....</bundle>
      <class>....</class>
      <link>....</link>
      <multilink-detail-statistics>....</multilink-detail-statistics>
      <crtp>....</crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description

<multilink-traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>....</bundle>
        <class>....</class>
        <link>....</link>
        <multilink-detail-statistics>....</multilink-detail-statistics>
        <crtp>....</crtp>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```


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Description

<multilink-traffic-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>....</bundle>
      <class>....</class>
      <link>....</link>
      <multilink-detail-statistics>....</multilink-detail-statistics>
      <crtp>....</crtp>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<ncp-information>

Usage

```
<ncp-information>
  <ncp-protocol>
    ncp-protocol
  </ncp-protocol>
  <ncp-state>
    ncp-state
  </ncp-state>
</ncp-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<logical-interface>
  <ncp-information>
    <ncp-protocol>
      ncp-protocol
    </ncp-protocol>
    <ncp-state>
      ncp-state
    </ncp-state>
  </ncp-information>
</logical-interface>
```

Description Network Control Protocol information

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<ncp-information>

Usage

```
<physical-interface>
  <ncp-information>
    <ncp-protocol>
      ncp-protocol
    </ncp-protocol>
    <ncp-state>
      ncp-state
    </ncp-state>
  </ncp-information>
</physical-interface>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<physical-interface>
  <logical-interface>
    <ncp-information>
      <ncp-protocol>
        ncp-protocol
      </ncp-protocol>
      <ncp-state>
        ncp-state
      </ncp-state>
    </ncp-information>
  </logical-interface>
</physical-interface>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-information>
  <physical-interface>
    <ncp-information>
      <ncp-protocol>
        ncp-protocol
      </ncp-protocol>
      <ncp-state>
        ncp-state
      </ncp-state>
    </ncp-information>
  </physical-interface>
</interface-information>
```


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Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ncp-information>
        <ncp-protocol>
          ncp-protocol
        </ncp-protocol>
        <ncp-state>
          ncp-state
        </ncp-state>
      </ncp-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-information>
  <logical-interface>
    <ncp-information>
      <ncp-protocol>
        ncp-protocol
      </ncp-protocol>
      <ncp-state>
        ncp-state
      </ncp-state>
    </ncp-information>
  </logical-interface>
</interface-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ncp-information>
      <ncp-protocol>
        ncp-protocol
      </ncp-protocol>
      <ncp-state>
        ncp-state
      </ncp-state>
```

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```
    </ncp-information>
  </physical-interface>
</interface-filter-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ncp-information>
        <ncp-protocol>
          ncp-protocol
        </ncp-protocol>
        <ncp-state>
          ncp-state
        </ncp-state>
      </ncp-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ncp-information>
      <ncp-protocol>
        ncp-protocol
      </ncp-protocol>
      <ncp-state>
        ncp-state
      </ncp-state>
    </ncp-information>
  </logical-interface>
</interface-filter-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ncp-information>
      <ncp-protocol>
```

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```
        ncp-protocol
       </ncp-protocol>
       <ncp-state>
        ncp-state
       </ncp-state>
      </ncp-information>
     </physical-interface>
    </interface-policer-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <ncp-information>
    <ncp-protocol>
     ncp-protocol
    </ncp-protocol>
    <ncp-state>
     ncp-state
    </ncp-state>
   </ncp-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description Network Control Protocol information

<ncp-information>

Usage

```
<interface-policer-information>
 <logical-interface>
  <ncp-information>
   <ncp-protocol>
    ncp-protocol
   </ncp-protocol>
   <ncp-state>
    ncp-state
   </ncp-state>
  </ncp-information>
 </logical-interface>
</interface-policer-information>
```

Description Network Control Protocol information

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<network-frames>

Usage

```
<network-frames>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
    output-frames
  </output-frames>
  <output-fps>
    output-fps
  </output-fps>
  <output-bytes>
    output-bytes
  </output-bytes>
  <output-bps>
    output-bps
  </output-bps>
</network-frames>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<multilink-traffic-statistics>
  <bundle>
    <network-frames>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-frames>
        output-frames
      </output-frames>
```


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```
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
     </network-frames>
    </bundle>
</multilink-traffic-statistics>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<multilink-traffic-statistics>
 <class>
  <network-frames>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </network-frames>
 </class>
</multilink-traffic-statistics>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

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<network-frames>

Usage

```
<mlfr-uni-nni-traffic-statistics>
  <bundle>
    <network-frames>
      <input-frames>
        input-frames
      </input-frames>
      <input-fps>
        input-fps
      </input-fps>
      <input-bytes>
        input-bytes
      </input-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-frames>
        output-frames
      </output-frames>
      <output-fps>
        output-fps
      </output-fps>
      <output-bytes>
        output-bytes
      </output-bytes>
      <output-bps>
        output-bps
      </output-bps>
    </network-frames>
  </bundle>
</mlfr-uni-nni-traffic-statistics>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<logical-interface>
  <multilink-traffic-statistics>
    <bundle>
      <network-frames>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
```


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```
        input-bps
       </input-bps>
       <output-frames>
        output-frames
       </output-frames>
       <output-fps>
        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </network-frames>
     </bundle>
    </multilink-traffic-statistics>
</logical-interface>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<logical-interface>
 <multilink-traffic-statistics>
  <class>
   <network-frames>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-frames>
     output-frames
    </output-frames>
    <output-fps>
     output-fps
    </output-fps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </network-frames>
  </class>
```

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```
  </multilink-traffic-statistics>
</logical-interface>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <network-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </network-frames>
      </bundle>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
```


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```
        <network-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<physical-interface>
  <mlfr-uni-nni-traffic-statistics>
    <bundle>
      <network-frames>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
```

```
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </network-frames>
    </bundle>
  </mlfr-uni-nni-traffic-statistics>
</physical-interface>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <network-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
```


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```
  </physical-interface>
</interface-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <network-frames>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-information>
  <physical-interface>
```

```
<mlfr-uni-nni-traffic-statistics>
 <bundle>
  <network-frames>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </network-frames>
 </bundle>
</mlfr-uni-nni-traffic-statistics>
</physical-interface>
</interface-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <bundle>
    <network-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
```


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```
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </network-frames>
    </bundle>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <class>
    <network-frames>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </network-frames>
```

```
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <bundle>
          <network-frames>
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              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

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<network-frames>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <network-frames>
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              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-filter-information>
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    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <network-frames>
          <input-frames>
            input-frames
          </input-frames>
```

```
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </bundle>
      </mlfr-uni-nni-traffic-statistics>
    </physical-interface>
  </interface-filter-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <bundle>
        <network-frames>
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            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
```


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```
        </output-fps>
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          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </network-frames>
    </bundle>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <class>
    <network-frames>
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     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </network-frames>
   </class>
  </multilink-traffic-statistics>
 </logical-interface>
</interface-filter-information>
```

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Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
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        <bundle>
          <network-frames>
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              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </bundle>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <class>
          <network-frames>
```


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```
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </network-frames>
        </class>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-policer-information>
  <physical-interface>
    <mlfr-uni-nni-traffic-statistics>
      <bundle>
        <network-frames>
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            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
```

```
                output-frames
               </output-frames>
               <output-fps>
                output-fps
               </output-fps>
               <output-bytes>
                output-bytes
               </output-bytes>
               <output-bps>
                output-bps
               </output-bps>
              </network-frames>
             </bundle>
            </mlfr-uni-nni-traffic-statistics>
           </physical-interface>
          </interface-policer-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-policer-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <bundle>
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      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-frames>
      output-frames
     </output-frames>
     <output-fps>
      output-fps
     </output-fps>
     <output-bytes>
      output-bytes
     </output-bytes>
     <output-bps>
      output-bps
     </output-bps>
    </network-frames>
   </bundle>
  </multilink-traffic-statistics>
```


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```
  </logical-interface>
</interface-policer-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<network-frames>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <class>
        <network-frames>
          <input-frames>
            input-frames
          </input-frames>
          <input-fps>
            input-fps
          </input-fps>
          <input-bytes>
            input-bytes
          </input-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-frames>
            output-frames
          </output-frames>
          <output-fps>
            output-fps
          </output-fps>
          <output-bytes>
            output-bytes
          </output-bytes>
          <output-bps>
            output-bps
          </output-bps>
        </network-frames>
      </class>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Internet/RE bound frame statistics for multilink bundles and classes

<non-fragments>

Usage

```
<non-fragments>
  <input-frames>
    input-frames
  </input-frames>
```

```
<input-fps>
  input-fps
</input-fps>
<input-bytes>
  input-bytes
</input-bytes>
<input-bps>
  input-bps
</input-bps>
<output-frames>
  output-frames
</output-frames>
<output-fps>
  output-fps
</output-fps>
<output-bytes>
  output-bytes
</output-bytes>
<output-bps>
  output-bps
</output-bps>
</non-fragments>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<multilink-traffic-statistics>
  <multilink-detail-statistics>
    <bundle-detail>
      <non-fragments>
        <input-frames>
          input-frames
        </input-frames>
        <input-fps>
          input-fps
        </input-fps>
        <input-bytes>
          input-bytes
        </input-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
```


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```
            output-bps
           </output-bps>
          </non-fragments>
         </bundle-detail>
        </multilink-detail-statistics>
       </multilink-traffic-statistics>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<multilink-traffic-statistics>
 <multilink-detail-statistics>
  <class-detail>
   <non-fragments>
    <input-frames>
     input-frames
    </input-frames>
    <input-fps>
     input-fps
    </input-fps>
    <input-bytes>
     input-bytes
    </input-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-frames>
     output-frames
    </output-frames>
    <output-fps>
     output-fps
    </output-fps>
    <output-bytes>
     output-bytes
    </output-bytes>
    <output-bps>
     output-bps
    </output-bps>
   </non-fragments>
  </class-detail>
 </multilink-detail-statistics>
</multilink-traffic-statistics>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<logical-interface>
 <multilink-traffic-statistics>
```

```
<multilink-detail-statistics>
 <bundle-detail>
  <non-fragments>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </non-fragments>
 </bundle-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<logical-interface>
 <multilink-traffic-statistics>
  <multilink-detail-statistics>
   <class-detail>
    <non-fragments>
     <input-frames>
      input-frames
     </input-frames>
     <input-fps>
      input-fps
     </input-fps>
     <input-bytes>
      input-bytes
     </input-bytes>
     <input-bps>
      input-bps
```


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```
        </input-bps>
        <output-frames>
          output-frames
        </output-frames>
        <output-fps>
          output-fps
        </output-fps>
        <output-bytes>
          output-bytes
        </output-bytes>
        <output-bps>
          output-bps
        </output-bps>
      </non-fragments>
    </class-detail>
  </multilink-detail-statistics>
 </multilink-traffic-statistics>
</logical-interface>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<physical-interface>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <bundle-detail>
     <non-fragments>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-frames>
       output-frames
      </output-frames>
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
       output-bps
      </output-bps>
```

```
            </non-fragments>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<physical-interface>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <class-detail>
          <non-fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </non-fragments>
        </class-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</physical-interface>
```

Description Non-fragment statistics for multilink bundles and classes

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<non-fragments>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <bundle-detail>
            <non-fragments>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </non-fragments>
          </bundle-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
```

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```
<non-fragments>
  <input-frames>
    input-frames
  </input-frames>
  <input-fps>
    input-fps
  </input-fps>
  <input-bytes>
    input-bytes
  </input-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-frames>
    output-frames
  </output-frames>
  <output-fps>
    output-fps
  </output-fps>
  <output-bytes>
    output-bytes
  </output-bytes>
  <output-bps>
    output-bps
  </output-bps>
</non-fragments>
</class-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
</physical-interface>
</interface-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <non-fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
```


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```
            input-bps
           </input-bps>
           <output-frames>
            output-frames
           </output-frames>
           <output-fps>
            output-fps
           </output-fps>
           <output-bytes>
            output-bytes
           </output-bytes>
           <output-bps>
            output-bps
           </output-bps>
          </non-fragments>
         </bundle-detail>
        </multilink-detail-statistics>
       </multilink-traffic-statistics>
      </logical-interface>
     </interface-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <class-detail>
     <non-fragments>
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      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-frames>
       output-frames
      </output-frames>
      <output-fps>
       output-fps
      </output-fps>
      <output-bytes>
       output-bytes
      </output-bytes>
      <output-bps>
```

```
                output-bps
               </output-bps>
              </non-fragments>
             </class-detail>
            </multilink-detail-statistics>
           </multilink-traffic-statistics>
          </logical-interface>
         </interface-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <multilink-detail-statistics>
     <bundle-detail>
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        input-frames
       </input-frames>
       <input-fps>
        input-fps
       </input-fps>
       <input-bytes>
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       <input-bps>
        input-bps
       </input-bps>
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        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </non-fragments>
     </bundle-detail>
    </multilink-detail-statistics>
   </multilink-traffic-statistics>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```


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Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
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                input-frames
              </input-frames>
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                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
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              </output-bps>
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          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-filter-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
```

```
<bundle-detail>
 <non-fragments>
  <input-frames>
   input-frames
  </input-frames>
  <input-fps>
   input-fps
  </input-fps>
  <input-bytes>
   input-bytes
  </input-bytes>
  <input-bps>
   input-bps
  </input-bps>
  <output-frames>
   output-frames
  </output-frames>
  <output-fps>
   output-fps
  </output-fps>
  <output-bytes>
   output-bytes
  </output-bytes>
  <output-bps>
   output-bps
  </output-bps>
 </non-fragments>
</bundle-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
</interface-filter-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-filter-information>
 <logical-interface>
  <multilink-traffic-statistics>
   <multilink-detail-statistics>
    <class-detail>
     <non-fragments>
      <input-frames>
       input-frames
      </input-frames>
      <input-fps>
       input-fps
      </input-fps>
      <input-bytes>
       input-bytes
      </input-bytes>
      <input-bps>
```


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```
        input-bps
       </input-bps>
       <output-frames>
        output-frames
       </output-frames>
       <output-fps>
        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
       <output-bps>
        output-bps
       </output-bps>
      </non-fragments>
     </class-detail>
    </multilink-detail-statistics>
   </multilink-traffic-statistics>
  </logical-interface>
</interface-filter-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <multilink-traffic-statistics>
    <multilink-detail-statistics>
     <bundle-detail>
      <non-fragments>
       <input-frames>
        input-frames
       </input-frames>
       <input-fps>
        input-fps
       </input-fps>
       <input-bytes>
        input-bytes
       </input-bytes>
       <input-bps>
        input-bps
       </input-bps>
       <output-frames>
        output-frames
       </output-frames>
       <output-fps>
        output-fps
       </output-fps>
       <output-bytes>
        output-bytes
       </output-bytes>
```

```
                <output-bps>
                  output-bps
                </output-bps>
              </non-fragments>
            </bundle-detail>
          </multilink-detail-statistics>
        </multilink-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <multilink-traffic-statistics>
        <multilink-detail-statistics>
          <class-detail>
            <non-fragments>
              <input-frames>
                input-frames
              </input-frames>
              <input-fps>
                input-fps
              </input-fps>
              <input-bytes>
                input-bytes
              </input-bytes>
              <input-bps>
                input-bps
              </input-bps>
              <output-frames>
                output-frames
              </output-frames>
              <output-fps>
                output-fps
              </output-fps>
              <output-bytes>
                output-bytes
              </output-bytes>
              <output-bps>
                output-bps
              </output-bps>
            </non-fragments>
          </class-detail>
        </multilink-detail-statistics>
      </multilink-traffic-statistics>
    </logical-interface>
  </physical-interface>
```


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```
</interface-policer-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
      <multilink-detail-statistics>
        <bundle-detail>
          <non-fragments>
            <input-frames>
              input-frames
            </input-frames>
            <input-fps>
              input-fps
            </input-fps>
            <input-bytes>
              input-bytes
            </input-bytes>
            <input-bps>
              input-bps
            </input-bps>
            <output-frames>
              output-frames
            </output-frames>
            <output-fps>
              output-fps
            </output-fps>
            <output-bytes>
              output-bytes
            </output-bytes>
            <output-bps>
              output-bps
            </output-bps>
          </non-fragments>
        </bundle-detail>
      </multilink-detail-statistics>
    </multilink-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Non-fragment statistics for multilink bundles and classes

<non-fragments>

Usage

```
<interface-policer-information>
  <logical-interface>
    <multilink-traffic-statistics>
```

```
<multilink-detail-statistics>
 <class-detail>
  <non-fragments>
   <input-frames>
    input-frames
   </input-frames>
   <input-fps>
    input-fps
   </input-fps>
   <input-bytes>
    input-bytes
   </input-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-frames>
    output-frames
   </output-frames>
   <output-fps>
    output-fps
   </output-fps>
   <output-bytes>
    output-bytes
   </output-bytes>
   <output-bps>
    output-bps
   </output-bps>
  </non-fragments>
 </class-detail>
</multilink-detail-statistics>
</multilink-traffic-statistics>
</logical-interface>
</interface-policer-information>
```

Description Non-fragment statistics for multilink bundles and classes

<nxds0-information>

Usage

```
<nxds0-information>
 <interface-tx-queue>....</interface-tx-queue>
</nxds0-information>
```

Description

<nxds0-information>

Usage

```
<physical-interface>
 <nxds0-information>
  <interface-tx-queue>....</interface-tx-queue>
 </nxds0-information>
```


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```
</physical-interface>
```

Description

<nxds0-information>

Usage

```
<interface-information>
  <physical-interface>
    <nxds0-information>
      <interface-tx-queue>....</interface-tx-queue>
    </nxds0-information>
  </physical-interface>
</interface-information>
```

Description

<nxds0-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <nxds0-information>
      <interface-tx-queue>....</interface-tx-queue>
    </nxds0-information>
  </physical-interface>
</interface-filter-information>
```

Description

<nxds0-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <nxds0-information>
      <interface-tx-queue>....</interface-tx-queue>
    </nxds0-information>
  </physical-interface>
</interface-policer-information>
```

Description

<oam-parameters>

Usage

```
<virtual-circuit-information>
  <oam-parameters>
    <period>
      period
    </period>
    <up-count>
```

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```
      up-count
    </up-count>
    <down-count>
      down-count
    </down-count>
  </oam-parameters>
</virtual-circuit-information>
```

Description

<oam-parameters>

Usage

```
<virtual-path-information>
  <oam-parameters>
    <period>
      period
    </period>
    <up-count>
      up-count
    </up-count>
    <down-count>
      down-count
    </down-count>
  </oam-parameters>
</virtual-path-information>
```

Description

<oam-parameters>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <oam-parameters>
      <period>
        period
      </period>
      <up-count>
        up-count
      </up-count>
      <down-count>
        down-count
      </down-count>
    </oam-parameters>
  </virtual-circuit-information>
</logical-interface>
```

Description

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<oam-parameters>

Usage

```
<physical-interface>
  <virtual-path-information>
    <oam-parameters>
      <period>
        period
      </period>
      <up-count>
        up-count
      </up-count>
      <down-count>
        down-count
      </down-count>
    </oam-parameters>
  </virtual-path-information>
</physical-interface>
```

Description

<oam-parameters>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <oam-parameters>
        <period>
          period
        </period>
        <up-count>
          up-count
        </up-count>
        <down-count>
          down-count
        </down-count>
      </oam-parameters>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description

<oam-parameters>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <oam-parameters>
        <period>
          period
```

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```
        </period>
        <up-count>
          up-count
        </up-count>
        <down-count>
          down-count
        </down-count>
      </oam-parameters>
    </virtual-path-information>
  </physical-interface>
</interface-information>
```

Description

<oam-parameters>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <oam-parameters>
          <period>
            period
          </period>
          <up-count>
            up-count
          </up-count>
          <down-count>
            down-count
          </down-count>
        </oam-parameters>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<oam-parameters>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <oam-parameters>
        <period>
          period
        </period>
        <up-count>
          up-count
        </up-count>
        <down-count>
          down-count
```


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```
        </down-count>
       </oam-parameters>
      </virtual-circuit-information>
     </logical-interface>
    </interface-information>
```

Description

<oam-parameters>

Usage

```
<interface-filter-information>
 <physical-interface>
  <virtual-path-information>
   <oam-parameters>
    <period>
     period
    </period>
    <up-count>
     up-count
    </up-count>
    <down-count>
     down-count
    </down-count>
   </oam-parameters>
  </virtual-path-information>
 </physical-interface>
</interface-filter-information>
```

Description

<oam-parameters>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <oam-parameters>
     <period>
      period
     </period>
     <up-count>
      up-count
     </up-count>
     <down-count>
      down-count
     </down-count>
    </oam-parameters>
   </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

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Description

<oam-parameters>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <oam-parameters>
        <period>
          period
        </period>
        <up-count>
          up-count
        </up-count>
        <down-count>
          down-count
        </down-count>
      </oam-parameters>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

<oam-parameters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <virtual-path-information>
      <oam-parameters>
        <period>
          period
        </period>
        <up-count>
          up-count
        </up-count>
        <down-count>
          down-count
        </down-count>
      </oam-parameters>
    </virtual-path-information>
  </physical-interface>
</interface-policer-information>
```

Description

<oam-parameters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
```


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```
      <virtual-circuit-information>
       <oam-parameters>
        <period>
         period
        </period>
        <up-count>
         up-count
        </up-count>
        <down-count>
         down-count
        </down-count>
       </oam-parameters>
      </virtual-circuit-information>
     </logical-interface>
    </physical-interface>
</interface-policer-information>
```

Description

<oam-parameters>

Usage

```
<interface-policer-information>
 <logical-interface>
  <virtual-circuit-information>
   <oam-parameters>
    <period>
     period
    </period>
    <up-count>
     up-count
    </up-count>
    <down-count>
     down-count
    </down-count>
   </oam-parameters>
  </virtual-circuit-information>
 </logical-interface>
</interface-policer-information>
```

Description

<oam-statistics>

Usage

```
<oam-statistics>
 <oam-loopback-received-count>
  oam-loopback-received-count
 </oam-loopback-received-count>
 <oam-loopback-received-last>
  oam-loopback-received-last
 </oam-loopback-received-last>
 <oam-loopback-transmitted-count>
  oam-loopback-transmitted-count
```

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```
</oam-loopback-transmitted-count>
<oam-loopback-transmitted-last>
  oam-loopback-transmitted-last
</oam-loopback-transmitted-last>
<oam-rdi-received-count>
  oam-rdi-received-count
</oam-rdi-received-count>
<oam-rdi-received-last>
  oam-rdi-received-last
</oam-rdi-received-last>
<oam-rdi-transmitted-count>
  oam-rdi-transmitted-count
</oam-rdi-transmitted-count>
<oam-rdi-transmitted-last>
  oam-rdi-transmitted-last
</oam-rdi-transmitted-last>
<oam-ais-received-count>
  oam-ais-received-count
</oam-ais-received-count>
<oam-ais-received-last>
  oam-ais-received-last
</oam-ais-received-last>
<oam-ais-transmitted-count>
  oam-ais-transmitted-count
</oam-ais-transmitted-count>
<oam-ais-transmitted-last>
  oam-ais-transmitted-last
</oam-ais-transmitted-last>
<oam-total-transmitted-count>
  oam-total-transmitted-count
</oam-total-transmitted-count>
<oam-total-received-count>
  oam-total-received-count
</oam-total-received-count>
<oam-total-transmitted-count-4>
  oam-total-transmitted-count-4
</oam-total-transmitted-count-4>
<oam-total-received-count-4>
  oam-total-received-count-4
</oam-total-received-count-4>
</oam-statistics>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<virtual-circuit-information>
  <oam-statistics>
    <oam-loopback-received-count>
      oam-loopback-received-count
    </oam-loopback-received-count>
    <oam-loopback-received-last>
      oam-loopback-received-last
```


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```
    </oam-loopback-received-last>
    <oam-loopback-transmitted-count>
      oam-loopback-transmitted-count
    </oam-loopback-transmitted-count>
    <oam-loopback-transmitted-last>
      oam-loopback-transmitted-last
    </oam-loopback-transmitted-last>
    <oam-rdi-received-count>
      oam-rdi-received-count
    </oam-rdi-received-count>
    <oam-rdi-received-last>
      oam-rdi-received-last
    </oam-rdi-received-last>
    <oam-rdi-transmitted-count>
      oam-rdi-transmitted-count
    </oam-rdi-transmitted-count>
    <oam-rdi-transmitted-last>
      oam-rdi-transmitted-last
    </oam-rdi-transmitted-last>
    <oam-ais-received-count>
      oam-ais-received-count
    </oam-ais-received-count>
    <oam-ais-received-last>
      oam-ais-received-last
    </oam-ais-received-last>
    <oam-ais-transmitted-count>
      oam-ais-transmitted-count
    </oam-ais-transmitted-count>
    <oam-ais-transmitted-last>
      oam-ais-transmitted-last
    </oam-ais-transmitted-last>
    <oam-total-transmitted-count>
      oam-total-transmitted-count
    </oam-total-transmitted-count>
    <oam-total-received-count>
      oam-total-received-count
    </oam-total-received-count>
    <oam-total-transmitted-count-4>
      oam-total-transmitted-count-4
    </oam-total-transmitted-count-4>
    <oam-total-received-count-4>
      oam-total-received-count-4
    </oam-total-received-count-4>
  </oam-statistics>
</virtual-circuit-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<virtual-path-information>
  <oam-statistics>
    <oam-loopback-received-count>
```

```
      oam-loopback-received-count
    </oam-loopback-received-count>
    <oam-loopback-received-last>
      oam-loopback-received-last
    </oam-loopback-received-last>
    <oam-loopback-transmitted-count>
      oam-loopback-transmitted-count
    </oam-loopback-transmitted-count>
    <oam-loopback-transmitted-last>
      oam-loopback-transmitted-last
    </oam-loopback-transmitted-last>
    <oam-rdi-received-count>
      oam-rdi-received-count
    </oam-rdi-received-count>
    <oam-rdi-received-last>
      oam-rdi-received-last
    </oam-rdi-received-last>
    <oam-rdi-transmitted-count>
      oam-rdi-transmitted-count
    </oam-rdi-transmitted-count>
    <oam-rdi-transmitted-last>
      oam-rdi-transmitted-last
    </oam-rdi-transmitted-last>
    <oam-ais-received-count>
      oam-ais-received-count
    </oam-ais-received-count>
    <oam-ais-received-last>
      oam-ais-received-last
    </oam-ais-received-last>
    <oam-ais-transmitted-count>
      oam-ais-transmitted-count
    </oam-ais-transmitted-count>
    <oam-ais-transmitted-last>
      oam-ais-transmitted-last
    </oam-ais-transmitted-last>
    <oam-total-transmitted-count>
      oam-total-transmitted-count
    </oam-total-transmitted-count>
    <oam-total-received-count>
      oam-total-received-count
    </oam-total-received-count>
    <oam-total-transmitted-count-4>
      oam-total-transmitted-count-4
    </oam-total-transmitted-count-4>
    <oam-total-received-count-4>
      oam-total-received-count-4
    </oam-total-received-count-4>
  </oam-statistics>
</virtual-path-information>
```

Description Container tag for OAM statistics

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<oam-statistics>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <oam-statistics>
      <oam-loopback-received-count>
        oam-loopback-received-count
      </oam-loopback-received-count>
      <oam-loopback-received-last>
        oam-loopback-received-last
      </oam-loopback-received-last>
      <oam-loopback-transmitted-count>
        oam-loopback-transmitted-count
      </oam-loopback-transmitted-count>
      <oam-loopback-transmitted-last>
        oam-loopback-transmitted-last
      </oam-loopback-transmitted-last>
      <oam-rdi-received-count>
        oam-rdi-received-count
      </oam-rdi-received-count>
      <oam-rdi-received-last>
        oam-rdi-received-last
      </oam-rdi-received-last>
      <oam-rdi-transmitted-count>
        oam-rdi-transmitted-count
      </oam-rdi-transmitted-count>
      <oam-rdi-transmitted-last>
        oam-rdi-transmitted-last
      </oam-rdi-transmitted-last>
      <oam-ais-received-count>
        oam-ais-received-count
      </oam-ais-received-count>
      <oam-ais-received-last>
        oam-ais-received-last
      </oam-ais-received-last>
      <oam-ais-transmitted-count>
        oam-ais-transmitted-count
      </oam-ais-transmitted-count>
      <oam-ais-transmitted-last>
        oam-ais-transmitted-last
      </oam-ais-transmitted-last>
      <oam-total-transmitted-count>
        oam-total-transmitted-count
      </oam-total-transmitted-count>
      <oam-total-received-count>
        oam-total-received-count
      </oam-total-received-count>
      <oam-total-transmitted-count-4>
        oam-total-transmitted-count-4
      </oam-total-transmitted-count-4>
      <oam-total-received-count-4>
        oam-total-received-count-4
      </oam-total-received-count-4>
    </oam-statistics>
```

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```
  </virtual-circuit-information>
</logical-interface>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<physical-interface>
  <virtual-path-information>
    <oam-statistics>
      <oam-loopback-received-count>
        oam-loopback-received-count
      </oam-loopback-received-count>
      <oam-loopback-received-last>
        oam-loopback-received-last
      </oam-loopback-received-last>
      <oam-loopback-transmitted-count>
        oam-loopback-transmitted-count
      </oam-loopback-transmitted-count>
      <oam-loopback-transmitted-last>
        oam-loopback-transmitted-last
      </oam-loopback-transmitted-last>
      <oam-rdi-received-count>
        oam-rdi-received-count
      </oam-rdi-received-count>
      <oam-rdi-received-last>
        oam-rdi-received-last
      </oam-rdi-received-last>
      <oam-rdi-transmitted-count>
        oam-rdi-transmitted-count
      </oam-rdi-transmitted-count>
      <oam-rdi-transmitted-last>
        oam-rdi-transmitted-last
      </oam-rdi-transmitted-last>
      <oam-ais-received-count>
        oam-ais-received-count
      </oam-ais-received-count>
      <oam-ais-received-last>
        oam-ais-received-last
      </oam-ais-received-last>
      <oam-ais-transmitted-count>
        oam-ais-transmitted-count
      </oam-ais-transmitted-count>
      <oam-ais-transmitted-last>
        oam-ais-transmitted-last
      </oam-ais-transmitted-last>
      <oam-total-transmitted-count>
        oam-total-transmitted-count
      </oam-total-transmitted-count>
      <oam-total-received-count>
        oam-total-received-count
      </oam-total-received-count>
      <oam-total-transmitted-count-4>
```


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```
            oam-total-transmitted-count-4
           </oam-total-transmitted-count-4>
           <oam-total-received-count-4>
            oam-total-received-count-4
           </oam-total-received-count-4>
          </oam-statistics>
         </virtual-path-information>
        </physical-interface>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <oam-statistics>
    <oam-loopback-received-count>
     oam-loopback-received-count
    </oam-loopback-received-count>
    <oam-loopback-received-last>
     oam-loopback-received-last
    </oam-loopback-received-last>
    <oam-loopback-transmitted-count>
     oam-loopback-transmitted-count
    </oam-loopback-transmitted-count>
    <oam-loopback-transmitted-last>
     oam-loopback-transmitted-last
    </oam-loopback-transmitted-last>
    <oam-rdi-received-count>
     oam-rdi-received-count
    </oam-rdi-received-count>
    <oam-rdi-received-last>
     oam-rdi-received-last
    </oam-rdi-received-last>
    <oam-rdi-transmitted-count>
     oam-rdi-transmitted-count
    </oam-rdi-transmitted-count>
    <oam-rdi-transmitted-last>
     oam-rdi-transmitted-last
    </oam-rdi-transmitted-last>
    <oam-ais-received-count>
     oam-ais-received-count
    </oam-ais-received-count>
    <oam-ais-received-last>
     oam-ais-received-last
    </oam-ais-received-last>
    <oam-ais-transmitted-count>
     oam-ais-transmitted-count
    </oam-ais-transmitted-count>
    <oam-ais-transmitted-last>
     oam-ais-transmitted-last
    </oam-ais-transmitted-last>
```

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```
            <oam-total-transmitted-count>
              oam-total-transmitted-count
            </oam-total-transmitted-count>
            <oam-total-received-count>
              oam-total-received-count
            </oam-total-received-count>
            <oam-total-transmitted-count-4>
              oam-total-transmitted-count-4
            </oam-total-transmitted-count-4>
            <oam-total-received-count-4>
              oam-total-received-count-4
            </oam-total-received-count-4>
          </oam-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
        <oam-rdi-received-count>
          oam-rdi-received-count
        </oam-rdi-received-count>
        <oam-rdi-received-last>
          oam-rdi-received-last
        </oam-rdi-received-last>
        <oam-rdi-transmitted-count>
          oam-rdi-transmitted-count
        </oam-rdi-transmitted-count>
        <oam-rdi-transmitted-last>
          oam-rdi-transmitted-last
        </oam-rdi-transmitted-last>
        <oam-ais-received-count>
          oam-ais-received-count
        </oam-ais-received-count>
        <oam-ais-received-last>
```


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```
        oam-ais-received-last
      </oam-ais-received-last>
      <oam-ais-transmitted-count>
        oam-ais-transmitted-count
      </oam-ais-transmitted-count>
      <oam-ais-transmitted-last>
        oam-ais-transmitted-last
      </oam-ais-transmitted-last>
      <oam-total-transmitted-count>
        oam-total-transmitted-count
      </oam-total-transmitted-count>
      <oam-total-received-count>
        oam-total-received-count
      </oam-total-received-count>
      <oam-total-transmitted-count-4>
        oam-total-transmitted-count-4
      </oam-total-transmitted-count-4>
      <oam-total-received-count-4>
        oam-total-received-count-4
      </oam-total-received-count-4>
    </oam-statistics>
  </virtual-path-information>
 </physical-interface>
</interface-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <oam-statistics>
     <oam-loopback-received-count>
      oam-loopback-received-count
     </oam-loopback-received-count>
     <oam-loopback-received-last>
      oam-loopback-received-last
     </oam-loopback-received-last>
     <oam-loopback-transmitted-count>
      oam-loopback-transmitted-count
     </oam-loopback-transmitted-count>
     <oam-loopback-transmitted-last>
      oam-loopback-transmitted-last
     </oam-loopback-transmitted-last>
     <oam-rdi-received-count>
      oam-rdi-received-count
     </oam-rdi-received-count>
     <oam-rdi-received-last>
      oam-rdi-received-last
     </oam-rdi-received-last>
     <oam-rdi-transmitted-count>
```

```
            oam-rdi-transmitted-count
          </oam-rdi-transmitted-count>
          <oam-rdi-transmitted-last>
            oam-rdi-transmitted-last
          </oam-rdi-transmitted-last>
          <oam-ais-received-count>
            oam-ais-received-count
          </oam-ais-received-count>
          <oam-ais-received-last>
            oam-ais-received-last
          </oam-ais-received-last>
          <oam-ais-transmitted-count>
            oam-ais-transmitted-count
          </oam-ais-transmitted-count>
          <oam-ais-transmitted-last>
            oam-ais-transmitted-last
          </oam-ais-transmitted-last>
          <oam-total-transmitted-count>
            oam-total-transmitted-count
          </oam-total-transmitted-count>
          <oam-total-received-count>
            oam-total-received-count
          </oam-total-received-count>
          <oam-total-transmitted-count-4>
            oam-total-transmitted-count-4
          </oam-total-transmitted-count-4>
          <oam-total-received-count-4>
            oam-total-received-count-4
          </oam-total-received-count-4>
        </oam-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
```


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```
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
        <oam-rdi-received-count>
          oam-rdi-received-count
        </oam-rdi-received-count>
        <oam-rdi-received-last>
          oam-rdi-received-last
        </oam-rdi-received-last>
        <oam-rdi-transmitted-count>
          oam-rdi-transmitted-count
        </oam-rdi-transmitted-count>
        <oam-rdi-transmitted-last>
          oam-rdi-transmitted-last
        </oam-rdi-transmitted-last>
        <oam-ais-received-count>
          oam-ais-received-count
        </oam-ais-received-count>
        <oam-ais-received-last>
          oam-ais-received-last
        </oam-ais-received-last>
        <oam-ais-transmitted-count>
          oam-ais-transmitted-count
        </oam-ais-transmitted-count>
        <oam-ais-transmitted-last>
          oam-ais-transmitted-last
        </oam-ais-transmitted-last>
        <oam-total-transmitted-count>
          oam-total-transmitted-count
        </oam-total-transmitted-count>
        <oam-total-received-count>
          oam-total-received-count
        </oam-total-received-count>
        <oam-total-transmitted-count-4>
          oam-total-transmitted-count-4
        </oam-total-transmitted-count-4>
        <oam-total-received-count-4>
          oam-total-received-count-4
        </oam-total-received-count-4>
      </oam-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <virtual-path-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
```

```
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
        <oam-rdi-received-count>
          oam-rdi-received-count
        </oam-rdi-received-count>
        <oam-rdi-received-last>
          oam-rdi-received-last
        </oam-rdi-received-last>
        <oam-rdi-transmitted-count>
          oam-rdi-transmitted-count
        </oam-rdi-transmitted-count>
        <oam-rdi-transmitted-last>
          oam-rdi-transmitted-last
        </oam-rdi-transmitted-last>
        <oam-ais-received-count>
          oam-ais-received-count
        </oam-ais-received-count>
        <oam-ais-received-last>
          oam-ais-received-last
        </oam-ais-received-last>
        <oam-ais-transmitted-count>
          oam-ais-transmitted-count
        </oam-ais-transmitted-count>
        <oam-ais-transmitted-last>
          oam-ais-transmitted-last
        </oam-ais-transmitted-last>
        <oam-total-transmitted-count>
          oam-total-transmitted-count
        </oam-total-transmitted-count>
        <oam-total-received-count>
          oam-total-received-count
        </oam-total-received-count>
        <oam-total-transmitted-count-4>
          oam-total-transmitted-count-4
        </oam-total-transmitted-count-4>
        <oam-total-received-count-4>
          oam-total-received-count-4
        </oam-total-received-count-4>
      </oam-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-filter-information>
```

Description Container tag for OAM statistics

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<oam-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <oam-statistics>
          <oam-loopback-received-count>
            oam-loopback-received-count
          </oam-loopback-received-count>
          <oam-loopback-received-last>
            oam-loopback-received-last
          </oam-loopback-received-last>
          <oam-loopback-transmitted-count>
            oam-loopback-transmitted-count
          </oam-loopback-transmitted-count>
          <oam-loopback-transmitted-last>
            oam-loopback-transmitted-last
          </oam-loopback-transmitted-last>
          <oam-rdi-received-count>
            oam-rdi-received-count
          </oam-rdi-received-count>
          <oam-rdi-received-last>
            oam-rdi-received-last
          </oam-rdi-received-last>
          <oam-rdi-transmitted-count>
            oam-rdi-transmitted-count
          </oam-rdi-transmitted-count>
          <oam-rdi-transmitted-last>
            oam-rdi-transmitted-last
          </oam-rdi-transmitted-last>
          <oam-ais-received-count>
            oam-ais-received-count
          </oam-ais-received-count>
          <oam-ais-received-last>
            oam-ais-received-last
          </oam-ais-received-last>
          <oam-ais-transmitted-count>
            oam-ais-transmitted-count
          </oam-ais-transmitted-count>
          <oam-ais-transmitted-last>
            oam-ais-transmitted-last
          </oam-ais-transmitted-last>
          <oam-total-transmitted-count>
            oam-total-transmitted-count
          </oam-total-transmitted-count>
          <oam-total-received-count>
            oam-total-received-count
          </oam-total-received-count>
          <oam-total-transmitted-count-4>
            oam-total-transmitted-count-4
          </oam-total-transmitted-count-4>
          <oam-total-received-count-4>
            oam-total-received-count-4
```

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```
            </oam-total-received-count-4>
          </oam-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
        <oam-rdi-received-count>
          oam-rdi-received-count
        </oam-rdi-received-count>
        <oam-rdi-received-last>
          oam-rdi-received-last
        </oam-rdi-received-last>
        <oam-rdi-transmitted-count>
          oam-rdi-transmitted-count
        </oam-rdi-transmitted-count>
        <oam-rdi-transmitted-last>
          oam-rdi-transmitted-last
        </oam-rdi-transmitted-last>
        <oam-ais-received-count>
          oam-ais-received-count
        </oam-ais-received-count>
        <oam-ais-received-last>
          oam-ais-received-last
        </oam-ais-received-last>
        <oam-ais-transmitted-count>
          oam-ais-transmitted-count
        </oam-ais-transmitted-count>
        <oam-ais-transmitted-last>
          oam-ais-transmitted-last
        </oam-ais-transmitted-last>
        <oam-total-transmitted-count>
          oam-total-transmitted-count
```


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```
        </oam-total-transmitted-count>
        <oam-total-received-count>
          oam-total-received-count
        </oam-total-received-count>
        <oam-total-transmitted-count-4>
          oam-total-transmitted-count-4
        </oam-total-transmitted-count-4>
        <oam-total-received-count-4>
          oam-total-received-count-4
        </oam-total-received-count-4>
      </oam-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <virtual-path-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
        <oam-rdi-received-count>
          oam-rdi-received-count
        </oam-rdi-received-count>
        <oam-rdi-received-last>
          oam-rdi-received-last
        </oam-rdi-received-last>
        <oam-rdi-transmitted-count>
          oam-rdi-transmitted-count
        </oam-rdi-transmitted-count>
        <oam-rdi-transmitted-last>
          oam-rdi-transmitted-last
        </oam-rdi-transmitted-last>
        <oam-ais-received-count>
          oam-ais-received-count
        </oam-ais-received-count>
        <oam-ais-received-last>
          oam-ais-received-last
        </oam-ais-received-last>
```

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```
                <oam-ais-transmitted-count>
                  oam-ais-transmitted-count
                </oam-ais-transmitted-count>
                <oam-ais-transmitted-last>
                  oam-ais-transmitted-last
                </oam-ais-transmitted-last>
                <oam-total-transmitted-count>
                  oam-total-transmitted-count
                </oam-total-transmitted-count>
                <oam-total-received-count>
                  oam-total-received-count
                </oam-total-received-count>
                <oam-total-transmitted-count-4>
                  oam-total-transmitted-count-4
                </oam-total-transmitted-count-4>
                <oam-total-received-count-4>
                  oam-total-received-count-4
                </oam-total-received-count-4>
              </oam-statistics>
            </virtual-path-information>
          </physical-interface>
        </interface-policer-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <oam-statistics>
          <oam-loopback-received-count>
            oam-loopback-received-count
          </oam-loopback-received-count>
          <oam-loopback-received-last>
            oam-loopback-received-last
          </oam-loopback-received-last>
          <oam-loopback-transmitted-count>
            oam-loopback-transmitted-count
          </oam-loopback-transmitted-count>
          <oam-loopback-transmitted-last>
            oam-loopback-transmitted-last
          </oam-loopback-transmitted-last>
          <oam-rdi-received-count>
            oam-rdi-received-count
          </oam-rdi-received-count>
          <oam-rdi-received-last>
            oam-rdi-received-last
          </oam-rdi-received-last>
          <oam-rdi-transmitted-count>
            oam-rdi-transmitted-count
          </oam-rdi-transmitted-count>
```


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```
                <oam-rdi-transmitted-last>
                  oam-rdi-transmitted-last
                </oam-rdi-transmitted-last>
                <oam-ais-received-count>
                  oam-ais-received-count
                </oam-ais-received-count>
                <oam-ais-received-last>
                  oam-ais-received-last
                </oam-ais-received-last>
                <oam-ais-transmitted-count>
                  oam-ais-transmitted-count
                </oam-ais-transmitted-count>
                <oam-ais-transmitted-last>
                  oam-ais-transmitted-last
                </oam-ais-transmitted-last>
                <oam-total-transmitted-count>
                  oam-total-transmitted-count
                </oam-total-transmitted-count>
                <oam-total-received-count>
                  oam-total-received-count
                </oam-total-received-count>
                <oam-total-transmitted-count-4>
                  oam-total-transmitted-count-4
                </oam-total-transmitted-count-4>
                <oam-total-received-count-4>
                  oam-total-received-count-4
                </oam-total-received-count-4>
              </oam-statistics>
            </virtual-circuit-information>
          </logical-interface>
        </physical-interface>
      </interface-policer-information>
```

Description Container tag for OAM statistics

<oam-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <oam-statistics>
        <oam-loopback-received-count>
          oam-loopback-received-count
        </oam-loopback-received-count>
        <oam-loopback-received-last>
          oam-loopback-received-last
        </oam-loopback-received-last>
        <oam-loopback-transmitted-count>
          oam-loopback-transmitted-count
        </oam-loopback-transmitted-count>
        <oam-loopback-transmitted-last>
          oam-loopback-transmitted-last
        </oam-loopback-transmitted-last>
```

```
<oam-rdi-received-count>
  oam-rdi-received-count
</oam-rdi-received-count>
<oam-rdi-received-last>
  oam-rdi-received-last
</oam-rdi-received-last>
<oam-rdi-transmitted-count>
  oam-rdi-transmitted-count
</oam-rdi-transmitted-count>
<oam-rdi-transmitted-last>
  oam-rdi-transmitted-last
</oam-rdi-transmitted-last>
<oam-ais-received-count>
  oam-ais-received-count
</oam-ais-received-count>
<oam-ais-received-last>
  oam-ais-received-last
</oam-ais-received-last>
<oam-ais-transmitted-count>
  oam-ais-transmitted-count
</oam-ais-transmitted-count>
<oam-ais-transmitted-last>
  oam-ais-transmitted-last
</oam-ais-transmitted-last>
<oam-total-transmitted-count>
  oam-total-transmitted-count
</oam-total-transmitted-count>
<oam-total-received-count>
  oam-total-received-count
</oam-total-received-count>
<oam-total-transmitted-count-4>
  oam-total-transmitted-count-4
</oam-total-transmitted-count-4>
<oam-total-received-count-4>
  oam-total-received-count-4
</oam-total-received-count-4>
</oam-statistics>
</virtual-circuit-information>
</logical-interface>
</interface-policer-information>
```

Description Container tag for OAM statistics

<optics-diagnostics>

Usage

```
<optics-diagnostics>
  <optic-diagnostics-not-available>
    optic-diagnostics-not-available
  </optic-diagnostics-not-available>
  <laser-bias-current-not-available>
    laser-bias-current-not-available
  </laser-bias-current-not-available>
  <soa-bias-current-not-available>
```


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```
  soa-bias-current-not-available
</soa-bias-current-not-available>
<laser-tx-power-not-available>
  laser-tx-power-not-available
</laser-tx-power-not-available>
<module-temperature-not-available>
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Description Optics diagnostics

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  laser-tx-power-high-warn-threshold-dbm
</laser-tx-power-high-warn-threshold-dbm>
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  laser-tx-power-low-warn-threshold-dbm
</laser-tx-power-low-warn-threshold-dbm>
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</module-temperature-low-alarm-threshold>
<module-temperature-high-warn-threshold>
  module-temperature-high-warn-threshold
</module-temperature-high-warn-threshold>
```

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<module-temperature-low-warn-threshold>
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  laser-rx-power-low-alarm-threshold-dbm
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<laser-rx-power-low-warn-threshold-dbm>
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<optics-diagnostics-lane-values>....</optics-diagnostics-lane-values>
</optics-diagnostics>
</link-entry>
</links>
</physical-interface>
```

Description Optics diagnostics

<optics-diagnostics>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
```


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<optics-diagnostics>
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  </optic-diagnostics-not-available>
  <laser-bias-current-not-available>
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  </laser-bias-current-not-available>
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    soa-bias-current-not-available
  </soa-bias-current-not-available>
  <laser-tx-power-not-available>
    laser-tx-power-not-available
  </laser-tx-power-not-available>
  <module-temperature-not-available>
    module-temperature-not-available
  </module-temperature-not-available>
  <laser-rx-power-not-available>
    laser-rx-power-not-available
  </laser-rx-power-not-available>
  <laser-bias-current>
    laser-bias-current
  </laser-bias-current>
  <laser-output-power>
    laser-output-power
  </laser-output-power>
  <laser-output-power-dbm>
    laser-output-power-dbm
  </laser-output-power-dbm>
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    module-temperature
  </module-temperature>
  <module-voltage>
    module-voltage
  </module-voltage>
  <soa-bias-current>
    soa-bias-current
  </soa-bias-current>
  <rx-signal-avg-optical-power>
    rx-signal-avg-optical-power
  </rx-signal-avg-optical-power>
  <rx-signal-avg-optical-power-dbm>
    rx-signal-avg-optical-power-dbm
  </rx-signal-avg-optical-power-dbm>
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  </laser-rx-optical-power>
  <laser-rx-optical-power-dbm>
    laser-rx-optical-power-dbm
  </laser-rx-optical-power-dbm>
  <laser-bias-current-high-alarm>
    laser-bias-current-high-alarm
  </laser-bias-current-high-alarm>
  <laser-bias-current-low-alarm>
    laser-bias-current-low-alarm
  </laser-bias-current-low-alarm>
  <laser-bias-current-high-warn>
```

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  laser-bias-current-high-warn
</laser-bias-current-high-warn>
<laser-bias-current-low-warn>
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</laser-bias-current-low-warn>
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  tx-loss-of-signal-functionality-alarm
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  apd-supply-fault-alarm
</apd-supply-fault-alarm>
<tec-fault-alarm>
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</tec-fault-alarm>
<wavelength-unlocked-alarm>
  wavelength-unlocked-alarm
</wavelength-unlocked-alarm>
<module-voltage-high-alarm>
  module-voltage-high-alarm
</module-voltage-high-alarm>
<module-voltage-low-alarm>
  module-voltage-low-alarm
</module-voltage-low-alarm>
```


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<module-voltage-high-warn>
  module-voltage-high-warn
</module-voltage-high-warn>
<module-voltage-low-warn>
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</module-voltage-low-warn>
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  soa-bias-current-low-alarm
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<soa-bias-current-low-warn>
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<laser-end-of-life-alarm>
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  modulator-bias-alarm
</modulator-bias-alarm>
<module-not-ready-alarm>
  module-not-ready-alarm
</module-not-ready-alarm>
<module-power-down-alarm>
  module-power-down-alarm
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</module-power-down-alarm>
<module-not-init-done-alarm>
  module-not-init-done-alarm
</module-not-init-done-alarm>
<module-not-high-power-on-alarm>
  module-not-high-power-on-alarm
</module-not-high-power-on-alarm>
<module-fault-alarm>
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</module-fault-alarm>
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  pld-flash-init-fault-alarm
</pld-flash-init-fault-alarm>
<power-supply-fault-alarm>
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</checksum-fault-alarm>
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  tx-data-not-ready-alarm
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<tx-not-ready-alarm>
  tx-not-ready-alarm
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<tx-laser-fault-alarm>
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<tx-laser-disabled-alarm>
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<module-voltage-low-alarm-threshold>
  module-voltage-low-alarm-threshold
</module-voltage-low-alarm-threshold>
<module-voltage-high-warn-threshold>
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  module-voltage-high-warn-threshold
</module-voltage-high-warn-threshold>
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  module-voltage-low-warn-threshold
</module-voltage-low-warn-threshold>
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  laser-tx-power-low-warn-threshold-dbm
</laser-tx-power-low-warn-threshold-dbm>
<module-temperature-high-alarm-threshold>
  module-temperature-high-alarm-threshold
</module-temperature-high-alarm-threshold>
```

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<module-temperature-low-alarm-threshold>
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</module-temperature-low-alarm-threshold>
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<optics-diagnostics-lane-values>....</optics-diagnostics-lane-values>
</optics-diagnostics>
</link-entry>
</links>
</physical-interface>
</interface-information>
```

Description Optics diagnostics

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<optics-diagnostics>

Usage

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<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <optics-diagnostics>
          <optic-diagnostics-not-available>
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          </optic-diagnostics-not-available>
          <laser-bias-current-not-available>
            laser-bias-current-not-available
          </laser-bias-current-not-available>
          <soa-bias-current-not-available>
            soa-bias-current-not-available
          </soa-bias-current-not-available>
          <laser-tx-power-not-available>
            laser-tx-power-not-available
          </laser-tx-power-not-available>
          <module-temperature-not-available>
            module-temperature-not-available
          </module-temperature-not-available>
          <laser-rx-power-not-available>
            laser-rx-power-not-available
          </laser-rx-power-not-available>
          <laser-bias-current>
            laser-bias-current
          </laser-bias-current>
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            laser-output-power
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            laser-output-power-dbm
          </laser-output-power-dbm>
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            module-voltage
          </module-voltage>
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            soa-bias-current
          </soa-bias-current>
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            rx-signal-avg-optical-power
          </rx-signal-avg-optical-power>
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            rx-signal-avg-optical-power-dbm
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            laser-rx-optical-power
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          <laser-rx-optical-power-dbm>
            laser-rx-optical-power-dbm
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</laser-rx-optical-power-dbm>
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  tx-loss-of-signal-functionality-alarm
</tx-loss-of-signal-functionality-alarm>
<tx-cdr-loss-of-lock-alarm>
  tx-cdr-loss-of-lock-alarm
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  apd-supply-fault-alarm
</apd-supply-fault-alarm>
<tec-fault-alarm>
  tec-fault-alarm
</tec-fault-alarm>
<wavelength-unlocked-alarm>
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  wavelength-unlocked-alarm
</wavelength-unlocked-alarm>
<module-voltage-high-alarm>
  module-voltage-high-alarm
</module-voltage-high-alarm>
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</module-voltage-low-alarm>
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  module-voltage-high-warn
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<module-voltage-low-warn>
  module-voltage-low-warn
</module-voltage-low-warn>
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</module-temperature-low-alarm>
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  module-temperature-low-warn
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<soa-bias-current-low-alarm>
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<laser-power-alarm>
  laser-power-alarm
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<modulator-temperature-alarm>
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</modulator-temperature-alarm>
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<modulator-bias-alarm>
  modulator-bias-alarm
</modulator-bias-alarm>
<module-not-ready-alarm>
  module-not-ready-alarm
</module-not-ready-alarm>
<module-power-down-alarm>
  module-power-down-alarm
</module-power-down-alarm>
<module-not-init-done-alarm>
  module-not-init-done-alarm
</module-not-init-done-alarm>
<module-not-high-power-on-alarm>
  module-not-high-power-on-alarm
</module-not-high-power-on-alarm>
<module-fault-alarm>
  module-fault-alarm
</module-fault-alarm>
<pld-flash-init-fault-alarm>
  pld-flash-init-fault-alarm
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    </laser-tx-power-high-warn-threshold-dbm>
    <laser-tx-power-low-warn-threshold-dbm>
      laser-tx-power-low-warn-threshold-dbm
    </laser-tx-power-low-warn-threshold-dbm>
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      laser-rx-power-high-warn-threshold-dbm
    </laser-rx-power-high-warn-threshold-dbm>
    <laser-rx-power-low-warn-threshold-dbm>
      laser-rx-power-low-warn-threshold-dbm
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    <optics-diagnostics-lane-values>....</optics-diagnostics-lane-values>
  </optics-diagnostics>
</link-entry>
```


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```
    </links>
  </physical-interface>
</interface-filter-information>
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Description Optics diagnostics

<optics-diagnostics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
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          </module-voltage>
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  laser-tx-power-high-alarm-threshold-dbm
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</laser-rx-power-low-alarm-threshold-dbm>
<laser-rx-power-high-warn-threshold-dbm>
  laser-rx-power-high-warn-threshold-dbm
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            </laser-rx-power-high-warn-threshold-dbm>
            <laser-rx-power-low-warn-threshold-dbm>
              laser-rx-power-low-warn-threshold-dbm
            </laser-rx-power-low-warn-threshold-dbm>
            <optics-diagnostics-lane-values>....</optics-diagnostics-lane-values>
          </optics-diagnostics>
        </link-entry>
      </links>
    </physical-interface>
  </interface-policer-information>
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Description Optics diagnostics

<optics-diagnostics-lane-values>

Usage

```
<optics-diagnostics-lane-values>
  <lane-index>
    lane-index
  </lane-index>
  <laser-bias-current>
    laser-bias-current
  </laser-bias-current>
  <laser-output-power>
    laser-output-power
  </laser-output-power>
  <laser-output-power-dbm>
    laser-output-power-dbm
  </laser-output-power-dbm>
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    laser-temperature
  </laser-temperature>
  <laser-rx-optical-power>
    laser-rx-optical-power
  </laser-rx-optical-power>
  <laser-rx-optical-power-dbm>
    laser-rx-optical-power-dbm
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    laser-bias-current-high-warn
  </laser-bias-current-high-warn>
  <laser-bias-current-low-warn>
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  </laser-bias-current-low-warn>
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    laser-tx-power-high-alarm
  </laser-tx-power-high-alarm>
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    tec-fault-alarm
  </tec-fault-alarm>
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    apd-supply-fault-alarm
  </apd-supply-fault-alarm>
  <tx-loss-of-signal-functionality-alarm>
    tx-loss-of-signal-functionality-alarm
  </tx-loss-of-signal-functionality-alarm>
  <tx-cdr-loss-of-lock-alarm>
    tx-cdr-loss-of-lock-alarm
  </tx-cdr-loss-of-lock-alarm>
  <rx-loss-of-signal-alarm>
    rx-loss-of-signal-alarm
  </rx-loss-of-signal-alarm>
  <rx-cdr-loss-of-lock-alarm>
    rx-cdr-loss-of-lock-alarm
  </rx-cdr-loss-of-lock-alarm>
</optics-diagnostics-lane-values>
```


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Description

<optics-diagnostics-lane-values>

Usage

```
<optics-diagnostics>
  <optics-diagnostics-lane-values>
    <lane-index>
      lane-index
    </lane-index>
    <laser-bias-current>
      laser-bias-current
    </laser-bias-current>
    <laser-output-power>
      laser-output-power
    </laser-output-power>
    <laser-output-power-dbm>
      laser-output-power-dbm
    </laser-output-power-dbm>
    <laser-temperature>
      laser-temperature
    </laser-temperature>
    <laser-rx-optical-power>
      laser-rx-optical-power
    </laser-rx-optical-power>
    <laser-rx-optical-power-dbm>
      laser-rx-optical-power-dbm
    </laser-rx-optical-power-dbm>
    <laser-bias-current-high-alarm>
      laser-bias-current-high-alarm
    </laser-bias-current-high-alarm>
    <laser-bias-current-low-alarm>
      laser-bias-current-low-alarm
    </laser-bias-current-low-alarm>
    <laser-bias-current-high-warn>
      laser-bias-current-high-warn
    </laser-bias-current-high-warn>
    <laser-bias-current-low-warn>
      laser-bias-current-low-warn
    </laser-bias-current-low-warn>
    <laser-tx-power-high-alarm>
      laser-tx-power-high-alarm
    </laser-tx-power-high-alarm>
    <laser-tx-power-low-alarm>
      laser-tx-power-low-alarm
    </laser-tx-power-low-alarm>
    <laser-tx-power-high-warn>
      laser-tx-power-high-warn
    </laser-tx-power-high-warn>
    <laser-tx-power-low-warn>
      laser-tx-power-low-warn
    </laser-tx-power-low-warn>
    <laser-temp-high-alarm>
      laser-temp-high-alarm
    </laser-temp-high-alarm>
    <laser-temp-low-alarm>
```

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```
      laser-temp-low-alarm
    </laser-temp-low-alarm>
    <laser-temp-high-warn>
      laser-temp-high-warn
    </laser-temp-high-warn>
    <laser-temp-low-warn>
      laser-temp-low-warn
    </laser-temp-low-warn>
    <laser-rx-power-high-alarm>
      laser-rx-power-high-alarm
    </laser-rx-power-high-alarm>
    <laser-rx-power-low-alarm>
      laser-rx-power-low-alarm
    </laser-rx-power-low-alarm>
    <laser-rx-power-high-warn>
      laser-rx-power-high-warn
    </laser-rx-power-high-warn>
    <laser-rx-power-low-warn>
      laser-rx-power-low-warn
    </laser-rx-power-low-warn>
    <tec-fault-alarm>
      tec-fault-alarm
    </tec-fault-alarm>
    <wavelength-unlocked-alarm>
      wavelength-unlocked-alarm
    </wavelength-unlocked-alarm>
    <apd-supply-fault-alarm>
      apd-supply-fault-alarm
    </apd-supply-fault-alarm>
    <tx-loss-of-signal-functionality-alarm>
      tx-loss-of-signal-functionality-alarm
    </tx-loss-of-signal-functionality-alarm>
    <tx-cdr-loss-of-lock-alarm>
      tx-cdr-loss-of-lock-alarm
    </tx-cdr-loss-of-lock-alarm>
    <rx-loss-of-signal-alarm>
      rx-loss-of-signal-alarm
    </rx-loss-of-signal-alarm>
    <rx-cdr-loss-of-lock-alarm>
      rx-cdr-loss-of-lock-alarm
    </rx-cdr-loss-of-lock-alarm>
  </optics-diagnostics-lane-values>
</optics-diagnostics>
```

Description

<optics-diagnostics-lane-values>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <optics-diagnostics>
        <optics-diagnostics-lane-values>
          <lane-index>
```


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```
  lane-index
</lane-index>
<laser-bias-current>
  laser-bias-current
</laser-bias-current>
<laser-output-power>
  laser-output-power
</laser-output-power>
<laser-output-power-dbm>
  laser-output-power-dbm
</laser-output-power-dbm>
<laser-temperature>
  laser-temperature
</laser-temperature>
<laser-rx-optical-power>
  laser-rx-optical-power
</laser-rx-optical-power>
<laser-rx-optical-power-dbm>
  laser-rx-optical-power-dbm
</laser-rx-optical-power-dbm>
<laser-bias-current-high-alarm>
  laser-bias-current-high-alarm
</laser-bias-current-high-alarm>
<laser-bias-current-low-alarm>
  laser-bias-current-low-alarm
</laser-bias-current-low-alarm>
<laser-bias-current-high-warn>
  laser-bias-current-high-warn
</laser-bias-current-high-warn>
<laser-bias-current-low-warn>
  laser-bias-current-low-warn
</laser-bias-current-low-warn>
<laser-tx-power-high-alarm>
  laser-tx-power-high-alarm
</laser-tx-power-high-alarm>
<laser-tx-power-low-alarm>
  laser-tx-power-low-alarm
</laser-tx-power-low-alarm>
<laser-tx-power-high-warn>
  laser-tx-power-high-warn
</laser-tx-power-high-warn>
<laser-tx-power-low-warn>
  laser-tx-power-low-warn
</laser-tx-power-low-warn>
<laser-temp-high-alarm>
  laser-temp-high-alarm
</laser-temp-high-alarm>
<laser-temp-low-alarm>
  laser-temp-low-alarm
</laser-temp-low-alarm>
<laser-temp-high-warn>
  laser-temp-high-warn
</laser-temp-high-warn>
<laser-temp-low-warn>
  laser-temp-low-warn
</laser-temp-low-warn>
```

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```
                <laser-rx-power-high-alarm>
                  laser-rx-power-high-alarm
                </laser-rx-power-high-alarm>
                <laser-rx-power-low-alarm>
                  laser-rx-power-low-alarm
                </laser-rx-power-low-alarm>
                <laser-rx-power-high-warn>
                  laser-rx-power-high-warn
                </laser-rx-power-high-warn>
                <laser-rx-power-low-warn>
                  laser-rx-power-low-warn
                </laser-rx-power-low-warn>
                <tec-fault-alarm>
                  tec-fault-alarm
                </tec-fault-alarm>
                <wavelength-unlocked-alarm>
                  wavelength-unlocked-alarm
                </wavelength-unlocked-alarm>
                <apd-supply-fault-alarm>
                  apd-supply-fault-alarm
                </apd-supply-fault-alarm>
                <tx-loss-of-signal-functionality-alarm>
                  tx-loss-of-signal-functionality-alarm
                </tx-loss-of-signal-functionality-alarm>
                <tx-cdr-loss-of-lock-alarm>
                  tx-cdr-loss-of-lock-alarm
                </tx-cdr-loss-of-lock-alarm>
                <rx-loss-of-signal-alarm>
                  rx-loss-of-signal-alarm
                </rx-loss-of-signal-alarm>
                <rx-cdr-loss-of-lock-alarm>
                  rx-cdr-loss-of-lock-alarm
                </rx-cdr-loss-of-lock-alarm>
              </optics-diagnostics-lane-values>
            </optics-diagnostics>
          </link-entry>
        </links>
      </physical-interface>
```

Description

<optics-diagnostics-lane-values>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <optics-diagnostics>
          <optics-diagnostics-lane-values>
            <lane-index>
              lane-index
            </lane-index>
            <laser-bias-current>
              laser-bias-current
```


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```
</laser-bias-current>
<laser-output-power>
  laser-output-power
</laser-output-power>
<laser-output-power-dbm>
  laser-output-power-dbm
</laser-output-power-dbm>
<laser-temperature>
  laser-temperature
</laser-temperature>
<laser-rx-optical-power>
  laser-rx-optical-power
</laser-rx-optical-power>
<laser-rx-optical-power-dbm>
  laser-rx-optical-power-dbm
</laser-rx-optical-power-dbm>
<laser-bias-current-high-alarm>
  laser-bias-current-high-alarm
</laser-bias-current-high-alarm>
<laser-bias-current-low-alarm>
  laser-bias-current-low-alarm
</laser-bias-current-low-alarm>
<laser-bias-current-high-warn>
  laser-bias-current-high-warn
</laser-bias-current-high-warn>
<laser-bias-current-low-warn>
  laser-bias-current-low-warn
</laser-bias-current-low-warn>
<laser-tx-power-high-alarm>
  laser-tx-power-high-alarm
</laser-tx-power-high-alarm>
<laser-tx-power-low-alarm>
  laser-tx-power-low-alarm
</laser-tx-power-low-alarm>
<laser-tx-power-high-warn>
  laser-tx-power-high-warn
</laser-tx-power-high-warn>
<laser-tx-power-low-warn>
  laser-tx-power-low-warn
</laser-tx-power-low-warn>
<laser-temp-high-alarm>
  laser-temp-high-alarm
</laser-temp-high-alarm>
<laser-temp-low-alarm>
  laser-temp-low-alarm
</laser-temp-low-alarm>
<laser-temp-high-warn>
  laser-temp-high-warn
</laser-temp-high-warn>
<laser-temp-low-warn>
  laser-temp-low-warn
</laser-temp-low-warn>
<laser-rx-power-high-alarm>
  laser-rx-power-high-alarm
</laser-rx-power-high-alarm>
<laser-rx-power-low-alarm>
```

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```
            laser-rx-power-low-alarm
           </laser-rx-power-low-alarm>
           <laser-rx-power-high-warn>
            laser-rx-power-high-warn
           </laser-rx-power-high-warn>
           <laser-rx-power-low-warn>
            laser-rx-power-low-warn
           </laser-rx-power-low-warn>
           <tec-fault-alarm>
            tec-fault-alarm
           </tec-fault-alarm>
           <wavelength-unlocked-alarm>
            wavelength-unlocked-alarm
           </wavelength-unlocked-alarm>
           <apd-supply-fault-alarm>
            apd-supply-fault-alarm
           </apd-supply-fault-alarm>
           <tx-loss-of-signal-functionality-alarm>
            tx-loss-of-signal-functionality-alarm
           </tx-loss-of-signal-functionality-alarm>
           <tx-cdr-loss-of-lock-alarm>
            tx-cdr-loss-of-lock-alarm
           </tx-cdr-loss-of-lock-alarm>
           <rx-loss-of-signal-alarm>
            rx-loss-of-signal-alarm
           </rx-loss-of-signal-alarm>
           <rx-cdr-loss-of-lock-alarm>
            rx-cdr-loss-of-lock-alarm
           </rx-cdr-loss-of-lock-alarm>
          </optics-diagnostics-lane-values>
         </optics-diagnostics>
        </link-entry>
       </links>
      </physical-interface>
     </interface-information>
```

Description

<optics-diagnostics-lane-values>

Usage

```
<interface-filter-information>
 <physical-interface>
  <links>
   <link-entry>
    <optics-diagnostics>
     <optics-diagnostics-lane-values>
      <lane-index>
       lane-index
      </lane-index>
      <laser-bias-current>
       laser-bias-current
      </laser-bias-current>
      <laser-output-power>
       laser-output-power
```


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```
</laser-output-power>
<laser-output-power-dbm>
  laser-output-power-dbm
</laser-output-power-dbm>
<laser-temperature>
  laser-temperature
</laser-temperature>
<laser-rx-optical-power>
  laser-rx-optical-power
</laser-rx-optical-power>
<laser-rx-optical-power-dbm>
  laser-rx-optical-power-dbm
</laser-rx-optical-power-dbm>
<laser-bias-current-high-alarm>
  laser-bias-current-high-alarm
</laser-bias-current-high-alarm>
<laser-bias-current-low-alarm>
  laser-bias-current-low-alarm
</laser-bias-current-low-alarm>
<laser-bias-current-high-warn>
  laser-bias-current-high-warn
</laser-bias-current-high-warn>
<laser-bias-current-low-warn>
  laser-bias-current-low-warn
</laser-bias-current-low-warn>
<laser-tx-power-high-alarm>
  laser-tx-power-high-alarm
</laser-tx-power-high-alarm>
<laser-tx-power-low-alarm>
  laser-tx-power-low-alarm
</laser-tx-power-low-alarm>
<laser-tx-power-high-warn>
  laser-tx-power-high-warn
</laser-tx-power-high-warn>
<laser-tx-power-low-warn>
  laser-tx-power-low-warn
</laser-tx-power-low-warn>
<laser-temp-high-alarm>
  laser-temp-high-alarm
</laser-temp-high-alarm>
<laser-temp-low-alarm>
  laser-temp-low-alarm
</laser-temp-low-alarm>
<laser-temp-high-warn>
  laser-temp-high-warn
</laser-temp-high-warn>
<laser-temp-low-warn>
  laser-temp-low-warn
</laser-temp-low-warn>
<laser-rx-power-high-alarm>
  laser-rx-power-high-alarm
</laser-rx-power-high-alarm>
<laser-rx-power-low-alarm>
  laser-rx-power-low-alarm
</laser-rx-power-low-alarm>
<laser-rx-power-high-warn>
```

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```
            laser-rx-power-high-warn
           </laser-rx-power-high-warn>
           <laser-rx-power-low-warn>
            laser-rx-power-low-warn
           </laser-rx-power-low-warn>
           <tec-fault-alarm>
            tec-fault-alarm
           </tec-fault-alarm>
           <wavelength-unlocked-alarm>
            wavelength-unlocked-alarm
           </wavelength-unlocked-alarm>
           <apd-supply-fault-alarm>
            apd-supply-fault-alarm
           </apd-supply-fault-alarm>
           <tx-loss-of-signal-functionality-alarm>
            tx-loss-of-signal-functionality-alarm
           </tx-loss-of-signal-functionality-alarm>
           <tx-cdr-loss-of-lock-alarm>
            tx-cdr-loss-of-lock-alarm
           </tx-cdr-loss-of-lock-alarm>
           <rx-loss-of-signal-alarm>
            rx-loss-of-signal-alarm
           </rx-loss-of-signal-alarm>
           <rx-cdr-loss-of-lock-alarm>
            rx-cdr-loss-of-lock-alarm
           </rx-cdr-loss-of-lock-alarm>
          </optics-diagnostics-lane-values>
         </optics-diagnostics>
        </link-entry>
       </links>
      </physical-interface>
     </interface-filter-information>
```

Description

<optics-diagnostics-lane-values>

Usage

```
<interface-policer-information>
 <physical-interface>
  <links>
   <link-entry>
    <optics-diagnostics>
     <optics-diagnostics-lane-values>
      <lane-index>
       lane-index
      </lane-index>
      <laser-bias-current>
       laser-bias-current
      </laser-bias-current>
      <laser-output-power>
       laser-output-power
      </laser-output-power>
      <laser-output-power-dbm>
       laser-output-power-dbm
```


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```
</laser-output-power-dbm>
<laser-temperature>
  laser-temperature
</laser-temperature>
<laser-rx-optical-power>
  laser-rx-optical-power
</laser-rx-optical-power>
<laser-rx-optical-power-dbm>
  laser-rx-optical-power-dbm
</laser-rx-optical-power-dbm>
<laser-bias-current-high-alarm>
  laser-bias-current-high-alarm
</laser-bias-current-high-alarm>
<laser-bias-current-low-alarm>
  laser-bias-current-low-alarm
</laser-bias-current-low-alarm>
<laser-bias-current-high-warn>
  laser-bias-current-high-warn
</laser-bias-current-high-warn>
<laser-bias-current-low-warn>
  laser-bias-current-low-warn
</laser-bias-current-low-warn>
<laser-tx-power-high-alarm>
  laser-tx-power-high-alarm
</laser-tx-power-high-alarm>
<laser-tx-power-low-alarm>
  laser-tx-power-low-alarm
</laser-tx-power-low-alarm>
<laser-tx-power-high-warn>
  laser-tx-power-high-warn
</laser-tx-power-high-warn>
<laser-tx-power-low-warn>
  laser-tx-power-low-warn
</laser-tx-power-low-warn>
<laser-temp-high-alarm>
  laser-temp-high-alarm
</laser-temp-high-alarm>
<laser-temp-low-alarm>
  laser-temp-low-alarm
</laser-temp-low-alarm>
<laser-temp-high-warn>
  laser-temp-high-warn
</laser-temp-high-warn>
<laser-temp-low-warn>
  laser-temp-low-warn
</laser-temp-low-warn>
<laser-rx-power-high-alarm>
  laser-rx-power-high-alarm
</laser-rx-power-high-alarm>
<laser-rx-power-low-alarm>
  laser-rx-power-low-alarm
</laser-rx-power-low-alarm>
<laser-rx-power-high-warn>
  laser-rx-power-high-warn
</laser-rx-power-high-warn>
<laser-rx-power-low-warn>
```

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```
            laser-rx-power-low-warn
          </laser-rx-power-low-warn>
          <tec-fault-alarm>
            tec-fault-alarm
          </tec-fault-alarm>
          <wavelength-unlocked-alarm>
            wavelength-unlocked-alarm
          </wavelength-unlocked-alarm>
          <apd-supply-fault-alarm>
            apd-supply-fault-alarm
          </apd-supply-fault-alarm>
          <tx-loss-of-signal-functionality-alarm>
            tx-loss-of-signal-functionality-alarm
          </tx-loss-of-signal-functionality-alarm>
          <tx-cdr-loss-of-lock-alarm>
            tx-cdr-loss-of-lock-alarm
          </tx-cdr-loss-of-lock-alarm>
          <rx-loss-of-signal-alarm>
            rx-loss-of-signal-alarm
          </rx-loss-of-signal-alarm>
          <rx-cdr-loss-of-lock-alarm>
            rx-cdr-loss-of-lock-alarm
          </rx-cdr-loss-of-lock-alarm>
        </optics-diagnostics-lane-values>
      </optics-diagnostics>
    </link-entry>
  </links>
 </physical-interface>
</interface-policer-information>
```

Description

<optics-properties>

Usage

```
<optics-properties>
 <wavelength>
  wavelength
 </wavelength>
 <frequency>
  frequency
 </frequency>
</optics-properties>
```

Description Optics properties

<optics-properties>

Usage

```
<physical-interface>
 <optics-properties>
  <wavelength>
   wavelength
```


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```
    </wavelength>
    <frequency>
      frequency
    </frequency>
  </optics-properties>
</physical-interface>
```

Description Optics properties

<optics-properties>

Usage

```
<interface-information>
  <physical-interface>
    <optics-properties>
      <wavelength>
        wavelength
      </wavelength>
      <frequency>
        frequency
      </frequency>
    </optics-properties>
  </physical-interface>
</interface-information>
```

Description Optics properties

<optics-properties>

Usage

```
<interface-filter-information>
  <physical-interface>
    <optics-properties>
      <wavelength>
        wavelength
      </wavelength>
      <frequency>
        frequency
      </frequency>
    </optics-properties>
  </physical-interface>
</interface-filter-information>
```

Description Optics properties

<optics-properties>

Usage

```
<interface-policer-information>
  <physical-interface>
    <optics-properties>
```

```
      <wavelength>
        wavelength
      </wavelength>
      <frequency>
        frequency
      </frequency>
    </optics-properties>
  </physical-interface>
</interface-policer-information>
```

Description Optics properties

<otn-errors>

Usage

```
<otn-errors>
  <media-alarm>....</media-alarm>
</otn-errors>
```

Description

<otn-errors>

Usage

```
<physical-interface>
  <otn-errors>
    <media-alarm>....</media-alarm>
  </otn-errors>
</physical-interface>
```

Description

<otn-errors>

Usage

```
<interface-information>
  <physical-interface>
    <otn-errors>
      <media-alarm>....</media-alarm>
    </otn-errors>
  </physical-interface>
</interface-information>
```

Description

<otn-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-errors>
```


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```
      <media-alarm>....</media-alarm>
    </otn-errors>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-errors>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-errors>
      <media-alarm>....</media-alarm>
    </otn-errors>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-fec-alarms>

Usage

```
<otn-fec-alarms>
  <media-alarm>....</media-alarm>
</otn-fec-alarms>
```

Description OTN degraded and excessive FEC error rates

<otn-fec-alarms>

Usage

```
<physical-interface>
  <otn-fec-alarms>
    <media-alarm>....</media-alarm>
  </otn-fec-alarms>
</physical-interface>
```

Description OTN degraded and excessive FEC error rates

<otn-fec-alarms>

Usage

```
<interface-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>....</media-alarm>
    </otn-fec-alarms>
  </physical-interface>
</interface-information>
```

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Description OTN degraded and excessive FEC error rates

<otn-fec-alarms>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>....</media-alarm>
    </otn-fec-alarms>
  </physical-interface>
</interface-filter-information>
```

Description OTN degraded and excessive FEC error rates

<otn-fec-alarms>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-fec-alarms>
      <media-alarm>....</media-alarm>
    </otn-fec-alarms>
  </physical-interface>
</interface-policer-information>
```

Description OTN degraded and excessive FEC error rates

<otn-fec-mode>

Usage

```
<otn-fec-mode>
  <fec-mode>
    fec-mode
  </fec-mode>
</otn-fec-mode>
```

Description

<otn-fec-mode>

Usage

```
<physical-interface>
  <otn-fec-mode>
    <fec-mode>
      fec-mode
    </fec-mode>
  </otn-fec-mode>
</physical-interface>
```


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Description

<otn-fec-mode>

Usage

```
<interface-information>
  <physical-interface>
    <otn-fec-mode>
      <fec-mode>
        fec-mode
      </fec-mode>
    </otn-fec-mode>
  </physical-interface>
</interface-information>
```

Description

<otn-fec-mode>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-fec-mode>
      <fec-mode>
        fec-mode
      </fec-mode>
    </otn-fec-mode>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-fec-mode>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-fec-mode>
      <fec-mode>
        fec-mode
      </fec-mode>
    </otn-fec-mode>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-fec-statistics>

Usage

```
<otn-fec-statistics>
  <fec-corrected-errors>
    fec-corrected-errors
```

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```
  </fec-corrected-errors>
  <fec-valid-time>
   fec-valid-time
  </fec-valid-time>
  <fec-corrected-error-ratio>
   fec-corrected-error-ratio
  </fec-corrected-error-ratio>
</otn-fec-statistics>
```

Description

<otn-fec-statistics>

Usage

```
<physical-interface>
  <otn-fec-statistics>
    <fec-corrected-errors>
     fec-corrected-errors
    </fec-corrected-errors>
    <fec-valid-time>
     fec-valid-time
    </fec-valid-time>
    <fec-corrected-error-ratio>
     fec-corrected-error-ratio
    </fec-corrected-error-ratio>
  </otn-fec-statistics>
</physical-interface>
```

Description

<otn-fec-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <otn-fec-statistics>
      <fec-corrected-errors>
       fec-corrected-errors
      </fec-corrected-errors>
      <fec-valid-time>
       fec-valid-time
      </fec-valid-time>
      <fec-corrected-error-ratio>
       fec-corrected-error-ratio
      </fec-corrected-error-ratio>
    </otn-fec-statistics>
  </physical-interface>
</interface-information>
```

Description

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<otn-fec-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-fec-statistics>
      <fec-corrected-errors>
        fec-corrected-errors
      </fec-corrected-errors>
      <fec-valid-time>
        fec-valid-time
      </fec-valid-time>
      <fec-corrected-error-ratio>
        fec-corrected-error-ratio
      </fec-corrected-error-ratio>
    </otn-fec-statistics>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-fec-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-fec-statistics>
      <fec-corrected-errors>
        fec-corrected-errors
      </fec-corrected-errors>
      <fec-valid-time>
        fec-valid-time
      </fec-valid-time>
      <fec-corrected-error-ratio>
        fec-corrected-error-ratio
      </fec-corrected-error-ratio>
    </otn-fec-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-oc-information>

Usage

```
<otn-oc-information>
  <media-alarm>....</media-alarm>
</otn-oc-information>
```

Description

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<otn-oc-information>

Usage

```
<physical-interface>
  <otn-oc-information>
    <media-alarm>....</media-alarm>
  </otn-oc-information>
</physical-interface>
```

Description

<otn-oc-information>

Usage

```
<interface-information>
  <physical-interface>
    <otn-oc-information>
      <media-alarm>....</media-alarm>
    </otn-oc-information>
  </physical-interface>
</interface-information>
```

Description

<otn-oc-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-oc-information>
      <media-alarm>....</media-alarm>
    </otn-oc-information>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-oc-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-oc-information>
      <media-alarm>....</media-alarm>
    </otn-oc-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<otn-odu-information>

Usage

```
<otn-odu-information>
  <media-alarm>....</media-alarm>
</otn-odu-information>
```

Description

<otn-odu-information>

Usage

```
<physical-interface>
  <otn-odu-information>
    <media-alarm>....</media-alarm>
  </otn-odu-information>
</physical-interface>
```

Description

<otn-odu-information>

Usage

```
<interface-information>
  <physical-interface>
    <otn-odu-information>
      <media-alarm>....</media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-information>
```

Description

<otn-odu-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-odu-information>
      <media-alarm>....</media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-odu-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-odu-information>
```

```
      <media-alarm>....</media-alarm>
    </otn-odu-information>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-otn-loopback>

Usage

```
<otn-otn-loopback>
  <otn-loopback>
    otn-loopback
  </otn-loopback>
</otn-otn-loopback>
```

Description

<otn-otn-loopback>

Usage

```
<physical-interface>
  <otn-otn-loopback>
    <otn-loopback>
      otn-loopback
    </otn-loopback>
  </otn-otn-loopback>
</physical-interface>
```

Description

<otn-otn-loopback>

Usage

```
<interface-information>
  <physical-interface>
    <otn-otn-loopback>
      <otn-loopback>
        otn-loopback
      </otn-loopback>
    </otn-otn-loopback>
  </physical-interface>
</interface-information>
```

Description

<otn-otn-loopback>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-otn-loopback>
```


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```
      <otn-loopback>
       otn-loopback
      </otn-loopback>
     </otn-otn-loopback>
    </physical-interface>
</interface-filter-information>
```

Description

<otn-otn-loopback>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-otn-loopback>
      <otn-loopback>
       otn-loopback
      </otn-loopback>
    </otn-otn-loopback>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-otn-mode>

Usage

```
<otn-otn-mode>
  <otn-mode>
   otn-mode
  </otn-mode>
</otn-otn-mode>
```

Description

<otn-otn-mode>

Usage

```
<physical-interface>
  <otn-otn-mode>
    <otn-mode>
     otn-mode
    </otn-mode>
  </otn-otn-mode>
</physical-interface>
```

Description

<otn-otn-mode>

Usage

```
<interface-information>
```

```
<physical-interface>
  <otn-otn-mode>
    <otn-mode>
      otn-mode
    </otn-mode>
  </otn-otn-mode>
</physical-interface>
</interface-information>
```

Description

<otn-otn-mode>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-otn-mode>
      <otn-mode>
        otn-mode
      </otn-mode>
    </otn-otn-mode>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-otn-mode>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-otn-mode>
      <otn-mode>
        otn-mode
      </otn-mode>
    </otn-otn-mode>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-otn-rate>

Usage

```
<otn-otn-rate>
  <otn-rate>
    otn-rate
  </otn-rate>
</otn-otn-rate>
```

Description

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<otn-otn-rate>

Usage

```
<physical-interface>
  <otn-otn-rate>
    <otn-rate>
      otn-rate
    </otn-rate>
  </otn-otn-rate>
</physical-interface>
```

Description

<otn-otn-rate>

Usage

```
<interface-information>
  <physical-interface>
    <otn-otn-rate>
      <otn-rate>
        otn-rate
      </otn-rate>
    </otn-otn-rate>
  </physical-interface>
</interface-information>
```

Description

<otn-otn-rate>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-otn-rate>
      <otn-rate>
        otn-rate
      </otn-rate>
    </otn-otn-rate>
  </physical-interface>
</interface-filter-information>
```

Description

<otn-otn-rate>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-otn-rate>
      <otn-rate>
        otn-rate
      </otn-rate>
```

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```
    </otn-otn-rate>
  </physical-interface>
</interface-policer-information>
```

Description

<otn-otu-information>

Usage

```
<otn-otu-information>
  <media-alarm>....</media-alarm>
</otn-otu-information>
```

Description

<otn-otu-information>

Usage

```
<physical-interface>
  <otn-otu-information>
    <media-alarm>....</media-alarm>
  </otn-otu-information>
</physical-interface>
```

Description

<otn-otu-information>

Usage

```
<interface-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>....</media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-information>
```

Description

<otn-otu-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>....</media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-filter-information>
```

Description

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<otn-otu-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <otn-otu-information>
      <media-alarm>....</media-alarm>
    </otn-otu-information>
  </physical-interface>
</interface-policer-information>
```

Description

<output-error-list>

Usage

```
<output-error-list>
  <carrier-transitions>
    carrier-transitions
  </carrier-transitions>
  <output-errors>
    output-errors
  </output-errors>
  <output-drops>
    output-drops
  </output-drops>
  <output-collisions>
    output-collisions
  </output-collisions>
  <output-hs-link-fifo-overflows>
    output-hs-link-fifo-overflows
  </output-hs-link-fifo-overflows>
  <aged-packets>
    aged-packets
  </aged-packets>
  <output-fifo-errors>
    output-fifo-errors
  </output-fifo-errors>
  <hs-link-fifo-underflows>
    hs-link-fifo-underflows
  </hs-link-fifo-underflows>
  <hs-link-crc-errors>
    hs-link-crc-errors
  </hs-link-crc-errors>
  <mtu-errors>
    mtu-errors
  </mtu-errors>
  <output-resource-errors>
    output-resource-errors
  </output-resource-errors>
</output-error-list>
```

Description Output errors on this interface

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<output-error-list>

Usage

```
<physical-interface>
  <output-error-list>
    <carrier-transitions>
      carrier-transitions
    </carrier-transitions>
    <output-errors>
      output-errors
    </output-errors>
    <output-drops>
      output-drops
    </output-drops>
    <output-collisions>
      output-collisions
    </output-collisions>
    <output-hs-link-fifo-overflows>
      output-hs-link-fifo-overflows
    </output-hs-link-fifo-overflows>
    <aged-packets>
      aged-packets
    </aged-packets>
    <output-fifo-errors>
      output-fifo-errors
    </output-fifo-errors>
    <hs-link-fifo-underflows>
      hs-link-fifo-underflows
    </hs-link-fifo-underflows>
    <hs-link-crc-errors>
      hs-link-crc-errors
    </hs-link-crc-errors>
    <mtu-errors>
      mtu-errors
    </mtu-errors>
    <output-resource-errors>
      output-resource-errors
    </output-resource-errors>
  </output-error-list>
</physical-interface>
```

Description Output errors on this interface

<output-error-list>

Usage

```
<interface-information>
  <physical-interface>
    <output-error-list>
      <carrier-transitions>
        carrier-transitions
      </carrier-transitions>
      <output-errors>
```


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```
      output-errors
    </output-errors>
    <output-drops>
      output-drops
    </output-drops>
    <output-collisions>
      output-collisions
    </output-collisions>
    <output-hs-link-fifo-overflows>
      output-hs-link-fifo-overflows
    </output-hs-link-fifo-overflows>
    <aged-packets>
      aged-packets
    </aged-packets>
    <output-fifo-errors>
      output-fifo-errors
    </output-fifo-errors>
    <hs-link-fifo-underflows>
      hs-link-fifo-underflows
    </hs-link-fifo-underflows>
    <hs-link-crc-errors>
      hs-link-crc-errors
    </hs-link-crc-errors>
    <mtu-errors>
      mtu-errors
    </mtu-errors>
    <output-resource-errors>
      output-resource-errors
    </output-resource-errors>
  </output-error-list>
 </physical-interface>
</interface-information>
```

Description Output errors on this interface

<output-error-list>

Usage

```
<interface-filter-information>
 <physical-interface>
  <output-error-list>
   <carrier-transitions>
    carrier-transitions
   </carrier-transitions>
   <output-errors>
    output-errors
   </output-errors>
   <output-drops>
    output-drops
   </output-drops>
   <output-collisions>
    output-collisions
   </output-collisions>
   <output-hs-link-fifo-overflows>
```

```
                output-hs-link-fifo-overflows
              </output-hs-link-fifo-overflows>
              <aged-packets>
                aged-packets
              </aged-packets>
              <output-fifo-errors>
                output-fifo-errors
              </output-fifo-errors>
              <hs-link-fifo-underflows>
                hs-link-fifo-underflows
              </hs-link-fifo-underflows>
              <hs-link-crc-errors>
                hs-link-crc-errors
              </hs-link-crc-errors>
              <mtu-errors>
                mtu-errors
              </mtu-errors>
              <output-resource-errors>
                output-resource-errors
              </output-resource-errors>
            </output-error-list>
          </physical-interface>
        </interface-filter-information>
```

Description Output errors on this interface

<output-error-list>

Usage

```
<interface-policer-information>
  <physical-interface>
    <output-error-list>
      <carrier-transitions>
        carrier-transitions
      </carrier-transitions>
      <output-errors>
        output-errors
      </output-errors>
      <output-drops>
        output-drops
      </output-drops>
      <output-collisions>
        output-collisions
      </output-collisions>
      <output-hs-link-fifo-overflows>
        output-hs-link-fifo-overflows
      </output-hs-link-fifo-overflows>
      <aged-packets>
        aged-packets
      </aged-packets>
      <output-fifo-errors>
        output-fifo-errors
      </output-fifo-errors>
      <hs-link-fifo-underflows>
```


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```
            hs-link-fifo-underflows
           </hs-link-fifo-underflows>
           <hs-link-crc-errors>
            hs-link-crc-errors
           </hs-link-crc-errors>
           <mtu-errors>
            mtu-errors
           </mtu-errors>
           <output-resource-errors>
            output-resource-errors
           </output-resource-errors>
          </output-error-list>
         </physical-interface>
        </interface-policer-information>
```

Description Output errors on this interface

<peer-configuration-status>

Usage

```
<peer-configuration-status>
 <peer-nonmatching-dlci>
  peer-nonmatching-dlci
 </peer-nonmatching-dlci>
</peer-configuration-status>
```

Description Nonmatching DCE end DLCIs

<peer-configuration-status>

Usage

```
<physical-interface>
 <peer-configuration-status>
  <peer-nonmatching-dlci>
   peer-nonmatching-dlci
  </peer-nonmatching-dlci>
 </peer-configuration-status>
</physical-interface>
```

Description Nonmatching DCE end DLCIs

<peer-configuration-status>

Usage

```
<interface-information>
 <physical-interface>
  <peer-configuration-status>
   <peer-nonmatching-dlci>
    peer-nonmatching-dlci
   </peer-nonmatching-dlci>
  </peer-configuration-status>
```

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```
  </physical-interface>
</interface-information>
```

Description Nonmatching DCE end DLCIs

<peer-configuration-status>

Usage

```
<interface-filter-information>
  <physical-interface>
    <peer-configuration-status>
      <peer-nonmatching-dlci>
        peer-nonmatching-dlci
      </peer-nonmatching-dlci>
    </peer-configuration-status>
  </physical-interface>
</interface-filter-information>
```

Description Nonmatching DCE end DLCIs

<peer-configuration-status>

Usage

```
<interface-policer-information>
  <physical-interface>
    <peer-configuration-status>
      <peer-nonmatching-dlci>
        peer-nonmatching-dlci
      </peer-nonmatching-dlci>
    </peer-configuration-status>
  </physical-interface>
</interface-policer-information>
```

Description Nonmatching DCE end DLCIs

<pfe-information>

Usage

```
<pfe-information>
  <destination-slot>
    destination-slot
  </destination-slot>
  <destination-mask>
    destination-mask
  </destination-mask>
  <stream-number>
    stream-number
  </stream-number>
  <stream-mask>
    stream-mask
  </stream-mask>
```


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```
<plp-byte>
  plp-byte
</plp-byte>
<plp-byte-count>
  plp-byte-count
</plp-byte-count>
<pop-all-label>
  pop-all-label
</pop-all-label>
</pfe-information>
```

Description Information about Packet Forwarding Engine configuration

<pfe-information>

Usage

```
<physical-interface>
  <pfe-information>
    <destination-slot>
      destination-slot
    </destination-slot>
    <destination-mask>
      destination-mask
    </destination-mask>
    <stream-number>
      stream-number
    </stream-number>
    <stream-mask>
      stream-mask
    </stream-mask>
    <plp-byte>
      plp-byte
    </plp-byte>
    <plp-byte-count>
      plp-byte-count
    </plp-byte-count>
    <pop-all-label>
      pop-all-label
    </pop-all-label>
  </pfe-information>
</physical-interface>
```

Description Information about Packet Forwarding Engine configuration

<pfe-information>

Usage

```
<interface-information>
  <physical-interface>
    <pfe-information>
      <destination-slot>
        destination-slot
```

```
        </destination-slot>
        <destination-mask>
          destination-mask
        </destination-mask>
        <stream-number>
          stream-number
        </stream-number>
        <stream-mask>
          stream-mask
        </stream-mask>
        <plp-byte>
          plp-byte
        </plp-byte>
        <plp-byte-count>
          plp-byte-count
        </plp-byte-count>
        <pop-all-label>
          pop-all-label
        </pop-all-label>
      </pfe-information>
    </physical-interface>
  </interface-information>
```

Description Information about Packet Forwarding Engine configuration

<pfe-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <pfe-information>
      <destination-slot>
        destination-slot
      </destination-slot>
      <destination-mask>
        destination-mask
      </destination-mask>
      <stream-number>
        stream-number
      </stream-number>
      <stream-mask>
        stream-mask
      </stream-mask>
      <plp-byte>
        plp-byte
      </plp-byte>
      <plp-byte-count>
        plp-byte-count
      </plp-byte-count>
      <pop-all-label>
        pop-all-label
      </pop-all-label>
    </pfe-information>
  </physical-interface>
```


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```
</interface-filter-information>
```

Description Information about Packet Forwarding Engine configuration

<pfe-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <pfe-information>
      <destination-slot>
        destination-slot
      </destination-slot>
      <destination-mask>
        destination-mask
      </destination-mask>
      <stream-number>
        stream-number
      </stream-number>
      <stream-mask>
        stream-mask
      </stream-mask>
      <plp-byte>
        plp-byte
      </plp-byte>
      <plp-byte-count>
        plp-byte-count
      </plp-byte-count>
      <pop-all-label>
        pop-all-label
      </pop-all-label>
    </pfe-information>
  </physical-interface>
</interface-policer-information>
```

Description Information about Packet Forwarding Engine configuration

<physical-interface>

Usage

```
<physical-interface>
  <name>
    name
  </name>
  <mc-ae-status>
    mc-ae-status
  </mc-ae-status>
  <admin-status>
    admin-status
  </admin-status>
  <oper-status>
    oper-status
```

```
</oper-status>
<local-index>
  local-index
</local-index>
<snmp-index>
  snmp-index
</snmp-index>
<generation>
  generation
</generation>
<description>
  description
</description>
<if-type>
  if-type
</if-type>
<link-level-type>
  link-level-type
</link-level-type>
<mtu>
  mtu
</mtu>
<link-mode>
  link-mode
</link-mode>
<mac-mode>
  mac-mode
</mac-mode>
<speed>
  speed
</speed>
<max-speed>
  max-speed
</max-speed>
<duplex>
  duplex
</duplex>
<clocking>
  clocking
</clocking>
<sonet-mode>
  sonet-mode
</sonet-mode>
<physical-mode>
  physical-mode
</physical-mode>
<l2circuit-mode>
  l2circuit-mode
</l2circuit-mode>
<ifd-cell-bundle-size>
  ifd-cell-bundle-size
</ifd-cell-bundle-size>
<ifd-cell-bundle-timeout>
  ifd-cell-bundle-timeout
</ifd-cell-bundle-timeout>
<loopback>
```


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```
  loopback
</loopback>
<ih-parent>
  ih-parent
</ih-parent>
<atm-line-build-out>
  atm-line-build-out
</atm-line-build-out>
<atm-encapsulation>
  atm-encapsulation
</atm-encapsulation>
<atm-e3-framing>
  atm-e3-framing
</atm-e3-framing>
<sonet-loopback>
  sonet-loopback
</sonet-loopback>
<crc>
  crc
</crc>
<payload-scrambler>
  payload-scrambler
</payload-scrambler>
<ingress-rate-limit>
  ingress-rate-limit
</ingress-rate-limit>
<source-filtering>
  source-filtering
</source-filtering>
<if-flow-control>
  if-flow-control
</if-flow-control>
<bpdu-error>
  bpdu-error
</bpdu-error>
<l2pt-error>
  l2pt-error
</l2pt-error>
<if-unidirectional>
  if-unidirectional
</if-unidirectional>
<if-auto-negotiation>
  if-auto-negotiation
</if-auto-negotiation>
<if-remote-fault>
  if-remote-fault
</if-remote-fault>
<if-speed-auto-negotiation>
  if-speed-auto-negotiation
</if-speed-auto-negotiation>
<if-auto-mdix>
  if-auto-mdix
</if-auto-mdix>
<minimum-links-in-aggregate>
  minimum-links-in-aggregate
</minimum-links-in-aggregate>
```

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```
<minimum-bandwidth-in-aggregate>
  minimum-bandwidth-in-aggregate
</minimum-bandwidth-in-aggregate>
<if-device-flags>....</if-device-flags>
<if-config-flags>....</if-config-flags>
<shared-interface-physical-interface>....</shared-interface-physical-interface>
<link-type>
  link-type
</link-type>
<if-media-flags>....</if-media-flags>
<optics-properties>....</optics-properties>
<keepalive-config>....</keepalive-config>
<lmi-dce-config>....</lmi-dce-config>
<lmi-dte-config>....</lmi-dte-config>
<queue-counters>....</queue-counters>
<keepalive-statistics>....</keepalive-statistics>
<ppp-flags>....</ppp-flags>
<lcp-state>
  lcp-state
</lcp-state>
<ncp-information>....</ncp-information>
<chap-state>
  chap-state
</chap-state>
<pap-state>
  pap-state
</pap-state>
<physical-information>
  physical-information
</physical-information>
<es-ifd-stats>....</es-ifd-stats>
<up-hold-time>
  up-hold-time
</up-hold-time>
<down-hold-time>
  down-hold-time
</down-hold-time>
<current-physical-address>
  current-physical-address
</current-physical-address>
<hardware-physical-address>
  hardware-physical-address
</hardware-physical-address>
<alternate-physical-address>
  alternate-physical-address
</alternate-physical-address>
<interface-flapped>
  interface-flapped
</interface-flapped>
<statistics-cleared>
  statistics-cleared
</statistics-cleared>
<interface-transmit-statistics>
  interface-transmit-statistics
</interface-transmit-statistics>
<preserve-interface>
```


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```
  preserve-interface
</preserve-interface>
<preserve-interface-statistics>....</preserve-interface-statistics>
<traffic-statistics>....</traffic-statistics>
<multicast-statistics>....</multicast-statistics>
<ingress-traffic-statistics>....</ingress-traffic-statistics>
<multilink-interface-errors>....</multilink-interface-errors>
<mlfr-uni-nni-bundle-options>....</mlfr-uni-nni-bundle-options>
<multilink-bundle-errors>....</multilink-bundle-errors>
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</input-error-count>
<output-error-list>....</output-error-list>
<output-error-count>
  output-error-count
</output-error-count>
<ber-threshold>....</ber-threshold>
<ds1-crc-alarm-threshold>....</ds1-crc-alarm-threshold>
<active-alarms>....</active-alarms>
<active-defects>....</active-defects>
<media-state-information>....</media-state-information>
<sonet-errors>....</sonet-errors>
<sonet-physical-information>....</sonet-physical-information>
<sonet-section-information>....</sonet-section-information>
<sonet-line-information>....</sonet-line-information>
<sonet-path-information>....</sonet-path-information>
<sonet-payload-pointer-information>....</sonet-payload-pointer-information>
<sonet-payload-pointer-curptr>
  sonet-payload-pointer-curptr
</sonet-payload-pointer-curptr>
<sonet-payload-pointer-ptrinc-count>
  sonet-payload-pointer-ptrinc-count
</sonet-payload-pointer-ptrinc-count>
<sonet-payload-pointer-ptrdec-count>
  sonet-payload-pointer-ptrdec-count
</sonet-payload-pointer-ptrdec-count>
<sonet-payload-pointer-newptr-ndf-count>
  sonet-payload-pointer-newptr-ndf-count
</sonet-payload-pointer-newptr-ndf-count>
<sonet-vt-information>....</sonet-vt-information>
<sonet-rx-overhead>
  sonet-rx-overhead
</sonet-rx-overhead>
<sonet-tx-overhead>
  sonet-tx-overhead
</sonet-tx-overhead>
<sonet-rx-path-trace>
  sonet-rx-path-trace
</sonet-rx-path-trace>
<sonet-tx-path-trace>
  sonet-tx-path-trace
</sonet-tx-path-trace>
<otn-errors>....</otn-errors>
<otn-rx-overhead>
  otn-rx-overhead
```

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```
</otn-rx-overhead>
<otn-tx-overhead>
  otn-tx-overhead
</otn-tx-overhead>
<otn-stats-counter>
  otn-stats-counter
</otn-stats-counter>
<otn-fec-statistics>....</otn-fec-statistics>
<otn-fec-alarms>....</otn-fec-alarms>
<otn-fec-mode>....</otn-fec-mode>
<otn-otn-mode>....</otn-otn-mode>
<otn-otn-rate>....</otn-otn-rate>
<otn-otn-loopback>....</otn-otn-loopback>
<otn-rx-tti>
  otn-rx-tti
</otn-rx-tti>
<otn-tx-tti>
  otn-tx-tti
</otn-tx-tti>
<media-information>....</media-information>
<ethernet-pcs-statistics>....</ethernet-pcs-statistics>
<ethernet-mac-statistics>....</ethernet-mac-statistics>
<fibrechannel-port-flow-control>....</fibrechannel-port-flow-control>
<fibrechannel-mac-statistics>....</fibrechannel-mac-statistics>
<ethernet-filter-statistics>....</ethernet-filter-statistics>
<ethernet-autonegotiation>....</ethernet-autonegotiation>
<link-partner-status>
  link-partner-status
</link-partner-status>
<local-info>....</local-info>
<mac-database>....</mac-database>
<dsl-information>....</dsl-information>
<vdsl-information>....</vdsl-information>
<shdsl-information>....</shdsl-information>
<atm-information>....</atm-information>
<modem-information>....</modem-information>
<serial-information>....</serial-information>
<virtual-path-information>....</virtual-path-information>
<ct3-information>....</ct3-information>
<cds1-information>....</cds1-information>
<nxds0-information>....</nxds0-information>
<ds3-mode>
  ds3-mode
</ds3-mode>
<ds3-long-buildout>
  ds3-long-buildout
</ds3-long-buildout>
<e3-framing>
  e3-framing
</e3-framing>
<ds1-framing>
  ds1-framing
</ds1-framing>
<dsu-information>....</dsu-information>
<ds3-bert-information>....</ds3-bert-information>
<e3-bert-information>....</e3-bert-information>
```


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```
<ds1-bert-information>....</ds1-bert-information>
<ds0-bert-information>....</ds0-bert-information>
<hdlc-information>....</hdlc-information>
<pfe-information>....</pfe-information>
<logical-interface>....</logical-interface>
<active-alarms-otn>....</active-alarms-otn>
<active-defects-otn>....</active-defects-otn>
<links>....</links>
<src-information>....</src-information>
<peer-configuration-status>....</peer-configuration-status>
<lmi-statistics>....</lmi-statistics>
<lsi-traffic-statistics>....</lsi-traffic-statistics>
<stp-traffic-statistics>....</stp-traffic-statistics>

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<chassis-queue-counters>....</chassis-queue-counters>
<ingress-queue-counters>....</ingress-queue-counters>
<otn-oc-information>....</otn-oc-information>
<otn-otu-information>....</otn-otu-information>
<otn-odu-information>....</otn-odu-information>
<ima-state>....</ima-state>
<ima-group-information>....</ima-group-information>
<ima-link-information>....</ima-link-information>
<ethernet-mac-pfc-statistics>....</ethernet-mac-pfc-statistics>
<satop-information>....</satop-information>
<cesopsn-information>....</cesopsn-information>
<ima-group-properties>....</ima-group-properties>
<ima-link-properties>....</ima-link-properties>
<cos-header>
  cos-header
</cos-header>
<cos-information>....</cos-information>
<physical-interface-cos-information>....</physical-interface-cos-information>
<mlfr-uni-nni-traffic-statistics>....</mlfr-uni-nni-traffic-statistics>
<interval-information>....</interval-information>
</physical-interface>
```

Description Information about a single physical interface

<physical-interface>

Usage

```
<interface-information>
  <physical-interface>
    <name>
      name
    </name>
    <mc-ae-status>
      mc-ae-status
    </mc-ae-status>
    <admin-status>
      admin-status
    </admin-status>
```

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```
<oper-status>
  oper-status
</oper-status>
<local-index>
  local-index
</local-index>
<snmp-index>
  snmp-index
</snmp-index>
<generation>
  generation
</generation>
<description>
  description
</description>
<if-type>
  if-type
</if-type>
<link-level-type>
  link-level-type
</link-level-type>
<mtu>
  mtu
</mtu>
<link-mode>
  link-mode
</link-mode>
<mac-mode>
  mac-mode
</mac-mode>
<speed>
  speed
</speed>
<max-speed>
  max-speed
</max-speed>
<duplex>
  duplex
</duplex>
<clocking>
  clocking
</clocking>
<sonet-mode>
  sonet-mode
</sonet-mode>
<physical-mode>
  physical-mode
</physical-mode>
<l2circuit-mode>
  l2circuit-mode
</l2circuit-mode>
<ifd-cell-bundle-size>
  ifd-cell-bundle-size
</ifd-cell-bundle-size>
<ifd-cell-bundle-timeout>
  ifd-cell-bundle-timeout
```


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```
</ifd-cell-bundle-timeout>
<loopback>
  loopback
</loopback>
<ih-parent>
  ih-parent
</ih-parent>
<atm-line-build-out>
  atm-line-build-out
</atm-line-build-out>
<atm-encapsulation>
  atm-encapsulation
</atm-encapsulation>
<atm-e3-framing>
  atm-e3-framing
</atm-e3-framing>
<sonet-loopback>
  sonet-loopback
</sonet-loopback>
<crc>
  crc
</crc>
<payload-scrambler>
  payload-scrambler
</payload-scrambler>
<ingress-rate-limit>
  ingress-rate-limit
</ingress-rate-limit>
<source-filtering>
  source-filtering
</source-filtering>
<if-flow-control>
  if-flow-control
</if-flow-control>
<bpdu-error>
  bpdu-error
</bpdu-error>
<l2pt-error>
  l2pt-error
</l2pt-error>
<if-unidirectional>
  if-unidirectional
</if-unidirectional>
<if-auto-negotiation>
  if-auto-negotiation
</if-auto-negotiation>
<if-remote-fault>
  if-remote-fault
</if-remote-fault>
<if-speed-auto-negotiation>
  if-speed-auto-negotiation
</if-speed-auto-negotiation>
<if-auto-mdix>
  if-auto-mdix
</if-auto-mdix>
<minimum-links-in-aggregate>
```

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```
  minimum-links-in-aggregate
</minimum-links-in-aggregate>
<minimum-bandwidth-in-aggregate>
  minimum-bandwidth-in-aggregate
</minimum-bandwidth-in-aggregate>
<if-device-flags>....</if-device-flags>
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<shared-interface-physical-interface>....</shared-interface-physical-interface>

<link-type>
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</link-type>
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<lmi-dce-config>....</lmi-dce-config>
<lmi-dte-config>....</lmi-dte-config>
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<lcp-state>
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<ncp-information>....</ncp-information>
<chap-state>
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</chap-state>
<pap-state>
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</pap-state>
<physical-information>
  physical-information
</physical-information>
<es-ifd-stats>....</es-ifd-stats>
<up-hold-time>
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<down-hold-time>
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<current-physical-address>
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<hardware-physical-address>
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<alternate-physical-address>
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<interface-flapped>
  interface-flapped
</interface-flapped>
<statistics-cleared>
  statistics-cleared
</statistics-cleared>
<interface-transmit-statistics>
```


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  interface-transmit-statistics
</interface-transmit-statistics>
<preserve-interface>
  preserve-interface
</preserve-interface>
<preserve-interface-statistics>....</preserve-interface-statistics>
<traffic-statistics>....</traffic-statistics>
<multicast-statistics>....</multicast-statistics>
<ingress-traffic-statistics>....</ingress-traffic-statistics>
<multilink-interface-errors>....</multilink-interface-errors>
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<multilink-bundle-errors>....</multilink-bundle-errors>
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<ber-threshold>....</ber-threshold>
<ds1-crc-alarm-threshold>....</ds1-crc-alarm-threshold>
<active-alarms>....</active-alarms>
<active-defects>....</active-defects>
<media-state-information>....</media-state-information>
<sonet-errors>....</sonet-errors>
<sonet-physical-information>....</sonet-physical-information>
<sonet-section-information>....</sonet-section-information>
<sonet-line-information>....</sonet-line-information>
<sonet-path-information>....</sonet-path-information>
<sonet-payload-pointer-information>....</sonet-payload-pointer-information>
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  sonet-payload-pointer-ptrinc-count
</sonet-payload-pointer-ptrinc-count>
<sonet-payload-pointer-ptrdec-count>
  sonet-payload-pointer-ptrdec-count
</sonet-payload-pointer-ptrdec-count>
<sonet-payload-pointer-newptr-ndf-count>
  sonet-payload-pointer-newptr-ndf-count
</sonet-payload-pointer-newptr-ndf-count>
<sonet-vt-information>....</sonet-vt-information>
<sonet-rx-overhead>
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</sonet-rx-overhead>
<sonet-tx-overhead>
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</sonet-tx-overhead>
<sonet-rx-path-trace>
  sonet-rx-path-trace
</sonet-rx-path-trace>
<sonet-tx-path-trace>
  sonet-tx-path-trace
</sonet-tx-path-trace>
```

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<otn-errors>....</otn-errors>
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  otn-rx-overhead
</otn-rx-overhead>
<otn-tx-overhead>
  otn-tx-overhead
</otn-tx-overhead>
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</otn-stats-counter>
<otn-fec-statistics>....</otn-fec-statistics>
<otn-fec-alarms>....</otn-fec-alarms>
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<otn-otn-mode>....</otn-otn-mode>
<otn-otn-rate>....</otn-otn-rate>
<otn-otn-loopback>....</otn-otn-loopback>
<otn-rx-tti>
  otn-rx-tti
</otn-rx-tti>
<otn-tx-tti>
  otn-tx-tti
</otn-tx-tti>
<media-information>....</media-information>
<ethernet-pcs-statistics>....</ethernet-pcs-statistics>
<ethernet-mac-statistics>....</ethernet-mac-statistics>
<fibrechannel-port-flow-control>....</fibrechannel-port-flow-control>
<fibrechannel-mac-statistics>....</fibrechannel-mac-statistics>
<ethernet-filter-statistics>....</ethernet-filter-statistics>
<ethernet-autonegotiation>....</ethernet-autonegotiation>
<link-partner-status>
  link-partner-status
</link-partner-status>
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<mac-database>....</mac-database>
<dsl-information>....</dsl-information>
<vdsl-information>....</vdsl-information>
<shdsl-information>....</shdsl-information>
<atm-information>....</atm-information>
<modem-information>....</modem-information>
<serial-information>....</serial-information>
<virtual-path-information>....</virtual-path-information>
<ct3-information>....</ct3-information>
<cds1-information>....</cds1-information>
<nxds0-information>....</nxds0-information>
<ds3-mode>
  ds3-mode
</ds3-mode>
<ds3-long-buildout>
  ds3-long-buildout
</ds3-long-buildout>
<e3-framing>
  e3-framing
</e3-framing>
<ds1-framing>
  ds1-framing
</ds1-framing>
```


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```
        <dsu-information>....</dsu-information>
        <ds3-bert-information>....</ds3-bert-information>
        <e3-bert-information>....</e3-bert-information>
        <ds1-bert-information>....</ds1-bert-information>
        <ds0-bert-information>....</ds0-bert-information>
        <hdlc-information>....</hdlc-information>
        <pfe-information>....</pfe-information>
        <logical-interface>....</logical-interface>
        <active-alarms-otn>....</active-alarms-otn>
        <active-defects-otn>....</active-defects-otn>
        <links>....</links>
        <src-information>....</src-information>
        <peer-configuration-status>....</peer-configuration-status>
        <lmi-statistics>....</lmi-statistics>
        <lsi-traffic-statistics>....</lsi-traffic-statistics>
        <stp-traffic-statistics>....</stp-traffic-statistics>

    <queue-num-forwarding-class-name-map>....</queue-num-forwarding-class-name-map>

        <chassis-queue-counters>....</chassis-queue-counters>
        <ingress-queue-counters>....</ingress-queue-counters>
        <otn-oc-information>....</otn-oc-information>
        <otn-otu-information>....</otn-otu-information>
        <otn-odu-information>....</otn-odu-information>
        <ima-state>....</ima-state>
        <ima-group-information>....</ima-group-information>
        <ima-link-information>....</ima-link-information>
        <ethernet-mac-pfc-statistics>....</ethernet-mac-pfc-statistics>
        <satop-information>....</satop-information>
        <cesopsn-information>....</cesopsn-information>
        <ima-group-properties>....</ima-group-properties>
        <ima-link-properties>....</ima-link-properties>
        <cos-header>
          cos-header
        </cos-header>
        <cos-information>....</cos-information>
        <physical-interface-cos-information>....</physical-interface-cos-information>
        <mlfr-uni-nni-traffic-statistics>....</mlfr-uni-nni-traffic-statistics>
        <interval-information>....</interval-information>
      </physical-interface>
    </interface-information>
```

Description Information about a single physical interface

<physical-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <name>
      name
    </name>
    <mc-ae-status>
      mc-ae-status
```

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  admin-status
</admin-status>
<oper-status>
  oper-status
</oper-status>
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  local-index
</local-index>
<snmp-index>
  snmp-index
</snmp-index>
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<l2circuit-mode>
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<ifd-cell-bundle-size>
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</ingress-rate-limit>
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</if-unidirectional>
<if-auto-negotiation>
  if-auto-negotiation
</if-auto-negotiation>
<if-remote-fault>
  if-remote-fault
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<if-speed-auto-negotiation>
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</if-speed-auto-negotiation>
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</if-auto-mdix>
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</minimum-links-in-aggregate>
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</link-type>
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</physical-information>
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</hardware-physical-address>
<alternate-physical-address>
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</alternate-physical-address>
<interface-flapped>
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</interface-flapped>
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<statistics-cleared>
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</statistics-cleared>
<interface-transmit-statistics>
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</interface-transmit-statistics>
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</sonet-payload-pointer-ptrinc-count>
<sonet-payload-pointer-ptrdec-count>
  sonet-payload-pointer-ptrdec-count
</sonet-payload-pointer-ptrdec-count>
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<sonet-tx-overhead>
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</sonet-tx-overhead>
<sonet-rx-path-trace>
  sonet-rx-path-trace
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</sonet-rx-path-trace>
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<modem-information>....</modem-information>
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<cds1-information>....</cds1-information>
<nxds0-information>....</nxds0-information>
<ds3-mode>
  ds3-mode
</ds3-mode>
<ds3-long-buildout>
  ds3-long-buildout
</ds3-long-buildout>
<e3-framing>
  e3-framing
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        </e3-framing>
        <ds1-framing>
          ds1-framing
        </ds1-framing>
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        <e3-bert-information>....</e3-bert-information>
        <ds1-bert-information>....</ds1-bert-information>
        <ds0-bert-information>....</ds0-bert-information>
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        <pfe-information>....</pfe-information>
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        <otn-otu-information>....</otn-otu-information>
        <otn-odu-information>....</otn-odu-information>
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        <ima-link-information>....</ima-link-information>
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        <cesopsn-information>....</cesopsn-information>
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        <ima-link-properties>....</ima-link-properties>
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        </cos-header>
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        <mlfr-uni-nni-traffic-statistics>....</mlfr-uni-nni-traffic-statistics>
        <interval-information>....</interval-information>
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    </interface-filter-information>
```

Description Information about a single physical interface

<physical-interface>

Usage

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```

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</clocking>
<sonet-mode>
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</sonet-mode>
<physical-mode>
  physical-mode
</physical-mode>
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<l2pt-error>
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</if-unidirectional>
<if-auto-negotiation>
  if-auto-negotiation
</if-auto-negotiation>
<if-remote-fault>
  if-remote-fault
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</if-remote-fault>
<if-speed-auto-negotiation>
  if-speed-auto-negotiation
</if-speed-auto-negotiation>
<if-auto-mdix>
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<alternate-physical-address>
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</alternate-physical-address>
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</interface-flapped>
<statistics-cleared>
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</sonet-rx-overhead>
<sonet-tx-overhead>
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  sonet-tx-overhead
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<sonet-rx-path-trace>
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<cds1-information>....</cds1-information>
<nxds0-information>....</nxds0-information>
<ds3-mode>
  ds3-mode
</ds3-mode>
<ds3-long-buildout>
```


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                ds3-long-buildout
              </ds3-long-buildout>
              <e3-framing>
                e3-framing
              </e3-framing>
              <ds1-framing>
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              </ds1-framing>
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              <e3-bert-information>....</e3-bert-information>
              <ds1-bert-information>....</ds1-bert-information>
              <ds0-bert-information>....</ds0-bert-information>
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              <pfe-information>....</pfe-information>
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              <active-defects-otn>....</active-defects-otn>
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              <lsi-traffic-statistics>....</lsi-traffic-statistics>
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              <ima-link-properties>....</ima-link-properties>
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              </cos-header>
              <cos-information>....</cos-information>
              <physical-interface-cos-information>....</physical-interface-cos-information>
              <mlfr-uni-nni-traffic-statistics>....</mlfr-uni-nni-traffic-statistics>
              <interval-information>....</interval-information>
            </physical-interface>
          </interface-policer-information>
```

Description Information about a single physical interface

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<physical-interface-cos-information>

Usage

```
<physical-interface-cos-information>
  <physical-interface-cos-hw-max-queues>
    physical-interface-cos-hw-max-queues
  </physical-interface-cos-hw-max-queues>
  <physical-interface-cos-use-max-queues>
    physical-interface-cos-use-max-queues
  </physical-interface-cos-use-max-queues>
  <physical-interface-schedulers>
    physical-interface-schedulers
  </physical-interface-schedulers>

<physical-interface-red-buffer-occupancy>....</physical-interface-red-buffer-occupancy>

</physical-interface-cos-information>
```

Description Physical interface class-of-service parameters

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Usage

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  <physical-interface-cos-information>
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      physical-interface-cos-hw-max-queues
    </physical-interface-cos-hw-max-queues>
    <physical-interface-cos-use-max-queues>
      physical-interface-cos-use-max-queues
    </physical-interface-cos-use-max-queues>
    <physical-interface-schedulers>
      physical-interface-schedulers
    </physical-interface-schedulers>

<physical-interface-red-buffer-occupancy>....</physical-interface-red-buffer-occupancy>

  </physical-interface-cos-information>
</physical-interface>
```

Description Physical interface class-of-service parameters

<physical-interface-cos-information>

Usage

```
<interface-information>
  <physical-interface>
    <physical-interface-cos-information>
      <physical-interface-cos-hw-max-queues>
        physical-interface-cos-hw-max-queues
      </physical-interface-cos-hw-max-queues>
      <physical-interface-cos-use-max-queues>
```


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```
                    physical-interface-cos-use-max-queues
                  </physical-interface-cos-use-max-queues>
                  <physical-interface-schedulers>
                    physical-interface-schedulers
                  </physical-interface-schedulers>

<physical-interface-red-buffer-occupancy>....</physical-interface-red-buffer-occupancy>

                </physical-interface-cos-information>
              </physical-interface>
            </interface-information>
```

Description Physical interface class-of-service parameters

<physical-interface-cos-information>

Usage

```
            <interface-filter-information>
              <physical-interface>
                <physical-interface-cos-information>
                  <physical-interface-cos-hw-max-queues>
                    physical-interface-cos-hw-max-queues
                  </physical-interface-cos-hw-max-queues>
                  <physical-interface-cos-use-max-queues>
                    physical-interface-cos-use-max-queues
                  </physical-interface-cos-use-max-queues>
                  <physical-interface-schedulers>
                    physical-interface-schedulers
                  </physical-interface-schedulers>

<physical-interface-red-buffer-occupancy>....</physical-interface-red-buffer-occupancy>

                </physical-interface-cos-information>
              </physical-interface>
            </interface-filter-information>
```

Description Physical interface class-of-service parameters

<physical-interface-cos-information>

Usage

```
            <interface-policer-information>
              <physical-interface>
                <physical-interface-cos-information>
                  <physical-interface-cos-hw-max-queues>
                    physical-interface-cos-hw-max-queues
                  </physical-interface-cos-hw-max-queues>
                  <physical-interface-cos-use-max-queues>
                    physical-interface-cos-use-max-queues
                  </physical-interface-cos-use-max-queues>
                  <physical-interface-schedulers>
                    physical-interface-schedulers
```

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```
                </physical-interface-schedulers>

            <physical-interface-red-buffer-occupancy>....</physical-interface-red-buffer-occupancy>

              </physical-interface-cos-information>
            </physical-interface>
          </interface-policer-information>
```

Description Physical interface class-of-service parameters

<physical-interface-red-buffer-occupancy>

Usage

```
<physical-interface-red-buffer-occupancy>
  <instant-usage-weight-exponent>
    instant-usage-weight-exponent
  </instant-usage-weight-exponent>
</physical-interface-red-buffer-occupancy>
```

Description Type of buffer occupancy information used for performing random early drop on the interface

<physical-interface-red-buffer-occupancy>

Usage

```
<physical-interface-cos-information>
  <physical-interface-red-buffer-occupancy>
    <instant-usage-weight-exponent>
      instant-usage-weight-exponent
    </instant-usage-weight-exponent>
  </physical-interface-red-buffer-occupancy>
</physical-interface-cos-information>
```

Description Type of buffer occupancy information used for performing random early drop on the interface

<physical-interface-red-buffer-occupancy>

Usage

```
<physical-interface>
  <physical-interface-cos-information>
    <physical-interface-red-buffer-occupancy>
      <instant-usage-weight-exponent>
        instant-usage-weight-exponent
      </instant-usage-weight-exponent>
    </physical-interface-red-buffer-occupancy>
  </physical-interface-cos-information>
</physical-interface>
```


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Description Type of buffer occupancy information used for performing random early drop on the interface

<physical-interface-red-buffer-occupancy>

Usage

```
<interface-information>
  <physical-interface>
    <physical-interface-cos-information>
      <physical-interface-red-buffer-occupancy>
        <instant-usage-weight-exponent>
          instant-usage-weight-exponent
        </instant-usage-weight-exponent>
      </physical-interface-red-buffer-occupancy>
    </physical-interface-cos-information>
  </physical-interface>
</interface-information>
```

Description Type of buffer occupancy information used for performing random early drop on the interface

<physical-interface-red-buffer-occupancy>

Usage

```
<interface-filter-information>
  <physical-interface>
    <physical-interface-cos-information>
      <physical-interface-red-buffer-occupancy>
        <instant-usage-weight-exponent>
          instant-usage-weight-exponent
        </instant-usage-weight-exponent>
      </physical-interface-red-buffer-occupancy>
    </physical-interface-cos-information>
  </physical-interface>
</interface-filter-information>
```

Description Type of buffer occupancy information used for performing random early drop on the interface

<physical-interface-red-buffer-occupancy>

Usage

```
<interface-policer-information>
  <physical-interface>
    <physical-interface-cos-information>
      <physical-interface-red-buffer-occupancy>
        <instant-usage-weight-exponent>
          instant-usage-weight-exponent
        </instant-usage-weight-exponent>
      </physical-interface-red-buffer-occupancy>
    </physical-interface-cos-information>
```

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```
  </physical-interface>
</interface-policer-information>
```

Description Type of buffer occupancy information used for performing random early drop on the interface

<plcp-defects>

Usage

```
<atm-information>
  <plcp-defects>
    <media-alarm>....</media-alarm>
  </plcp-defects>
</atm-information>
```

Description

<plcp-defects>

Usage

```
<physical-interface>
  <atm-information>
    <plcp-defects>
      <media-alarm>....</media-alarm>
    </plcp-defects>
  </atm-information>
</physical-interface>
```

Description

<plcp-defects>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <plcp-defects>
        <media-alarm>....</media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-information>
```

Description

<plcp-defects>

Usage

```
<interface-filter-information>
  <physical-interface>
    <atm-information>
```


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```
      <plcp-defects>
        <media-alarm>....</media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-filter-information>
```

Description

<plcp-defects>

Usage

```
<interface-policer-information>
  <physical-interface>
    <atm-information>
      <plcp-defects>
        <media-alarm>....</media-alarm>
      </plcp-defects>
    </atm-information>
  </physical-interface>
</interface-policer-information>
```

Description

<plcp-statistics>

Usage

```
<atm-information>
  <plcp-statistics>
    <ferr-count>
      ferr-count
    </ferr-count>
    <ferr-seconds>
      ferr-seconds
    </ferr-seconds>
    <bipe-count>
      bipe-count
    </bipe-count>
    <bipe-seconds>
      bipe-seconds
    </bipe-seconds>
    <febe-count>
      febe-count
    </febe-count>
    <febe-seconds>
      febe-seconds
    </febe-seconds>
  </plcp-statistics>
</atm-information>
```

Description

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<plcp-statistics>

Usage

```
<physical-interface>
  <atm-information>
    <plcp-statistics>
      <ferr-count>
        ferr-count
      </ferr-count>
      <ferr-seconds>
        ferr-seconds
      </ferr-seconds>
      <bipe-count>
        bipe-count
      </bipe-count>
      <bipe-seconds>
        bipe-seconds
      </bipe-seconds>
      <febe-count>
        febe-count
      </febe-count>
      <febe-seconds>
        febe-seconds
      </febe-seconds>
    </plcp-statistics>
  </atm-information>
</physical-interface>
```

Description

<plcp-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <atm-information>
      <plcp-statistics>
        <ferr-count>
          ferr-count
        </ferr-count>
        <ferr-seconds>
          ferr-seconds
        </ferr-seconds>
        <bipe-count>
          bipe-count
        </bipe-count>
        <bipe-seconds>
          bipe-seconds
        </bipe-seconds>
        <febe-count>
          febe-count
        </febe-count>
        <febe-seconds>
          febe-seconds
```


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```
            </febe-seconds>
          </plcp-statistics>
        </atm-information>
      </physical-interface>
    </interface-information>
```

Description

<plcp-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <atm-information>
      <plcp-statistics>
        <ferr-count>
          ferr-count
        </ferr-count>
        <ferr-seconds>
          ferr-seconds
        </ferr-seconds>
        <bipe-count>
          bipe-count
        </bipe-count>
        <bipe-seconds>
          bipe-seconds
        </bipe-seconds>
        <febe-count>
          febe-count
        </febe-count>
        <febe-seconds>
          febe-seconds
        </febe-seconds>
      </plcp-statistics>
    </atm-information>
  </physical-interface>
</interface-filter-information>
```

Description

<plcp-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <atm-information>
      <plcp-statistics>
        <ferr-count>
          ferr-count
        </ferr-count>
        <ferr-seconds>
          ferr-seconds
        </ferr-seconds>
        <bipe-count>
```

```
            bipe-count
           </bipe-count>
           <bipe-seconds>
            bipe-seconds
           </bipe-seconds>
           <febe-count>
            febe-count
           </febe-count>
           <febe-seconds>
            febe-seconds
           </febe-seconds>
          </plcp-statistics>
         </atm-information>
        </physical-interface>
       </interface-policer-information>
```

Description

<policer-information>

Usage

```
<policer-information>
 <policer-family>
  policer-family
 </policer-family>
 <policer-input>
  policer-input
 </policer-input>
 <policer-output>
  policer-output
 </policer-output>
</policer-information>
```

Description Interface policer information

<policer-information>

Usage

```
<address-family>
 <policer-information>
  <policer-family>
   policer-family
  </policer-family>
  <policer-input>
   policer-input
  </policer-input>
  <policer-output>
   policer-output
  </policer-output>
 </policer-information>
</address-family>
```


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Description Interface policer information

<policer-information>

Usage

```
<logical-interface>
  <policer-information>
    <policer-family>
      policer-family
    </policer-family>
    <policer-input>
      policer-input
    </policer-input>
    <policer-output>
      policer-output
    </policer-output>
  </policer-information>
</logical-interface>
```

Description Interface policer information

<policer-information>

Usage

```
<logical-interface>
  <address-family>
    <policer-information>
      <policer-family>
        policer-family
      </policer-family>
      <policer-input>
        policer-input
      </policer-input>
      <policer-output>
        policer-output
      </policer-output>
    </policer-information>
  </address-family>
</logical-interface>
```

Description Interface policer information

<policer-information>

Usage

```
<physical-interface>
  <logical-interface>
    <policer-information>
      <policer-family>
        policer-family
      </policer-family>
      <policer-input>
```

```
                policer-input
              </policer-input>
              <policer-output>
                policer-output
              </policer-output>
            </policer-information>
          </logical-interface>
        </physical-interface>
```

Description Interface policer information

<policer-information>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </logical-interface>
```


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```
  </physical-interface>
</interface-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <policer-information>
          <policer-family>
            policer-family
          </policer-family>
          <policer-input>
            policer-input
          </policer-input>
          <policer-output>
            policer-output
          </policer-output>
        </policer-information>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-information>
  <logical-interface>
    <policer-information>
      <policer-family>
        policer-family
      </policer-family>
      <policer-input>
        policer-input
      </policer-input>
      <policer-output>
        policer-output
      </policer-output>
    </policer-information>
  </logical-interface>
</interface-information>
```

Description Interface policer information

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<policer-information>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </address-family>
  </logical-interface>
</interface-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
```


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```
      <address-family>
       <policer-information>
        <policer-family>
         policer-family
        </policer-family>
        <policer-input>
         policer-input
        </policer-input>
        <policer-output>
         policer-output
        </policer-output>
       </policer-information>
      </address-family>
     </logical-interface>
    </physical-interface>
</interface-filter-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-filter-information>
 <logical-interface>
  <policer-information>
   <policer-family>
    policer-family
   </policer-family>
   <policer-input>
    policer-input
   </policer-input>
   <policer-output>
    policer-output
   </policer-output>
  </policer-information>
 </logical-interface>
</interface-filter-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-filter-information>
 <logical-interface>
  <address-family>
   <policer-information>
    <policer-family>
     policer-family
    </policer-family>
    <policer-input>
     policer-input
```

```
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <policer-information>
          <policer-family>
            policer-family
          </policer-family>
          <policer-input>
            policer-input
          </policer-input>
          <policer-output>
            policer-output
          </policer-output>
        </policer-information>
```


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```
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <policer-information>
      <policer-family>
        policer-family
      </policer-family>
      <policer-input>
        policer-input
      </policer-input>
      <policer-output>
        policer-output
      </policer-output>
    </policer-information>
  </logical-interface>
</interface-policer-information>
```

Description Interface policer information

<policer-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <policer-information>
        <policer-family>
          policer-family
        </policer-family>
        <policer-input>
          policer-input
        </policer-input>
        <policer-output>
          policer-output
        </policer-output>
      </policer-information>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description Interface policer information

<ppp-flags>

Usage

```
<ppp-flags>
  <iff-ppp-flags-acfc>
    iff-ppp-flags-acfc
  </iff-ppp-flags-acfc>
  <iff-ppp-flags-pfc>
    iff-ppp-flags-pfc
  </iff-ppp-flags-pfc>
</ppp-flags>
```

Description

<ppp-flags>

Usage

```
<logical-interface>
  <ppp-flags>
    <iff-ppp-flags-acfc>
      iff-ppp-flags-acfc
    </iff-ppp-flags-acfc>
    <iff-ppp-flags-pfc>
      iff-ppp-flags-pfc
    </iff-ppp-flags-pfc>
  </ppp-flags>
</logical-interface>
```

Description

<ppp-flags>

Usage

```
<physical-interface>
  <ppp-flags>
    <iff-ppp-flags-acfc>
      iff-ppp-flags-acfc
    </iff-ppp-flags-acfc>
    <iff-ppp-flags-pfc>
      iff-ppp-flags-pfc
    </iff-ppp-flags-pfc>
  </ppp-flags>
</physical-interface>
```

Description

<ppp-flags>

Usage

```
<physical-interface>
  <logical-interface>
    <ppp-flags>
```


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```
      <iff-ppp-flags-acfc>
        iff-ppp-flags-acfc
      </iff-ppp-flags-acfc>
      <iff-ppp-flags-pfc>
        iff-ppp-flags-pfc
      </iff-ppp-flags-pfc>
    </ppp-flags>
  </logical-interface>
</physical-interface>
```

Description

<ppp-flags>

Usage

```
<interface-information>
  <physical-interface>
    <ppp-flags>
      <iff-ppp-flags-acfc>
        iff-ppp-flags-acfc
      </iff-ppp-flags-acfc>
      <iff-ppp-flags-pfc>
        iff-ppp-flags-pfc
      </iff-ppp-flags-pfc>
    </ppp-flags>
  </physical-interface>
</interface-information>
```

Description

<ppp-flags>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ppp-flags>
        <iff-ppp-flags-acfc>
          iff-ppp-flags-acfc
        </iff-ppp-flags-acfc>
        <iff-ppp-flags-pfc>
          iff-ppp-flags-pfc
        </iff-ppp-flags-pfc>
      </ppp-flags>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

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<ppp-flags>

Usage

```
<interface-information>
  <logical-interface>
    <ppp-flags>
      <iff-ppp-flags-acfc>
        iff-ppp-flags-acfc
      </iff-ppp-flags-acfc>
      <iff-ppp-flags-pfc>
        iff-ppp-flags-pfc
      </iff-ppp-flags-pfc>
    </ppp-flags>
  </logical-interface>
</interface-information>
```

Description

<ppp-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ppp-flags>
      <iff-ppp-flags-acfc>
        iff-ppp-flags-acfc
      </iff-ppp-flags-acfc>
      <iff-ppp-flags-pfc>
        iff-ppp-flags-pfc
      </iff-ppp-flags-pfc>
    </ppp-flags>
  </physical-interface>
</interface-filter-information>
```

Description

<ppp-flags>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ppp-flags>
        <iff-ppp-flags-acfc>
          iff-ppp-flags-acfc
        </iff-ppp-flags-acfc>
        <iff-ppp-flags-pfc>
          iff-ppp-flags-pfc
        </iff-ppp-flags-pfc>
      </ppp-flags>
    </logical-interface>
  </physical-interface>
```


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```
</interface-filter-information>
```

Description

<ppp-flags>

Usage

```
<interface-filter-information>
 <logical-interface>
  <ppp-flags>
   <iff-ppp-flags-acfc>
    iff-ppp-flags-acfc
   </iff-ppp-flags-acfc>
   <iff-ppp-flags-pfc>
    iff-ppp-flags-pfc
   </iff-ppp-flags-pfc>
  </ppp-flags>
 </logical-interface>
</interface-filter-information>
```

Description

<ppp-flags>

Usage

```
<interface-policer-information>
 <physical-interface>
  <ppp-flags>
   <iff-ppp-flags-acfc>
    iff-ppp-flags-acfc
   </iff-ppp-flags-acfc>
   <iff-ppp-flags-pfc>
    iff-ppp-flags-pfc
   </iff-ppp-flags-pfc>
  </ppp-flags>
 </physical-interface>
</interface-policer-information>
```

Description

<ppp-flags>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <ppp-flags>
    <iff-ppp-flags-acfc>
     iff-ppp-flags-acfc
    </iff-ppp-flags-acfc>
    <iff-ppp-flags-pfc>
     iff-ppp-flags-pfc
    </iff-ppp-flags-pfc>
```

```
      </ppp-flags>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<ppp-flags>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ppp-flags>
      <iff-ppp-flags-acfc>
        iff-ppp-flags-acfc
      </iff-ppp-flags-acfc>
      <iff-ppp-flags-pfc>
        iff-ppp-flags-pfc
      </iff-ppp-flags-pfc>
    </ppp-flags>
  </logical-interface>
</interface-policer-information>
```

Description

<ppp-parameters>

Usage

```
<ppp-parameters>
  <lcp-restart-timer>
    lcp-restart-timer
  </lcp-restart-timer>
  <ncp-restart-timer>
    ncp-restart-timer
  </ncp-restart-timer>
  <termination-requests>
    termination-requests
  </termination-requests>
  <loopback-clear-timer>
    loopback-clear-timer
  </loopback-clear-timer>
</ppp-parameters>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<logical-interface>
  <ppp-parameters>
    <lcp-restart-timer>
      lcp-restart-timer
```


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```
    </lcp-restart-timer>
    <ncp-restart-timer>
      ncp-restart-timer
    </ncp-restart-timer>
    <termination-requests>
      termination-requests
    </termination-requests>
    <loopback-clear-timer>
      loopback-clear-timer
    </loopback-clear-timer>
  </ppp-parameters>
</logical-interface>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<physical-interface>
  <logical-interface>
    <ppp-parameters>
      <lcp-restart-timer>
        lcp-restart-timer
      </lcp-restart-timer>
      <ncp-restart-timer>
        ncp-restart-timer
      </ncp-restart-timer>
      <termination-requests>
        termination-requests
      </termination-requests>
      <loopback-clear-timer>
        loopback-clear-timer
      </loopback-clear-timer>
    </ppp-parameters>
  </logical-interface>
</physical-interface>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ppp-parameters>
        <lcp-restart-timer>
          lcp-restart-timer
        </lcp-restart-timer>
        <ncp-restart-timer>
          ncp-restart-timer
        </ncp-restart-timer>
```

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```
        <termination-requests>
          termination-requests
        </termination-requests>
        <loopback-clear-timer>
          loopback-clear-timer
        </loopback-clear-timer>
      </ppp-parameters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-information>
  <logical-interface>
    <ppp-parameters>
      <lcp-restart-timer>
        lcp-restart-timer
      </lcp-restart-timer>
      <ncp-restart-timer>
        ncp-restart-timer
      </ncp-restart-timer>
      <termination-requests>
        termination-requests
      </termination-requests>
      <loopback-clear-timer>
        loopback-clear-timer
      </loopback-clear-timer>
    </ppp-parameters>
  </logical-interface>
</interface-information>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ppp-parameters>
        <lcp-restart-timer>
          lcp-restart-timer
        </lcp-restart-timer>
        <ncp-restart-timer>
          ncp-restart-timer
        </ncp-restart-timer>
        <termination-requests>
          termination-requests
```


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```
            </termination-requests>
            <loopback-clear-timer>
              loopback-clear-timer
            </loopback-clear-timer>
          </ppp-parameters>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ppp-parameters>
      <lcp-restart-timer>
        lcp-restart-timer
      </lcp-restart-timer>
      <ncp-restart-timer>
        ncp-restart-timer
      </ncp-restart-timer>
      <termination-requests>
        termination-requests
      </termination-requests>
      <loopback-clear-timer>
        loopback-clear-timer
      </loopback-clear-timer>
    </ppp-parameters>
  </logical-interface>
</interface-filter-information>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ppp-parameters>
        <lcp-restart-timer>
          lcp-restart-timer
        </lcp-restart-timer>
        <ncp-restart-timer>
          ncp-restart-timer
        </ncp-restart-timer>
        <termination-requests>
          termination-requests
        </termination-requests>
        <loopback-clear-timer>
```

```
                    loopback-clear-timer
                  </loopback-clear-timer>
                </ppp-parameters>
              </logical-interface>
            </physical-interface>
          </interface-policer-information>
```

Description PPP parameters

<ppp-parameters>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ppp-parameters>
      <lcp-restart-timer>
        lcp-restart-timer
      </lcp-restart-timer>
      <ncp-restart-timer>
        ncp-restart-timer
      </ncp-restart-timer>
      <termination-requests>
        termination-requests
      </termination-requests>
      <loopback-clear-timer>
        loopback-clear-timer
      </loopback-clear-timer>
    </ppp-parameters>
  </logical-interface>
</interface-policer-information>
```

Description PPP parameters

<pppoe-information>

Usage

```
<logical-interface>
  <pppoe-information>
    <pppoe-interface>....</pppoe-interface>
  </pppoe-information>
</logical-interface>
```

Description PPPoE information

<pppoe-information>

Usage

```
<physical-interface>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>....</pppoe-interface>
```


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```
    </pppoe-information>
  </logical-interface>
</physical-interface>
```

Description PPPoE information

<pppoe-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>....</pppoe-interface>
      </pppoe-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description PPPoE information

<pppoe-information>

Usage

```
<interface-information>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>....</pppoe-interface>
    </pppoe-information>
  </logical-interface>
</interface-information>
```

Description PPPoE information

<pppoe-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>....</pppoe-interface>
      </pppoe-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description PPPoE information

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<pppoe-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>....</pppoe-interface>
    </pppoe-information>
  </logical-interface>
</interface-filter-information>
```

Description PPPoE information

<pppoe-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>....</pppoe-interface>
      </pppoe-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description PPPoE information

<pppoe-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>....</pppoe-interface>
    </pppoe-information>
  </logical-interface>
</interface-policer-information>
```

Description PPPoE information

<pppoe-interface>

Usage

```
<pppoe-interface>
  <interface-name>
    interface-name
  </interface-name>
  <interface-index>
    interface-index
```


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```
</interface-index>
<underlying-interface-name>
  underlying-interface-name
</underlying-interface-name>
<underlying-interface-index>
  underlying-interface-index
</underlying-interface-index>
<state>
  state
</state>
<ifl-type>
  ifl-type
</ifl-type>
<session-id>
  session-id
</session-id>
<ac-name-config>
  ac-name-config
</ac-name-config>
<ac-name-session>
  ac-name-session
</ac-name-session>
<service-name>
  service-name
</service-name>
<remote-mac>
  remote-mac
</remote-mac>
<auto-reconnect>
  auto-reconnect
</auto-reconnect>
<idle-timeout>
  idle-timeout
</idle-timeout>
<session-uptime>
  session-uptime
</session-uptime>
<dynamic-profile>
  dynamic-profile
</dynamic-profile>
<pppoe-credits>
  pppoe-credits
</pppoe-credits>
<pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
</pppoe-credit-scale-factor>
<dynamic-interface-bandwidth>
  dynamic-interface-bandwidth
</dynamic-interface-bandwidth>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
<padm-motm>
```

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```
    padm-motm
  </padm-motm>
  <padm-hurl>
    padm-hurl
  </padm-hurl>
  <padg-credits>
    padg-credits
  </padg-credits>
</pppoe-interface>
```

Description

<pppoe-interface>

Usage

```
<logical-interface>
  <pppoe-information>
    <pppoe-interface>
      <interface-name>
        interface-name
      </interface-name>
      <interface-index>
        interface-index
      </interface-index>
      <underlying-interface-name>
        underlying-interface-name
      </underlying-interface-name>
      <underlying-interface-index>
        underlying-interface-index
      </underlying-interface-index>
      <state>
        state
      </state>
      <ifl-type>
        ifl-type
      </ifl-type>
      <session-id>
        session-id
      </session-id>
      <ac-name-config>
        ac-name-config
      </ac-name-config>
      <ac-name-session>
        ac-name-session
      </ac-name-session>
      <service-name>
        service-name
      </service-name>
      <remote-mac>
        remote-mac
      </remote-mac>
      <auto-reconnect>
        auto-reconnect
      </auto-reconnect>
      <idle-timeout>
```


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```
      idle-timeout
    </idle-timeout>
    <session-uptime>
      session-uptime
    </session-uptime>
    <dynamic-profile>
      dynamic-profile
    </dynamic-profile>
    <pppoe-credits>
      pppoe-credits
    </pppoe-credits>
    <pppoe-credit-scale-factor>
      pppoe-credit-scale-factor
    </pppoe-credit-scale-factor>
    <dynamic-interface-bandwidth>
      dynamic-interface-bandwidth
    </dynamic-interface-bandwidth>
    <agent-circuit-id>
      agent-circuit-id
    </agent-circuit-id>
    <agent-remote-id>
      agent-remote-id
    </agent-remote-id>
    <padm-motm>
      padm-motm
    </padm-motm>
    <padm-hurl>
      padm-hurl
    </padm-hurl>
    <padg-credits>
      padg-credits
    </padg-credits>
  </pppoe-interface>
 </pppoe-information>
</logical-interface>
```

Description

<pppoe-interface>

Usage

```
<physical-interface>
 <logical-interface>
  <pppoe-information>
   <pppoe-interface>
    <interface-name>
     interface-name
    </interface-name>
    <interface-index>
     interface-index
    </interface-index>
    <underlying-interface-name>
     underlying-interface-name
    </underlying-interface-name>
    <underlying-interface-index>
```

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```
  underlying-interface-index
</underlying-interface-index>
<state>
  state
</state>
<ifl-type>
  ifl-type
</ifl-type>
<session-id>
  session-id
</session-id>
<ac-name-config>
  ac-name-config
</ac-name-config>
<ac-name-session>
  ac-name-session
</ac-name-session>
<service-name>
  service-name
</service-name>
<remote-mac>
  remote-mac
</remote-mac>
<auto-reconnect>
  auto-reconnect
</auto-reconnect>
<idle-timeout>
  idle-timeout
</idle-timeout>
<session-uptime>
  session-uptime
</session-uptime>
<dynamic-profile>
  dynamic-profile
</dynamic-profile>
<pppoe-credits>
  pppoe-credits
</pppoe-credits>
<pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
</pppoe-credit-scale-factor>
<dynamic-interface-bandwidth>
  dynamic-interface-bandwidth
</dynamic-interface-bandwidth>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
<padm-motm>
  padm-motm
</padm-motm>
<padm-hurl>
  padm-hurl
</padm-hurl>
```


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```
            <padg-credits>
              padg-credits
            </padg-credits>
          </pppoe-interface>
        </pppoe-information>
      </logical-interface>
    </physical-interface>
```

Description

<pppoe-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-index>
            interface-index
          </interface-index>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <ifl-type>
            ifl-type
          </ifl-type>
          <session-id>
            session-id
          </session-id>
          <ac-name-config>
            ac-name-config
          </ac-name-config>
          <ac-name-session>
            ac-name-session
          </ac-name-session>
          <service-name>
            service-name
          </service-name>
          <remote-mac>
            remote-mac
          </remote-mac>
          <auto-reconnect>
            auto-reconnect
          </auto-reconnect>
          <idle-timeout>
```

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```
                idle-timeout
               </idle-timeout>
               <session-uptime>
                session-uptime
               </session-uptime>
               <dynamic-profile>
                dynamic-profile
               </dynamic-profile>
               <pppoe-credits>
                pppoe-credits
               </pppoe-credits>
               <pppoe-credit-scale-factor>
                pppoe-credit-scale-factor
               </pppoe-credit-scale-factor>
               <dynamic-interface-bandwidth>
                dynamic-interface-bandwidth
               </dynamic-interface-bandwidth>
               <agent-circuit-id>
                agent-circuit-id
               </agent-circuit-id>
               <agent-remote-id>
                agent-remote-id
               </agent-remote-id>
               <padm-motm>
                padm-motm
               </padm-motm>
               <padm-hurl>
                padm-hurl
               </padm-hurl>
               <padg-credits>
                padg-credits
               </padg-credits>
              </pppoe-interface>
             </pppoe-information>
            </logical-interface>
           </physical-interface>
          </interface-information>
```

Description

<pppoe-interface>

Usage

```
<interface-information>
 <logical-interface>
  <pppoe-information>
   <pppoe-interface>
    <interface-name>
     interface-name
    </interface-name>
    <interface-index>
     interface-index
    </interface-index>
    <underlying-interface-name>
     underlying-interface-name
```


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```
</underlying-interface-name>
<underlying-interface-index>
  underlying-interface-index
</underlying-interface-index>
<state>
  state
</state>
<ifl-type>
  ifl-type
</ifl-type>
<session-id>
  session-id
</session-id>
<ac-name-config>
  ac-name-config
</ac-name-config>
<ac-name-session>
  ac-name-session
</ac-name-session>
<service-name>
  service-name
</service-name>
<remote-mac>
  remote-mac
</remote-mac>
<auto-reconnect>
  auto-reconnect
</auto-reconnect>
<idle-timeout>
  idle-timeout
</idle-timeout>
<session-uptime>
  session-uptime
</session-uptime>
<dynamic-profile>
  dynamic-profile
</dynamic-profile>
<pppoe-credits>
  pppoe-credits
</pppoe-credits>
<pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
</pppoe-credit-scale-factor>
<dynamic-interface-bandwidth>
  dynamic-interface-bandwidth
</dynamic-interface-bandwidth>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
<padm-motm>
  padm-motm
</padm-motm>
<padm-hurl>
```

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```
            padm-hurl
          </padm-hurl>
          <padg-credits>
            padg-credits
          </padg-credits>
        </pppoe-interface>
      </pppoe-information>
    </logical-interface>
  </interface-information>
```

Description

<pppoe-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-index>
            interface-index
          </interface-index>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <ifl-type>
            ifl-type
          </ifl-type>
          <session-id>
            session-id
          </session-id>
          <ac-name-config>
            ac-name-config
          </ac-name-config>
          <ac-name-session>
            ac-name-session
          </ac-name-session>
          <service-name>
            service-name
          </service-name>
          <remote-mac>
            remote-mac
          </remote-mac>
          <auto-reconnect>
            auto-reconnect
```


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```
            </auto-reconnect>
            <idle-timeout>
              idle-timeout
            </idle-timeout>
            <session-uptime>
              session-uptime
            </session-uptime>
            <dynamic-profile>
              dynamic-profile
            </dynamic-profile>
            <pppoe-credits>
              pppoe-credits
            </pppoe-credits>
            <pppoe-credit-scale-factor>
              pppoe-credit-scale-factor
            </pppoe-credit-scale-factor>
            <dynamic-interface-bandwidth>
              dynamic-interface-bandwidth
            </dynamic-interface-bandwidth>
            <agent-circuit-id>
              agent-circuit-id
            </agent-circuit-id>
            <agent-remote-id>
              agent-remote-id
            </agent-remote-id>
            <padm-motm>
              padm-motm
            </padm-motm>
            <padm-hurl>
              padm-hurl
            </padm-hurl>
            <padg-credits>
              padg-credits
            </padg-credits>
          </pppoe-interface>
        </pppoe-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<pppoe-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-index>
          interface-index
        </interface-index>
```

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```
<underlying-interface-name>
  underlying-interface-name
</underlying-interface-name>
<underlying-interface-index>
  underlying-interface-index
</underlying-interface-index>
<state>
  state
</state>
<ifl-type>
  ifl-type
</ifl-type>
<session-id>
  session-id
</session-id>
<ac-name-config>
  ac-name-config
</ac-name-config>
<ac-name-session>
  ac-name-session
</ac-name-session>
<service-name>
  service-name
</service-name>
<remote-mac>
  remote-mac
</remote-mac>
<auto-reconnect>
  auto-reconnect
</auto-reconnect>
<idle-timeout>
  idle-timeout
</idle-timeout>
<session-uptime>
  session-uptime
</session-uptime>
<dynamic-profile>
  dynamic-profile
</dynamic-profile>
<pppoe-credits>
  pppoe-credits
</pppoe-credits>
<pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
</pppoe-credit-scale-factor>
<dynamic-interface-bandwidth>
  dynamic-interface-bandwidth
</dynamic-interface-bandwidth>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
<padm-motm>
  padm-motm
```


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```
        </padm-motm>
        <padm-hurl>
          padm-hurl
        </padm-hurl>
        <padg-credits>
          padg-credits
        </padg-credits>
      </pppoe-interface>
    </pppoe-information>
  </logical-interface>
</interface-filter-information>
```

Description

<pppoe-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <pppoe-information>
        <pppoe-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-index>
            interface-index
          </interface-index>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <ifl-type>
            ifl-type
          </ifl-type>
          <session-id>
            session-id
          </session-id>
          <ac-name-config>
            ac-name-config
          </ac-name-config>
          <ac-name-session>
            ac-name-session
          </ac-name-session>
          <service-name>
            service-name
          </service-name>
          <remote-mac>
            remote-mac
          </remote-mac>
```

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```
                <auto-reconnect>
                  auto-reconnect
                </auto-reconnect>
                <idle-timeout>
                  idle-timeout
                </idle-timeout>
                <session-uptime>
                  session-uptime
                </session-uptime>
                <dynamic-profile>
                  dynamic-profile
                </dynamic-profile>
                <pppoe-credits>
                  pppoe-credits
                </pppoe-credits>
                <pppoe-credit-scale-factor>
                  pppoe-credit-scale-factor
                </pppoe-credit-scale-factor>
                <dynamic-interface-bandwidth>
                  dynamic-interface-bandwidth
                </dynamic-interface-bandwidth>
                <agent-circuit-id>
                  agent-circuit-id
                </agent-circuit-id>
                <agent-remote-id>
                  agent-remote-id
                </agent-remote-id>
                <padm-motm>
                  padm-motm
                </padm-motm>
                <padm-hurl>
                  padm-hurl
                </padm-hurl>
                <padg-credits>
                  padg-credits
                </padg-credits>
              </pppoe-interface>
            </pppoe-information>
          </logical-interface>
        </physical-interface>
      </interface-policer-information>
```

Description

<pppoe-interface>

Usage

```
<interface-policer-information>
  <logical-interface>
    <pppoe-information>
      <pppoe-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-index>
```


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```
  interface-index
</interface-index>
<underlying-interface-name>
  underlying-interface-name
</underlying-interface-name>
<underlying-interface-index>
  underlying-interface-index
</underlying-interface-index>
<state>
  state
</state>
<ifl-type>
  ifl-type
</ifl-type>
<session-id>
  session-id
</session-id>
<ac-name-config>
  ac-name-config
</ac-name-config>
<ac-name-session>
  ac-name-session
</ac-name-session>
<service-name>
  service-name
</service-name>
<remote-mac>
  remote-mac
</remote-mac>
<auto-reconnect>
  auto-reconnect
</auto-reconnect>
<idle-timeout>
  idle-timeout
</idle-timeout>
<session-uptime>
  session-uptime
</session-uptime>
<dynamic-profile>
  dynamic-profile
</dynamic-profile>
<pppoe-credits>
  pppoe-credits
</pppoe-credits>
<pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
</pppoe-credit-scale-factor>
<dynamic-interface-bandwidth>
  dynamic-interface-bandwidth
</dynamic-interface-bandwidth>
<agent-circuit-id>
  agent-circuit-id
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
```

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```
                <padm-motm>
                  padm-motm
                </padm-motm>
                <padm-hurl>
                  padm-hurl
                </padm-hurl>
                <padg-credits>
                  padg-credits
                </padg-credits>
              </pppoe-interface>
            </pppoe-information>
          </logical-interface>
        </interface-policer-information>
```

Description

<pppoe-underlying-information>

Usage

```
<address-family>
  <pppoe-underlying-information>
    <pppoe-underlying-interface>....</pppoe-underlying-interface>
  </pppoe-underlying-information>
</address-family>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<logical-interface>
  <pppoe-underlying-information>
    <pppoe-underlying-interface>....</pppoe-underlying-interface>
  </pppoe-underlying-information>
</logical-interface>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<logical-interface>
  <address-family>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>....</pppoe-underlying-interface>
    </pppoe-underlying-information>
  </address-family>
</logical-interface>
```

Description PPPoE Underlying information

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<pppoe-underlying-information>

Usage

```
<physical-interface>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>....</pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</physical-interface>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
```

```
            <pppoe-underlying-information>
              <pppoe-underlying-interface>....</pppoe-underlying-interface>
            </pppoe-underlying-information>
          </address-family>
        </logical-interface>
      </physical-interface>
    </interface-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-information>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>....</pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</interface-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </address-family>
  </logical-interface>
</interface-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```


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Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <pppoe-underlying-information>
          <pppoe-underlying-interface>....</pppoe-underlying-interface>
        </pppoe-underlying-information>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>....</pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</interface-filter-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <pppoe-underlying-information>
          <pppoe-underlying-interface>....</pppoe-underlying-interface>
        </pppoe-underlying-information>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>....</pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</interface-policer-information>
```

Description PPPoE Underlying information

<pppoe-underlying-information>

Usage

```
<interface-policer-information>
  <logical-interface>
```


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```
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>....</pppoe-underlying-interface>
      </pppoe-underlying-information>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description PPPoE Underlying information

<pppoe-underlying-interface>

Usage

```
<pppoe-underlying-interface>
  <underlying-interface-name>
    underlying-interface-name
  </underlying-interface-name>
  <underlying-interface-index>
    underlying-interface-index
  </underlying-interface-index>
  <state>
    state
  </state>
  <dynamic-profile>
    dynamic-profile
  </dynamic-profile>
  <max-sessions>
    max-sessions
  </max-sessions>
  <max-sessions-vsa-ignore>
    max-sessions-vsa-ignore
  </max-sessions-vsa-ignore>
  <active-sessions>
    active-sessions
  </active-sessions>
  <ac-name>
    ac-name
  </ac-name>
  <service-name-table>
    service-name-table
  </service-name-table>
  <duplicate-protection>
    duplicate-protection
  </duplicate-protection>
  <short-cycle-protection>
    short-cycle-protection
  </short-cycle-protection>
</pppoe-underlying-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<address-family>
  <pppoe-underlying-information>
    <pppoe-underlying-interface>
      <underlying-interface-name>
        underlying-interface-name
      </underlying-interface-name>
      <underlying-interface-index>
        underlying-interface-index
      </underlying-interface-index>
      <state>
        state
      </state>
      <dynamic-profile>
        dynamic-profile
      </dynamic-profile>
      <max-sessions>
        max-sessions
      </max-sessions>
      <max-sessions-vsa-ignore>
        max-sessions-vsa-ignore
      </max-sessions-vsa-ignore>
      <active-sessions>
        active-sessions
      </active-sessions>
      <ac-name>
        ac-name
      </ac-name>
      <service-name-table>
        service-name-table
      </service-name-table>
      <duplicate-protection>
        duplicate-protection
      </duplicate-protection>
      <short-cycle-protection>
        short-cycle-protection
      </short-cycle-protection>
    </pppoe-underlying-interface>
  </pppoe-underlying-information>
</address-family>
```

Description

<pppoe-underlying-interface>

Usage

```
<logical-interface>
  <pppoe-underlying-information>
    <pppoe-underlying-interface>
      <underlying-interface-name>
        underlying-interface-name
      </underlying-interface-name>
```


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```
        <underlying-interface-index>
          underlying-interface-index
        </underlying-interface-index>
        <state>
          state
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
        </short-cycle-protection>
      </pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<logical-interface>
  <address-family>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>
        <underlying-interface-name>
          underlying-interface-name
        </underlying-interface-name>
        <underlying-interface-index>
          underlying-interface-index
        </underlying-interface-index>
        <state>
          state
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
```

```
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
        </short-cycle-protection>
      </pppoe-underlying-interface>
    </pppoe-underlying-information>
  </address-family>
</logical-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<physical-interface>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>
        <underlying-interface-name>
          underlying-interface-name
        </underlying-interface-name>
        <underlying-interface-index>
          underlying-interface-index
        </underlying-interface-index>
        <state>
          state
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
```


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```
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
        </short-cycle-protection>
      </pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</physical-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <dynamic-profile>
            dynamic-profile
          </dynamic-profile>
          <max-sessions>
            max-sessions
          </max-sessions>
          <max-sessions-vsa-ignore>
            max-sessions-vsa-ignore
          </max-sessions-vsa-ignore>
          <active-sessions>
            active-sessions
          </active-sessions>
          <ac-name>
            ac-name
          </ac-name>
          <service-name-table>
            service-name-table
          </service-name-table>
```

```
                <duplicate-protection>
                  duplicate-protection
                </duplicate-protection>
                <short-cycle-protection>
                  short-cycle-protection
                </short-cycle-protection>
              </pppoe-underlying-interface>
            </pppoe-underlying-information>
          </address-family>
        </logical-interface>
      </physical-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <dynamic-profile>
            dynamic-profile
          </dynamic-profile>
          <max-sessions>
            max-sessions
          </max-sessions>
          <max-sessions-vsa-ignore>
            max-sessions-vsa-ignore
          </max-sessions-vsa-ignore>
          <active-sessions>
            active-sessions
          </active-sessions>
          <ac-name>
            ac-name
          </ac-name>
          <service-name-table>
            service-name-table
          </service-name-table>
          <duplicate-protection>
            duplicate-protection
          </duplicate-protection>
          <short-cycle-protection>
            short-cycle-protection
          </short-cycle-protection>
```


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```
        </pppoe-underlying-interface>
      </pppoe-underlying-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <pppoe-underlying-information>
          <pppoe-underlying-interface>
            <underlying-interface-name>
              underlying-interface-name
            </underlying-interface-name>
            <underlying-interface-index>
              underlying-interface-index
            </underlying-interface-index>
            <state>
              state
            </state>
            <dynamic-profile>
              dynamic-profile
            </dynamic-profile>
            <max-sessions>
              max-sessions
            </max-sessions>
            <max-sessions-vsa-ignore>
              max-sessions-vsa-ignore
            </max-sessions-vsa-ignore>
            <active-sessions>
              active-sessions
            </active-sessions>
            <ac-name>
              ac-name
            </ac-name>
            <service-name-table>
              service-name-table
            </service-name-table>
            <duplicate-protection>
              duplicate-protection
            </duplicate-protection>
            <short-cycle-protection>
              short-cycle-protection
            </short-cycle-protection>
          </pppoe-underlying-interface>
        </pppoe-underlying-information>
      </address-family>
    </logical-interface>
  </physical-interface>
```

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```
</interface-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-information>
 <logical-interface>
  <pppoe-underlying-information>
   <pppoe-underlying-interface>
    <underlying-interface-name>
     underlying-interface-name
    </underlying-interface-name>
    <underlying-interface-index>
     underlying-interface-index
    </underlying-interface-index>
    <state>
     state
    </state>
    <dynamic-profile>
     dynamic-profile
    </dynamic-profile>
    <max-sessions>
     max-sessions
    </max-sessions>
    <max-sessions-vsa-ignore>
     max-sessions-vsa-ignore
    </max-sessions-vsa-ignore>
    <active-sessions>
     active-sessions
    </active-sessions>
    <ac-name>
     ac-name
    </ac-name>
    <service-name-table>
     service-name-table
    </service-name-table>
    <duplicate-protection>
     duplicate-protection
    </duplicate-protection>
    <short-cycle-protection>
     short-cycle-protection
    </short-cycle-protection>
   </pppoe-underlying-interface>
  </pppoe-underlying-information>
 </logical-interface>
</interface-information>
```

Description

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<pppoe-underlying-interface>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <dynamic-profile>
            dynamic-profile
          </dynamic-profile>
          <max-sessions>
            max-sessions
          </max-sessions>
          <max-sessions-vsa-ignore>
            max-sessions-vsa-ignore
          </max-sessions-vsa-ignore>
          <active-sessions>
            active-sessions
          </active-sessions>
          <ac-name>
            ac-name
          </ac-name>
          <service-name-table>
            service-name-table
          </service-name-table>
          <duplicate-protection>
            duplicate-protection
          </duplicate-protection>
          <short-cycle-protection>
            short-cycle-protection
          </short-cycle-protection>
        </pppoe-underlying-interface>
      </pppoe-underlying-information>
    </address-family>
  </logical-interface>
</interface-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
```

```
        <logical-interface>
          <pppoe-underlying-information>
            <pppoe-underlying-interface>
              <underlying-interface-name>
                underlying-interface-name
              </underlying-interface-name>
              <underlying-interface-index>
                underlying-interface-index
              </underlying-interface-index>
              <state>
                state
              </state>
              <dynamic-profile>
                dynamic-profile
              </dynamic-profile>
              <max-sessions>
                max-sessions
              </max-sessions>
              <max-sessions-vsa-ignore>
                max-sessions-vsa-ignore
              </max-sessions-vsa-ignore>
              <active-sessions>
                active-sessions
              </active-sessions>
              <ac-name>
                ac-name
              </ac-name>
              <service-name-table>
                service-name-table
              </service-name-table>
              <duplicate-protection>
                duplicate-protection
              </duplicate-protection>
              <short-cycle-protection>
                short-cycle-protection
              </short-cycle-protection>
            </pppoe-underlying-interface>
          </pppoe-underlying-information>
        </logical-interface>
      </physical-interface>
    </interface-filter-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <pppoe-underlying-information>
          <pppoe-underlying-interface>
            <underlying-interface-name>
              underlying-interface-name
```


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```
        </underlying-interface-name>
        <underlying-interface-index>
          underlying-interface-index
        </underlying-interface-index>
        <state>
          state
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
        </short-cycle-protection>
      </pppoe-underlying-interface>
    </pppoe-underlying-information>
  </address-family>
 </logical-interface>
</physical-interface>
</interface-filter-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-filter-information>
 <logical-interface>
  <pppoe-underlying-information>
   <pppoe-underlying-interface>
    <underlying-interface-name>
     underlying-interface-name
    </underlying-interface-name>
    <underlying-interface-index>
     underlying-interface-index
    </underlying-interface-index>
    <state>
     state
```

```
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
        </short-cycle-protection>
      </pppoe-underlying-interface>
    </pppoe-underlying-information>
  </logical-interface>
</interface-filter-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <dynamic-profile>
            dynamic-profile
          </dynamic-profile>
          <max-sessions>
            max-sessions
          </max-sessions>
```


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```
            <max-sessions-vsa-ignore>
              max-sessions-vsa-ignore
            </max-sessions-vsa-ignore>
            <active-sessions>
              active-sessions
            </active-sessions>
            <ac-name>
              ac-name
            </ac-name>
            <service-name-table>
              service-name-table
            </service-name-table>
            <duplicate-protection>
              duplicate-protection
            </duplicate-protection>
            <short-cycle-protection>
              short-cycle-protection
            </short-cycle-protection>
          </pppoe-underlying-interface>
        </pppoe-underlying-information>
      </address-family>
    </logical-interface>
  </interface-filter-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <pppoe-underlying-information>
        <pppoe-underlying-interface>
          <underlying-interface-name>
            underlying-interface-name
          </underlying-interface-name>
          <underlying-interface-index>
            underlying-interface-index
          </underlying-interface-index>
          <state>
            state
          </state>
          <dynamic-profile>
            dynamic-profile
          </dynamic-profile>
          <max-sessions>
            max-sessions
          </max-sessions>
          <max-sessions-vsa-ignore>
            max-sessions-vsa-ignore
          </max-sessions-vsa-ignore>
          <active-sessions>
            active-sessions
          </active-sessions>
```

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```
            <ac-name>
              ac-name
            </ac-name>
            <service-name-table>
              service-name-table
            </service-name-table>
            <duplicate-protection>
              duplicate-protection
            </duplicate-protection>
            <short-cycle-protection>
              short-cycle-protection
            </short-cycle-protection>
          </pppoe-underlying-interface>
        </pppoe-underlying-information>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <pppoe-underlying-information>
          <pppoe-underlying-interface>
            <underlying-interface-name>
              underlying-interface-name
            </underlying-interface-name>
            <underlying-interface-index>
              underlying-interface-index
            </underlying-interface-index>
            <state>
              state
            </state>
            <dynamic-profile>
              dynamic-profile
            </dynamic-profile>
            <max-sessions>
              max-sessions
            </max-sessions>
            <max-sessions-vsa-ignore>
              max-sessions-vsa-ignore
            </max-sessions-vsa-ignore>
            <active-sessions>
              active-sessions
            </active-sessions>
            <ac-name>
              ac-name
            </ac-name>
            <service-name-table>
              service-name-table
```


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```
            </service-name-table>
            <duplicate-protection>
              duplicate-protection
            </duplicate-protection>
            <short-cycle-protection>
              short-cycle-protection
            </short-cycle-protection>
          </pppoe-underlying-interface>
        </pppoe-underlying-information>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-policer-information>
  <logical-interface>
    <pppoe-underlying-information>
      <pppoe-underlying-interface>
        <underlying-interface-name>
          underlying-interface-name
        </underlying-interface-name>
        <underlying-interface-index>
          underlying-interface-index
        </underlying-interface-index>
        <state>
          state
        </state>
        <dynamic-profile>
          dynamic-profile
        </dynamic-profile>
        <max-sessions>
          max-sessions
        </max-sessions>
        <max-sessions-vsa-ignore>
          max-sessions-vsa-ignore
        </max-sessions-vsa-ignore>
        <active-sessions>
          active-sessions
        </active-sessions>
        <ac-name>
          ac-name
        </ac-name>
        <service-name-table>
          service-name-table
        </service-name-table>
        <duplicate-protection>
          duplicate-protection
        </duplicate-protection>
        <short-cycle-protection>
          short-cycle-protection
```

```
        </short-cycle-protection>
       </pppoe-underlying-interface>
      </pppoe-underlying-information>
     </logical-interface>
    </interface-policer-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<interface-policer-information>
 <logical-interface>
  <address-family>
   <pppoe-underlying-information>
    <pppoe-underlying-interface>
     <underlying-interface-name>
      underlying-interface-name
     </underlying-interface-name>
     <underlying-interface-index>
      underlying-interface-index
     </underlying-interface-index>
     <state>
      state
     </state>
     <dynamic-profile>
      dynamic-profile
     </dynamic-profile>
     <max-sessions>
      max-sessions
     </max-sessions>
     <max-sessions-vsa-ignore>
      max-sessions-vsa-ignore
     </max-sessions-vsa-ignore>
     <active-sessions>
      active-sessions
     </active-sessions>
     <ac-name>
      ac-name
     </ac-name>
     <service-name-table>
      service-name-table
     </service-name-table>
     <duplicate-protection>
      duplicate-protection
     </duplicate-protection>
     <short-cycle-protection>
      short-cycle-protection
     </short-cycle-protection>
    </pppoe-underlying-interface>
   </pppoe-underlying-information>
  </address-family>
 </logical-interface>
</interface-policer-information>
```


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Description

<preserve-interface-statistics>

Usage

```
<physical-interface>
  <preserve-interface-statistics>
    <if-switchover-total>
      if-switchover-total
    </if-switchover-total>
    <if-switchover-last-attempt>
      if-switchover-last-attempt
    </if-switchover-last-attempt>
    <if-switchover-last-time>
      if-switchover-last-time
    </if-switchover-last-time>
    <if-switchover-min-max-avg-time>
      if-switchover-min-max-avg-time
    </if-switchover-min-max-avg-time>
  </preserve-interface-statistics>
</physical-interface>
```

Description Interface switchover statistics

<preserve-interface-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <preserve-interface-statistics>
      <if-switchover-total>
        if-switchover-total
      </if-switchover-total>
      <if-switchover-last-attempt>
        if-switchover-last-attempt
      </if-switchover-last-attempt>
      <if-switchover-last-time>
        if-switchover-last-time
      </if-switchover-last-time>
      <if-switchover-min-max-avg-time>
        if-switchover-min-max-avg-time
      </if-switchover-min-max-avg-time>
    </preserve-interface-statistics>
  </physical-interface>
</interface-information>
```

Description Interface switchover statistics

<preserve-interface-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
```

```
<preserve-interface-statistics>
 <if-switchover-total>
  if-switchover-total
 </if-switchover-total>
 <if-switchover-last-attempt>
  if-switchover-last-attempt
 </if-switchover-last-attempt>
 <if-switchover-last-time>
  if-switchover-last-time
 </if-switchover-last-time>
 <if-switchover-min-max-avg-time>
  if-switchover-min-max-avg-time
 </if-switchover-min-max-avg-time>
</preserve-interface-statistics>
</physical-interface>
</interface-filter-information>
```

Description Interface switchover statistics

<preserve-interface-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <preserve-interface-statistics>
   <if-switchover-total>
    if-switchover-total
   </if-switchover-total>
   <if-switchover-last-attempt>
    if-switchover-last-attempt
   </if-switchover-last-attempt>
   <if-switchover-last-time>
    if-switchover-last-time
   </if-switchover-last-time>
   <if-switchover-min-max-avg-time>
    if-switchover-min-max-avg-time
   </if-switchover-min-max-avg-time>
  </preserve-interface-statistics>
 </physical-interface>
</interface-policer-information>
```

Description Interface switchover statistics

<queue>

Usage

```
<queue-counters>
 <queue>
  <queue-number>
   queue-number
  </queue-number>
  <forwarding-class-name>
```


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```
  forwarding-class-name
</forwarding-class-name>
<queue-counters-queued-packets>
  queue-counters-queued-packets
</queue-counters-queued-packets>
<queue-counters-queued-packets-na>
  queue-counters-queued-packets-na
</queue-counters-queued-packets-na>
<queue-counters-queued-bytes-na>
  queue-counters-queued-bytes-na
</queue-counters-queued-bytes-na>
<queue-counters-queued-bytes>
  queue-counters-queued-bytes
</queue-counters-queued-bytes>
<queue-counters-queued-packets-rate>
  queue-counters-queued-packets-rate
</queue-counters-queued-packets-rate>
<queue-counters-queued-bytes-rate>
  queue-counters-queued-bytes-rate
</queue-counters-queued-bytes-rate>
<queue-counters-trans-packets>
  queue-counters-trans-packets
</queue-counters-trans-packets>
<queue-counters-trans-bytes>
  queue-counters-trans-bytes
</queue-counters-trans-bytes>
<queue-counters-trans-packets-rate>
  queue-counters-trans-packets-rate
</queue-counters-trans-packets-rate>
<queue-counters-trans-bytes-rate>
  queue-counters-trans-bytes-rate
</queue-counters-trans-bytes-rate>
<queue-counters-tail-drop-packets>
  queue-counters-tail-drop-packets
</queue-counters-tail-drop-packets>
<queue-counters-tail-drop-packets-rate>
  queue-counters-tail-drop-packets-rate
</queue-counters-tail-drop-packets-rate>
<queue-counters-tail-drop-packets-na>
  queue-counters-tail-drop-packets-na
</queue-counters-tail-drop-packets-na>
<queue-counters-tail-drop-bytes>
  queue-counters-tail-drop-bytes
</queue-counters-tail-drop-bytes>
<queue-counters-tail-drop-bytes-rate>
  queue-counters-tail-drop-bytes-rate
</queue-counters-tail-drop-bytes-rate>
<queue-counters-rate-limit-drop-packets>
  queue-counters-rate-limit-drop-packets
</queue-counters-rate-limit-drop-packets>
<queue-counters-rate-limit-drop-packets-rate>
  queue-counters-rate-limit-drop-packets-rate
</queue-counters-rate-limit-drop-packets-rate>
<queue-counters-rate-limit-drop-packets-na>
  queue-counters-rate-limit-drop-packets-na
</queue-counters-rate-limit-drop-packets-na>
```

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```
<queue-counters-rate-limit-drop-bytes>
  queue-counters-rate-limit-drop-bytes
</queue-counters-rate-limit-drop-bytes>
<queue-counters-rate-limit-drop-bytes-rate>
  queue-counters-rate-limit-drop-bytes-rate
</queue-counters-rate-limit-drop-bytes-rate>
<queue-counters-rate-limit-drop-bytes-na>
  queue-counters-rate-limit-drop-bytes-na
</queue-counters-rate-limit-drop-bytes-na>
<queue-counters-red-packets-na>
  queue-counters-red-packets-na
</queue-counters-red-packets-na>
<queue-counters-red-packets>
  queue-counters-red-packets
</queue-counters-red-packets>
<queue-counters-red-bytes-na>
  queue-counters-red-bytes-na
</queue-counters-red-bytes-na>
<queue-counters-red-bytes>
  queue-counters-red-bytes
</queue-counters-red-bytes>
<queue-counters-red-packets-rate>
  queue-counters-red-packets-rate
</queue-counters-red-packets-rate>
<queue-counters-red-bytes-rate>
  queue-counters-red-bytes-rate
</queue-counters-red-bytes-rate>
<queue-counters-red-packets-ln>
  queue-counters-red-packets-ln
</queue-counters-red-packets-ln>
<queue-counters-red-bytes-ln>
  queue-counters-red-bytes-ln
</queue-counters-red-bytes-ln>
<queue-counters-red-packets-rate-ln>
  queue-counters-red-packets-rate-ln
</queue-counters-red-packets-rate-ln>
<queue-counters-red-bytes-rate-ln>
  queue-counters-red-bytes-rate-ln
</queue-counters-red-bytes-rate-ln>
<queue-counters-red-packets-lt>
  queue-counters-red-packets-lt
</queue-counters-red-packets-lt>
<queue-counters-red-bytes-lt>
  queue-counters-red-bytes-lt
</queue-counters-red-bytes-lt>
<queue-counters-red-packets-rate-lt>
  queue-counters-red-packets-rate-lt
</queue-counters-red-packets-rate-lt>
<queue-counters-red-bytes-rate-lt>
  queue-counters-red-bytes-rate-lt
</queue-counters-red-bytes-rate-lt>
<queue-counters-red-packets-ht>
  queue-counters-red-packets-ht
</queue-counters-red-packets-ht>
<queue-counters-red-bytes-ht>
  queue-counters-red-bytes-ht
```


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```
</queue-counters-red-bytes-ht>
<queue-counters-red-packets-rate-ht>
  queue-counters-red-packets-rate-ht
</queue-counters-red-packets-rate-ht>
<queue-counters-red-bytes-rate-ht>
  queue-counters-red-bytes-rate-ht
</queue-counters-red-bytes-rate-ht>
<queue-counters-red-packets-hn>
  queue-counters-red-packets-hn
</queue-counters-red-packets-hn>
<queue-counters-red-bytes-hn>
  queue-counters-red-bytes-hn
</queue-counters-red-bytes-hn>
<queue-counters-red-packets-rate-hn>
  queue-counters-red-packets-rate-hn
</queue-counters-red-packets-rate-hn>
<queue-counters-red-bytes-rate-hn>
  queue-counters-red-bytes-rate-hn
</queue-counters-red-bytes-rate-hn>
<queue-counters-red-packets-low>
  queue-counters-red-packets-low
</queue-counters-red-packets-low>
<queue-counters-red-bytes-low>
  queue-counters-red-bytes-low
</queue-counters-red-bytes-low>
<queue-counters-red-packets-rate-low>
  queue-counters-red-packets-rate-low
</queue-counters-red-packets-rate-low>
<queue-counters-red-bytes-rate-low>
  queue-counters-red-bytes-rate-low
</queue-counters-red-bytes-rate-low>
<queue-counters-red-packets-medium-low>
  queue-counters-red-packets-medium-low
</queue-counters-red-packets-medium-low>
<queue-counters-red-bytes-medium-low>
  queue-counters-red-bytes-medium-low
</queue-counters-red-bytes-medium-low>
<queue-counters-red-packets-rate-medium-low>
  queue-counters-red-packets-rate-medium-low
</queue-counters-red-packets-rate-medium-low>
<queue-counters-red-bytes-rate-medium-low>
  queue-counters-red-bytes-rate-medium-low
</queue-counters-red-bytes-rate-medium-low>
<queue-counters-red-packets-medium-high>
  queue-counters-red-packets-medium-high
</queue-counters-red-packets-medium-high>
<queue-counters-red-bytes-medium-high>
  queue-counters-red-bytes-medium-high
</queue-counters-red-bytes-medium-high>
<queue-counters-red-packets-rate-medium-high>
  queue-counters-red-packets-rate-medium-high
</queue-counters-red-packets-rate-medium-high>
<queue-counters-red-bytes-rate-medium-high>
  queue-counters-red-bytes-rate-medium-high
</queue-counters-red-bytes-rate-medium-high>
<queue-counters-red-packets-medium>
```

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```
                    queue-counters-red-packets-medium
                  </queue-counters-red-packets-medium>
                  <queue-counters-red-bytes-medium>
                    queue-counters-red-bytes-medium
                  </queue-counters-red-bytes-medium>
                  <queue-counters-red-packets-rate-medium>
                    queue-counters-red-packets-rate-medium
                  </queue-counters-red-packets-rate-medium>
                  <queue-counters-red-bytes-rate-medium>
                    queue-counters-red-bytes-rate-medium
                  </queue-counters-red-bytes-rate-medium>
                  <queue-counters-red-packets-high>
                    queue-counters-red-packets-high
                  </queue-counters-red-packets-high>
                  <queue-counters-red-bytes-high>
                    queue-counters-red-bytes-high
                  </queue-counters-red-bytes-high>
                  <queue-counters-red-packets-rate-high>
                    queue-counters-red-packets-rate-high
                  </queue-counters-red-packets-rate-high>
                  <queue-counters-red-bytes-rate-high>
                    queue-counters-red-bytes-rate-high
                  </queue-counters-red-bytes-rate-high>
                  <queue-counters-total-drop-packets>
                    queue-counters-total-drop-packets
                  </queue-counters-total-drop-packets>
                  <queue-counters-total-drop-packets-rate>
                    queue-counters-total-drop-packets-rate
                  </queue-counters-total-drop-packets-rate>
                  <queue-counters-total-drop-bytes>
                    queue-counters-total-drop-bytes
                  </queue-counters-total-drop-bytes>
                  <queue-counters-total-drop-bytes-rate>
                    queue-counters-total-drop-bytes-rate
                  </queue-counters-total-drop-bytes-rate>
                </queue>
              </queue-counters>
```

Description Counters for a single queue

<queue>

Usage

```
<chassis-queue-counters>
  <queue>
    <queue-number>
      queue-number
    </queue-number>
    <forwarding-class-name>
      forwarding-class-name
    </forwarding-class-name>
    <queue-counters-queued-packets>
      queue-counters-queued-packets
    </queue-counters-queued-packets>
```


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```
<queue-counters-queued-packets-na>
  queue-counters-queued-packets-na
</queue-counters-queued-packets-na>
<queue-counters-queued-bytes-na>
  queue-counters-queued-bytes-na
</queue-counters-queued-bytes-na>
<queue-counters-queued-bytes>
  queue-counters-queued-bytes
</queue-counters-queued-bytes>
<queue-counters-queued-packets-rate>
  queue-counters-queued-packets-rate
</queue-counters-queued-packets-rate>
<queue-counters-queued-bytes-rate>
  queue-counters-queued-bytes-rate
</queue-counters-queued-bytes-rate>
<queue-counters-trans-packets>
  queue-counters-trans-packets
</queue-counters-trans-packets>
<queue-counters-trans-bytes>
  queue-counters-trans-bytes
</queue-counters-trans-bytes>
<queue-counters-trans-packets-rate>
  queue-counters-trans-packets-rate
</queue-counters-trans-packets-rate>
<queue-counters-trans-bytes-rate>
  queue-counters-trans-bytes-rate
</queue-counters-trans-bytes-rate>
<queue-counters-tail-drop-packets>
  queue-counters-tail-drop-packets
</queue-counters-tail-drop-packets>
<queue-counters-tail-drop-packets-rate>
  queue-counters-tail-drop-packets-rate
</queue-counters-tail-drop-packets-rate>
<queue-counters-tail-drop-packets-na>
  queue-counters-tail-drop-packets-na
</queue-counters-tail-drop-packets-na>
<queue-counters-tail-drop-bytes>
  queue-counters-tail-drop-bytes
</queue-counters-tail-drop-bytes>
<queue-counters-tail-drop-bytes-rate>
  queue-counters-tail-drop-bytes-rate
</queue-counters-tail-drop-bytes-rate>
<queue-counters-rate-limit-drop-packets>
  queue-counters-rate-limit-drop-packets
</queue-counters-rate-limit-drop-packets>
<queue-counters-rate-limit-drop-packets-rate>
  queue-counters-rate-limit-drop-packets-rate
</queue-counters-rate-limit-drop-packets-rate>
<queue-counters-rate-limit-drop-packets-na>
  queue-counters-rate-limit-drop-packets-na
</queue-counters-rate-limit-drop-packets-na>
<queue-counters-rate-limit-drop-bytes>
  queue-counters-rate-limit-drop-bytes
</queue-counters-rate-limit-drop-bytes>
<queue-counters-rate-limit-drop-bytes-rate>
  queue-counters-rate-limit-drop-bytes-rate
```

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</queue-counters-rate-limit-drop-bytes-rate>
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Description Counters for a single queue

<queue>

Usage

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      queue-number
    </queue-number>
    <forwarding-class-name>
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Description Counters for a single queue

<queue>

Usage

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        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
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```

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        </queue-counters-red-packets-rate-high>
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          queue-counters-red-bytes-rate-high
        </queue-counters-red-bytes-rate-high>
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          queue-counters-total-drop-packets
        </queue-counters-total-drop-packets>
        <queue-counters-total-drop-packets-rate>
          queue-counters-total-drop-packets-rate
        </queue-counters-total-drop-packets-rate>
        <queue-counters-total-drop-bytes>
          queue-counters-total-drop-bytes
        </queue-counters-total-drop-bytes>
        <queue-counters-total-drop-bytes-rate>
          queue-counters-total-drop-bytes-rate
        </queue-counters-total-drop-bytes-rate>
      </queue>
    </queue-counters>
  </logical-interface>
```

Description Counters for a single queue

<queue>

Usage

```
<logical-interface>
  <ingress-queue-counters>
    <queue>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
      <queue-counters-queued-packets>
        queue-counters-queued-packets
      </queue-counters-queued-packets>
      <queue-counters-queued-packets-na>
        queue-counters-queued-packets-na
      </queue-counters-queued-packets-na>
      <queue-counters-queued-bytes-na>
        queue-counters-queued-bytes-na
      </queue-counters-queued-bytes-na>
      <queue-counters-queued-bytes>
        queue-counters-queued-bytes
      </queue-counters-queued-bytes>
      <queue-counters-queued-packets-rate>
        queue-counters-queued-packets-rate
      </queue-counters-queued-packets-rate>
```


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                <queue-counters-total-drop-bytes>
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                </queue-counters-total-drop-bytes>
                <queue-counters-total-drop-bytes-rate>
                  queue-counters-total-drop-bytes-rate
                </queue-counters-total-drop-bytes-rate>
              </queue>
            </ingress-queue-counters>
          </logical-interface>
```

Description Counters for a single queue

<queue>

Usage

```
<physical-interface>
  <queue-counters>
    <queue>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
      <queue-counters-queued-packets>
        queue-counters-queued-packets
      </queue-counters-queued-packets>
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        queue-counters-queued-packets-na
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      <queue-counters-queued-bytes-na>
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                <queue-counters-red-bytes-rate-high>
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                </queue-counters-total-drop-bytes>
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                  queue-counters-total-drop-bytes-rate
                </queue-counters-total-drop-bytes-rate>
              </queue>
            </queue-counters>
          </physical-interface>
```

Description Counters for a single queue

<queue>

Usage

```
<physical-interface>
  <logical-interface>
    <queue-counters>
      <queue>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
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          queue-counters-queued-packets
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Description Counters for a single queue

<queue>

Usage

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Description Counters for a single queue

<queue>

Usage

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  </chassis-queue-counters>
</physical-interface>
```

Description Counters for a single queue

<queue>

Usage

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      </queue-number>
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        forwarding-class-name
      </forwarding-class-name>
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        queue-counters-queued-packets
      </queue-counters-queued-packets>
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        queue-counters-queued-packets-na
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      </queue-counters-queued-packets-rate>
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       queue-counters-total-drop-bytes-rate
      </queue-counters-total-drop-bytes-rate>
     </queue>
    </ingress-queue-counters>
   </physical-interface>
```

Description Counters for a single queue

<queue>

Usage

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 <interface-set-queue-information>
  <queue-counters>
   <queue>
    <queue-number>
     queue-number
    </queue-number>
    <forwarding-class-name>
     forwarding-class-name
    </forwarding-class-name>
    <queue-counters-queued-packets>
     queue-counters-queued-packets
    </queue-counters-queued-packets>
    <queue-counters-queued-packets-na>
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    <queue-counters-queued-bytes-na>
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    </queue-counters-queued-bytes-na>
    <queue-counters-queued-bytes>
     queue-counters-queued-bytes
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            queue-counters-total-drop-bytes-rate
           </queue-counters-total-drop-bytes-rate>
          </queue>
         </queue-counters>
        </interface-set-queue-information>
       </interface-set>
```

Description Counters for a single queue

<queue>

Usage

```
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 <interface-set-queue-information>
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     queue-number
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Description Counters for a single queue

<queue>

Usage

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Description Counters for a single queue

<queue>

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</queue-counters-total-drop-bytes>
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                </queue-counters-total-drop-bytes-rate>
              </queue>
            </queue-counters>
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        </physical-interface>
      </interface-information>
```

Description Counters for a single queue

<queue>

Usage

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  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <queue>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
          <queue-counters-queued-packets>
            queue-counters-queued-packets
          </queue-counters-queued-packets>
          <queue-counters-queued-packets-na>
            queue-counters-queued-packets-na
          </queue-counters-queued-packets-na>
          <queue-counters-queued-bytes-na>
            queue-counters-queued-bytes-na
          </queue-counters-queued-bytes-na>
          <queue-counters-queued-bytes>
            queue-counters-queued-bytes
          </queue-counters-queued-bytes>
          <queue-counters-queued-packets-rate>
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  queue-counters-total-drop-bytes
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            </queue-counters-total-drop-bytes-rate>
          </queue>
        </ingress-queue-counters>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-information>
  <physical-interface>
    <chassis-queue-counters>
      <queue>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queue-counters-queued-packets>
          queue-counters-queued-packets
        </queue-counters-queued-packets>
        <queue-counters-queued-packets-na>
          queue-counters-queued-packets-na
        </queue-counters-queued-packets-na>
        <queue-counters-queued-bytes-na>
          queue-counters-queued-bytes-na
        </queue-counters-queued-bytes-na>
        <queue-counters-queued-bytes>
          queue-counters-queued-bytes
        </queue-counters-queued-bytes>
        <queue-counters-queued-packets-rate>
          queue-counters-queued-packets-rate
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        <queue-counters-queued-bytes-rate>
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        <queue-counters-trans-bytes>
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            </queue-counters-total-drop-bytes>
            <queue-counters-total-drop-bytes-rate>
              queue-counters-total-drop-bytes-rate
            </queue-counters-total-drop-bytes-rate>
          </queue>
        </chassis-queue-counters>
      </physical-interface>
    </interface-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-information>
  <physical-interface>
    <ingress-queue-counters>
      <queue>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queue-counters-queued-packets>
          queue-counters-queued-packets
        </queue-counters-queued-packets>
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        <queue-counters-queued-bytes>
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```

Description Counters for a single queue

<queue>

Usage

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Description Counters for a single queue

<queue>

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  queue-counters-total-drop-bytes-rate
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```
        </queue-counters-total-drop-bytes-rate>
       </queue>
      </ingress-queue-counters>
     </logical-interface>
    </interface-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-information>
 <interface-set>
  <interface-set-queue-information>
   <queue-counters>
    <queue>
     <queue-number>
      queue-number
     </queue-number>
     <forwarding-class-name>
      forwarding-class-name
     </forwarding-class-name>
     <queue-counters-queued-packets>
      queue-counters-queued-packets
     </queue-counters-queued-packets>
     <queue-counters-queued-packets-na>
      queue-counters-queued-packets-na
     </queue-counters-queued-packets-na>
     <queue-counters-queued-bytes-na>
      queue-counters-queued-bytes-na
     </queue-counters-queued-bytes-na>
     <queue-counters-queued-bytes>
      queue-counters-queued-bytes
     </queue-counters-queued-bytes>
     <queue-counters-queued-packets-rate>
      queue-counters-queued-packets-rate
     </queue-counters-queued-packets-rate>
     <queue-counters-queued-bytes-rate>
      queue-counters-queued-bytes-rate
     </queue-counters-queued-bytes-rate>
     <queue-counters-trans-packets>
      queue-counters-trans-packets
     </queue-counters-trans-packets>
     <queue-counters-trans-bytes>
      queue-counters-trans-bytes
     </queue-counters-trans-bytes>
     <queue-counters-trans-packets-rate>
      queue-counters-trans-packets-rate
     </queue-counters-trans-packets-rate>
     <queue-counters-trans-bytes-rate>
      queue-counters-trans-bytes-rate
     </queue-counters-trans-bytes-rate>
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      queue-counters-tail-drop-packets
```


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  queue-counters-total-drop-bytes
</queue-counters-total-drop-bytes>
<queue-counters-total-drop-bytes-rate>
  queue-counters-total-drop-bytes-rate
```

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```
            </queue-counters-total-drop-bytes-rate>
          </queue>
        </queue-counters>
      </interface-set-queue-information>
    </interface-set>
  </interface-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <ingress-queue-counters>
        <queue>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
          <queue-counters-queued-packets>
            queue-counters-queued-packets
          </queue-counters-queued-packets>
          <queue-counters-queued-packets-na>
            queue-counters-queued-packets-na
          </queue-counters-queued-packets-na>
          <queue-counters-queued-bytes-na>
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          </queue-counters-queued-bytes-na>
          <queue-counters-queued-bytes>
            queue-counters-queued-bytes
          </queue-counters-queued-bytes>
          <queue-counters-queued-packets-rate>
            queue-counters-queued-packets-rate
          </queue-counters-queued-packets-rate>
          <queue-counters-queued-bytes-rate>
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          </queue-counters-queued-bytes-rate>
          <queue-counters-trans-packets>
            queue-counters-trans-packets
          </queue-counters-trans-packets>
          <queue-counters-trans-bytes>
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          </queue-counters-trans-bytes>
          <queue-counters-trans-packets-rate>
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          <queue-counters-trans-bytes-rate>
            queue-counters-trans-bytes-rate
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</queue-counters-total-drop-bytes>
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```
                    queue-counters-total-drop-bytes-rate
                  </queue-counters-total-drop-bytes-rate>
                </queue>
              </ingress-queue-counters>
            </interface-set-queue-information>
          </interface-set>
        </interface-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-filter-information>
  <physical-interface>
    <queue-counters>
      <queue>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queue-counters-queued-packets>
          queue-counters-queued-packets
        </queue-counters-queued-packets>
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Description Counters for a single queue

<queue>

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Description Counters for a single queue

<queue>

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Description Counters for a single queue

<queue>

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        </chassis-queue-counters>
      </physical-interface>
    </interface-filter-information>
```

Description Counters for a single queue

<queue>

Usage

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                  </queue-counters-total-drop-bytes-rate>
                </queue>
              </ingress-queue-counters>
            </physical-interface>
          </interface-filter-information>
```

Description Counters for a single queue

<queue>

Usage

```
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  <logical-interface>
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          queue-number
        </queue-number>
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          forwarding-class-name
        </forwarding-class-name>
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          queue-counters-queued-packets
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          queue-counters-queued-packets-na
        </queue-counters-queued-packets-na>
        <queue-counters-queued-bytes-na>
          queue-counters-queued-bytes-na
        </queue-counters-queued-bytes-na>
        <queue-counters-queued-bytes>
          queue-counters-queued-bytes
        </queue-counters-queued-bytes>
        <queue-counters-queued-packets-rate>
          queue-counters-queued-packets-rate
        </queue-counters-queued-packets-rate>
        <queue-counters-queued-bytes-rate>
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          queue-counters-trans-packets
        </queue-counters-trans-packets>
        <queue-counters-trans-bytes>
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        </queue-counters-trans-bytes>
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        </queue-counters-trans-packets-rate>
        <queue-counters-trans-bytes-rate>
          queue-counters-trans-bytes-rate
        </queue-counters-trans-bytes-rate>
        <queue-counters-tail-drop-packets>
          queue-counters-tail-drop-packets
```


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        </queue-counters-total-drop-bytes-rate>
       </queue>
      </queue-counters>
     </logical-interface>
    </interface-filter-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-filter-information>
 <logical-interface>
  <ingress-queue-counters>
   <queue>
    <queue-number>
     queue-number
    </queue-number>
    <forwarding-class-name>
     forwarding-class-name
    </forwarding-class-name>
    <queue-counters-queued-packets>
     queue-counters-queued-packets
    </queue-counters-queued-packets>
    <queue-counters-queued-packets-na>
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```
      </queue>
    </ingress-queue-counters>
  </logical-interface>
</interface-filter-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-policer-information>
  <physical-interface>
    <queue-counters>
      <queue>
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          queue-number
        </queue-number>
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          forwarding-class-name
        </forwarding-class-name>
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  </interface-policer-information>
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Description Counters for a single queue

<queue>

Usage

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    </physical-interface>
  </interface-policer-information>
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Description Counters for a single queue

<queue>

Usage

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       </ingress-queue-counters>
      </logical-interface>
     </physical-interface>
    </interface-policer-information>
```

Description Counters for a single queue

<queue>

Usage

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  <chassis-queue-counters>
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     queue-number
    </queue-number>
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     forwarding-class-name
    </forwarding-class-name>
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     queue-counters-queued-packets
    </queue-counters-queued-packets>
    <queue-counters-queued-packets-na>
     queue-counters-queued-packets-na
    </queue-counters-queued-packets-na>
    <queue-counters-queued-bytes-na>
     queue-counters-queued-bytes-na
    </queue-counters-queued-bytes-na>
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    <queue-counters-queued-packets-rate>
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    </queue-counters-queued-packets-rate>
    <queue-counters-queued-bytes-rate>
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    </queue-counters-tail-drop-packets>
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```
      </queue>
    </chassis-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Counters for a single queue

<queue>

Usage

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          queue-number
        </queue-number>
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          forwarding-class-name
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    </ingress-queue-counters>
  </physical-interface>
</interface-policer-information>
```

Description Counters for a single queue

<queue>

Usage

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</queue-counters-red-packets-medium-low>
<queue-counters-red-bytes-medium-low>
queue-counters-red-bytes-medium-low
</queue-counters-red-bytes-medium-low>

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```
    <queue-counters-red-packets-rate-medium-low>
      queue-counters-red-packets-rate-medium-low
    </queue-counters-red-packets-rate-medium-low>
    <queue-counters-red-bytes-rate-medium-low>
      queue-counters-red-bytes-rate-medium-low
    </queue-counters-red-bytes-rate-medium-low>
    <queue-counters-red-packets-medium-high>
      queue-counters-red-packets-medium-high
    </queue-counters-red-packets-medium-high>
    <queue-counters-red-bytes-medium-high>
      queue-counters-red-bytes-medium-high
    </queue-counters-red-bytes-medium-high>
    <queue-counters-red-packets-rate-medium-high>
      queue-counters-red-packets-rate-medium-high
    </queue-counters-red-packets-rate-medium-high>
    <queue-counters-red-bytes-rate-medium-high>
      queue-counters-red-bytes-rate-medium-high
    </queue-counters-red-bytes-rate-medium-high>
    <queue-counters-red-packets-medium>
      queue-counters-red-packets-medium
    </queue-counters-red-packets-medium>
    <queue-counters-red-bytes-medium>
      queue-counters-red-bytes-medium
    </queue-counters-red-bytes-medium>
    <queue-counters-red-packets-rate-medium>
      queue-counters-red-packets-rate-medium
    </queue-counters-red-packets-rate-medium>
    <queue-counters-red-bytes-rate-medium>
      queue-counters-red-bytes-rate-medium
    </queue-counters-red-bytes-rate-medium>
    <queue-counters-red-packets-high>
      queue-counters-red-packets-high
    </queue-counters-red-packets-high>
    <queue-counters-red-bytes-high>
      queue-counters-red-bytes-high
    </queue-counters-red-bytes-high>
    <queue-counters-red-packets-rate-high>
      queue-counters-red-packets-rate-high
    </queue-counters-red-packets-rate-high>
    <queue-counters-red-bytes-rate-high>
      queue-counters-red-bytes-rate-high
    </queue-counters-red-bytes-rate-high>
    <queue-counters-total-drop-packets>
      queue-counters-total-drop-packets
    </queue-counters-total-drop-packets>
    <queue-counters-total-drop-packets-rate>
      queue-counters-total-drop-packets-rate
    </queue-counters-total-drop-packets-rate>
    <queue-counters-total-drop-bytes>
      queue-counters-total-drop-bytes
    </queue-counters-total-drop-bytes>
    <queue-counters-total-drop-bytes-rate>
      queue-counters-total-drop-bytes-rate
    </queue-counters-total-drop-bytes-rate>
  </queue>
</queue-counters>
```

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```
  </logical-interface>
</interface-policer-information>
```

Description Counters for a single queue

<queue>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <queue>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
        <queue-counters-queued-packets>
          queue-counters-queued-packets
        </queue-counters-queued-packets>
        <queue-counters-queued-packets-na>
          queue-counters-queued-packets-na
        </queue-counters-queued-packets-na>
        <queue-counters-queued-bytes-na>
          queue-counters-queued-bytes-na
        </queue-counters-queued-bytes-na>
        <queue-counters-queued-bytes>
          queue-counters-queued-bytes
        </queue-counters-queued-bytes>
        <queue-counters-queued-packets-rate>
          queue-counters-queued-packets-rate
        </queue-counters-queued-packets-rate>
        <queue-counters-queued-bytes-rate>
          queue-counters-queued-bytes-rate
        </queue-counters-queued-bytes-rate>
        <queue-counters-trans-packets>
          queue-counters-trans-packets
        </queue-counters-trans-packets>
        <queue-counters-trans-bytes>
          queue-counters-trans-bytes
        </queue-counters-trans-bytes>
        <queue-counters-trans-packets-rate>
          queue-counters-trans-packets-rate
        </queue-counters-trans-packets-rate>
        <queue-counters-trans-bytes-rate>
          queue-counters-trans-bytes-rate
        </queue-counters-trans-bytes-rate>
        <queue-counters-tail-drop-packets>
          queue-counters-tail-drop-packets
        </queue-counters-tail-drop-packets>
        <queue-counters-tail-drop-packets-rate>
          queue-counters-tail-drop-packets-rate
        </queue-counters-tail-drop-packets-rate>
```


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<queue-counters-tail-drop-packets-na>
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</queue-counters-red-bytes-medium-low>
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```


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    </queue-counters-red-packets-medium-high>
    <queue-counters-red-bytes-medium-high>
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    </queue-counters-red-packets-rate-medium-high>
    <queue-counters-red-bytes-rate-medium-high>
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    <queue-counters-red-packets-medium>
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    <queue-counters-red-bytes-medium>
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    </queue-counters-red-packets-high>
    <queue-counters-red-bytes-high>
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    </queue-counters-red-packets-rate-high>
    <queue-counters-red-bytes-rate-high>
      queue-counters-red-bytes-rate-high
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    <queue-counters-total-drop-packets-rate>
      queue-counters-total-drop-packets-rate
    </queue-counters-total-drop-packets-rate>
    <queue-counters-total-drop-bytes>
      queue-counters-total-drop-bytes
    </queue-counters-total-drop-bytes>
    <queue-counters-total-drop-bytes-rate>
      queue-counters-total-drop-bytes-rate
    </queue-counters-total-drop-bytes-rate>
   </queue>
  </ingress-queue-counters>
</logical-interface>
```

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```
</interface-policer-information>
```

Description Counters for a single queue

<queue-counters>

Usage

```
<queue-counters>
  <queue-counters-error-message>
    queue-counters-error-message
  </queue-counters-error-message>
  <queue>....</queue>
  <interface-cos-short-summary>....</interface-cos-short-summary>
  <interface-cos-summary>....</interface-cos-summary>
</queue-counters>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<logical-interface>
  <queue-counters>
    <queue-counters-error-message>
      queue-counters-error-message
    </queue-counters-error-message>
    <queue>....</queue>
    <interface-cos-short-summary>....</interface-cos-short-summary>
    <interface-cos-summary>....</interface-cos-summary>
  </queue-counters>
</logical-interface>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<physical-interface>
  <queue-counters>
    <queue-counters-error-message>
      queue-counters-error-message
    </queue-counters-error-message>
    <queue>....</queue>
    <interface-cos-short-summary>....</interface-cos-short-summary>
    <interface-cos-summary>....</interface-cos-summary>
  </queue-counters>
</physical-interface>
```

Description Queue counter statistics

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<queue-counters>

Usage

```
<physical-interface>
  <logical-interface>
    <queue-counters>
      <queue-counters-error-message>
        queue-counters-error-message
      </queue-counters-error-message>
      <queue>....</queue>
      <interface-cos-short-summary>....</interface-cos-short-summary>
      <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
  </logical-interface>
</physical-interface>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-set>
  <interface-set-queue-information>
    <queue-counters>
      <queue-counters-error-message>
        queue-counters-error-message
      </queue-counters-error-message>
      <queue>....</queue>
      <interface-cos-short-summary>....</interface-cos-short-summary>
      <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
  </interface-set-queue-information>
</interface-set>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-information>
  <physical-interface>
    <queue-counters>
      <queue-counters-error-message>
        queue-counters-error-message
      </queue-counters-error-message>
      <queue>....</queue>
      <interface-cos-short-summary>....</interface-cos-short-summary>
      <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
  </physical-interface>
</interface-information>
```

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Description Queue counter statistics

<queue-counters>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <queue-counters>
        <queue-counters-error-message>
          queue-counters-error-message
        </queue-counters-error-message>
        <queue>....</queue>
        <interface-cos-short-summary>....</interface-cos-short-summary>
        <interface-cos-summary>....</interface-cos-summary>
      </queue-counters>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-information>
  <logical-interface>
    <queue-counters>
      <queue-counters-error-message>
        queue-counters-error-message
      </queue-counters-error-message>
      <queue>....</queue>
      <interface-cos-short-summary>....</interface-cos-short-summary>
      <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
  </logical-interface>
</interface-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <queue-counters>
        <queue-counters-error-message>
          queue-counters-error-message
        </queue-counters-error-message>
        <queue>....</queue>
        <interface-cos-short-summary>....</interface-cos-short-summary>
```


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```
        <interface-cos-summary>....</interface-cos-summary>
       </queue-counters>
      </interface-set-queue-information>
     </interface-set>
    </interface-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-filter-information>
 <physical-interface>
  <queue-counters>
   <queue-counters-error-message>
    queue-counters-error-message
   </queue-counters-error-message>
   <queue>....</queue>
   <interface-cos-short-summary>....</interface-cos-short-summary>
   <interface-cos-summary>....</interface-cos-summary>
  </queue-counters>
 </physical-interface>
</interface-filter-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <queue-counters>
    <queue-counters-error-message>
     queue-counters-error-message
    </queue-counters-error-message>
    <queue>....</queue>
    <interface-cos-short-summary>....</interface-cos-short-summary>
    <interface-cos-summary>....</interface-cos-summary>
   </queue-counters>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-filter-information>
 <logical-interface>
```

```
    <queue-counters>
     <queue-counters-error-message>
      queue-counters-error-message
     </queue-counters-error-message>
     <queue>....</queue>
     <interface-cos-short-summary>....</interface-cos-short-summary>
     <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
   </logical-interface>
  </interface-filter-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-policer-information>
 <physical-interface>
  <queue-counters>
   <queue-counters-error-message>
    queue-counters-error-message
   </queue-counters-error-message>
   <queue>....</queue>
   <interface-cos-short-summary>....</interface-cos-short-summary>
   <interface-cos-summary>....</interface-cos-summary>
  </queue-counters>
 </physical-interface>
</interface-policer-information>
```

Description Queue counter statistics

<queue-counters>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <queue-counters>
    <queue-counters-error-message>
     queue-counters-error-message
    </queue-counters-error-message>
    <queue>....</queue>
    <interface-cos-short-summary>....</interface-cos-short-summary>
    <interface-cos-summary>....</interface-cos-summary>
   </queue-counters>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description Queue counter statistics

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<queue-counters>

Usage

```
<interface-policer-information>
  <logical-interface>
    <queue-counters>
      <queue-counters-error-message>
        queue-counters-error-message
      </queue-counters-error-message>
      <queue>....</queue>
      <interface-cos-short-summary>....</interface-cos-short-summary>
      <interface-cos-summary>....</interface-cos-summary>
    </queue-counters>
  </logical-interface>
</interface-policer-information>
```

Description Queue counter statistics

<queue-num-forwarding-class-name-map>

Usage

```
<ingress-queue-counters>
  <queue-num-forwarding-class-name-map>
    <queue-number>
      queue-number
    </queue-number>
    <forwarding-class-name>
      forwarding-class-name
    </forwarding-class-name>
  </queue-num-forwarding-class-name-map>
</ingress-queue-counters>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<logical-interface>
  <ingress-queue-counters>
    <queue-num-forwarding-class-name-map>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
    </queue-num-forwarding-class-name-map>
  </ingress-queue-counters>
</logical-interface>
```

Description

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<queue-num-forwarding-class-name-map>

Usage

```
<physical-interface>
  <logical-interface>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
      </queue-num-forwarding-class-name-map>
    </ingress-queue-counters>
  </logical-interface>
</physical-interface>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<physical-interface>
  <queue-num-forwarding-class-name-map>
    <queue-number>
      queue-number
    </queue-number>
    <forwarding-class-name>
      forwarding-class-name
    </forwarding-class-name>
  </queue-num-forwarding-class-name-map>
</physical-interface>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<physical-interface>
  <ingress-queue-counters>
    <queue-num-forwarding-class-name-map>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
    </queue-num-forwarding-class-name-map>
  </ingress-queue-counters>
</physical-interface>
```


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Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-set>
  <interface-set-queue-information>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
      </queue-num-forwarding-class-name-map>
    </ingress-queue-counters>
  </interface-set-queue-information>
</interface-set>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<queue-num-forwarding-class-name-map>
  <queue-number>
    queue-number
  </queue-number>
  <forwarding-class-name>
    forwarding-class-name
  </forwarding-class-name>
</queue-num-forwarding-class-name-map>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <queue-num-forwarding-class-name-map>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
```

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```
</interface-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-information>
 <physical-interface>
  <queue-num-forwarding-class-name-map>
   <queue-number>
    queue-number
   </queue-number>
   <forwarding-class-name>
    forwarding-class-name
   </forwarding-class-name>
  </queue-num-forwarding-class-name-map>
 </physical-interface>
</interface-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-information>
 <physical-interface>
  <ingress-queue-counters>
   <queue-num-forwarding-class-name-map>
    <queue-number>
     queue-number
    </queue-number>
    <forwarding-class-name>
     forwarding-class-name
    </forwarding-class-name>
   </queue-num-forwarding-class-name-map>
  </ingress-queue-counters>
 </physical-interface>
</interface-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-information>
 <logical-interface>
  <ingress-queue-counters>
   <queue-num-forwarding-class-name-map>
    <queue-number>
     queue-number
    </queue-number>
    <forwarding-class-name>
```


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```
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </logical-interface>
  </interface-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-information>
  <interface-set>
    <interface-set-queue-information>
      <ingress-queue-counters>
        <queue-num-forwarding-class-name-map>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </interface-set-queue-information>
  </interface-set>
</interface-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <queue-num-forwarding-class-name-map>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

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<queue-num-forwarding-class-name-map>

Usage

```
<interface-filter-information>
  <physical-interface>
    <queue-num-forwarding-class-name-map>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
    </queue-num-forwarding-class-name-map>
  </physical-interface>
</interface-filter-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-filter-information>
  <physical-interface>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
      </queue-num-forwarding-class-name-map>
    </ingress-queue-counters>
  </physical-interface>
</interface-filter-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-filter-information>
  <logical-interface>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
      </queue-num-forwarding-class-name-map>
    </ingress-queue-counters>
```


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```
  </logical-interface>
</interface-filter-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <ingress-queue-counters>
        <queue-num-forwarding-class-name-map>
          <queue-number>
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-policer-information>
  <physical-interface>
    <queue-num-forwarding-class-name-map>
      <queue-number>
        queue-number
      </queue-number>
      <forwarding-class-name>
        forwarding-class-name
      </forwarding-class-name>
    </queue-num-forwarding-class-name-map>
  </physical-interface>
</interface-policer-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-policer-information>
  <physical-interface>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
```

```
            queue-number
          </queue-number>
          <forwarding-class-name>
            forwarding-class-name
          </forwarding-class-name>
        </queue-num-forwarding-class-name-map>
      </ingress-queue-counters>
    </physical-interface>
  </interface-policer-information>
```

Description

<queue-num-forwarding-class-name-map>

Usage

```
<interface-policer-information>
  <logical-interface>
    <ingress-queue-counters>
      <queue-num-forwarding-class-name-map>
        <queue-number>
          queue-number
        </queue-number>
        <forwarding-class-name>
          forwarding-class-name
        </forwarding-class-name>
      </queue-num-forwarding-class-name-map>
    </ingress-queue-counters>
  </logical-interface>
</interface-policer-information>
```

Description

<resync-history>

Usage

```
<serial-information>
  <resync-history>
    <resync-counter>
      resync-counter
    </resync-counter>
    <resync-timestamp>
      resync-timestamp
    </resync-timestamp>
  </resync-history>
</serial-information>
```

Description

<resync-history>

Usage

```
<physical-interface>
  <serial-information>
```


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```
    <resync-history>
      <resync-counter>
        resync-counter
      </resync-counter>
      <resync-timestamp>
        resync-timestamp
      </resync-timestamp>
    </resync-history>
  </serial-information>
</physical-interface>
```

Description

<resync-history>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <resync-history>
        <resync-counter>
          resync-counter
        </resync-counter>
        <resync-timestamp>
          resync-timestamp
        </resync-timestamp>
      </resync-history>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<resync-history>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <resync-history>
        <resync-counter>
          resync-counter
        </resync-counter>
        <resync-timestamp>
          resync-timestamp
        </resync-timestamp>
      </resync-history>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

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<resync-history>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <resync-history>
        <resync-counter>
          resync-counter
        </resync-counter>
        <resync-timestamp>
          resync-timestamp
        </resync-timestamp>
      </resync-history>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<route-rpf-statistics>

Usage

```
<route-rpf-statistics>
  <route-rpf-packets>
    route-rpf-packets
  </route-rpf-packets>
  <route-rpf-bytes>
    route-rpf-bytes
  </route-rpf-bytes>
</route-rpf-statistics>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<address-family>
  <route-rpf-statistics>
    <route-rpf-packets>
      route-rpf-packets
    </route-rpf-packets>
    <route-rpf-bytes>
      route-rpf-bytes
    </route-rpf-bytes>
  </route-rpf-statistics>
</address-family>
```

Description Unicast reverse-path forwarding (RPF) statistics

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<route-rpf-statistics>

Usage

```
<logical-interface>
  <address-family>
    <route-rpf-statistics>
      <route-rpf-packets>
        route-rpf-packets
      </route-rpf-packets>
      <route-rpf-bytes>
        route-rpf-bytes
      </route-rpf-bytes>
    </route-rpf-statistics>
  </address-family>
</logical-interface>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <route-rpf-statistics>
        <route-rpf-packets>
          route-rpf-packets
        </route-rpf-packets>
        <route-rpf-bytes>
          route-rpf-bytes
        </route-rpf-bytes>
      </route-rpf-statistics>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <route-rpf-statistics>
          <route-rpf-packets>
            route-rpf-packets
          </route-rpf-packets>
          <route-rpf-bytes>
            route-rpf-bytes
          </route-rpf-bytes>
```

```
        </route-rpf-statistics>
       </address-family>
      </logical-interface>
     </physical-interface>
    </interface-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <address-family>
   <route-rpf-statistics>
    <route-rpf-packets>
     route-rpf-packets
    </route-rpf-packets>
    <route-rpf-bytes>
     route-rpf-bytes
    </route-rpf-bytes>
   </route-rpf-statistics>
  </address-family>
 </logical-interface>
</interface-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <address-family>
    <route-rpf-statistics>
     <route-rpf-packets>
      route-rpf-packets
     </route-rpf-packets>
     <route-rpf-bytes>
      route-rpf-bytes
     </route-rpf-bytes>
    </route-rpf-statistics>
   </address-family>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

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<route-rpf-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <route-rpf-statistics>
        <route-rpf-packets>
          route-rpf-packets
        </route-rpf-packets>
        <route-rpf-bytes>
          route-rpf-bytes
        </route-rpf-bytes>
      </route-rpf-statistics>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <route-rpf-statistics>
          <route-rpf-packets>
            route-rpf-packets
          </route-rpf-packets>
          <route-rpf-bytes>
            route-rpf-bytes
          </route-rpf-bytes>
        </route-rpf-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

<route-rpf-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <route-rpf-statistics>
        <route-rpf-packets>
          route-rpf-packets
        </route-rpf-packets>
```

```
        <route-rpf-bytes>
          route-rpf-bytes
        </route-rpf-bytes>
      </route-rpf-statistics>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description Unicast reverse-path forwarding (RPF) statistics

<satop-information>

Usage

```
<satop-information>
  <ce-payload-size>
    ce-payload-size
  </ce-payload-size>
  <ce-idle-pattern>
    ce-idle-pattern
  </ce-idle-pattern>
  <ce-octet-aligned>
    ce-octet-aligned
  </ce-octet-aligned>
  <ce-jitter-buffer-packets>
    ce-jitter-buffer-packets
  </ce-jitter-buffer-packets>
  <ce-jitter-buffer-latency>
    ce-jitter-buffer-latency
  </ce-jitter-buffer-latency>
  <ce-jitter-buffer-auto-adjust>
    ce-jitter-buffer-auto-adjust
  </ce-jitter-buffer-auto-adjust>
  <ce-excessive-packet-loss-rate-sample-period>
    ce-excessive-packet-loss-rate-sample-period
  </ce-excessive-packet-loss-rate-sample-period>
  <ce-excessive-packet-loss-rate-threshold>
    ce-excessive-packet-loss-rate-threshold
  </ce-excessive-packet-loss-rate-threshold>
</satop-information>
```

Description

<satop-information>

Usage

```
<physical-interface>
  <satop-information>
    <ce-payload-size>
      ce-payload-size
    </ce-payload-size>
    <ce-idle-pattern>
      ce-idle-pattern
    </ce-idle-pattern>
```


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```
    <ce-octet-aligned>
      ce-octet-aligned
    </ce-octet-aligned>
    <ce-jitter-buffer-packets>
      ce-jitter-buffer-packets
    </ce-jitter-buffer-packets>
    <ce-jitter-buffer-latency>
      ce-jitter-buffer-latency
    </ce-jitter-buffer-latency>
    <ce-jitter-buffer-auto-adjust>
      ce-jitter-buffer-auto-adjust
    </ce-jitter-buffer-auto-adjust>
    <ce-excessive-packet-loss-rate-sample-period>
      ce-excessive-packet-loss-rate-sample-period
    </ce-excessive-packet-loss-rate-sample-period>
    <ce-excessive-packet-loss-rate-threshold>
      ce-excessive-packet-loss-rate-threshold
    </ce-excessive-packet-loss-rate-threshold>
  </satop-information>
</physical-interface>
```

Description

<satop-information>

Usage

```
<interface-information>
  <physical-interface>
    <satop-information>
      <ce-payload-size>
        ce-payload-size
      </ce-payload-size>
      <ce-idle-pattern>
        ce-idle-pattern
      </ce-idle-pattern>
      <ce-octet-aligned>
        ce-octet-aligned
      </ce-octet-aligned>
      <ce-jitter-buffer-packets>
        ce-jitter-buffer-packets
      </ce-jitter-buffer-packets>
      <ce-jitter-buffer-latency>
        ce-jitter-buffer-latency
      </ce-jitter-buffer-latency>
      <ce-jitter-buffer-auto-adjust>
        ce-jitter-buffer-auto-adjust
      </ce-jitter-buffer-auto-adjust>
      <ce-excessive-packet-loss-rate-sample-period>
        ce-excessive-packet-loss-rate-sample-period
      </ce-excessive-packet-loss-rate-sample-period>
      <ce-excessive-packet-loss-rate-threshold>
        ce-excessive-packet-loss-rate-threshold
      </ce-excessive-packet-loss-rate-threshold>
    </satop-information>
  </physical-interface>
```

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```
</interface-information>
```

Description

<satop-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <satop-information>
      <ce-payload-size>
        ce-payload-size
      </ce-payload-size>
      <ce-idle-pattern>
        ce-idle-pattern
      </ce-idle-pattern>
      <ce-octet-aligned>
        ce-octet-aligned
      </ce-octet-aligned>
      <ce-jitter-buffer-packets>
        ce-jitter-buffer-packets
      </ce-jitter-buffer-packets>
      <ce-jitter-buffer-latency>
        ce-jitter-buffer-latency
      </ce-jitter-buffer-latency>
      <ce-jitter-buffer-auto-adjust>
        ce-jitter-buffer-auto-adjust
      </ce-jitter-buffer-auto-adjust>
      <ce-excessive-packet-loss-rate-sample-period>
        ce-excessive-packet-loss-rate-sample-period
      </ce-excessive-packet-loss-rate-sample-period>
      <ce-excessive-packet-loss-rate-threshold>
        ce-excessive-packet-loss-rate-threshold
      </ce-excessive-packet-loss-rate-threshold>
    </satop-information>
  </physical-interface>
</interface-filter-information>
```

Description

<satop-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <satop-information>
      <ce-payload-size>
        ce-payload-size
      </ce-payload-size>
      <ce-idle-pattern>
        ce-idle-pattern
      </ce-idle-pattern>
      <ce-octet-aligned>
        ce-octet-aligned
```


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```
      </ce-octet-aligned>
      <ce-jitter-buffer-packets>
        ce-jitter-buffer-packets
      </ce-jitter-buffer-packets>
      <ce-jitter-buffer-latency>
        ce-jitter-buffer-latency
      </ce-jitter-buffer-latency>
      <ce-jitter-buffer-auto-adjust>
        ce-jitter-buffer-auto-adjust
      </ce-jitter-buffer-auto-adjust>
      <ce-excessive-packet-loss-rate-sample-period>
        ce-excessive-packet-loss-rate-sample-period
      </ce-excessive-packet-loss-rate-sample-period>
      <ce-excessive-packet-loss-rate-threshold>
        ce-excessive-packet-loss-rate-threshold
      </ce-excessive-packet-loss-rate-threshold>
    </satop-information>
  </physical-interface>
</interface-policer-information>
```

Description

<serial-encoding>

Usage

```
<serial-information>
  <serial-encoding>
    <serial-encoding-conf>
      serial-encoding-conf
    </serial-encoding-conf>
  </serial-encoding>
</serial-information>
```

Description

<serial-encoding>

Usage

```
<physical-interface>
  <serial-information>
    <serial-encoding>
      <serial-encoding-conf>
        serial-encoding-conf
      </serial-encoding-conf>
    </serial-encoding>
  </serial-information>
</physical-interface>
```

Description

<serial-encoding>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <serial-encoding>
        <serial-encoding-conf>
          serial-encoding-conf
        </serial-encoding-conf>
      </serial-encoding>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<serial-encoding>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <serial-encoding>
        <serial-encoding-conf>
          serial-encoding-conf
        </serial-encoding-conf>
      </serial-encoding>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<serial-encoding>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <serial-encoding>
        <serial-encoding-conf>
          serial-encoding-conf
        </serial-encoding-conf>
      </serial-encoding>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<serial-information>

Usage

```
<serial-information>
  <line-protocol>....</line-protocol>
  <resync-history>....</resync-history>
  <clocking-mode>....</clocking-mode>
  <clocking-rate>....</clocking-rate>
  <serial-encoding>....</serial-encoding>
  <dtr-circuit>....</dtr-circuit>
  <eia530-signal-polarity>....</eia530-signal-polarity>
  <x21-signal-polarity>....</x21-signal-polarity>
  <serial-loopback>....</serial-loopback>
  <tx-clock>....</tx-clock>
  <data-signal>....</data-signal>
  <eia530-control-signal>....</eia530-control-signal>
  <x21-control-signal>....</x21-control-signal>
  <dce-loopback-override>
    dce-loopback-override
  </dce-loopback-override>
</serial-information>
```

Description Serial interfaces information and statistics

<serial-information>

Usage

```
<physical-interface>
  <serial-information>
    <line-protocol>....</line-protocol>
    <resync-history>....</resync-history>
    <clocking-mode>....</clocking-mode>
    <clocking-rate>....</clocking-rate>
    <serial-encoding>....</serial-encoding>
    <dtr-circuit>....</dtr-circuit>
    <eia530-signal-polarity>....</eia530-signal-polarity>
    <x21-signal-polarity>....</x21-signal-polarity>
    <serial-loopback>....</serial-loopback>
    <tx-clock>....</tx-clock>
    <data-signal>....</data-signal>
    <eia530-control-signal>....</eia530-control-signal>
    <x21-control-signal>....</x21-control-signal>
    <dce-loopback-override>
      dce-loopback-override
    </dce-loopback-override>
  </serial-information>
</physical-interface>
```

Description Serial interfaces information and statistics

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<serial-information>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <line-protocol>....</line-protocol>
      <resync-history>....</resync-history>
      <clocking-mode>....</clocking-mode>
      <clocking-rate>....</clocking-rate>
      <serial-encoding>....</serial-encoding>
      <dtr-circuit>....</dtr-circuit>
      <eia530-signal-polarity>....</eia530-signal-polarity>
      <x21-signal-polarity>....</x21-signal-polarity>
      <serial-loopback>....</serial-loopback>
      <tx-clock>....</tx-clock>
      <data-signal>....</data-signal>
      <eia530-control-signal>....</eia530-control-signal>
      <x21-control-signal>....</x21-control-signal>
      <dce-loopback-override>
        dce-loopback-override
      </dce-loopback-override>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description Serial interfaces information and statistics

<serial-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <line-protocol>....</line-protocol>
      <resync-history>....</resync-history>
      <clocking-mode>....</clocking-mode>
      <clocking-rate>....</clocking-rate>
      <serial-encoding>....</serial-encoding>
      <dtr-circuit>....</dtr-circuit>
      <eia530-signal-polarity>....</eia530-signal-polarity>
      <x21-signal-polarity>....</x21-signal-polarity>
      <serial-loopback>....</serial-loopback>
      <tx-clock>....</tx-clock>
      <data-signal>....</data-signal>
      <eia530-control-signal>....</eia530-control-signal>
      <x21-control-signal>....</x21-control-signal>
      <dce-loopback-override>
        dce-loopback-override
      </dce-loopback-override>
    </serial-information>
  </physical-interface>
```


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```
</interface-filter-information>
```

Description Serial interfaces information and statistics

<serial-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <line-protocol>....</line-protocol>
      <resync-history>....</resync-history>
      <clocking-mode>....</clocking-mode>
      <clocking-rate>....</clocking-rate>
      <serial-encoding>....</serial-encoding>
      <dtr-circuit>....</dtr-circuit>
      <eia530-signal-polarity>....</eia530-signal-polarity>
      <x21-signal-polarity>....</x21-signal-polarity>
      <serial-loopback>....</serial-loopback>
      <tx-clock>....</tx-clock>
      <data-signal>....</data-signal>
      <eia530-control-signal>....</eia530-control-signal>
      <x21-control-signal>....</x21-control-signal>
      <dce-loopback-override>
        dce-loopback-override
      </dce-loopback-override>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description Serial interfaces information and statistics

<serial-loopback>

Usage

```
<serial-information>
  <serial-loopback>
    <serial-loopback-mode>
      serial-loopback-mode
    </serial-loopback-mode>
  </serial-loopback>
</serial-information>
```

Description

<serial-loopback>

Usage

```
<physical-interface>
  <serial-information>
    <serial-loopback>
```

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```
      <serial-loopback-mode>
       serial-loopback-mode
      </serial-loopback-mode>
     </serial-loopback>
    </serial-information>
   </physical-interface>
```

Description

<serial-loopback>

Usage

```
<interface-information>
 <physical-interface>
  <serial-information>
   <serial-loopback>
    <serial-loopback-mode>
     serial-loopback-mode
    </serial-loopback-mode>
   </serial-loopback>
  </serial-information>
 </physical-interface>
</interface-information>
```

Description

<serial-loopback>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <serial-loopback>
    <serial-loopback-mode>
     serial-loopback-mode
    </serial-loopback-mode>
   </serial-loopback>
  </serial-information>
 </physical-interface>
</interface-filter-information>
```

Description

<serial-loopback>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <serial-loopback>
    <serial-loopback-mode>
     serial-loopback-mode
    </serial-loopback-mode>
```


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```
      </serial-loopback>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<shared-interface-information>

Usage

```
<logical-interface>
  <shared-interface-information>
    <shared-interface-logical-interface>....</shared-interface-logical-interface>
  </shared-interface-information>
</logical-interface>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<physical-interface>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>....</shared-interface-logical-interface>
    </shared-interface-information>
  </logical-interface>
</physical-interface>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <shared-interface-information>
        <shared-interface-logical-interface>....</shared-interface-logical-interface>

      </shared-interface-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Shared interface information

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<shared-interface-information>

Usage

```
<interface-information>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>....</shared-interface-logical-interface>
    </shared-interface-information>
  </logical-interface>
</interface-information>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <shared-interface-information>
        <shared-interface-logical-interface>....</shared-interface-logical-interface>

      </shared-interface-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>....</shared-interface-logical-interface>
    </shared-interface-information>
  </logical-interface>
</interface-filter-information>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <shared-interface-information>
        <shared-interface-logical-interface>....</shared-interface-logical-interface>
```


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```
      </shared-interface-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Shared interface information

<shared-interface-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>....</shared-interface-logical-interface>
    </shared-interface-information>
  </logical-interface>
</interface-policer-information>
```

Description Shared interface information

<shared-interface-logical-interface>

Usage

```
<shared-interface-logical-interface>
  <peer-interface-name>
    peer-interface-name
  </peer-interface-name>
  <interface-shared-with>
    interface-shared-with
  </interface-shared-with>
  <rx-fe>
    rx-fe
  </rx-fe>
  <rx-nhid>
    rx-nhid
  </rx-nhid>
  <tx-fe>
    tx-fe
  </tx-fe>
  <tx-nhid>
    tx-nhid
  </tx-nhid>
</shared-interface-logical-interface>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<logical-interface>
```

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```
<shared-interface-information>
  <shared-interface-logical-interface>
    <peer-interface-name>
      peer-interface-name
    </peer-interface-name>
    <interface-shared-with>
      interface-shared-with
    </interface-shared-with>
    <rx-fe>
      rx-fe
    </rx-fe>
    <rx-nhid>
      rx-nhid
    </rx-nhid>
    <tx-fe>
      tx-fe
    </tx-fe>
    <tx-nhid>
      tx-nhid
    </tx-nhid>
  </shared-interface-logical-interface>
 </shared-interface-information>
</logical-interface>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<physical-interface>
 <logical-interface>
  <shared-interface-information>
   <shared-interface-logical-interface>
    <peer-interface-name>
     peer-interface-name
    </peer-interface-name>
    <interface-shared-with>
     interface-shared-with
    </interface-shared-with>
    <rx-fe>
     rx-fe
    </rx-fe>
    <rx-nhid>
     rx-nhid
    </rx-nhid>
    <tx-fe>
     tx-fe
    </tx-fe>
    <tx-nhid>
     tx-nhid
    </tx-nhid>
   </shared-interface-logical-interface>
  </shared-interface-information>
 </logical-interface>
```


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```
</physical-interface>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <shared-interface-information>
        <shared-interface-logical-interface>
          <peer-interface-name>
            peer-interface-name
          </peer-interface-name>
          <interface-shared-with>
            interface-shared-with
          </interface-shared-with>
          <rx-fe>
            rx-fe
          </rx-fe>
          <rx-nhid>
            rx-nhid
          </rx-nhid>
          <tx-fe>
            tx-fe
          </tx-fe>
          <tx-nhid>
            tx-nhid
          </tx-nhid>
        </shared-interface-logical-interface>
      </shared-interface-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<interface-information>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>
        <peer-interface-name>
          peer-interface-name
        </peer-interface-name>
        <interface-shared-with>
          interface-shared-with
        </interface-shared-with>
        <rx-fe>
```

```
            rx-fe
           </rx-fe>
           <rx-nhid>
            rx-nhid
           </rx-nhid>
           <tx-fe>
            tx-fe
           </tx-fe>
           <tx-nhid>
            tx-nhid
           </tx-nhid>
          </shared-interface-logical-interface>
         </shared-interface-information>
        </logical-interface>
       </interface-information>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<interface-filter-information>
 <physical-interface>
  <logical-interface>
   <shared-interface-information>
    <shared-interface-logical-interface>
     <peer-interface-name>
      peer-interface-name
     </peer-interface-name>
     <interface-shared-with>
      interface-shared-with
     </interface-shared-with>
     <rx-fe>
      rx-fe
     </rx-fe>
     <rx-nhid>
      rx-nhid
     </rx-nhid>
     <tx-fe>
      tx-fe
     </tx-fe>
     <tx-nhid>
      tx-nhid
     </tx-nhid>
    </shared-interface-logical-interface>
   </shared-interface-information>
  </logical-interface>
 </physical-interface>
</interface-filter-information>
```

Description Shared interface logical interface

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<shared-interface-logical-interface>

Usage

```
<interface-filter-information>
  <logical-interface>
    <shared-interface-information>
      <shared-interface-logical-interface>
        <peer-interface-name>
          peer-interface-name
        </peer-interface-name>
        <interface-shared-with>
          interface-shared-with
        </interface-shared-with>
        <rx-fe>
          rx-fe
        </rx-fe>
        <rx-nhid>
          rx-nhid
        </rx-nhid>
        <tx-fe>
          tx-fe
        </tx-fe>
        <tx-nhid>
          tx-nhid
        </tx-nhid>
      </shared-interface-logical-interface>
    </shared-interface-information>
  </logical-interface>
</interface-filter-information>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <shared-interface-information>
        <shared-interface-logical-interface>
          <peer-interface-name>
            peer-interface-name
          </peer-interface-name>
          <interface-shared-with>
            interface-shared-with
          </interface-shared-with>
          <rx-fe>
            rx-fe
          </rx-fe>
          <rx-nhid>
            rx-nhid
          </rx-nhid>
          <tx-fe>
```

```
            tx-fe
           </tx-fe>
           <tx-nhid>
            tx-nhid
           </tx-nhid>
          </shared-interface-logical-interface>
         </shared-interface-information>
        </logical-interface>
       </physical-interface>
      </interface-policer-information>
```

Description Shared interface logical interface

<shared-interface-logical-interface>

Usage

```
<interface-policer-information>
 <logical-interface>
  <shared-interface-information>
   <shared-interface-logical-interface>
    <peer-interface-name>
     peer-interface-name
    </peer-interface-name>
    <interface-shared-with>
     interface-shared-with
    </interface-shared-with>
    <rx-fe>
     rx-fe
    </rx-fe>
    <rx-nhid>
     rx-nhid
    </rx-nhid>
    <tx-fe>
     tx-fe
    </tx-fe>
    <tx-nhid>
     tx-nhid
    </tx-nhid>
   </shared-interface-logical-interface>
  </shared-interface-information>
 </logical-interface>
</interface-policer-information>
```

Description Shared interface logical interface

<shared-interface-physical-interface>

Usage

```
<shared-interface-physical-interface>
 <ownership>
  ownership
 </ownership>
```


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```
</shared-interface-physical-interface>
```

Description Shared interface physical interface

<shared-interface-physical-interface>

Usage

```
<physical-interface>
  <shared-interface-physical-interface>
    <ownership>
      ownership
    </ownership>
  </shared-interface-physical-interface>
</physical-interface>
```

Description Shared interface physical interface

<shared-interface-physical-interface>

Usage

```
<interface-information>
  <physical-interface>
    <shared-interface-physical-interface>
      <ownership>
        ownership
      </ownership>
    </shared-interface-physical-interface>
  </physical-interface>
</interface-information>
```

Description Shared interface physical interface

<shared-interface-physical-interface>

Usage

```
<interface-filter-information>
  <physical-interface>
    <shared-interface-physical-interface>
      <ownership>
        ownership
      </ownership>
    </shared-interface-physical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Shared interface physical interface

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<shared-interface-physical-interface>

Usage

```
<interface-policer-information>
  <physical-interface>
    <shared-interface-physical-interface>
      <ownership>
        ownership
      </ownership>
    </shared-interface-physical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Shared interface physical interface

<shdsl-information>

Usage

```
<shdsl-information>
  <shdsl-line-termination>
    shdsl-line-termination
  </shdsl-line-termination>
  <shdsl-annex>
    shdsl-annex
  </shdsl-annex>
  <shdsl-line-mode>
    shdsl-line-mode
  </shdsl-line-mode>
  <shdsl-modem-status>
    shdsl-modem-status
  </shdsl-modem-status>
  <shdsl-bit-rate>
    shdsl-bit-rate
  </shdsl-bit-rate>
  <shdsl-last-fail-reason>
    shdsl-last-fail-reason
  </shdsl-last-fail-reason>
  <shdsl-last-fail-code>
    shdsl-last-fail-code
  </shdsl-last-fail-code>
  <shdsl-framer-mode>
    shdsl-framer-mode
  </shdsl-framer-mode>
  <shdsl-dying-gasp>
    shdsl-dying-gasp
  </shdsl-dying-gasp>
  <shdsl-framer-sync-status>
    shdsl-framer-sync-status
  </shdsl-framer-sync-status>
  <shdsl-chipset-version>
    shdsl-chipset-version
  </shdsl-chipset-version>
  <shdsl-firmware-version>
```


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```
    shdsl-firmware-version
   </shdsl-firmware-version>
   <shdsl-statistics>....</shdsl-statistics>
  </shdsl-information>
```

Description Operational information and statistics for SHDSL interfaces

<shdsl-information>

Usage

```
<physical-interface>
  <shdsl-information>
    <shdsl-line-termination>
      shdsl-line-termination
    </shdsl-line-termination>
    <shdsl-annex>
      shdsl-annex
    </shdsl-annex>
    <shdsl-line-mode>
      shdsl-line-mode
    </shdsl-line-mode>
    <shdsl-modem-status>
      shdsl-modem-status
    </shdsl-modem-status>
    <shdsl-bit-rate>
      shdsl-bit-rate
    </shdsl-bit-rate>
    <shdsl-last-fail-reason>
      shdsl-last-fail-reason
    </shdsl-last-fail-reason>
    <shdsl-last-fail-code>
      shdsl-last-fail-code
    </shdsl-last-fail-code>
    <shdsl-framer-mode>
      shdsl-framer-mode
    </shdsl-framer-mode>
    <shdsl-dying-gasp>
      shdsl-dying-gasp
    </shdsl-dying-gasp>
    <shdsl-framer-sync-status>
      shdsl-framer-sync-status
    </shdsl-framer-sync-status>
    <shdsl-chipset-version>
      shdsl-chipset-version
    </shdsl-chipset-version>
    <shdsl-firmware-version>
      shdsl-firmware-version
    </shdsl-firmware-version>
    <shdsl-statistics>....</shdsl-statistics>
  </shdsl-information>
</physical-interface>
```

Description Operational information and statistics for SHDSL interfaces

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<shdsl-information>

Usage

```
<interface-information>
  <physical-interface>
    <shdsl-information>
      <shdsl-line-termination>
        shdsl-line-termination
      </shdsl-line-termination>
      <shdsl-annex>
        shdsl-annex
      </shdsl-annex>
      <shdsl-line-mode>
        shdsl-line-mode
      </shdsl-line-mode>
      <shdsl-modem-status>
        shdsl-modem-status
      </shdsl-modem-status>
      <shdsl-bit-rate>
        shdsl-bit-rate
      </shdsl-bit-rate>
      <shdsl-last-fail-reason>
        shdsl-last-fail-reason
      </shdsl-last-fail-reason>
      <shdsl-last-fail-code>
        shdsl-last-fail-code
      </shdsl-last-fail-code>
      <shdsl-framer-mode>
        shdsl-framer-mode
      </shdsl-framer-mode>
      <shdsl-dying-gasp>
        shdsl-dying-gasp
      </shdsl-dying-gasp>
      <shdsl-framer-sync-status>
        shdsl-framer-sync-status
      </shdsl-framer-sync-status>
      <shdsl-chipset-version>
        shdsl-chipset-version
      </shdsl-chipset-version>
      <shdsl-firmware-version>
        shdsl-firmware-version
      </shdsl-firmware-version>
      <shdsl-statistics>....</shdsl-statistics>
    </shdsl-information>
  </physical-interface>
</interface-information>
```

Description Operational information and statistics for SHDSL interfaces

<shdsl-information>

Usage

```
<interface-filter-information>
```


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```
<physical-interface>
  <shdsl-information>
    <shdsl-line-termination>
      shdsl-line-termination
    </shdsl-line-termination>
    <shdsl-annex>
      shdsl-annex
    </shdsl-annex>
    <shdsl-line-mode>
      shdsl-line-mode
    </shdsl-line-mode>
    <shdsl-modem-status>
      shdsl-modem-status
    </shdsl-modem-status>
    <shdsl-bit-rate>
      shdsl-bit-rate
    </shdsl-bit-rate>
    <shdsl-last-fail-reason>
      shdsl-last-fail-reason
    </shdsl-last-fail-reason>
    <shdsl-last-fail-code>
      shdsl-last-fail-code
    </shdsl-last-fail-code>
    <shdsl-framer-mode>
      shdsl-framer-mode
    </shdsl-framer-mode>
    <shdsl-dying-gasp>
      shdsl-dying-gasp
    </shdsl-dying-gasp>
    <shdsl-framer-sync-status>
      shdsl-framer-sync-status
    </shdsl-framer-sync-status>
    <shdsl-chipset-version>
      shdsl-chipset-version
    </shdsl-chipset-version>
    <shdsl-firmware-version>
      shdsl-firmware-version
    </shdsl-firmware-version>
    <shdsl-statistics>....</shdsl-statistics>
  </shdsl-information>
 </physical-interface>
</interface-filter-information>
```

Description Operational information and statistics for SHDSL interfaces

<shdsl-information>

Usage

```
<interface-policer-information>
 <physical-interface>
   <shdsl-information>
     <shdsl-line-termination>
       shdsl-line-termination
     </shdsl-line-termination>
```

```
<shdsl-annex>
  shdsl-annex
</shdsl-annex>
<shdsl-line-mode>
  shdsl-line-mode
</shdsl-line-mode>
<shdsl-modem-status>
  shdsl-modem-status
</shdsl-modem-status>
<shdsl-bit-rate>
  shdsl-bit-rate
</shdsl-bit-rate>
<shdsl-last-fail-reason>
  shdsl-last-fail-reason
</shdsl-last-fail-reason>
<shdsl-last-fail-code>
  shdsl-last-fail-code
</shdsl-last-fail-code>
<shdsl-framer-mode>
  shdsl-framer-mode
</shdsl-framer-mode>
<shdsl-dying-gasp>
  shdsl-dying-gasp
</shdsl-dying-gasp>
<shdsl-framer-sync-status>
  shdsl-framer-sync-status
</shdsl-framer-sync-status>
<shdsl-chipset-version>
  shdsl-chipset-version
</shdsl-chipset-version>
<shdsl-firmware-version>
  shdsl-firmware-version
</shdsl-firmware-version>
<shdsl-statistics>....</shdsl-statistics>
</shdsl-information>
</physical-interface>
</interface-policer-information>
```

Description Operational information and statistics for SHDSL interfaces

<shdsl-statistics>

Usage

```
<shdsl-information>
  <shdsl-statistics>
    <shdsl-loop-attenuation>
      shdsl-loop-attenuation
    </shdsl-loop-attenuation>
    <shdsl-transmit-power>
      shdsl-transmit-power
    </shdsl-transmit-power>
    <shdsl-receiver-gain>
      shdsl-receiver-gain
    </shdsl-receiver-gain>
```


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```
      <shdsl-snr-sampling>
        shdsl-snr-sampling
      </shdsl-snr-sampling>
      <shdsl-rx-cells>
        shdsl-rx-cells
      </shdsl-rx-cells>
      <shdsl-tx-cells>
        shdsl-tx-cells
      </shdsl-tx-cells>
      <shdsl-crc>
        shdsl-crc
      </shdsl-crc>
      <shdsl-sega>
        shdsl-sega
      </shdsl-sega>
      <shdsl-losw>
        shdsl-losw
      </shdsl-losw>
      <shdsl-hec>
        shdsl-hec
      </shdsl-hec>
      <shdsl-cell-drop>
        shdsl-cell-drop
      </shdsl-cell-drop>
    </shdsl-statistics>
  </shdsl-information>
```

Description

<shdsl-statistics>

Usage

```
<physical-interface>
  <shdsl-information>
    <shdsl-statistics>
      <shdsl-loop-attenuation>
        shdsl-loop-attenuation
      </shdsl-loop-attenuation>
      <shdsl-transmit-power>
        shdsl-transmit-power
      </shdsl-transmit-power>
      <shdsl-receiver-gain>
        shdsl-receiver-gain
      </shdsl-receiver-gain>
      <shdsl-snr-sampling>
        shdsl-snr-sampling
      </shdsl-snr-sampling>
      <shdsl-rx-cells>
        shdsl-rx-cells
      </shdsl-rx-cells>
      <shdsl-tx-cells>
        shdsl-tx-cells
      </shdsl-tx-cells>
      <shdsl-crc>
        shdsl-crc
```

```
        </shdsl-crc>
        <shdsl-sega>
          shdsl-sega
        </shdsl-sega>
        <shdsl-losw>
          shdsl-losw
        </shdsl-losw>
        <shdsl-hec>
          shdsl-hec
        </shdsl-hec>
        <shdsl-cell-drop>
          shdsl-cell-drop
        </shdsl-cell-drop>
      </shdsl-statistics>
    </shdsl-information>
  </physical-interface>
```

Description

<shdsl-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <shdsl-information>
      <shdsl-statistics>
        <shdsl-loop-attenuation>
          shdsl-loop-attenuation
        </shdsl-loop-attenuation>
        <shdsl-transmit-power>
          shdsl-transmit-power
        </shdsl-transmit-power>
        <shdsl-receiver-gain>
          shdsl-receiver-gain
        </shdsl-receiver-gain>
        <shdsl-snr-sampling>
          shdsl-snr-sampling
        </shdsl-snr-sampling>
        <shdsl-rx-cells>
          shdsl-rx-cells
        </shdsl-rx-cells>
        <shdsl-tx-cells>
          shdsl-tx-cells
        </shdsl-tx-cells>
        <shdsl-crc>
          shdsl-crc
        </shdsl-crc>
        <shdsl-sega>
          shdsl-sega
        </shdsl-sega>
        <shdsl-losw>
          shdsl-losw
        </shdsl-losw>
        <shdsl-hec>
          shdsl-hec
```


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```
            </shdsl-hec>
            <shdsl-cell-drop>
              shdsl-cell-drop
            </shdsl-cell-drop>
          </shdsl-statistics>
        </shdsl-information>
      </physical-interface>
    </interface-information>
```

Description

<shdsl-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <shdsl-information>
      <shdsl-statistics>
        <shdsl-loop-attenuation>
          shdsl-loop-attenuation
        </shdsl-loop-attenuation>
        <shdsl-transmit-power>
          shdsl-transmit-power
        </shdsl-transmit-power>
        <shdsl-receiver-gain>
          shdsl-receiver-gain
        </shdsl-receiver-gain>
        <shdsl-snr-sampling>
          shdsl-snr-sampling
        </shdsl-snr-sampling>
        <shdsl-rx-cells>
          shdsl-rx-cells
        </shdsl-rx-cells>
        <shdsl-tx-cells>
          shdsl-tx-cells
        </shdsl-tx-cells>
        <shdsl-crc>
          shdsl-crc
        </shdsl-crc>
        <shdsl-sega>
          shdsl-sega
        </shdsl-sega>
        <shdsl-losw>
          shdsl-losw
        </shdsl-losw>
        <shdsl-hec>
          shdsl-hec
        </shdsl-hec>
        <shdsl-cell-drop>
          shdsl-cell-drop
        </shdsl-cell-drop>
      </shdsl-statistics>
    </shdsl-information>
  </physical-interface>
```

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```
</interface-filter-information>
```

Description

<shdsl-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <shdsl-information>
   <shdsl-statistics>
    <shdsl-loop-attenuation>
     shdsl-loop-attenuation
    </shdsl-loop-attenuation>
    <shdsl-transmit-power>
     shdsl-transmit-power
    </shdsl-transmit-power>
    <shdsl-receiver-gain>
     shdsl-receiver-gain
    </shdsl-receiver-gain>
    <shdsl-snr-sampling>
     shdsl-snr-sampling
    </shdsl-snr-sampling>
    <shdsl-rx-cells>
     shdsl-rx-cells
    </shdsl-rx-cells>
    <shdsl-tx-cells>
     shdsl-tx-cells
    </shdsl-tx-cells>
    <shdsl-crc>
     shdsl-crc
    </shdsl-crc>
    <shdsl-sega>
     shdsl-sega
    </shdsl-sega>
    <shdsl-losw>
     shdsl-losw
    </shdsl-losw>
    <shdsl-hec>
     shdsl-hec
    </shdsl-hec>
    <shdsl-cell-drop>
     shdsl-cell-drop
    </shdsl-cell-drop>
   </shdsl-statistics>
  </shdsl-information>
 </physical-interface>
</interface-policer-information>
```

Description

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<sonet-errors>

Usage

```
<sonet-errors>
  <media-alarm>....</media-alarm>
</sonet-errors>
```

Description

<sonet-errors>

Usage

```
<physical-interface>
  <sonet-errors>
    <media-alarm>....</media-alarm>
  </sonet-errors>
</physical-interface>
```

Description

<sonet-errors>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-errors>
        <media-alarm>....</media-alarm>
      </sonet-errors>
    </link-entry>
  </links>
</physical-interface>
```

Description

<sonet-errors>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>....</media-alarm>
    </sonet-errors>
  </physical-interface>
</interface-information>
```

Description

<sonet-errors>

Usage

```
<interface-information>
```

```
  <physical-interface>
   <links>
    <link-entry>
     <sonet-errors>
      <media-alarm>....</media-alarm>
     </sonet-errors>
    </link-entry>
   </links>
  </physical-interface>
</interface-information>
```

Description

<sonet-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>....</media-alarm>
    </sonet-errors>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-errors>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-errors>
          <media-alarm>....</media-alarm>
        </sonet-errors>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-errors>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-errors>
      <media-alarm>....</media-alarm>
    </sonet-errors>
  </physical-interface>
```


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```
</interface-policer-information>
```

Description

<sonet-errors>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-errors>
          <media-alarm>....</media-alarm>
        </sonet-errors>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-line-information>

Usage

```
<sonet-line-information>
  <media-alarm>....</media-alarm>
</sonet-line-information>
```

Description

<sonet-line-information>

Usage

```
<physical-interface>
  <sonet-line-information>
    <media-alarm>....</media-alarm>
  </sonet-line-information>
</physical-interface>
```

Description

<sonet-line-information>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-line-information>
        <media-alarm>....</media-alarm>
      </sonet-line-information>
    </link-entry>
  </links>
```

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```
</physical-interface>
```

Description

<sonet-line-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-line-information>
      <media-alarm>....</media-alarm>
    </sonet-line-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-line-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>....</media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<sonet-line-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-line-information>
      <media-alarm>....</media-alarm>
    </sonet-line-information>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-line-information>

Usage

```
<interface-filter-information>
  <physical-interface>
```


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```
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>....</media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-line-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-line-information>
      <media-alarm>....</media-alarm>
    </sonet-line-information>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-line-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-line-information>
          <media-alarm>....</media-alarm>
        </sonet-line-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-path-information>

Usage

```
<sonet-path-information>
  <media-alarm>....</media-alarm>
</sonet-path-information>
```

Description

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<sonet-path-information>

Usage

```
<physical-interface>
  <sonet-path-information>
    <media-alarm>....</media-alarm>
  </sonet-path-information>
</physical-interface>
```

Description

<sonet-path-information>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-path-information>
        <media-alarm>....</media-alarm>
      </sonet-path-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

<sonet-path-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-path-information>
      <media-alarm>....</media-alarm>
    </sonet-path-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-path-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>....</media-alarm>
        </sonet-path-information>
      </link-entry>
    </links>
  </physical-interface>
```


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```
</interface-information>
```

Description

<sonet-path-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-path-information>
      <media-alarm>....</media-alarm>
    </sonet-path-information>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-path-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>....</media-alarm>
        </sonet-path-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-path-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-path-information>
      <media-alarm>....</media-alarm>
    </sonet-path-information>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-path-information>

Usage

```
<interface-policer-information>
  <physical-interface>
```

```
    <links>
      <link-entry>
        <sonet-path-information>
          <media-alarm>....</media-alarm>
        </sonet-path-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-payload-pointer-information>

Usage

```
<sonet-payload-pointer-information>
  <sonet-payload-pointer-curptr>
    sonet-payload-pointer-curptr
  </sonet-payload-pointer-curptr>
  <sonet-payload-pointer-ptrinc-count>
    sonet-payload-pointer-ptrinc-count
  </sonet-payload-pointer-ptrinc-count>
  <sonet-payload-pointer-ptrdec-count>
    sonet-payload-pointer-ptrdec-count
  </sonet-payload-pointer-ptrdec-count>
  <sonet-payload-pointer-newptr-ndf-count>
    sonet-payload-pointer-newptr-ndf-count
  </sonet-payload-pointer-newptr-ndf-count>
</sonet-payload-pointer-information>
```

Description

<sonet-payload-pointer-information>

Usage

```
<physical-interface>
  <sonet-payload-pointer-information>
    <sonet-payload-pointer-curptr>
      sonet-payload-pointer-curptr
    </sonet-payload-pointer-curptr>
    <sonet-payload-pointer-ptrinc-count>
      sonet-payload-pointer-ptrinc-count
    </sonet-payload-pointer-ptrinc-count>
    <sonet-payload-pointer-ptrdec-count>
      sonet-payload-pointer-ptrdec-count
    </sonet-payload-pointer-ptrdec-count>
    <sonet-payload-pointer-newptr-ndf-count>
      sonet-payload-pointer-newptr-ndf-count
    </sonet-payload-pointer-newptr-ndf-count>
  </sonet-payload-pointer-information>
</physical-interface>
```

Description

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<sonet-payload-pointer-information>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-payload-pointer-information>
        <sonet-payload-pointer-curptr>
          sonet-payload-pointer-curptr
        </sonet-payload-pointer-curptr>
        <sonet-payload-pointer-ptrinc-count>
          sonet-payload-pointer-ptrinc-count
        </sonet-payload-pointer-ptrinc-count>
        <sonet-payload-pointer-ptrdec-count>
          sonet-payload-pointer-ptrdec-count
        </sonet-payload-pointer-ptrdec-count>
        <sonet-payload-pointer-newptr-ndf-count>
          sonet-payload-pointer-newptr-ndf-count
        </sonet-payload-pointer-newptr-ndf-count>
      </sonet-payload-pointer-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

<sonet-payload-pointer-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-payload-pointer-information>
      <sonet-payload-pointer-curptr>
        sonet-payload-pointer-curptr
      </sonet-payload-pointer-curptr>
      <sonet-payload-pointer-ptrinc-count>
        sonet-payload-pointer-ptrinc-count
      </sonet-payload-pointer-ptrinc-count>
      <sonet-payload-pointer-ptrdec-count>
        sonet-payload-pointer-ptrdec-count
      </sonet-payload-pointer-ptrdec-count>
      <sonet-payload-pointer-newptr-ndf-count>
        sonet-payload-pointer-newptr-ndf-count
      </sonet-payload-pointer-newptr-ndf-count>
    </sonet-payload-pointer-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-payload-pointer-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-payload-pointer-information>
          <sonet-payload-pointer-curptr>
            sonet-payload-pointer-curptr
          </sonet-payload-pointer-curptr>
          <sonet-payload-pointer-ptrinc-count>
            sonet-payload-pointer-ptrinc-count
          </sonet-payload-pointer-ptrinc-count>
          <sonet-payload-pointer-ptrdec-count>
            sonet-payload-pointer-ptrdec-count
          </sonet-payload-pointer-ptrdec-count>
          <sonet-payload-pointer-newptr-ndf-count>
            sonet-payload-pointer-newptr-ndf-count
          </sonet-payload-pointer-newptr-ndf-count>
        </sonet-payload-pointer-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<sonet-payload-pointer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-payload-pointer-information>
      <sonet-payload-pointer-curptr>
        sonet-payload-pointer-curptr
      </sonet-payload-pointer-curptr>
      <sonet-payload-pointer-ptrinc-count>
        sonet-payload-pointer-ptrinc-count
      </sonet-payload-pointer-ptrinc-count>
      <sonet-payload-pointer-ptrdec-count>
        sonet-payload-pointer-ptrdec-count
      </sonet-payload-pointer-ptrdec-count>
      <sonet-payload-pointer-newptr-ndf-count>
        sonet-payload-pointer-newptr-ndf-count
      </sonet-payload-pointer-newptr-ndf-count>
    </sonet-payload-pointer-information>
  </physical-interface>
</interface-filter-information>
```

Description

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<sonet-payload-pointer-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-payload-pointer-information>
          <sonet-payload-pointer-curptr>
            sonet-payload-pointer-curptr
          </sonet-payload-pointer-curptr>
          <sonet-payload-pointer-ptrinc-count>
            sonet-payload-pointer-ptrinc-count
          </sonet-payload-pointer-ptrinc-count>
          <sonet-payload-pointer-ptrdec-count>
            sonet-payload-pointer-ptrdec-count
          </sonet-payload-pointer-ptrdec-count>
          <sonet-payload-pointer-newptr-ndf-count>
            sonet-payload-pointer-newptr-ndf-count
          </sonet-payload-pointer-newptr-ndf-count>
        </sonet-payload-pointer-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-payload-pointer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-payload-pointer-information>
      <sonet-payload-pointer-curptr>
        sonet-payload-pointer-curptr
      </sonet-payload-pointer-curptr>
      <sonet-payload-pointer-ptrinc-count>
        sonet-payload-pointer-ptrinc-count
      </sonet-payload-pointer-ptrinc-count>
      <sonet-payload-pointer-ptrdec-count>
        sonet-payload-pointer-ptrdec-count
      </sonet-payload-pointer-ptrdec-count>
      <sonet-payload-pointer-newptr-ndf-count>
        sonet-payload-pointer-newptr-ndf-count
      </sonet-payload-pointer-newptr-ndf-count>
    </sonet-payload-pointer-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<sonet-payload-pointer-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-payload-pointer-information>
          <sonet-payload-pointer-curptr>
            sonet-payload-pointer-curptr
          </sonet-payload-pointer-curptr>
          <sonet-payload-pointer-ptrinc-count>
            sonet-payload-pointer-ptrinc-count
          </sonet-payload-pointer-ptrinc-count>
          <sonet-payload-pointer-ptrdec-count>
            sonet-payload-pointer-ptrdec-count
          </sonet-payload-pointer-ptrdec-count>
          <sonet-payload-pointer-newptr-ndf-count>
            sonet-payload-pointer-newptr-ndf-count
          </sonet-payload-pointer-newptr-ndf-count>
        </sonet-payload-pointer-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-physical-information>

Usage

```
<sonet-physical-information>
  <media-alarm>....</media-alarm>
</sonet-physical-information>
```

Description

<sonet-physical-information>

Usage

```
<physical-interface>
  <sonet-physical-information>
    <media-alarm>....</media-alarm>
  </sonet-physical-information>
</physical-interface>
```

Description

<sonet-physical-information>

Usage

```
<physical-interface>
```


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```
  <links>
    <link-entry>
      <sonet-physical-information>
        <media-alarm>....</media-alarm>
      </sonet-physical-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

<sonet-physical-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>....</media-alarm>
    </sonet-physical-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-physical-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-physical-information>
          <media-alarm>....</media-alarm>
        </sonet-physical-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<sonet-physical-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>....</media-alarm>
    </sonet-physical-information>
  </physical-interface>
</interface-filter-information>
```

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Description

<sonet-physical-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-physical-information>
          <media-alarm>....</media-alarm>
        </sonet-physical-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-physical-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-physical-information>
      <media-alarm>....</media-alarm>
    </sonet-physical-information>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-physical-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-physical-information>
          <media-alarm>....</media-alarm>
        </sonet-physical-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-section-information>

Usage

```
<sonet-section-information>
```


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```
  <media-alarm>....</media-alarm>
</sonet-section-information>
```

Description

<sonet-section-information>

Usage

```
<physical-interface>
  <sonet-section-information>
    <media-alarm>....</media-alarm>
  </sonet-section-information>
</physical-interface>
```

Description

<sonet-section-information>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-section-information>
        <media-alarm>....</media-alarm>
      </sonet-section-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

<sonet-section-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>....</media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-section-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-section-information>
```

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```
            <media-alarm>....</media-alarm>
          </sonet-section-information>
        </link-entry>
      </links>
    </physical-interface>
  </interface-information>
```

Description

<sonet-section-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>....</media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-section-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-section-information>
          <media-alarm>....</media-alarm>
        </sonet-section-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-section-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-section-information>
      <media-alarm>....</media-alarm>
    </sonet-section-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<sonet-section-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-section-information>
          <media-alarm>....</media-alarm>
        </sonet-section-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-vt-information>

Usage

```
<sonet-vt-information>
  <media-alarm>....</media-alarm>
</sonet-vt-information>
```

Description

<sonet-vt-information>

Usage

```
<physical-interface>
  <sonet-vt-information>
    <media-alarm>....</media-alarm>
  </sonet-vt-information>
</physical-interface>
```

Description

<sonet-vt-information>

Usage

```
<physical-interface>
  <links>
    <link-entry>
      <sonet-vt-information>
        <media-alarm>....</media-alarm>
      </sonet-vt-information>
    </link-entry>
  </links>
</physical-interface>
```

Description

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<sonet-vt-information>

Usage

```
<interface-information>
  <physical-interface>
    <sonet-vt-information>
      <media-alarm>....</media-alarm>
    </sonet-vt-information>
  </physical-interface>
</interface-information>
```

Description

<sonet-vt-information>

Usage

```
<interface-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-vt-information>
          <media-alarm>....</media-alarm>
        </sonet-vt-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-information>
```

Description

<sonet-vt-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <sonet-vt-information>
      <media-alarm>....</media-alarm>
    </sonet-vt-information>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-vt-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-vt-information>
          <media-alarm>....</media-alarm>
```


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```
        </sonet-vt-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-filter-information>
```

Description

<sonet-vt-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <sonet-vt-information>
      <media-alarm>....</media-alarm>
    </sonet-vt-information>
  </physical-interface>
</interface-policer-information>
```

Description

<sonet-vt-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <links>
      <link-entry>
        <sonet-vt-information>
          <media-alarm>....</media-alarm>
        </sonet-vt-information>
      </link-entry>
    </links>
  </physical-interface>
</interface-policer-information>
```

Description

<source-class>

Usage

```
<source-class-statistics>
  <source-class>
    <scu-class-name>
      scu-class-name
    </scu-class-name>
    <scu-class-packets>
      scu-class-packets
    </scu-class-packets>
    <scu-class-bytes>
      scu-class-bytes
    </scu-class-bytes>
    <scu-class-pps>
```

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```
            scu-class-pps
          </scu-class-pps>
          <scu-class-bps>
            scu-class-bps
          </scu-class-bps>
        </source-class>
      </source-class-statistics>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<address-family>
  <source-class-statistics>
    <source-class>
      <scu-class-name>
        scu-class-name
      </scu-class-name>
      <scu-class-packets>
        scu-class-packets
      </scu-class-packets>
      <scu-class-bytes>
        scu-class-bytes
      </scu-class-bytes>
      <scu-class-pps>
        scu-class-pps
      </scu-class-pps>
      <scu-class-bps>
        scu-class-bps
      </scu-class-bps>
    </source-class>
  </source-class-statistics>
</address-family>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<logical-interface>
  <address-family>
    <source-class-statistics>
      <source-class>
        <scu-class-name>
          scu-class-name
        </scu-class-name>
        <scu-class-packets>
          scu-class-packets
        </scu-class-packets>
        <scu-class-bytes>
          scu-class-bytes
```


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```
            </scu-class-bytes>
            <scu-class-pps>
              scu-class-pps
            </scu-class-pps>
            <scu-class-bps>
              scu-class-bps
            </scu-class-bps>
          </source-class>
        </source-class-statistics>
      </address-family>
    </logical-interface>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>
          <scu-class-name>
            scu-class-name
          </scu-class-name>
          <scu-class-packets>
            scu-class-packets
          </scu-class-packets>
          <scu-class-bytes>
            scu-class-bytes
          </scu-class-bytes>
          <scu-class-pps>
            scu-class-pps
          </scu-class-pps>
          <scu-class-bps>
            scu-class-bps
          </scu-class-bps>
        </source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
```

```
                <source-class-statistics>
                  <source-class>
                    <scu-class-name>
                      scu-class-name
                    </scu-class-name>
                    <scu-class-packets>
                      scu-class-packets
                    </scu-class-packets>
                    <scu-class-bytes>
                      scu-class-bytes
                    </scu-class-bytes>
                    <scu-class-pps>
                      scu-class-pps
                    </scu-class-pps>
                    <scu-class-bps>
                      scu-class-bps
                    </scu-class-bps>
                  </source-class>
                </source-class-statistics>
              </address-family>
            </logical-interface>
          </physical-interface>
        </interface-information>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<interface-information>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>
          <scu-class-name>
            scu-class-name
          </scu-class-name>
          <scu-class-packets>
            scu-class-packets
          </scu-class-packets>
          <scu-class-bytes>
            scu-class-bytes
          </scu-class-bytes>
          <scu-class-pps>
            scu-class-pps
          </scu-class-pps>
          <scu-class-bps>
            scu-class-bps
          </scu-class-bps>
        </source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
```


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```
</interface-information>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <source-class-statistics>
          <source-class>
            <scu-class-name>
              scu-class-name
            </scu-class-name>
            <scu-class-packets>
              scu-class-packets
            </scu-class-packets>
            <scu-class-bytes>
              scu-class-bytes
            </scu-class-bytes>
            <scu-class-pps>
              scu-class-pps
            </scu-class-pps>
            <scu-class-bps>
              scu-class-bps
            </scu-class-bps>
          </source-class>
        </source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>
          <scu-class-name>
            scu-class-name
          </scu-class-name>
          <scu-class-packets>
            scu-class-packets
          </scu-class-packets>
          <scu-class-bytes>
```

```
                scu-class-bytes
              </scu-class-bytes>
              <scu-class-pps>
                scu-class-pps
              </scu-class-pps>
              <scu-class-bps>
                scu-class-bps
              </scu-class-bps>
            </source-class>
          </source-class-statistics>
        </address-family>
      </logical-interface>
    </interface-filter-information>
```

Description SCU statistics for a single class

<source-class>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <source-class-statistics>
          <source-class>
            <scu-class-name>
              scu-class-name
            </scu-class-name>
            <scu-class-packets>
              scu-class-packets
            </scu-class-packets>
            <scu-class-bytes>
              scu-class-bytes
            </scu-class-bytes>
            <scu-class-pps>
              scu-class-pps
            </scu-class-pps>
            <scu-class-bps>
              scu-class-bps
            </scu-class-bps>
          </source-class>
        </source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description SCU statistics for a single class

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<source-class>

Usage

```
<interface-policer-information>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>
          <scu-class-name>
            scu-class-name
          </scu-class-name>
          <scu-class-packets>
            scu-class-packets
          </scu-class-packets>
          <scu-class-bytes>
            scu-class-bytes
          </scu-class-bytes>
          <scu-class-pps>
            scu-class-pps
          </scu-class-pps>
          <scu-class-bps>
            scu-class-bps
          </scu-class-bps>
        </source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
</interface-policer-information>
```

Description SCU statistics for a single class

<source-class-statistics>

Usage

```
<source-class-statistics>
  <source-class>....</source-class>
</source-class-statistics>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<address-family>
  <source-class-statistics>
    <source-class>....</source-class>
  </source-class-statistics>
</address-family>
```

Description Source class usage (SCU) statistics

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<source-class-statistics>

Usage

```
<logical-interface>
  <address-family>
    <source-class-statistics>
      <source-class>....</source-class>
    </source-class-statistics>
  </address-family>
</logical-interface>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>....</source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
</physical-interface>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <source-class-statistics>
          <source-class>....</source-class>
        </source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-information>
  <logical-interface>
```


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```
    <address-family>
      <source-class-statistics>
        <source-class>....</source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
</interface-information>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <source-class-statistics>
          <source-class>....</source-class>
        </source-class-statistics>
      </address-family>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <address-family>
      <source-class-statistics>
        <source-class>....</source-class>
      </source-class-statistics>
    </address-family>
  </logical-interface>
</interface-filter-information>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <address-family>
        <source-class-statistics>
          <source-class>....</source-class>
```

```
        </source-class-statistics>
       </address-family>
      </logical-interface>
     </physical-interface>
    </interface-policer-information>
```

Description Source class usage (SCU) statistics

<source-class-statistics>

Usage

```
<interface-policer-information>
 <logical-interface>
  <address-family>
   <source-class-statistics>
    <source-class>....</source-class>
   </source-class-statistics>
  </address-family>
 </logical-interface>
</interface-policer-information>
```

Description Source class usage (SCU) statistics

<src-information>

Usage

```
<src-information>
 <src-chassis-name>
  src-chassis-name
 </src-chassis-name>
 <src-fpc>
  src-fpc
 </src-fpc>
 <src-pfe-id>
  src-pfe-id
 </src-pfe-id>
</src-information>
```

Description

<src-information>

Usage

```
<physical-interface>
 <src-information>
  <src-chassis-name>
   src-chassis-name
  </src-chassis-name>
  <src-fpc>
   src-fpc
  </src-fpc>
```


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```
    <src-pfe-id>
     src-pfe-id
    </src-pfe-id>
   </src-information>
</physical-interface>
```

Description

<src-information>

Usage

```
<interface-information>
 <physical-interface>
  <src-information>
   <src-chassis-name>
    src-chassis-name
   </src-chassis-name>
   <src-fpc>
    src-fpc
   </src-fpc>
   <src-pfe-id>
    src-pfe-id
   </src-pfe-id>
  </src-information>
 </physical-interface>
</interface-information>
```

Description

<src-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <src-information>
   <src-chassis-name>
    src-chassis-name
   </src-chassis-name>
   <src-fpc>
    src-fpc
   </src-fpc>
   <src-pfe-id>
    src-pfe-id
   </src-pfe-id>
  </src-information>
 </physical-interface>
</interface-filter-information>
```

Description

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<src-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <src-information>
      <src-chassis-name>
        src-chassis-name
      </src-chassis-name>
      <src-fpc>
        src-fpc
      </src-fpc>
      <src-pfe-id>
        src-pfe-id
      </src-pfe-id>
    </src-information>
  </physical-interface>
</interface-policer-information>
```

Description

<stp-traffic-statistics>

Usage

```
<stp-traffic-statistics>
  <stp-input-bytes-dropped>
    stp-input-bytes-dropped
  </stp-input-bytes-dropped>
  <stp-output-bytes-dropped>
    stp-output-bytes-dropped
  </stp-output-bytes-dropped>
  <stp-input-packets-dropped>
    stp-input-packets-dropped
  </stp-input-packets-dropped>
  <stp-output-packets-dropped>
    stp-output-packets-dropped
  </stp-output-packets-dropped>
</stp-traffic-statistics>
```

Description

<stp-traffic-statistics>

Usage

```
<physical-interface>
  <stp-traffic-statistics>
    <stp-input-bytes-dropped>
      stp-input-bytes-dropped
    </stp-input-bytes-dropped>
    <stp-output-bytes-dropped>
      stp-output-bytes-dropped
    </stp-output-bytes-dropped>
    <stp-input-packets-dropped>
```


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```
        stp-input-packets-dropped
      </stp-input-packets-dropped>
      <stp-output-packets-dropped>
        stp-output-packets-dropped
      </stp-output-packets-dropped>
    </stp-traffic-statistics>
  </physical-interface>
```

Description

<stp-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <stp-traffic-statistics>
      <stp-input-bytes-dropped>
        stp-input-bytes-dropped
      </stp-input-bytes-dropped>
      <stp-output-bytes-dropped>
        stp-output-bytes-dropped
      </stp-output-bytes-dropped>
      <stp-input-packets-dropped>
        stp-input-packets-dropped
      </stp-input-packets-dropped>
      <stp-output-packets-dropped>
        stp-output-packets-dropped
      </stp-output-packets-dropped>
    </stp-traffic-statistics>
  </physical-interface>
</interface-information>
```

Description

<stp-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <stp-traffic-statistics>
      <stp-input-bytes-dropped>
        stp-input-bytes-dropped
      </stp-input-bytes-dropped>
      <stp-output-bytes-dropped>
        stp-output-bytes-dropped
      </stp-output-bytes-dropped>
      <stp-input-packets-dropped>
        stp-input-packets-dropped
      </stp-input-packets-dropped>
      <stp-output-packets-dropped>
        stp-output-packets-dropped
      </stp-output-packets-dropped>
    </stp-traffic-statistics>
  </physical-interface>
```

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```
</interface-filter-information>
```

Description

<stp-traffic-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <stp-traffic-statistics>
   <stp-input-bytes-dropped>
    stp-input-bytes-dropped
   </stp-input-bytes-dropped>
   <stp-output-bytes-dropped>
    stp-output-bytes-dropped
   </stp-output-bytes-dropped>
   <stp-input-packets-dropped>
    stp-input-packets-dropped
   </stp-input-packets-dropped>
   <stp-output-packets-dropped>
    stp-output-packets-dropped
   </stp-output-packets-dropped>
  </stp-traffic-statistics>
 </physical-interface>
</interface-policer-information>
```

Description

<sub-interface-list>

Usage

```
<sub-interface-list>
 <sub-interface-name>
  sub-interface-name
 </sub-interface-name>
</sub-interface-list>
```

Description

<sub-interface-list>

Usage

```
<dialer-interface>
 <sub-interface-list>
  <sub-interface-name>
   sub-interface-name
  </sub-interface-name>
 </sub-interface-list>
</dialer-interface>
```

Description

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<sub-interface-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <sub-interface-list>
      <sub-interface-name>
        sub-interface-name
      </sub-interface-name>
    </sub-interface-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

<sub-interface-list>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>
      <sub-interface-list>
        <sub-interface-name>
          sub-interface-name
        </sub-interface-name>
      </sub-interface-list>
    </dialer-interface>
  </dialer-information>
</logical-interface>
```

Description

<sub-interface-list>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <sub-interface-list>
          <sub-interface-name>
            sub-interface-name
          </sub-interface-name>
        </sub-interface-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</physical-interface>
```

Description

<sub-interface-list>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <sub-interface-list>
            <sub-interface-name>
              sub-interface-name
            </sub-interface-name>
          </sub-interface-list>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<sub-interface-list>

Usage

```
<interface-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <sub-interface-list>
          <sub-interface-name>
            sub-interface-name
          </sub-interface-name>
        </sub-interface-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-information>
```

Description

<sub-interface-list>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <sub-interface-list>
            <sub-interface-name>
              sub-interface-name
            </sub-interface-name>
          </sub-interface-list>
```


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```
        </dialer-interface>
       </dialer-information>
      </logical-interface>
     </physical-interface>
</interface-filter-information>
```

Description

<sub-interface-list>

Usage

```
<interface-filter-information>
 <logical-interface>
  <dialer-information>
   <dialer-interface>
    <sub-interface-list>
     <sub-interface-name>
      sub-interface-name
     </sub-interface-name>
    </sub-interface-list>
   </dialer-interface>
  </dialer-information>
 </logical-interface>
</interface-filter-information>
```

Description

<sub-interface-list>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <dialer-information>
    <dialer-interface>
     <sub-interface-list>
      <sub-interface-name>
       sub-interface-name
      </sub-interface-name>
     </sub-interface-list>
    </dialer-interface>
   </dialer-information>
  </logical-interface>
 </physical-interface>
</interface-policer-information>
```

Description

<sub-interface-list>

Usage

```
<interface-policer-information>
 <logical-interface>
```

```
    <dialer-information>
     <dialer-interface>
      <sub-interface-list>
       <sub-interface-name>
        sub-interface-name
       </sub-interface-name>
      </sub-interface-list>
     </dialer-interface>
    </dialer-information>
   </logical-interface>
</interface-policer-information>
```

Description

<to-dce>

Usage

```
<serial-information>
 <eia530-control-signal>
  <to-dce>
   <dtr>
    dtr
   </dtr>
   <rts>
    rts
   </rts>
   <cts>
    cts
   </cts>
   <dcd>
    dcd
   </dcd>
   <dsr>
    dsr
   </dsr>
  </to-dce>
 </eia530-control-signal>
</serial-information>
```

Description

<to-dce>

Usage

```
<physical-interface>
 <serial-information>
  <eia530-control-signal>
   <to-dce>
    <dtr>
     dtr
    </dtr>
    <rts>
     rts
    </rts>
```


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```
            <cts>
              cts
            </cts>
            <dcd>
              dcd
            </dcd>
            <dsr>
              dsr
            </dsr>
          </to-dce>
        </eia530-control-signal>
      </serial-information>
    </physical-interface>
```

Description

<to-dce>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <to-dce>
          <dtr>
            dtr
          </dtr>
          <rts>
            rts
          </rts>
          <cts>
            cts
          </cts>
          <dcd>
            dcd
          </dcd>
          <dsr>
            dsr
          </dsr>
        </to-dce>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<to-dce>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
```

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```
            <to-dce>
              <dtr>
                dtr
              </dtr>
              <rts>
                rts
              </rts>
              <cts>
                cts
              </cts>
              <dcd>
                dcd
              </dcd>
              <dsr>
                dsr
              </dsr>
            </to-dce>
          </eia530-control-signal>
        </serial-information>
      </physical-interface>
    </interface-filter-information>
```

Description

<to-dce>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <eia530-control-signal>
        <to-dce>
          <dtr>
            dtr
          </dtr>
          <rts>
            rts
          </rts>
          <cts>
            cts
          </cts>
          <dcd>
            dcd
          </dcd>
          <dsr>
            dsr
          </dsr>
        </to-dce>
      </eia530-control-signal>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

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<to-dte>

Usage

```
<serial-information>
  <eia530-control-signal>
    <to-dte>
      <dtr>
        dtr
      </dtr>
      <rts>
        rts
      </rts>
      <cts>
        cts
      </cts>
      <dcd>
        dcd
      </dcd>
      <dsr>
        dsr
      </dsr>
    </to-dte>
  </eia530-control-signal>
</serial-information>
```

Description

<to-dte>

Usage

```
<physical-interface>
  <serial-information>
    <eia530-control-signal>
      <to-dte>
        <dtr>
          dtr
        </dtr>
        <rts>
          rts
        </rts>
        <cts>
          cts
        </cts>
        <dcd>
          dcd
        </dcd>
        <dsr>
          dsr
        </dsr>
      </to-dte>
    </eia530-control-signal>
  </serial-information>
</physical-interface>
```

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Description

<to-dte>

Usage

```
<interface-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
    <to-dte>
     <dtr>
      dtr
     </dtr>
     <rts>
      rts
     </rts>
     <cts>
      cts
     </cts>
     <dcd>
      dcd
     </dcd>
     <dsr>
      dsr
     </dsr>
    </to-dte>
   </eia530-control-signal>
  </serial-information>
 </physical-interface>
</interface-information>
```

Description

<to-dte>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
    <to-dte>
     <dtr>
      dtr
     </dtr>
     <rts>
      rts
     </rts>
     <cts>
      cts
     </cts>
     <dcd>
      dcd
     </dcd>
     <dsr>
      dsr
```


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```
            </dsr>
           </to-dte>
          </eia530-control-signal>
         </serial-information>
        </physical-interface>
       </interface-filter-information>
```

Description

<to-dte>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <eia530-control-signal>
    <to-dte>
     <dtr>
      dtr
     </dtr>
     <rts>
      rts
     </rts>
     <cts>
      cts
     </cts>
     <dcd>
      dcd
     </dcd>
     <dsr>
      dsr
     </dsr>
    </to-dte>
   </eia530-control-signal>
  </serial-information>
 </physical-interface>
</interface-policer-information>
```

Description

<traffic-statistics>

Usage

```
<traffic-statistics>
 <input-bytes>
  input-bytes
 </input-bytes>
 <output-bytes>
  output-bytes
 </output-bytes>
 <input-bps>
  input-bps
 </input-bps>
 <output-bps>
```

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```
    output-bps
  </output-bps>
  <input-packets>
    input-packets
  </input-packets>
  <output-packets>
    output-packets
  </output-packets>
  <input-pps>
    input-pps
  </input-pps>
  <output-pps>
    output-pps
  </output-pps>
  <ipv6-transit-statistics>....</ipv6-transit-statistics>
  <ipv6-total-statistics>....</ipv6-total-statistics>
</traffic-statistics>
```

Description

<traffic-statistics>

Usage

```
<virtual-circuit-information>
  <traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
</virtual-circuit-information>
```


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Description

<traffic-statistics>

Usage

```
<virtual-path-information>
  <traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
</virtual-path-information>
```

Description

<traffic-statistics>

Usage

```
<logical-interface>
  <traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
```

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```
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
    <input-pps>
     input-pps
    </input-pps>
    <output-pps>
     output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
   </traffic-statistics>
</logical-interface>
```

Description

<traffic-statistics>

Usage

```
<logical-interface>
 <virtual-circuit-information>
  <traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
   <output-pps>
    output-pps
   </output-pps>
   <ipv6-transit-statistics>....</ipv6-transit-statistics>
   <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
 </virtual-circuit-information>
</logical-interface>
```


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Description

<traffic-statistics>

Usage

```
<physical-interface>
  <traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
</physical-interface>
```

Description

<traffic-statistics>

Usage

```
<physical-interface>
  <virtual-path-information>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
```

```
      </output-bps>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
      <input-pps>
       input-pps
      </input-pps>
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
```

Description

<traffic-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
   <output-pps>
    output-pps
   </output-pps>
   <ipv6-transit-statistics>....</ipv6-transit-statistics>
   <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
 </logical-interface>
```


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```
</physical-interface>
```

Description

<traffic-statistics>

Usage

```
<physical-interface>
 <logical-interface>
  <virtual-circuit-information>
   <traffic-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
    <input-pps>
     input-pps
    </input-pps>
    <output-pps>
     output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
   </traffic-statistics>
  </virtual-circuit-information>
 </logical-interface>
</physical-interface>
```

Description

<traffic-statistics>

Usage

```
<interface-set>
 <traffic-statistics>
  <input-bytes>
   input-bytes
  </input-bytes>
  <output-bytes>
   output-bytes
```

```
    </output-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
    <input-pps>
     input-pps
    </input-pps>
    <output-pps>
     output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
   </traffic-statistics>
</interface-set>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
   <output-pps>
    output-pps
```


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```
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
    </traffic-statistics>
  </physical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
```

```
    <logical-interface>
     <traffic-statistics>
      <input-bytes>
       input-bytes
      </input-bytes>
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-bps>
       output-bps
      </output-bps>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
      <input-pps>
       input-pps
      </input-pps>
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </traffic-statistics>
    </logical-interface>
   </physical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <traffic-statistics>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-bps>
      input-bps
     </input-bps>
     <output-bps>
      output-bps
     </output-bps>
```


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```
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
 </physical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
   <output-pps>
    output-pps
   </output-pps>
   <ipv6-transit-statistics>....</ipv6-transit-statistics>
   <ipv6-total-statistics>....</ipv6-total-statistics>
  </traffic-statistics>
```

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```
  </logical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-information>
  <interface-set>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
```


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```
      <output-bytes>
       output-bytes
      </output-bytes>
      <input-bps>
       input-bps
      </input-bps>
      <output-bps>
       output-bps
      </output-bps>
      <input-packets>
       input-packets
      </input-packets>
      <output-packets>
       output-packets
      </output-packets>
      <input-pps>
       input-pps
      </input-pps>
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </traffic-statistics>
    </interface-set>
</interface-information>
```

Description

<traffic-statistics>

Usage

```
<interface-filter-information>
 <physical-interface>
  <traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
```

```
      </input-pps>
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </traffic-statistics>
    </physical-interface>
  </interface-filter-information>
```

Description

<traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-filter-information>
```

Description

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<traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description

<traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <traffic-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
```

```
            <input-bps>
              input-bps
            </input-bps>
            <output-bps>
              output-bps
            </output-bps>
            <input-packets>
              input-packets
            </input-packets>
            <output-packets>
              output-packets
            </output-packets>
            <input-pps>
              input-pps
            </input-pps>
            <output-pps>
              output-pps
            </output-pps>
            <ipv6-transit-statistics>....</ipv6-transit-statistics>
            <ipv6-total-statistics>....</ipv6-total-statistics>
          </traffic-statistics>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
```


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```
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </traffic-statistics>
    </logical-interface>
</interface-filter-information>
```

Description

<traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description

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<traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-pps>
        output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
    </traffic-statistics>
  </physical-interface>
</interface-policer-information>
```

Description

<traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <virtual-path-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
```


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```
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-path-information>
  </physical-interface>
</interface-policer-information>
```

Description

<traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
```

```
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<traffic-statistics>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <traffic-statistics>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-bps>
            input-bps
          </input-bps>
          <output-bps>
            output-bps
          </output-bps>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
          <input-pps>
            input-pps
          </input-pps>
          <output-pps>
            output-pps
          </output-pps>
          <ipv6-transit-statistics>....</ipv6-transit-statistics>
          <ipv6-total-statistics>....</ipv6-total-statistics>
        </traffic-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

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<traffic-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-pps>
        output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
    </traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description

<traffic-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
```

```
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </traffic-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description

<transit-traffic-statistics>

Usage

```
<transit-traffic-statistics>
  <input-bytes>
    input-bytes
  </input-bytes>
  <output-bytes>
    output-bytes
  </output-bytes>
  <input-bps>
    input-bps
  </input-bps>
  <output-bps>
    output-bps
  </output-bps>
  <input-packets>
    input-packets
  </input-packets>
  <output-packets>
    output-packets
  </output-packets>
  <input-pps>
    input-pps
  </input-pps>
  <output-pps>
    output-pps
  </output-pps>
  <ipv6-transit-statistics>....</ipv6-transit-statistics>
  <ipv6-total-statistics>....</ipv6-total-statistics>
```


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```
</transit-traffic-statistics>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<logical-interface>
  <transit-traffic-statistics>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
    <ipv6-transit-statistics>....</ipv6-transit-statistics>
    <ipv6-total-statistics>....</ipv6-total-statistics>
  </transit-traffic-statistics>
</logical-interface>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<physical-interface>
  <logical-interface>
    <transit-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
```

```
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </transit-traffic-statistics>
    </logical-interface>
  </physical-interface>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <transit-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
```


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```
      <output-pps>
       output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
     </transit-traffic-statistics>
    </logical-interface>
   </physical-interface>
</interface-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<interface-information>
 <logical-interface>
  <transit-traffic-statistics>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-bps>
    input-bps
   </input-bps>
   <output-bps>
    output-bps
   </output-bps>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-pps>
    input-pps
   </input-pps>
   <output-pps>
    output-pps
   </output-pps>
   <ipv6-transit-statistics>....</ipv6-transit-statistics>
   <ipv6-total-statistics>....</ipv6-total-statistics>
  </transit-traffic-statistics>
 </logical-interface>
</interface-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

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<transit-traffic-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <transit-traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-bps>
          input-bps
        </input-bps>
        <output-bps>
          output-bps
        </output-bps>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
        </output-packets>
        <input-pps>
          input-pps
        </input-pps>
        <output-pps>
          output-pps
        </output-pps>
        <ipv6-transit-statistics>....</ipv6-transit-statistics>
        <ipv6-total-statistics>....</ipv6-total-statistics>
      </transit-traffic-statistics>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<interface-filter-information>
  <logical-interface>
    <transit-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
```


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```
      input-bps
     </input-bps>
     <output-bps>
      output-bps
     </output-bps>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
     <input-pps>
      input-pps
     </input-pps>
     <output-pps>
      output-pps
     </output-pps>
     <ipv6-transit-statistics>....</ipv6-transit-statistics>
     <ipv6-total-statistics>....</ipv6-total-statistics>
    </transit-traffic-statistics>
   </logical-interface>
</interface-filter-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <logical-interface>
   <transit-traffic-statistics>
    <input-bytes>
     input-bytes
    </input-bytes>
    <output-bytes>
     output-bytes
    </output-bytes>
    <input-bps>
     input-bps
    </input-bps>
    <output-bps>
     output-bps
    </output-bps>
    <input-packets>
     input-packets
    </input-packets>
    <output-packets>
     output-packets
    </output-packets>
    <input-pps>
     input-pps
    </input-pps>
    <output-pps>
```

```
            output-pps
          </output-pps>
          <ipv6-transit-statistics>....</ipv6-transit-statistics>
          <ipv6-total-statistics>....</ipv6-total-statistics>
        </transit-traffic-statistics>
      </logical-interface>
    </physical-interface>
  </interface-policer-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

<transit-traffic-statistics>

Usage

```
<interface-policer-information>
  <logical-interface>
    <transit-traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-bps>
        input-bps
      </input-bps>
      <output-bps>
        output-bps
      </output-bps>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
      <input-pps>
        input-pps
      </input-pps>
      <output-pps>
        output-pps
      </output-pps>
      <ipv6-transit-statistics>....</ipv6-transit-statistics>
      <ipv6-total-statistics>....</ipv6-total-statistics>
    </transit-traffic-statistics>
  </logical-interface>
</interface-policer-information>
```

Description Statistics for traffic passing through the Packet Forwarding Engine

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<tx-clock>

Usage

```
<serial-information>
  <tx-clock>
    <tx-clock-mode>
      tx-clock-mode
    </tx-clock-mode>
  </tx-clock>
</serial-information>
```

Description

<tx-clock>

Usage

```
<physical-interface>
  <serial-information>
    <tx-clock>
      <tx-clock-mode>
        tx-clock-mode
      </tx-clock-mode>
    </tx-clock>
  </serial-information>
</physical-interface>
```

Description

<tx-clock>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <tx-clock>
        <tx-clock-mode>
          tx-clock-mode
        </tx-clock-mode>
      </tx-clock>
    </serial-information>
  </physical-interface>
</interface-information>
```

Description

<tx-clock>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <tx-clock>
```

```
        <tx-clock-mode>
          tx-clock-mode
        </tx-clock-mode>
      </tx-clock>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<tx-clock>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <tx-clock>
        <tx-clock-mode>
          tx-clock-mode
        </tx-clock-mode>
      </tx-clock>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

<vci-range>

Usage

```
<virtual-circuit-information>
  <vci-range>
    <vpi>
      vpi
    </vpi>
    <start-vci>
      start-vci
    </start-vci>
    <end-vci>
      end-vci
    </end-vci>
  </vci-range>
</virtual-circuit-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <vci-range>
```


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```
            <vpi>
              vpi
            </vpi>
            <start-vci>
              start-vci
            </start-vci>
            <end-vci>
              end-vci
            </end-vci>
          </vci-range>
        </virtual-circuit-information>
      </logical-interface>
```

Description ATM VCI range

<vci-range>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <vci-range>
        <vpi>
          vpi
        </vpi>
        <start-vci>
          start-vci
        </start-vci>
        <end-vci>
          end-vci
        </end-vci>
      </vci-range>
    </virtual-circuit-information>
  </logical-interface>
</physical-interface>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <vci-range>
          <vpi>
            vpi
          </vpi>
          <start-vci>
            start-vci
          </start-vci>
```

```
            <end-vci>
              end-vci
            </end-vci>
          </vci-range>
        </virtual-circuit-information>
      </logical-interface>
    </physical-interface>
  </interface-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <vci-range>
        <vpi>
          vpi
        </vpi>
        <start-vci>
          start-vci
        </start-vci>
        <end-vci>
          end-vci
        </end-vci>
      </vci-range>
    </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <vci-range>
          <vpi>
            vpi
          </vpi>
          <start-vci>
            start-vci
          </start-vci>
          <end-vci>
            end-vci
          </end-vci>
        </vci-range>
```


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```
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-filter-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <vci-range>
        <vpi>
          vpi
        </vpi>
        <start-vci>
          start-vci
        </start-vci>
        <end-vci>
          end-vci
        </end-vci>
      </vci-range>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <vci-range>
          <vpi>
            vpi
          </vpi>
          <start-vci>
            start-vci
          </start-vci>
          <end-vci>
            end-vci
          </end-vci>
        </vci-range>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
```

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```
</interface-policer-information>
```

Description ATM VCI range

<vci-range>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <vci-range>
        <vpi>
          vpi
        </vpi>
        <start-vci>
          start-vci
        </start-vci>
        <end-vci>
          end-vci
        </end-vci>
      </vci-range>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description ATM VCI range

<vdsl-chipset-information>

Usage

```
<vdsl-information>
  <vdsl-chipset-information>
    <vtu-r-vendor-id>
      vtu-r-vendor-id
    </vtu-r-vendor-id>
    <vtu-c-vendor-id>
      vtu-c-vendor-id
    </vtu-c-vendor-id>
    <vtu-r-vendor-specific>
      vtu-r-vendor-specific
    </vtu-r-vendor-specific>
    <vtu-c-vendor-specific>
      vtu-c-vendor-specific
    </vtu-c-vendor-specific>
    <vtu-r-country-code>
      vtu-r-country-code
    </vtu-r-country-code>
    <vtu-c-country-code>
      vtu-c-country-code
    </vtu-c-country-code>
  </vdsl-chipset-information>
```


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```
</vdsl-information>
```

Description

<vdsl-chipset-information>

Usage

```
<physical-interface>
  <vdsl-information>
    <vdsl-chipset-information>
      <vtu-r-vendor-id>
        vtu-r-vendor-id
      </vtu-r-vendor-id>
      <vtu-c-vendor-id>
        vtu-c-vendor-id
      </vtu-c-vendor-id>
      <vtu-r-vendor-specific>
        vtu-r-vendor-specific
      </vtu-r-vendor-specific>
      <vtu-c-vendor-specific>
        vtu-c-vendor-specific
      </vtu-c-vendor-specific>
      <vtu-r-country-code>
        vtu-r-country-code
      </vtu-r-country-code>
      <vtu-c-country-code>
        vtu-c-country-code
      </vtu-c-country-code>
    </vdsl-chipset-information>
  </vdsl-information>
</physical-interface>
```

Description

<vdsl-chipset-information>

Usage

```
<interface-information>
  <physical-interface>
    <vdsl-information>
      <vdsl-chipset-information>
        <vtu-r-vendor-id>
          vtu-r-vendor-id
        </vtu-r-vendor-id>
        <vtu-c-vendor-id>
          vtu-c-vendor-id
        </vtu-c-vendor-id>
        <vtu-r-vendor-specific>
          vtu-r-vendor-specific
        </vtu-r-vendor-specific>
        <vtu-c-vendor-specific>
          vtu-c-vendor-specific
        </vtu-c-vendor-specific>
        <vtu-r-country-code>
```

```
                vtu-r-country-code
               </vtu-r-country-code>
               <vtu-c-country-code>
                vtu-c-country-code
               </vtu-c-country-code>
              </vdsl-chipset-information>
             </vdsl-information>
            </physical-interface>
           </interface-information>
```

Description

<vdsl-chipset-information>

Usage

```
<interface-filter-information>
 <physical-interface>
  <vdsl-information>
   <vdsl-chipset-information>
    <vtu-r-vendor-id>
     vtu-r-vendor-id
    </vtu-r-vendor-id>
    <vtu-c-vendor-id>
     vtu-c-vendor-id
    </vtu-c-vendor-id>
    <vtu-r-vendor-specific>
     vtu-r-vendor-specific
    </vtu-r-vendor-specific>
    <vtu-c-vendor-specific>
     vtu-c-vendor-specific
    </vtu-c-vendor-specific>
    <vtu-r-country-code>
     vtu-r-country-code
    </vtu-r-country-code>
    <vtu-c-country-code>
     vtu-c-country-code
    </vtu-c-country-code>
   </vdsl-chipset-information>
  </vdsl-information>
 </physical-interface>
</interface-filter-information>
```

Description

<vdsl-chipset-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <vdsl-information>
   <vdsl-chipset-information>
    <vtu-r-vendor-id>
     vtu-r-vendor-id
    </vtu-r-vendor-id>
```


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```
        <vtu-c-vendor-id>
          vtu-c-vendor-id
        </vtu-c-vendor-id>
        <vtu-r-vendor-specific>
          vtu-r-vendor-specific
        </vtu-r-vendor-specific>
        <vtu-c-vendor-specific>
          vtu-c-vendor-specific
        </vtu-c-vendor-specific>
        <vtu-r-country-code>
          vtu-r-country-code
        </vtu-r-country-code>
        <vtu-c-country-code>
          vtu-c-country-code
        </vtu-c-country-code>
      </vdsl-chipset-information>
    </vdsl-information>
  </physical-interface>
</interface-policer-information>
```

Description

<vdsl-information>

Usage

```
<vdsl-information>
  <vdsl-line-status>
    vdsl-line-status
  </vdsl-line-status>
  <vdsl-line-profile-type>
    vdsl-line-profile-type
  </vdsl-line-profile-type>
  <vdsl-line-type>
    vdsl-line-type
  </vdsl-line-type>
  <vdsl-annex-type>
    vdsl-annex-type
  </vdsl-annex-type>
  <vdsl-last-fail-code>
    vdsl-last-fail-code
  </vdsl-last-fail-code>
  <vdsl-subfunction>
    vdsl-subfunction
  </vdsl-subfunction>
  <vdsl-seconds-in-showtime>
    vdsl-seconds-in-showtime
  </vdsl-seconds-in-showtime>
  <vdsl-chipset-information>....</vdsl-chipset-information>
  <vdsl-statistics>....</vdsl-statistics>
</vdsl-information>
```

Description Operational information and statistics for VDSL interfaces

<vdsl-information>

Usage

```
<physical-interface>
  <vdsl-information>
    <vdsl-line-status>
      vdsl-line-status
    </vdsl-line-status>
    <vdsl-line-profile-type>
      vdsl-line-profile-type
    </vdsl-line-profile-type>
    <vdsl-line-type>
      vdsl-line-type
    </vdsl-line-type>
    <vdsl-annex-type>
      vdsl-annex-type
    </vdsl-annex-type>
    <vdsl-last-fail-code>
      vdsl-last-fail-code
    </vdsl-last-fail-code>
    <vdsl-subfunction>
      vdsl-subfunction
    </vdsl-subfunction>
    <vdsl-seconds-in-showtime>
      vdsl-seconds-in-showtime
    </vdsl-seconds-in-showtime>
    <vdsl-chipset-information>....</vdsl-chipset-information>
    <vdsl-statistics>....</vdsl-statistics>
  </vdsl-information>
</physical-interface>
```

Description Operational information and statistics for VDSL interfaces

<vdsl-information>

Usage

```
<interface-information>
  <physical-interface>
    <vdsl-information>
      <vdsl-line-status>
        vdsl-line-status
      </vdsl-line-status>
      <vdsl-line-profile-type>
        vdsl-line-profile-type
      </vdsl-line-profile-type>
      <vdsl-line-type>
        vdsl-line-type
      </vdsl-line-type>
      <vdsl-annex-type>
        vdsl-annex-type
      </vdsl-annex-type>
      <vdsl-last-fail-code>
        vdsl-last-fail-code
```


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```
        </vdsl-last-fail-code>
        <vdsl-subfunction>
          vdsl-subfunction
        </vdsl-subfunction>
        <vdsl-seconds-in-showtime>
          vdsl-seconds-in-showtime
        </vdsl-seconds-in-showtime>
        <vdsl-chipset-information>....</vdsl-chipset-information>
        <vdsl-statistics>....</vdsl-statistics>
      </vdsl-information>
    </physical-interface>
  </interface-information>
```

Description Operational information and statistics for VDSL interfaces

<vdsl-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <vdsl-information>
      <vdsl-line-status>
        vdsl-line-status
      </vdsl-line-status>
      <vdsl-line-profile-type>
        vdsl-line-profile-type
      </vdsl-line-profile-type>
      <vdsl-line-type>
        vdsl-line-type
      </vdsl-line-type>
      <vdsl-annex-type>
        vdsl-annex-type
      </vdsl-annex-type>
      <vdsl-last-fail-code>
        vdsl-last-fail-code
      </vdsl-last-fail-code>
      <vdsl-subfunction>
        vdsl-subfunction
      </vdsl-subfunction>
      <vdsl-seconds-in-showtime>
        vdsl-seconds-in-showtime
      </vdsl-seconds-in-showtime>
      <vdsl-chipset-information>....</vdsl-chipset-information>
      <vdsl-statistics>....</vdsl-statistics>
    </vdsl-information>
  </physical-interface>
</interface-filter-information>
```

Description Operational information and statistics for VDSL interfaces

<vdsl-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <vdsl-information>
      <vdsl-line-status>
        vdsl-line-status
      </vdsl-line-status>
      <vdsl-line-profile-type>
        vdsl-line-profile-type
      </vdsl-line-profile-type>
      <vdsl-line-type>
        vdsl-line-type
      </vdsl-line-type>
      <vdsl-annex-type>
        vdsl-annex-type
      </vdsl-annex-type>
      <vdsl-last-fail-code>
        vdsl-last-fail-code
      </vdsl-last-fail-code>
      <vdsl-subfunction>
        vdsl-subfunction
      </vdsl-subfunction>
      <vdsl-seconds-in-showtime>
        vdsl-seconds-in-showtime
      </vdsl-seconds-in-showtime>
      <vdsl-chipset-information>....</vdsl-chipset-information>
      <vdsl-statistics>....</vdsl-statistics>
    </vdsl-information>
  </physical-interface>
</interface-policer-information>
```

Description Operational information and statistics for VDSL interfaces

<vdsl-statistics>

Usage

```
<vdsl-information>
  <vdsl-statistics>
    <vdsl-near-end-attainable-bitrate>
      vdsl-near-end-attainable-bitrate
    </vdsl-near-end-attainable-bitrate>
    <vdsl-far-end-attainable-bitrate>
      vdsl-far-end-attainable-bitrate
    </vdsl-far-end-attainable-bitrate>
    <vdsl-near-end-attenuation>
      vdsl-near-end-attenuation
    </vdsl-near-end-attenuation>
    <vdsl-far-end-attenuation>
      vdsl-far-end-attenuation
    </vdsl-far-end-attenuation>
    <vdsl-near-end-capacity-used>
```


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```
  vdsl-near-end-capacity-used
</vdsl-near-end-capacity-used>
<vdsl-far-end-capacity-used>
  vdsl-far-end-capacity-used
</vdsl-far-end-capacity-used>
<vdsl-near-end-noise-margin>
  vdsl-near-end-noise-margin
</vdsl-near-end-noise-margin>
<vdsl-far-end-noise-margin>
  vdsl-far-end-noise-margin
</vdsl-far-end-noise-margin>
<vdsl-near-end-output-power>
  vdsl-near-end-output-power
</vdsl-near-end-output-power>
<vdsl-far-end-output-power>
  vdsl-far-end-output-power
</vdsl-far-end-output-power>
<vdsl-near-end-interleaved-bitrate>
  vdsl-near-end-interleaved-bitrate
</vdsl-near-end-interleaved-bitrate>
<vdsl-near-end-fast-bitrate>
  vdsl-near-end-fast-bitrate
</vdsl-near-end-fast-bitrate>
<vdsl-far-end-interleaved-bitrate>
  vdsl-far-end-interleaved-bitrate
</vdsl-far-end-interleaved-bitrate>
<vdsl-far-end-fast-bitrate>
  vdsl-far-end-fast-bitrate
</vdsl-far-end-fast-bitrate>
<vdsl-near-end-interleaved-crc>
  vdsl-near-end-interleaved-crc
</vdsl-near-end-interleaved-crc>
<vdsl-near-end-fast-crc>
  vdsl-near-end-fast-crc
</vdsl-near-end-fast-crc>
<vdsl-far-end-interleaved-crc>
  vdsl-far-end-interleaved-crc
</vdsl-far-end-interleaved-crc>
<vdsl-far-end-fast-crc>
  vdsl-far-end-fast-crc
</vdsl-far-end-fast-crc>
<vdsl-near-end-interleaved-hec>
  vdsl-near-end-interleaved-hec
</vdsl-near-end-interleaved-hec>
<vdsl-near-end-fast-hec>
  vdsl-near-end-fast-hec
</vdsl-near-end-fast-hec>
<vdsl-far-end-interleaved-hec>
  vdsl-far-end-interleaved-hec
</vdsl-far-end-interleaved-hec>
<vdsl-far-end-fast-hec>
  vdsl-far-end-fast-hec
</vdsl-far-end-fast-hec>
<vdsl-near-end-interleaved-fec>
  vdsl-near-end-interleaved-fec
</vdsl-near-end-interleaved-fec>
```

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```
    <vdsl-near-end-fast-fec>
      vdsl-near-end-fast-fec
    </vdsl-near-end-fast-fec>
    <vdsl-far-end-interleaved-fec>
      vdsl-far-end-interleaved-fec
    </vdsl-far-end-interleaved-fec>
    <vdsl-far-end-fast-fec>
      vdsl-far-end-fast-fec
    </vdsl-far-end-fast-fec>
    <vdsl-near-end-interleaved-rx-cells>
      vdsl-near-end-interleaved-rx-cells
    </vdsl-near-end-interleaved-rx-cells>
    <vdsl-near-end-fast-rx-cells>
      vdsl-near-end-fast-rx-cells
    </vdsl-near-end-fast-rx-cells>
    <vdsl-near-end-interleaved-tx-cells>
      vdsl-near-end-interleaved-tx-cells
    </vdsl-near-end-interleaved-tx-cells>
    <vdsl-near-end-fast-tx-cells>
      vdsl-near-end-fast-tx-cells
    </vdsl-near-end-fast-tx-cells>
  </vdsl-statistics>
</vdsl-information>
```

Description

<vdsl-statistics>

Usage

```
<physical-interface>
  <vdsl-information>
    <vdsl-statistics>
      <vdsl-near-end-attainable-bitrate>
        vdsl-near-end-attainable-bitrate
      </vdsl-near-end-attainable-bitrate>
      <vdsl-far-end-attainable-bitrate>
        vdsl-far-end-attainable-bitrate
      </vdsl-far-end-attainable-bitrate>
      <vdsl-near-end-attenuation>
        vdsl-near-end-attenuation
      </vdsl-near-end-attenuation>
      <vdsl-far-end-attenuation>
        vdsl-far-end-attenuation
      </vdsl-far-end-attenuation>
      <vdsl-near-end-capacity-used>
        vdsl-near-end-capacity-used
      </vdsl-near-end-capacity-used>
      <vdsl-far-end-capacity-used>
        vdsl-far-end-capacity-used
      </vdsl-far-end-capacity-used>
      <vdsl-near-end-noise-margin>
        vdsl-near-end-noise-margin
      </vdsl-near-end-noise-margin>
      <vdsl-far-end-noise-margin>
        vdsl-far-end-noise-margin
```


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```
</vdsl-far-end-noise-margin>
<vdsl-near-end-output-power>
  vdsl-near-end-output-power
</vdsl-near-end-output-power>
<vdsl-far-end-output-power>
  vdsl-far-end-output-power
</vdsl-far-end-output-power>
<vdsl-near-end-interleaved-bitrate>
  vdsl-near-end-interleaved-bitrate
</vdsl-near-end-interleaved-bitrate>
<vdsl-near-end-fast-bitrate>
  vdsl-near-end-fast-bitrate
</vdsl-near-end-fast-bitrate>
<vdsl-far-end-interleaved-bitrate>
  vdsl-far-end-interleaved-bitrate
</vdsl-far-end-interleaved-bitrate>
<vdsl-far-end-fast-bitrate>
  vdsl-far-end-fast-bitrate
</vdsl-far-end-fast-bitrate>
<vdsl-near-end-interleaved-crc>
  vdsl-near-end-interleaved-crc
</vdsl-near-end-interleaved-crc>
<vdsl-near-end-fast-crc>
  vdsl-near-end-fast-crc
</vdsl-near-end-fast-crc>
<vdsl-far-end-interleaved-crc>
  vdsl-far-end-interleaved-crc
</vdsl-far-end-interleaved-crc>
<vdsl-far-end-fast-crc>
  vdsl-far-end-fast-crc
</vdsl-far-end-fast-crc>
<vdsl-near-end-interleaved-hec>
  vdsl-near-end-interleaved-hec
</vdsl-near-end-interleaved-hec>
<vdsl-near-end-fast-hec>
  vdsl-near-end-fast-hec
</vdsl-near-end-fast-hec>
<vdsl-far-end-interleaved-hec>
  vdsl-far-end-interleaved-hec
</vdsl-far-end-interleaved-hec>
<vdsl-far-end-fast-hec>
  vdsl-far-end-fast-hec
</vdsl-far-end-fast-hec>
<vdsl-near-end-interleaved-fec>
  vdsl-near-end-interleaved-fec
</vdsl-near-end-interleaved-fec>
<vdsl-near-end-fast-fec>
  vdsl-near-end-fast-fec
</vdsl-near-end-fast-fec>
<vdsl-far-end-interleaved-fec>
  vdsl-far-end-interleaved-fec
</vdsl-far-end-interleaved-fec>
<vdsl-far-end-fast-fec>
  vdsl-far-end-fast-fec
</vdsl-far-end-fast-fec>
<vdsl-near-end-interleaved-rx-cells>
```

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```
            vdsl-near-end-interleaved-rx-cells
           </vdsl-near-end-interleaved-rx-cells>
           <vdsl-near-end-fast-rx-cells>
            vdsl-near-end-fast-rx-cells
           </vdsl-near-end-fast-rx-cells>
           <vdsl-near-end-interleaved-tx-cells>
            vdsl-near-end-interleaved-tx-cells
           </vdsl-near-end-interleaved-tx-cells>
           <vdsl-near-end-fast-tx-cells>
            vdsl-near-end-fast-tx-cells
           </vdsl-near-end-fast-tx-cells>
          </vdsl-statistics>
         </vdsl-information>
        </physical-interface>
```

Description

<vdsl-statistics>

Usage

```
<interface-information>
 <physical-interface>
  <vdsl-information>
   <vdsl-statistics>
    <vdsl-near-end-attainable-bitrate>
     vdsl-near-end-attainable-bitrate
    </vdsl-near-end-attainable-bitrate>
    <vdsl-far-end-attainable-bitrate>
     vdsl-far-end-attainable-bitrate
    </vdsl-far-end-attainable-bitrate>
    <vdsl-near-end-attenuation>
     vdsl-near-end-attenuation
    </vdsl-near-end-attenuation>
    <vdsl-far-end-attenuation>
     vdsl-far-end-attenuation
    </vdsl-far-end-attenuation>
    <vdsl-near-end-capacity-used>
     vdsl-near-end-capacity-used
    </vdsl-near-end-capacity-used>
    <vdsl-far-end-capacity-used>
     vdsl-far-end-capacity-used
    </vdsl-far-end-capacity-used>
    <vdsl-near-end-noise-margin>
     vdsl-near-end-noise-margin
    </vdsl-near-end-noise-margin>
    <vdsl-far-end-noise-margin>
     vdsl-far-end-noise-margin
    </vdsl-far-end-noise-margin>
    <vdsl-near-end-output-power>
     vdsl-near-end-output-power
    </vdsl-near-end-output-power>
    <vdsl-far-end-output-power>
     vdsl-far-end-output-power
    </vdsl-far-end-output-power>
    <vdsl-near-end-interleaved-bitrate>
```


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```
  vdsl-near-end-interleaved-bitrate
</vdsl-near-end-interleaved-bitrate>
<vdsl-near-end-fast-bitrate>
  vdsl-near-end-fast-bitrate
</vdsl-near-end-fast-bitrate>
<vdsl-far-end-interleaved-bitrate>
  vdsl-far-end-interleaved-bitrate
</vdsl-far-end-interleaved-bitrate>
<vdsl-far-end-fast-bitrate>
  vdsl-far-end-fast-bitrate
</vdsl-far-end-fast-bitrate>
<vdsl-near-end-interleaved-crc>
  vdsl-near-end-interleaved-crc
</vdsl-near-end-interleaved-crc>
<vdsl-near-end-fast-crc>
  vdsl-near-end-fast-crc
</vdsl-near-end-fast-crc>
<vdsl-far-end-interleaved-crc>
  vdsl-far-end-interleaved-crc
</vdsl-far-end-interleaved-crc>
<vdsl-far-end-fast-crc>
  vdsl-far-end-fast-crc
</vdsl-far-end-fast-crc>
<vdsl-near-end-interleaved-hec>
  vdsl-near-end-interleaved-hec
</vdsl-near-end-interleaved-hec>
<vdsl-near-end-fast-hec>
  vdsl-near-end-fast-hec
</vdsl-near-end-fast-hec>
<vdsl-far-end-interleaved-hec>
  vdsl-far-end-interleaved-hec
</vdsl-far-end-interleaved-hec>
<vdsl-far-end-fast-hec>
  vdsl-far-end-fast-hec
</vdsl-far-end-fast-hec>
<vdsl-near-end-interleaved-fec>
  vdsl-near-end-interleaved-fec
</vdsl-near-end-interleaved-fec>
<vdsl-near-end-fast-fec>
  vdsl-near-end-fast-fec
</vdsl-near-end-fast-fec>
<vdsl-far-end-interleaved-fec>
  vdsl-far-end-interleaved-fec
</vdsl-far-end-interleaved-fec>
<vdsl-far-end-fast-fec>
  vdsl-far-end-fast-fec
</vdsl-far-end-fast-fec>
<vdsl-near-end-interleaved-rx-cells>
  vdsl-near-end-interleaved-rx-cells
</vdsl-near-end-interleaved-rx-cells>
<vdsl-near-end-fast-rx-cells>
  vdsl-near-end-fast-rx-cells
</vdsl-near-end-fast-rx-cells>
<vdsl-near-end-interleaved-tx-cells>
  vdsl-near-end-interleaved-tx-cells
</vdsl-near-end-interleaved-tx-cells>
```

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```
            <vdsl-near-end-fast-tx-cells>
              vdsl-near-end-fast-tx-cells
            </vdsl-near-end-fast-tx-cells>
          </vdsl-statistics>
        </vdsl-information>
      </physical-interface>
    </interface-information>
```

Description

<vdsl-statistics>

Usage

```
<interface-filter-information>
  <physical-interface>
    <vdsl-information>
      <vdsl-statistics>
        <vdsl-near-end-attainable-bitrate>
          vdsl-near-end-attainable-bitrate
        </vdsl-near-end-attainable-bitrate>
        <vdsl-far-end-attainable-bitrate>
          vdsl-far-end-attainable-bitrate
        </vdsl-far-end-attainable-bitrate>
        <vdsl-near-end-attenuation>
          vdsl-near-end-attenuation
        </vdsl-near-end-attenuation>
        <vdsl-far-end-attenuation>
          vdsl-far-end-attenuation
        </vdsl-far-end-attenuation>
        <vdsl-near-end-capacity-used>
          vdsl-near-end-capacity-used
        </vdsl-near-end-capacity-used>
        <vdsl-far-end-capacity-used>
          vdsl-far-end-capacity-used
        </vdsl-far-end-capacity-used>
        <vdsl-near-end-noise-margin>
          vdsl-near-end-noise-margin
        </vdsl-near-end-noise-margin>
        <vdsl-far-end-noise-margin>
          vdsl-far-end-noise-margin
        </vdsl-far-end-noise-margin>
        <vdsl-near-end-output-power>
          vdsl-near-end-output-power
        </vdsl-near-end-output-power>
        <vdsl-far-end-output-power>
          vdsl-far-end-output-power
        </vdsl-far-end-output-power>
        <vdsl-near-end-interleaved-bitrate>
          vdsl-near-end-interleaved-bitrate
        </vdsl-near-end-interleaved-bitrate>
        <vdsl-near-end-fast-bitrate>
          vdsl-near-end-fast-bitrate
        </vdsl-near-end-fast-bitrate>
        <vdsl-far-end-interleaved-bitrate>
          vdsl-far-end-interleaved-bitrate
```


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```
      </vdsl-far-end-interleaved-bitrate>
      <vdsl-far-end-fast-bitrate>
        vdsl-far-end-fast-bitrate
      </vdsl-far-end-fast-bitrate>
      <vdsl-near-end-interleaved-crc>
        vdsl-near-end-interleaved-crc
      </vdsl-near-end-interleaved-crc>
      <vdsl-near-end-fast-crc>
        vdsl-near-end-fast-crc
      </vdsl-near-end-fast-crc>
      <vdsl-far-end-interleaved-crc>
        vdsl-far-end-interleaved-crc
      </vdsl-far-end-interleaved-crc>
      <vdsl-far-end-fast-crc>
        vdsl-far-end-fast-crc
      </vdsl-far-end-fast-crc>
      <vdsl-near-end-interleaved-hec>
        vdsl-near-end-interleaved-hec
      </vdsl-near-end-interleaved-hec>
      <vdsl-near-end-fast-hec>
        vdsl-near-end-fast-hec
      </vdsl-near-end-fast-hec>
      <vdsl-far-end-interleaved-hec>
        vdsl-far-end-interleaved-hec
      </vdsl-far-end-interleaved-hec>
      <vdsl-far-end-fast-hec>
        vdsl-far-end-fast-hec
      </vdsl-far-end-fast-hec>
      <vdsl-near-end-interleaved-fec>
        vdsl-near-end-interleaved-fec
      </vdsl-near-end-interleaved-fec>
      <vdsl-near-end-fast-fec>
        vdsl-near-end-fast-fec
      </vdsl-near-end-fast-fec>
      <vdsl-far-end-interleaved-fec>
        vdsl-far-end-interleaved-fec
      </vdsl-far-end-interleaved-fec>
      <vdsl-far-end-fast-fec>
        vdsl-far-end-fast-fec
      </vdsl-far-end-fast-fec>
      <vdsl-near-end-interleaved-rx-cells>
        vdsl-near-end-interleaved-rx-cells
      </vdsl-near-end-interleaved-rx-cells>
      <vdsl-near-end-fast-rx-cells>
        vdsl-near-end-fast-rx-cells
      </vdsl-near-end-fast-rx-cells>
      <vdsl-near-end-interleaved-tx-cells>
        vdsl-near-end-interleaved-tx-cells
      </vdsl-near-end-interleaved-tx-cells>
      <vdsl-near-end-fast-tx-cells>
        vdsl-near-end-fast-tx-cells
      </vdsl-near-end-fast-tx-cells>
    </vdsl-statistics>
  </vdsl-information>
</physical-interface>
```

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```
</interface-filter-information>
```

Description

<vdsl-statistics>

Usage

```
<interface-policer-information>
 <physical-interface>
  <vdsl-information>
   <vdsl-statistics>
    <vdsl-near-end-attainable-bitrate>
     vdsl-near-end-attainable-bitrate
    </vdsl-near-end-attainable-bitrate>
    <vdsl-far-end-attainable-bitrate>
     vdsl-far-end-attainable-bitrate
    </vdsl-far-end-attainable-bitrate>
    <vdsl-near-end-attenuation>
     vdsl-near-end-attenuation
    </vdsl-near-end-attenuation>
    <vdsl-far-end-attenuation>
     vdsl-far-end-attenuation
    </vdsl-far-end-attenuation>
    <vdsl-near-end-capacity-used>
     vdsl-near-end-capacity-used
    </vdsl-near-end-capacity-used>
    <vdsl-far-end-capacity-used>
     vdsl-far-end-capacity-used
    </vdsl-far-end-capacity-used>
    <vdsl-near-end-noise-margin>
     vdsl-near-end-noise-margin
    </vdsl-near-end-noise-margin>
    <vdsl-far-end-noise-margin>
     vdsl-far-end-noise-margin
    </vdsl-far-end-noise-margin>
    <vdsl-near-end-output-power>
     vdsl-near-end-output-power
    </vdsl-near-end-output-power>
    <vdsl-far-end-output-power>
     vdsl-far-end-output-power
    </vdsl-far-end-output-power>
    <vdsl-near-end-interleaved-bitrate>
     vdsl-near-end-interleaved-bitrate
    </vdsl-near-end-interleaved-bitrate>
    <vdsl-near-end-fast-bitrate>
     vdsl-near-end-fast-bitrate
    </vdsl-near-end-fast-bitrate>
    <vdsl-far-end-interleaved-bitrate>
     vdsl-far-end-interleaved-bitrate
    </vdsl-far-end-interleaved-bitrate>
    <vdsl-far-end-fast-bitrate>
     vdsl-far-end-fast-bitrate
    </vdsl-far-end-fast-bitrate>
    <vdsl-near-end-interleaved-crc>
     vdsl-near-end-interleaved-crc
```


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```
            </vdsl-near-end-interleaved-crc>
            <vdsl-near-end-fast-crc>
              vdsl-near-end-fast-crc
            </vdsl-near-end-fast-crc>
            <vdsl-far-end-interleaved-crc>
              vdsl-far-end-interleaved-crc
            </vdsl-far-end-interleaved-crc>
            <vdsl-far-end-fast-crc>
              vdsl-far-end-fast-crc
            </vdsl-far-end-fast-crc>
            <vdsl-near-end-interleaved-hec>
              vdsl-near-end-interleaved-hec
            </vdsl-near-end-interleaved-hec>
            <vdsl-near-end-fast-hec>
              vdsl-near-end-fast-hec
            </vdsl-near-end-fast-hec>
            <vdsl-far-end-interleaved-hec>
              vdsl-far-end-interleaved-hec
            </vdsl-far-end-interleaved-hec>
            <vdsl-far-end-fast-hec>
              vdsl-far-end-fast-hec
            </vdsl-far-end-fast-hec>
            <vdsl-near-end-interleaved-fec>
              vdsl-near-end-interleaved-fec
            </vdsl-near-end-interleaved-fec>
            <vdsl-near-end-fast-fec>
              vdsl-near-end-fast-fec
            </vdsl-near-end-fast-fec>
            <vdsl-far-end-interleaved-fec>
              vdsl-far-end-interleaved-fec
            </vdsl-far-end-interleaved-fec>
            <vdsl-far-end-fast-fec>
              vdsl-far-end-fast-fec
            </vdsl-far-end-fast-fec>
            <vdsl-near-end-interleaved-rx-cells>
              vdsl-near-end-interleaved-rx-cells
            </vdsl-near-end-interleaved-rx-cells>
            <vdsl-near-end-fast-rx-cells>
              vdsl-near-end-fast-rx-cells
            </vdsl-near-end-fast-rx-cells>
            <vdsl-near-end-interleaved-tx-cells>
              vdsl-near-end-interleaved-tx-cells
            </vdsl-near-end-interleaved-tx-cells>
            <vdsl-near-end-fast-tx-cells>
              vdsl-near-end-fast-tx-cells
            </vdsl-near-end-fast-tx-cells>
          </vdsl-statistics>
        </vdsl-information>
      </physical-interface>
    </interface-policer-information>
```

Description

<virtual-circuit-information>

Usage

```
<virtual-circuit-information>
  <dlci-statistics>....</dlci-statistics>
  <vpi>
    vpi
  </vpi>
  <vci>
    vci
  </vci>
  <vci-range>....</vci-range>
  <trunk>
    trunk
  </trunk>
  <trunk-bandwidth>
    trunk-bandwidth
  </trunk-bandwidth>
  <dlci>
    dlci
  </dlci>
  <ifvc-flags>....</ifvc-flags>
  <ifvc-multipoint-destination>....</ifvc-multipoint-destination>
  <atm-tm-cbr>
    atm-tm-cbr
  </atm-tm-cbr>
  <atm-tm-vbr>
    atm-tm-vbr
  </atm-tm-vbr>
  <atm-tm-rtvbr>
    atm-tm-rtvbr
  </atm-tm-rtvbr>
  <peak>
    peak
  </peak>
  <sustained>
    sustained
  </sustained>
  <burst>
    burst
  </burst>
  <cdvt>
    cdvt
  </cdvt>
  <queue-limit>
    queue-limit
  </queue-limit>
  <down-time>
    down-time
  </down-time>
  <last-down-time>
    last-down-time
  </last-down-time>
  <ifvc-epd>
    ifvc-epd
```


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```
  </ifvc-epd>
  <ifvc-epd-plp0>
    ifvc-epd-plp0
  </ifvc-epd-plp0>
  <ifvc-epd-plp1>
    ifvc-epd-plp1
  </ifvc-epd-plp1>
  <ifvc-weight>
    ifvc-weight
  </ifvc-weight>
  <oam-parameters>....</oam-parameters>
  <oam-statistics>....</oam-statistics>
  <traffic-statistics>....</traffic-statistics>
  <atm-policer-statistics>....</atm-policer-statistics>
  <atm-statistics>....</atm-statistics>
  <atm-cos-information>....</atm-cos-information>
  <in-arp-statistics>....</in-arp-statistics>
</virtual-circuit-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<logical-interface>
  <virtual-circuit-information>
    <dlci-statistics>....</dlci-statistics>
    <vpi>
      vpi
    </vpi>
    <vci>
      vci
    </vci>
    <vci-range>....</vci-range>
    <trunk>
      trunk
    </trunk>
    <trunk-bandwidth>
      trunk-bandwidth
    </trunk-bandwidth>
    <dlci>
      dlci
    </dlci>
    <ifvc-flags>....</ifvc-flags>
    <ifvc-multipoint-destination>....</ifvc-multipoint-destination>
    <atm-tm-cbr>
      atm-tm-cbr
    </atm-tm-cbr>
    <atm-tm-vbr>
      atm-tm-vbr
    </atm-tm-vbr>
    <atm-tm-rtvbr>
      atm-tm-rtvbr
    </atm-tm-rtvbr>
```

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```
      <peak>
        peak
      </peak>
      <sustained>
        sustained
      </sustained>
      <burst>
        burst
      </burst>
      <cdvt>
        cdvt
      </cdvt>
      <queue-limit>
        queue-limit
      </queue-limit>
      <down-time>
        down-time
      </down-time>
      <last-down-time>
        last-down-time
      </last-down-time>
      <ifvc-epd>
        ifvc-epd
      </ifvc-epd>
      <ifvc-epd-plp0>
        ifvc-epd-plp0
      </ifvc-epd-plp0>
      <ifvc-epd-plp1>
        ifvc-epd-plp1
      </ifvc-epd-plp1>
      <ifvc-weight>
        ifvc-weight
      </ifvc-weight>
      <oam-parameters>....</oam-parameters>
      <oam-statistics>....</oam-statistics>
      <traffic-statistics>....</traffic-statistics>
      <atm-policer-statistics>....</atm-policer-statistics>
      <atm-statistics>....</atm-statistics>
      <atm-cos-information>....</atm-cos-information>
      <in-arp-statistics>....</in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<physical-interface>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>....</dlci-statistics>
      <vpi>
        vpi
```


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```
</vpi>
<vci>
  vci
</vci>
<vci-range>....</vci-range>
<trunk>
  trunk
</trunk>
<trunk-bandwidth>
  trunk-bandwidth
</trunk-bandwidth>
<dlci>
  dlci
</dlci>
<ifvc-flags>....</ifvc-flags>
<ifvc-multipoint-destination>....</ifvc-multipoint-destination>
<atm-tm-cbr>
  atm-tm-cbr
</atm-tm-cbr>
<atm-tm-vbr>
  atm-tm-vbr
</atm-tm-vbr>
<atm-tm-rtvbr>
  atm-tm-rtvbr
</atm-tm-rtvbr>
<peak>
  peak
</peak>
<sustained>
  sustained
</sustained>
<burst>
  burst
</burst>
<cdvt>
  cdvt
</cdvt>
<queue-limit>
  queue-limit
</queue-limit>
<down-time>
  down-time
</down-time>
<last-down-time>
  last-down-time
</last-down-time>
<ifvc-epd>
  ifvc-epd
</ifvc-epd>
<ifvc-epd-plp0>
  ifvc-epd-plp0
</ifvc-epd-plp0>
<ifvc-epd-plp1>
  ifvc-epd-plp1
</ifvc-epd-plp1>
<ifvc-weight>
```

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```
      ifvc-weight
    </ifvc-weight>
    <oam-parameters>....</oam-parameters>
    <oam-statistics>....</oam-statistics>
    <traffic-statistics>....</traffic-statistics>
    <atm-policer-statistics>....</atm-policer-statistics>
    <atm-statistics>....</atm-statistics>
    <atm-cos-information>....</atm-cos-information>
    <in-arp-statistics>....</in-arp-statistics>
  </virtual-circuit-information>
 </logical-interface>
</physical-interface>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-information>
 <physical-interface>
  <logical-interface>
   <virtual-circuit-information>
    <dlci-statistics>....</dlci-statistics>
    <vpi>
     vpi
    </vpi>
    <vci>
     vci
    </vci>
    <vci-range>....</vci-range>
    <trunk>
     trunk
    </trunk>
    <trunk-bandwidth>
     trunk-bandwidth
    </trunk-bandwidth>
    <dlci>
     dlci
    </dlci>
    <ifvc-flags>....</ifvc-flags>
    <ifvc-multipoint-destination>....</ifvc-multipoint-destination>
    <atm-tm-cbr>
     atm-tm-cbr
    </atm-tm-cbr>
    <atm-tm-vbr>
     atm-tm-vbr
    </atm-tm-vbr>
    <atm-tm-rtvbr>
     atm-tm-rtvbr
    </atm-tm-rtvbr>
    <peak>
     peak
    </peak>
    <sustained>
```


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```
          sustained
        </sustained>
        <burst>
          burst
        </burst>
        <cdvt>
          cdvt
        </cdvt>
        <queue-limit>
          queue-limit
        </queue-limit>
        <down-time>
          down-time
        </down-time>
        <last-down-time>
          last-down-time
        </last-down-time>
        <ifvc-epd>
          ifvc-epd
        </ifvc-epd>
        <ifvc-epd-plp0>
          ifvc-epd-plp0
        </ifvc-epd-plp0>
        <ifvc-epd-plp1>
          ifvc-epd-plp1
        </ifvc-epd-plp1>
        <ifvc-weight>
          ifvc-weight
        </ifvc-weight>
        <oam-parameters>....</oam-parameters>
        <oam-statistics>....</oam-statistics>
        <traffic-statistics>....</traffic-statistics>
        <atm-policer-statistics>....</atm-policer-statistics>
        <atm-statistics>....</atm-statistics>
        <atm-cos-information>....</atm-cos-information>
        <in-arp-statistics>....</in-arp-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>....</dlci-statistics>
      <vpi>
        vpi
      </vpi>
      <vci>
```

```
  vci
</vci>
<vci-range>....</vci-range>
<trunk>
  trunk
</trunk>
<trunk-bandwidth>
  trunk-bandwidth
</trunk-bandwidth>
<dlci>
  dlci
</dlci>
<ifvc-flags>....</ifvc-flags>
<ifvc-multipoint-destination>....</ifvc-multipoint-destination>
<atm-tm-cbr>
  atm-tm-cbr
</atm-tm-cbr>
<atm-tm-vbr>
  atm-tm-vbr
</atm-tm-vbr>
<atm-tm-rtvbr>
  atm-tm-rtvbr
</atm-tm-rtvbr>
<peak>
  peak
</peak>
<sustained>
  sustained
</sustained>
<burst>
  burst
</burst>
<cdvt>
  cdvt
</cdvt>
<queue-limit>
  queue-limit
</queue-limit>
<down-time>
  down-time
</down-time>
<last-down-time>
  last-down-time
</last-down-time>
<ifvc-epd>
  ifvc-epd
</ifvc-epd>
<ifvc-epd-plp0>
  ifvc-epd-plp0
</ifvc-epd-plp0>
<ifvc-epd-plp1>
  ifvc-epd-plp1
</ifvc-epd-plp1>
<ifvc-weight>
  ifvc-weight
</ifvc-weight>
```


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```
    <oam-parameters>....</oam-parameters>
    <oam-statistics>....</oam-statistics>
    <traffic-statistics>....</traffic-statistics>
    <atm-policer-statistics>....</atm-policer-statistics>
    <atm-statistics>....</atm-statistics>
    <atm-cos-information>....</atm-cos-information>
    <in-arp-statistics>....</in-arp-statistics>
   </virtual-circuit-information>
  </logical-interface>
</interface-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <dlci-statistics>....</dlci-statistics>
        <vpi>
          vpi
        </vpi>
        <vci>
          vci
        </vci>
        <vci-range>....</vci-range>
        <trunk>
          trunk
        </trunk>
        <trunk-bandwidth>
          trunk-bandwidth
        </trunk-bandwidth>
        <dlci>
          dlci
        </dlci>
        <ifvc-flags>....</ifvc-flags>
        <ifvc-multipoint-destination>....</ifvc-multipoint-destination>
        <atm-tm-cbr>
          atm-tm-cbr
        </atm-tm-cbr>
        <atm-tm-vbr>
          atm-tm-vbr
        </atm-tm-vbr>
        <atm-tm-rtvbr>
          atm-tm-rtvbr
        </atm-tm-rtvbr>
        <peak>
          peak
        </peak>
        <sustained>
          sustained
        </sustained>
```

```
                <burst>
                  burst
                </burst>
                <cdvt>
                  cdvt
                </cdvt>
                <queue-limit>
                  queue-limit
                </queue-limit>
                <down-time>
                  down-time
                </down-time>
                <last-down-time>
                  last-down-time
                </last-down-time>
                <ifvc-epd>
                  ifvc-epd
                </ifvc-epd>
                <ifvc-epd-plp0>
                  ifvc-epd-plp0
                </ifvc-epd-plp0>
                <ifvc-epd-plp1>
                  ifvc-epd-plp1
                </ifvc-epd-plp1>
                <ifvc-weight>
                  ifvc-weight
                </ifvc-weight>
                <oam-parameters>....</oam-parameters>
                <oam-statistics>....</oam-statistics>
                <traffic-statistics>....</traffic-statistics>
                <atm-policer-statistics>....</atm-policer-statistics>
                <atm-statistics>....</atm-statistics>
                <atm-cos-information>....</atm-cos-information>
                <in-arp-statistics>....</in-arp-statistics>
              </virtual-circuit-information>
            </logical-interface>
          </physical-interface>
        </interface-filter-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-filter-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>....</dlci-statistics>
      <vpi>
        vpi
      </vpi>
      <vci>
        vci
      </vci>
```


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```
<vci-range>....</vci-range>
<trunk>
  trunk
</trunk>
<trunk-bandwidth>
  trunk-bandwidth
</trunk-bandwidth>
<dlci>
  dlci
</dlci>
<ifvc-flags>....</ifvc-flags>
<ifvc-multipoint-destination>....</ifvc-multipoint-destination>
<atm-tm-cbr>
  atm-tm-cbr
</atm-tm-cbr>
<atm-tm-vbr>
  atm-tm-vbr
</atm-tm-vbr>
<atm-tm-rtvbr>
  atm-tm-rtvbr
</atm-tm-rtvbr>
<peak>
  peak
</peak>
<sustained>
  sustained
</sustained>
<burst>
  burst
</burst>
<cdvt>
  cdvt
</cdvt>
<queue-limit>
  queue-limit
</queue-limit>
<down-time>
  down-time
</down-time>
<last-down-time>
  last-down-time
</last-down-time>
<ifvc-epd>
  ifvc-epd
</ifvc-epd>
<ifvc-epd-plp0>
  ifvc-epd-plp0
</ifvc-epd-plp0>
<ifvc-epd-plp1>
  ifvc-epd-plp1
</ifvc-epd-plp1>
<ifvc-weight>
  ifvc-weight
</ifvc-weight>
<oam-parameters>....</oam-parameters>
<oam-statistics>....</oam-statistics>
```

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```
      <traffic-statistics>....</traffic-statistics>
      <atm-policer-statistics>....</atm-policer-statistics>
      <atm-statistics>....</atm-statistics>
      <atm-cos-information>....</atm-cos-information>
      <in-arp-statistics>....</in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-filter-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <virtual-circuit-information>
        <dlci-statistics>....</dlci-statistics>
        <vpi>
          vpi
        </vpi>
        <vci>
          vci
        </vci>
        <vci-range>....</vci-range>
        <trunk>
          trunk
        </trunk>
        <trunk-bandwidth>
          trunk-bandwidth
        </trunk-bandwidth>
        <dlci>
          dlci
        </dlci>
        <ifvc-flags>....</ifvc-flags>
        <ifvc-multipoint-destination>....</ifvc-multipoint-destination>
        <atm-tm-cbr>
          atm-tm-cbr
        </atm-tm-cbr>
        <atm-tm-vbr>
          atm-tm-vbr
        </atm-tm-vbr>
        <atm-tm-rtvbr>
          atm-tm-rtvbr
        </atm-tm-rtvbr>
        <peak>
          peak
        </peak>
        <sustained>
          sustained
        </sustained>
        <burst>
          burst
```


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```
        </burst>
        <cdvt>
          cdvt
        </cdvt>
        <queue-limit>
          queue-limit
        </queue-limit>
        <down-time>
          down-time
        </down-time>
        <last-down-time>
          last-down-time
        </last-down-time>
        <ifvc-epd>
          ifvc-epd
        </ifvc-epd>
        <ifvc-epd-plp0>
          ifvc-epd-plp0
        </ifvc-epd-plp0>
        <ifvc-epd-plp1>
          ifvc-epd-plp1
        </ifvc-epd-plp1>
        <ifvc-weight>
          ifvc-weight
        </ifvc-weight>
        <oam-parameters>....</oam-parameters>
        <oam-statistics>....</oam-statistics>
        <traffic-statistics>....</traffic-statistics>
        <atm-policer-statistics>....</atm-policer-statistics>
        <atm-statistics>....</atm-statistics>
        <atm-cos-information>....</atm-cos-information>
        <in-arp-statistics>....</in-arp-statistics>
      </virtual-circuit-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-circuit-information>

Usage

```
<interface-policer-information>
  <logical-interface>
    <virtual-circuit-information>
      <dlci-statistics>....</dlci-statistics>
      <vpi>
        vpi
      </vpi>
      <vci>
        vci
      </vci>
      <vci-range>....</vci-range>
      <trunk>
```

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```
  trunk
</trunk>
<trunk-bandwidth>
  trunk-bandwidth
</trunk-bandwidth>
<dlci>
  dlci
</dlci>
<ifvc-flags>....</ifvc-flags>
<ifvc-multipoint-destination>....</ifvc-multipoint-destination>
<atm-tm-cbr>
  atm-tm-cbr
</atm-tm-cbr>
<atm-tm-vbr>
  atm-tm-vbr
</atm-tm-vbr>
<atm-tm-rtvbr>
  atm-tm-rtvbr
</atm-tm-rtvbr>
<peak>
  peak
</peak>
<sustained>
  sustained
</sustained>
<burst>
  burst
</burst>
<cdvt>
  cdvt
</cdvt>
<queue-limit>
  queue-limit
</queue-limit>
<down-time>
  down-time
</down-time>
<last-down-time>
  last-down-time
</last-down-time>
<ifvc-epd>
  ifvc-epd
</ifvc-epd>
<ifvc-epd-plp0>
  ifvc-epd-plp0
</ifvc-epd-plp0>
<ifvc-epd-plp1>
  ifvc-epd-plp1
</ifvc-epd-plp1>
<ifvc-weight>
  ifvc-weight
</ifvc-weight>
<oam-parameters>....</oam-parameters>
<oam-statistics>....</oam-statistics>
<traffic-statistics>....</traffic-statistics>
<atm-policer-statistics>....</atm-policer-statistics>
```


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```
      <atm-statistics>....</atm-statistics>
      <atm-cos-information>....</atm-cos-information>
      <in-arp-statistics>....</in-arp-statistics>
    </virtual-circuit-information>
  </logical-interface>
</interface-policer-information>
```

Description Operational information and statistics for a virtual circuit

<virtual-path-information>

Usage

```
<virtual-path-information>
  <vpi>
    vpi
  </vpi>
  <ifvp-flags>....</ifvp-flags>
  <atm-tm-cbr>
    atm-tm-cbr
  </atm-tm-cbr>
  <atm-tm-vbr>
    atm-tm-vbr
  </atm-tm-vbr>
  <atm-tm-rtvbr>
    atm-tm-rtvbr
  </atm-tm-rtvbr>
  <peak>
    peak
  </peak>
  <sustained>
    sustained
  </sustained>
  <burst>
    burst
  </burst>
  <cdvt>
    cdvt
  </cdvt>
  <queue-limit>
    queue-limit
  </queue-limit>
  <down-time>
    down-time
  </down-time>
  <last-down-time>
    last-down-time
  </last-down-time>
  <oam-parameters>....</oam-parameters>
  <oam-statistics>....</oam-statistics>
  <traffic-statistics>....</traffic-statistics>
</virtual-path-information>
```

Description Operational information and statistics for a virtual path

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<virtual-path-information>

Usage

```
<physical-interface>
  <virtual-path-information>
    <vpi>
      vpi
    </vpi>
    <ifvp-flags>....</ifvp-flags>
    <atm-tm-cbr>
      atm-tm-cbr
    </atm-tm-cbr>
    <atm-tm-vbr>
      atm-tm-vbr
    </atm-tm-vbr>
    <atm-tm-rtvbr>
      atm-tm-rtvbr
    </atm-tm-rtvbr>
    <peak>
      peak
    </peak>
    <sustained>
      sustained
    </sustained>
    <burst>
      burst
    </burst>
    <cdvt>
      cdvt
    </cdvt>
    <queue-limit>
      queue-limit
    </queue-limit>
    <down-time>
      down-time
    </down-time>
    <last-down-time>
      last-down-time
    </last-down-time>
    <oam-parameters>....</oam-parameters>
    <oam-statistics>....</oam-statistics>
    <traffic-statistics>....</traffic-statistics>
  </virtual-path-information>
</physical-interface>
```

Description Operational information and statistics for a virtual path

<virtual-path-information>

Usage

```
<interface-information>
  <physical-interface>
    <virtual-path-information>
```


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```
            <vpi>
              vpi
            </vpi>
            <ifvp-flags>....</ifvp-flags>
            <atm-tm-cbr>
              atm-tm-cbr
            </atm-tm-cbr>
            <atm-tm-vbr>
              atm-tm-vbr
            </atm-tm-vbr>
            <atm-tm-rtvbr>
              atm-tm-rtvbr
            </atm-tm-rtvbr>
            <peak>
              peak
            </peak>
            <sustained>
              sustained
            </sustained>
            <burst>
              burst
            </burst>
            <cdvt>
              cdvt
            </cdvt>
            <queue-limit>
              queue-limit
            </queue-limit>
            <down-time>
              down-time
            </down-time>
            <last-down-time>
              last-down-time
            </last-down-time>
            <oam-parameters>....</oam-parameters>
            <oam-statistics>....</oam-statistics>
            <traffic-statistics>....</traffic-statistics>
          </virtual-path-information>
        </physical-interface>
      </interface-information>
```

Description Operational information and statistics for a virtual path

<virtual-path-information>

Usage

```
      <interface-filter-information>
        <physical-interface>
          <virtual-path-information>
            <vpi>
              vpi
            </vpi>
            <ifvp-flags>....</ifvp-flags>
            <atm-tm-cbr>
```

```
                atm-tm-cbr
               </atm-tm-cbr>
               <atm-tm-vbr>
                atm-tm-vbr
               </atm-tm-vbr>
               <atm-tm-rtvbr>
                atm-tm-rtvbr
               </atm-tm-rtvbr>
               <peak>
                peak
               </peak>
               <sustained>
                sustained
               </sustained>
               <burst>
                burst
               </burst>
               <cdvt>
                cdvt
               </cdvt>
               <queue-limit>
                queue-limit
               </queue-limit>
               <down-time>
                down-time
               </down-time>
               <last-down-time>
                last-down-time
               </last-down-time>
               <oam-parameters>....</oam-parameters>
               <oam-statistics>....</oam-statistics>
               <traffic-statistics>....</traffic-statistics>
              </virtual-path-information>
             </physical-interface>
            </interface-filter-information>
```

Description Operational information and statistics for a virtual path

<virtual-path-information>

Usage

```
<interface-policer-information>
 <physical-interface>
  <virtual-path-information>
   <vpi>
    vpi
   </vpi>
   <ifvp-flags>....</ifvp-flags>
   <atm-tm-cbr>
    atm-tm-cbr
   </atm-tm-cbr>
   <atm-tm-vbr>
    atm-tm-vbr
   </atm-tm-vbr>
```


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```
        <atm-tm-rtvbr>
          atm-tm-rtvbr
        </atm-tm-rtvbr>
        <peak>
          peak
        </peak>
        <sustained>
          sustained
        </sustained>
        <burst>
          burst
        </burst>
        <cdvt>
          cdvt
        </cdvt>
        <queue-limit>
          queue-limit
        </queue-limit>
        <down-time>
          down-time
        </down-time>
        <last-down-time>
          last-down-time
        </last-down-time>
        <oam-parameters>....</oam-parameters>
        <oam-statistics>....</oam-statistics>
        <traffic-statistics>....</traffic-statistics>
      </virtual-path-information>
    </physical-interface>
  </interface-policer-information>
```

Description Operational information and statistics for a virtual path

<watch-list>

Usage

```
<watch-list>
  <watch-route>
    watch-route
  </watch-route>
</watch-list>
```

Description

<watch-list>

Usage

```
<dialer-interface>
  <watch-list>
    <watch-route>
      watch-route
    </watch-route>
  </watch-list>
```

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```
</dialer-interface>
```

Description

<watch-list>

Usage

```
<dialer-interface-information>
  <dialer-interface>
    <watch-list>
      <watch-route>
        watch-route
      </watch-route>
    </watch-list>
  </dialer-interface>
</dialer-interface-information>
```

Description

<watch-list>

Usage

```
<logical-interface>
  <dialer-information>
    <dialer-interface>
      <watch-list>
        <watch-route>
          watch-route
        </watch-route>
      </watch-list>
    </dialer-interface>
  </dialer-information>
</logical-interface>
```

Description

<watch-list>

Usage

```
<physical-interface>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <watch-list>
          <watch-route>
            watch-route
          </watch-route>
        </watch-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</physical-interface>
```


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Description

<watch-list>

Usage

```
<interface-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <watch-list>
            <watch-route>
              watch-route
            </watch-route>
          </watch-list>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-information>
```

Description

<watch-list>

Usage

```
<interface-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <watch-list>
          <watch-route>
            watch-route
          </watch-route>
        </watch-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-information>
```

Description

<watch-list>

Usage

```
<interface-filter-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <watch-list>
            <watch-route>
              watch-route
            </watch-route>
```

```
            </watch-list>
          </dialer-interface>
        </dialer-information>
      </logical-interface>
    </physical-interface>
  </interface-filter-information>
```

Description

<watch-list>

Usage

```
<interface-filter-information>
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <watch-list>
          <watch-route>
            watch-route
          </watch-route>
        </watch-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-filter-information>
```

Description

<watch-list>

Usage

```
<interface-policer-information>
  <physical-interface>
    <logical-interface>
      <dialer-information>
        <dialer-interface>
          <watch-list>
            <watch-route>
              watch-route
            </watch-route>
          </watch-list>
        </dialer-interface>
      </dialer-information>
    </logical-interface>
  </physical-interface>
</interface-policer-information>
```

Description

<watch-list>

Usage

```
<interface-policer-information>
```


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```
  <logical-interface>
    <dialer-information>
      <dialer-interface>
        <watch-list>
          <watch-route>
            watch-route
          </watch-route>
        </watch-list>
      </dialer-interface>
    </dialer-information>
  </logical-interface>
</interface-policer-information>
```

Description

<x21-control-signal>

Usage

```
<serial-information>
  <x21-control-signal>
    <rts>
      rts
    </rts>
    <cts>
      cts
    </cts>
  </x21-control-signal>
</serial-information>
```

Description

<x21-control-signal>

Usage

```
<physical-interface>
  <serial-information>
    <x21-control-signal>
      <rts>
        rts
      </rts>
      <cts>
        cts
      </cts>
    </x21-control-signal>
  </serial-information>
</physical-interface>
```

Description

<x21-control-signal>

Usage

```
<interface-information>
```

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```
<physical-interface>
 <serial-information>
  <x21-control-signal>
   <rts>
    rts
   </rts>
   <cts>
    cts
   </cts>
  </x21-control-signal>
 </serial-information>
</physical-interface>
</interface-information>
```

Description

<x21-control-signal>

Usage

```
<interface-filter-information>
 <physical-interface>
  <serial-information>
   <x21-control-signal>
    <rts>
     rts
    </rts>
    <cts>
     cts
    </cts>
   </x21-control-signal>
  </serial-information>
 </physical-interface>
</interface-filter-information>
```

Description

<x21-control-signal>

Usage

```
<interface-policer-information>
 <physical-interface>
  <serial-information>
   <x21-control-signal>
    <rts>
     rts
    </rts>
    <cts>
     cts
    </cts>
   </x21-control-signal>
  </serial-information>
 </physical-interface>
</interface-policer-information>
```


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Description

<x21-signal-polarity>

Usage

```
<serial-information>
  <x21-signal-polarity>
    <rts-polarity>
      rts-polarity
    </rts-polarity>
    <cts-polarity>
      cts-polarity
    </cts-polarity>
  </x21-signal-polarity>
</serial-information>
```

Description

<x21-signal-polarity>

Usage

```
<physical-interface>
  <serial-information>
    <x21-signal-polarity>
      <rts-polarity>
        rts-polarity
      </rts-polarity>
      <cts-polarity>
        cts-polarity
      </cts-polarity>
    </x21-signal-polarity>
  </serial-information>
</physical-interface>
```

Description

<x21-signal-polarity>

Usage

```
<interface-information>
  <physical-interface>
    <serial-information>
      <x21-signal-polarity>
        <rts-polarity>
          rts-polarity
        </rts-polarity>
        <cts-polarity>
          cts-polarity
        </cts-polarity>
      </x21-signal-polarity>
    </serial-information>
  </physical-interface>
</interface-information>
```

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Description

<x21-signal-polarity>

Usage

```
<interface-filter-information>
  <physical-interface>
    <serial-information>
      <x21-signal-polarity>
        <rts-polarity>
          rts-polarity
        </rts-polarity>
        <cts-polarity>
          cts-polarity
        </cts-polarity>
      </x21-signal-polarity>
    </serial-information>
  </physical-interface>
</interface-filter-information>
```

Description

<x21-signal-polarity>

Usage

```
<interface-policer-information>
  <physical-interface>
    <serial-information>
      <x21-signal-polarity>
        <rts-polarity>
          rts-polarity
        </rts-polarity>
        <cts-polarity>
          cts-polarity
        </cts-polarity>
      </x21-signal-polarity>
    </serial-information>
  </physical-interface>
</interface-policer-information>
```

Description

Summary of IPv6 Neighbor Discovery Response Tags

<ipv6-modify-nd>

Usage

```
<ipv6-modify-nd>
  <ipv6-modify-nd-entry>....</ipv6-modify-nd-entry>
</ipv6-modify-nd>
```

Description

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<ipv6-modify-nd-entry>

Usage

```
<ipv6-modify-nd-entry>
  <ipv6-nd-neighbor-address>
    ipv6-nd-neighbor-address
  </ipv6-nd-neighbor-address>
  <ipv6-nd-neighbor-l2-address>
    ipv6-nd-neighbor-l2-address
  </ipv6-nd-neighbor-l2-address>
  <ipv6-nd-change>
    ipv6-nd-change
  </ipv6-nd-change>
</ipv6-modify-nd-entry>
```

Description

<ipv6-modify-nd-entry>

Usage

```
<ipv6-modify-nd>
  <ipv6-modify-nd-entry>
    <ipv6-nd-neighbor-address>
      ipv6-nd-neighbor-address
    </ipv6-nd-neighbor-address>
    <ipv6-nd-neighbor-l2-address>
      ipv6-nd-neighbor-l2-address
    </ipv6-nd-neighbor-l2-address>
    <ipv6-nd-change>
      ipv6-nd-change
    </ipv6-nd-change>
  </ipv6-modify-nd-entry>
</ipv6-modify-nd>
```

Description

<ipv6-nd-entry>

Usage

```
<ipv6-nd-entry>
  <ipv6-nd-neighbor-address>
    ipv6-nd-neighbor-address
  </ipv6-nd-neighbor-address>
  <ipv6-nd-neighbor-l2-address>
    ipv6-nd-neighbor-l2-address
  </ipv6-nd-neighbor-l2-address>
  <ipv6-nd-total>
    ipv6-nd-total
  </ipv6-nd-total>
  <ipv6-nd-state>
    ipv6-nd-state
  </ipv6-nd-state>
  <ipv6-nd-expire>
```

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```
    ipv6-nd-expire
   </ipv6-nd-expire>
   <ipv6-nd-isrouter>
    ipv6-nd-isrouter
   </ipv6-nd-isrouter>
   <ipv6-nd-issecure>
    ipv6-nd-issecure
   </ipv6-nd-issecure>
   <ipv6-nd-interface-name>
    ipv6-nd-interface-name
   </ipv6-nd-interface-name>
  </ipv6-nd-entry>
```

Description

<ipv6-nd-entry>

Usage

```
<ipv6-nd-information>
 <ipv6-nd-entry>
  <ipv6-nd-neighbor-address>
   ipv6-nd-neighbor-address
  </ipv6-nd-neighbor-address>
  <ipv6-nd-neighbor-l2-address>
   ipv6-nd-neighbor-l2-address
  </ipv6-nd-neighbor-l2-address>
  <ipv6-nd-total>
   ipv6-nd-total
  </ipv6-nd-total>
  <ipv6-nd-state>
   ipv6-nd-state
  </ipv6-nd-state>
  <ipv6-nd-expire>
   ipv6-nd-expire
  </ipv6-nd-expire>
  <ipv6-nd-isrouter>
   ipv6-nd-isrouter
  </ipv6-nd-isrouter>
  <ipv6-nd-issecure>
   ipv6-nd-issecure
  </ipv6-nd-issecure>
  <ipv6-nd-interface-name>
   ipv6-nd-interface-name
  </ipv6-nd-interface-name>
 </ipv6-nd-entry>
</ipv6-nd-information>
```

Description

<ipv6-nd-information>

Usage

```
<ipv6-nd-information>
 <ipv6-nd-entry>....</ipv6-nd-entry>
```


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```
</ipv6-nd-information>
```

Description

Summary of DDOS Response Tags

<ddos-instance-config>

Usage

```
<ddos-instance-config>
  <policer-bandwidth>
    policer-bandwidth
  </policer-bandwidth>
  <policer-bandwidth-scale>
    policer-bandwidth-scale
  </policer-bandwidth-scale>
  <policer-burst>
    policer-burst
  </policer-burst>
  <policer-burst-scale>
    policer-burst-scale
  </policer-burst-scale>
  <policer-enable>
    policer-enable
  </policer-enable>
  <policer-bypass-aggregate>
    policer-bypass-aggregate
  </policer-bypass-aggregate>
</ddos-instance-config>
```

Description

<ddos-instance-config>

Usage

```
<ddos-protocol-instance-info>
  <ddos-instance-config>
    <policer-bandwidth>
      policer-bandwidth
    </policer-bandwidth>
    <policer-bandwidth-scale>
      policer-bandwidth-scale
    </policer-bandwidth-scale>
    <policer-burst>
      policer-burst
    </policer-burst>
    <policer-burst-scale>
      policer-burst-scale
    </policer-burst-scale>
    <policer-enable>
      policer-enable
    </policer-enable>
    <policer-bypass-aggregate>
      policer-bypass-aggregate
```

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```
    </policer-bypass-aggregate>
  </ddos-instance-config>
</ddos-protocol-instance-info>
```

Description

<ddos-instance-config>

Usage

```
<ddos-protocol>
  <ddos-protocol-instance-info>
    <ddos-instance-config>
      <policer-bandwidth>
        policer-bandwidth
      </policer-bandwidth>
      <policer-bandwidth-scale>
        policer-bandwidth-scale
      </policer-bandwidth-scale>
      <policer-burst>
        policer-burst
      </policer-burst>
      <policer-burst-scale>
        policer-burst-scale
      </policer-burst-scale>
      <policer-enable>
        policer-enable
      </policer-enable>
      <policer-bypass-aggregate>
        policer-bypass-aggregate
      </policer-bypass-aggregate>
    </ddos-instance-config>
  </ddos-protocol-instance-info>
</ddos-protocol>
```

Description

<ddos-instance-config>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <ddos-protocol-instance-info>
      <ddos-instance-config>
        <policer-bandwidth>
          policer-bandwidth
        </policer-bandwidth>
        <policer-bandwidth-scale>
          policer-bandwidth-scale
        </policer-bandwidth-scale>
        <policer-burst>
          policer-burst
        </policer-burst>
        <policer-burst-scale>
          policer-burst-scale
```


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```
        </policer-burst-scale>
        <policer-enable>
          policer-enable
        </policer-enable>
        <policer-bypass-aggregate>
          policer-bypass-aggregate
        </policer-bypass-aggregate>
      </ddos-instance-config>
    </ddos-protocol-instance-info>
  </ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-instance-stats>

Usage

```
<ddos-instance-stats>
  <packet-received>
    packet-received
  </packet-received>
  <packet-dropped>
    packet-dropped
  </packet-dropped>
  <packet-dropped-protocol>
    packet-dropped-protocol
  </packet-dropped-protocol>
  <packet-dropped-aggr>
    packet-dropped-aggr
  </packet-dropped-aggr>
  <packet-dropped-others>
    packet-dropped-others
  </packet-dropped-others>
  <packet-arrival-rate>
    packet-arrival-rate
  </packet-arrival-rate>
  <packet-arrival-rate-max>
    packet-arrival-rate-max
  </packet-arrival-rate-max>
  <policer-violation-start-time>
    policer-violation-start-time
  </policer-violation-start-time>
  <policer-violation-last-time>
    policer-violation-last-time
  </policer-violation-last-time>
  <policer-violation-duration>
    policer-violation-duration
  </policer-violation-duration>
  <policer-violation-count>
    policer-violation-count
  </policer-violation-count>
</ddos-instance-stats>
```

Description

<ddos-instance-stats>

Usage

```
<ddos-protocol-instance-info>
  <ddos-instance-stats>
    <packet-received>
      packet-received
    </packet-received>
    <packet-dropped>
      packet-dropped
    </packet-dropped>
    <packet-dropped-protocol>
      packet-dropped-protocol
    </packet-dropped-protocol>
    <packet-dropped-aggr>
      packet-dropped-aggr
    </packet-dropped-aggr>
    <packet-dropped-others>
      packet-dropped-others
    </packet-dropped-others>
    <packet-arrival-rate>
      packet-arrival-rate
    </packet-arrival-rate>
    <packet-arrival-rate-max>
      packet-arrival-rate-max
    </packet-arrival-rate-max>
    <policer-violation-start-time>
      policer-violation-start-time
    </policer-violation-start-time>
    <policer-violation-last-time>
      policer-violation-last-time
    </policer-violation-last-time>
    <policer-violation-duration>
      policer-violation-duration
    </policer-violation-duration>
    <policer-violation-count>
      policer-violation-count
    </policer-violation-count>
  </ddos-instance-stats>
</ddos-protocol-instance-info>
```

Description

<ddos-instance-stats>

Usage

```
<ddos-protocol>
  <ddos-protocol-instance-info>
    <ddos-instance-stats>
      <packet-received>
        packet-received
      </packet-received>
      <packet-dropped>
        packet-dropped
```


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```
      </packet-dropped>
      <packet-dropped-protocol>
        packet-dropped-protocol
      </packet-dropped-protocol>
      <packet-dropped-aggr>
        packet-dropped-aggr
      </packet-dropped-aggr>
      <packet-dropped-others>
        packet-dropped-others
      </packet-dropped-others>
      <packet-arrival-rate>
        packet-arrival-rate
      </packet-arrival-rate>
      <packet-arrival-rate-max>
        packet-arrival-rate-max
      </packet-arrival-rate-max>
      <policer-violation-start-time>
        policer-violation-start-time
      </policer-violation-start-time>
      <policer-violation-last-time>
        policer-violation-last-time
      </policer-violation-last-time>
      <policer-violation-duration>
        policer-violation-duration
      </policer-violation-duration>
      <policer-violation-count>
        policer-violation-count
      </policer-violation-count>
    </ddos-instance-stats>
  </ddos-protocol-instance-info>
</ddos-protocol>
```

Description

<ddos-instance-stats>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <ddos-protocol-instance-info>
      <ddos-instance-stats>
        <packet-received>
          packet-received
        </packet-received>
        <packet-dropped>
          packet-dropped
        </packet-dropped>
        <packet-dropped-protocol>
          packet-dropped-protocol
        </packet-dropped-protocol>
        <packet-dropped-aggr>
          packet-dropped-aggr
        </packet-dropped-aggr>
        <packet-dropped-others>
          packet-dropped-others
```

```
        </packet-dropped-others>
        <packet-arrival-rate>
          packet-arrival-rate
        </packet-arrival-rate>
        <packet-arrival-rate-max>
          packet-arrival-rate-max
        </packet-arrival-rate-max>
        <policer-violation-start-time>
          policer-violation-start-time
        </policer-violation-start-time>
        <policer-violation-last-time>
          policer-violation-last-time
        </policer-violation-last-time>
        <policer-violation-duration>
          policer-violation-duration
        </policer-violation-duration>
        <policer-violation-count>
          policer-violation-count
        </policer-violation-count>
      </ddos-instance-stats>
    </ddos-protocol-instance-info>
  </ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-parameters-brief>

Usage

```
<ddos-parameters-brief>
  <group-name>
    group-name
  </group-name>
  <protocol-name>
    protocol-name
  </protocol-name>
  <policer-bandwidth>
    policer-bandwidth
  </policer-bandwidth>
  <policer-burst>
    policer-burst
  </policer-burst>
  <policer-priority>
    policer-priority
  </policer-priority>
  <policer-bypass-aggregate>
    policer-bypass-aggregate
  </policer-bypass-aggregate>
  <policer-time-recover>
    policer-time-recover
  </policer-time-recover>
  <policer-enable>
    policer-enable
  </policer-enable>
  <policer-fpc-scaled>
```


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```
    policer-fpc-scaled
  </policer-fpc-scaled>
</ddos-parameters-brief>
```

Description

<ddos-policer-parameter-scale>

Usage

```
<ddos-policer-parameter-scale>
  <policer-slot-name>
    policer-slot-name
  </policer-slot-name>
  <policer-bandwidth-scale>
    policer-bandwidth-scale
  </policer-bandwidth-scale>
  <policer-burst-scale>
    policer-burst-scale
  </policer-burst-scale>
</ddos-policer-parameter-scale>
```

Description

<ddos-protocol>

Usage

```
<ddos-protocol>
  <protocol-name>
    protocol-name
  </protocol-name>
  <protocol-description>
    protocol-description
  </protocol-description>
  <ddos-protocol-basic-config>....</ddos-protocol-basic-config>
  <ddos-system-stats>....</ddos-system-stats>
  <ddos-protocol-instance-info>....</ddos-protocol-instance-info>
</ddos-protocol>
```

Description

<ddos-protocol>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <protocol-name>
      protocol-name
    </protocol-name>
    <protocol-description>
      protocol-description
    </protocol-description>
    <ddos-protocol-basic-config>....</ddos-protocol-basic-config>
    <ddos-system-stats>....</ddos-system-stats>
```

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```
    <ddos-protocol-instance-info>....</ddos-protocol-instance-info>
  </ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-protocol-basic-config>

Usage

```
<ddos-protocol-basic-config>
  <policer-bandwidth>
    policer-bandwidth
  </policer-bandwidth>
  <policer-burst>
    policer-burst
  </policer-burst>
  <policer-priority>
    policer-priority
  </policer-priority>
  <policer-time-recover>
    policer-time-recover
  </policer-time-recover>
  <policer-enable>
    policer-enable
  </policer-enable>
  <policer-bypass-aggregate>
    policer-bypass-aggregate
  </policer-bypass-aggregate>
</ddos-protocol-basic-config>
```

Description

<ddos-protocol-basic-config>

Usage

```
<ddos-protocol>
  <ddos-protocol-basic-config>
    <policer-bandwidth>
      policer-bandwidth
    </policer-bandwidth>
    <policer-burst>
      policer-burst
    </policer-burst>
    <policer-priority>
      policer-priority
    </policer-priority>
    <policer-time-recover>
      policer-time-recover
    </policer-time-recover>
    <policer-enable>
      policer-enable
    </policer-enable>
    <policer-bypass-aggregate>
      policer-bypass-aggregate
```


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```
    </policer-bypass-aggregate>
  </ddos-protocol-basic-config>
</ddos-protocol>
```

Description

<ddos-protocol-basic-config>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <ddos-protocol-basic-config>
      <policer-bandwidth>
        policer-bandwidth
      </policer-bandwidth>
      <policer-burst>
        policer-burst
      </policer-burst>
      <policer-priority>
        policer-priority
      </policer-priority>
      <policer-time-recover>
        policer-time-recover
      </policer-time-recover>
      <policer-enable>
        policer-enable
      </policer-enable>
      <policer-bypass-aggregate>
        policer-bypass-aggregate
      </policer-bypass-aggregate>
    </ddos-protocol-basic-config>
  </ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-protocol-group>

Usage

```
<ddos-protocol-group>
  <protocol-group-name>
    protocol-group-name
  </protocol-group-name>
  <ddos-protocol>....</ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-protocol-instance-info>

Usage

```
<ddos-protocol-instance-info>
  <protocol-states-locale>
```

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```
    protocol-states-locale
  </protocol-states-locale>
  <ddos-instance-config>....</ddos-instance-config>
  <ddos-instance-stats>....</ddos-instance-stats>
</ddos-protocol-instance-info>
```

Description

<ddos-protocol-instance-info>

Usage

```
<ddos-protocol>
  <ddos-protocol-instance-info>
    <protocol-states-locale>
      protocol-states-locale
    </protocol-states-locale>
    <ddos-instance-config>....</ddos-instance-config>
    <ddos-instance-stats>....</ddos-instance-stats>
  </ddos-protocol-instance-info>
</ddos-protocol>
```

Description

<ddos-protocol-instance-info>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <ddos-protocol-instance-info>
      <protocol-states-locale>
        protocol-states-locale
      </protocol-states-locale>
      <ddos-instance-config>....</ddos-instance-config>
      <ddos-instance-stats>....</ddos-instance-stats>
    </ddos-protocol-instance-info>
  </ddos-protocol>
</ddos-protocol-group>
```

Description

<ddos-protocol-states>

Usage

```
<ddos-protocol-states>
  <protocol-enabled>
    protocol-enabled
  </protocol-enabled>
  <protocol-violated>
    protocol-violated
  </protocol-violated>
</ddos-protocol-states>
```


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Description

<ddos-protocols-information>

Usage

```
<ddos-protocols-information>
  <total-changed-policers>
    total-changed-policers
  </total-changed-policers>
  <num-protocols-in-violation>
    num-protocols-in-violation
  </num-protocols-in-violation>
</ddos-protocols-information>
```

Description

<ddos-statistics-brief>

Usage

```
<ddos-statistics-brief>
  <group-name>
    group-name
  </group-name>
  <protocol-name>
    protocol-name
  </protocol-name>
  <packet-received>
    packet-received
  </packet-received>
  <packet-dropped>
    packet-dropped
  </packet-dropped>
  <packet-arrival-rate>
    packet-arrival-rate
  </packet-arrival-rate>
  <policer-violation-count>
    policer-violation-count
  </policer-violation-count>
  <protocol-states>
    protocol-states
  </protocol-states>
</ddos-statistics-brief>
```

Description

<ddos-statistics-information>

Usage

```
<ddos-statistics-information>
  <num-protocols-seen-violation>
    num-protocols-seen-violation
  </num-protocols-seen-violation>
  <num-protocols-in-violation>
    num-protocols-in-violation
```

```
</num-protocols-in-violation>
<num-total-violations>
  num-total-violations
</num-total-violations>
</ddos-statistics-information>
```

Description DDOS global statistics

<ddos-status-information>

Usage

```
<ddos-status-information>
  <total-policers>
    total-policers
  </total-policers>
  <total-violated-policers>
    total-violated-policers
  </total-violated-policers>
</ddos-status-information>
```

Description

<ddos-system-stats>

Usage

```
<ddos-system-stats>
  <packet-received>
    packet-received
  </packet-received>
  <packet-dropped>
    packet-dropped
  </packet-dropped>
  <packet-arrival-rate>
    packet-arrival-rate
  </packet-arrival-rate>
  <packet-arrival-rate-max>
    packet-arrival-rate-max
  </packet-arrival-rate-max>
  <policer-violation-start-time>
    policer-violation-start-time
  </policer-violation-start-time>
  <policer-violation-last-time>
    policer-violation-last-time
  </policer-violation-last-time>
  <policer-violation-duration>
    policer-violation-duration
  </policer-violation-duration>
  <policer-violation-count>
    policer-violation-count
  </policer-violation-count>
  <fpc-violation-count-current>
    fpc-violation-count-current
  </fpc-violation-count-current>
```


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```
  <fpc-violation-count>
   fpc-violation-count
  </fpc-violation-count>
</ddos-system-stats>
```

Description

<ddos-system-stats>

Usage

```
<ddos-protocol>
  <ddos-system-stats>
    <packet-received>
     packet-received
    </packet-received>
    <packet-dropped>
     packet-dropped
    </packet-dropped>
    <packet-arrival-rate>
     packet-arrival-rate
    </packet-arrival-rate>
    <packet-arrival-rate-max>
     packet-arrival-rate-max
    </packet-arrival-rate-max>
    <policer-violation-start-time>
     policer-violation-start-time
    </policer-violation-start-time>
    <policer-violation-last-time>
     policer-violation-last-time
    </policer-violation-last-time>
    <policer-violation-duration>
     policer-violation-duration
    </policer-violation-duration>
    <policer-violation-count>
     policer-violation-count
    </policer-violation-count>
    <fpc-violation-count-current>
     fpc-violation-count-current
    </fpc-violation-count-current>
    <fpc-violation-count>
     fpc-violation-count
    </fpc-violation-count>
  </ddos-system-stats>
</ddos-protocol>
```

Description

<ddos-system-stats>

Usage

```
<ddos-protocol-group>
  <ddos-protocol>
    <ddos-system-stats>
      <packet-received>
```

```
                packet-received
              </packet-received>
              <packet-dropped>
                packet-dropped
              </packet-dropped>
              <packet-arrival-rate>
                packet-arrival-rate
              </packet-arrival-rate>
              <packet-arrival-rate-max>
                packet-arrival-rate-max
              </packet-arrival-rate-max>
              <policer-violation-start-time>
                policer-violation-start-time
              </policer-violation-start-time>
              <policer-violation-last-time>
                policer-violation-last-time
              </policer-violation-last-time>
              <policer-violation-duration>
                policer-violation-duration
              </policer-violation-duration>
              <policer-violation-count>
                policer-violation-count
              </policer-violation-count>
              <fpc-violation-count-current>
                fpc-violation-count-current
              </fpc-violation-count-current>
              <fpc-violation-count>
                fpc-violation-count
              </fpc-violation-count>
            </ddos-system-stats>
          </ddos-protocol>
        </ddos-protocol-group>
```

Description

<ddos-version>

Usage

```
<ddos-version>
  <total-groups>
    total-groups
  </total-groups>
  <total-policers>
    total-policers
  </total-policers>
</ddos-version>
```

Description

<ddos-violations-brief>

Usage

```
<ddos-violations-brief>
  <group-name>
```


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```
    group-name
  </group-name>
  <protocol-name>
    protocol-name
  </protocol-name>
  <policer-bandwidth>
    policer-bandwidth
  </policer-bandwidth>
  <packet-arrival-rate>
    packet-arrival-rate
  </packet-arrival-rate>
  <packet-arrival-rate-max>
    packet-arrival-rate-max
  </packet-arrival-rate-max>
  <policer-violation-start-time>
    policer-violation-start-time
  </policer-violation-start-time>
  <protocol-states-locale>
    protocol-states-locale
  </protocol-states-locale>
</ddos-violations-brief>
```

Description

Summary of Junos OS Diameter Function Response Tags

<jdiameterd-function-brief>

Usage

```
<jdiameterd-function-brief>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-state>
    jdiameterd-function-state
  </jdiameterd-function-state>
  <jdiameterd-function-upstream-transaction-utilization>
    jdiameterd-function-upstream-transaction-utilization
  </jdiameterd-function-upstream-transaction-utilization>
  <jdiameterd-function-downstream-transaction-utilization>
    jdiameterd-function-downstream-transaction-utilization
  </jdiameterd-function-downstream-transaction-utilization>
  <jdiameterd-function-network-transmission-queue-memory-utilization>
    jdiameterd-function-network-transmission-queue-memory-utilization
  </jdiameterd-function-network-transmission-queue-memory-utilization>
  <jdiameterd-function-function-transmission-queue-memory-utilization>
    jdiameterd-function-function-transmission-queue-memory-utilization
  </jdiameterd-function-function-transmission-queue-memory-utilization>
  <jdiameterd-function-routed-dests>
    jdiameterd-function-routed-dests
  </jdiameterd-function-routed-dests>
</jdiameterd-function-brief>
```

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Description Diameter function

<jdiameterd-function-brief>

Usage

```
<jdiameterd-function-information>
  <jdiameterd-function-brief>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-state>
      jdiameterd-function-state
    </jdiameterd-function-state>
    <jdiameterd-function-upstream-transaction-utilization>
      jdiameterd-function-upstream-transaction-utilization
    </jdiameterd-function-upstream-transaction-utilization>
    <jdiameterd-function-downstream-transaction-utilization>
      jdiameterd-function-downstream-transaction-utilization
    </jdiameterd-function-downstream-transaction-utilization>
    <jdiameterd-function-network-transmission-queue-memory-utilization>
      jdiameterd-function-network-transmission-queue-memory-utilization
    </jdiameterd-function-network-transmission-queue-memory-utilization>
    <jdiameterd-function-function-transmission-queue-memory-utilization>
      jdiameterd-function-function-transmission-queue-memory-utilization
    </jdiameterd-function-function-transmission-queue-memory-utilization>
    <jdiameterd-function-routed-dests>
      jdiameterd-function-routed-dests
    </jdiameterd-function-routed-dests>
  </jdiameterd-function-brief>
</jdiameterd-function-information>
```

Description Diameter function

<jdiameterd-function-data>

Usage

```
<jdiameterd-function-data>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-state>
    jdiameterd-function-state
  </jdiameterd-function-state>
  <jdiameterd-function-upstream-transaction-utilization>
    jdiameterd-function-upstream-transaction-utilization
  </jdiameterd-function-upstream-transaction-utilization>
  <jdiameterd-function-downstream-transaction-utilization>
    jdiameterd-function-downstream-transaction-utilization
  </jdiameterd-function-downstream-transaction-utilization>
  <jdiameterd-function-network-transmission-queue-memory-utilization>
    jdiameterd-function-network-transmission-queue-memory-utilization
  </jdiameterd-function-network-transmission-queue-memory-utilization>
  <jdiameterd-function-function-transmission-queue-memory-utilization>
```


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```
  jdiameterd-function-function-transmission-queue-memory-utilization
</jdiameterd-function-function-transmission-queue-memory-utilization>
<jdiameterd-function-routed-dests>
  jdiameterd-function-routed-dests
</jdiameterd-function-routed-dests>
<jdiameterd-function-network-transmission-queue-requests>
  jdiameterd-function-network-transmission-queue-requests
</jdiameterd-function-network-transmission-queue-requests>
<jdiameterd-function-expected-answers-from-network>
  jdiameterd-function-expected-answers-from-network
</jdiameterd-function-expected-answers-from-network>
<jdiameterd-function-function-transmission-queue-answers>
  jdiameterd-function-function-transmission-queue-answers
</jdiameterd-function-function-transmission-queue-answers>
<jdiameterd-function-upstream-transaction-count>
  jdiameterd-function-upstream-transaction-count
</jdiameterd-function-upstream-transaction-count>
<jdiameterd-function-upstream-transaction-limit>
  jdiameterd-function-upstream-transaction-limit
</jdiameterd-function-upstream-transaction-limit>
<jdiameterd-function-function-transmission-queue-requests>
  jdiameterd-function-function-transmission-queue-requests
</jdiameterd-function-function-transmission-queue-requests>
<jdiameterd-function-expected-answers-from-function>
  jdiameterd-function-expected-answers-from-function
</jdiameterd-function-expected-answers-from-function>
<jdiameterd-function-network-transmission-queue-answers>
  jdiameterd-function-network-transmission-queue-answers
</jdiameterd-function-network-transmission-queue-answers>
<jdiameterd-function-downstream-transaction-count>
  jdiameterd-function-downstream-transaction-count
</jdiameterd-function-downstream-transaction-count>
<jdiameterd-function-downstream-transaction-limit>
  jdiameterd-function-downstream-transaction-limit
</jdiameterd-function-downstream-transaction-limit>
<jdiameterd-function-network-transmission-queue-memory>
  jdiameterd-function-network-transmission-queue-memory
</jdiameterd-function-network-transmission-queue-memory>
<jdiameterd-function-network-transmission-queue-memory-limit>
  jdiameterd-function-network-transmission-queue-memory-limit
</jdiameterd-function-network-transmission-queue-memory-limit>
<jdiameterd-function-function-transmission-queue-memory>
  jdiameterd-function-function-transmission-queue-memory
</jdiameterd-function-function-transmission-queue-memory>
<jdiameterd-function-function-transmission-queue-memory-limit>
  jdiameterd-function-function-transmission-queue-memory-limit
</jdiameterd-function-function-transmission-queue-memory-limit>
</jdiameterd-function-data>
```

Description Diameter function

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<jdiameterd-function-data>

Usage

```
<jdiameterd-function-information>
  <jdiameterd-function-data>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-state>
      jdiameterd-function-state
    </jdiameterd-function-state>
    <jdiameterd-function-upstream-transaction-utilization>
      jdiameterd-function-upstream-transaction-utilization
    </jdiameterd-function-upstream-transaction-utilization>
    <jdiameterd-function-downstream-transaction-utilization>
      jdiameterd-function-downstream-transaction-utilization
    </jdiameterd-function-downstream-transaction-utilization>
    <jdiameterd-function-network-transmission-queue-memory-utilization>
      jdiameterd-function-network-transmission-queue-memory-utilization
    </jdiameterd-function-network-transmission-queue-memory-utilization>
    <jdiameterd-function-function-transmission-queue-memory-utilization>
      jdiameterd-function-function-transmission-queue-memory-utilization
    </jdiameterd-function-function-transmission-queue-memory-utilization>
    <jdiameterd-function-routed-dests>
      jdiameterd-function-routed-dests
    </jdiameterd-function-routed-dests>
    <jdiameterd-function-network-transmission-queue-requests>
      jdiameterd-function-network-transmission-queue-requests
    </jdiameterd-function-network-transmission-queue-requests>
    <jdiameterd-function-expected-answers-from-network>
      jdiameterd-function-expected-answers-from-network
    </jdiameterd-function-expected-answers-from-network>
    <jdiameterd-function-function-transmission-queue-answers>
      jdiameterd-function-function-transmission-queue-answers
    </jdiameterd-function-function-transmission-queue-answers>
    <jdiameterd-function-upstream-transaction-count>
      jdiameterd-function-upstream-transaction-count
    </jdiameterd-function-upstream-transaction-count>
    <jdiameterd-function-upstream-transaction-limit>
      jdiameterd-function-upstream-transaction-limit
    </jdiameterd-function-upstream-transaction-limit>
    <jdiameterd-function-function-transmission-queue-requests>
      jdiameterd-function-function-transmission-queue-requests
    </jdiameterd-function-function-transmission-queue-requests>
    <jdiameterd-function-expected-answers-from-function>
      jdiameterd-function-expected-answers-from-function
    </jdiameterd-function-expected-answers-from-function>
    <jdiameterd-function-network-transmission-queue-answers>
      jdiameterd-function-network-transmission-queue-answers
    </jdiameterd-function-network-transmission-queue-answers>
    <jdiameterd-function-downstream-transaction-count>
      jdiameterd-function-downstream-transaction-count
    </jdiameterd-function-downstream-transaction-count>
    <jdiameterd-function-downstream-transaction-limit>
      jdiameterd-function-downstream-transaction-limit
```


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```
    </jdiameterd-function-downstream-transaction-limit>
    <jdiameterd-function-network-transmission-queue-memory>
      jdiameterd-function-network-transmission-queue-memory
    </jdiameterd-function-network-transmission-queue-memory>
    <jdiameterd-function-network-transmission-queue-memory-limit>
      jdiameterd-function-network-transmission-queue-memory-limit
    </jdiameterd-function-network-transmission-queue-memory-limit>
    <jdiameterd-function-function-transmission-queue-memory>
      jdiameterd-function-function-transmission-queue-memory
    </jdiameterd-function-function-transmission-queue-memory>
    <jdiameterd-function-function-transmission-queue-memory-limit>
      jdiameterd-function-function-transmission-queue-memory-limit
    </jdiameterd-function-function-transmission-queue-memory-limit>
  </jdiameterd-function-data>
</jdiameterd-function-information>
```

Description Diameter function

<jdiameterd-function-error>

Usage

```
<jdiameterd-function-information>
  <jdiameterd-function-error>
</jdiameterd-function-error>
</jdiameterd-function-information>
```

Description

<jdiameterd-function-information>

Usage

```
<jdiameterd-function-information>
  <jdiameterd-function-list>....</jdiameterd-function-list>
  <jdiameterd-function-brief>....</jdiameterd-function-brief>
  <jdiameterd-function-data>....</jdiameterd-function-data>
  <jdiameterd-function-not-found>
    jdiameterd-function-not-found
  </jdiameterd-function-not-found>
  <jdiameterd-function-error>....</jdiameterd-function-error>
</jdiameterd-function-information>
```

Description Diameter function informaiton

<jdiameterd-function-list>

Usage

```
<jdiameterd-function-list>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-state>
```

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```
    jdiameterd-function-state
  </jdiameterd-function-state>
  <jdiameterd-function-upstream-transaction-utilization>
    jdiameterd-function-upstream-transaction-utilization
  </jdiameterd-function-upstream-transaction-utilization>
  <jdiameterd-function-downstream-transaction-utilization>
    jdiameterd-function-downstream-transaction-utilization
  </jdiameterd-function-downstream-transaction-utilization>
  <jdiameterd-function-network-transmission-queue-memory-utilization>
    jdiameterd-function-network-transmission-queue-memory-utilization
  </jdiameterd-function-network-transmission-queue-memory-utilization>
  <jdiameterd-function-function-transmission-queue-memory-utilization>
    jdiameterd-function-function-transmission-queue-memory-utilization
  </jdiameterd-function-function-transmission-queue-memory-utilization>
  <jdiameterd-function-routed-dests>
    jdiameterd-function-routed-dests
  </jdiameterd-function-routed-dests>
</jdiameterd-function-list>
```

Description Diameter functions

<jdiameterd-function-list>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-function-list>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-state>
      jdiameterd-function-state
    </jdiameterd-function-state>
    <jdiameterd-function-upstream-transaction-utilization>
      jdiameterd-function-upstream-transaction-utilization
    </jdiameterd-function-upstream-transaction-utilization>
    <jdiameterd-function-downstream-transaction-utilization>
      jdiameterd-function-downstream-transaction-utilization
    </jdiameterd-function-downstream-transaction-utilization>
    <jdiameterd-function-network-transmission-queue-memory-utilization>
      jdiameterd-function-network-transmission-queue-memory-utilization
    </jdiameterd-function-network-transmission-queue-memory-utilization>
    <jdiameterd-function-function-transmission-queue-memory-utilization>
      jdiameterd-function-function-transmission-queue-memory-utilization
    </jdiameterd-function-function-transmission-queue-memory-utilization>
    <jdiameterd-function-routed-dests>
      jdiameterd-function-routed-dests
    </jdiameterd-function-routed-dests>
  </jdiameterd-function-list>
</jdiameterd-node-information>
```

Description Diameter functions

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<jdiameterd-function-list>

Usage

```
<jdiameterd-function-information>
  <jdiameterd-function-list>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-state>
      jdiameterd-function-state
    </jdiameterd-function-state>
    <jdiameterd-function-upstream-transaction-utilization>
      jdiameterd-function-upstream-transaction-utilization
    </jdiameterd-function-upstream-transaction-utilization>
    <jdiameterd-function-downstream-transaction-utilization>
      jdiameterd-function-downstream-transaction-utilization
    </jdiameterd-function-downstream-transaction-utilization>
    <jdiameterd-function-network-transmission-queue-memory-utilization>
      jdiameterd-function-network-transmission-queue-memory-utilization
    </jdiameterd-function-network-transmission-queue-memory-utilization>
    <jdiameterd-function-function-transmission-queue-memory-utilization>
      jdiameterd-function-function-transmission-queue-memory-utilization
    </jdiameterd-function-function-transmission-queue-memory-utilization>
    <jdiameterd-function-routed-dests>
      jdiameterd-function-routed-dests
    </jdiameterd-function-routed-dests>
  </jdiameterd-function-list>
</jdiameterd-function-information>
```

Description Diameter functions

<jdiameterd-function-statistics-brief>

Usage

```
<jdiameterd-function-statistics-brief>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-connection-count>
    jdiameterd-function-connection-count
  </jdiameterd-function-connection-count>
  <jdiameterd-function-network-received-requests-deliveries>
    jdiameterd-function-network-received-requests-deliveries
  </jdiameterd-function-network-received-requests-deliveries>
  <jdiameterd-function-network-received-requests-deliveries-total>
    jdiameterd-function-network-received-requests-deliveries-total
  </jdiameterd-function-network-received-requests-deliveries-total>
  <jdiameterd-function-network-received-answer-deliveries>
    jdiameterd-function-network-received-answer-deliveries
  </jdiameterd-function-network-received-answer-deliveries>
  <jdiameterd-function-network-received-answer-deliveries-total>
    jdiameterd-function-network-received-answer-deliveries-total
  </jdiameterd-function-network-received-answer-deliveries-total>
```

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```
<jdiameterd-function-network-received-message-deliveries>
  jdiameterd-function-network-received-message-deliveries
</jdiameterd-function-network-received-message-deliveries>
<jdiameterd-function-network-received-message-deliveries-total>
  jdiameterd-function-network-received-message-deliveries-total
</jdiameterd-function-network-received-message-deliveries-total>
<jdiameterd-function-function-received-requests-forwarded>
  jdiameterd-function-function-received-requests-forwarded
</jdiameterd-function-function-received-requests-forwarded>
<jdiameterd-function-function-received-requests-forwarded-total>
  jdiameterd-function-function-received-requests-forwarded-total
</jdiameterd-function-function-received-requests-forwarded-total>
<jdiameterd-function-function-received-answers-forwarded>
  jdiameterd-function-function-received-answers-forwarded
</jdiameterd-function-function-received-answers-forwarded>
<jdiameterd-function-function-received-answers-forwarded-total>
  jdiameterd-function-function-received-answers-forwarded-total
</jdiameterd-function-function-received-answers-forwarded-total>
<jdiameterd-function-function-received-messages-forwarded>
  jdiameterd-function-function-received-messages-forwarded
</jdiameterd-function-function-received-messages-forwarded>
<jdiameterd-function-function-received-messages-forwarded-total>
  jdiameterd-function-function-received-messages-forwarded-total
</jdiameterd-function-function-received-messages-forwarded-total>
</jdiameterd-function-statistics-brief>
```

Description Function statistics

<jdiameterd-function-statistics-brief>

Usage

```
<jdiameterd-function-statistics-information>
  <jdiameterd-function-statistics-brief>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-connection-count>
      jdiameterd-function-connection-count
    </jdiameterd-function-connection-count>
    <jdiameterd-function-network-received-requests-deliveries>
      jdiameterd-function-network-received-requests-deliveries
    </jdiameterd-function-network-received-requests-deliveries>
    <jdiameterd-function-network-received-requests-deliveries-total>
      jdiameterd-function-network-received-requests-deliveries-total
    </jdiameterd-function-network-received-requests-deliveries-total>
    <jdiameterd-function-network-received-answer-deliveries>
      jdiameterd-function-network-received-answer-deliveries
    </jdiameterd-function-network-received-answer-deliveries>
    <jdiameterd-function-network-received-answer-deliveries-total>
      jdiameterd-function-network-received-answer-deliveries-total
    </jdiameterd-function-network-received-answer-deliveries-total>
    <jdiameterd-function-network-received-message-deliveries>
      jdiameterd-function-network-received-message-deliveries
    </jdiameterd-function-network-received-message-deliveries>
```


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```
    <jdiameterd-function-network-received-message-deliveries-total>
      jdiameterd-function-network-received-message-deliveries-total
    </jdiameterd-function-network-received-message-deliveries-total>
    <jdiameterd-function-function-received-requests-forwarded>
      jdiameterd-function-function-received-requests-forwarded
    </jdiameterd-function-function-received-requests-forwarded>
    <jdiameterd-function-function-received-requests-forwarded-total>
      jdiameterd-function-function-received-requests-forwarded-total
    </jdiameterd-function-function-received-requests-forwarded-total>
    <jdiameterd-function-function-received-answers-forwarded>
      jdiameterd-function-function-received-answers-forwarded
    </jdiameterd-function-function-received-answers-forwarded>
    <jdiameterd-function-function-received-answers-forwarded-total>
      jdiameterd-function-function-received-answers-forwarded-total
    </jdiameterd-function-function-received-answers-forwarded-total>
    <jdiameterd-function-function-received-messages-forwarded>
      jdiameterd-function-function-received-messages-forwarded
    </jdiameterd-function-function-received-messages-forwarded>
    <jdiameterd-function-function-received-messages-forwarded-total>
      jdiameterd-function-function-received-messages-forwarded-total
    </jdiameterd-function-function-received-messages-forwarded-total>
  </jdiameterd-function-statistics-brief>
</jdiameterd-function-statistics-information>
```

Description Function statistics

<jdiameterd-function-statistics-data>

Usage

```
<jdiameterd-function-statistics-data>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-connection-count>
    jdiameterd-function-connection-count
  </jdiameterd-function-connection-count>
  <jdiameterd-function-network-received-requests-deliveries>
    jdiameterd-function-network-received-requests-deliveries
  </jdiameterd-function-network-received-requests-deliveries>
  <jdiameterd-function-network-received-requests-deliveries-total>
    jdiameterd-function-network-received-requests-deliveries-total
  </jdiameterd-function-network-received-requests-deliveries-total>
  <jdiameterd-function-network-received-answer-deliveries>
    jdiameterd-function-network-received-answer-deliveries
  </jdiameterd-function-network-received-answer-deliveries>
  <jdiameterd-function-network-received-answer-deliveries-total>
    jdiameterd-function-network-received-answer-deliveries-total
  </jdiameterd-function-network-received-answer-deliveries-total>
  <jdiameterd-function-network-received-message-deliveries>
    jdiameterd-function-network-received-message-deliveries
  </jdiameterd-function-network-received-message-deliveries>
  <jdiameterd-function-network-received-message-deliveries-total>
    jdiameterd-function-network-received-message-deliveries-total
  </jdiameterd-function-network-received-message-deliveries-total>
```

<jdiameterd-function-function-received-requests-forwarded>
  jdiameterd-function-function-received-requests-forwarded
</jdiameterd-function-function-received-requests-forwarded>
<jdiameterd-function-function-received-requests-forwarded-total>
  jdiameterd-function-function-received-requests-forwarded-total
</jdiameterd-function-function-received-requests-forwarded-total>
<jdiameterd-function-function-received-answers-forwarded>
  jdiameterd-function-function-received-answers-forwarded
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  jdiameterd-function-function-received-answers-forwarded-total
</jdiameterd-function-function-received-answers-forwarded-total>
<jdiameterd-function-function-received-messages-forwarded>
  jdiameterd-function-function-received-messages-forwarded
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  jdiameterd-function-function-received-messages-forwarded-total
</jdiameterd-function-function-received-messages-forwarded-total>
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  jdiameterd-function-network-received-requests-over-limit
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  jdiameterd-function-network-received-requests-over-limit-total
</jdiameterd-function-network-received-requests-over-limit-total>
<jdiameterd-function-network-received-answers-over-limit>
  jdiameterd-function-network-received-answers-over-limit
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<jdiameterd-function-network-received-answer-delivery-fails>
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  jdiameterd-function-network-received-message-delivery-fails-total
</jdiameterd-function-network-received-message-delivery-fails-total>
<jdiameterd-function-function-received-requests-over-limit>
  jdiameterd-function-function-received-requests-over-limit

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```
</jdiameterd-function-function-received-requests-over-limit>
<jdiameterd-function-function-received-requests-over-limit-total>
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  jdiameterd-function-function-receive-request-failures
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</jdiameterd-function-function-receive-answer-failures-total>
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  jdiameterd-function-function-receive-message-failures
</jdiameterd-function-function-receive-message-failures>
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  jdiameterd-function-function-receive-message-failures-total
</jdiameterd-function-function-receive-message-failures-total>
</jdiameterd-function-statistics-data>
```

Description Function statistics

<jdiameterd-function-statistics-data>

Usage

```
<jdiameterd-function-statistics-information>
  <jdiameterd-function-statistics-data>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-connection-count>
      jdiameterd-function-connection-count
    </jdiameterd-function-connection-count>
    <jdiameterd-function-network-received-requests-deliveries>
      jdiameterd-function-network-received-requests-deliveries
    </jdiameterd-function-network-received-requests-deliveries>
    <jdiameterd-function-network-received-requests-deliveries-total>
      jdiameterd-function-network-received-requests-deliveries-total
```

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</jdiameterd-function-network-received-requests-deliveries-total>
<jdiameterd-function-network-received-answer-deliveries>
jdiameterd-function-network-received-answer-deliveries
</jdiameterd-function-network-received-answer-deliveries>
<jdiameterd-function-network-received-answer-deliveries-total>
jdiameterd-function-network-received-answer-deliveries-total
</jdiameterd-function-network-received-answer-deliveries-total>
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jdiameterd-function-network-received-message-deliveries
</jdiameterd-function-network-received-message-deliveries>
<jdiameterd-function-network-received-message-deliveries-total>
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</jdiameterd-function-network-received-message-deliveries-total>
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jdiameterd-function-function-received-requests-forwarded
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<jdiameterd-function-network-received-requests-delivery-fails-total>
jdiameterd-function-network-received-requests-delivery-fails-total
</jdiameterd-function-network-received-requests-delivery-fails-total>
<jdiameterd-function-network-received-answer-delivery-fails>

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```
          jdiameterd-function-network-received-answer-delivery-fails
        </jdiameterd-function-network-received-answer-delivery-fails>
        <jdiameterd-function-network-received-answer-delivery-fails-total>
          jdiameterd-function-network-received-answer-delivery-fails-total
        </jdiameterd-function-network-received-answer-delivery-fails-total>
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          jdiameterd-function-network-received-message-delivery-fails
        </jdiameterd-function-network-received-message-delivery-fails>
        <jdiameterd-function-network-received-message-delivery-fails-total>
          jdiameterd-function-network-received-message-delivery-fails-total
        </jdiameterd-function-network-received-message-delivery-fails-total>
        <jdiameterd-function-function-received-requests-over-limit>
          jdiameterd-function-function-received-requests-over-limit
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        <jdiameterd-function-function-received-requests-over-limit-total>
          jdiameterd-function-function-received-requests-over-limit-total
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          jdiameterd-function-function-received-answers-over-limit
        </jdiameterd-function-function-received-answers-over-limit>
        <jdiameterd-function-function-received-answers-over-limit-total>
          jdiameterd-function-function-received-answers-over-limit-total
        </jdiameterd-function-function-received-answers-over-limit-total>
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          jdiameterd-function-function-received-messages-over-limit
        </jdiameterd-function-function-received-messages-over-limit>
        <jdiameterd-function-function-received-messages-over-limit-total>
          jdiameterd-function-function-received-messages-over-limit-total
        </jdiameterd-function-function-received-messages-over-limit-total>
        <jdiameterd-function-function-receive-request-failures>
          jdiameterd-function-function-receive-request-failures
        </jdiameterd-function-function-receive-request-failures>
        <jdiameterd-function-function-receive-request-failures-total>
          jdiameterd-function-function-receive-request-failures-total
        </jdiameterd-function-function-receive-request-failures-total>
        <jdiameterd-function-function-receive-answer-failures>
          jdiameterd-function-function-receive-answer-failures
        </jdiameterd-function-function-receive-answer-failures>
        <jdiameterd-function-function-receive-answer-failures-total>
          jdiameterd-function-function-receive-answer-failures-total
        </jdiameterd-function-function-receive-answer-failures-total>
        <jdiameterd-function-function-receive-message-failures>
          jdiameterd-function-function-receive-message-failures
        </jdiameterd-function-function-receive-message-failures>
        <jdiameterd-function-function-receive-message-failures-total>
          jdiameterd-function-function-receive-message-failures-total
        </jdiameterd-function-function-receive-message-failures-total>
      </jdiameterd-function-statistics-data>
    </jdiameterd-function-statistics-information>
```

Description Function statistics

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<jdiameterd-function-statistics-error>

Usage

```
<jdiameterd-function-statistics-information>
  <jdiameterd-function-statistics-error>
</jdiameterd-function-statistics-error>
</jdiameterd-function-statistics-information>
```

Description

<jdiameterd-function-statistics-information>

Usage

```
<jdiameterd-function-statistics-information>
  <jdiameterd-function-statistics-list>....</jdiameterd-function-statistics-list>
  <jdiameterd-function-statistics-brief>....</jdiameterd-function-statistics-brief>
  <jdiameterd-function-statistics-data>....</jdiameterd-function-statistics-data>
  <jdiameterd-function-statistics-not-found>
    jdiameterd-function-statistics-not-found
  </jdiameterd-function-statistics-not-found>
  <jdiameterd-function-statistics-error>....</jdiameterd-function-statistics-error>
</jdiameterd-function-statistics-information>
```

Description Diameter function statistics

<jdiameterd-function-statistics-list>

Usage

```
<jdiameterd-function-statistics-list>
  <jdiameterd-function-name>
    jdiameterd-function-name
  </jdiameterd-function-name>
  <jdiameterd-function-network-received-requests-deliveries>
    jdiameterd-function-network-received-requests-deliveries
  </jdiameterd-function-network-received-requests-deliveries>
  <jdiameterd-function-network-received-answer-deliveries>
    jdiameterd-function-network-received-answer-deliveries
  </jdiameterd-function-network-received-answer-deliveries>
  <jdiameterd-function-network-received-message-deliveries>
    jdiameterd-function-network-received-message-deliveries
  </jdiameterd-function-network-received-message-deliveries>
  <jdiameterd-function-function-received-requests-forwarded>
    jdiameterd-function-function-received-requests-forwarded
  </jdiameterd-function-function-received-requests-forwarded>
  <jdiameterd-function-function-received-answers-forwarded>
    jdiameterd-function-function-received-answers-forwarded
  </jdiameterd-function-function-received-answers-forwarded>
  <jdiameterd-function-function-received-messages-forwarded>
    jdiameterd-function-function-received-messages-forwarded
  </jdiameterd-function-function-received-messages-forwarded>
</jdiameterd-function-statistics-list>
```


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Description Function statistics summary

<jdiameterd-function-statistics-list>

Usage

```
<jdiameterd-function-statistics-information>
  <jdiameterd-function-statistics-list>
    <jdiameterd-function-name>
      jdiameterd-function-name
    </jdiameterd-function-name>
    <jdiameterd-function-network-received-requests-deliveries>
      jdiameterd-function-network-received-requests-deliveries
    </jdiameterd-function-network-received-requests-deliveries>
    <jdiameterd-function-network-received-answer-deliveries>
      jdiameterd-function-network-received-answer-deliveries
    </jdiameterd-function-network-received-answer-deliveries>
    <jdiameterd-function-network-received-message-deliveries>
      jdiameterd-function-network-received-message-deliveries
    </jdiameterd-function-network-received-message-deliveries>
    <jdiameterd-function-function-received-requests-forwarded>
      jdiameterd-function-function-received-requests-forwarded
    </jdiameterd-function-function-received-requests-forwarded>
    <jdiameterd-function-function-received-answers-forwarded>
      jdiameterd-function-function-received-answers-forwarded
    </jdiameterd-function-function-received-answers-forwarded>
    <jdiameterd-function-function-received-messages-forwarded>
      jdiameterd-function-function-received-messages-forwarded
    </jdiameterd-function-function-received-messages-forwarded>
  </jdiameterd-function-statistics-list>
</jdiameterd-function-statistics-information>
```

Description Function statistics summary

<jdiameterd-instance-brief>

Usage

```
<jdiameterd-instance-brief>
  <jdiameterd-instance-name>
    jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-instance-origin-realm>
    jdiameterd-instance-origin-realm
  </jdiameterd-instance-origin-realm>
  <jdiameterd-instance-origin-host>
    jdiameterd-instance-origin-host
  </jdiameterd-instance-origin-host>
  <jdiameterd-instance-total-network-elements>
    jdiameterd-instance-total-network-elements
  </jdiameterd-instance-total-network-elements>
  <jdiameterd-instance-connected-network-elements>
    jdiameterd-instance-connected-network-elements
  </jdiameterd-instance-connected-network-elements>
```

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```
</jdiameterd-instance-brief>
```

Description Diameter instance

<jdiameterd-instance-brief>

Usage

```
<jdiameterd-instance-information>
  <jdiameterd-instance-brief>
    <jdiameterd-instance-name>
      jdiameterd-instance-name
    </jdiameterd-instance-name>
    <jdiameterd-instance-origin-realm>
      jdiameterd-instance-origin-realm
    </jdiameterd-instance-origin-realm>
    <jdiameterd-instance-origin-host>
      jdiameterd-instance-origin-host
    </jdiameterd-instance-origin-host>
    <jdiameterd-instance-total-network-elements>
      jdiameterd-instance-total-network-elements
    </jdiameterd-instance-total-network-elements>
    <jdiameterd-instance-connected-network-elements>
      jdiameterd-instance-connected-network-elements
    </jdiameterd-instance-connected-network-elements>
  </jdiameterd-instance-brief>
</jdiameterd-instance-information>
```

Description Diameter instance

<jdiameterd-instance-error>

Usage

```
<jdiameterd-instance-information>
  <jdiameterd-instance-error>
</jdiameterd-instance-error>
</jdiameterd-instance-information>
```

Description

<jdiameterd-instance-information>

Usage

```
<jdiameterd-instance-information>
  <jdiameterd-instance-list>....</jdiameterd-instance-list>
  <jdiameterd-instance-brief>....</jdiameterd-instance-brief>
  <jdiameterd-instance-not-found>
    jdiameterd-instance-not-found
  </jdiameterd-instance-not-found>
  <jdiameterd-instance-error>....</jdiameterd-instance-error>
</jdiameterd-instance-information>
```


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Description Diameter instance informaiton

<jdiameterd-instance-list>

Usage

```
<jdiameterd-instance-list>
  <jdiameterd-instance-name>
    jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-instance-origin-realm>
    jdiameterd-instance-origin-realm
  </jdiameterd-instance-origin-realm>
  <jdiameterd-instance-origin-host>
    jdiameterd-instance-origin-host
  </jdiameterd-instance-origin-host>
  <jdiameterd-instance-total-network-elements>
    jdiameterd-instance-total-network-elements
  </jdiameterd-instance-total-network-elements>
  <jdiameterd-instance-connected-network-elements>
    jdiameterd-instance-connected-network-elements
  </jdiameterd-instance-connected-network-elements>
</jdiameterd-instance-list>
```

Description Diameter instances

<jdiameterd-instance-list>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-instance-list>
    <jdiameterd-instance-name>
      jdiameterd-instance-name
    </jdiameterd-instance-name>
    <jdiameterd-instance-origin-realm>
      jdiameterd-instance-origin-realm
    </jdiameterd-instance-origin-realm>
    <jdiameterd-instance-origin-host>
      jdiameterd-instance-origin-host
    </jdiameterd-instance-origin-host>
    <jdiameterd-instance-total-network-elements>
      jdiameterd-instance-total-network-elements
    </jdiameterd-instance-total-network-elements>
    <jdiameterd-instance-connected-network-elements>
      jdiameterd-instance-connected-network-elements
    </jdiameterd-instance-connected-network-elements>
  </jdiameterd-instance-list>
</jdiameterd-node-information>
```

Description Diameter instances

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<jdiameterd-instance-list>

Usage

```
<jdiameterd-instance-information>
  <jdiameterd-instance-list>
    <jdiameterd-instance-name>
      jdiameterd-instance-name
    </jdiameterd-instance-name>
    <jdiameterd-instance-origin-realm>
      jdiameterd-instance-origin-realm
    </jdiameterd-instance-origin-realm>
    <jdiameterd-instance-origin-host>
      jdiameterd-instance-origin-host
    </jdiameterd-instance-origin-host>
    <jdiameterd-instance-total-network-elements>
      jdiameterd-instance-total-network-elements
    </jdiameterd-instance-total-network-elements>
    <jdiameterd-instance-connected-network-elements>
      jdiameterd-instance-connected-network-elements
    </jdiameterd-instance-connected-network-elements>
  </jdiameterd-instance-list>
</jdiameterd-instance-information>
```

Description Diameter instances

<jdiameterd-network-element-brief>

Usage

```
<jdiameterd-network-element-brief>
  <jdiameterd-network-element-name>
    jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
    jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-state>
    jdiameterd-network-element-state
  </jdiameterd-network-element-state>
  <jdiameterd-network-element-primary-peer>
    jdiameterd-network-element-primary-peer
  </jdiameterd-network-element-primary-peer>
  <jdiameterd-network-element-secondary-peer>
    jdiameterd-network-element-secondary-peer
  </jdiameterd-network-element-secondary-peer>
</jdiameterd-network-element-brief>
```

Description Diameter network-elements

<jdiameterd-network-element-brief>

Usage

```
<jdiameterd-network-element-information>
```


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```
<jdiameterd-network-element-brief>
  <jdiameterd-network-element-name>
    jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
    jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-state>
    jdiameterd-network-element-state
  </jdiameterd-network-element-state>
  <jdiameterd-network-element-primary-peer>
    jdiameterd-network-element-primary-peer
  </jdiameterd-network-element-primary-peer>
  <jdiameterd-network-element-secondary-peer>
    jdiameterd-network-element-secondary-peer
  </jdiameterd-network-element-secondary-peer>
</jdiameterd-network-element-brief>
</jdiameterd-network-element-information>
```

Description Diameter network-elements

<jdiameterd-network-element-data>

Usage

```
<jdiameterd-network-element-data>
  <jdiameterd-network-element-name>
    jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
    jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-state>
    jdiameterd-network-element-state
  </jdiameterd-network-element-state>
  <jdiameterd-network-element-primary-peer>
    jdiameterd-network-element-primary-peer
  </jdiameterd-network-element-primary-peer>
  <jdiameterd-network-element-secondary-peer>
    jdiameterd-network-element-secondary-peer
  </jdiameterd-network-element-secondary-peer>
  <jdiameterd-network-element-total-peers>
    jdiameterd-network-element-total-peers
  </jdiameterd-network-element-total-peers>
  <jdiameterd-network-element-activated-peers>
    jdiameterd-network-element-activated-peers
  </jdiameterd-network-element-activated-peers>
  <jdiameterd-network-element-open-peers>
    jdiameterd-network-element-open-peers
  </jdiameterd-network-element-open-peers>
  <jdiameterd-network-element-total-routes>
    jdiameterd-network-element-total-routes
  </jdiameterd-network-element-total-routes>
  <jdiameterd-network-element-invalid-routes>
    jdiameterd-network-element-invalid-routes
```

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```
    </jdiameterd-network-element-invalid-routes>
    <jdiameterd-network-element-peer-activation-delay>
      jdiameterd-network-element-peer-activation-delay
    </jdiameterd-network-element-peer-activation-delay>
    <jdiameterd-network-element-first-selection-delay>
      jdiameterd-network-element-first-selection-delay
    </jdiameterd-network-element-first-selection-delay>
    <jdiameterd-network-element-post-selection-delay>
      jdiameterd-network-element-post-selection-delay
    </jdiameterd-network-element-post-selection-delay>
  </jdiameterd-network-element-data>
```

Description Diameter network-elements

<jdiameterd-network-element-data>

Usage

```
<jdiameterd-network-element-information>
  <jdiameterd-network-element-data>
    <jdiameterd-network-element-name>
      jdiameterd-network-element-name
    </jdiameterd-network-element-name>
    <jdiameterd-network-element-instance-name>
      jdiameterd-network-element-instance-name
    </jdiameterd-network-element-instance-name>
    <jdiameterd-network-element-state>
      jdiameterd-network-element-state
    </jdiameterd-network-element-state>
    <jdiameterd-network-element-primary-peer>
      jdiameterd-network-element-primary-peer
    </jdiameterd-network-element-primary-peer>
    <jdiameterd-network-element-secondary-peer>
      jdiameterd-network-element-secondary-peer
    </jdiameterd-network-element-secondary-peer>
    <jdiameterd-network-element-total-peers>
      jdiameterd-network-element-total-peers
    </jdiameterd-network-element-total-peers>
    <jdiameterd-network-element-activated-peers>
      jdiameterd-network-element-activated-peers
    </jdiameterd-network-element-activated-peers>
    <jdiameterd-network-element-open-peers>
      jdiameterd-network-element-open-peers
    </jdiameterd-network-element-open-peers>
    <jdiameterd-network-element-total-routes>
      jdiameterd-network-element-total-routes
    </jdiameterd-network-element-total-routes>
    <jdiameterd-network-element-invalid-routes>
      jdiameterd-network-element-invalid-routes
    </jdiameterd-network-element-invalid-routes>
    <jdiameterd-network-element-peer-activation-delay>
      jdiameterd-network-element-peer-activation-delay
    </jdiameterd-network-element-peer-activation-delay>
    <jdiameterd-network-element-first-selection-delay>
      jdiameterd-network-element-first-selection-delay
```


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```
    </jdiameterd-network-element-first-selection-delay>
    <jdiameterd-network-element-post-selection-delay>
      jdiameterd-network-element-post-selection-delay
    </jdiameterd-network-element-post-selection-delay>
  </jdiameterd-network-element-data>
</jdiameterd-network-element-information>
```

Description Diameter network-elements

<jdiameterd-network-element-error>

Usage

```
<jdiameterd-network-element-information>
  <jdiameterd-network-element-error>
</jdiameterd-network-element-error>
</jdiameterd-network-element-information>
```

Description

<jdiameterd-network-element-information>

Usage

```
<jdiameterd-network-element-information>
  <jdiameterd-network-element-list>....</jdiameterd-network-element-list>
  <jdiameterd-network-element-brief>....</jdiameterd-network-element-brief>
  <jdiameterd-network-element-data>....</jdiameterd-network-element-data>
  <jdiameterd-network-element-not-found>
    jdiameterd-network-element-not-found
  </jdiameterd-network-element-not-found>
  <jdiameterd-network-element-error>....</jdiameterd-network-element-error>
</jdiameterd-network-element-information>
```

Description Diameter network element informaiton

<jdiameterd-network-element-list>

Usage

```
<jdiameterd-network-element-list>
  <jdiameterd-network-element-name>
    jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
    jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-state>
    jdiameterd-network-element-state
  </jdiameterd-network-element-state>
  <jdiameterd-network-element-primary-peer>
    jdiameterd-network-element-primary-peer
  </jdiameterd-network-element-primary-peer>
  <jdiameterd-network-element-secondary-peer>
```

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```
      jdiameterd-network-element-secondary-peer
    </jdiameterd-network-element-secondary-peer>
  </jdiameterd-network-element-list>
```

Description Diameter network-elements

<jdiameterd-network-element-list>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-network-element-list>
    <jdiameterd-network-element-name>
      jdiameterd-network-element-name
    </jdiameterd-network-element-name>
    <jdiameterd-network-element-instance-name>
      jdiameterd-network-element-instance-name
    </jdiameterd-network-element-instance-name>
    <jdiameterd-network-element-state>
      jdiameterd-network-element-state
    </jdiameterd-network-element-state>
    <jdiameterd-network-element-primary-peer>
      jdiameterd-network-element-primary-peer
    </jdiameterd-network-element-primary-peer>
    <jdiameterd-network-element-secondary-peer>
      jdiameterd-network-element-secondary-peer
    </jdiameterd-network-element-secondary-peer>
  </jdiameterd-network-element-list>
</jdiameterd-node-information>
```

Description Diameter network-elements

<jdiameterd-network-element-list>

Usage

```
<jdiameterd-network-element-information>
  <jdiameterd-network-element-list>
    <jdiameterd-network-element-name>
      jdiameterd-network-element-name
    </jdiameterd-network-element-name>
    <jdiameterd-network-element-instance-name>
      jdiameterd-network-element-instance-name
    </jdiameterd-network-element-instance-name>
    <jdiameterd-network-element-state>
      jdiameterd-network-element-state
    </jdiameterd-network-element-state>
    <jdiameterd-network-element-primary-peer>
      jdiameterd-network-element-primary-peer
    </jdiameterd-network-element-primary-peer>
    <jdiameterd-network-element-secondary-peer>
      jdiameterd-network-element-secondary-peer
    </jdiameterd-network-element-secondary-peer>
  </jdiameterd-network-element-list>
```


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```
</jdiameterd-network-element-information>
```

Description Diameter network-elements

<jdiameterd-network-element-map-data>

Usage

```
<jdiameterd-network-element-map-data>
  <jdiameterd-network-element-name>
    jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
    jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-peer-name>
    jdiameterd-network-element-peer-name
  </jdiameterd-network-element-peer-name>
  <jdiameterd-network-element-peer-priority>
    jdiameterd-network-element-peer-priority
  </jdiameterd-network-element-peer-priority>
  <jdiameterd-network-element-peer-usage>
    jdiameterd-network-element-peer-usage
  </jdiameterd-network-element-peer-usage>
</jdiameterd-network-element-map-data>
```

Description Diameter peers used by network-elements

<jdiameterd-network-element-map-data>

Usage

```
<jdiameterd-network-element-map-information>
  <jdiameterd-network-element-map-data>
    <jdiameterd-network-element-name>
      jdiameterd-network-element-name
    </jdiameterd-network-element-name>
    <jdiameterd-network-element-instance-name>
      jdiameterd-network-element-instance-name
    </jdiameterd-network-element-instance-name>
    <jdiameterd-network-element-peer-name>
      jdiameterd-network-element-peer-name
    </jdiameterd-network-element-peer-name>
    <jdiameterd-network-element-peer-priority>
      jdiameterd-network-element-peer-priority
    </jdiameterd-network-element-peer-priority>
    <jdiameterd-network-element-peer-usage>
      jdiameterd-network-element-peer-usage
    </jdiameterd-network-element-peer-usage>
  </jdiameterd-network-element-map-data>
</jdiameterd-network-element-map-information>
```

Description Diameter peers used by network-elements

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<jdiameterd-network-element-map-error>

Usage

```
<jdiameterd-network-element-map-information>
  <jdiameterd-network-element-map-error>
</jdiameterd-network-element-map-error>
</jdiameterd-network-element-map-information>
```

Description

<jdiameterd-network-element-map-information>

Usage

```
<jdiameterd-network-element-map-information>

<jdiameterd-network-element-map-list>....</jdiameterd-network-element-map-list>

<jdiameterd-network-element-map-data>....</jdiameterd-network-element-map-data>

  <jdiameterd-network-element-map-not-found>
   jdiameterd-network-element-map-not-found
  </jdiameterd-network-element-map-not-found>

<jdiameterd-network-element-map-error>....</jdiameterd-network-element-map-error>

</jdiameterd-network-element-map-information>
```

Description Diameter network element map informaiton

<jdiameterd-network-element-map-list>

Usage

```
<jdiameterd-network-element-map-list>
  <jdiameterd-network-element-name>
   jdiameterd-network-element-name
  </jdiameterd-network-element-name>
  <jdiameterd-network-element-instance-name>
   jdiameterd-network-element-instance-name
  </jdiameterd-network-element-instance-name>
  <jdiameterd-network-element-peer-name>
   jdiameterd-network-element-peer-name
  </jdiameterd-network-element-peer-name>
  <jdiameterd-network-element-peer-priority>
   jdiameterd-network-element-peer-priority
  </jdiameterd-network-element-peer-priority>
  <jdiameterd-network-element-peer-usage>
   jdiameterd-network-element-peer-usage
  </jdiameterd-network-element-peer-usage>
</jdiameterd-network-element-map-list>
```

Description Diameter peers used by network-elements

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<jdiameterd-network-element-map-list>

Usage

```
<jdiameterd-network-element-map-information>
  <jdiameterd-network-element-map-list>
    <jdiameterd-network-element-name>
      jdiameterd-network-element-name
    </jdiameterd-network-element-name>
    <jdiameterd-network-element-instance-name>
      jdiameterd-network-element-instance-name
    </jdiameterd-network-element-instance-name>
    <jdiameterd-network-element-peer-name>
      jdiameterd-network-element-peer-name
    </jdiameterd-network-element-peer-name>
    <jdiameterd-network-element-peer-priority>
      jdiameterd-network-element-peer-priority
    </jdiameterd-network-element-peer-priority>
    <jdiameterd-network-element-peer-usage>
      jdiameterd-network-element-peer-usage
    </jdiameterd-network-element-peer-usage>
  </jdiameterd-network-element-map-list>
</jdiameterd-network-element-map-information>
```

Description Diameter peers used by network-elements

<jdiameterd-node-information>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-node-summary>....</jdiameterd-node-summary>
  <jdiameterd-function-list>....</jdiameterd-function-list>
  <jdiameterd-instance-list>....</jdiameterd-instance-list>
  <jdiameterd-network-element-list>....</jdiameterd-network-element-list>
  <jdiameterd-peer-list>....</jdiameterd-peer-list>
  <jdiameterd-route-list>....</jdiameterd-route-list>
</jdiameterd-node-information>
```

Description Diameter information

<jdiameterd-node-summary>

Usage

```
<jdiameterd-node-summary>
  <jdiameterd-node-pid>
    jdiameterd-node-pid
  </jdiameterd-node-pid>
  <jdiameterd-node-total-functions>
    jdiameterd-node-total-functions
  </jdiameterd-node-total-functions>
  <jdiameterd-node-connected-functions>
    jdiameterd-node-connected-functions
  </jdiameterd-node-connected-functions>
```

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```
<jdiameterd-node-instances>
  jdiameterd-node-instances
</jdiameterd-node-instances>
<jdiameterd-node-total-network-elements>
  jdiameterd-node-total-network-elements
</jdiameterd-node-total-network-elements>
<jdiameterd-node-connected-network-elements>
  jdiameterd-node-connected-network-elements
</jdiameterd-node-connected-network-elements>
<jdiameterd-node-total-peers>
  jdiameterd-node-total-peers
</jdiameterd-node-total-peers>
<jdiameterd-node-activated-peers>
  jdiameterd-node-activated-peers
</jdiameterd-node-activated-peers>
<jdiameterd-node-open-peers>
  jdiameterd-node-open-peers
</jdiameterd-node-open-peers>
<jdiameterd-node-total-transports>
  jdiameterd-node-total-transports
</jdiameterd-node-total-transports>
<jdiameterd-node-network-transmission-queue-requests>
  jdiameterd-node-network-transmission-queue-requests
</jdiameterd-node-network-transmission-queue-requests>
<jdiameterd-node-network-transmission-queue-answers>
  jdiameterd-node-network-transmission-queue-answers
</jdiameterd-node-network-transmission-queue-answers>
<jdiameterd-node-expected-answers-from-network>
  jdiameterd-node-expected-answers-from-network
</jdiameterd-node-expected-answers-from-network>
<jdiameterd-node-function-transmission-queue-requests>
  jdiameterd-node-function-transmission-queue-requests
</jdiameterd-node-function-transmission-queue-requests>
<jdiameterd-node-function-transmission-queue-answers>
  jdiameterd-node-function-transmission-queue-answers
</jdiameterd-node-function-transmission-queue-answers>
<jdiameterd-node-expected-answers-from-function>
  jdiameterd-node-expected-answers-from-function
</jdiameterd-node-expected-answers-from-function>
<jdiameterd-node-network-transmission-queue-memory>
  jdiameterd-node-network-transmission-queue-memory
</jdiameterd-node-network-transmission-queue-memory>
<jdiameterd-node-function-transmission-queue-memory>
  jdiameterd-node-function-transmission-queue-memory
</jdiameterd-node-function-transmission-queue-memory>
</jdiameterd-node-summary>
```

Description Diameter node information

<jdiameterd-node-summary>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-node-summary>
```


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```
<jdiameterd-node-pid>
  jdiameterd-node-pid
</jdiameterd-node-pid>
<jdiameterd-node-total-functions>
  jdiameterd-node-total-functions
</jdiameterd-node-total-functions>
<jdiameterd-node-connected-functions>
  jdiameterd-node-connected-functions
</jdiameterd-node-connected-functions>
<jdiameterd-node-instances>
  jdiameterd-node-instances
</jdiameterd-node-instances>
<jdiameterd-node-total-network-elements>
  jdiameterd-node-total-network-elements
</jdiameterd-node-total-network-elements>
<jdiameterd-node-connected-network-elements>
  jdiameterd-node-connected-network-elements
</jdiameterd-node-connected-network-elements>
<jdiameterd-node-total-peers>
  jdiameterd-node-total-peers
</jdiameterd-node-total-peers>
<jdiameterd-node-activated-peers>
  jdiameterd-node-activated-peers
</jdiameterd-node-activated-peers>
<jdiameterd-node-open-peers>
  jdiameterd-node-open-peers
</jdiameterd-node-open-peers>
<jdiameterd-node-total-transports>
  jdiameterd-node-total-transports
</jdiameterd-node-total-transports>
<jdiameterd-node-network-transmission-queue-requests>
  jdiameterd-node-network-transmission-queue-requests
</jdiameterd-node-network-transmission-queue-requests>
<jdiameterd-node-network-transmission-queue-answers>
  jdiameterd-node-network-transmission-queue-answers
</jdiameterd-node-network-transmission-queue-answers>
<jdiameterd-node-expected-answers-from-network>
  jdiameterd-node-expected-answers-from-network
</jdiameterd-node-expected-answers-from-network>
<jdiameterd-node-function-transmission-queue-requests>
  jdiameterd-node-function-transmission-queue-requests
</jdiameterd-node-function-transmission-queue-requests>
<jdiameterd-node-function-transmission-queue-answers>
  jdiameterd-node-function-transmission-queue-answers
</jdiameterd-node-function-transmission-queue-answers>
<jdiameterd-node-expected-answers-from-function>
  jdiameterd-node-expected-answers-from-function
</jdiameterd-node-expected-answers-from-function>
<jdiameterd-node-network-transmission-queue-memory>
  jdiameterd-node-network-transmission-queue-memory
</jdiameterd-node-network-transmission-queue-memory>
<jdiameterd-node-function-transmission-queue-memory>
  jdiameterd-node-function-transmission-queue-memory
</jdiameterd-node-function-transmission-queue-memory>
</jdiameterd-node-summary>
```

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```
</jdiameterd-node-information>
```

Description Diameter node information

<jdiameterd-peer-brief>

Usage

```
<jdiameterd-peer-brief>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-instance-name>
    jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-peer-state>
    jdiameterd-peer-state
  </jdiameterd-peer-state>
  <jdiameterd-peer-network-element-count>
    jdiameterd-peer-network-element-count
  </jdiameterd-peer-network-element-count>
  <jdiameterd-peer-activated-count>
    jdiameterd-peer-activated-count
  </jdiameterd-peer-activated-count>
  <jdiameterd-peer-primary-count>
    jdiameterd-peer-primary-count
  </jdiameterd-peer-primary-count>
  <jdiameterd-peer-secondary-count>
    jdiameterd-peer-secondary-count
  </jdiameterd-peer-secondary-count>
  <jdiameterd-peer-vrf>
    jdiameterd-peer-vrf
  </jdiameterd-peer-vrf>
  <jdiameterd-peer-remote-address>
    jdiameterd-peer-remote-address
  </jdiameterd-peer-remote-address>
  <jdiameterd-peer-remote-port>
    jdiameterd-peer-remote-port
  </jdiameterd-peer-remote-port>
  <jdiameterd-peer-remote-realm>
    jdiameterd-peer-remote-realm
  </jdiameterd-peer-remote-realm>
  <jdiameterd-peer-remote-host>
    jdiameterd-peer-remote-host
  </jdiameterd-peer-remote-host>
</jdiameterd-peer-brief>
```

Description Peer brief

<jdiameterd-peer-brief>

Usage

```
<jdiameterd-peer-information>
```


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```
<jdiameterd-peer-brief>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-instance-name>
    jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-peer-state>
    jdiameterd-peer-state
  </jdiameterd-peer-state>
  <jdiameterd-peer-network-element-count>
    jdiameterd-peer-network-element-count
  </jdiameterd-peer-network-element-count>
  <jdiameterd-peer-activated-count>
    jdiameterd-peer-activated-count
  </jdiameterd-peer-activated-count>
  <jdiameterd-peer-primary-count>
    jdiameterd-peer-primary-count
  </jdiameterd-peer-primary-count>
  <jdiameterd-peer-secondary-count>
    jdiameterd-peer-secondary-count
  </jdiameterd-peer-secondary-count>
  <jdiameterd-peer-vrf>
    jdiameterd-peer-vrf
  </jdiameterd-peer-vrf>
  <jdiameterd-peer-remote-address>
    jdiameterd-peer-remote-address
  </jdiameterd-peer-remote-address>
  <jdiameterd-peer-remote-port>
    jdiameterd-peer-remote-port
  </jdiameterd-peer-remote-port>
  <jdiameterd-peer-remote-realm>
    jdiameterd-peer-remote-realm
  </jdiameterd-peer-remote-realm>
  <jdiameterd-peer-remote-host>
    jdiameterd-peer-remote-host
  </jdiameterd-peer-remote-host>
</jdiameterd-peer-brief>
</jdiameterd-peer-information>
```

Description Peer brief

<jdiameterd-peer-data>

Usage

```
<jdiameterd-peer-data>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-instance-name>
    jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-peer-state>
    jdiameterd-peer-state
```

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```
</jdiameterd-peer-state>
<jdiameterd-peer-network-element-count>
  jdiameterd-peer-network-element-count
</jdiameterd-peer-network-element-count>
<jdiameterd-peer-activated-count>
  jdiameterd-peer-activated-count
</jdiameterd-peer-activated-count>
<jdiameterd-peer-primary-count>
  jdiameterd-peer-primary-count
</jdiameterd-peer-primary-count>
<jdiameterd-peer-secondary-count>
  jdiameterd-peer-secondary-count
</jdiameterd-peer-secondary-count>
<jdiameterd-peer-vrf>
  jdiameterd-peer-vrf
</jdiameterd-peer-vrf>
<jdiameterd-peer-remote-address>
  jdiameterd-peer-remote-address
</jdiameterd-peer-remote-address>
<jdiameterd-peer-remote-port>
  jdiameterd-peer-remote-port
</jdiameterd-peer-remote-port>
<jdiameterd-peer-remote-realm>
  jdiameterd-peer-remote-realm
</jdiameterd-peer-remote-realm>
<jdiameterd-peer-remote-host>
  jdiameterd-peer-remote-host
</jdiameterd-peer-remote-host>
<jdiameterd-peer-local-address>
  jdiameterd-peer-local-address
</jdiameterd-peer-local-address>
<jdiameterd-peer-local-port>
  jdiameterd-peer-local-port
</jdiameterd-peer-local-port>
<jdiameterd-peer-local-transport>
  jdiameterd-peer-local-transport
</jdiameterd-peer-local-transport>
<jdiameterd-peer-post-enable-time>
  jdiameterd-peer-post-enable-time
</jdiameterd-peer-post-enable-time>
<jdiameterd-peer-in-state-time>
  jdiameterd-peer-in-state-time
</jdiameterd-peer-in-state-time>
<jdiameterd-peer-in-state-remain-time>
  jdiameterd-peer-in-state-remain-time
</jdiameterd-peer-in-state-remain-time>
<jdiameterd-peer-missed-watch-dogs>
  jdiameterd-peer-missed-watch-dogs
</jdiameterd-peer-missed-watch-dogs>
<jdiameterd-peer-transmission-queue-length>
  jdiameterd-peer-transmission-queue-length
</jdiameterd-peer-transmission-queue-length>
<jdiameterd-peer-answer-count>
  jdiameterd-peer-answer-count
</jdiameterd-peer-answer-count>
<jdiameterd-peer-post-rx-time>
```


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```
    jdiameterd-peer-post-rx-time
   </jdiameterd-peer-post-rx-time>
   <jdiameterd-peer-post-rx-remain>
    jdiameterd-peer-post-rx-remain
   </jdiameterd-peer-post-rx-remain>
   <jdiameterd-peer-op-timeout>
    jdiameterd-peer-op-timeout
   </jdiameterd-peer-op-timeout>
   <jdiameterd-peer-suspended-timeout>
    jdiameterd-peer-suspended-timeout
   </jdiameterd-peer-suspended-timeout>
   <jdiameterd-peer-closed-timeout>
    jdiameterd-peer-closed-timeout
   </jdiameterd-peer-closed-timeout>
   <jdiameterd-peer-connect-timeout>
    jdiameterd-peer-connect-timeout
   </jdiameterd-peer-connect-timeout>
  </jdiameterd-peer-data>
```

Description Peer information

<jdiameterd-peer-data>

Usage

```
<jdiameterd-peer-information>
 <jdiameterd-peer-data>
  <jdiameterd-peer-name>
   jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-instance-name>
   jdiameterd-instance-name
  </jdiameterd-instance-name>
  <jdiameterd-peer-state>
   jdiameterd-peer-state
  </jdiameterd-peer-state>
  <jdiameterd-peer-network-element-count>
   jdiameterd-peer-network-element-count
  </jdiameterd-peer-network-element-count>
  <jdiameterd-peer-activated-count>
   jdiameterd-peer-activated-count
  </jdiameterd-peer-activated-count>
  <jdiameterd-peer-primary-count>
   jdiameterd-peer-primary-count
  </jdiameterd-peer-primary-count>
  <jdiameterd-peer-secondary-count>
   jdiameterd-peer-secondary-count
  </jdiameterd-peer-secondary-count>
  <jdiameterd-peer-vrf>
   jdiameterd-peer-vrf
  </jdiameterd-peer-vrf>
  <jdiameterd-peer-remote-address>
   jdiameterd-peer-remote-address
  </jdiameterd-peer-remote-address>
  <jdiameterd-peer-remote-port>
```

```
            jdiameterd-peer-remote-port
          </jdiameterd-peer-remote-port>
          <jdiameterd-peer-remote-realm>
            jdiameterd-peer-remote-realm
          </jdiameterd-peer-remote-realm>
          <jdiameterd-peer-remote-host>
            jdiameterd-peer-remote-host
          </jdiameterd-peer-remote-host>
          <jdiameterd-peer-local-address>
            jdiameterd-peer-local-address
          </jdiameterd-peer-local-address>
          <jdiameterd-peer-local-port>
            jdiameterd-peer-local-port
          </jdiameterd-peer-local-port>
          <jdiameterd-peer-local-transport>
            jdiameterd-peer-local-transport
          </jdiameterd-peer-local-transport>
          <jdiameterd-peer-post-enable-time>
            jdiameterd-peer-post-enable-time
          </jdiameterd-peer-post-enable-time>
          <jdiameterd-peer-in-state-time>
            jdiameterd-peer-in-state-time
          </jdiameterd-peer-in-state-time>
          <jdiameterd-peer-in-state-remain-time>
            jdiameterd-peer-in-state-remain-time
          </jdiameterd-peer-in-state-remain-time>
          <jdiameterd-peer-missed-watch-dogs>
            jdiameterd-peer-missed-watch-dogs
          </jdiameterd-peer-missed-watch-dogs>
          <jdiameterd-peer-transmission-queue-length>
            jdiameterd-peer-transmission-queue-length
          </jdiameterd-peer-transmission-queue-length>
          <jdiameterd-peer-answer-count>
            jdiameterd-peer-answer-count
          </jdiameterd-peer-answer-count>
          <jdiameterd-peer-post-rx-time>
            jdiameterd-peer-post-rx-time
          </jdiameterd-peer-post-rx-time>
          <jdiameterd-peer-post-rx-remain>
            jdiameterd-peer-post-rx-remain
          </jdiameterd-peer-post-rx-remain>
          <jdiameterd-peer-op-timeout>
            jdiameterd-peer-op-timeout
          </jdiameterd-peer-op-timeout>
          <jdiameterd-peer-suspended-timeout>
            jdiameterd-peer-suspended-timeout
          </jdiameterd-peer-suspended-timeout>
          <jdiameterd-peer-closed-timeout>
            jdiameterd-peer-closed-timeout
          </jdiameterd-peer-closed-timeout>
          <jdiameterd-peer-connect-timeout>
            jdiameterd-peer-connect-timeout
          </jdiameterd-peer-connect-timeout>
        </jdiameterd-peer-data>
      </jdiameterd-peer-information>
```


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Description Peer information

<jdiameterd-peer-error>

Usage

```
<jdiameterd-peer-information>
  <jdiameterd-peer-error>
</jdiameterd-peer-error>
</jdiameterd-peer-information>
```

Description

<jdiameterd-peer-information>

Usage

```
<jdiameterd-peer-information>
  <jdiameterd-peer-list>....</jdiameterd-peer-list>
  <jdiameterd-peer-brief>....</jdiameterd-peer-brief>
  <jdiameterd-peer-data>....</jdiameterd-peer-data>
  <jdiameterd-peer-not-found>
    jdiameterd-peer-not-found
  </jdiameterd-peer-not-found>
  <jdiameterd-peer-error>....</jdiameterd-peer-error>
</jdiameterd-peer-information>
```

Description Diameter peer informaiton

<jdiameterd-peer-list>

Usage

```
<jdiameterd-peer-list>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-peer-instance-name>
    jdiameterd-peer-instance-name
  </jdiameterd-peer-instance-name>
  <jdiameterd-peer-state>
    jdiameterd-peer-state
  </jdiameterd-peer-state>
  <jdiameterd-peer-network-element-count>
    jdiameterd-peer-network-element-count
  </jdiameterd-peer-network-element-count>
  <jdiameterd-peer-activated-count>
    jdiameterd-peer-activated-count
  </jdiameterd-peer-activated-count>
  <jdiameterd-peer-primary-count>
    jdiameterd-peer-primary-count
  </jdiameterd-peer-primary-count>
  <jdiameterd-peer-secondary-count>
    jdiameterd-peer-secondary-count
  </jdiameterd-peer-secondary-count>
```

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```
</jdiameterd-peer-list>
```

Description Diameter peers

<jdiameterd-peer-list>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-peer-list>
    <jdiameterd-peer-name>
      jdiameterd-peer-name
    </jdiameterd-peer-name>
    <jdiameterd-peer-instance-name>
      jdiameterd-peer-instance-name
    </jdiameterd-peer-instance-name>
    <jdiameterd-peer-state>
      jdiameterd-peer-state
    </jdiameterd-peer-state>
    <jdiameterd-peer-network-element-count>
      jdiameterd-peer-network-element-count
    </jdiameterd-peer-network-element-count>
    <jdiameterd-peer-activated-count>
      jdiameterd-peer-activated-count
    </jdiameterd-peer-activated-count>
    <jdiameterd-peer-primary-count>
      jdiameterd-peer-primary-count
    </jdiameterd-peer-primary-count>
    <jdiameterd-peer-secondary-count>
      jdiameterd-peer-secondary-count
    </jdiameterd-peer-secondary-count>
  </jdiameterd-peer-list>
</jdiameterd-node-information>
```

Description Diameter peers

<jdiameterd-peer-list>

Usage

```
<jdiameterd-peer-information>
  <jdiameterd-peer-list>
    <jdiameterd-peer-name>
      jdiameterd-peer-name
    </jdiameterd-peer-name>
    <jdiameterd-peer-instance-name>
      jdiameterd-peer-instance-name
    </jdiameterd-peer-instance-name>
    <jdiameterd-peer-state>
      jdiameterd-peer-state
    </jdiameterd-peer-state>
    <jdiameterd-peer-network-element-count>
      jdiameterd-peer-network-element-count
    </jdiameterd-peer-network-element-count>
```


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```
    <jdiameterd-peer-activated-count>
      jdiameterd-peer-activated-count
    </jdiameterd-peer-activated-count>
    <jdiameterd-peer-primary-count>
      jdiameterd-peer-primary-count
    </jdiameterd-peer-primary-count>
    <jdiameterd-peer-secondary-count>
      jdiameterd-peer-secondary-count
    </jdiameterd-peer-secondary-count>
  </jdiameterd-peer-list>
</jdiameterd-peer-information>
```

Description Diameter peers

<jdiameterd-peer-map-data>

Usage

```
<jdiameterd-peer-map-data>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-peer-instance-name>
    jdiameterd-peer-instance-name
  </jdiameterd-peer-instance-name>
  <jdiameterd-peer-network-element-name>
    jdiameterd-peer-network-element-name
  </jdiameterd-peer-network-element-name>
  <jdiameterd-peer-network-element-priority>
    jdiameterd-peer-network-element-priority
  </jdiameterd-peer-network-element-priority>
  <jdiameterd-peer-network-element-usage>
    jdiameterd-peer-network-element-usage
  </jdiameterd-peer-network-element-usage>
</jdiameterd-peer-map-data>
```

Description Diameter peers used by network-elements

<jdiameterd-peer-map-data>

Usage

```
<jdiameterd-peer-map-information>
  <jdiameterd-peer-map-data>
    <jdiameterd-peer-name>
      jdiameterd-peer-name
    </jdiameterd-peer-name>
    <jdiameterd-peer-instance-name>
      jdiameterd-peer-instance-name
    </jdiameterd-peer-instance-name>
    <jdiameterd-peer-network-element-name>
      jdiameterd-peer-network-element-name
    </jdiameterd-peer-network-element-name>
    <jdiameterd-peer-network-element-priority>
```

```
                jdiameterd-peer-network-element-priority
              </jdiameterd-peer-network-element-priority>
              <jdiameterd-peer-network-element-usage>
                jdiameterd-peer-network-element-usage
              </jdiameterd-peer-network-element-usage>
            </jdiameterd-peer-map-data>
          </jdiameterd-peer-map-information>
```

Description Diameter peers used by network-elements

<jdiameterd-peer-map-error>

Usage

```
<jdiameterd-peer-map-information>
  <jdiameterd-peer-map-error>
</jdiameterd-peer-map-error>
</jdiameterd-peer-map-information>
```

Description

<jdiameterd-peer-map-information>

Usage

```
<jdiameterd-peer-map-information>
  <jdiameterd-peer-map-list>....</jdiameterd-peer-map-list>
  <jdiameterd-peer-map-data>....</jdiameterd-peer-map-data>
  <jdiameterd-peer-map-not-found>
    jdiameterd-peer-map-not-found
  </jdiameterd-peer-map-not-found>
  <jdiameterd-peer-map-error>....</jdiameterd-peer-map-error>
</jdiameterd-peer-map-information>
```

Description Diameter peer map informaiton

<jdiameterd-peer-map-list>

Usage

```
<jdiameterd-peer-map-list>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-peer-instance-name>
    jdiameterd-peer-instance-name
  </jdiameterd-peer-instance-name>
  <jdiameterd-peer-network-element-name>
    jdiameterd-peer-network-element-name
  </jdiameterd-peer-network-element-name>
  <jdiameterd-peer-network-element-priority>
    jdiameterd-peer-network-element-priority
  </jdiameterd-peer-network-element-priority>
  <jdiameterd-peer-network-element-usage>
```


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```
    jdiameterd-peer-network-element-usage
  </jdiameterd-peer-network-element-usage>
</jdiameterd-peer-map-list>
```

Description Diameter peers used by network-elements

<jdiameterd-peer-map-list>

Usage

```
<jdiameterd-peer-map-information>
  <jdiameterd-peer-map-list>
    <jdiameterd-peer-name>
      jdiameterd-peer-name
    </jdiameterd-peer-name>
    <jdiameterd-peer-instance-name>
      jdiameterd-peer-instance-name
    </jdiameterd-peer-instance-name>
    <jdiameterd-peer-network-element-name>
      jdiameterd-peer-network-element-name
    </jdiameterd-peer-network-element-name>
    <jdiameterd-peer-network-element-priority>
      jdiameterd-peer-network-element-priority
    </jdiameterd-peer-network-element-priority>
    <jdiameterd-peer-network-element-usage>
      jdiameterd-peer-network-element-usage
    </jdiameterd-peer-network-element-usage>
  </jdiameterd-peer-map-list>
</jdiameterd-peer-map-information>
```

Description Diameter peers used by network-elements

<jdiameterd-peer-statistics-brief>

Usage

```
<jdiameterd-peer-statistics-brief>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-peer-instance-name>
    jdiameterd-peer-instance-name
  </jdiameterd-peer-instance-name>
  <jdiameterd-peer-receive-errors>
    jdiameterd-peer-receive-errors
  </jdiameterd-peer-receive-errors>
  <jdiameterd-peer-receive-successes>
    jdiameterd-peer-receive-successes
  </jdiameterd-peer-receive-successes>
  <jdiameterd-peer-receive-messages-handled-by-peer>
    jdiameterd-peer-receive-messages-handled-by-peer
  </jdiameterd-peer-receive-messages-handled-by-peer>
  <jdiameterd-peer-receive-messages-dropped>
    jdiameterd-peer-receive-messages-dropped
```

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```
</jdiameterd-peer-receive-messages-dropped>
<jdiameterd-peer-receive-answers-dropped>
  jdiameterd-peer-receive-answers-dropped
</jdiameterd-peer-receive-answers-dropped>
<jdiameterd-peer-received-answers>
  jdiameterd-peer-received-answers
</jdiameterd-peer-received-answers>
<jdiameterd-peer-received-requests>
  jdiameterd-peer-received-requests
</jdiameterd-peer-received-requests>
<jdiameterd-peer-receive-messages-delivered-to-node>
  jdiameterd-peer-receive-messages-delivered-to-node
</jdiameterd-peer-receive-messages-delivered-to-node>
<jdiameterd-peer-receive-errors-total>
  jdiameterd-peer-receive-errors-total
</jdiameterd-peer-receive-errors-total>
<jdiameterd-peer-receive-successes-total>
  jdiameterd-peer-receive-successes-total
</jdiameterd-peer-receive-successes-total>
<jdiameterd-peer-receive-messages-handled-by-peer-total>
  jdiameterd-peer-receive-messages-handled-by-peer-total
</jdiameterd-peer-receive-messages-handled-by-peer-total>
<jdiameterd-peer-receive-messages-dropped-total>
  jdiameterd-peer-receive-messages-dropped-total
</jdiameterd-peer-receive-messages-dropped-total>
<jdiameterd-peer-receive-answers-dropped-total>
  jdiameterd-peer-receive-answers-dropped-total
</jdiameterd-peer-receive-answers-dropped-total>
<jdiameterd-peer-received-answers-total>
  jdiameterd-peer-received-answers-total
</jdiameterd-peer-received-answers-total>
<jdiameterd-peer-received-requests-total>
  jdiameterd-peer-received-requests-total
</jdiameterd-peer-received-requests-total>
<jdiameterd-peer-receive-messages-delivered-to-node-total>
  jdiameterd-peer-receive-messages-delivered-to-node-total
</jdiameterd-peer-receive-messages-delivered-to-node-total>
<jdiameterd-peer-messages-forwarded-to-peer-connection>
  jdiameterd-peer-messages-forwarded-to-peer-connection
</jdiameterd-peer-messages-forwarded-to-peer-connection>
<jdiameterd-peer-messages-forwarded-to-peer>
  jdiameterd-peer-messages-forwarded-to-peer
</jdiameterd-peer-messages-forwarded-to-peer>
<jdiameterd-peer-messages-forwarded-to-routed-destination>
  jdiameterd-peer-messages-forwarded-to-routed-destination
</jdiameterd-peer-messages-forwarded-to-routed-destination>
<jdiameterd-peer-forwarded-messages>
  jdiameterd-peer-forwarded-messages
</jdiameterd-peer-forwarded-messages>
<jdiameterd-peer-forwarding-failures>
  jdiameterd-peer-forwarding-failures
</jdiameterd-peer-forwarding-failures>
<jdiameterd-peer-forwarding-successes>
  jdiameterd-peer-forwarding-successes
</jdiameterd-peer-forwarding-successes>
<jdiameterd-peer-forwarding-moved-in-messages>
```


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```
  jdiameterd-peer-forwarding-moved-in-messages
</jdiameterd-peer-forwarding-moved-in-messages>
<jdiameterd-peer-forwarding-moved-out-messages>
  jdiameterd-peer-forwarding-moved-out-messages
</jdiameterd-peer-forwarding-moved-out-messages>
<jdiameterd-peer-forwarding-rerouted-messages>
  jdiameterd-peer-forwarding-rerouted-messages
</jdiameterd-peer-forwarding-rerouted-messages>
<jdiameterd-peer-forwarding-dropped-messages>
  jdiameterd-peer-forwarding-dropped-messages
</jdiameterd-peer-forwarding-dropped-messages>
<jdiameterd-peer-messages-transmitted-by-self>
  jdiameterd-peer-messages-transmitted-by-self
</jdiameterd-peer-messages-transmitted-by-self>
<jdiameterd-peer-transmit-errors>
  jdiameterd-peer-transmit-errors
</jdiameterd-peer-transmit-errors>
<jdiameterd-peer-transmit-successes>
  jdiameterd-peer-transmit-successes
</jdiameterd-peer-transmit-successes>
<jdiameterd-peer-messages-forwarded-to-peer-connection-total>
  jdiameterd-peer-messages-forwarded-to-peer-connection-total
</jdiameterd-peer-messages-forwarded-to-peer-connection-total>
<jdiameterd-peer-messages-forwarded-to-peer-total>
  jdiameterd-peer-messages-forwarded-to-peer-total
</jdiameterd-peer-messages-forwarded-to-peer-total>
<jdiameterd-peer-messages-forwarded-to-routed-destination-total>
  jdiameterd-peer-messages-forwarded-to-routed-destination-total
</jdiameterd-peer-messages-forwarded-to-routed-destination-total>
<jdiameterd-peer-forwarded-messages-total>
  jdiameterd-peer-forwarded-messages-total
</jdiameterd-peer-forwarded-messages-total>
<jdiameterd-peer-forwarding-failures-total>
  jdiameterd-peer-forwarding-failures-total
</jdiameterd-peer-forwarding-failures-total>
<jdiameterd-peer-forwarding-successes-total>
  jdiameterd-peer-forwarding-successes-total
</jdiameterd-peer-forwarding-successes-total>
<jdiameterd-peer-forwarding-moved-in-messages-total>
  jdiameterd-peer-forwarding-moved-in-messages-total
</jdiameterd-peer-forwarding-moved-in-messages-total>
<jdiameterd-peer-forwarding-moved-out-messages-total>
  jdiameterd-peer-forwarding-moved-out-messages-total
</jdiameterd-peer-forwarding-moved-out-messages-total>
<jdiameterd-peer-forwarding-rerouted-messages-total>
  jdiameterd-peer-forwarding-rerouted-messages-total
</jdiameterd-peer-forwarding-rerouted-messages-total>
<jdiameterd-peer-forwarding-dropped-messages-total>
  jdiameterd-peer-forwarding-dropped-messages-total
</jdiameterd-peer-forwarding-dropped-messages-total>
<jdiameterd-peer-messages-transmitted-by-self-total>
  jdiameterd-peer-messages-transmitted-by-self-total
</jdiameterd-peer-messages-transmitted-by-self-total>
<jdiameterd-peer-transmit-errors-total>
  jdiameterd-peer-transmit-errors-total
</jdiameterd-peer-transmit-errors-total>
```

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<jdiameterd-peer-transmit-successes-total>
  jdiameterd-peer-transmit-successes-total
</jdiameterd-peer-transmit-successes-total>
<jdiameterd-peer-connection-attempts>
  jdiameterd-peer-connection-attempts
</jdiameterd-peer-connection-attempts>
<jdiameterd-peer-connection-failures>
  jdiameterd-peer-connection-failures
</jdiameterd-peer-connection-failures>
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Description Peer statiscs

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Description Peer statiscs

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<jdiameterd-peer-cer-received-total>
  jdiameterd-peer-cer-received-total
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<jdiameterd-peer-cea-transmitted-total>
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</jdiameterd-peer-cea-transmitted-total>
<jdiameterd-peer-cea-received-total>
  jdiameterd-peer-cea-received-total
</jdiameterd-peer-cea-received-total>
<jdiameterd-peer-dwr-transmitted-total>
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<jdiameterd-peer-dwa-transmitted-total>
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<jdiameterd-peer-dwa-received-total>
  jdiameterd-peer-dwa-received-total

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</jdiameterd-peer-dwa-received-total>
<jdiameterd-peer-dpr-transmitted-total>
  jdiameterd-peer-dpr-transmitted-total
</jdiameterd-peer-dpr-transmitted-total>
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  jdiameterd-peer-dpa-transmitted-total
</jdiameterd-peer-dpa-transmitted-total>
<jdiameterd-peer-dpa-received-total>
  jdiameterd-peer-dpa-received-total
</jdiameterd-peer-dpa-received-total>
</jdiameterd-peer-statistics-data>
```

Description Peer statiscs

<jdiameterd-peer-statistics-data>

Usage

```
<jdiameterd-peer-statistics-information>
  <jdiameterd-peer-statistics-data>
    <jdiameterd-peer-receive-errors>
      jdiameterd-peer-receive-errors
    </jdiameterd-peer-receive-errors>
    <jdiameterd-peer-receive-successes>
      jdiameterd-peer-receive-successes
    </jdiameterd-peer-receive-successes>
    <jdiameterd-peer-receive-messages-handled-by-peer>
      jdiameterd-peer-receive-messages-handled-by-peer
    </jdiameterd-peer-receive-messages-handled-by-peer>
    <jdiameterd-peer-receive-messages-dropped>
      jdiameterd-peer-receive-messages-dropped
    </jdiameterd-peer-receive-messages-dropped>
    <jdiameterd-peer-receive-answers-dropped>
      jdiameterd-peer-receive-answers-dropped
    </jdiameterd-peer-receive-answers-dropped>
    <jdiameterd-peer-received-answers>
      jdiameterd-peer-received-answers
    </jdiameterd-peer-received-answers>
    <jdiameterd-peer-received-requests>
      jdiameterd-peer-received-requests
    </jdiameterd-peer-received-requests>
    <jdiameterd-peer-receive-messages-delivered-to-node>
      jdiameterd-peer-receive-messages-delivered-to-node
    </jdiameterd-peer-receive-messages-delivered-to-node>
    <jdiameterd-peer-receive-errors-total>
      jdiameterd-peer-receive-errors-total
    </jdiameterd-peer-receive-errors-total>
    <jdiameterd-peer-receive-successes-total>
      jdiameterd-peer-receive-successes-total
    </jdiameterd-peer-receive-successes-total>
    <jdiameterd-peer-receive-messages-handled-by-peer-total>
      jdiameterd-peer-receive-messages-handled-by-peer-total
```

</jdiameterd-peer-receive-messages-handled-by-peer-total>
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jdiameterd-peer-forwarding-moved-out-messages
</jdiameterd-peer-forwarding-moved-out-messages>
<jdiameterd-peer-forwarding-rerouted-messages>
jdiameterd-peer-forwarding-rerouted-messages
</jdiameterd-peer-forwarding-rerouted-messages>
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jdiameterd-peer-forwarding-dropped-messages
</jdiameterd-peer-forwarding-dropped-messages>
<jdiameterd-peer-messages-transmitted-by-self>
jdiameterd-peer-messages-transmitted-by-self
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jdiameterd-peer-transmit-successes
</jdiameterd-peer-transmit-successes>
<jdiameterd-peer-messages-forwarded-to-peer-connection-total>

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```
  jdiameterd-peer-messages-forwarded-to-peer-connection-total
</jdiameterd-peer-messages-forwarded-to-peer-connection-total>
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  jdiameterd-peer-forwarding-rerouted-messages-total
</jdiameterd-peer-forwarding-rerouted-messages-total>
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  jdiameterd-peer-messages-transmitted-by-self-total
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</jdiameterd-peer-connection-successes>
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  jdiameterd-peer-passive-connection-terminations
</jdiameterd-peer-passive-connection-terminations>
<jdiameterd-peer-active-connection-terminations>
  jdiameterd-peer-active-connection-terminations
</jdiameterd-peer-active-connection-terminations>
<jdiameterd-peer-passive-disconnects>
  jdiameterd-peer-passive-disconnects
</jdiameterd-peer-passive-disconnects>
```

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<jdiameterd-peer-active-disconnects>
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<jdiameterd-peer-connection-attempts-total>
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</jdiameterd-peer-receive-blocking-timeouts-total>
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jdiameterd-peer-cer-received
</jdiameterd-peer-cer-received>
<jdiameterd-peer-cea-transmitted>
jdiameterd-peer-cea-transmitted
</jdiameterd-peer-cea-transmitted>
<jdiameterd-peer-cea-received>
jdiameterd-peer-cea-received
</jdiameterd-peer-cea-received>
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jdiameterd-peer-dwr-transmitted
</jdiameterd-peer-dwr-transmitted>
<jdiameterd-peer-dwr-received>
jdiameterd-peer-dwr-received
</jdiameterd-peer-dwr-received>
<jdiameterd-peer-dwa-transmitted>
jdiameterd-peer-dwa-transmitted

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```
    </jdiameterd-peer-dwa-transmitted>
    <jdiameterd-peer-dwa-received>
      jdiameterd-peer-dwa-received
    </jdiameterd-peer-dwa-received>
    <jdiameterd-peer-dpr-transmitted>
      jdiameterd-peer-dpr-transmitted
    </jdiameterd-peer-dpr-transmitted>
    <jdiameterd-peer-dpr-received>
      jdiameterd-peer-dpr-received
    </jdiameterd-peer-dpr-received>
    <jdiameterd-peer-dpa-transmitted>
      jdiameterd-peer-dpa-transmitted
    </jdiameterd-peer-dpa-transmitted>
    <jdiameterd-peer-dpa-received>
      jdiameterd-peer-dpa-received
    </jdiameterd-peer-dpa-received>
    <jdiameterd-peer-cer-transmitted-total>
      jdiameterd-peer-cer-transmitted-total
    </jdiameterd-peer-cer-transmitted-total>
    <jdiameterd-peer-cer-received-total>
      jdiameterd-peer-cer-received-total
    </jdiameterd-peer-cer-received-total>
    <jdiameterd-peer-cea-transmitted-total>
      jdiameterd-peer-cea-transmitted-total
    </jdiameterd-peer-cea-transmitted-total>
    <jdiameterd-peer-cea-received-total>
      jdiameterd-peer-cea-received-total
    </jdiameterd-peer-cea-received-total>
    <jdiameterd-peer-dwr-transmitted-total>
      jdiameterd-peer-dwr-transmitted-total
    </jdiameterd-peer-dwr-transmitted-total>
    <jdiameterd-peer-dwr-received-total>
      jdiameterd-peer-dwr-received-total
    </jdiameterd-peer-dwr-received-total>
    <jdiameterd-peer-dwa-transmitted-total>
      jdiameterd-peer-dwa-transmitted-total
    </jdiameterd-peer-dwa-transmitted-total>
    <jdiameterd-peer-dwa-received-total>
      jdiameterd-peer-dwa-received-total
    </jdiameterd-peer-dwa-received-total>
    <jdiameterd-peer-dpr-transmitted-total>
      jdiameterd-peer-dpr-transmitted-total
    </jdiameterd-peer-dpr-transmitted-total>
    <jdiameterd-peer-dpr-received-total>
      jdiameterd-peer-dpr-received-total
    </jdiameterd-peer-dpr-received-total>
    <jdiameterd-peer-dpa-transmitted-total>
      jdiameterd-peer-dpa-transmitted-total
    </jdiameterd-peer-dpa-transmitted-total>
    <jdiameterd-peer-dpa-received-total>
      jdiameterd-peer-dpa-received-total
    </jdiameterd-peer-dpa-received-total>
  </jdiameterd-peer-statistics-data>
</jdiameterd-peer-statistics-information>
```

Description Peer statiscs

<jdiameterd-peer-statistics-error>

Usage

```
<jdiameterd-peer-statistics-information>
  <jdiameterd-peer-statistics-error>
</jdiameterd-peer-statistics-error>
</jdiameterd-peer-statistics-information>
```

Description

<jdiameterd-peer-statistics-information>

Usage

```
<jdiameterd-peer-statistics-information>
  <jdiameterd-peer-statistics-list>....</jdiameterd-peer-statistics-list>
  <jdiameterd-peer-statistics-brief>....</jdiameterd-peer-statistics-brief>
  <jdiameterd-peer-statistics-data>....</jdiameterd-peer-statistics-data>
  <jdiameterd-peer-statistics-not-found>
    jdiameterd-peer-statistics-not-found
  </jdiameterd-peer-statistics-not-found>
  <jdiameterd-peer-statistics-error>....</jdiameterd-peer-statistics-error>
</jdiameterd-peer-statistics-information>
```

Description Diameter peer statistics

<jdiameterd-peer-statistics-list>

Usage

```
<jdiameterd-peer-statistics-list>
  <jdiameterd-peer-name>
    jdiameterd-peer-name
  </jdiameterd-peer-name>
  <jdiameterd-peer-instance-name>
    jdiameterd-peer-instance-name
  </jdiameterd-peer-instance-name>
  <jdiameterd-peer-receive-successes>
    jdiameterd-peer-receive-successes
  </jdiameterd-peer-receive-successes>
  <jdiameterd-peer-receive-messages-handled-by-peer>
    jdiameterd-peer-receive-messages-handled-by-peer
  </jdiameterd-peer-receive-messages-handled-by-peer>
  <jdiameterd-peer-receive-messages-delivered-to-node>
    jdiameterd-peer-receive-messages-delivered-to-node
  </jdiameterd-peer-receive-messages-delivered-to-node>
  <jdiameterd-peer-forwarding-successes>
    jdiameterd-peer-forwarding-successes
  </jdiameterd-peer-forwarding-successes>
  <jdiameterd-peer-messages-transmitted-by-self>
    jdiameterd-peer-messages-transmitted-by-self
  </jdiameterd-peer-messages-transmitted-by-self>
  <jdiameterd-peer-transmit-successes>
```


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```
    jdiameterd-peer-transmit-successes
   </jdiameterd-peer-transmit-successes>
  </jdiameterd-peer-statistics-list>
```

Description Peer statiscs summary

<jdiameterd-peer-statistics-list>

Usage

```
<jdiameterd-peer-statistics-information>
  <jdiameterd-peer-statistics-list>
    <jdiameterd-peer-name>
      jdiameterd-peer-name
    </jdiameterd-peer-name>
    <jdiameterd-peer-instance-name>
      jdiameterd-peer-instance-name
    </jdiameterd-peer-instance-name>
    <jdiameterd-peer-receive-successes>
      jdiameterd-peer-receive-successes
    </jdiameterd-peer-receive-successes>
    <jdiameterd-peer-receive-messages-handled-by-peer>
      jdiameterd-peer-receive-messages-handled-by-peer
    </jdiameterd-peer-receive-messages-handled-by-peer>
    <jdiameterd-peer-receive-messages-delivered-to-node>
      jdiameterd-peer-receive-messages-delivered-to-node
    </jdiameterd-peer-receive-messages-delivered-to-node>
    <jdiameterd-peer-forwarding-successes>
      jdiameterd-peer-forwarding-successes
    </jdiameterd-peer-forwarding-successes>
    <jdiameterd-peer-messages-transmitted-by-self>
      jdiameterd-peer-messages-transmitted-by-self
    </jdiameterd-peer-messages-transmitted-by-self>
    <jdiameterd-peer-transmit-successes>
      jdiameterd-peer-transmit-successes
    </jdiameterd-peer-transmit-successes>
  </jdiameterd-peer-statistics-list>
</jdiameterd-peer-statistics-information>
```

Description Peer statiscs summary

<jdiameterd-route-brief>

Usage

```
<jdiameterd-route-brief>
  <jdiameterd-route-name>
    jdiameterd-route-name
  </jdiameterd-route-name>
  <jdiameterd-route-network-element-name>
    jdiameterd-route-network-element-name
  </jdiameterd-route-network-element-name>
  <jdiameterd-route-instance-name>
    jdiameterd-route-instance-name
```

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```
    </jdiameterd-route-instance-name>
    <jdiameterd-route-valid>
      jdiameterd-route-valid
    </jdiameterd-route-valid>
    <jdiameterd-route-up>
      jdiameterd-route-up
    </jdiameterd-route-up>
  </jdiameterd-route-brief>
```

Description Diameter routes

<jdiameterd-route-brief>

Usage

```
<jdiameterd-route-information>
  <jdiameterd-route-brief>
    <jdiameterd-route-name>
      jdiameterd-route-name
    </jdiameterd-route-name>
    <jdiameterd-route-network-element-name>
      jdiameterd-route-network-element-name
    </jdiameterd-route-network-element-name>
    <jdiameterd-route-instance-name>
      jdiameterd-route-instance-name
    </jdiameterd-route-instance-name>
    <jdiameterd-route-valid>
      jdiameterd-route-valid
    </jdiameterd-route-valid>
    <jdiameterd-route-up>
      jdiameterd-route-up
    </jdiameterd-route-up>
  </jdiameterd-route-brief>
</jdiameterd-route-information>
```

Description Diameter routes

<jdiameterd-route-data>

Usage

```
<jdiameterd-route-data>
  <jdiameterd-route-name>
    jdiameterd-route-name
  </jdiameterd-route-name>
  <jdiameterd-route-network-element-name>
    jdiameterd-route-network-element-name
  </jdiameterd-route-network-element-name>
  <jdiameterd-route-instance-name>
    jdiameterd-route-instance-name
  </jdiameterd-route-instance-name>
  <jdiameterd-route-valid>
    jdiameterd-route-valid
  </jdiameterd-route-valid>
```


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```
<jdiameterd-route-up>
  jdiameterd-route-up
</jdiameterd-route-up>
<jdiameterd-route-function>
  jdiameterd-route-function
</jdiameterd-route-function>
<jdiameterd-route-function-part>
  jdiameterd-route-function-part
</jdiameterd-route-function-part>
<jdiameterd-route-dest-realm>
  jdiameterd-route-dest-realm
</jdiameterd-route-dest-realm>
<jdiameterd-route-dest-host>
  jdiameterd-route-dest-host
</jdiameterd-route-dest-host>
<jdiameterd-route-metric>
  jdiameterd-route-metric
</jdiameterd-route-metric>
<jdiameterd-route-score>
  jdiameterd-route-score
</jdiameterd-route-score>
</jdiameterd-route-data>
```

Description Diameter routes

<jdiameterd-route-data>

Usage

```
<jdiameterd-route-information>
  <jdiameterd-route-data>
    <jdiameterd-route-name>
      jdiameterd-route-name
    </jdiameterd-route-name>
    <jdiameterd-route-network-element-name>
      jdiameterd-route-network-element-name
    </jdiameterd-route-network-element-name>
    <jdiameterd-route-instance-name>
      jdiameterd-route-instance-name
    </jdiameterd-route-instance-name>
    <jdiameterd-route-valid>
      jdiameterd-route-valid
    </jdiameterd-route-valid>
    <jdiameterd-route-up>
      jdiameterd-route-up
    </jdiameterd-route-up>
    <jdiameterd-route-function>
      jdiameterd-route-function
    </jdiameterd-route-function>
    <jdiameterd-route-function-part>
      jdiameterd-route-function-part
    </jdiameterd-route-function-part>
    <jdiameterd-route-dest-realm>
      jdiameterd-route-dest-realm
    </jdiameterd-route-dest-realm>
```

```
<jdiameterd-route-dest-host>
  jdiameterd-route-dest-host
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<jdiameterd-route-metric>
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<jdiameterd-route-score>
  jdiameterd-route-score
</jdiameterd-route-score>
</jdiameterd-route-data>
</jdiameterd-route-information>
```

Description Diameter routes

<jdiameterd-route-error>

Usage

```
<jdiameterd-route-information>
  <jdiameterd-route-error>
</jdiameterd-route-error>
</jdiameterd-route-information>
```

Description

<jdiameterd-route-information>

Usage

```
<jdiameterd-route-information>
  <jdiameterd-route-list>....</jdiameterd-route-list>
  <jdiameterd-route-brief>....</jdiameterd-route-brief>
  <jdiameterd-route-data>....</jdiameterd-route-data>
  <jdiameterd-route-not-found>
    jdiameterd-route-not-found
  </jdiameterd-route-not-found>
  <jdiameterd-route-error>....</jdiameterd-route-error>
</jdiameterd-route-information>
```

Description Diameter route information

<jdiameterd-route-list>

Usage

```
<jdiameterd-route-list>
  <jdiameterd-route-name>
    jdiameterd-route-name
  </jdiameterd-route-name>
  <jdiameterd-route-network-element-name>
    jdiameterd-route-network-element-name
  </jdiameterd-route-network-element-name>
  <jdiameterd-route-instance-name>
    jdiameterd-route-instance-name
```


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```
  </jdiameterd-route-instance-name>
  <jdiameterd-route-valid>
   jdiameterd-route-valid
  </jdiameterd-route-valid>
  <jdiameterd-route-up>
   jdiameterd-route-up
  </jdiameterd-route-up>
</jdiameterd-route-list>
```

Description Diameter routes

<jdiameterd-route-list>

Usage

```
<jdiameterd-node-information>
  <jdiameterd-route-list>
    <jdiameterd-route-name>
      jdiameterd-route-name
    </jdiameterd-route-name>
    <jdiameterd-route-network-element-name>
      jdiameterd-route-network-element-name
    </jdiameterd-route-network-element-name>
    <jdiameterd-route-instance-name>
      jdiameterd-route-instance-name
    </jdiameterd-route-instance-name>
    <jdiameterd-route-valid>
      jdiameterd-route-valid
    </jdiameterd-route-valid>
    <jdiameterd-route-up>
      jdiameterd-route-up
    </jdiameterd-route-up>
  </jdiameterd-route-list>
</jdiameterd-node-information>
```

Description Diameter routes

<jdiameterd-route-list>

Usage

```
<jdiameterd-route-information>
  <jdiameterd-route-list>
    <jdiameterd-route-name>
      jdiameterd-route-name
    </jdiameterd-route-name>
    <jdiameterd-route-network-element-name>
      jdiameterd-route-network-element-name
    </jdiameterd-route-network-element-name>
    <jdiameterd-route-instance-name>
      jdiameterd-route-instance-name
    </jdiameterd-route-instance-name>
    <jdiameterd-route-valid>
      jdiameterd-route-valid
```

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```
    </jdiameterd-route-valid>
    <jdiameterd-route-up>
     jdiameterd-route-up
    </jdiameterd-route-up>
   </jdiameterd-route-list>
</jdiameterd-route-information>
```

Description Diameter routes

Summary of JNX Example Response Tags

<jnx-example-data>

Usage

```
<jnx-example-data-information>
 <jnx-example-data>
  <jnx-example-data-name>
   jnx-example-data-name
  </jnx-example-data-name>
  <jnx-example-data-description>
   jnx-example-data-description
  </jnx-example-data-description>
  <jnx-example-data-type>
   jnx-example-data-type
  </jnx-example-data-type>
  <jnx-example-data-value>
   jnx-example-data-value
  </jnx-example-data-value>
 </jnx-example-data>
</jnx-example-data-information>
```

Description

<jnx-example-data-information>

Usage

```
<jnx-example-data-information>
  <jnx-example-data>....</jnx-example-data>
</jnx-example-data-information>
```

Description

<jnx-example-statistics>

Usage

```
<jnx-example-statistics>
 <cpu-usage>
  cpu-usage
 </cpu-usage>
 <memory-usage>
  memory-usage
 </memory-usage>
```


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```
</jnx-example-statistics>
```

Description

Summary of Layer 2 Address Learning Response Tags

<bridge-statistics-information>

Usage

```
<bridge-statistics-information>
  <l2ald-rtb-entry>....</l2ald-rtb-entry>
  <interface-statistics>....</interface-statistics>
</bridge-statistics-information>
```

Description

<flood-nh-components>

Usage

```
<flood-nh-components>
  <interface-name>
    interface-name
  </interface-name>
  <interface-type>
    interface-type
  </interface-type>
  <nhtype>
    nhtype
  </nhtype>
  <nhindex>
    nhindex
  </nhindex>
</flood-nh-components>
```

Description

<flood-nh-components>

Usage

```
<flood-nh-group>
  <flood-nh-components>
    <interface-name>
      interface-name
    </interface-name>
    <interface-type>
      interface-type
    </interface-type>
    <nhtype>
      nhtype
    </nhtype>
    <nhindex>
      nhindex
    </nhindex>
```

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```
  </flood-nh-components>
</flood-nh-group>
```

Description

<flood-nh-components>

Usage

```
<flood-route>
  <flood-nh-components>
    <interface-name>
      interface-name
    </interface-name>
    <interface-type>
      interface-type
    </interface-type>
    <nhtype>
      nhtype
    </nhtype>
    <nhindex>
      nhindex
    </nhindex>
  </flood-nh-components>
</flood-route>
```

Description

<flood-nh-components>

Usage

```
<flood-route>
  <flood-nh-group>
    <flood-nh-components>
      <interface-name>
        interface-name
      </interface-name>
      <interface-type>
        interface-type
      </interface-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
    </flood-nh-components>
  </flood-nh-group>
</flood-route>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <flood-nh-components>
      <interface-name>
        interface-name
      </interface-name>
      <interface-type>
        interface-type
      </interface-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
    </flood-nh-components>
  </flood-route>
</l2ald-vpls-flood-instance-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-components>
        <interface-name>
          interface-name
        </interface-name>
        <interface-type>
          interface-type
        </interface-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
      </flood-nh-components>
    </flood-nh-group>
  </flood-route>
</l2ald-vpls-flood-instance-information>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
    <flood-route>
      <flood-nh-components>
        <interface-name>
          interface-name
        </interface-name>
        <interface-type>
          interface-type
        </interface-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
      </flood-nh-components>
    </flood-route>
  </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
    <flood-route>
      <flood-nh-group>
        <flood-nh-components>
          <interface-name>
            interface-name
          </interface-name>
          <interface-type>
            interface-type
          </interface-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
        </flood-nh-components>
      </flood-nh-group>
    </flood-route>
  </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <l2ald-vpls-flood-instance-information>
      <flood-route>
        <flood-nh-components>
          <interface-name>
            interface-name
          </interface-name>
          <interface-type>
            interface-type
          </interface-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
        </flood-nh-components>
      </flood-route>
    </l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<flood-nh-components>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <l2ald-vpls-flood-instance-information>
      <flood-route>
        <flood-nh-group>
          <flood-nh-components>
            <interface-name>
              interface-name
            </interface-name>
            <interface-type>
              interface-type
            </interface-type>
            <nhtype>
              nhtype
            </nhtype>
            <nhindex>
              nhindex
            </nhindex>
          </flood-nh-components>
        </flood-nh-group>
      </flood-route>
    </l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
```

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```
</l2ald-vpls-flood-instance>
```

Description

<flood-nh-components>

Usage

```
<l2ald-vpls-flood-route-information>
 <flood-route>
  <flood-nh-components>
   <interface-name>
    interface-name
   </interface-name>
   <interface-type>
    interface-type
   </interface-type>
   <nhtype>
    nhtype
   </nhtype>
   <nhindex>
    nhindex
   </nhindex>
  </flood-nh-components>
 </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-vpls-flood-route-information>
 <flood-route>
  <flood-nh-group>
   <flood-nh-components>
    <interface-name>
     interface-name
    </interface-name>
    <interface-type>
     interface-type
    </interface-type>
    <nhtype>
     nhtype
    </nhtype>
    <nhindex>
     nhindex
    </nhindex>
   </flood-nh-components>
  </flood-nh-group>
 </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <flood-nh-components>
      <interface-name>
        interface-name
      </interface-name>
      <interface-type>
        interface-type
      </interface-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
    </flood-nh-components>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-components>
        <interface-name>
          interface-name
        </interface-name>
        <interface-type>
          interface-type
        </interface-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
      </flood-nh-components>
    </flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <flood-route>
      <flood-nh-components>
        <interface-name>
          interface-name
        </interface-name>
        <interface-type>
          interface-type
        </interface-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
      </flood-nh-components>
    </flood-route>
  </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <flood-route>
      <flood-nh-group>
        <flood-nh-components>
          <interface-name>
            interface-name
          </interface-name>
          <interface-type>
            interface-type
          </interface-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
        </flood-nh-components>
      </flood-nh-group>
    </flood-route>
  </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

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<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <l2ald-bridge-domain-flood-instance-information>
      <flood-route>
        <flood-nh-components>
          <interface-name>
            interface-name
          </interface-name>
          <interface-type>
            interface-type
          </interface-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
        </flood-nh-components>
      </flood-route>
    </l2ald-bridge-domain-flood-instance-information>
  </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <l2ald-bridge-domain-flood-instance-information>
      <flood-route>
        <flood-nh-group>
          <flood-nh-components>
            <interface-name>
              interface-name
            </interface-name>
            <interface-type>
              interface-type
            </interface-type>
            <nhtype>
              nhtype
            </nhtype>
            <nhindex>
              nhindex
            </nhindex>
          </flood-nh-components>
        </flood-nh-group>
      </flood-route>
    </l2ald-bridge-domain-flood-instance-information>
  </l2ald-bridge-domain-lr-information>
```

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```
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-route-information>
 <flood-route>
  <flood-nh-components>
   <interface-name>
    interface-name
   </interface-name>
   <interface-type>
    interface-type
   </interface-type>
   <nhtype>
    nhtype
   </nhtype>
   <nhindex>
    nhindex
   </nhindex>
  </flood-nh-components>
 </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<flood-nh-components>

Usage

```
<l2ald-bridge-domain-flood-route-information>
 <flood-route>
  <flood-nh-group>
   <flood-nh-components>
    <interface-name>
     interface-name
    </interface-name>
    <interface-type>
     interface-type
    </interface-type>
    <nhtype>
     nhtype
    </nhtype>
    <nhindex>
     nhindex
    </nhindex>
   </flood-nh-components>
  </flood-nh-group>
 </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

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<flood-nh-group>

Usage

```
<flood-nh-group>
  <flood-nh-group-name>
    flood-nh-group-name
  </flood-nh-group-name>
  <flood-nh-group-type>
    flood-nh-group-type
  </flood-nh-group-type>
  <nhtype>
    nhtype
  </nhtype>
  <nhindex>
    nhindex
  </nhindex>
  <flood-group-composite-function>
    flood-group-composite-function
  </flood-group-composite-function>
  <flood-nh-components>....</flood-nh-components>
  <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
</flood-nh-group>
```

Description

<flood-nh-group>

Usage

```
<flood-route>
  <flood-nh-group>
    <flood-nh-group-name>
      flood-nh-group-name
    </flood-nh-group-name>
    <flood-nh-group-type>
      flood-nh-group-type
    </flood-nh-group-type>
    <nhtype>
      nhtype
    </nhtype>
    <nhindex>
      nhindex
    </nhindex>
    <flood-group-composite-function>
      flood-group-composite-function
    </flood-group-composite-function>
    <flood-nh-components>....</flood-nh-components>
    <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
  </flood-nh-group>
</flood-route>
```

Description

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<flood-nh-group>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-group-name>
        flood-nh-group-name
      </flood-nh-group-name>
      <flood-nh-group-type>
        flood-nh-group-type
      </flood-nh-group-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
      <flood-group-composite-function>
        flood-group-composite-function
      </flood-group-composite-function>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-vpls-flood-instance-information>
```

Description

<flood-nh-group>

Usage

```
<l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
    <flood-route>
      <flood-nh-group>
        <flood-nh-group-name>
          flood-nh-group-name
        </flood-nh-group-name>
        <flood-nh-group-type>
          flood-nh-group-type
        </flood-nh-group-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
        <flood-group-composite-function>
          flood-group-composite-function
        </flood-group-composite-function>
        <flood-nh-components>....</flood-nh-components>
        <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
      </flood-nh-group>
```


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```
    </flood-route>
  </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<flood-nh-group>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <l2ald-vpls-flood-instance-information>
      <flood-route>
        <flood-nh-group>
          <flood-nh-group-name>
            flood-nh-group-name
          </flood-nh-group-name>
          <flood-nh-group-type>
            flood-nh-group-type
          </flood-nh-group-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
          <flood-group-composite-function>
            flood-group-composite-function
          </flood-group-composite-function>
          <flood-nh-components>....</flood-nh-components>
          <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
        </flood-nh-group>
      </flood-route>
    </l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<flood-nh-group>

Usage

```
<l2ald-vpls-flood-route-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-group-name>
        flood-nh-group-name
      </flood-nh-group-name>
      <flood-nh-group-type>
        flood-nh-group-type
      </flood-nh-group-type>
      <nhtype>
        nhtype
      </nhtype>
```

```
      <nhindex>
        nhindex
      </nhindex>
      <flood-group-composite-function>
        flood-group-composite-function
      </flood-group-composite-function>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

<flood-nh-group>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-group-name>
        flood-nh-group-name
      </flood-nh-group-name>
      <flood-nh-group-type>
        flood-nh-group-type
      </flood-nh-group-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
      <flood-group-composite-function>
        flood-group-composite-function
      </flood-group-composite-function>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<flood-nh-group>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <flood-route>
      <flood-nh-group>
        <flood-nh-group-name>
          flood-nh-group-name
        </flood-nh-group-name>
        <flood-nh-group-type>
```


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```
          flood-nh-group-type
        </flood-nh-group-type>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
        <flood-group-composite-function>
          flood-group-composite-function
        </flood-group-composite-function>
        <flood-nh-components>....</flood-nh-components>
        <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
      </flood-nh-group>
    </flood-route>
  </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<flood-nh-group>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <l2ald-bridge-domain-flood-instance-information>
      <flood-route>
        <flood-nh-group>
          <flood-nh-group-name>
            flood-nh-group-name
          </flood-nh-group-name>
          <flood-nh-group-type>
            flood-nh-group-type
          </flood-nh-group-type>
          <nhtype>
            nhtype
          </nhtype>
          <nhindex>
            nhindex
          </nhindex>
          <flood-group-composite-function>
            flood-group-composite-function
          </flood-group-composite-function>
          <flood-nh-components>....</flood-nh-components>
          <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
        </flood-nh-group>
      </flood-route>
    </l2ald-bridge-domain-flood-instance-information>
  </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-nh-group>

Usage

```
<l2ald-bridge-domain-flood-route-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-group-name>
        flood-nh-group-name
      </flood-nh-group-name>
      <flood-nh-group-type>
        flood-nh-group-type
      </flood-nh-group-type>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
      <flood-group-composite-function>
        flood-group-composite-function
      </flood-group-composite-function>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<flood-nh-p2mp-components>
  <component-nhindex>
    component-nhindex
  </component-nhindex>
</flood-nh-p2mp-components>
```

Description

<flood-nh-p2mp-components>

Usage

```
<flood-nh-group>
  <flood-nh-p2mp-components>
    <component-nhindex>
      component-nhindex
    </component-nhindex>
  </flood-nh-p2mp-components>
</flood-nh-group>
```

Description

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<flood-nh-p2mp-components>

Usage

```
<flood-route>
  <flood-nh-p2mp-components>
    <component-nhindex>
      component-nhindex
    </component-nhindex>
  </flood-nh-p2mp-components>
</flood-route>
```

Description

<flood-nh-p2mp-components>

Usage

```
<flood-route>
  <flood-nh-group>
    <flood-nh-p2mp-components>
      <component-nhindex>
        component-nhindex
      </component-nhindex>
    </flood-nh-p2mp-components>
  </flood-nh-group>
</flood-route>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <flood-nh-p2mp-components>
      <component-nhindex>
        component-nhindex
      </component-nhindex>
    </flood-nh-p2mp-components>
  </flood-route>
</l2ald-vpls-flood-instance-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-p2mp-components>
        <component-nhindex>
          component-nhindex
```

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```
        </component-nhindex>
       </flood-nh-p2mp-components>
      </flood-nh-group>
     </flood-route>
    </l2ald-vpls-flood-instance-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-lr-information>
 <l2ald-vpls-flood-instance-information>
  <flood-route>
   <flood-nh-p2mp-components>
    <component-nhindex>
     component-nhindex
    </component-nhindex>
   </flood-nh-p2mp-components>
  </flood-route>
 </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-lr-information>
 <l2ald-vpls-flood-instance-information>
  <flood-route>
   <flood-nh-group>
    <flood-nh-p2mp-components>
     <component-nhindex>
      component-nhindex
     </component-nhindex>
    </flood-nh-p2mp-components>
   </flood-nh-group>
  </flood-route>
 </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-instance>
 <l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
   <flood-route>
    <flood-nh-p2mp-components>
     <component-nhindex>
```


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```
                component-nhindex
               </component-nhindex>
              </flood-nh-p2mp-components>
             </flood-route>
            </l2ald-vpls-flood-instance-information>
           </l2ald-vpls-lr-information>
          </l2ald-vpls-flood-instance>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-instance>
 <l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
   <flood-route>
    <flood-nh-group>
     <flood-nh-p2mp-components>
      <component-nhindex>
       component-nhindex
      </component-nhindex>
     </flood-nh-p2mp-components>
    </flood-nh-group>
   </flood-route>
  </l2ald-vpls-flood-instance-information>
 </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-route-information>
 <flood-route>
  <flood-nh-p2mp-components>
   <component-nhindex>
    component-nhindex
   </component-nhindex>
  </flood-nh-p2mp-components>
 </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-vpls-flood-route-information>
 <flood-route>
  <flood-nh-group>
   <flood-nh-p2mp-components>
```

```
        <component-nhindex>
          component-nhindex
        </component-nhindex>
      </flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <flood-nh-p2mp-components>
      <component-nhindex>
        component-nhindex
      </component-nhindex>
    </flood-nh-p2mp-components>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-p2mp-components>
        <component-nhindex>
          component-nhindex
        </component-nhindex>
      </flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <flood-route>
      <flood-nh-p2mp-components>
        <component-nhindex>
          component-nhindex
        </component-nhindex>
      </flood-nh-p2mp-components>
```


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```
    </flood-route>
   </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-lr-information>
 <l2ald-bridge-domain-flood-instance-information>
  <flood-route>
   <flood-nh-group>
    <flood-nh-p2mp-components>
     <component-nhindex>
      component-nhindex
     </component-nhindex>
    </flood-nh-p2mp-components>
   </flood-nh-group>
  </flood-route>
 </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-instance>
 <l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
   <flood-route>
    <flood-nh-p2mp-components>
     <component-nhindex>
      component-nhindex
     </component-nhindex>
    </flood-nh-p2mp-components>
   </flood-route>
  </l2ald-bridge-domain-flood-instance-information>
 </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-instance>
 <l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
   <flood-route>
    <flood-nh-group>
     <flood-nh-p2mp-components>
```

```
            <component-nhindex>
              component-nhindex
            </component-nhindex>
          </flood-nh-p2mp-components>
        </flood-nh-group>
      </flood-route>
    </l2ald-bridge-domain-flood-instance-information>
  </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-route-information>
  <flood-route>
    <flood-nh-p2mp-components>
      <component-nhindex>
        component-nhindex
      </component-nhindex>
    </flood-nh-p2mp-components>
  </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<flood-nh-p2mp-components>

Usage

```
<l2ald-bridge-domain-flood-route-information>
  <flood-route>
    <flood-nh-group>
      <flood-nh-p2mp-components>
        <component-nhindex>
          component-nhindex
        </component-nhindex>
      </flood-nh-p2mp-components>
    </flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<flood-route>

Usage

```
<flood-route>
  <route-prefix>
    route-prefix
  </route-prefix>
  <route-type>
    route-type
```


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```
  </route-type>
  <owner>
   owner
  </owner>
  <route-flood-group-name>
   route-flood-group-name
  </route-flood-group-name>
  <route-flood-group-index>
   route-flood-group-index
  </route-flood-group-index>
  <nhtype>
   nhtype
  </nhtype>
  <nhindex>
   nhindex
  </nhindex>
  <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
  <flood-nh-components>....</flood-nh-components>
  <flood-nh-group>....</flood-nh-group>
</flood-route>
```

Description

<flood-route>

Usage

```
<l2ald-vpls-flood-instance-information>
  <flood-route>
    <route-prefix>
     route-prefix
    </route-prefix>
    <route-type>
     route-type
    </route-type>
    <owner>
     owner
    </owner>
    <route-flood-group-name>
     route-flood-group-name
    </route-flood-group-name>
    <route-flood-group-index>
     route-flood-group-index
    </route-flood-group-index>
    <nhtype>
     nhtype
    </nhtype>
    <nhindex>
     nhindex
    </nhindex>
    <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    <flood-nh-components>....</flood-nh-components>
    <flood-nh-group>....</flood-nh-group>
  </flood-route>
</l2ald-vpls-flood-instance-information>
```

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Description

<flood-route>

Usage

```
<l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
    <flood-route>
      <route-prefix>
        route-prefix
      </route-prefix>
      <route-type>
        route-type
      </route-type>
      <owner>
        owner
      </owner>
      <route-flood-group-name>
        route-flood-group-name
      </route-flood-group-name>
      <route-flood-group-index>
        route-flood-group-index
      </route-flood-group-index>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-group>....</flood-nh-group>
    </flood-route>
  </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<flood-route>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <l2ald-vpls-flood-instance-information>
      <flood-route>
        <route-prefix>
          route-prefix
        </route-prefix>
        <route-type>
          route-type
        </route-type>
        <owner>
          owner
        </owner>
        <route-flood-group-name>
```


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```
        route-flood-group-name
       </route-flood-group-name>
       <route-flood-group-index>
        route-flood-group-index
       </route-flood-group-index>
       <nhtype>
        nhtype
       </nhtype>
       <nhindex>
        nhindex
       </nhindex>
       <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
       <flood-nh-components>....</flood-nh-components>
       <flood-nh-group>....</flood-nh-group>
      </flood-route>
     </l2ald-vpls-flood-instance-information>
    </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<flood-route>

Usage

```
<l2ald-vpls-flood-route-information>
 <flood-route>
  <route-prefix>
   route-prefix
  </route-prefix>
  <route-type>
   route-type
  </route-type>
  <owner>
   owner
  </owner>
  <route-flood-group-name>
   route-flood-group-name
  </route-flood-group-name>
  <route-flood-group-index>
   route-flood-group-index
  </route-flood-group-index>
  <nhtype>
   nhtype
  </nhtype>
  <nhindex>
   nhindex
  </nhindex>
  <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
  <flood-nh-components>....</flood-nh-components>
  <flood-nh-group>....</flood-nh-group>
 </flood-route>
</l2ald-vpls-flood-route-information>
```

Description

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<flood-route>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <flood-route>
    <route-prefix>
      route-prefix
    </route-prefix>
    <route-type>
      route-type
    </route-type>
    <owner>
      owner
    </owner>
    <route-flood-group-name>
      route-flood-group-name
    </route-flood-group-name>
    <route-flood-group-index>
      route-flood-group-index
    </route-flood-group-index>
    <nhtype>
      nhtype
    </nhtype>
    <nhindex>
      nhindex
    </nhindex>
    <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    <flood-nh-components>....</flood-nh-components>
    <flood-nh-group>....</flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<flood-route>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <flood-route>
      <route-prefix>
        route-prefix
      </route-prefix>
      <route-type>
        route-type
      </route-type>
      <owner>
        owner
      </owner>
      <route-flood-group-name>
        route-flood-group-name
      </route-flood-group-name>
      <route-flood-group-index>
        route-flood-group-index
```


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```
      </route-flood-group-index>
      <nhtype>
        nhtype
      </nhtype>
      <nhindex>
        nhindex
      </nhindex>
      <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
      <flood-nh-components>....</flood-nh-components>
      <flood-nh-group>....</flood-nh-group>
    </flood-route>
  </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<flood-route>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <l2ald-bridge-domain-flood-instance-information>
      <flood-route>
        <route-prefix>
          route-prefix
        </route-prefix>
        <route-type>
          route-type
        </route-type>
        <owner>
          owner
        </owner>
        <route-flood-group-name>
          route-flood-group-name
        </route-flood-group-name>
        <route-flood-group-index>
          route-flood-group-index
        </route-flood-group-index>
        <nhtype>
          nhtype
        </nhtype>
        <nhindex>
          nhindex
        </nhindex>
        <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
        <flood-nh-components>....</flood-nh-components>
        <flood-nh-group>....</flood-nh-group>
      </flood-route>
    </l2ald-bridge-domain-flood-instance-information>
  </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<flood-route>

Usage

```
<l2ald-bridge-domain-flood-route-information>
  <flood-route>
    <route-prefix>
      route-prefix
    </route-prefix>
    <route-type>
      route-type
    </route-type>
    <owner>
      owner
    </owner>
    <route-flood-group-name>
      route-flood-group-name
    </route-flood-group-name>
    <route-flood-group-index>
      route-flood-group-index
    </route-flood-group-index>
    <nhtype>
      nhtype
    </nhtype>
    <nhindex>
      nhindex
    </nhindex>
    <flood-nh-p2mp-components>....</flood-nh-p2mp-components>
    <flood-nh-components>....</flood-nh-components>
    <flood-nh-group>....</flood-nh-group>
  </flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<interface>

Usage

```
<interface>
  <interface-name>
    interface-name
  </interface-name>
  <interface-id>
    interface-id
  </interface-id>
  <interface-description>
    interface-description
  </interface-description>
  <local-interface-index>
    local-interface-index
  </local-interface-index>
  <interface-flags>
    interface-flags
  </interface-flags>
  <interface-flags-description>
```


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```
    interface-flags-description
  </interface-flags-description>
</interface>
```

Description

<interface>

Usage

```
<interface-statistics>
  <interface>
    <interface-name>
      interface-name
    </interface-name>
    <interface-id>
      interface-id
    </interface-id>
    <interface-description>
      interface-description
    </interface-description>
    <local-interface-index>
      local-interface-index
    </local-interface-index>
    <interface-flags>
      interface-flags
    </interface-flags>
    <interface-flags-description>
      interface-flags-description
    </interface-flags-description>
  </interface>
</interface-statistics>
```

Description

<interface>

Usage

```
<bridge-statistics-information>
  <interface-statistics>
    <interface>
      <interface-name>
        interface-name
      </interface-name>
      <interface-id>
        interface-id
      </interface-id>
      <interface-description>
        interface-description
      </interface-description>
      <local-interface-index>
        local-interface-index
      </local-interface-index>
      <interface-flags>
        interface-flags
```

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```
      </interface-flags>
      <interface-flags-description>
        interface-flags-description
      </interface-flags-description>
    </interface>
  </interface-statistics>
</bridge-statistics-information>
```

Description

<interface-statistics>

Usage

```
<interface-statistics>
  <interface>....</interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <broadcast-packets>
    broadcast-packets
  </broadcast-packets>
  <broadcast-bytes>
    broadcast-bytes
  </broadcast-bytes>
  <multicast-packets>
    multicast-packets
  </multicast-packets>
  <multicast-bytes>
    multicast-bytes
  </multicast-bytes>
  <flooded-packets>
    flooded-packets
  </flooded-packets>
  <flooded-bytes>
    flooded-bytes
  </flooded-bytes>
  <unicast-packets>
    unicast-packets
  </unicast-packets>
  <unicast-bytes>
    unicast-bytes
  </unicast-bytes>
  <mac-limit>
    mac-limit
  </mac-limit>
  <num-mac-count>
    num-mac-count
  </num-mac-count>
</interface-statistics>
```

Description

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<interface-statistics>

Usage

```
<bridge-statistics-information>
  <interface-statistics>
    <interface>....</interface>
    <remote-pe>
      remote-pe
    </remote-pe>
    <broadcast-packets>
      broadcast-packets
    </broadcast-packets>
    <broadcast-bytes>
      broadcast-bytes
    </broadcast-bytes>
    <multicast-packets>
      multicast-packets
    </multicast-packets>
    <multicast-bytes>
      multicast-bytes
    </multicast-bytes>
    <flooded-packets>
      flooded-packets
    </flooded-packets>
    <flooded-bytes>
      flooded-bytes
    </flooded-bytes>
    <unicast-packets>
      unicast-packets
    </unicast-packets>
    <unicast-bytes>
      unicast-bytes
    </unicast-bytes>
    <mac-limit>
      mac-limit
    </mac-limit>
    <num-mac-count>
      num-mac-count
    </num-mac-count>
  </interface-statistics>
</bridge-statistics-information>
```

Description

<l2ald-bridge-domain-flood-event-info>

Usage

```
<l2ald-bridge-domain-flood-event-info>
  <event-name>
    event-name
  </event-name>
  <event-type>
    event-type
  </event-type>
```

```
<event-owner>
 event-owner
</event-owner>
<event-op>
 event-op
</event-op>
<event-error>
 event-error
</event-error>
</l2ald-bridge-domain-flood-event-info>
```

Description

<l2ald-bridge-domain-flood-event-info>

Usage

```
<l2ald-bridge-domain-flood-next-event>
 <l2ald-bridge-domain-flood-event-info>
  <event-name>
   event-name
  </event-name>
  <event-type>
   event-type
  </event-type>
  <event-owner>
   event-owner
  </event-owner>
  <event-op>
   event-op
  </event-op>
  <event-error>
   event-error
  </event-error>
 </l2ald-bridge-domain-flood-event-info>
</l2ald-bridge-domain-flood-next-event>
```

Description

<l2ald-bridge-domain-flood-event-info>

Usage

```
<l2ald-bridge-domain-flood-event-list>
 <l2ald-bridge-domain-flood-event-info>
  <event-name>
   event-name
  </event-name>
  <event-type>
   event-type
  </event-type>
  <event-owner>
   event-owner
  </event-owner>
  <event-op>
   event-op
```


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```
    </event-op>
    <event-error>
      event-error
    </event-error>
  </l2ald-bridge-domain-flood-event-info>
</l2ald-bridge-domain-flood-event-list>
```

Description

<l2ald-bridge-domain-flood-event-info>

Usage

```
<l2ald-bridge-domain-flood-event-queue>
  <l2ald-bridge-domain-flood-next-event>
    <l2ald-bridge-domain-flood-event-info>
      <event-name>
        event-name
      </event-name>
      <event-type>
        event-type
      </event-type>
      <event-owner>
        event-owner
      </event-owner>
      <event-op>
        event-op
      </event-op>
      <event-error>
        event-error
      </event-error>
    </l2ald-bridge-domain-flood-event-info>
  </l2ald-bridge-domain-flood-next-event>
</l2ald-bridge-domain-flood-event-queue>
```

Description

<l2ald-bridge-domain-flood-event-info>

Usage

```
<l2ald-bridge-domain-flood-event-queue>
  <l2ald-bridge-domain-flood-event-list>
    <l2ald-bridge-domain-flood-event-info>
      <event-name>
        event-name
      </event-name>
      <event-type>
        event-type
      </event-type>
      <event-owner>
        event-owner
      </event-owner>
      <event-op>
        event-op
      </event-op>
```

```
                    <event-error>
                      event-error
                    </event-error>
                  </l2ald-bridge-domain-flood-event-info>
                </l2ald-bridge-domain-flood-event-list>
              </l2ald-bridge-domain-flood-event-queue>
```

Description

<l2ald-bridge-domain-flood-event-list>

Usage

```
<l2ald-bridge-domain-flood-event-list>
<l2ald-bridge-domain-flood-event-info>....</l2ald-bridge-domain-flood-event-info>

</l2ald-bridge-domain-flood-event-list>
```

Description

<l2ald-bridge-domain-flood-event-list>

Usage

```
<l2ald-bridge-domain-flood-event-queue>
  <l2ald-bridge-domain-flood-event-list>

<l2ald-bridge-domain-flood-event-info>....</l2ald-bridge-domain-flood-event-info>
  </l2ald-bridge-domain-flood-event-list>
</l2ald-bridge-domain-flood-event-queue>
```

Description

<l2ald-bridge-domain-flood-event-queue>

Usage

```
<l2ald-bridge-domain-flood-event-queue>

<l2ald-bridge-domain-flood-next-event>....</l2ald-bridge-domain-flood-next-event>
<l2ald-bridge-domain-flood-event-list>....</l2ald-bridge-domain-flood-event-list>

</l2ald-bridge-domain-flood-event-queue>
```

Description

<l2ald-bridge-domain-flood-instance>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>....</l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

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<l2ald-bridge-domain-flood-instance-information>

Usage

```
<l2ald-bridge-domain-flood-instance-information>
  <instance-name>
    instance-name
  </instance-name>
  <num-active-ce-iffs>
    num-active-ce-iffs
  </num-active-ce-iffs>
  <num-active-ve-iffs>
    num-active-ve-iffs
  </num-active-ve-iffs>
  <flood-route>....</flood-route>
</l2ald-bridge-domain-flood-instance-information>
```

Description

<l2ald-bridge-domain-flood-instance-information>

Usage

```
<l2ald-bridge-domain-lr-information>
  <l2ald-bridge-domain-flood-instance-information>
    <instance-name>
      instance-name
    </instance-name>
    <num-active-ce-iffs>
      num-active-ce-iffs
    </num-active-ce-iffs>
    <num-active-ve-iffs>
      num-active-ve-iffs
    </num-active-ve-iffs>
    <flood-route>....</flood-route>
  </l2ald-bridge-domain-flood-instance-information>
</l2ald-bridge-domain-lr-information>
```

Description

<l2ald-bridge-domain-flood-instance-information>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <l2ald-bridge-domain-flood-instance-information>
      <instance-name>
        instance-name
      </instance-name>
      <num-active-ce-iffs>
        num-active-ce-iffs
      </num-active-ce-iffs>
      <num-active-ve-iffs>
        num-active-ve-iffs
      </num-active-ve-iffs>
```

```
        <flood-route>....</flood-route>
      </l2ald-bridge-domain-flood-instance-information>
    </l2ald-bridge-domain-lr-information>
  </l2ald-bridge-domain-flood-instance>
```

Description

<l2ald-bridge-domain-flood-next-event>

Usage

```
<l2ald-bridge-domain-flood-next-event>
<l2ald-bridge-domain-flood-event-info>....</l2ald-bridge-domain-flood-event-info>

</l2ald-bridge-domain-flood-next-event>
```

Description

<l2ald-bridge-domain-flood-next-event>

Usage

```
<l2ald-bridge-domain-flood-event-queue>
  <l2ald-bridge-domain-flood-next-event>

<l2ald-bridge-domain-flood-event-info>....</l2ald-bridge-domain-flood-event-info>
  </l2ald-bridge-domain-flood-next-event>
</l2ald-bridge-domain-flood-event-queue>
```

Description

<l2ald-bridge-domain-flood-route-information>

Usage

```
<l2ald-bridge-domain-flood-route-information>
  <flood-route>....</flood-route>
</l2ald-bridge-domain-flood-route-information>
```

Description

<l2ald-bridge-domain-lr-information>

Usage

```
<l2ald-bridge-domain-lr-information>
  <logical-system-info>....</logical-system-info>

<l2ald-bridge-domain-flood-instance-information>....</l2ald-bridge-domain-flood-instance-information>

</l2ald-bridge-domain-lr-information>
```

Description

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<l2ald-bridge-domain-lr-information>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <logical-system-info>....</logical-system-info>

<l2ald-bridge-domain-flood-instance-information>....</l2ald-bridge-domain-flood-instance-information>

  </l2ald-bridge-domain-lr-information>
</l2ald-bridge-domain-flood-instance>
```

Description

<l2ald-bridge-instance-group>

Usage

```
<l2ald-bridge-instance-group>
  <l2rtb-name>
    l2rtb-name
  </l2rtb-name>
  <l2rtb-bridging-domain>
    l2rtb-bridging-domain
  </l2rtb-bridging-domain>
  <l2rtb-instance-description>
    l2rtb-instance-description
  </l2rtb-instance-description>
  <l2rtb-instance-type>
    l2rtb-instance-type
  </l2rtb-instance-type>
  <l2rtb-instance-state>
    l2rtb-instance-state
  </l2rtb-instance-state>
  <l2rtb-instance-restart-state>
    l2rtb-instance-restart-state
  </l2rtb-instance-restart-state>
  <l2rtb-instance-pathse1-timeout>
    l2rtb-instance-pathse1-timeout
  </l2rtb-instance-pathse1-timeout>
  <l2rtb-interface-name>
    l2rtb-interface-name
  </l2rtb-interface-name>
  <l2rtb-macs-learned>
    l2rtb-macs-learned
  </l2rtb-macs-learned>
  <l2rtb-instance-flags>
    l2rtb-instance-flags
  </l2rtb-instance-flags>
  <l2rtb-bridge-vlan>
    l2rtb-bridge-vlan
  </l2rtb-bridge-vlan>
  <l2rtb-brief-summary>
    l2rtb-brief-summary
  </l2rtb-brief-summary>
```

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```
</l2ald-bridge-instance-group>
```

Description

<l2ald-bridge-instance-group>

Usage

```
<l2ald-bridge-instance-information>
  <l2ald-bridge-instance-group>
    <l2rtb-name>
      l2rtb-name
    </l2rtb-name>
    <l2rtb-bridging-domain>
      l2rtb-bridging-domain
    </l2rtb-bridging-domain>
    <l2rtb-instance-description>
      l2rtb-instance-description
    </l2rtb-instance-description>
    <l2rtb-instance-type>
      l2rtb-instance-type
    </l2rtb-instance-type>
    <l2rtb-instance-state>
      l2rtb-instance-state
    </l2rtb-instance-state>
    <l2rtb-instance-restart-state>
      l2rtb-instance-restart-state
    </l2rtb-instance-restart-state>
    <l2rtb-instance-pathse1-timeout>
      l2rtb-instance-pathse1-timeout
    </l2rtb-instance-pathse1-timeout>
    <l2rtb-interface-name>
      l2rtb-interface-name
    </l2rtb-interface-name>
    <l2rtb-macs-learned>
      l2rtb-macs-learned
    </l2rtb-macs-learned>
    <l2rtb-instance-flags>
      l2rtb-instance-flags
    </l2rtb-instance-flags>
    <l2rtb-bridge-vlan>
      l2rtb-bridge-vlan
    </l2rtb-bridge-vlan>
    <l2rtb-brief-summary>
      l2rtb-brief-summary
    </l2rtb-brief-summary>
  </l2ald-bridge-instance-group>
</l2ald-bridge-instance-information>
```

Description

<l2ald-bridge-instance-information>

Usage

```
<l2ald-bridge-instance-information>
```


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```
  <l2ald-bridge-instance-group>....</l2ald-bridge-instance-group>
</l2ald-bridge-instance-information>
```

Description Operational bridge instances that can be passed to netapp commands

<l2ald-config-pbbn>

Usage

```
<l2ald-config-pbbn>
  <l2ald-pbbn-entry>....</l2ald-pbbn-entry>
</l2ald-config-pbbn>
```

Description

<l2ald-global-configuration>

Usage

```
<l2ald-global-configuration>
  <l2ald-mac-aging-time>
    l2ald-mac-aging-time
  </l2ald-mac-aging-time>
  <l2ald-config-flag>
    l2ald-config-flag
  </l2ald-config-flag>
  <l2ald-mac-learning-status>
    l2ald-mac-learning-status
  </l2ald-mac-learning-status>
  <l2ald-hardware-mac-learning-status>
    l2ald-hardware-mac-learning-status
  </l2ald-hardware-mac-learning-status>
  <l2ald-software-mac-learning-status>
    l2ald-software-mac-learning-status
  </l2ald-software-mac-learning-status>
  <l2ald-statistics-status>
    l2ald-statistics-status
  </l2ald-statistics-status>
  <l2ald-sequence-number>
    l2ald-sequence-number
  </l2ald-sequence-number>
  <l2ald-mac-learn-toggle-count>
    l2ald-mac-learn-toggle-count
  </l2ald-mac-learn-toggle-count>
  <l2ald-hardware-mac-learn-toggle-count>
    l2ald-hardware-mac-learn-toggle-count
  </l2ald-hardware-mac-learn-toggle-count>
  <l2ald-software-mac-learn-toggle-count>
    l2ald-software-mac-learn-toggle-count
  </l2ald-software-mac-learn-toggle-count>
  <l2ald-statistics-toggle-count>
    l2ald-statistics-toggle-count
  </l2ald-statistics-toggle-count>
  <l2ald-global-mac-limit-count>
    l2ald-global-mac-limit-count
```

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```
</l2ald-global-mac-limit-count>
<l2ald-global-mac-limit>
  l2ald-global-mac-limit
</l2ald-global-mac-limit>
<l2ald-global-packet-action-drop>
  l2ald-global-packet-action-drop
</l2ald-global-packet-action-drop>
<l2ald-interface-mac-limit-wm>
  l2ald-interface-mac-limit-wm
</l2ald-interface-mac-limit-wm>
<l2ald-rtb-mac-limit-wm>
  l2ald-rtb-mac-limit-wm
</l2ald-rtb-mac-limit-wm>
<l2ald-mac-limit-wm>
  l2ald-mac-limit-wm
</l2ald-mac-limit-wm>
<l2ald-interface-mac-limit-timeout>
  l2ald-interface-mac-limit-timeout
</l2ald-interface-mac-limit-timeout>
<l2ald-rtb-mac-limit-timeout>
  l2ald-rtb-mac-limit-timeout
</l2ald-rtb-mac-limit-timeout>
<l2ald-mac-limit-timeout>
  l2ald-mac-limit-timeout
</l2ald-mac-limit-timeout>
<l2ald-config-smac-count>
  l2ald-config-smac-count
</l2ald-config-smac-count>
<l2ald-non-config-smac-count>
  l2ald-non-config-smac-count
</l2ald-non-config-smac-count>
<l2ald-le-aging-time>
  l2ald-le-aging-time
</l2ald-le-aging-time>
<l2ald-le-bridge-domain-aging-time>
  l2ald-le-bridge-domain-aging-time
</l2ald-le-bridge-domain-aging-time>
</l2ald-global-configuration>
```

Description Global configuration values for the the media access control address learning process

<l2ald-global-macdb>

Usage

```
<l2ald-global-macdb>
  <l2ald-mac-entry>....</l2ald-mac-entry>
</l2ald-global-macdb>
```

Description

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<l2ald-global-macdb-count>

Usage

```
<l2ald-global-macdb-count>
  <global-mac-count>
    global-mac-count
  </global-mac-count>
</l2ald-global-macdb-count>
```

Description

<l2ald-if-mac-count-entry>

Usage

```
<l2ald-interface-mac-count>
  <l2ald-if-mac-count-entry>
    <interface-name>
      interface-name
    </interface-name>
    <mac-count>
      mac-count
    </mac-count>
  </l2ald-if-mac-count-entry>
</l2ald-interface-mac-count>
```

Description MAC Address count for interface

<l2ald-ifd-preconfig-entry>

Usage

```
<l2ald-ifd-preconfig-entry>
  <l2ald-ifd-preconfig-name>
    l2ald-ifd-preconfig-name
  </l2ald-ifd-preconfig-name>
  <l2ald-ifd-preconfig-vmap>
    l2ald-ifd-preconfig-vmap
  </l2ald-ifd-preconfig-vmap>
  <l2ald-ifd-preconfig-vmap-count>
    l2ald-ifd-preconfig-vmap-count
  </l2ald-ifd-preconfig-vmap-count>
  <l2ald-ifd-tmp-resync-vmap>
    l2ald-ifd-tmp-resync-vmap
  </l2ald-ifd-tmp-resync-vmap>
  <l2ald-ifd-tmp-resync-vmap-count>
    l2ald-ifd-tmp-resync-vmap-count
  </l2ald-ifd-tmp-resync-vmap-count>
</l2ald-ifd-preconfig-entry>
```

Description

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<l2ald-ifd-preconfig-entry>

Usage

```
<l2ald-mvrp-information>
  <l2ald-ifd-preconfig-entry>
    <l2ald-ifd-preconfig-name>
      l2ald-ifd-preconfig-name
    </l2ald-ifd-preconfig-name>
    <l2ald-ifd-preconfig-vmap>
      l2ald-ifd-preconfig-vmap
    </l2ald-ifd-preconfig-vmap>
    <l2ald-ifd-preconfig-vmap-count>
      l2ald-ifd-preconfig-vmap-count
    </l2ald-ifd-preconfig-vmap-count>
    <l2ald-ifd-tmp-resync-vmap>
      l2ald-ifd-tmp-resync-vmap
    </l2ald-ifd-tmp-resync-vmap>
    <l2ald-ifd-tmp-resync-vmap-count>
      l2ald-ifd-tmp-resync-vmap-count
    </l2ald-ifd-tmp-resync-vmap-count>
  </l2ald-ifd-preconfig-entry>
</l2ald-mvrp-information>
```

Description

<l2ald-interface-mac-count>

Usage

```
<l2ald-interface-mac-count>
  <l2ald-total-intf-mac-count>
    l2ald-total-intf-mac-count
  </l2ald-total-intf-mac-count>
  <l2ald-if-mac-count-entry>....</l2ald-if-mac-count-entry>
</l2ald-interface-mac-count>
```

Description

<l2ald-interface-macdb>

Usage

```
<l2ald-interface-macdb>
  <l2ald-macdb-if-name>
    l2ald-macdb-if-name
  </l2ald-macdb-if-name>
  <l2ald-mac-entry>....</l2ald-mac-entry>
</l2ald-interface-macdb>
```

Description

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<l2ald-mac-destination-address-statistics>

Usage

```
<l2ald-mac-destination-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</l2ald-mac-destination-address-statistics>
```

Description MAC destination address statistics

<l2ald-mac-destination-address-statistics>

Usage

```
<l2ald-mac-entry>
  <l2ald-mac-destination-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </l2ald-mac-destination-address-statistics>
</l2ald-mac-entry>
```

Description MAC destination address statistics

<l2ald-mac-destination-address-statistics>

Usage

```
<l2ald-global-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-destination-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </l2ald-mac-destination-address-statistics>
  </l2ald-mac-entry>
</l2ald-global-macdb>
```

Description MAC destination address statistics

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<l2ald-mac-destination-address-statistics>

Usage

```
<l2ald-interface-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-destination-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </l2ald-mac-destination-address-statistics>
  </l2ald-mac-entry>
</l2ald-interface-macdb>
```

Description MAC destination address statistics

<l2ald-mac-destination-address-statistics>

Usage

```
<l2ald-rtb-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-destination-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </l2ald-mac-destination-address-statistics>
  </l2ald-mac-entry>
</l2ald-rtb-macdb>
```

Description MAC destination address statistics

<l2ald-mac-entry>

Usage

```
<l2ald-mac-entry>
  <l2-mac-address>
    l2-mac-address
  </l2-mac-address>
  <l2-remote-beb-mac-address>
    l2-remote-beb-mac-address
  </l2-remote-beb-mac-address>
  <l2-mac-interface-device>
    l2-mac-interface-device
  </l2-mac-interface-device>
  <l2-mac-logical-interface>
    l2-mac-logical-interface
  </l2-mac-logical-interface>
```


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```
<l2-mac-routing-instance>
  l2-mac-routing-instance
</l2-mac-routing-instance>
<l2-mac-bridging-domain>
  l2-mac-bridging-domain
</l2-mac-bridging-domain>
<l2-mac-logical-system>
  l2-mac-logical-system
</l2-mac-logical-system>
<l2-mac-vlan>
  l2-mac-vlan
</l2-mac-vlan>
<l2-mac-stp-index>
  l2-mac-stp-index
</l2-mac-stp-index>
<l2-mac-epoch>
  l2-mac-epoch
</l2-mac-epoch>
<l2-mac-ifl-generation>
  l2-mac-ifl-generation
</l2-mac-ifl-generation>
<l2-mac-sequence-number>
  l2-mac-sequence-number
</l2-mac-sequence-number>
<l2-mac-learn-mask>
  l2-mac-learn-mask
</l2-mac-learn-mask>
<l2-mac-entry-flags>
  l2-mac-entry-flags
</l2-mac-entry-flags>
<l2-mac-flags>
  l2-mac-flags
</l2-mac-flags>
<l2-bridge-vlan>
  l2-bridge-vlan
</l2-bridge-vlan>
<l2-bridge-isid>
  l2-bridge-isid
</l2-bridge-isid>
<l2ald-mac-source-address-statistics>....</l2ald-mac-source-address-statistics>

<l2ald-mac-destination-address-statistics>....</l2ald-mac-destination-address-statistics>

</l2ald-mac-entry>
```

Description

<l2ald-mac-entry>

Usage

```
<l2ald-global-macdb>
  <l2ald-mac-entry>
    <l2-mac-address>
      l2-mac-address
```

```
        </l2-mac-address>
        <l2-remote-beb-mac-address>
          l2-remote-beb-mac-address
        </l2-remote-beb-mac-address>
        <l2-mac-interface-device>
          l2-mac-interface-device
        </l2-mac-interface-device>
        <l2-mac-logical-interface>
          l2-mac-logical-interface
        </l2-mac-logical-interface>
        <l2-mac-routing-instance>
          l2-mac-routing-instance
        </l2-mac-routing-instance>
        <l2-mac-bridging-domain>
          l2-mac-bridging-domain
        </l2-mac-bridging-domain>
        <l2-mac-logical-system>
          l2-mac-logical-system
        </l2-mac-logical-system>
        <l2-mac-vlan>
          l2-mac-vlan
        </l2-mac-vlan>
        <l2-mac-stp-index>
          l2-mac-stp-index
        </l2-mac-stp-index>
        <l2-mac-epoch>
          l2-mac-epoch
        </l2-mac-epoch>
        <l2-mac-ifl-generation>
          l2-mac-ifl-generation
        </l2-mac-ifl-generation>
        <l2-mac-sequence-number>
          l2-mac-sequence-number
        </l2-mac-sequence-number>
        <l2-mac-learn-mask>
          l2-mac-learn-mask
        </l2-mac-learn-mask>
        <l2-mac-entry-flags>
          l2-mac-entry-flags
        </l2-mac-entry-flags>
        <l2-mac-flags>
          l2-mac-flags
        </l2-mac-flags>
        <l2-bridge-vlan>
          l2-bridge-vlan
        </l2-bridge-vlan>
        <l2-bridge-isid>
          l2-bridge-isid
        </l2-bridge-isid>
      <l2ald-mac-source-address-statistics>....</l2ald-mac-source-address-statistics>

    <l2ald-mac-destination-address-statistics>....</l2ald-mac-destination-address-statistics>

      </l2ald-mac-entry>
```


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```
</l2ald-global-macdb>
```

Description

<l2ald-mac-entry>

Usage

```
<l2ald-interface-macdb>
 <l2ald-mac-entry>
  <l2-mac-address>
   l2-mac-address
  </l2-mac-address>
  <l2-remote-beb-mac-address>
   l2-remote-beb-mac-address
  </l2-remote-beb-mac-address>
  <l2-mac-interface-device>
   l2-mac-interface-device
  </l2-mac-interface-device>
  <l2-mac-logical-interface>
   l2-mac-logical-interface
  </l2-mac-logical-interface>
  <l2-mac-routing-instance>
   l2-mac-routing-instance
  </l2-mac-routing-instance>
  <l2-mac-bridging-domain>
   l2-mac-bridging-domain
  </l2-mac-bridging-domain>
  <l2-mac-logical-system>
   l2-mac-logical-system
  </l2-mac-logical-system>
  <l2-mac-vlan>
   l2-mac-vlan
  </l2-mac-vlan>
  <l2-mac-stp-index>
   l2-mac-stp-index
  </l2-mac-stp-index>
  <l2-mac-epoch>
   l2-mac-epoch
  </l2-mac-epoch>
  <l2-mac-ifl-generation>
   l2-mac-ifl-generation
  </l2-mac-ifl-generation>
  <l2-mac-sequence-number>
   l2-mac-sequence-number
  </l2-mac-sequence-number>
  <l2-mac-learn-mask>
   l2-mac-learn-mask
  </l2-mac-learn-mask>
  <l2-mac-entry-flags>
   l2-mac-entry-flags
  </l2-mac-entry-flags>
  <l2-mac-flags>
   l2-mac-flags
  </l2-mac-flags>
  <l2-bridge-vlan>
```

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```
                    l2-bridge-vlan
                  </l2-bridge-vlan>
                  <l2-bridge-isid>
                    l2-bridge-isid
                  </l2-bridge-isid>
                <l2ald-mac-source-address-statistics>....</l2ald-mac-source-address-statistics>

              <l2ald-mac-destination-address-statistics>....</l2ald-mac-destination-address-statistics>

                </l2ald-mac-entry>
              </l2ald-interface-macdb>
```

Description

<l2ald-mac-entry>

Usage

```
<l2ald-rtb-macdb>
  <l2ald-mac-entry>
    <l2-mac-address>
      l2-mac-address
    </l2-mac-address>
    <l2-remote-beb-mac-address>
      l2-remote-beb-mac-address
    </l2-remote-beb-mac-address>
    <l2-mac-interface-device>
      l2-mac-interface-device
    </l2-mac-interface-device>
    <l2-mac-logical-interface>
      l2-mac-logical-interface
    </l2-mac-logical-interface>
    <l2-mac-routing-instance>
      l2-mac-routing-instance
    </l2-mac-routing-instance>
    <l2-mac-bridging-domain>
      l2-mac-bridging-domain
    </l2-mac-bridging-domain>
    <l2-mac-logical-system>
      l2-mac-logical-system
    </l2-mac-logical-system>
    <l2-mac-vlan>
      l2-mac-vlan
    </l2-mac-vlan>
    <l2-mac-stp-index>
      l2-mac-stp-index
    </l2-mac-stp-index>
    <l2-mac-epoch>
      l2-mac-epoch
    </l2-mac-epoch>
    <l2-mac-ifl-generation>
      l2-mac-ifl-generation
    </l2-mac-ifl-generation>
    <l2-mac-sequence-number>
      l2-mac-sequence-number
```


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```
      </l2-mac-sequence-number>
      <l2-mac-learn-mask>
        l2-mac-learn-mask
      </l2-mac-learn-mask>
      <l2-mac-entry-flags>
        l2-mac-entry-flags
      </l2-mac-entry-flags>
      <l2-mac-flags>
        l2-mac-flags
      </l2-mac-flags>
      <l2-bridge-vlan>
        l2-bridge-vlan
      </l2-bridge-vlan>
      <l2-bridge-isid>
        l2-bridge-isid
      </l2-bridge-isid>
    <l2ald-mac-source-address-statistics>....</l2ald-mac-source-address-statistics>


  <l2ald-mac-destination-address-statistics>....</l2ald-mac-destination-address-statistics>

      </l2ald-mac-entry>
    </l2ald-rtb-macdb>
```

Description

<l2ald-mac-source-address-statistics>

Usage

```
<l2ald-mac-source-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</l2ald-mac-source-address-statistics>
```

Description MAC source address statistics

<l2ald-mac-source-address-statistics>

Usage

```
<l2ald-mac-entry>
  <l2ald-mac-source-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </l2ald-mac-source-address-statistics>
```

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```
</l2ald-mac-entry>
```

Description MAC source address statistics

<l2ald-mac-source-address-statistics>

Usage

```
<l2ald-global-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-source-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </l2ald-mac-source-address-statistics>
  </l2ald-mac-entry>
</l2ald-global-macdb>
```

Description MAC source address statistics

<l2ald-mac-source-address-statistics>

Usage

```
<l2ald-interface-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-source-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </l2ald-mac-source-address-statistics>
  </l2ald-mac-entry>
</l2ald-interface-macdb>
```

Description MAC source address statistics

<l2ald-mac-source-address-statistics>

Usage

```
<l2ald-rtb-macdb>
  <l2ald-mac-entry>
    <l2ald-mac-source-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
```


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```
      </byte-count>
    </l2ald-mac-source-address-statistics>
  </l2ald-mac-entry>
</l2ald-rtb-macdb>
```

Description MAC source address statistics

<l2ald-mc-ae-arp-entry>

Usage

```
<l2ald-mc-ae-arp-entry>
  <l2ald-mc-ae-rg-id>
    l2ald-mc-ae-rg-id
  </l2ald-mc-ae-rg-id>
  <l2ald-mc-ae-arp-rx-count-from-line>
    l2ald-mc-ae-arp-rx-count-from-line
  </l2ald-mc-ae-arp-rx-count-from-line>
  <l2ald-mc-ae-arp-tx-count-to-peer>
    l2ald-mc-ae-arp-tx-count-to-peer
  </l2ald-mc-ae-arp-tx-count-to-peer>
  <l2ald-mc-ae-arp-rx-count-from-peer>
    l2ald-mc-ae-arp-rx-count-from-peer
  </l2ald-mc-ae-arp-rx-count-from-peer>
  <l2ald-mc-ae-arp-install-count>
    l2ald-mc-ae-arp-install-count
  </l2ald-mc-ae-arp-install-count>
  <l2ald-mc-ae-arp-local-drop-count>
    l2ald-mc-ae-arp-local-drop-count
  </l2ald-mc-ae-arp-local-drop-count>
  <l2ald-mc-ae-arp-remote-drop-count>
    l2ald-mc-ae-arp-remote-drop-count
  </l2ald-mc-ae-arp-remote-drop-count>
</l2ald-mc-ae-arp-entry>
```

Description

<l2ald-mc-ae-arp-entry>

Usage

```
<l2ald-rg-information>
  <l2ald-mc-ae-arp-entry>
    <l2ald-mc-ae-rg-id>
      l2ald-mc-ae-rg-id
    </l2ald-mc-ae-rg-id>
    <l2ald-mc-ae-arp-rx-count-from-line>
      l2ald-mc-ae-arp-rx-count-from-line
    </l2ald-mc-ae-arp-rx-count-from-line>
    <l2ald-mc-ae-arp-tx-count-to-peer>
      l2ald-mc-ae-arp-tx-count-to-peer
    </l2ald-mc-ae-arp-tx-count-to-peer>
    <l2ald-mc-ae-arp-rx-count-from-peer>
      l2ald-mc-ae-arp-rx-count-from-peer
    </l2ald-mc-ae-arp-rx-count-from-peer>
```

```
    <l2ald-mc-ae-arp-install-count>
      l2ald-mc-ae-arp-install-count
    </l2ald-mc-ae-arp-install-count>
    <l2ald-mc-ae-arp-local-drop-count>
      l2ald-mc-ae-arp-local-drop-count
    </l2ald-mc-ae-arp-local-drop-count>
    <l2ald-mc-ae-arp-remote-drop-count>
      l2ald-mc-ae-arp-remote-drop-count
    </l2ald-mc-ae-arp-remote-drop-count>
  </l2ald-mc-ae-arp-entry>
</l2ald-rg-information>
```

Description

<l2ald-mc-ae-mh-remote-mac-entry>

Usage

```
<l2ald-mc-ae-mh-remote-mac-entry>
  <l2ald-mc-ae-mh-service-id>
    l2ald-mc-ae-mh-service-id
  </l2ald-mc-ae-mh-service-id>
  <l2ald-mc-ae-mh-vlan-id>
    l2ald-mc-ae-mh-vlan-id
  </l2ald-mc-ae-mh-vlan-id>
  <l2ald-mc-ae-mh-peer-address>
    l2ald-mc-ae-mh-peer-address
  </l2ald-mc-ae-mh-peer-address>
  <l2ald-mc-ae-mh-mac-address>
    l2ald-mc-ae-mh-mac-address
  </l2ald-mc-ae-mh-mac-address>
  <l2ald-mc-ae-mh-mcae-id>
    l2ald-mc-ae-mh-mcae-id
  </l2ald-mc-ae-mh-mcae-id>
  <l2ald-mc-ae-mh-unit-num>
    l2ald-mc-ae-mh-unit-num
  </l2ald-mc-ae-mh-unit-num>
  <l2ald-mc-ae-mh-rtm-op>
    l2ald-mc-ae-mh-rtm-op
  </l2ald-mc-ae-mh-rtm-op>
  <l2ald-mc-ae-mh-flags>
    l2ald-mc-ae-mh-flags
  </l2ald-mc-ae-mh-flags>
  <l2ald-mc-ae-mh-status>
    l2ald-mc-ae-mh-status
  </l2ald-mc-ae-mh-status>
</l2ald-mc-ae-mh-remote-mac-entry>
```

Description

<l2ald-mc-ae-mh-remote-mac-entry>

Usage

```
<l2ald-rg-information>
  <l2ald-mc-ae-mh-remote-mac-entry>
```


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```
    <l2ald-mc-ae-mh-service-id>
      l2ald-mc-ae-mh-service-id
    </l2ald-mc-ae-mh-service-id>
    <l2ald-mc-ae-mh-vlan-id>
      l2ald-mc-ae-mh-vlan-id
    </l2ald-mc-ae-mh-vlan-id>
    <l2ald-mc-ae-mh-peer-address>
      l2ald-mc-ae-mh-peer-address
    </l2ald-mc-ae-mh-peer-address>
    <l2ald-mc-ae-mh-mac-address>
      l2ald-mc-ae-mh-mac-address
    </l2ald-mc-ae-mh-mac-address>
    <l2ald-mc-ae-mh-mcae-id>
      l2ald-mc-ae-mh-mcae-id
    </l2ald-mc-ae-mh-mcae-id>
    <l2ald-mc-ae-mh-unit-num>
      l2ald-mc-ae-mh-unit-num
    </l2ald-mc-ae-mh-unit-num>
    <l2ald-mc-ae-mh-rtm-op>
      l2ald-mc-ae-mh-rtm-op
    </l2ald-mc-ae-mh-rtm-op>
    <l2ald-mc-ae-mh-flags>
      l2ald-mc-ae-mh-flags
    </l2ald-mc-ae-mh-flags>
    <l2ald-mc-ae-mh-status>
      l2ald-mc-ae-mh-status
    </l2ald-mc-ae-mh-status>
  </l2ald-mc-ae-mh-remote-mac-entry>
</l2ald-rg-information>
```

Description

<l2ald-mc-ae-rg-entry>

Usage

```
<l2ald-mc-ae-rg-entry>
  <l2ald-mc-ae-rg-id>
    l2ald-mc-ae-rg-id
  </l2ald-mc-ae-rg-id>
  <l2ald-mc-ae-rg-flags>
    l2ald-mc-ae-rg-flags
  </l2ald-mc-ae-rg-flags>
  <l2ald-mc-ae-rg-ref-count>
    l2ald-mc-ae-rg-ref-count
  </l2ald-mc-ae-rg-ref-count>
  <l2ald-mc-ae-rg-tx-count>
    l2ald-mc-ae-rg-tx-count
  </l2ald-mc-ae-rg-tx-count>
  <l2ald-mc-ae-rg-rx-count>
    l2ald-mc-ae-rg-rx-count
  </l2ald-mc-ae-rg-rx-count>
  <l2ald-mc-ae-rg-disconnect-count>
    l2ald-mc-ae-rg-disconnect-count
  </l2ald-mc-ae-rg-disconnect-count>
```

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```
</l2ald-mc-ae-rg-entry>
```

Description

<l2ald-mc-ae-rg-entry>

Usage

```
<l2ald-rg-information>
  <l2ald-mc-ae-rg-entry>
    <l2ald-mc-ae-rg-id>
      l2ald-mc-ae-rg-id
    </l2ald-mc-ae-rg-id>
    <l2ald-mc-ae-rg-flags>
      l2ald-mc-ae-rg-flags
    </l2ald-mc-ae-rg-flags>
    <l2ald-mc-ae-rg-ref-count>
      l2ald-mc-ae-rg-ref-count
    </l2ald-mc-ae-rg-ref-count>
    <l2ald-mc-ae-rg-tx-count>
      l2ald-mc-ae-rg-tx-count
    </l2ald-mc-ae-rg-tx-count>
    <l2ald-mc-ae-rg-rx-count>
      l2ald-mc-ae-rg-rx-count
    </l2ald-mc-ae-rg-rx-count>
    <l2ald-mc-ae-rg-disconnect-count>
      l2ald-mc-ae-rg-disconnect-count
    </l2ald-mc-ae-rg-disconnect-count>
  </l2ald-mc-ae-rg-entry>
</l2ald-rg-information>
```

Description

<l2ald-mc-ae-sh-remote-mac-entry>

Usage

```
<l2ald-mc-ae-sh-remote-mac-entry>
  <l2ald-mc-ae-sh-service-id>
    l2ald-mc-ae-sh-service-id
  </l2ald-mc-ae-sh-service-id>
  <l2ald-mc-ae-sh-vlan-id>
    l2ald-mc-ae-sh-vlan-id
  </l2ald-mc-ae-sh-vlan-id>
  <l2ald-mc-ae-sh-peer-address>
    l2ald-mc-ae-sh-peer-address
  </l2ald-mc-ae-sh-peer-address>
  <l2ald-mc-ae-sh-mac-address>
    l2ald-mc-ae-sh-mac-address
  </l2ald-mc-ae-sh-mac-address>
  <l2ald-mc-ae-sh-rtm-op>
    l2ald-mc-ae-sh-rtm-op
  </l2ald-mc-ae-sh-rtm-op>
  <l2ald-mc-ae-sh-flags>
    l2ald-mc-ae-sh-flags
  </l2ald-mc-ae-sh-flags>
```


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```
<l2ald-mc-ae-sh-status>
  l2ald-mc-ae-sh-status
</l2ald-mc-ae-sh-status>
</l2ald-mc-ae-sh-remote-mac-entry>
```

Description

<l2ald-mc-ae-sh-remote-mac-entry>

Usage

```
<l2ald-rg-information>
  <l2ald-mc-ae-sh-remote-mac-entry>
    <l2ald-mc-ae-sh-service-id>
      l2ald-mc-ae-sh-service-id
    </l2ald-mc-ae-sh-service-id>
    <l2ald-mc-ae-sh-vlan-id>
      l2ald-mc-ae-sh-vlan-id
    </l2ald-mc-ae-sh-vlan-id>
    <l2ald-mc-ae-sh-peer-address>
      l2ald-mc-ae-sh-peer-address
    </l2ald-mc-ae-sh-peer-address>
    <l2ald-mc-ae-sh-mac-address>
      l2ald-mc-ae-sh-mac-address
    </l2ald-mc-ae-sh-mac-address>
    <l2ald-mc-ae-sh-rtm-op>
      l2ald-mc-ae-sh-rtm-op
    </l2ald-mc-ae-sh-rtm-op>
    <l2ald-mc-ae-sh-flags>
      l2ald-mc-ae-sh-flags
    </l2ald-mc-ae-sh-flags>
    <l2ald-mc-ae-sh-status>
      l2ald-mc-ae-sh-status
    </l2ald-mc-ae-sh-status>
  </l2ald-mc-ae-sh-remote-mac-entry>
</l2ald-rg-information>
```

Description

<l2ald-mvrp-information>

Usage

```
<l2ald-mvrp-information>
  <l2ald-ifd-preconfig-entry>....</l2ald-ifd-preconfig-entry>
  <l2ald-server-non-mvrp-ct>
    l2ald-server-non-mvrp-ct
  </l2ald-server-non-mvrp-ct>
  <l2ald-server-mvrp-ct>
    l2ald-server-mvrp-ct
  </l2ald-server-mvrp-ct>
  <l2ald-server-mvrp-join-ct>
    l2ald-server-mvrp-join-ct
  </l2ald-server-mvrp-join-ct>
  <l2ald-server-mvrp-leave-ct>
    l2ald-server-mvrp-leave-ct
```

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```
  </l2ald-server-mvrp-leave-ct>
</l2ald-mvrp-information>
```

Description

<l2ald-pbbn>

Usage

```
<l2ald-pbbn>
  <l2ald-pbbn-entry>....</l2ald-pbbn-entry>
</l2ald-pbbn>
```

Description

<l2ald-pbbn-entry>

Usage

```
<l2ald-pbbn-entry>
  <l2pbbn-logical-system>
    l2pbbn-logical-system
  </l2pbbn-logical-system>
  <l2pbbn-rtb>
    l2pbbn-rtb
  </l2pbbn-rtb>
  <l2pbbn-rtb-bb>
    l2pbbn-rtb-bb
  </l2pbbn-rtb-bb>
  <l2pbbn-rtb-pbbn-id>
    l2pbbn-rtb-pbbn-id
  </l2pbbn-rtb-pbbn-id>
  <l2pbbn-pbn-bd>
    l2pbbn-pbn-bd
  </l2pbbn-pbn-bd>
  <l2pbbn-svlan>
    l2pbbn-svlan
  </l2pbbn-svlan>
  <l2pbbn-isid>
    l2pbbn-isid
  </l2pbbn-isid>
  <l2pbbn-bvlan>
    l2pbbn-bvlan
  </l2pbbn-bvlan>
  <l2pbbn-flags>
    l2pbbn-flags
  </l2pbbn-flags>
  <l2pbbn-pbn-bd-index>
    l2pbbn-pbn-bd-index
  </l2pbbn-pbn-bd-index>
  <l2pbbn-pbbn-bd>
    l2pbbn-pbbn-bd
  </l2pbbn-pbbn-bd>
  <l2pbbn-pbbn-bd-index>
    l2pbbn-pbbn-bd-index
  </l2pbbn-pbbn-bd-index>
```


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```
    <l2pbbn-generation>
      l2pbbn-generation
    </l2pbbn-generation>
    <l2pbbn-sequence-number>
      l2pbbn-sequence-number
    </l2pbbn-sequence-number>
    <l2pbbn-handle>
      l2pbbn-handle
    </l2pbbn-handle>
    <l2pbbn-mac-address>
      l2pbbn-mac-address
    </l2pbbn-mac-address>
  </l2ald-pbbn-entry>
```

Description

<l2ald-pbbn-entry>

Usage

```
<l2ald-config-pbbn>
  <l2ald-pbbn-entry>
    <l2pbbn-logical-system>
      l2pbbn-logical-system
    </l2pbbn-logical-system>
    <l2pbbn-rtb>
      l2pbbn-rtb
    </l2pbbn-rtb>
    <l2pbbn-rtb-bb>
      l2pbbn-rtb-bb
    </l2pbbn-rtb-bb>
    <l2pbbn-rtb-pbbn-id>
      l2pbbn-rtb-pbbn-id
    </l2pbbn-rtb-pbbn-id>
    <l2pbbn-pbn-bd>
      l2pbbn-pbn-bd
    </l2pbbn-pbn-bd>
    <l2pbbn-svlan>
      l2pbbn-svlan
    </l2pbbn-svlan>
    <l2pbbn-isid>
      l2pbbn-isid
    </l2pbbn-isid>
    <l2pbbn-bvlan>
      l2pbbn-bvlan
    </l2pbbn-bvlan>
    <l2pbbn-flags>
      l2pbbn-flags
    </l2pbbn-flags>
    <l2pbbn-pbn-bd-index>
      l2pbbn-pbn-bd-index
    </l2pbbn-pbn-bd-index>
    <l2pbbn-pbbn-bd>
      l2pbbn-pbbn-bd
    </l2pbbn-pbbn-bd>
    <l2pbbn-pbbn-bd-index>
```

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```
      l2pbbn-pbbn-bd-index
    </l2pbbn-pbbn-bd-index>
    <l2pbbn-generation>
      l2pbbn-generation
    </l2pbbn-generation>
    <l2pbbn-sequence-number>
      l2pbbn-sequence-number
    </l2pbbn-sequence-number>
    <l2pbbn-handle>
      l2pbbn-handle
    </l2pbbn-handle>
    <l2pbbn-mac-address>
      l2pbbn-mac-address
    </l2pbbn-mac-address>
  </l2ald-pbbn-entry>
</l2ald-config-pbbn>
```

Description

<l2ald-pbbn-entry>

Usage

```
<l2ald-pbbn>
  <l2ald-pbbn-entry>
    <l2pbbn-logical-system>
      l2pbbn-logical-system
    </l2pbbn-logical-system>
    <l2pbbn-rtb>
      l2pbbn-rtb
    </l2pbbn-rtb>
    <l2pbbn-rtb-bb>
      l2pbbn-rtb-bb
    </l2pbbn-rtb-bb>
    <l2pbbn-rtb-pbbn-id>
      l2pbbn-rtb-pbbn-id
    </l2pbbn-rtb-pbbn-id>
    <l2pbbn-pbn-bd>
      l2pbbn-pbn-bd
    </l2pbbn-pbn-bd>
    <l2pbbn-svlan>
      l2pbbn-svlan
    </l2pbbn-svlan>
    <l2pbbn-isid>
      l2pbbn-isid
    </l2pbbn-isid>
    <l2pbbn-bvlan>
      l2pbbn-bvlan
    </l2pbbn-bvlan>
    <l2pbbn-flags>
      l2pbbn-flags
    </l2pbbn-flags>
    <l2pbbn-pbn-bd-index>
      l2pbbn-pbn-bd-index
    </l2pbbn-pbn-bd-index>
    <l2pbbn-pbbn-bd>
```


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```
    l2pbbn-pbbn-bd
   </l2pbbn-pbbn-bd>
   <l2pbbn-pbbn-bd-index>
    l2pbbn-pbbn-bd-index
   </l2pbbn-pbbn-bd-index>
   <l2pbbn-generation>
    l2pbbn-generation
   </l2pbbn-generation>
   <l2pbbn-sequence-number>
    l2pbbn-sequence-number
   </l2pbbn-sequence-number>
   <l2pbbn-handle>
    l2pbbn-handle
   </l2pbbn-handle>
   <l2pbbn-mac-address>
    l2pbbn-mac-address
   </l2pbbn-mac-address>
  </l2ald-pbbn-entry>
</l2ald-pbbn>
```

Description

<l2ald-pbn>

Usage

```
<l2ald-pbn>
  <l2ald-pbn-entry>....</l2ald-pbn-entry>
</l2ald-pbn>
```

Description

<l2ald-pbn-entry>

Usage

```
<l2ald-pbn-entry>
  <l2pbn-logical-system>
   l2pbn-logical-system
  </l2pbn-logical-system>
  <l2pbn-rtb>
   l2pbn-rtb
  </l2pbn-rtb>
  <l2pbn-rtb-bb>
   l2pbn-rtb-bb
  </l2pbn-rtb-bb>
  <l2pbn-bridging-domain>
   l2pbn-bridging-domain
  </l2pbn-bridging-domain>
  <l2pbn-pbn-bd>
   l2pbn-pbn-bd
  </l2pbn-pbn-bd>
  <l2pbn-pbbn-bd>
   l2pbn-pbbn-bd
  </l2pbn-pbbn-bd>
  <l2pbn-svlan>
```

```
    l2pbn-svlan
  </l2pbn-svlan>
  <l2pbn-isid>
    l2pbn-isid
  </l2pbn-isid>
  <l2pbn-bvlan>
    l2pbn-bvlan
  </l2pbn-bvlan>
  <l2pbn-flags>
    l2pbn-flags
  </l2pbn-flags>
  <l2pbn-pbn-bd-index>
    l2pbn-pbn-bd-index
  </l2pbn-pbn-bd-index>
  <l2pbn-pbbn-bd-index>
    l2pbn-pbbn-bd-index
  </l2pbn-pbbn-bd-index>
  <l2pbn-generation>
    l2pbn-generation
  </l2pbn-generation>
  <l2pbn-sequence-number>
    l2pbn-sequence-number
  </l2pbn-sequence-number>
  <l2pbn-handle>
    l2pbn-handle
  </l2pbn-handle>
  <l2pbn-mac-address>
    l2pbn-mac-address
  </l2pbn-mac-address>
</l2ald-pbn-entry>
```

Description

<l2ald-pbn-entry>

Usage

```
<l2ald-pbn>
  <l2ald-pbn-entry>
    <l2pbn-logical-system>
      l2pbn-logical-system
    </l2pbn-logical-system>
    <l2pbn-rtb>
      l2pbn-rtb
    </l2pbn-rtb>
    <l2pbn-rtb-bb>
      l2pbn-rtb-bb
    </l2pbn-rtb-bb>
    <l2pbn-bridging-domain>
      l2pbn-bridging-domain
    </l2pbn-bridging-domain>
    <l2pbn-pbn-bd>
      l2pbn-pbn-bd
    </l2pbn-pbn-bd>
    <l2pbn-pbbn-bd>
      l2pbn-pbbn-bd
```


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```
    </l2pbn-pbbn-bd>
    <l2pbn-svlan>
      l2pbn-svlan
    </l2pbn-svlan>
    <l2pbn-isid>
      l2pbn-isid
    </l2pbn-isid>
    <l2pbn-bvlan>
      l2pbn-bvlan
    </l2pbn-bvlan>
    <l2pbn-flags>
      l2pbn-flags
    </l2pbn-flags>
    <l2pbn-pbn-bd-index>
      l2pbn-pbn-bd-index
    </l2pbn-pbn-bd-index>
    <l2pbn-pbbn-bd-index>
      l2pbn-pbbn-bd-index
    </l2pbn-pbbn-bd-index>
    <l2pbn-generation>
      l2pbn-generation
    </l2pbn-generation>
    <l2pbn-sequence-number>
      l2pbn-sequence-number
    </l2pbn-sequence-number>
    <l2pbn-handle>
      l2pbn-handle
    </l2pbn-handle>
    <l2pbn-mac-address>
      l2pbn-mac-address
    </l2pbn-mac-address>
  </l2ald-pbn-entry>
</l2ald-pbn>
```

Description

<l2ald-perf-counters>

Usage

```
<l2ald-perf-counters>
  <perf-desc>
    perf-desc
  </perf-desc>
  <perf-count>
    perf-count
  </perf-count>
  <perf-start-time-sec>
    perf-start-time-sec
  </perf-start-time-sec>
  <perf-start-time-usec>
    perf-start-time-usec
  </perf-start-time-usec>
  <perf-end-time-sec>
    perf-end-time-sec
  </perf-end-time-sec>
```

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```
<perf-end-time-usec>
  perf-end-time-usec
</perf-end-time-usec>
<perf-diff-time-sec>
  perf-diff-time-sec
</perf-diff-time-sec>
<perf-diff-time-usec>
  perf-diff-time-usec
</perf-diff-time-usec>
</l2ald-perf-counters>
```

Description Show L2 address learning performance information

<l2ald-rbeb-entry>

Usage

```
<l2ald-rbeb-entry>
  <l2-rbeb-logical-system>
    l2-rbeb-logical-system
  </l2-rbeb-logical-system>
  <l2-rbeb-routing-instance>
    l2-rbeb-routing-instance
  </l2-rbeb-routing-instance>
  <l2-rbeb-le-index>
    l2-rbeb-le-index
  </l2-rbeb-le-index>
  <l2-rbeb-mac-address>
    l2-rbeb-mac-address
  </l2-rbeb-mac-address>
  <l2-rbeb-time-left-sec>
    l2-rbeb-time-left-sec
  </l2-rbeb-time-left-sec>
  <l2-rbeb-time-left-msec>
    l2-rbeb-time-left-msec
  </l2-rbeb-time-left-msec>
  <l2-rbeb-flags>
    l2-rbeb-flags
  </l2-rbeb-flags>
  <l2-rbeb-state-flags>
    l2-rbeb-state-flags
  </l2-rbeb-state-flags>
</l2ald-rbeb-entry>
```

Description

<l2ald-rbeb-entry>

Usage

```
<l2ald-rbeb-information>
  <l2ald-rbeb-entry>
    <l2-rbeb-logical-system>
      l2-rbeb-logical-system
    </l2-rbeb-logical-system>
```


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```
    <l2-rbeb-routing-instance>
      l2-rbeb-routing-instance
    </l2-rbeb-routing-instance>
    <l2-rbeb-le-index>
      l2-rbeb-le-index
    </l2-rbeb-le-index>
    <l2-rbeb-mac-address>
      l2-rbeb-mac-address
    </l2-rbeb-mac-address>
    <l2-rbeb-time-left-sec>
      l2-rbeb-time-left-sec
    </l2-rbeb-time-left-sec>
    <l2-rbeb-time-left-msec>
      l2-rbeb-time-left-msec
    </l2-rbeb-time-left-msec>
    <l2-rbeb-flags>
      l2-rbeb-flags
    </l2-rbeb-flags>
    <l2-rbeb-state-flags>
      l2-rbeb-state-flags
    </l2-rbeb-state-flags>
  </l2ald-rbeb-entry>
</l2ald-rbeb-information>
```

Description

<l2ald-rbeb-information>

Usage

```
<l2ald-rbeb-information>
  <l2ald-rbeb-entry>....</l2ald-rbeb-entry>
</l2ald-rbeb-information>
```

Description

<l2ald-rg-information>

Usage

```
<l2ald-rg-information>
  <l2ald-mc-ae-rg-entry>....</l2ald-mc-ae-rg-entry>
  <l2ald-mc-ae-sh-remote-mac-entry>....</l2ald-mc-ae-sh-remote-mac-entry>
  <l2ald-mc-ae-mh-remote-mac-entry>....</l2ald-mc-ae-mh-remote-mac-entry>
  <l2ald-mc-ae-arp-entry>....</l2ald-mc-ae-arp-entry>
</l2ald-rg-information>
```

Description

<l2ald-rtb-entry>

Usage

```
<l2ald-rtb-entry>
  <l2rtb-name>
    l2rtb-name
```

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```
</l2rtb-name>
<l2rtb-bridging-domain>
  l2rtb-bridging-domain
</l2rtb-bridging-domain>
<l2rtb-id>
  l2rtb-id
</l2rtb-id>
<l2bd-id>
  l2bd-id
</l2bd-id>
<l2rtb-l2irb-ifl-index>
  l2rtb-l2irb-ifl-index
</l2rtb-l2irb-ifl-index>
<l2bd-vlan-id>
  l2bd-vlan-id
</l2bd-vlan-id>
<l2rtb-logical-system>
  l2rtb-logical-system
</l2rtb-logical-system>
<l2rtb-sequence-number>
  l2rtb-sequence-number
</l2rtb-sequence-number>
<l2rtb-mac-limit>
  l2rtb-mac-limit
</l2rtb-mac-limit>
<l2rtb-macs-learned>
  l2rtb-macs-learned
</l2rtb-macs-learned>
<l2rtb-config-smacs-learned>
  l2rtb-config-smacs-learned
</l2rtb-config-smacs-learned>
<l2rtb-non-config-smacs-learned>
  l2rtb-non-config-smacs-learned
</l2rtb-non-config-smacs-learned>
<l2rtb-flags>
  l2rtb-flags
</l2rtb-flags>
<l2rtb-peer-pbbn-rtb-id>
  l2rtb-peer-pbbn-rtb-id
</l2rtb-peer-pbbn-rtb-id>
<l2rtb-irb-interface>
  l2rtb-irb-interface
</l2rtb-irb-interface>
<l2rtb-irb-interface-index>
  l2rtb-irb-interface-index
</l2rtb-irb-interface-index>
<l2rtb-handle>
  l2rtb-handle
</l2rtb-handle>
<l2rtb-config-bd-vlan>
  l2rtb-config-bd-vlan
</l2rtb-config-bd-vlan>
<l2rtb-config-operation>
  l2rtb-config-operation
</l2rtb-config-operation>
<l2rtb-config-flags>
```


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```
  l2rtb-config-flags
 </l2rtb-config-flags>
 <l2rtb-config-params>
  l2rtb-config-params
 </l2rtb-config-params>
 <l2rtb-config-ownership-flags>
  l2rtb-config-ownership-flags
 </l2rtb-config-ownership-flags>
 <l2rtb-config-mvrp-ref-count>
  l2rtb-config-mvrp-ref-count
 </l2rtb-config-mvrp-ref-count>
 <l2rtb-instance-type>
  l2rtb-instance-type
 </l2rtb-instance-type>
 <l2rtb-config-smac-count>
  l2rtb-config-smac-count
 </l2rtb-config-smac-count>
 <l2rtb-rtsock-write-errors>
  l2rtb-rtsock-write-errors
 </l2rtb-rtsock-write-errors>
 <l2rtb-ownership-flags>
  l2rtb-ownership-flags
 </l2rtb-ownership-flags>
 <l2rtb-configured-service-id>
  l2rtb-configured-service-id
 </l2rtb-configured-service-id>
 <l2rtb-active-service-id>
  l2rtb-active-service-id
 </l2rtb-active-service-id>
 <l2rtb-configured-bd-service-id>
  l2rtb-configured-bd-service-id
 </l2rtb-configured-bd-service-id>
 <l2rtb-active-bd-service-id>
  l2rtb-active-bd-service-id
 </l2rtb-active-bd-service-id>
 <l2rtb-configured-rg-id>
  l2rtb-configured-rg-id
 </l2rtb-configured-rg-id>
 <l2rtb-active-rg-id>
  l2rtb-active-rg-id
 </l2rtb-active-rg-id>
</l2ald-rtb-entry>
```

Description

<l2ald-rtb-entry>

Usage

```
<bridge-statistics-information>
 <l2ald-rtb-entry>
  <l2rtb-name>
   l2rtb-name
  </l2rtb-name>
  <l2rtb-bridging-domain>
   l2rtb-bridging-domain
```

```
</l2rtb-bridging-domain>
<l2rtb-id>
  l2rtb-id
</l2rtb-id>
<l2bd-id>
  l2bd-id
</l2bd-id>
<l2rtb-l2irb-ifl-index>
  l2rtb-l2irb-ifl-index
</l2rtb-l2irb-ifl-index>
<l2bd-vlan-id>
  l2bd-vlan-id
</l2bd-vlan-id>
<l2rtb-logical-system>
  l2rtb-logical-system
</l2rtb-logical-system>
<l2rtb-sequence-number>
  l2rtb-sequence-number
</l2rtb-sequence-number>
<l2rtb-mac-limit>
  l2rtb-mac-limit
</l2rtb-mac-limit>
<l2rtb-macs-learned>
  l2rtb-macs-learned
</l2rtb-macs-learned>
<l2rtb-config-smacs-learned>
  l2rtb-config-smacs-learned
</l2rtb-config-smacs-learned>
<l2rtb-non-config-smacs-learned>
  l2rtb-non-config-smacs-learned
</l2rtb-non-config-smacs-learned>
<l2rtb-flags>
  l2rtb-flags
</l2rtb-flags>
<l2rtb-peer-pbbn-rtb-id>
  l2rtb-peer-pbbn-rtb-id
</l2rtb-peer-pbbn-rtb-id>
<l2rtb-irb-interface>
  l2rtb-irb-interface
</l2rtb-irb-interface>
<l2rtb-irb-interface-index>
  l2rtb-irb-interface-index
</l2rtb-irb-interface-index>
<l2rtb-handle>
  l2rtb-handle
</l2rtb-handle>
<l2rtb-config-bd-vlan>
  l2rtb-config-bd-vlan
</l2rtb-config-bd-vlan>
<l2rtb-config-operation>
  l2rtb-config-operation
</l2rtb-config-operation>
<l2rtb-config-flags>
  l2rtb-config-flags
</l2rtb-config-flags>
<l2rtb-config-params>
```


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```
    l2rtb-config-params
   </l2rtb-config-params>
   <l2rtb-config-ownership-flags>
    l2rtb-config-ownership-flags
   </l2rtb-config-ownership-flags>
   <l2rtb-config-mvrp-ref-count>
    l2rtb-config-mvrp-ref-count
   </l2rtb-config-mvrp-ref-count>
   <l2rtb-instance-type>
    l2rtb-instance-type
   </l2rtb-instance-type>
   <l2rtb-config-smac-count>
    l2rtb-config-smac-count
   </l2rtb-config-smac-count>
   <l2rtb-rtsock-write-errors>
    l2rtb-rtsock-write-errors
   </l2rtb-rtsock-write-errors>
   <l2rtb-ownership-flags>
    l2rtb-ownership-flags
   </l2rtb-ownership-flags>
   <l2rtb-configured-service-id>
    l2rtb-configured-service-id
   </l2rtb-configured-service-id>
   <l2rtb-active-service-id>
    l2rtb-active-service-id
   </l2rtb-active-service-id>
   <l2rtb-configured-bd-service-id>
    l2rtb-configured-bd-service-id
   </l2rtb-configured-bd-service-id>
   <l2rtb-active-bd-service-id>
    l2rtb-active-bd-service-id
   </l2rtb-active-bd-service-id>
   <l2rtb-configured-rg-id>
    l2rtb-configured-rg-id
   </l2rtb-configured-rg-id>
   <l2rtb-active-rg-id>
    l2rtb-active-rg-id
   </l2rtb-active-rg-id>
  </l2ald-rtb-entry>
</bridge-statistics-information>
```

Description

<l2ald-rtb-if-mac-count>

Usage

```
<l2ald-rtb-if-mac-count>
  <l2ald-rtb-if-mac-count-entry>....</l2ald-rtb-if-mac-count-entry>
</l2ald-rtb-if-mac-count>
```

Description MAC address count for all the interfaces in the routing instance

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<l2ald-rtb-if-mac-count>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>
    <l2ald-rtb-if-mac-count>
      <l2ald-rtb-if-mac-count-entry>....</l2ald-rtb-if-mac-count-entry>
    </l2ald-rtb-if-mac-count>
  </l2ald-rtb-mac-count-entry>
</l2ald-rtb-mac-count>
```

Description MAC address count for all the interfaces in the routing instance

<l2ald-rtb-if-mac-count-entry>

Usage

```
<l2ald-rtb-if-mac-count>
  <l2ald-rtb-if-mac-count-entry>
    <interface-name>
      interface-name
    </interface-name>
    <mac-count>
      mac-count
    </mac-count>
  </l2ald-rtb-if-mac-count-entry>
</l2ald-rtb-if-mac-count>
```

Description

<l2ald-rtb-if-mac-count-entry>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>
    <l2ald-rtb-if-mac-count>
      <l2ald-rtb-if-mac-count-entry>
        <interface-name>
          interface-name
        </interface-name>
        <mac-count>
          mac-count
        </mac-count>
      </l2ald-rtb-if-mac-count-entry>
    </l2ald-rtb-if-mac-count>
  </l2ald-rtb-mac-count-entry>
</l2ald-rtb-mac-count>
```

Description

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<l2ald-rtb-learn-vlan-mac-count>

Usage

```
<l2ald-rtb-learn-vlan-mac-count>
<l2ald-rtb-learn-vlan-mac-count-entry>....</l2ald-rtb-learn-vlan-mac-count-entry>

</l2ald-rtb-learn-vlan-mac-count>
```

Description MAC address count for all the learn vlans within the routing instance

<l2ald-rtb-learn-vlan-mac-count>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>
    <l2ald-rtb-learn-vlan-mac-count>

<l2ald-rtb-learn-vlan-mac-count-entry>....</l2ald-rtb-learn-vlan-mac-count-entry>
    </l2ald-rtb-learn-vlan-mac-count>
  </l2ald-rtb-mac-count-entry>
</l2ald-rtb-mac-count>
```

Description MAC address count for all the learn vlans within the routing instance

<l2ald-rtb-learn-vlan-mac-count-entry>

Usage

```
<l2ald-rtb-learn-vlan-mac-count>
  <l2ald-rtb-learn-vlan-mac-count-entry>
    <learn-vlan>
      learn-vlan
    </learn-vlan>
    <mac-count>
      mac-count
    </mac-count>
  </l2ald-rtb-learn-vlan-mac-count-entry>
</l2ald-rtb-learn-vlan-mac-count>
```

Description

<l2ald-rtb-learn-vlan-mac-count-entry>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>
    <l2ald-rtb-learn-vlan-mac-count>
      <l2ald-rtb-learn-vlan-mac-count-entry>
        <learn-vlan>
          learn-vlan
        </learn-vlan>
        <mac-count>
```

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```
            mac-count
           </mac-count>
          </l2ald-rtb-learn-vlan-mac-count-entry>
        </l2ald-rtb-learn-vlan-mac-count>
      </l2ald-rtb-mac-count-entry>
    </l2ald-rtb-mac-count>
```

Description

<l2ald-rtb-mac-count>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>....</l2ald-rtb-mac-count-entry>
</l2ald-rtb-mac-count>
```

Description

<l2ald-rtb-mac-count-entry>

Usage

```
<l2ald-rtb-mac-count>
  <l2ald-rtb-mac-count-entry>
    <rtb-name>
      rtb-name
    </rtb-name>
    <bd-name>
      bd-name
    </bd-name>
    <rtb-mac-count>
      rtb-mac-count
    </rtb-mac-count>
    <l2ald-rtb-if-mac-count>....</l2ald-rtb-if-mac-count>
    <l2ald-rtb-learn-vlan-mac-count>....</l2ald-rtb-learn-vlan-mac-count>
  </l2ald-rtb-mac-count-entry>
</l2ald-rtb-mac-count>
```

Description

<l2ald-rtb-mac-learn-count>

Usage

```
<l2ald-rtb-mac-learn-count>
  <l2ald-rtb-mac-learn-address>
    l2ald-rtb-mac-learn-address
  </l2ald-rtb-mac-learn-address>
  <l2ald-rtb-mac-learn-num-times>
    l2ald-rtb-mac-learn-num-times
  </l2ald-rtb-mac-learn-num-times>
</l2ald-rtb-mac-learn-count>
```

Description

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<l2ald-rtb-macdb>

Usage

```
<l2ald-rtb-macdb>
  <l2ald-macdb-rtb-name>
    l2ald-macdb-rtb-name
  </l2ald-macdb-rtb-name>
  <l2ald-mac-entry>....</l2ald-mac-entry>
</l2ald-rtb-macdb>
```

Description

<l2ald-vpls-flood-event-info>

Usage

```
<l2ald-vpls-flood-event-info>
  <event-name>
    event-name
  </event-name>
  <event-type>
    event-type
  </event-type>
  <event-owner>
    event-owner
  </event-owner>
  <event-op>
    event-op
  </event-op>
  <event-error>
    event-error
  </event-error>
</l2ald-vpls-flood-event-info>
```

Description

<l2ald-vpls-flood-event-info>

Usage

```
<l2ald-vpls-flood-next-event>
  <l2ald-vpls-flood-event-info>
    <event-name>
      event-name
    </event-name>
    <event-type>
      event-type
    </event-type>
    <event-owner>
      event-owner
    </event-owner>
    <event-op>
      event-op
    </event-op>
    <event-error>
```

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```
      event-error
    </event-error>
  </l2ald-vpls-flood-event-info>
</l2ald-vpls-flood-next-event>
```

Description

<l2ald-vpls-flood-event-info>

Usage

```
<l2ald-vpls-flood-event-list>
  <l2ald-vpls-flood-event-info>
    <event-name>
      event-name
    </event-name>
    <event-type>
      event-type
    </event-type>
    <event-owner>
      event-owner
    </event-owner>
    <event-op>
      event-op
    </event-op>
    <event-error>
      event-error
    </event-error>
  </l2ald-vpls-flood-event-info>
</l2ald-vpls-flood-event-list>
```

Description

<l2ald-vpls-flood-event-info>

Usage

```
<l2ald-vpls-flood-event-queue>
  <l2ald-vpls-flood-next-event>
    <l2ald-vpls-flood-event-info>
      <event-name>
        event-name
      </event-name>
      <event-type>
        event-type
      </event-type>
      <event-owner>
        event-owner
      </event-owner>
      <event-op>
        event-op
      </event-op>
      <event-error>
        event-error
      </event-error>
    </l2ald-vpls-flood-event-info>
```


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```
  </l2ald-vpls-flood-next-event>
</l2ald-vpls-flood-event-queue>
```

Description

<l2ald-vpls-flood-event-info>

Usage

```
<l2ald-vpls-flood-event-queue>
  <l2ald-vpls-flood-event-list>
    <l2ald-vpls-flood-event-info>
      <event-name>
        event-name
      </event-name>
      <event-type>
        event-type
      </event-type>
      <event-owner>
        event-owner
      </event-owner>
      <event-op>
        event-op
      </event-op>
      <event-error>
        event-error
      </event-error>
    </l2ald-vpls-flood-event-info>
  </l2ald-vpls-flood-event-list>
</l2ald-vpls-flood-event-queue>
```

Description

<l2ald-vpls-flood-event-list>

Usage

```
<l2ald-vpls-flood-event-list>
  <l2ald-vpls-flood-event-info>....</l2ald-vpls-flood-event-info>
</l2ald-vpls-flood-event-list>
```

Description

<l2ald-vpls-flood-event-list>

Usage

```
<l2ald-vpls-flood-event-queue>
  <l2ald-vpls-flood-event-list>
    <l2ald-vpls-flood-event-info>....</l2ald-vpls-flood-event-info>
  </l2ald-vpls-flood-event-list>
</l2ald-vpls-flood-event-queue>
```

Description

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<l2ald-vpls-flood-event-queue>

Usage

```
<l2ald-vpls-flood-event-queue>
  <l2ald-vpls-flood-next-event>....</l2ald-vpls-flood-next-event>
  <l2ald-vpls-flood-event-list>....</l2ald-vpls-flood-event-list>
</l2ald-vpls-flood-event-queue>
```

Description

<l2ald-vpls-flood-instance>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>....</l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<l2ald-vpls-flood-instance-information>

Usage

```
<l2ald-vpls-flood-instance-information>
  <instance-name>
    instance-name
  </instance-name>
  <bridging-domain>
    bridging-domain
  </bridging-domain>
  <num-active-ce-iffs>
    num-active-ce-iffs
  </num-active-ce-iffs>
  <num-active-ve-iffs>
    num-active-ve-iffs
  </num-active-ve-iffs>
  <bridge-domain-name>
    bridge-domain-name
  </bridge-domain-name>
  <flood-route>....</flood-route>
</l2ald-vpls-flood-instance-information>
```

Description

<l2ald-vpls-flood-instance-information>

Usage

```
<l2ald-vpls-lr-information>
  <l2ald-vpls-flood-instance-information>
    <instance-name>
      instance-name
    </instance-name>
    <bridging-domain>
```


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```
      bridging-domain
    </bridging-domain>
    <num-active-ce-iffs>
      num-active-ce-iffs
    </num-active-ce-iffs>
    <num-active-ve-iffs>
      num-active-ve-iffs
    </num-active-ve-iffs>
    <bridge-domain-name>
      bridge-domain-name
    </bridge-domain-name>
    <flood-route>....</flood-route>
  </l2ald-vpls-flood-instance-information>
</l2ald-vpls-lr-information>
```

Description

<l2ald-vpls-flood-instance-information>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <l2ald-vpls-flood-instance-information>
      <instance-name>
        instance-name
      </instance-name>
      <bridging-domain>
        bridging-domain
      </bridging-domain>
      <num-active-ce-iffs>
        num-active-ce-iffs
      </num-active-ce-iffs>
      <num-active-ve-iffs>
        num-active-ve-iffs
      </num-active-ve-iffs>
      <bridge-domain-name>
        bridge-domain-name
      </bridge-domain-name>
      <flood-route>....</flood-route>
    </l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<l2ald-vpls-flood-next-event>

Usage

```
<l2ald-vpls-flood-next-event>
  <l2ald-vpls-flood-event-info>....</l2ald-vpls-flood-event-info>
</l2ald-vpls-flood-next-event>
```

Description

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<l2ald-vpls-flood-next-event>

Usage

```
<l2ald-vpls-flood-event-queue>
  <l2ald-vpls-flood-next-event>
    <l2ald-vpls-flood-event-info>....</l2ald-vpls-flood-event-info>
  </l2ald-vpls-flood-next-event>
</l2ald-vpls-flood-event-queue>
```

Description

<l2ald-vpls-flood-route-information>

Usage

```
<l2ald-vpls-flood-route-information>
  <flood-route>....</flood-route>
</l2ald-vpls-flood-route-information>
```

Description

<l2ald-vpls-lr-information>

Usage

```
<l2ald-vpls-lr-information>
  <logical-system-info>....</logical-system-info>

<l2ald-vpls-flood-instance-information>....</l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
```

Description

<l2ald-vpls-lr-information>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <logical-system-info>....</logical-system-info>

<l2ald-vpls-flood-instance-information>....</l2ald-vpls-flood-instance-information>
  </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<logical-system-info>

Usage

```
<logical-system-info>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
```


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```
</logical-system-info>
```

Description

<logical-system-info>

Usage

```
<l2ald-vpls-lr-information>
  <logical-system-info>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
  </logical-system-info>
</l2ald-vpls-lr-information>
```

Description

<logical-system-info>

Usage

```
<l2ald-vpls-flood-instance>
  <l2ald-vpls-lr-information>
    <logical-system-info>
      <logical-system-name>
        logical-system-name
      </logical-system-name>
    </logical-system-info>
  </l2ald-vpls-lr-information>
</l2ald-vpls-flood-instance>
```

Description

<logical-system-info>

Usage

```
<l2ald-bridge-domain-lr-information>
  <logical-system-info>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
  </logical-system-info>
</l2ald-bridge-domain-lr-information>
```

Description

<logical-system-info>

Usage

```
<l2ald-bridge-domain-flood-instance>
  <l2ald-bridge-domain-lr-information>
    <logical-system-info>
      <logical-system-name>
```

```
            logical-system-name
          </logical-system-name>
        </logical-system-info>
      </l2ald-bridge-domain-lr-information>
    </l2ald-bridge-domain-flood-instance>
```

Description

Summary of LACP Response Response Tags

<lacp-interface-information>

Usage

```
<lacp-interface-information-list>
  <lacp-interface-information>
    <lag-lacp-header>....</lag-lacp-header>
    <lag-lacp-info>....</lag-lacp-info>
    <lag-lacp-state>....</lag-lacp-state>
    <lag-lacp-protocol>....</lag-lacp-protocol>
  </lacp-interface-information>
</lacp-interface-information-list>
```

Description Information about an aggregated interface

<lacp-interface-information-list>

Usage

```
<lacp-interface-information-list>
  <lacp-interface-information>....</lacp-interface-information>
</lacp-interface-information-list>
```

Description Information about one or more aggregated interfaces

<lacp-interface-statistics>

Usage

```
<lacp-interface-statistics-list>
  <lacp-interface-statistics>
    <lag-lacp-header>....</lag-lacp-header>
    <lag-lacp-statistics>....</lag-lacp-statistics>
  </lacp-interface-statistics>
</lacp-interface-statistics-list>
```

Description Statistics for an aggregated interface

<lacp-interface-statistics-list>

Usage

```
<lacp-interface-statistics-list>
```


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```
  <lacp-interface-statistics>....</lacp-interface-statistics>
</lacp-interface-statistics-list>
```

Description Information about one or more aggregated interfaces

<lacp-link-switchover>

Usage

```
<lacp-link-switchover>
  <aggregate-name>
    aggregate-name
  </aggregate-name>
  <lacp-status>
    lacp-status
  </lacp-status>
</lacp-link-switchover>
```

Description Lacp Link-swithover request

<lag-lacp-header>

Usage

```
<lag-lacp-header>
  <aggregate-name>
    aggregate-name
  </aggregate-name>
</lag-lacp-header>
```

Description LACP header

<lag-lacp-header>

Usage

```
<lacp-interface-information-list>
  <lacp-interface-information>
    <lag-lacp-header>
      <aggregate-name>
        aggregate-name
      </aggregate-name>
    </lag-lacp-header>
  </lacp-interface-information>
</lacp-interface-information-list>
```

Description LACP header

<lag-lacp-header>

Usage

```
<lacp-interface-statistics-list>
```

```
<lacp-interface-statistics>
  <lag-lacp-header>
    <aggregate-name>
      aggregate-name
    </aggregate-name>
  </lag-lacp-header>
 </lacp-interface-statistics>
</lacp-interface-statistics-list>
```

Description LACP header

<lag-lacp-info>

Usage

```
<lag-lacp-info>
 <name>
  name
 </name>
 <lacp-role>
  lacp-role
 </lacp-role>
 <lacp-sys-priority>
  lacp-sys-priority
 </lacp-sys-priority>
 <lacp-system-id>
  lacp-system-id
 </lacp-system-id>
 <lacp-port-priority>
  lacp-port-priority
 </lacp-port-priority>
 <lacp-port-number>
  lacp-port-number
 </lacp-port-number>
 <lacp-port-key>
  lacp-port-key
 </lacp-port-key>
</lag-lacp-info>
```

Description LACP information

<lag-lacp-info>

Usage

```
<lacp-interface-information-list>
 <lacp-interface-information>
  <lag-lacp-info>
   <name>
    name
   </name>
   <lacp-role>
    lacp-role
   </lacp-role>
```


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```
        <lacp-sys-priority>
          lacp-sys-priority
        </lacp-sys-priority>
        <lacp-system-id>
          lacp-system-id
        </lacp-system-id>
        <lacp-port-priority>
          lacp-port-priority
        </lacp-port-priority>
        <lacp-port-number>
          lacp-port-number
        </lacp-port-number>
        <lacp-port-key>
          lacp-port-key
        </lacp-port-key>
      </lag-lacp-info>
    </lacp-interface-information>
  </lacp-interface-information-list>
```

Description LACP information

<lag-lacp-protocol>

Usage

```
<lag-lacp-protocol>
  <name>
    name
  </name>
  <lacp-receive-state>
    lacp-receive-state
  </lacp-receive-state>
  <lacp-transmit-state>
    lacp-transmit-state
  </lacp-transmit-state>
  <lacp-mux-state>
    lacp-mux-state
  </lacp-mux-state>
</lag-lacp-protocol>
```

Description LACP protocol information

<lag-lacp-protocol>

Usage

```
<lacp-interface-information-list>
  <lacp-interface-information>
    <lag-lacp-protocol>
      <name>
        name
      </name>
      <lacp-receive-state>
        lacp-receive-state
```

```
        </lacp-receive-state>
        <lacp-transmit-state>
          lacp-transmit-state
        </lacp-transmit-state>
        <lacp-mux-state>
          lacp-mux-state
        </lacp-mux-state>
      </lag-lacp-protocol>
    </lacp-interface-information>
  </lacp-interface-information-list>
```

Description LACP protocol information

<lag-lacp-state>

Usage

```
<lag-lacp-state>
  <name>
    name
  </name>
  <lacp-role>
    lacp-role
  </lacp-role>
  <lacp-expired>
    lacp-expired
  </lacp-expired>
  <lacp-defaulted>
    lacp-defaulted
  </lacp-defaulted>
  <lacp-distributing>
    lacp-distributing
  </lacp-distributing>
  <lacp-collecting>
    lacp-collecting
  </lacp-collecting>
  <lacp-synchronization>
    lacp-synchronization
  </lacp-synchronization>
  <lacp-aggregation>
    lacp-aggregation
  </lacp-aggregation>
  <lacp-timeout>
    lacp-timeout
  </lacp-timeout>
  <lacp-activity>
    lacp-activity
  </lacp-activity>
</lag-lacp-state>
```

Description LACP protocol state information

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<lag-lacp-state>

Usage

```
<lacp-interface-information-list>
  <lacp-interface-information>
    <lag-lacp-state>
      <name>
        name
      </name>
      <lacp-role>
        lacp-role
      </lacp-role>
      <lacp-expired>
        lacp-expired
      </lacp-expired>
      <lacp-defaulted>
        lacp-defaulted
      </lacp-defaulted>
      <lacp-distributing>
        lacp-distributing
      </lacp-distributing>
      <lacp-collecting>
        lacp-collecting
      </lacp-collecting>
      <lacp-synchronization>
        lacp-synchronization
      </lacp-synchronization>
      <lacp-aggregation>
        lacp-aggregation
      </lacp-aggregation>
      <lacp-timeout>
        lacp-timeout
      </lacp-timeout>
      <lacp-activity>
        lacp-activity
      </lacp-activity>
    </lag-lacp-state>
  </lacp-interface-information>
</lacp-interface-information-list>
```

Description LACP protocol state information

<lag-lacp-statistics>

Usage

```
<lag-lacp-statistics>
  <name>
    name
  </name>
  <lacp-rx-packets>
    lacp-rx-packets
  </lacp-rx-packets>
  <lacp-tx-packets>
```

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```
    lacp-tx-packets
   </lacp-tx-packets>
   <unknown-rx-packets>
    unknown-rx-packets
   </unknown-rx-packets>
   <illegal-rx-packets>
    illegal-rx-packets
   </illegal-rx-packets>
</lag-lacp-statistics>
```

Description

<lag-lacp-statistics>

Usage

```
<lacp-interface-statistics-list>
  <lacp-interface-statistics>
    <lag-lacp-statistics>
      <name>
        name
      </name>
      <lacp-rx-packets>
        lacp-rx-packets
      </lacp-rx-packets>
      <lacp-tx-packets>
        lacp-tx-packets
      </lacp-tx-packets>
      <unknown-rx-packets>
        unknown-rx-packets
      </unknown-rx-packets>
      <illegal-rx-packets>
        illegal-rx-packets
      </illegal-rx-packets>
    </lag-lacp-statistics>
  </lacp-interface-statistics>
</lacp-interface-statistics-list>
```

Description

<mc-ae-clink>

Usage

```
<mc-ae-clink>
  <local-ip>
    local-ip
  </local-ip>
  <remote-ip>
    remote-ip
  </remote-ip>
  <clink-type>
    clink-type
  </clink-type>
  <la-status>
    la-status
```


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```
  </la-status>
  <pa-status>
   pa-status
  </pa-status>
  <clink-state>
   clink-state
  </clink-state>
  <vc-id>
   vc-id
  </vc-id>
</mc-ae-clink>
```

Description

<mc-ae-clink>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>
    <mc-ae-clink>
      <local-ip>
        local-ip
      </local-ip>
      <remote-ip>
        remote-ip
      </remote-ip>
      <clink-type>
        clink-type
      </clink-type>
      <la-status>
        la-status
      </la-status>
      <pa-status>
        pa-status
      </pa-status>
      <clink-state>
        clink-state
      </clink-state>
      <vc-id>
        vc-id
      </vc-id>
    </mc-ae-clink>
  </mc-ae-status-information>
</mc-ae-status-information-list>
```

Description

<mc-ae-ifl-list>

Usage

```
<mc-ae-ifl-list>
  <logical-interface>
   logical-interface
  </logical-interface>
```

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```
  <topology-type>
    topology-type
  </topology-type>
  <local-logical-interface-state>
    local-logical-interface-state
  </local-logical-interface-state>
  <peer-logical-interface-state>
    peer-logical-interface-state
  </peer-logical-interface-state>
  <mcp-state>
    mcp-state
  </mcp-state>
</mc-ae-ifl-list>
```

Description

<mc-ae-ifl-list>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>
    <mc-ae-ifl-list>
      <logical-interface>
        logical-interface
      </logical-interface>
      <topology-type>
        topology-type
      </topology-type>
      <local-logical-interface-state>
        local-logical-interface-state
      </local-logical-interface-state>
      <peer-logical-interface-state>
        peer-logical-interface-state
      </peer-logical-interface-state>
      <mcp-state>
        mcp-state
      </mcp-state>
    </mc-ae-ifl-list>
  </mc-ae-status-information>
</mc-ae-status-information-list>
```

Description

<mc-ae-status>

Usage

```
<mc-ae-status>
  <member-link>
    member-link
  </member-link>
  <init-sm-state>
    init-sm-state
  </init-sm-state>
  <local-status>
```


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```
    local-status
  </local-status>
  <local-state>
    local-state
  </local-state>
  <peer-status>
    peer-status
  </peer-status>
  <peer-state>
    peer-state
  </peer-state>
</mc-ae-status>
```

Description

<mc-ae-status>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>
    <mc-ae-status>
      <member-link>
        member-link
      </member-link>
      <init-sm-state>
        init-sm-state
      </init-sm-state>
      <local-status>
        local-status
      </local-status>
      <local-state>
        local-state
      </local-state>
      <peer-status>
        peer-status
      </peer-status>
      <peer-state>
        peer-state
      </peer-state>
    </mc-ae-status>
  </mc-ae-status-information>
</mc-ae-status-information-list>
```

Description

<mc-ae-status-information>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>
    <mc-ae-status>....</mc-ae-status>
    <mc-ae-ifl-list>....</mc-ae-ifl-list>
    <mc-ae-stitching-peer>....</mc-ae-stitching-peer>
    <mc-ae-clink>....</mc-ae-clink>
```

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```
  </mc-ae-status-information>
</mc-ae-status-information-list>
```

Description Information about an mc-ae

<mc-ae-status-information-list>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>....</mc-ae-status-information>
</mc-ae-status-information-list>
```

Description Information about one or more mc-ae

<mc-ae-stitching-peer>

Usage

```
<mc-ae-stitching-peer>
  <stitching-peer>
    stitching-peer
  </stitching-peer>
</mc-ae-stitching-peer>
```

Description

<mc-ae-stitching-peer>

Usage

```
<mc-ae-status-information-list>
  <mc-ae-status-information>
    <mc-ae-stitching-peer>
      <stitching-peer>
        stitching-peer
      </stitching-peer>
    </mc-ae-stitching-peer>
  </mc-ae-status-information>
</mc-ae-status-information-list>
```

Description

Summary of Link Fault Management Response Tags

<lfmd-action-profile-information>

Usage

```
<lfmd-information>
  <lfmd-action-profile-information>
    <lfmd-action-profile-name>
      lfmd-action-profile-name
    </lfmd-action-profile-name>
```


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```
    <lfmd-action-profile-invoke-count>
     lfmd-action-profile-invoke-count
    </lfmd-action-profile-invoke-count>
    <lfmd-action-profile-execution-count>
     lfmd-action-profile-execution-count
    </lfmd-action-profile-execution-count>
   </lfmd-action-profile-information>
</lfmd-information>
```

Description Link-fault action profile information

<lfmd-discovery-flags>

Usage

```
<lfmd-information>
 <lfmd-interface-information>
  <lfmd-discovery-flags>
   <lfmd-flag-remote-stable>
    lfmd-flag-remote-stable
   </lfmd-flag-remote-stable>
   <lfmd-flag-remote-evaluating>
    lfmd-flag-remote-evaluating
   </lfmd-flag-remote-evaluating>
   <lfmd-flag-remote-state-valid>
    lfmd-flag-remote-state-valid
   </lfmd-flag-remote-state-valid>
   <lfmd-flag-local-satisfied>
    lfmd-flag-local-satisfied
   </lfmd-flag-local-satisfied>
   <lfmd-flag-local-stable>
    lfmd-flag-local-stable
   </lfmd-flag-local-stable>
   <lfmd-pdu-flags>
    lfmd-pdu-flags
   </lfmd-pdu-flags>
  </lfmd-discovery-flags>
 </lfmd-interface-information>
</lfmd-information>
```

Description

<lfmd-event-current-frame-error>

Usage

```
<lfmd-information>
 <lfmd-interface-information>
  <lfmd-events>
   <lfmd-events-current>
    <lfmd-event-current-frame-error>
     <lfmd-event-frame-error-window>
      lfmd-event-frame-error-window
     </lfmd-event-frame-error-window>
     <lfmd-event-frame-error-threshold>
```

```
                lfmd-event-frame-error-threshold
               </lfmd-event-frame-error-threshold>
               <lfmd-event-frame-error-count>
                lfmd-event-frame-error-count
               </lfmd-event-frame-error-count>
               <lfmd-event-frame-error-total-count>
                lfmd-event-frame-error-total-count
               </lfmd-event-frame-error-total-count>
               <lfmd-event-frame-count>
                lfmd-event-frame-count
               </lfmd-event-frame-count>
              </lfmd-event-current-frame-error>
             </lfmd-events-current>
            </lfmd-events>
           </lfmd-interface-information>
          </lfmd-information>
```

Description Errored frame event current information

<lfmd-event-current-symbol-error>

Usage

```
<lfmd-information>
 <lfmd-interface-information>
  <lfmd-events>
   <lfmd-events-current>
    <lfmd-event-current-symbol-error>
     <lfmd-event-symbol-error-window>
      lfmd-event-symbol-error-window
     </lfmd-event-symbol-error-window>
     <lfmd-event-symbol-error-threshold>
      lfmd-event-symbol-error-threshold
     </lfmd-event-symbol-error-threshold>
     <lfmd-event-symbol-error-count>
      lfmd-event-symbol-error-count
     </lfmd-event-symbol-error-count>
     <lfmd-event-symbol-error-total-count>
      lfmd-event-symbol-error-total-count
     </lfmd-event-symbol-error-total-count>
     <lfmd-event-symbol-count>
      lfmd-event-symbol-count
     </lfmd-event-symbol-count>
    </lfmd-event-current-symbol-error>
   </lfmd-events-current>
  </lfmd-events>
 </lfmd-interface-information>
</lfmd-information>
```

Description Errored symbol period event current information

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<lfmd-event-received-frame-error>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-events>
      <lfmd-events-received>
        <lfmd-event-received-frame-error>
          <lfmd-event-received-frame-error-window>
            lfmd-event-received-frame-error-window
          </lfmd-event-received-frame-error-window>
          <lfmd-event-received-frame-error-threshold>
            lfmd-event-received-frame-error-threshold
          </lfmd-event-received-frame-error-threshold>
          <lfmd-event-received-frame-error-count>
            lfmd-event-received-frame-error-count
          </lfmd-event-received-frame-error-count>
          <lfmd-event-received-frame-error-total-count>
            lfmd-event-received-frame-error-total-count
          </lfmd-event-received-frame-error-total-count>
          <lfmd-event-received-frame-count>
            lfmd-event-received-frame-count
          </lfmd-event-received-frame-count>
        </lfmd-event-received-frame-error>
      </lfmd-events-received>
    </lfmd-events>
  </lfmd-interface-information>
</lfmd-information>
```

Description Errored frame event information

<lfmd-event-received-frame-period-error>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-events>
      <lfmd-events-received>
        <lfmd-event-received-frame-period-error>
          <lfmd-event-received-frame-period-error-window>
            lfmd-event-received-frame-period-error-window
          </lfmd-event-received-frame-period-error-window>
          <lfmd-event-received-frame-period-error-threshold>
            lfmd-event-received-frame-period-error-threshold
          </lfmd-event-received-frame-period-error-threshold>
          <lfmd-event-received-frame-period-error-count>
            lfmd-event-received-frame-period-error-count
          </lfmd-event-received-frame-period-error-count>
          <lfmd-event-received-frame-period-error-total-count>
            lfmd-event-received-frame-period-error-total-count
          </lfmd-event-received-frame-period-error-total-count>
          <lfmd-event-received-frame-period-count>
            lfmd-event-received-frame-period-count
```

```
            </lfmd-event-received-frame-period-count>
           </lfmd-event-received-frame-period-error>
          </lfmd-events-received>
         </lfmd-events>
        </lfmd-interface-information>
       </lfmd-information>
```

Description Errored frame period event information

<lfmd-event-received-frame-seconds-error>

Usage

```
<lfmd-information>
 <lfmd-interface-information>
  <lfmd-events>
   <lfmd-events-received>
    <lfmd-event-received-frame-seconds-error>
     <lfmd-event-received-frame-seconds-error-window>
      lfmd-event-received-frame-seconds-error-window
     </lfmd-event-received-frame-seconds-error-window>
     <lfmd-event-received-frame-seconds-error-threshold>
      lfmd-event-received-frame-seconds-error-threshold
     </lfmd-event-received-frame-seconds-error-threshold>
     <lfmd-event-received-frame-seconds-error-count>
      lfmd-event-received-frame-seconds-error-count
     </lfmd-event-received-frame-seconds-error-count>
     <lfmd-event-received-frame-seconds-error-total-count>
      lfmd-event-received-frame-seconds-error-total-count
     </lfmd-event-received-frame-seconds-error-total-count>
     <lfmd-event-received-frame-seconds-count>
      lfmd-event-received-frame-seconds-count
     </lfmd-event-received-frame-seconds-count>
    </lfmd-event-received-frame-seconds-error>
   </lfmd-events-received>
  </lfmd-events>
 </lfmd-interface-information>
</lfmd-information>
```

Description Errored frame seconds event information

<lfmd-event-received-symbol-error>

Usage

```
<lfmd-information>
 <lfmd-interface-information>
  <lfmd-events>
   <lfmd-events-received>
    <lfmd-event-received-symbol-error>
     <lfmd-event-received-symbol-error-window>
      lfmd-event-received-symbol-error-window
     </lfmd-event-received-symbol-error-window>
     <lfmd-event-received-symbol-error-threshold>
```


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```
            lfmd-event-received-symbol-error-threshold
           </lfmd-event-received-symbol-error-threshold>
           <lfmd-event-received-symbol-error-count>
            lfmd-event-received-symbol-error-count
           </lfmd-event-received-symbol-error-count>
           <lfmd-event-received-symbol-error-total-count>
            lfmd-event-received-symbol-error-total-count
           </lfmd-event-received-symbol-error-total-count>
           <lfmd-event-received-symbol-count>
            lfmd-event-received-symbol-count
           </lfmd-event-received-symbol-count>
          </lfmd-event-received-symbol-error>
         </lfmd-events-received>
        </lfmd-events>
       </lfmd-interface-information>
      </lfmd-information>
```

Description Errored symbol period event information

<lfmd-event-transmitted-frame-error>

Usage

```
      <lfmd-information>
       <lfmd-interface-information>
        <lfmd-events>
         <lfmd-events-transmitted>
          <lfmd-event-transmitted-frame-error>
           <lfmd-event-transmitted-frame-error-window>
            lfmd-event-transmitted-frame-error-window
           </lfmd-event-transmitted-frame-error-window>
           <lfmd-event-transmitted-frame-error-threshold>
            lfmd-event-transmitted-frame-error-threshold
           </lfmd-event-transmitted-frame-error-threshold>
           <lfmd-event-transmitted-frame-error-count>
            lfmd-event-transmitted-frame-error-count
           </lfmd-event-transmitted-frame-error-count>
           <lfmd-event-transmitted-frame-error-total-count>
            lfmd-event-transmitted-frame-error-total-count
           </lfmd-event-transmitted-frame-error-total-count>
           <lfmd-event-transmitted-frame-count>
            lfmd-event-transmitted-frame-count
           </lfmd-event-transmitted-frame-count>
          </lfmd-event-transmitted-frame-error>
         </lfmd-events-transmitted>
        </lfmd-events>
       </lfmd-interface-information>
      </lfmd-information>
```

Description Errored frame event information

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<lfmd-event-transmitted-symbol-error>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-events>
      <lfmd-events-transmitted>
        <lfmd-event-transmitted-symbol-error>
          <lfmd-event-transmitted-symbol-error-window>
            lfmd-event-transmitted-symbol-error-window
          </lfmd-event-transmitted-symbol-error-window>
          <lfmd-event-transmitted-symbol-error-threshold>
            lfmd-event-transmitted-symbol-error-threshold
          </lfmd-event-transmitted-symbol-error-threshold>
          <lfmd-event-transmitted-symbol-error-count>
            lfmd-event-transmitted-symbol-error-count
          </lfmd-event-transmitted-symbol-error-count>
          <lfmd-event-transmitted-symbol-error-total-count>
            lfmd-event-transmitted-symbol-error-total-count
          </lfmd-event-transmitted-symbol-error-total-count>
          <lfmd-event-transmitted-symbol-count>
            lfmd-event-transmitted-symbol-count
          </lfmd-event-transmitted-symbol-count>
        </lfmd-event-transmitted-symbol-error>
      </lfmd-events-transmitted>
    </lfmd-events>
  </lfmd-interface-information>
</lfmd-information>
```

Description Errored symbol period event information

<lfmd-events>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-events>
      <lfmd-events-received>....</lfmd-events-received>
      <lfmd-events-transmitted>....</lfmd-events-transmitted>
      <lfmd-events-current>....</lfmd-events-current>
    </lfmd-events>
  </lfmd-interface-information>
</lfmd-information>
```

Description Event information

<lfmd-events-current>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-events>
```


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```
            <lfmd-events-current>
              <lfmd-event-current-symbol-error>....</lfmd-event-current-symbol-error>
              <lfmd-event-current-frame-error>....</lfmd-event-current-frame-error>
            </lfmd-events-current>
          </lfmd-events>
        </lfmd-interface-information>
      </lfmd-information>
```

Description Current link events

<lfmd-events-received>

Usage

```
      <lfmd-information>
        <lfmd-interface-information>
          <lfmd-events>
            <lfmd-events-received>
              <lfmd-event-received-symbol-error>....</lfmd-event-received-symbol-error>

              <lfmd-event-received-frame-error>....</lfmd-event-received-frame-error>

<lfmd-event-received-frame-period-error>....</lfmd-event-received-frame-period-error>


<lfmd-event-received-frame-seconds-error>....</lfmd-event-received-frame-seconds-error>

            </lfmd-events-received>
          </lfmd-events>
        </lfmd-interface-information>
      </lfmd-information>
```

Description Received link events

<lfmd-events-transmitted>

Usage

```
      <lfmd-information>
        <lfmd-interface-information>
          <lfmd-events>
            <lfmd-events-transmitted>

<lfmd-event-transmitted-symbol-error>....</lfmd-event-transmitted-symbol-error>

<lfmd-event-transmitted-frame-error>....</lfmd-event-transmitted-frame-error>
            </lfmd-events-transmitted>
          </lfmd-events>
        </lfmd-interface-information>
      </lfmd-information>
```

Description Transmitted link events

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<lfmd-information>

Usage

```
<lfmd-information>
  <lfmd-interface-information>....</lfmd-interface-information>
  <lfmd-action-profile-information>....</lfmd-action-profile-information>
</lfmd-information>
```

Description Information about the Link-Fault Management protocol

<lfmd-interface-information>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-interface-name>
      lfmd-interface-name
    </lfmd-interface-name>
    <lfmd-status>
      lfmd-status
    </lfmd-status>
    <lfmd-discovery-state>
      lfmd-discovery-state
    </lfmd-discovery-state>
    <lfmd-discovery-flags>....</lfmd-discovery-flags>
    <lfmd-peer-address>
      lfmd-peer-address
    </lfmd-peer-address>
    <lfmd-peer-mux-action>
      lfmd-peer-mux-action
    </lfmd-peer-mux-action>
    <lfmd-peer-parser-action>
      lfmd-peer-parser-action
    </lfmd-peer-parser-action>
    <lfmd-peer-config-mode>
      lfmd-peer-config-mode
    </lfmd-peer-config-mode>
    <lfmd-peer-config-unidirectional>
      lfmd-peer-config-unidirectional
    </lfmd-peer-config-unidirectional>
    <lfmd-peer-config-loopback>
      lfmd-peer-config-loopback
    </lfmd-peer-config-loopback>
    <lfmd-peer-config-link-events>
      lfmd-peer-config-link-events
    </lfmd-peer-config-link-events>
    <lfmd-peer-config-variable-request>
      lfmd-peer-config-variable-request
    </lfmd-peer-config-variable-request>
    <lfmd-loopback-local-enabled>
      lfmd-loopback-local-enabled
    </lfmd-loopback-local-enabled>
    <lfmd-loopback-remote-enabled>
```


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```
        lfmd-loopback-remote-enabled
      </lfmd-loopback-remote-enabled>
      <lfmd-statistics>....</lfmd-statistics>
      <lfmd-events>....</lfmd-events>
    </lfmd-interface-information>
  </lfmd-information>
```

Description Link-fault management information for one or more interfaces

<lfmd-statistics>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-statistics>
      <lfmd-statistics-received>....</lfmd-statistics-received>
      <lfmd-statistics-transmitted>....</lfmd-statistics-transmitted>
    </lfmd-statistics>
  </lfmd-interface-information>
</lfmd-information>
```

Description Interface statistics

<lfmd-statistics-received>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-statistics>
      <lfmd-statistics-received>
        <lfmd-information-pdus-received>
          lfmd-information-pdus-received
        </lfmd-information-pdus-received>
        <lfmd-event-pdus-received>
          lfmd-event-pdus-received
        </lfmd-event-pdus-received>
        <lfmd-variable-request-pdus-received>
          lfmd-variable-request-pdus-received
        </lfmd-variable-request-pdus-received>
        <lfmd-variable-response-pdus-received>
          lfmd-variable-response-pdus-received
        </lfmd-variable-response-pdus-received>
        <lfmd-loopback-control-pdus-received>
          lfmd-loopback-control-pdus-received
        </lfmd-loopback-control-pdus-received>
        <lfmd-organization-pdus-received>
          lfmd-organization-pdus-received
        </lfmd-organization-pdus-received>
        <lfmd-unknown-pdus-received>
          lfmd-unknown-pdus-received
        </lfmd-unknown-pdus-received>
        <lfmd-critical-event-received>
```

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```
            lfmd-critical-event-received
          </lfmd-critical-event-received>
          <lfmd-dying-gasp-received>
            lfmd-dying-gasp-received
          </lfmd-dying-gasp-received>
          <lfmd-link-fault-received>
            lfmd-link-fault-received
          </lfmd-link-fault-received>
        </lfmd-statistics-received>
      </lfmd-statistics>
    </lfmd-interface-information>
  </lfmd-information>
```

Description OAM receive statistics

<lfmd-statistics-transmitted>

Usage

```
<lfmd-information>
  <lfmd-interface-information>
    <lfmd-statistics>
      <lfmd-statistics-transmitted>
        <lfmd-information-pdus-transmitted>
          lfmd-information-pdus-transmitted
        </lfmd-information-pdus-transmitted>
        <lfmd-event-pdus-transmitted>
          lfmd-event-pdus-transmitted
        </lfmd-event-pdus-transmitted>
        <lfmd-variable-request-pdus-transmitted>
          lfmd-variable-request-pdus-transmitted
        </lfmd-variable-request-pdus-transmitted>
        <lfmd-variable-response-pdus-transmitted>
          lfmd-variable-response-pdus-transmitted
        </lfmd-variable-response-pdus-transmitted>
        <lfmd-loopback-control-pdus-transmitted>
          lfmd-loopback-control-pdus-transmitted
        </lfmd-loopback-control-pdus-transmitted>
        <lfmd-organization-pdus-transmitted>
          lfmd-organization-pdus-transmitted
        </lfmd-organization-pdus-transmitted>
        <lfmd-unknown-pdus-transmitted>
          lfmd-unknown-pdus-transmitted
        </lfmd-unknown-pdus-transmitted>
      </lfmd-statistics-transmitted>
    </lfmd-statistics>
  </lfmd-interface-information>
</lfmd-information>
```

Description OAM transmit statistics

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Summary of License Response Tags

<add-individual-result>

Usage

```
<add-license-results>
  <add-individual-result>
    <operation-status>
      operation-status
    </operation-status>
    <filename>
      filename
    </filename>
    <line-number>
      line-number
    </line-number>
    <name>
      name
    </name>
    <message>
      message
    </message>
  </add-individual-result>
</add-license-results>
```

Description Report status of individual license add operation

<add-license-results>

Usage

```
<add-license-results>
  <add-individual-result>....</add-individual-result>
  <add-error-count>
    add-error-count
  </add-error-count>
  <add-success>
    add-success
  </add-success>
</add-license-results>
```

Description Results of license add operation

<feature>

Usage

```
<feature-block>
  <feature>
    <name>
      name
    </name>
    <description>
```

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```
      description
    </description>
    <validity-information>....</validity-information>
  </feature>
</feature-block>
```

Description A single feature instance

<feature>

Usage

```
<license>
  <feature-block>
    <feature>
      <name>
        name
      </name>
      <description>
        description
      </description>
      <validity-information>....</validity-information>
    </feature>
  </feature-block>
</license>
```

Description A single feature instance

<feature>

Usage

```
<license-information>
  <license>
    <feature-block>
      <feature>
        <name>
          name
        </name>
        <description>
          description
        </description>
        <validity-information>....</validity-information>
      </feature>
    </feature-block>
  </license>
</license-information>
```

Description A single feature instance

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<feature>

Usage

```
<license-summary-information>
  <license-information>
    <license>
      <feature-block>
        <feature>
          <name>
            name
          </name>
          <description>
            description
          </description>
          <validity-information>....</validity-information>
        </feature>
      </feature-block>
    </license>
  </license-information>
</license-summary-information>
```

Description A single feature instance

<feature-block>

Usage

```
<feature-block>
  <feature>....</feature>
</feature-block>
```

Description

<feature-block>

Usage

```
<license>
  <feature-block>
    <feature>....</feature>
  </feature-block>
</license>
```

Description

<feature-block>

Usage

```
<license-information>
  <license>
    <feature-block>
      <feature>....</feature>
    </feature-block>
  </license>
```

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```
</license-information>
```

Description

<feature-block>

Usage

```
<license-summary-information>
  <license-information>
    <license>
      <feature-block>
        <feature>....</feature>
      </feature-block>
    </license>
  </license-information>
</license-summary-information>
```

Description

<feature-summary>

Usage

```
<feature-summary>
  <name>
    name
  </name>
  <description>
    description
  </description>
  <licensed>
    licensed
  </licensed>
  <used-licensed>
    used-licensed
  </used-licensed>
  <used-given>
    used-given
  </used-given>
  <needed>
    needed
  </needed>
  <validity-type>
    validity-type
  </validity-type>
  <remaining-time>....</remaining-time>
  <end-date>
    end-date
  </end-date>
</feature-summary>
```

Description

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<feature-summary>

Usage

```
<license-usage-summary>
  <feature-summary>
    <name>
      name
    </name>
    <description>
      description
    </description>
    <licensed>
      licensed
    </licensed>
    <used-licensed>
      used-licensed
    </used-licensed>
    <used-given>
      used-given
    </used-given>
    <needed>
      needed
    </needed>
    <validity-type>
      validity-type
    </validity-type>
    <remaining-time>....</remaining-time>
    <end-date>
      end-date
    </end-date>
  </feature-summary>
</license-usage-summary>
```

Description

<feature-summary>

Usage

```
<license-summary-information>
  <license-usage-summary>
    <feature-summary>
      <name>
        name
      </name>
      <description>
        description
      </description>
      <licensed>
        licensed
      </licensed>
      <used-licensed>
        used-licensed
      </used-licensed>
      <used-given>
```

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```
      used-given
     </used-given>
     <needed>
      needed
     </needed>
     <validity-type>
      validity-type
     </validity-type>
     <remaining-time>....</remaining-time>
     <end-date>
      end-date
     </end-date>
    </feature-summary>
  </license-usage-summary>
</license-summary-information>
```

Description

<license>

Usage

```
<license>
  <name>
   name
  </name>
  <license-state>
   license-state
  </license-state>
  <license-version>
   license-version
  </license-version>
  <license-type>
   license-type
  </license-type>
  <device-reference>
   device-reference
  </device-reference>
  <group-reference>
   group-reference
  </group-reference>
  <group-define>
   group-define
  </group-define>
  <unsupported-attribute>
   unsupported-attribute
  </unsupported-attribute>
  <feature-block>....</feature-block>
</license>
```

Description

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<license>

Usage

```
<license-information>
  <license>
    <name>
      name
    </name>
    <license-state>
      license-state
    </license-state>
    <license-version>
      license-version
    </license-version>
    <license-type>
      license-type
    </license-type>
    <device-reference>
      device-reference
    </device-reference>
    <group-reference>
      group-reference
    </group-reference>
    <group-define>
      group-define
    </group-define>
    <unsupported-attribute>
      unsupported-attribute
    </unsupported-attribute>
    <feature-block>....</feature-block>
  </license>
</license-information>
```

Description

<license>

Usage

```
<license-summary-information>
  <license-information>
    <license>
      <name>
        name
      </name>
      <license-state>
        license-state
      </license-state>
      <license-version>
        license-version
      </license-version>
      <license-type>
        license-type
      </license-type>
      <device-reference>
```

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```
      device-reference
    </device-reference>
    <group-reference>
      group-reference
    </group-reference>
    <group-define>
      group-define
    </group-define>
    <unsupported-attribute>
      unsupported-attribute
    </unsupported-attribute>
    <feature-block>....</feature-block>
  </license>
 </license-information>
</license-summary-information>
```

Description

<license-information>

Usage

```
<license-information>
 <no-licenses-installed>
  no-licenses-installed
 </no-licenses-installed>
 <licenses-installed>
  licenses-installed
 </licenses-installed>
 <license>....</license>
</license-information>
```

Description Information about feature licenses installed on device

<license-information>

Usage

```
<license-summary-information>
 <license-information>
  <no-licenses-installed>
   no-licenses-installed
  </no-licenses-installed>
  <licenses-installed>
   licenses-installed
  </licenses-installed>
  <license>....</license>
 </license-information>
</license-summary-information>
```

Description Information about feature licenses installed on device

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<license-key>

Usage

```
<license-key>
  <name>
    name
  </name>
  <key-data>
    key-data
  </key-data>
</license-key>
```

Description

<license-key>

Usage

```
<license-key-information>
  <license-key>
    <name>
      name
    </name>
    <key-data>
      key-data
    </key-data>
  </license-key>
</license-key-information>
```

Description

<license-key-information>

Usage

```
<license-key-information>
  <license-key>....</license-key>
</license-key-information>
```

Description Textual license keys

<license-summary-information>

Usage

```
<license-summary-information>
  <license-usage-summary>....</license-usage-summary>
  <license-information>....</license-information>
</license-summary-information>
```

Description Feature license information

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<license-usage-summary>

Usage

```
<license-usage-summary>
  <features-used>
    features-used
  </features-used>
  <no-feature-used>
    no-feature-used
  </no-feature-used>
  <feature-summary>....</feature-summary>
</license-usage-summary>
```

Description Information about features licensed on this device

<license-usage-summary>

Usage

```
<license-summary-information>
  <license-usage-summary>
    <features-used>
      features-used
    </features-used>
    <no-feature-used>
      no-feature-used
    </no-feature-used>
    <feature-summary>....</feature-summary>
  </license-usage-summary>
</license-summary-information>
```

Description Information about features licensed on this device

<license-usage-time-information>

Usage

```
<license-usage-time-information>
  <total-features>
    total-features
  </total-features>
  <features-used>
    features-used
  </features-used>
  <no-feature-used>
    no-feature-used
  </no-feature-used>
  <usage-time-summary>....</usage-time-summary>
</license-usage-time-information>
```

Description Feature license usage time

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<original-validity>

Usage

```
<original-validity>
  <original-validity-value>
    original-validity-value
  </original-validity-value>
  <original-validity-time-unit>
    original-validity-time-unit
  </original-validity-time-unit>
</original-validity>
```

Description

<original-validity>

Usage

```
<validity-information>
  <original-validity>
    <original-validity-value>
      original-validity-value
    </original-validity-value>
    <original-validity-time-unit>
      original-validity-time-unit
    </original-validity-time-unit>
  </original-validity>
</validity-information>
```

Description

<original-validity>

Usage

```
<feature-block>
  <feature>
    <validity-information>
      <original-validity>
        <original-validity-value>
          original-validity-value
        </original-validity-value>
        <original-validity-time-unit>
          original-validity-time-unit
        </original-validity-time-unit>
      </original-validity>
    </validity-information>
  </feature>
</feature-block>
```

Description

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<original-validity>

Usage

```
<license>
  <feature-block>
    <feature>
      <validity-information>
        <original-validity>
          <original-validity-value>
            original-validity-value
          </original-validity-value>
          <original-validity-time-unit>
            original-validity-time-unit
          </original-validity-time-unit>
        </original-validity>
      </validity-information>
    </feature>
  </feature-block>
</license>
```

Description

<original-validity>

Usage

```
<license-information>
  <license>
    <feature-block>
      <feature>
        <validity-information>
          <original-validity>
            <original-validity-value>
              original-validity-value
            </original-validity-value>
            <original-validity-time-unit>
              original-validity-time-unit
            </original-validity-time-unit>
          </original-validity>
        </validity-information>
      </feature>
    </feature-block>
  </license>
</license-information>
```

Description

<original-validity>

Usage

```
<license-summary-information>
  <license-information>
    <license>
      <feature-block>
```


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```
      <feature>
       <validity-information>
        <original-validity>
         <original-validity-value>
          original-validity-value
         </original-validity-value>
         <original-validity-time-unit>
          original-validity-time-unit
         </original-validity-time-unit>
        </original-validity>
       </validity-information>
      </feature>
     </feature-block>
    </license>
   </license-information>
</license-summary-information>
```

Description

<remaining-time>

Usage

```
<remaining-time>
 <remaining-validity-value>
  remaining-validity-value
 </remaining-validity-value>
 <remaining-validity-time-unit>
  remaining-validity-time-unit
 </remaining-validity-time-unit>
</remaining-time>
```

Description

<remaining-time>

Usage

```
<validity-information>
 <remaining-time>
  <remaining-validity-value>
   remaining-validity-value
  </remaining-validity-value>
  <remaining-validity-time-unit>
   remaining-validity-time-unit
  </remaining-validity-time-unit>
 </remaining-time>
</validity-information>
```

Description

<remaining-time>

Usage

```
<feature-block>
```

```
  <feature>
   <validity-information>
    <remaining-time>
     <remaining-validity-value>
      remaining-validity-value
     </remaining-validity-value>
     <remaining-validity-time-unit>
      remaining-validity-time-unit
     </remaining-validity-time-unit>
    </remaining-time>
   </validity-information>
  </feature>
</feature-block>
```

Description

<remaining-time>

Usage

```
<license>
 <feature-block>
  <feature>
   <validity-information>
    <remaining-time>
     <remaining-validity-value>
      remaining-validity-value
     </remaining-validity-value>
     <remaining-validity-time-unit>
      remaining-validity-time-unit
     </remaining-validity-time-unit>
    </remaining-time>
   </validity-information>
  </feature>
 </feature-block>
</license>
```

Description

<remaining-time>

Usage

```
<license-information>
 <license>
  <feature-block>
   <feature>
    <validity-information>
     <remaining-time>
      <remaining-validity-value>
       remaining-validity-value
      </remaining-validity-value>
      <remaining-validity-time-unit>
       remaining-validity-time-unit
      </remaining-validity-time-unit>
     </remaining-time>
```


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```
        </validity-information>
      </feature>
    </feature-block>
  </license>
</license-information>
```

Description

<remaining-time>

Usage

```
<feature-summary>
  <remaining-time>
    <remaining-validity-value>
      remaining-validity-value
    </remaining-validity-value>
    <remaining-validity-time-unit>
      remaining-validity-time-unit
    </remaining-validity-time-unit>
  </remaining-time>
</feature-summary>
```

Description

<remaining-time>

Usage

```
<license-usage-summary>
  <feature-summary>
    <remaining-time>
      <remaining-validity-value>
        remaining-validity-value
      </remaining-validity-value>
      <remaining-validity-time-unit>
        remaining-validity-time-unit
      </remaining-validity-time-unit>
    </remaining-time>
  </feature-summary>
</license-usage-summary>
```

Description

<remaining-time>

Usage

```
<license-summary-information>
  <license-usage-summary>
    <feature-summary>
      <remaining-time>
        <remaining-validity-value>
          remaining-validity-value
        </remaining-validity-value>
        <remaining-validity-time-unit>
```

```
                remaining-validity-time-unit
              </remaining-validity-time-unit>
            </remaining-time>
          </feature-summary>
        </license-usage-summary>
      </license-summary-information>
```

Description

<remaining-time>

Usage

```
<license-summary-information>
  <license-information>
    <license>
      <feature-block>
        <feature>
          <validity-information>
            <remaining-time>
              <remaining-validity-value>
                remaining-validity-value
              </remaining-validity-value>
              <remaining-validity-time-unit>
                remaining-validity-time-unit
              </remaining-validity-time-unit>
            </remaining-time>
          </validity-information>
        </feature>
      </feature-block>
    </license>
  </license-information>
</license-summary-information>
```

Description

<usage-time-summary>

Usage

```
<usage-time-summary>
  <name>
    name
  </name>
  <cumulative-usage>
    cumulative-usage
  </cumulative-usage>
  <grace-usage>
    grace-usage
  </grace-usage>
  <last-update-time>
    last-update-time
  </last-update-time>
</usage-time-summary>
```


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Description

<usage-time-summary>

Usage

```
<license-usage-time-information>
  <usage-time-summary>
    <name>
      name
    </name>
    <cumulative-usage>
      cumulative-usage
    </cumulative-usage>
    <grace-usage>
      grace-usage
    </grace-usage>
    <last-update-time>
      last-update-time
    </last-update-time>
  </usage-time-summary>
</license-usage-time-information>
```

Description

<validity-information>

Usage

```
<validity-information>
  <validity-type>
    validity-type
  </validity-type>
  <original-validity>....</original-validity>
  <remaining-time>....</remaining-time>
  <start-date>
    start-date
  </start-date>
  <end-date>
    end-date
  </end-date>
  <license-state>
    license-state
  </license-state>
</validity-information>
```

Description

<validity-information>

Usage

```
<feature-block>
  <feature>
    <validity-information>
      <validity-type>
        validity-type
```

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```
    </validity-type>
    <original-validity>....</original-validity>
    <remaining-time>....</remaining-time>
    <start-date>
     start-date
    </start-date>
    <end-date>
     end-date
    </end-date>
    <license-state>
     license-state
    </license-state>
   </validity-information>
  </feature>
</feature-block>
```

Description

<validity-information>

Usage

```
<license>
 <feature-block>
  <feature>
   <validity-information>
    <validity-type>
     validity-type
    </validity-type>
    <original-validity>....</original-validity>
    <remaining-time>....</remaining-time>
    <start-date>
     start-date
    </start-date>
    <end-date>
     end-date
    </end-date>
    <license-state>
     license-state
    </license-state>
   </validity-information>
  </feature>
 </feature-block>
</license>
```

Description

<validity-information>

Usage

```
<license-information>
 <license>
  <feature-block>
   <feature>
    <validity-information>
```


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```
        <validity-type>
          validity-type
        </validity-type>
        <original-validity>....</original-validity>
        <remaining-time>....</remaining-time>
        <start-date>
          start-date
        </start-date>
        <end-date>
          end-date
        </end-date>
        <license-state>
          license-state
        </license-state>
      </validity-information>
    </feature>
  </feature-block>
 </license>
</license-information>
```

Description

<validity-information>

Usage

```
<license-summary-information>
 <license-information>
  <license>
   <feature-block>
    <feature>
     <validity-information>
      <validity-type>
       validity-type
      </validity-type>
      <original-validity>....</original-validity>
      <remaining-time>....</remaining-time>
      <start-date>
       start-date
      </start-date>
      <end-date>
       end-date
      </end-date>
      <license-state>
       license-state
      </license-state>
     </validity-information>
    </feature>
   </feature-block>
  </license>
 </license-information>
</license-summary-information>
```

Description

Summary of Licensed Feature Metadata Response Tags

<alias>

Usage

```
<licensed-feature>
  <alias>
    <base-feature>
      base-feature
    </base-feature>
    <cummulative-value>
      cummulative-value
    </cummulative-value>
  </alias>
</licensed-feature>
```

Description

<alias>

Usage

```
<licensed-feature-metadata-information>
  <licensed-feature>
    <alias>
      <base-feature>
        base-feature
      </base-feature>
      <cummulative-value>
        cummulative-value
      </cummulative-value>
    </alias>
  </licensed-feature>
</licensed-feature-metadata-information>
```

Description

<licensed-feature>

Usage

```
<licensed-feature>
  <id>
    id
  </id>
  <name>
    name
  </name>
  <description>
    description
  </description>
  <flag>
    flag
  </flag>
  <alias>....</alias>
```


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```
</licensed-feature>
```

Description Information on a licensed feature

<licensed-feature>

Usage

```
<licensed-feature-metadata-information>
  <licensed-feature>
    <id>
      id
    </id>
    <name>
      name
    </name>
    <description>
      description
    </description>
    <flag>
      flag
    </flag>
    <alias>....</alias>
  </licensed-feature>
</licensed-feature-metadata-information>
```

Description Information on a licensed feature

<licensed-feature-metadata-information>

Usage

```
<licensed-feature-metadata-information>
  <licensed-feature>....</licensed-feature>
</licensed-feature-metadata-information>
```

Description Informtation on one or more licensed features

Summary of Junos OS Metadata Response Tags

<js:object>

Usage

```
<js:object>
  <js:xml-name>
    js:xml-name
  </js:xml-name>
  <js:help>
    js:help
  </js:help>
  <js:type>
    js:type
```

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```
</js:type>
<js:require>
  js:require
</js:require>
<js:flags>
  js:flags
</js:flags>
<js:default>
  js:default
</js:default>
<js:hidden>
  js:hidden
</js:hidden>
<js:secret>
  js:secret
</js:secret>
<js:path>
  js:path
</js:path>
<js:range>....</js:range>
<js:product>
  js:product
</js:product>
<js:notify>
  js:notify
</js:notify>
<js:match-message>
  js:match-message
</js:match-message>
<js:match>
  js:match
</js:match>
<js:alias>
  js:alias
</js:alias>
<js:max-elements>
  js:max-elements
</js:max-elements>
<js:constraint>
  js:constraint
</js:constraint>
</js:object>
```

Description

<js:object>

Usage

```
<metadata-information>
  <js:object>
    <js:xml-name>
      js:xml-name
    </js:xml-name>
    <js:help>
      js:help
```


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```
    </js:help>
    <js:type>
      js:type
    </js:type>
    <js:require>
      js:require
    </js:require>
    <js:flags>
      js:flags
    </js:flags>
    <js:default>
      js:default
    </js:default>
    <js:hidden>
      js:hidden
    </js:hidden>
    <js:secret>
      js:secret
    </js:secret>
    <js:path>
      js:path
    </js:path>
    <js:range>....</js:range>
    <js:product>
      js:product
    </js:product>
    <js:notify>
      js:notify
    </js:notify>
    <js:match-message>
      js:match-message
    </js:match-message>
    <js:match>
      js:match
    </js:match>
    <js:alias>
      js:alias
    </js:alias>
    <js:max-elements>
      js:max-elements
    </js:max-elements>
    <js:constraint>
      js:constraint
    </js:constraint>
  </js:object>
</metadata-information>
```

Description

<js:range>

Usage

```
<js:object>
  <js:range>
    <js:min>
```

```
            js:min
          </js:min>
          <js:max>
            js:max
          </js:max>
        </js:range>
      </js:object>
```

Description

<js:range>

Usage

```
<metadata-information>
  <js:object>
    <js:range>
      <js:min>
        js:min
      </js:min>
      <js:max>
        js:max
      </js:max>
    </js:range>
  </js:object>
</metadata-information>
```

Description

<metadata-information>

Usage

```
<metadata-information>
  <js:object>....</js:object>
</metadata-information>
```

Description

Summary of MIP Response Tags

<addr-pool>

Usage

```
<addr-pool>
  <start-addr>
    start-addr
  </start-addr>
  <end-addr>
    end-addr
  </end-addr>
</addr-pool>
```


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Description Mobile IP ha address pool

<addr-pool>

Usage

```
<mip-home-agent-virtual-network-information>
  <mip-home-agent-virtual-network>
    <addr-pool>
      <start-addr>
        start-addr
      </start-addr>
      <end-addr>
        end-addr
      </end-addr>
    </addr-pool>
  </mip-home-agent-virtual-network>
</mip-home-agent-virtual-network-information>
```

Description Mobile IP ha address pool

<addr-pool>

Usage

```
<mip-home-agent-interface-network-information>
  <mip-home-agent-interface-network>
    <addr-pool>
      <start-addr>
        start-addr
      </start-addr>
      <end-addr>
        end-addr
      </end-addr>
    </addr-pool>
  </mip-home-agent-interface-network>
</mip-home-agent-interface-network-information>
```

Description Mobile IP ha address pool

<address-list>

Usage

```
<mip-home-agent-overview-information>
  <mip-home-agent-overview>
    <address-list>
      <address>
        address
      </address>
    </address-list>
  </mip-home-agent-overview>
</mip-home-agent-overview-information>
```

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Description Mobile IP HA address list

<mip-binding>

Usage

```
<mip-binding-information>
  <mip-binding>
    <mip-home-address>
      mip-home-address
    </mip-home-address>
    <mip-nai>
      mip-nai
    </mip-nai>
    <mip-home-agent>
      mip-home-agent
    </mip-home-agent>
    <mip-care-of-address>
      mip-care-of-address
    </mip-care-of-address>
    <lifetime-granted>
      lifetime-granted
    </lifetime-granted>
    <lifetime-remaining>
      lifetime-remaining
    </lifetime-remaining>
    <tunnel-type>
      tunnel-type
    </tunnel-type>
    <tunnel-id>
      tunnel-id
    </tunnel-id>
    <tunnel-source>
      tunnel-source
    </tunnel-source>
    <tunnel-destination>
      tunnel-destination
    </tunnel-destination>
    <identification>
      identification
    </identification>
    <revocation-support>
      revocation-support
    </revocation-support>
    <revocation-inform>
      revocation-inform
    </revocation-inform>
    <count>
      count
    </count>
    <state>
      state
    </state>
    <session-id>
      session-id
    </session-id>
```


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```
  </mip-binding>
</mip-binding-information>
```

Description

<mip-binding-information>

Usage

```
<mip-binding-information>
  <mip-binding>....</mip-binding>
</mip-binding-information>
```

Description Mobile IP Binding information

<mip-error>

Usage

```
<mip-error>
  <mip-error-message>
    mip-error-message
  </mip-error-message>
</mip-error>
```

Description

<mip-fa>

Usage

```
<mip-fa-information>
  <mip-fa>
    <mip-fa-status>
      mip-fa-status
    </mip-fa-status>
    <mip-fa-max-pending-request>
      mip-fa-max-pending-request
    </mip-fa-max-pending-request>
    <mip-fa-request-timeout>
      mip-fa-request-timeout
    </mip-fa-request-timeout>
    <mip-fa-registration-required>
      mip-fa-registration-required
    </mip-fa-registration-required>
    <mip-fa-registration-lifetime>
      mip-fa-registration-lifetime
    </mip-fa-registration-lifetime>
    <mip-fa-coa>
      mip-fa-coa
    </mip-fa-coa>
    <mip-fa-serice-enabled>
      mip-fa-serice-enabled
    </mip-fa-serice-enabled>
    <mip-fa-reverse-tunnel>
```

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```
      mip-fa-reverse-tunnel
    </mip-fa-reverse-tunnel>
  </mip-fa>
</mip-fa-information>
```

Description Mobile IP foreign agent information

<mip-fa-information>

Usage

```
<mip-fa-information>
  <mip-fa>....</mip-fa>
</mip-fa-information>
```

Description Mobile IP foreign agent information

<mip-home-agent-interface-network>

Usage

```
<mip-home-agent-interface-network-information>
  <mip-home-agent-interface-network>
    <interface>
      interface
    </interface>
    <mip-home-agent>
      mip-home-agent
    </mip-home-agent>
    <registration-lifetime>
      registration-lifetime
    </registration-lifetime>
    <time-tolerance>
      time-tolerance
    </time-tolerance>
    <addr-pool>....</addr-pool>
    <number-of-mn>
      number-of-mn
    </number-of-mn>
    <mip-home-address>
      mip-home-address
    </mip-home-address>
    <range>
      range
    </range>
    <mip-nai>
      mip-nai
    </mip-nai>
    <mip-care-of-address>
      mip-care-of-address
    </mip-care-of-address>
    <lifetime-granted>
      lifetime-granted
    </lifetime-granted>
```


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```
    <lifetime-remaining>
     lifetime-remaining
    </lifetime-remaining>
   </mip-home-agent-interface-network>
</mip-home-agent-interface-network-information>
```

Description Mobile IP interface-network information

<mip-home-agent-interface-network-information>

Usage

```
<mip-home-agent-interface-network-information>
  <mip-home-agent-interface-network>....</mip-home-agent-interface-network>

</mip-home-agent-interface-network-information>
```

Description Mobile IP home-agent interface-network information

<mip-home-agent-overview>

Usage

```
<mip-home-agent-overview-information>
  <mip-home-agent-overview>
    <status>
     status
    </status>
    <service-enabled-on>....</service-enabled-on>
    <address-list>....</address-list>
    <authentication>
     authentication
    </authentication>
   </mip-home-agent-overview>
</mip-home-agent-overview-information>
```

Description

<mip-home-agent-overview-information>

Usage

```
<mip-home-agent-overview-information>
  <mip-home-agent-overview>....</mip-home-agent-overview>
</mip-home-agent-overview-information>
```

Description Mobile IP home-agent overview

<mip-home-agent-traffic>

Usage

```
<mip-home-agent-traffic-information>
  <mip-home-agent-traffic>
```

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```
<request-received>
  request-received
</request-received>
<request-forwarded>
  request-forwarded
</request-forwarded>
<request-denied>
  request-denied
</request-denied>
<replies-forwarded>
  replies-forwarded
</replies-forwarded>
<unspecified>
  unspecified
</unspecified>
<administrative-prohibited>
  administrative-prohibited
</administrative-prohibited>
<no-resource>
  no-resource
</no-resource>
<bad-request>
  bad-request
</bad-request>
<too-many-bindings>
  too-many-bindings
</too-many-bindings>
<unknown-ha>
  unknown-ha
</unknown-ha>
<id-mismatch>
  id-mismatch
</id-mismatch>
<unavailable-reverse-tunnel>
  unavailable-reverse-tunnel
</unavailable-reverse-tunnel>
<unavailable-encapsulation>
  unavailable-encapsulation
</unavailable-encapsulation>
<failed-mn>
  failed-mn
</failed-mn>
<failed-fa>
  failed-fa
</failed-fa>
</mip-home-agent-traffic>
</mip-home-agent-traffic-information>
```

Description Mobile IP violation information in specific

<mip-home-agent-traffic-information>

Usage

<mip-home-agent-traffic-information>

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```
  <mip-home-agent-traffic>....</mip-home-agent-traffic>
</mip-home-agent-traffic-information>
```

Description Mobile IP HA traffic information

<mip-home-agent-virtual-network>

Usage

```
<mip-home-agent-virtual-network-information>
  <mip-home-agent-virtual-network>
    <mip-home-agent>
      mip-home-agent
    </mip-home-agent>
    <registration-lifetime>
      registration-lifetime
    </registration-lifetime>
    <time-tolerance>
      time-tolerance
    </time-tolerance>
    <addr-pool>....</addr-pool>
    <number-of-mn>
      number-of-mn
    </number-of-mn>
    <mip-home-address>
      mip-home-address
    </mip-home-address>
    <mip-nai>
      mip-nai
    </mip-nai>
    <mip-care-of-address>
      mip-care-of-address
    </mip-care-of-address>
    <lifetime-granted>
      lifetime-granted
    </lifetime-granted>
    <lifetime-remaining>
      lifetime-remaining
    </lifetime-remaining>
  </mip-home-agent-virtual-network>
</mip-home-agent-virtual-network-information>
```

Description Mobile IP virtual-network information

<mip-home-agent-virtual-network-information>

Usage

```
<mip-home-agent-virtual-network-information>
  <mip-home-agent-virtual-network>....</mip-home-agent-virtual-network>
</mip-home-agent-virtual-network-information>
```

Description Mobile IP home-agent virtual-network information

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<mip-memory>

Usage

```
<mip-memory-information>
  <mip-memory>
    <mip-memory-size>
      mip-memory-size
    </mip-memory-size>
    <mip-memory-file-name>
      mip-memory-file-name
    </mip-memory-file-name>
    <mip-memory-line-number>
      mip-memory-line-number
    </mip-memory-line-number>
    <mip-memory-allocated-memory>
      mip-memory-allocated-memory
    </mip-memory-allocated-memory>
  </mip-memory>
</mip-memory-information>
```

Description Mobile IP memory information in specific

<mip-memory-information>

Usage

```
<mip-memory-information>
  <mip-memory>....</mip-memory>
</mip-memory-information>
```

Description Mobile IP memory information

<mip-statistics-information>

Usage

```
<mip-statistics-information>
  <registration-request-received>
    registration-request-received
  </registration-request-received>
  <registration-request-accepted>
    registration-request-accepted
  </registration-request-accepted>
  <registration-request-rejected>
    registration-request-rejected
  </registration-request-rejected>
</mip-statistics-information>
```

Description Statistics from Mobile IP

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<mip-traffic>

Usage

```
<mip-traffic-information>
  <mip-traffic>
    <request-received>
      request-received
    </request-received>
    <request-forwarded>
      request-forwarded
    </request-forwarded>
    <request-denied>
      request-denied
    </request-denied>
    <replies-received>
      replies-received
    </replies-received>
    <replies-forwarded>
      replies-forwarded
    </replies-forwarded>
    <replies-denied>
      replies-denied
    </replies-denied>
    <unspecified>
      unspecified
    </unspecified>
    <ha-unreachable>
      ha-unreachable
    </ha-unreachable>
    <administrative-prohibited>
      administrative-prohibited
    </administrative-prohibited>
    <no-resource>
      no-resource
    </no-resource>
    <bad-lifetime>
      bad-lifetime
    </bad-lifetime>
    <bad-request>
      bad-request
    </bad-request>
    <unavailable-encapsulation>
      unavailable-encapsulation
    </unavailable-encapsulation>
    <unavailable-reverse-tunnel>
      unavailable-reverse-tunnel
    </unavailable-reverse-tunnel>
    <failed-mn>
      failed-mn
    </failed-mn>
    <failed-ha>
      failed-ha
    </failed-ha>
    <unknown-challenge>
      unknown-challenge
```

```
    </unknown-challenge>
    <missing-challenge>
     missing-challenge
    </missing-challenge>
    <stale-challenge>
     stale-challenge
    </stale-challenge>
   </mip-traffic>
  </mip-traffic-information>
```

Description Mobile IP violation information in specific

<mip-traffic-information>

Usage

```
<mip-traffic-information>
 <mip-traffic>....</mip-traffic>
</mip-traffic-information>
```

Description Mobile IP traffic information

<mip-tunnel>

Usage

```
<mip-tunnel-information>
 <mip-tunnel>
  <mip-tunnel-source>
   mip-tunnel-source
  </mip-tunnel-source>
  <mip-tunnel-destination>
   mip-tunnel-destination
  </mip-tunnel-destination>
  <mip-tunnel-type>
   mip-tunnel-type
  </mip-tunnel-type>
 </mip-tunnel>
</mip-tunnel-information>
```

Description Mobile IP tunnel information in specific

<mip-tunnel-information>

Usage

```
<mip-tunnel-information>
 <mip-tunnel>....</mip-tunnel>
</mip-tunnel-information>
```

Description Mobile IP tunnel information

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<mip-violation>

Usage

```
<mip-violation-information>
  <mip-violation>
    <mip-nai>
      mip-nai
    </mip-nai>
    <mip-home-address>
      mip-home-address
    </mip-home-address>
    <mip-violation-code>
      mip-violation-code
    </mip-violation-code>
    <mip-violation-time>
      mip-violation-time
    </mip-violation-time>
    <mip-violation-spi>
      mip-violation-spi
    </mip-violation-spi>
    <mip-violation-error-code>
      mip-violation-error-code
    </mip-violation-error-code>
    <mip-violation-reason>
      mip-violation-reason
    </mip-violation-reason>
    <mip-violation-count-per-peer>
      mip-violation-count-per-peer
    </mip-violation-count-per-peer>
    <mip-violation-totol-count>
      mip-violation-totol-count
    </mip-violation-totol-count>
  </mip-violation>
</mip-violation-information>
```

Description Mobile IP violation information

<mip-violation-information>

Usage

```
<mip-violation-information>
  <mip-violation>....</mip-violation>
</mip-violation-information>
```

Description Mobile IP violation information

<mip-visitor>

Usage

```
<mip-visitor-information>
  <mip-visitor>
    <mip-nai>
```

```
            mip-nai
          </mip-nai>
          <mip-home-address>
            mip-home-address
          </mip-home-address>
          <mip-home-agent>
            mip-home-agent
          </mip-home-agent>
          <mip-care-of-address>
            mip-care-of-address
          </mip-care-of-address>
          <mip-visitor-time-requested>
            mip-visitor-time-requested
          </mip-visitor-time-requested>
          <mip-visitor-time-alloted>
            mip-visitor-time-alloted
          </mip-visitor-time-alloted>
          <mip-visitor-time-remaining>
            mip-visitor-time-remaining
          </mip-visitor-time-remaining>
          <mip-visitor-count>
            mip-visitor-count
          </mip-visitor-count>
          <mip-visitor-pending-count>
            mip-visitor-pending-count
          </mip-visitor-pending-count>
        </mip-visitor>
      </mip-visitor-information>
```

Description Mobile IP visitor information

<mip-visitor-information>

Usage

```
<mip-visitor-information>
  <mip-visitor>....</mip-visitor>
</mip-visitor-information>
```

Description Mobile IP visitor information

<mip-wimax-release>

Usage

```
<mip-wimax-release-information>
  <mip-wimax-release>
    <release>
      release
    </release>
  </mip-wimax-release>
</mip-wimax-release-information>
```


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Description

<mip-wimax-release-information>

Usage

```
<mip-wimax-release-information>
  <mip-wimax-release>....</mip-wimax-release>
</mip-wimax-release-information>
```

Description WiMAX release supported by Mobile IP

<service-enabled-on>

Usage

```
<mip-home-agent-overview-information>
  <mip-home-agent-overview>
    <service-enabled-on>
      <interface-name>
        interface-name
      </interface-name>
    </service-enabled-on>
  </mip-home-agent-overview>
</mip-home-agent-overview-information>
```

Description Mobile IP HA enabled interfaces

Summary of MPLS OAM Response Tags

<database>

Usage

```
<database>
</database>
```

Description

<fec>

Usage

```
<fec>
  <fec-prefix>
    fec-prefix
  </fec-prefix>
</fec>
```

Description

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<instance>

Usage

```
<instance>
  <count>
    count
  </count>
</instance>
```

Description

<last-trace-time>

Usage

```
<last-trace-time>
  <date-time>
    date-time
  </date-time>
</last-trace-time>
```

Description

<multipath-information>

Usage

```
<multipath-information>
  <multipath-type>
    multipath-type
  </multipath-type>
  <address-range-index>
    address-range-index
  </address-range-index>
  <low-address>
    low-address
  </low-address>
  <high-address>
    high-address
  </high-address>
</multipath-information>
```

Description

<next-scheduled-trace>

Usage

```
<next-scheduled-trace>
  <timer-expiry>
    timer-expiry
  </timer-expiry>
</next-scheduled-trace>
```


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Description

<options>

Usage

```
<options>
  <probe-ttl>
    probe-ttl
  </probe-ttl>
  <probe-retries>
    probe-retries
  </probe-retries>
  <probe-wait>
    probe-wait
  </probe-wait>
  <probe-paths>
    probe-paths
  </probe-paths>
  <probe-source>
    probe-source
  </probe-source>
  <probe-destination>
    probe-destination
  </probe-destination>
  <probe-exp>
    probe-exp
  </probe-exp>
  <probe-fanout>
    probe-fanout
  </probe-fanout>
</options>
```

Description

<probe-options>

Usage

```
<probe-options>
  <probe-ttl>
    probe-ttl
  </probe-ttl>
  <probe-retries>
    probe-retries
  </probe-retries>
  <probe-wait>
    probe-wait
  </probe-wait>
  <probe-paths>
    probe-paths
  </probe-paths>
  <probe-source>
    probe-source
  </probe-source>
  <probe-destination>
    probe-destination
```

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```
</probe-destination>
<probe-exp>
  probe-exp
</probe-exp>
<probe-fanout>
  probe-fanout
</probe-fanout>
</probe-options>
```

Description

<scan-status>

Usage

```
<scan-status>
  <status>
    status
  </status>
</scan-status>
```

Description

<test>

Usage

```
<test>
</test>
```

Description

<tracelsp>

Usage

```
<tracelsp>
</tracelsp>
```

Description

<tracelsp-label>

Usage

```
<tracelsp-label>
  <label-value>
    label-value
  </label-value>
  <label-depth>
    label-depth
  </label-depth>
  <label-protocol>
    label-protocol
  </label-protocol>
```


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```
</tracelsp-label>
```

Description

<tracelsp-node>

Usage

```
<tracelsp-node>
 <depth>
  depth
 </depth>
 <label-value>
  label-value
 </label-value>
 <label-protocol>
  label-protocol
 </label-protocol>
 <address>
  address
 </address>
 <parent>
  parent
 </parent>
 <response-time>
  response-time
 </response-time>
 <return-code>
  return-code
 </return-code>
 <multipath-type>
  multipath-type
 </multipath-type>
 <sender-timestamp>
  sender-timestamp
 </sender-timestamp>
 <receiver-timestamp>
  receiver-timestamp
 </receiver-timestamp>
 <status>
  status
 </status>
 <path-index>
  path-index
 </path-index>
 <path-status>
  path-status
 </path-status>
 <probe-destination>
  probe-destination
 </probe-destination>
 <mtu>
  mtu
 </mtu>
 <interface>
  interface
```

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```
  </interface>
</tracelsp-node>
```

Description

Summary of Multiservices PIC Deamon Response Tags

<mspinfo-raw-output>

Usage

```
<mspinfo-raw-output>
  <interface-name>
    interface-name
  </interface-name>
  <raw-output>
    raw-output
  </raw-output>
</mspinfo-raw-output>
```

Description

Summary of OAM Response Tags

<oam-information>

Usage

```
<oam-information>
  <oam-interface-information>....</oam-interface-information>
</oam-information>
```

Description Information about the GRE keepalive protocol

<oam-interface-information>

Usage

```
<oam-information>
  <oam-interface-information>
    <oam-interface-name>
      oam-interface-name
    </oam-interface-name>
    <oam-statistics>....</oam-statistics>
    <oam-status>....</oam-status>
  </oam-interface-information>
</oam-information>
```

Description Link-fault management information for one or more interfaces

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<oam-statistics>

Usage

```
<oam-information>
  <oam-interface-information>
    <oam-statistics>
      <oam-pdus-received>
        oam-pdus-received
      </oam-pdus-received>
      <oam-pdus-transmitted>
        oam-pdus-transmitted
      </oam-pdus-transmitted>
    </oam-statistics>
  </oam-interface-information>
</oam-information>
```

Description Interface statistics

<oam-status>

Usage

```
<oam-information>
  <oam-interface-information>
    <oam-status>
      <oam-keepalive-status>
        oam-keepalive-status
      </oam-keepalive-status>
    </oam-status>
  </oam-interface-information>
</oam-information>
```

Description

Summary of Packet Triggered Subscribers Response Tags

<clear-session-result>

Usage

```
<packet-triggered-subscribers-information>
  <clear-session-result>
    <num-logout-initiated>
      num-logout-initiated
    </num-logout-initiated>
  </clear-session-result>
</packet-triggered-subscribers-information>
```

Description Result of clear session request

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<extra-statistics>

Usage

```
<packet-triggered-subscribers-information>
  <extra-statistics>
    <statistics-string>
      statistics-string
    </statistics-string>
  </extra-statistics>
</packet-triggered-subscribers-information>
```

Description Session statistics information provided by additional source

<flows>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-flows>
    <flows>
      <five-tuple>
        five-tuple
      </five-tuple>
      <application-id>
        application-id
      </application-id>
      <policy-name>
        policy-name
      </policy-name>
      <policy-action>
        policy-action
      </policy-action>
      <policy-direction>
        policy-direction
      </policy-direction>
      <packets>
        packets
      </packets>
      <bytes>
        bytes
      </bytes>
    </flows>
  </subscriber-flows>
</packet-triggered-subscribers-information>
```

Description Flows

<packet-triggered-subscribers-information>

Usage

```
<packet-triggered-subscribers-information>
  <message>
    message
```


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```
  </message>
  <process-status>....</process-status>
  <subscriber-session-summary>....</subscriber-session-summary>
  <subscriber-session>....</subscriber-session>
  <session-statistics>....</session-statistics>
  <extra-statistics>....</extra-statistics>
  <subscriber-policy>....</subscriber-policy>
  <subscriber-flows>....</subscriber-flows>
  <subscriber-bandwidth>....</subscriber-bandwidth>
  <clear-session-result>....</clear-session-result>
  <service-subscribers-request-result>....</service-subscribers-request-result>
</packet-triggered-subscribers-information>
```

Description Packet Triggered Subscribers information

<pic-status>

Usage

```
<packet-triggered-subscribers-information>
  <process-status>
    <pic-status>
      <pic-name>
        pic-name
      </pic-name>
      <num-pic-login>
        num-pic-login
      </num-pic-login>
      <num-pic-logout-response>
        num-pic-logout-response
      </num-pic-logout-response>
      <num-login-done>
        num-login-done
      </num-login-done>
      <num-pic-logout>
        num-pic-logout
      </num-pic-logout>
      <num-policy-change>
        num-policy-change
      </num-policy-change>
      <num-policy-change-response>
        num-policy-change-response
      </num-policy-change-response>
      <num-src-logout>
        num-src-logout
      </num-src-logout>
      <num-statistics-polling>
        num-statistics-polling
      </num-statistics-polling>
      <num-sync-start>
        num-sync-start
      </num-sync-start>
      <num-sync-request>
        num-sync-request
      </num-sync-request>
```

<num-update-username>
  num-update-username
</num-update-username>
<num-connection-up-event>
  num-connection-up-event
</num-connection-up-event>
<num-queued-pic-task>
  num-queued-pic-task
</num-queued-pic-task>
<num-pending-response>
  num-pending-response
</num-pending-response>
<num-service-request-timeout>
  num-service-request-timeout
</num-service-request-timeout>
<num-logout-request-timeout>
  num-logout-request-timeout
</num-logout-request-timeout>
<num-logout-request-send-failure>
  num-logout-request-send-failure
</num-logout-request-send-failure>
<num-service-request-send-failure>
  num-service-request-send-failure
</num-service-request-send-failure>
<num-accounting-request-send-failure>
  num-accounting-request-send-failure
</num-accounting-request-send-failure>
<num-login-done-send-failure>
  num-login-done-send-failure
</num-login-done-send-failure>
<num-username-update-send-failure>
  num-username-update-send-failure
</num-username-update-send-failure>
<num-pre-announcement>
  num-pre-announcement
</num-pre-announcement>
<num-pre-announcement-send-failure>
  num-pre-announcement-send-failure
</num-pre-announcement-send-failure>
<num-idle-timeout-update>
  num-idle-timeout-update
</num-idle-timeout-update>
<num-idle-timeout-update-send-failure>
  num-idle-timeout-update-send-failure
</num-idle-timeout-update-send-failure>
<num-service-set-update>
  num-service-set-update
</num-service-set-update>
<num-service-set-update-send-failure>
  num-service-set-update-send-failure
</num-service-set-update-send-failure>
<num-partition-update-send>
  num-partition-update-send
</num-partition-update-send>
<num-partition-update-send-failure>
  num-partition-update-send-failure

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```
      </num-partition-update-send-failure>
      <num-subscriber-profiles-update>
        num-subscriber-profiles-update
      </num-subscriber-profiles-update>
      <num-subscriber-profiles-update-failure>
        num-subscriber-profiles-update-failure
      </num-subscriber-profiles-update-failure>
      <num-service-set-subscriber-profiles-mapping-update>
        num-service-set-subscriber-profiles-mapping-update
      </num-service-set-subscriber-profiles-mapping-update>
      <num-service-set-subscriber-profiles-mapping-update-failure>
        num-service-set-subscriber-profiles-mapping-update-failure
      </num-service-set-subscriber-profiles-mapping-update-failure>
      <num-set-profile>
        num-set-profile
      </num-set-profile>
      <num-set-profile-failure>
        num-set-profile-failure
      </num-set-profile-failure>
      <num-clear-profile>
        num-clear-profile
      </num-clear-profile>
      <num-clear-profile-failure>
        num-clear-profile-failure
      </num-clear-profile-failure>
    </pic-status>
  </process-status>
</packet-triggered-subscribers-information>
```

Description

<policy-attribute>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-policy>
    <radius-policy>
      <policy-attribute>
        <attribute-name>
          attribute-name
        </attribute-name>
        <attribute-value>
          attribute-value
        </attribute-value>
      </policy-attribute>
    </radius-policy>
  </subscriber-policy>
</packet-triggered-subscribers-information>
```

Description

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<process-status>

Usage

```
<packet-triggered-subscribers-information>
 <process-status>
  <num-clients>
   num-clients
  </num-clients>
  <num-down-pic-clients>
   num-down-pic-clients
  </num-down-pic-clients>
  <first-down-pic-client-id>
   first-down-pic-client-id
  </first-down-pic-client-id>
  <src-connection-state>
   src-connection-state
  </src-connection-state>
  <num-srr-received>
   num-srr-received
  </num-srr-received>
  <num-ppr-received>
   num-ppr-received
  </num-ppr-received>
  <num-asr-received>
   num-asr-received
  </num-asr-received>
  <num-acr-received>
   num-acr-received
  </num-acr-received>
  <num-aaa-received>
   num-aaa-received
  </num-aaa-received>
  <num-sta-received>
   num-sta-received
  </num-sta-received>
  <num-sync-aaa-received>
   num-sync-aaa-received
  </num-sync-aaa-received>
  <num-sync-sta-received>
   num-sync-sta-received
  </num-sync-sta-received>
  <num-srr-queued>
   num-srr-queued
  </num-srr-queued>
  <num-srq-queued>
   num-srq-queued
  </num-srq-queued>
  <num-aar-queued>
   num-aar-queued
  </num-aar-queued>
  <num-ppa-queued>
   num-ppa-queued
  </num-ppa-queued>
  <num-str-queued>
   num-str-queued
```


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```
</num-str-queued>
<num-asa-queued>
  num-asa-queued
</num-asa-queued>
<num-aca-queued>
  num-aca-queued
</num-aca-queued>
<num-sync-aar-queued>
  num-sync-aar-queued
</num-sync-aar-queued>
<num-sync-str-queued>
  num-sync-str-queued
</num-sync-str-queued>
<num-sending-message>
  num-sending-message
</num-sending-message>
<num-waiting-message>
  num-waiting-message
</num-waiting-message>
<num-sending-queue-full>
  num-sending-queue-full
</num-sending-queue-full>
<num-sending-timeout>
  num-sending-timeout
</num-sending-timeout>
<num-response-timeout>
  num-response-timeout
</num-response-timeout>
<num-sync-aar-timeout>
  num-sync-aar-timeout
</num-sync-aar-timeout>
<num-sync-str-timeout>
  num-sync-str-timeout
</num-sync-str-timeout>
<num-aar-timeout>
  num-aar-timeout
</num-aar-timeout>
<num-str-timeout>
  num-str-timeout
</num-str-timeout>
<num-srq-timeout>
  num-srq-timeout
</num-srq-timeout>
<num-aar-send-failure>
  num-aar-send-failure
</num-aar-send-failure>
<num-asa-send-failure>
  num-asa-send-failure
</num-asa-send-failure>
<num-aca-send-failure>
  num-aca-send-failure
</num-aca-send-failure>
<num-ppa-send-failure>
  num-ppa-send-failure
</num-ppa-send-failure>
<num-str-send-failure>
```

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```
  num-str-send-failure
</num-str-send-failure>
<num-srq-send-failure>
  num-srq-send-failure
</num-srq-send-failure>
<num-srr-send-failure>
  num-srr-send-failure
</num-srr-send-failure>
<num-sync-aar-send-failure>
  num-sync-aar-send-failure
</num-sync-aar-send-failure>
<num-sync-str-send-failure>
  num-sync-str-send-failure
</num-sync-str-send-failure>
<num-srq-full-sync>
  num-srq-full-sync
</num-srq-full-sync>
<num-srq-fast-sync>
  num-srq-fast-sync
</num-srq-fast-sync>
<num-srq-single-sync>
  num-srq-single-sync
</num-srq-single-sync>
<num-fast-sync-queued>
  num-fast-sync-queued
</num-fast-sync-queued>
<num-queued-diameter-task>
  num-queued-diameter-task
</num-queued-diameter-task>
<fast-sync-in-progress>
  fast-sync-in-progress
</fast-sync-in-progress>
<full-sync-in-progress>
  full-sync-in-progress
</full-sync-in-progress>
<num-full-sync-abort>
  num-full-sync-abort
</num-full-sync-abort>
<num-fast-sync-abort>
  num-fast-sync-abort
</num-fast-sync-abort>
<num-outstanding-diameter-message>
  num-outstanding-diameter-message
</num-outstanding-diameter-message>
<num-login-retry>
  num-login-retry
</num-login-retry>
<num-diameterd-connected>
  num-diameterd-connected
</num-diameterd-connected>
<num-diameterd-disconnected>
  num-diameterd-disconnected
</num-diameterd-disconnected>
<num-srr-failure>
  num-srr-failure
</num-srr-failure>
```


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```
    <num-pconn>
     num-pconn
    </num-pconn>
    <pic-status>....</pic-status>
    <radius-partition-status>....</radius-partition-status>
   </process-status>
</packet-triggered-subscribers-information>
```

Description Process status

<radius-partition-status>

Usage

```
<packet-triggered-subscribers-information>
 <process-status>
  <radius-partition-status>
   <partition>
    partition
   </partition>
   <num-valid-acctounting-start>
    num-valid-acctounting-start
   </num-valid-acctounting-start>
   <num-valid-acctounting-stop>
    num-valid-acctounting-stop
   </num-valid-acctounting-stop>
   <num-valid-interim-acctounting>
    num-valid-interim-acctounting
   </num-valid-interim-acctounting>
   <num-invalid-acctounting-start>
    num-invalid-acctounting-start
   </num-invalid-acctounting-start>
   <num-invalid-acctounting-stop>
    num-invalid-acctounting-stop
   </num-invalid-acctounting-stop>
   <num-invalid-interim-acctounting>
    num-invalid-interim-acctounting
   </num-invalid-interim-acctounting>
   <num-acctounting-on>
    num-acctounting-on
   </num-acctounting-on>
   <num-acctounting-off>
    num-acctounting-off
   </num-acctounting-off>
   <num-acctounting-start-response>
    num-acctounting-start-response
   </num-acctounting-start-response>
   <num-acctounting-stop-response>
    num-acctounting-stop-response
   </num-acctounting-stop-response>
   <num-interim-acctounting-response>
    num-interim-acctounting-response
   </num-interim-acctounting-response>
   <num-tagging>
    num-tagging
```

```
      </num-tagging>
    </radius-partition-status>
  </process-status>
</packet-triggered-subscribers-information>
```

Description

<radius-policy>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-policy>
    <radius-policy>
      <policy-attribute>....</policy-attribute>
    </radius-policy>
  </subscriber-policy>
</packet-triggered-subscribers-information>
```

Description Dynamic RADIUS policies

<service-policy>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-policy>
    <service-policy>
      <policy-name>
        policy-name
      </policy-name>
      <rpr>
        rpr
      </rpr>
      <d>
        d
      </d>
      <term>....</term>
    </service-policy>
  </subscriber-policy>
</packet-triggered-subscribers-information>
```

Description Service dynamic policy

<service-session>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-session>
    <service-session>
      <policy-name>
        policy-name
      </policy-name>
```


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```
        <service-state>
          service-state
        </service-state>
      </service-session>
    </subscriber-session>
</packet-triggered-subscribers-information>
```

Description Service session information

<service-subscribers-request-result>

Usage

```
<packet-triggered-subscribers-information>
  <service-subscribers-request-result>
    <request_success>
      request_success
    </request_success>
    <request_failure>
      request_failure
    </request_failure>
  </service-subscribers-request-result>
</packet-triggered-subscribers-information>
```

Description Result for service subscriber request

<session-statistics>

Usage

```
<packet-triggered-subscribers-information>
  <session-statistics>
    <session-type>
      session-type
    </session-type>
    <name-id>
      name-id
    </name-id>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
  </session-statistics>
</packet-triggered-subscribers-information>
```

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Description Session statistics

<subscriber-bandwidth>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-bandwidth>
    <client-id>
      client-id
    </client-id>
    <input-bps>
      input-bps
    </input-bps>
    <output-bps>
      output-bps
    </output-bps>
    <input-pps>
      input-pps
    </input-pps>
    <output-pps>
      output-pps
    </output-pps>
  </subscriber-bandwidth>
</packet-triggered-subscribers-information>
```

Description Bandwidth

<subscriber-flows>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-flows>
    <client-id>
      client-id
    </client-id>
    <num-data-sessions>
      num-data-sessions
    </num-data-sessions>
    <hwm>
      hwm
    </hwm>
    <flows>....</flows>
  </subscriber-flows>
</packet-triggered-subscribers-information>
```

Description Flows

<subscriber-policy>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-policy>
```


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```
    <client-id>
     client-id
    </client-id>
    <service-policy>....</service-policy>
    <radius-policy>....</radius-policy>
   </subscriber-policy>
</packet-triggered-subscribers-information>
```

Description Dynamic policies

<subscriber-session>

Usage

```
<packet-triggered-subscribers-information>
 <subscriber-session>
  <username>
   username
  </username>
  <user-ip-address>
   user-ip-address
  </user-ip-address>
  <interface>
   interface
  </interface>
  <service-interface>
   service-interface
  </service-interface>
  <subscriber-state>
   subscriber-state
  </subscriber-state>
  <login-time>
   login-time
  </login-time>
  <routing-instance>
   routing-instance
  </routing-instance>
  <partition>
   partition
  </partition>
  <profile>
   profile
  </profile>
  <num-services>
   num-services
  </num-services>
  <client-id>
   client-id
  </client-id>
  <service-session>....</service-session>
 </subscriber-session>
</packet-triggered-subscribers-information>
```

Description Subscriber session information

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<subscriber-session-summary>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-session-summary>
    <num-clients>
      num-clients
    </num-clients>
  </subscriber-session-summary>
</packet-triggered-subscribers-information>
```

Description Subscriber session summary

<term>

Usage

```
<packet-triggered-subscribers-information>
  <subscriber-policy>
    <service-policy>
      <term>
        <template-name>
          template-name
        </template-name>
        <tpr>
          tpr
        </tpr>
        <ra>
          ra
        </ra>
        <rm>
          rm
        </rm>
        <lpl>
          lpl
        </lpl>
        <lph>
          lph
        </lph>
        <rpl>
          rpl
        </rpl>
        <rph>
          rph
        </rph>
        <p>
          p
        </p>
        <anl>
          anl
        </anl>
        <agl>
          agl
        </agl>
```


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```
            <nanl>
              nanl
            </nanl>
            <a-f>
              a-f
            </a-f>
            <a-s>
              a-s
            </a-s>
            <a-fc>
              a-fc
            </a-fc>
            <a-p-i>
              a-p-i
            </a-p-i>
            <a-p-bw>
              a-p-bw
            </a-p-bw>
            <a-p-mbs>
              a-p-mbs
            </a-p-mbs>
            <a-fu>
              a-fu
            </a-fu>
            <opt-profile>
              opt-profile
            </opt-profile>
          </term>
        </service-policy>
      </subscriber-policy>
    </packet-triggered-subscribers-information>
```

Description Term

Summary of Passive Monitoring Interfaces Response Tags

<error-information>

Usage

```
<passive-monitoring-information>
  <error-information>
    <error-packets-dropped-no-memory>
      error-packets-dropped-no-memory
    </error-packets-dropped-no-memory>
    <error-packets-dropped-not-ip>
      error-packets-dropped-not-ip
    </error-packets-dropped-not-ip>
    <error-packets-dropped-not-ipv4>
      error-packets-dropped-not-ipv4
    </error-packets-dropped-not-ipv4>
    <error-packets-too-small>
      error-packets-too-small
    </error-packets-too-small>
    <error-allocation-failures>
```

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```
    error-allocation-failures
   </error-allocation-failures>
   <error-free-failures>
    error-free-failures
   </error-free-failures>
   <error-free-list-failures>
    error-free-list-failures
   </error-free-list-failures>
   <error-memory-warning>
    error-memory-warning
   </error-memory-warning>
   <error-memory-overload>
    error-memory-overload
   </error-memory-overload>
   <error-packets-per-second-overload>
    error-packets-per-second-overload
   </error-packets-per-second-overload>
   <error-bytes-per-second-overload>
    error-bytes-per-second-overload
   </error-bytes-per-second-overload>
  </error-information>
</passive-monitoring-information>
```

Description Passive monitoring error information

<flow-information>

Usage

```
<passive-monitoring-information>
  <flow-information>
   <flow-packets>
    flow-packets
   </flow-packets>
   <flow-bytes>
    flow-bytes
   </flow-bytes>
   <flow-packets-ten-second-rate>
    flow-packets-ten-second-rate
   </flow-packets-ten-second-rate>
   <flow-bytes-ten-second-rate>
    flow-bytes-ten-second-rate
   </flow-bytes-ten-second-rate>
   <active-flows>
    active-flows
   </active-flows>
   <flows>
    flows
   </flows>
   <flows-exported>
    flows-exported
   </flows-exported>
   <flow-packets-exported>
    flow-packets-exported
   </flow-packets-exported>
```


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```
    <flows-expired>
      flows-expired
    </flows-expired>
    <flows-aged>
      flows-aged
    </flows-aged>
  </flow-information>
</passive-monitoring-information>
```

Description Passive monitoring flow information

<memory-information>

Usage

```
<passive-monitoring-information>
  <memory-information>
    <allocation-count>
      allocation-count
    </allocation-count>
    <free-count>
      free-count
    </free-count>
    <maximum-allocated>
      maximum-allocated
    </maximum-allocated>
    <allocations-per-second>
      allocations-per-second
    </allocations-per-second>
    <frees-per-second>
      frees-per-second
    </frees-per-second>
    <memory-used>
      memory-used
    </memory-used>
    <memory-free>
      memory-free
    </memory-free>
  </memory-information>
</passive-monitoring-information>
```

Description Passive monitoring memory utilization

<passive-monitoring-information>

Usage

```
<passive-monitoring-information>
  <interface-name>
    interface-name
  </interface-name>
  <local-index>
    local-index
  </local-index>
```

```
  <pic-status>
    pic-status
  </pic-status>
  <usage-information>....</usage-information>
  <memory-information>....</memory-information>
  <flow-information>....</flow-information>
  <error-information>....</error-information>
  <status-information>....</status-information>
</passive-monitoring-information>
```

Description

<status-information>

Usage

```
<passive-monitoring-information>
  <status-information>
    <status-group-index>
      status-group-index
    </status-group-index>
    <status-export-interval>
      status-export-interval
    </status-export-interval>
    <status-export-format>
      status-export-format
    </status-export-format>
    <status-proto>
      status-proto
    </status-proto>
    <status-engine-type>
      status-engine-type
    </status-engine-type>
    <status-engine-id>
      status-engine-id
    </status-engine-id>
    <status-route-record-count>
      status-route-record-count
    </status-route-record-count>
    <status-ifl-snmp-map-count>
      status-ifl-snmp-map-count
    </status-ifl-snmp-map-count>
    <status-as-count>
      status-as-count
    </status-as-count>
    <status-monitor-time-set>
      status-monitor-time-set
    </status-monitor-time-set>
    <status-monitor-config-set>
      status-monitor-config-set
    </status-monitor-config-set>
    <status-monitor-route-record-set>
      status-monitor-route-record-set
    </status-monitor-route-record-set>
    <status-monitor-ifl-snmp-set>
      status-monitor-ifl-snmp-set
```


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```
    </status-monitor-ifl-snmp-set>
  </status-information>
</passive-monitoring-information>
```

Description Passive monitoring status information

<usage-information>

Usage

```
<passive-monitoring-information>
  <usage-information>
    <uptime>
      uptime
    </uptime>
    <inttime>
      inttime
    </inttime>
    <five-second-load>
      five-second-load
    </five-second-load>
    <one-minute-load>
      one-minute-load
    </one-minute-load>
  </usage-information>
</passive-monitoring-information>
```

Description Passive monitoring CPU utilization

Summary of PGM Response Tags

<errors>

Usage

```
<pgm-statistics-information>
  <packet-counters>
    <errors>
      <short-pgm-header>
        short-pgm-header
      </short-pgm-header>
      <bad-checksum>
        bad-checksum
      </bad-checksum>
      <zero-checksum>
        zero-checksum
      </zero-checksum>
      <bad-tsdu-length>
        bad-tsdu-length
      </bad-tsdu-length>
      <bad-spm-length>
        bad-spm-length
      </bad-spm-length>
      <bad-spm-family>
```

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```
            bad-spm-family
           </bad-spm-family>
           <bad-nak-length>
            bad-nak-length
           </bad-nak-length>
           <bad-nak-family>
            bad-nak-family
           </bad-nak-family>
           <nak-unknown-tsi>
            nak-unknown-tsi
           </nak-unknown-tsi>
           <nak-throttled>
            nak-throttled
           </nak-throttled>
           <bad-ncf-length>
            bad-ncf-length
           </bad-ncf-length>
           <bad-ncf-family>
            bad-ncf-family
           </bad-ncf-family>
           <ncf-unknown-tsi>
            ncf-unknown-tsi
           </ncf-unknown-tsi>
           <bad-rdata-length>
            bad-rdata-length
           </bad-rdata-length>
           <rdata-unknown-tsi>
            rdata-unknown-tsi
           </rdata-unknown-tsi>
           <odata-with-ra>
            odata-with-ra
           </odata-with-ra>
          </errors>
         </packet-counters>
        </pgm-statistics-information>
```

Description

<nak>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <nak>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </nak>
 </packet-counters>
</pgm-statistics-information>
```


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Description

<ncf>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <ncf>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </ncf>
 </packet-counters>
</pgm-statistics-information>
```

Description

<nullnak>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <nullnak>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </nullnak>
 </packet-counters>
</pgm-statistics-information>
```

Description

<other>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <other>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </other>
 </packet-counters>
</pgm-statistics-information>
```

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Description

<packet-counters>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <spm>....</spm>
  <poll>....</poll>
  <polr>....</polr>
  <rdata>....</rdata>
  <nak>....</nak>
  <nullnak>....</nullnak>
  <ncf>....</ncf>
  <spmr>....</spmr>
  <other>....</other>
  <errors>....</errors>
 </packet-counters>
</pgm-statistics-information>
```

Description

<pgm-nak-interface>

Usage

```
<pgm-spm-information>
 <pgm-spm-tsi>
  <pgm-spm-nak>
   <pgm-nak-interface>
    <pgm-nak-interface-name>
     pgm-nak-interface-name
    </pgm-nak-interface-name>
    <pgm-nak-interface-sender>
     pgm-nak-interface-sender
    </pgm-nak-interface-sender>
   </pgm-nak-interface>
  </pgm-spm-nak>
 </pgm-spm-tsi>
</pgm-spm-information>
```

Description

<pgm-spm-information>

Usage

```
<pgm-spm-information>
 <pgm-spm-tsi>....</pgm-spm-tsi>
</pgm-spm-information>
```

Description

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<pgm-spm-nak>

Usage

```
<pgm-spm-information>
 <pgm-spm-tsi>
  <pgm-spm-nak>
   <pgm-nak-sequence>
    pgm-nak-sequence
   </pgm-nak-sequence>
   <pgm-nak-source>
    pgm-nak-source
   </pgm-nak-source>
   <pgm-nak-group>
    pgm-nak-group
   </pgm-nak-group>
   <pgm-nak-interface>....</pgm-nak-interface>
  </pgm-spm-nak>
 </pgm-spm-tsi>
</pgm-spm-information>
```

Description

<pgm-spm-tsi>

Usage

```
<pgm-spm-information>
 <pgm-spm-tsi>
  <pgm-spm-gsid>
   pgm-spm-gsid
  </pgm-spm-gsid>
  <pgm-spm-sport>
   pgm-spm-sport
  </pgm-spm-sport>
  <pgm-spm-seq>
   pgm-spm-seq
  </pgm-spm-seq>
  <pgm-spm-trail>
   pgm-spm-trail
  </pgm-spm-trail>
  <pgm-spm-lead>
   pgm-spm-lead
  </pgm-spm-lead>
  <pgm-spm-nla>
   pgm-spm-nla
  </pgm-spm-nla>
  <pgm-spm-nak>....</pgm-spm-nak>
 </pgm-spm-tsi>
</pgm-spm-information>
```

Description

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<pgm-statistics-information>

Usage

```
<pgm-statistics-information>
  <packet-counters>....</packet-counters>
</pgm-statistics-information>
```

Description

<poll>

Usage

```
<pgm-statistics-information>
  <packet-counters>
    <poll>
      <received>
        received
      </received>
      <sent>
        sent
      </sent>
    </poll>
  </packet-counters>
</pgm-statistics-information>
```

Description

<polr>

Usage

```
<pgm-statistics-information>
  <packet-counters>
    <polr>
      <received>
        received
      </received>
      <sent>
        sent
      </sent>
    </polr>
  </packet-counters>
</pgm-statistics-information>
```

Description

<rdata>

Usage

```
<pgm-statistics-information>
  <packet-counters>
    <rdata>
      <received>
```


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```
        received
       </received>
       <sent>
        sent
       </sent>
      </rdata>
     </packet-counters>
    </pgm-statistics-information>
```

Description

<spm>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <spm>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </spm>
 </packet-counters>
</pgm-statistics-information>
```

Description

<spmr>

Usage

```
<pgm-statistics-information>
 <packet-counters>
  <spmr>
   <received>
    received
   </received>
   <sent>
    sent
   </sent>
  </spmr>
 </packet-counters>
</pgm-statistics-information>
```

Description

Summary of PKI Response Tags

<alternate-subject-list>

Usage

```
<alternate-subject-list>
```

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```
<alternate-subject>
  alternate-subject
</alternate-subject>
</alternate-subject-list>
```

Description

<alternate-subject-list>

Usage

```
<x509-certificate-info>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
</x509-certificate-info>
```

Description

<alternate-subject-list>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <alternate-subject-list>
      <alternate-subject>
        alternate-subject
      </alternate-subject>
    </alternate-subject-list>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<alternate-subject-list>

Usage

```
<x509-certificate-cache-info>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
</x509-certificate-cache-info>
```

Description

<alternate-subject-list>

Usage

```
<x509-certificate-cache-info-list>
```


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```
<x509-certificate-cache-info>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
 </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description

<alternate-subject-list>

Usage

```
<pkid-x509-certificate-information>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
</pkid-x509-certificate-information>
```

Description

<alternate-subject-list>

Usage

```
<pkid-x509-certificate-request-information>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
</pkid-x509-certificate-request-information>
```

Description

<auto-re-enrollment>

Usage

```
<auto-re-enrollment>
  <auto-re-enrollment-status>
    auto-re-enrollment-status
  </auto-re-enrollment-status>
  <auto-re-enrollment-next-trigger-time>
    auto-re-enrollment-next-trigger-time
  </auto-re-enrollment-next-trigger-time>
</auto-re-enrollment>
```

Description

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<auto-re-enrollment>

Usage

```
<x509-certificate-info>
  <auto-re-enrollment>
    <auto-re-enrollment-status>
      auto-re-enrollment-status
    </auto-re-enrollment-status>
    <auto-re-enrollment-next-trigger-time>
      auto-re-enrollment-next-trigger-time
    </auto-re-enrollment-next-trigger-time>
  </auto-re-enrollment>
</x509-certificate-info>
```

Description

<auto-re-enrollment>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <auto-re-enrollment>
      <auto-re-enrollment-status>
        auto-re-enrollment-status
      </auto-re-enrollment-status>
      <auto-re-enrollment-next-trigger-time>
        auto-re-enrollment-next-trigger-time
      </auto-re-enrollment-next-trigger-time>
    </auto-re-enrollment>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<auto-re-enrollment>

Usage

```
<pkid-x509-certificate-information>
  <auto-re-enrollment>
    <auto-re-enrollment-status>
      auto-re-enrollment-status
    </auto-re-enrollment-status>
    <auto-re-enrollment-next-trigger-time>
      auto-re-enrollment-next-trigger-time
    </auto-re-enrollment-next-trigger-time>
  </auto-re-enrollment>
</pkid-x509-certificate-information>
```

Description

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<ca-certificate-enroll>

Usage

```
<ca-certificate-enroll>
  <ca-subject>
    ca-subject
  </ca-subject>
  <fingerprint>....</fingerprint>
</ca-certificate-enroll>
```

Description Dump the subject and fingerprint of received CA certificate

<ca-certificate-enroll>

Usage

```
<ca-certificate-enroll-list>
  <ca-certificate-enroll>
    <ca-subject>
      ca-subject
    </ca-subject>
    <fingerprint>....</fingerprint>
  </ca-certificate-enroll>
</ca-certificate-enroll-list>
```

Description Dump the subject and fingerprint of received CA certificate

<ca-certificate-enroll-list>

Usage

```
<ca-certificate-enroll-list>
  <ca-certificate-enroll-msg>
    ca-certificate-enroll-msg
  </ca-certificate-enroll-msg>
  <ca-certificate-enroll>....</ca-certificate-enroll>
</ca-certificate-enroll-list>
```

Description

<cert-ca-load-status>

Usage

```
<cert-ca-load-status>
  <cert-ca-profile>
    cert-ca-profile
  </cert-ca-profile>
</cert-ca-load-status>
```

Description Certificate Authority certificate load status

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<cert-ca-manual-load>

Usage

```
<cert-ca-manual-load>
  <fingerprint>....</fingerprint>
</cert-ca-manual-load>
```

Description CA certificate manual-load prompt

<cert-flag-info>

Usage

```
<cert-flag-info>
  <cert-flag-trust>
    cert-flag-trust
  </cert-flag-trust>
  <cert-flag-root>
    cert-flag-root
  </cert-flag-root>
</cert-flag-info>
```

Description Information about state of certificates present in the cache

<cert-flag-info>

Usage

```
<x509-certificate-cache-info>
  <cert-flag-info>
    <cert-flag-trust>
      cert-flag-trust
    </cert-flag-trust>
    <cert-flag-root>
      cert-flag-root
    </cert-flag-root>
  </cert-flag-info>
</x509-certificate-cache-info>
```

Description Information about state of certificates present in the cache

<cert-flag-info>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <cert-flag-info>
      <cert-flag-trust>
        cert-flag-trust
      </cert-flag-trust>
      <cert-flag-root>
        cert-flag-root
```


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```
        </cert-flag-root>
      </cert-flag-info>
    </x509-certificate-cache-info>
  </x509-certificate-cache-info-list>
```

Description Information about state of certificates present in the cache

<cert-key-pair>

Usage

```
<cert-key-pair>
  <cert-key-pair-name>
    cert-key-pair-name
  </cert-key-pair-name>
  <cert-key-pair-size>
    cert-key-pair-size
  </cert-key-pair-size>
</cert-key-pair>
```

Description Generate key pair status

<cert-load-status>

Usage

```
<cert-load-status>
  <cert-certificate-id>
    cert-certificate-id
  </cert-certificate-id>
</cert-load-status>
```

Description Local certificate load status

<cert-request-dump>

Usage

```
<cert-request-dump>
  <cert-request-dump-msg>
    cert-request-dump-msg
  </cert-request-dump-msg>
  <cert-request-dump-file>....</cert-request-dump-file>
  <fingerprint>....</fingerprint>
</cert-request-dump>
```

Description Dump the generated certificate request

<cert-request-dump-file>

Usage

```
<cert-request-dump>
```

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```
<cert-request-dump-file>
  <cert-request-dump-file-content>
    cert-request-dump-file-content
  </cert-request-dump-file-content>
</cert-request-dump-file>
</cert-request-dump>
```

Description File contents

<crl-issuer-alternate-subject-list>

Usage

```
<crl-issuer-alternate-subject-list>
  <crl-issuer-alternate-subject>
    crl-issuer-alternate-subject
  </crl-issuer-alternate-subject>
</crl-issuer-alternate-subject-list>
```

Description

<crl-issuer-alternate-subject-list>

Usage

```
<x509-crl-information>
  <crl-issuer-alternate-subject-list>
    <crl-issuer-alternate-subject>
      crl-issuer-alternate-subject
    </crl-issuer-alternate-subject>
  </crl-issuer-alternate-subject-list>
</x509-crl-information>
```

Description

<crl-issuer-alternate-subject-list>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-issuer-alternate-subject-list>
      <crl-issuer-alternate-subject>
        crl-issuer-alternate-subject
      </crl-issuer-alternate-subject>
    </crl-issuer-alternate-subject-list>
  </x509-crl-information>
</x509-pki-crl-information-list>
```

Description

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<crl-issuer-alternate-subject-list>

Usage

```
<pkid-x509-crl-information>
  <crl-issuer-alternate-subject-list>
    <crl-issuer-alternate-subject>
      crl-issuer-alternate-subject
    </crl-issuer-alternate-subject>
  </crl-issuer-alternate-subject-list>
</pkid-x509-crl-information>
```

Description

<crl-issuer-alternate-subject-list>

Usage

```
<x509-pkid-crl-information-list>
  <pkid-x509-crl-information>
    <crl-issuer-alternate-subject-list>
      <crl-issuer-alternate-subject>
        crl-issuer-alternate-subject
      </crl-issuer-alternate-subject>
    </crl-issuer-alternate-subject-list>
  </pkid-x509-crl-information>
</x509-pkid-crl-information-list>
```

Description

<crl-issuer-detail>

Usage

```
<x509-crl-information>
  <crl-issuer-detail>
    <distinguished-name>....</distinguished-name>
  </crl-issuer-detail>
</x509-crl-information>
```

Description Distinguished name of CRL issuer

<crl-issuer-detail>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-issuer-detail>
      <distinguished-name>....</distinguished-name>
    </crl-issuer-detail>
  </x509-crl-information>
</x509-pki-crl-information-list>
```

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Description Distinguished name of CRL issuer

<crl-load-status>

Usage

```
<crl-load-status>
  <ca-profile-name>
    ca-profile-name
  </ca-profile-name>
</crl-load-status>
```

Description Status of manual load of certificate revocation list

<crl-revocation-list>

Usage

```
<crl-revocation-list>
  <revoked-cert-serial-number>
    revoked-cert-serial-number
  </revoked-cert-serial-number>
  <crl-revocation-date>
    crl-revocation-date
  </crl-revocation-date>
</crl-revocation-list>
```

Description

<crl-revocation-list>

Usage

```
<x509-crl-information>
  <crl-revocation-list>
    <revoked-cert-serial-number>
      revoked-cert-serial-number
    </revoked-cert-serial-number>
    <crl-revocation-date>
      crl-revocation-date
    </crl-revocation-date>
  </crl-revocation-list>
</x509-crl-information>
```

Description

<crl-revocation-list>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-revocation-list>
      <revoked-cert-serial-number>
        revoked-cert-serial-number
      </revoked-cert-serial-number>
```


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```
      <crl-revocation-date>
        crl-revocation-date
      </crl-revocation-date>
    </crl-revocation-list>
  </x509-crl-information>
</x509-pki-crl-information-list>
```

Description

<crl-revocation-list>

Usage

```
<pkid-x509-crl-information>
  <crl-revocation-list>
    <revoked-cert-serial-number>
      revoked-cert-serial-number
    </revoked-cert-serial-number>
    <crl-revocation-date>
      crl-revocation-date
    </crl-revocation-date>
  </crl-revocation-list>
</pkid-x509-crl-information>
```

Description

<crl-revocation-list>

Usage

```
<x509-pkid-crl-information-list>
  <pkid-x509-crl-information>
    <crl-revocation-list>
      <revoked-cert-serial-number>
        revoked-cert-serial-number
      </revoked-cert-serial-number>
      <crl-revocation-date>
        crl-revocation-date
      </crl-revocation-date>
    </crl-revocation-list>
  </pkid-x509-crl-information>
</x509-pkid-crl-information-list>
```

Description

<crl-validity>

Usage

```
<crl-validity>
  <effective-date>
    effective-date
  </effective-date>
  <next-update>
    next-update
  </next-update>
```

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```
</crl-validity>
```

Description Information about validity period for X.509 certificate revocation list

<crl-validity>

Usage

```
<x509-crl-information>
  <crl-validity>
    <effective-date>
      effective-date
    </effective-date>
    <next-update>
      next-update
    </next-update>
  </crl-validity>
</x509-crl-information>
```

Description Information about validity period for X.509 certificate revocation list

<crl-validity>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-validity>
      <effective-date>
        effective-date
      </effective-date>
      <next-update>
        next-update
      </next-update>
    </crl-validity>
  </x509-crl-information>
</x509-pki-crl-information-list>
```

Description Information about validity period for X.509 certificate revocation list

<crl-validity>

Usage

```
<pkid-x509-crl-information>
  <crl-validity>
    <effective-date>
      effective-date
    </effective-date>
    <next-update>
      next-update
    </next-update>
  </crl-validity>
```


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```
</pkid-x509-crl-information>
```

Description Information about validity period for X.509 certificate revocation list

<crl-validity>

Usage

```
<x509-pkid-crl-information-list>
  <pkid-x509-crl-information>
    <crl-validity>
      <effective-date>
        effective-date
      </effective-date>
      <next-update>
        next-update
      </next-update>
    </crl-validity>
  </pkid-x509-crl-information>
</x509-pkid-crl-information-list>
```

Description Information about validity period for X.509 certificate revocation list

<distinguished-name>

Usage

```
<distinguished-name>
  <organization-name>
    organization-name
  </organization-name>
  <organizational-unit-name>
    organizational-unit-name
  </organizational-unit-name>
  <country-name>
    country-name
  </country-name>
  <state-or-province-name>
    state-or-province-name
  </state-or-province-name>
  <locality-name>
    locality-name
  </locality-name>
  <common-name>
    common-name
  </common-name>
  <email-address>
    email-address
  </email-address>
  <domain-component>
    domain-component
  </domain-component>
</distinguished-name>
```

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Description

<distinguished-name>

Usage

```
<x509-certificate-info>
  <issuer>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
      </state-or-province-name>
      <locality-name>
        locality-name
      </locality-name>
      <common-name>
        common-name
      </common-name>
      <email-address>
        email-address
      </email-address>
      <domain-component>
        domain-component
      </domain-component>
    </distinguished-name>
  </issuer>
</x509-certificate-info>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-info>
  <subject>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
```


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```
      </state-or-province-name>
      <locality-name>
        locality-name
      </locality-name>
      <common-name>
        common-name
      </common-name>
      <email-address>
        email-address
      </email-address>
      <domain-component>
        domain-component
      </domain-component>
    </distinguished-name>
  </subject>
</x509-certificate-info>
```

Description

<distinguished-name>

Usage

```
<x509-crl-information>
  <crl-issuer-detail>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
      </state-or-province-name>
      <locality-name>
        locality-name
      </locality-name>
      <common-name>
        common-name
      </common-name>
      <email-address>
        email-address
      </email-address>
      <domain-component>
        domain-component
      </domain-component>
    </distinguished-name>
  </crl-issuer-detail>
</x509-crl-information>
```

Description

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<distinguished-name>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <issuer>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </issuer>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<distinguished-name>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <subject>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
```


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```
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<distinguished-name>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-issuer-detail>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </crl-issuer-detail>
```

```
  </x509-crl-information>
</x509-pki-crl-information-list>
```

Description

<distinguished-name>

Usage

```
<pkid-x509-certificate-information>
  <issuer-name>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
      </state-or-province-name>
      <locality-name>
        locality-name
      </locality-name>
      <common-name>
        common-name
      </common-name>
      <email-address>
        email-address
      </email-address>
      <domain-component>
        domain-component
      </domain-component>
    </distinguished-name>
  </issuer-name>
</pkid-x509-certificate-information>
```

Description

<distinguished-name>

Usage

```
<pkid-x509-certificate-information>
  <subject-name>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
```


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```
      country-name
    </country-name>
    <state-or-province-name>
      state-or-province-name
    </state-or-province-name>
    <locality-name>
      locality-name
    </locality-name>
    <common-name>
      common-name
    </common-name>
    <email-address>
      email-address
    </email-address>
    <domain-component>
      domain-component
    </domain-component>
  </distinguished-name>
 </subject-name>
</pkid-x509-certificate-information>
```

Description

<distribution-crl-list>

Usage

```
<distribution-crl-list>
 <distribution-crl>
  distribution-crl
 </distribution-crl>
</distribution-crl-list>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-certificate-info>
 <distribution-crl-list>
  <distribution-crl>
   distribution-crl
  </distribution-crl>
 </distribution-crl-list>
</x509-certificate-info>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-pki-certificate-info-list>
```

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```
<x509-certificate-info>
  <distribution-crl-list>
    <distribution-crl>
      distribution-crl
    </distribution-crl>
  </distribution-crl-list>
 </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-certificate-cache-info>
  <distribution-crl-list>
    <distribution-crl>
      distribution-crl
    </distribution-crl>
  </distribution-crl-list>
</x509-certificate-cache-info>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <distribution-crl-list>
      <distribution-crl>
        distribution-crl
      </distribution-crl>
    </distribution-crl-list>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<pkid-x509-certificate-information>
  <distribution-crl-list>
    <distribution-crl>
      distribution-crl
    </distribution-crl>
  </distribution-crl-list>
</pkid-x509-certificate-information>
```


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Description Information about one or more distribution certificate revocation lists

<fingerprint>

Usage

```
<fingerprint>
  <fingerprint-hash-algorithm>
    fingerprint-hash-algorithm
  </fingerprint-hash-algorithm>
  <fingerprint-content>
    fingerprint-content
  </fingerprint-content>
</fingerprint>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-info>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</x509-certificate-info>
```

Description Fingerprint

<fingerprint>

Usage

```
<cert-ca-manual-load>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</cert-ca-manual-load>
```

Description Fingerprint

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<fingerprint>

Usage

```
<cert-request-dump>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</cert-request-dump>
```

Description Fingerprint

<fingerprint>

Usage

```
<ca-certificate-enroll>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</ca-certificate-enroll>
```

Description Fingerprint

<fingerprint>

Usage

```
<ca-certificate-enroll-list>
  <ca-certificate-enroll>
    <fingerprint>
      <fingerprint-hash-algorithm>
        fingerprint-hash-algorithm
      </fingerprint-hash-algorithm>
      <fingerprint-content>
        fingerprint-content
      </fingerprint-content>
    </fingerprint>
  </ca-certificate-enroll>
</ca-certificate-enroll-list>
```

Description Fingerprint

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<fingerprint>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <fingerprint>
      <fingerprint-hash-algorithm>
        fingerprint-hash-algorithm
      </fingerprint-hash-algorithm>
      <fingerprint-content>
        fingerprint-content
      </fingerprint-content>
    </fingerprint>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-cache-info>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</x509-certificate-cache-info>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <fingerprint>
      <fingerprint-hash-algorithm>
        fingerprint-hash-algorithm
      </fingerprint-hash-algorithm>
      <fingerprint-content>
        fingerprint-content
      </fingerprint-content>
    </fingerprint>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

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Description Fingerprint

<fingerprint>

Usage

```
<pkid-x509-certificate-information>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</pkid-x509-certificate-information>
```

Description Fingerprint

<fingerprint>

Usage

```
<pkid-x509-certificate-request-information>
  <fingerprint>
    <fingerprint-hash-algorithm>
      fingerprint-hash-algorithm
    </fingerprint-hash-algorithm>
    <fingerprint-content>
      fingerprint-content
    </fingerprint-content>
  </fingerprint>
</pkid-x509-certificate-request-information>
```

Description Fingerprint

<issue-info>

Usage

```
<issue-info>
  <recipient>
    recipient
  </recipient>
  <issued-by>
    issued-by
  </issued-by>
</issue-info>
```

Description

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<issue-info>

Usage

```
<x509-certificate-info>
  <issue-info>
    <recipient>
      recipient
    </recipient>
    <issued-by>
      issued-by
    </issued-by>
  </issue-info>
</x509-certificate-info>
```

Description

<issue-info>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <issue-info>
      <recipient>
        recipient
      </recipient>
      <issued-by>
        issued-by
      </issued-by>
    </issue-info>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<issue-info>

Usage

```
<x509-certificate-cache-info>
  <issue-info>
    <recipient>
      recipient
    </recipient>
    <issued-by>
      issued-by
    </issued-by>
  </issue-info>
</x509-certificate-cache-info>
```

Description

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<issue-info>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <issue-info>
      <recipient>
        recipient
      </recipient>
      <issued-by>
        issued-by
      </issued-by>
    </issue-info>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description

<issue-info>

Usage

```
<pkid-x509-certificate-information>
  <issue-info>
    <recipient>
      recipient
    </recipient>
    <issued-by>
      issued-by
    </issued-by>
  </issue-info>
</pkid-x509-certificate-information>
```

Description

<issue-info>

Usage

```
<pkid-x509-certificate-request-information>
  <issue-info>
    <recipient>
      recipient
    </recipient>
    <issued-by>
      issued-by
    </issued-by>
  </issue-info>
</pkid-x509-certificate-request-information>
```

Description

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<issuer>

Usage

```
<x509-certificate-info>
  <issuer>
    <distinguished-name>....</distinguished-name>
  </issuer>
</x509-certificate-info>
```

Description Identifies the CA that issued certificate

<issuer>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <issuer>
      <distinguished-name>....</distinguished-name>
    </issuer>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Identifies the CA that issued certificate

<issuer-name>

Usage

```
<pkid-x509-certificate-information>
  <issuer-name>
    <distinguished-name>....</distinguished-name>
  </issuer-name>
</pkid-x509-certificate-information>
```

Description Identifies the CA that issued certificate

<key-usage-list>

Usage

```
<key-usage-list>
  <key-usage>
    key-usage
  </key-usage>
</key-usage-list>
```

Description

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<key-usage-list>

Usage

```
<x509-certificate-info>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</x509-certificate-info>
```

Description

<key-usage-list>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <key-usage-list>
      <key-usage>
        key-usage
      </key-usage>
    </key-usage-list>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description

<key-usage-list>

Usage

```
<x509-certificate-cache-info>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</x509-certificate-cache-info>
```

Description

<key-usage-list>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <key-usage-list>
      <key-usage>
        key-usage
      </key-usage>
    </key-usage-list>
  </x509-certificate-cache-info>
```


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```
</x509-certificate-cache-info-list>
```

Description

<key-usage-list>

Usage

```
<pkid-x509-certificate-information>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</pkid-x509-certificate-information>
```

Description

<key-usage-list>

Usage

```
<pkid-x509-certificate-request-information>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</pkid-x509-certificate-request-information>
```

Description

<pki-scep>

Usage

```
<pki-scep>
  <url>
    url
  </url>
  <ca-name>
    ca-name
  </ca-name>
  <ca-file>
    ca-file
  </ca-file>
  <key>
    key
  </key>
  <certificate-subject>
    certificate-subject
  </certificate-subject>
  <certificate-dns>
    certificate-dns
  </certificate-dns>
  <certificate-alternate-subject>
```

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```
    certificate-alternate-subject
  </certificate-alternate-subject>
  <encoding>
    encoding
  </encoding>
  <message>
    message
  </message>
</pki-scep>
```

Description Simple Certificate Enrollment Protocol

<pki-status>

Usage

```
<pki-status>
  <running>
    running
  </running>
</pki-status>
```

Description Status of PKI service

<pkid-status-messages>

Usage

```
<pkid-status-messages>
  <load-status>
    load-status
  </load-status>
</pkid-status-messages>
```

Description Status of pkid operational commands

<pkid-x509-certificate-information>

Usage

```
<pkid-x509-certificate-information>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
```


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```
  </identifier>
  <validity>....</validity>
  <version>
    version
  </version>
  <certificate-type>
    certificate-type
  </certificate-type>
  <status>
    status
  </status>
  <auto-re-enrollment>....</auto-re-enrollment>
  <issuer-name>....</issuer-name>
  <subject-name>....</subject-name>
</pkid-x509-certificate-information>
```

Description Detailed information about an X.509 certificate

<pkid-x509-certificate-request-information>

Usage

```
<pkid-x509-certificate-request-information>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
  </identifier>
  <version>
    version
  </version>
  <status>
    status
  </status>
</pkid-x509-certificate-request-information>
```

Description Detailed information about an X.509 certificate

<pkid-x509-crl-information>

Usage

```
<pkid-x509-crl-information>
  <crl-number>
    crl-number
  </crl-number>
```

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```
<crl-revocation-list>....</crl-revocation-list>
<crl-validity>....</crl-validity>
<crl-version>
  crl-version
</crl-version>
<crl-issuer>
  crl-issuer
</crl-issuer>
<identifier>
  identifier
</identifier>
<crl-issuer-alternate-subject-list>....</crl-issuer-alternate-subject-list>
</pkid-x509-crl-information>
```

Description Detailed information about X.509 certificate revocation list

<pkid-x509-crl-information>

Usage

```
<x509-pkid-crl-information-list>
  <pkid-x509-crl-information>
    <crl-number>
      crl-number
    </crl-number>
    <crl-revocation-list>....</crl-revocation-list>
    <crl-validity>....</crl-validity>
    <crl-version>
      crl-version
    </crl-version>
    <crl-issuer>
      crl-issuer
    </crl-issuer>
    <identifier>
      identifier
    </identifier>
    <crl-issuer-alternate-subject-list>....</crl-issuer-alternate-subject-list>
  </pkid-x509-crl-information>
</x509-pkid-crl-information-list>
```

Description Detailed information about X.509 certificate revocation list

<public-key>

Usage

```
<public-key>
  <public-key-algorithm>
    public-key-algorithm
  </public-key-algorithm>
  <public-key-length>
    public-key-length
  </public-key-length>
  <public-key-verification-status>
```


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```
    public-key-verification-status
  </public-key-verification-status>
</public-key>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-info>
  <public-key>
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
</x509-certificate-info>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <public-key>
      <public-key-algorithm>
        public-key-algorithm
      </public-key-algorithm>
      <public-key-length>
        public-key-length
      </public-key-length>
      <public-key-verification-status>
        public-key-verification-status
      </public-key-verification-status>
    </public-key>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-cache-info>
  <public-key>
```

```
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
</x509-certificate-cache-info>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <public-key>
      <public-key-algorithm>
        public-key-algorithm
      </public-key-algorithm>
      <public-key-length>
        public-key-length
      </public-key-length>
      <public-key-verification-status>
        public-key-verification-status
      </public-key-verification-status>
    </public-key>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<pkid-x509-certificate-information>
  <public-key>
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
</pkid-x509-certificate-information>
```


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Description Information about an X.509 public key

<public-key>

Usage

```
<pkid-x509-certificate-request-information>
  <public-key>
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
</pkid-x509-certificate-request-information>
```

Description Information about an X.509 public key

<public-key-contents-list>

Usage

```
<public-key-contents-list>
  <key-contents>
    key-contents
  </key-contents>
</public-key-contents-list>
```

Description

<public-key-contents-list>

Usage

```
<x509-certificate-info>
  <public-key-contents-list>
    <key-contents>
      key-contents
    </key-contents>
  </public-key-contents-list>
</x509-certificate-info>
```

Description

<public-key-contents-list>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <public-key-contents-list>
      <key-contents>
```

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```
            key-contents
           </key-contents>
          </public-key-contents-list>
         </x509-certificate-info>
        </x509-pki-certificate-info-list>
```

Description

<public-key-contents-list>

Usage

```
<x509-certificate-cache-info>
 <public-key-contents-list>
  <key-contents>
   key-contents
  </key-contents>
 </public-key-contents-list>
</x509-certificate-cache-info>
```

Description

<public-key-contents-list>

Usage

```
<x509-certificate-cache-info-list>
 <x509-certificate-cache-info>
  <public-key-contents-list>
   <key-contents>
    key-contents
   </key-contents>
  </public-key-contents-list>
 </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description

<public-key-contents-list>

Usage

```
<pkid-x509-certificate-information>
 <public-key-contents-list>
  <key-contents>
   key-contents
  </key-contents>
 </public-key-contents-list>
</pkid-x509-certificate-information>
```

Description

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<public-key-contents-list>

Usage

```
<pkid-x509-certificate-request-information>
  <public-key-contents-list>
    <key-contents>
      key-contents
    </key-contents>
  </public-key-contents-list>
</pkid-x509-certificate-request-information>
```

Description

<serial-number-list>

Usage

```
<serial-number-list>
  <serial-number-x509>
    serial-number-x509
  </serial-number-x509>
</serial-number-list>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-info>
  <serial-number-list>
    <serial-number-x509>
      serial-number-x509
    </serial-number-x509>
  </serial-number-list>
</x509-certificate-info>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <serial-number-list>
      <serial-number-x509>
        serial-number-x509
      </serial-number-x509>
    </serial-number-list>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

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Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-cache-info>
  <serial-number-list>
    <serial-number-x509>
      serial-number-x509
    </serial-number-x509>
  </serial-number-list>
</x509-certificate-cache-info>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <serial-number-list>
      <serial-number-x509>
        serial-number-x509
      </serial-number-x509>
    </serial-number-list>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<pkid-x509-certificate-information>
  <serial-number-list>
    <serial-number-x509>
      serial-number-x509
    </serial-number-x509>
  </serial-number-list>
</pkid-x509-certificate-information>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<pkid-x509-certificate-request-information>
  <serial-number-list>
    <serial-number-x509>
      serial-number-x509
```


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```
    </serial-number-x509>
  </serial-number-list>
</pkid-x509-certificate-request-information>
```

Description Serial numbers of one or more X.509 certificate

<service-set-info>

Usage

```
<service-set-info>
  <service-set-name>
    service-set-name
  </service-set-name>
  <total-cert-entries>
    total-cert-entries
  </total-cert-entries>
</service-set-info>
```

Description Information about service set and certificate cache statistics

<service-set-info>

Usage

```
<x509-certificate-cache-info>
  <service-set-info>
    <service-set-name>
      service-set-name
    </service-set-name>
    <total-cert-entries>
      total-cert-entries
    </total-cert-entries>
  </service-set-info>
</x509-certificate-cache-info>
```

Description Information about service set and certificate cache statistics

<service-set-info>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <service-set-info>
      <service-set-name>
        service-set-name
      </service-set-name>
      <total-cert-entries>
        total-cert-entries
      </total-cert-entries>
    </service-set-info>
  </x509-certificate-cache-info>
```

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```
</x509-certificate-cache-info-list>
```

Description Information about service set and certificate cache statistics

<subject>

Usage

```
<x509-certificate-info>
  <subject>
    <distinguished-name>....</distinguished-name>
  </subject>
</x509-certificate-info>
```

Description Information about certificate owner

<subject>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <subject>
      <distinguished-name>....</distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Information about certificate owner

<subject-name>

Usage

```
<pkid-x509-certificate-information>
  <subject-name>
    <distinguished-name>....</distinguished-name>
  </subject-name>
</pkid-x509-certificate-information>
```

Description Information about certificate owner

<validity>

Usage

```
<validity>
  <not-before>
    not-before
  </not-before>
  <not-after>
    not-after
  </not-after>
```


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```
</validity>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-certificate-info>
  <validity>
    <not-before>
      not-before
    </not-before>
    <not-after>
      not-after
    </not-after>
  </validity>
</x509-certificate-info>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>
    <validity>
      <not-before>
        not-before
      </not-before>
      <not-after>
        not-after
      </not-after>
    </validity>
  </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-certificate-cache-info>
  <validity>
    <not-before>
      not-before
    </not-before>
    <not-after>
      not-after
    </not-after>
  </validity>
```

```
</x509-certificate-cache-info>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <validity>
      <not-before>
        not-before
      </not-before>
      <not-after>
        not-after
      </not-after>
    </validity>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<pkid-x509-certificate-information>
  <validity>
    <not-before>
      not-before
    </not-before>
    <not-after>
      not-after
    </not-after>
  </validity>
</pkid-x509-certificate-information>
```

Description Information about validity period for X.509 certificate

<verify-cert-status>

Usage

```
<verify-cert-status>
  <cert-verification-status>
    cert-verification-status
  </cert-verification-status>
</verify-cert-status>
```

Description Certificate verification status

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<verify-integrity-status>

Usage

```
<verify-integrity-status>
  <int-check-verification-status>
    int-check-verification-status
  </int-check-verification-status>
</verify-integrity-status>
```

Description Integrity check verification status

<x509-certificate-cache-info>

Usage

```
<x509-certificate-cache-info>
  <service-set-info>....</service-set-info>
  <cert-flag-info>....</cert-flag-info>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
  </identifier>
  <validity>....</validity>
  <version>
    version
  </version>
  <certificate-cache-entry>
    certificate-cache-entry
  </certificate-cache-entry>
</x509-certificate-cache-info>
```

Description Information about an X.509 certificate present in the cache

<x509-certificate-cache-info>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>
    <service-set-info>....</service-set-info>
    <cert-flag-info>....</cert-flag-info>
    <issue-info>....</issue-info>
    <serial-number-list>....</serial-number-list>
    <public-key>....</public-key>
```

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```
    <fingerprint>....</fingerprint>
    <public-key-contents-list>....</public-key-contents-list>
    <alternate-subject-list>....</alternate-subject-list>
    <key-usage-list>....</key-usage-list>
    <distribution-crl-list>....</distribution-crl-list>
    <signature-algorithm>
      signature-algorithm
    </signature-algorithm>
    <identifier>
      identifier
    </identifier>
    <validity>....</validity>
    <version>
      version
    </version>
    <certificate-cache-entry>
      certificate-cache-entry
    </certificate-cache-entry>
  </x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Information about an X.509 certificate present in the cache

<x509-certificate-cache-info-list>

Usage

```
<x509-certificate-cache-info-list>
  <x509-certificate-cache-info>....</x509-certificate-cache-info>
</x509-certificate-cache-info-list>
```

Description Details of X.509 certificates present in the cache

<x509-certificate-info>

Usage

```
<x509-certificate-info>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
  </identifier>
  <validity>....</validity>
  <version>
```

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```
  version
 </version>
 <auto-re-enrollment>....</auto-re-enrollment>
 <certificate-type>
  certificate-type
 </certificate-type>
 <status>
  status
 </status>
 <issuer>....</issuer>
 <subject>....</subject>
</x509-certificate-info>
```

Description Detailed information about an X.509 certificate

<x509-certificate-info>

Usage

```
<x509-pki-certificate-info-list>
 <x509-certificate-info>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
   signature-algorithm
  </signature-algorithm>
  <identifier>
   identifier
  </identifier>
  <validity>....</validity>
  <version>
   version
  </version>
  <auto-re-enrollment>....</auto-re-enrollment>
  <certificate-type>
   certificate-type
  </certificate-type>
  <status>
   status
  </status>
  <issuer>....</issuer>
  <subject>....</subject>
 </x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description Detailed information about an X.509 certificate

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<x509-crl-information>

Usage

```
<x509-crl-information>
  <crl-number>
    crl-number
  </crl-number>
  <crl-revocation-list>....</crl-revocation-list>
  <crl-validity>....</crl-validity>
  <crl-version>
    crl-version
  </crl-version>
  <crl-issuer>
    crl-issuer
  </crl-issuer>
  <identifier>
    identifier
  </identifier>
  <crl-issuer-alternate-subject-list>....</crl-issuer-alternate-subject-list>
  <crl-issuer-detail>....</crl-issuer-detail>
</x509-crl-information>
```

Description Detailed information about X.509 certificate revocation list

<x509-crl-information>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>
    <crl-number>
      crl-number
    </crl-number>
    <crl-revocation-list>....</crl-revocation-list>
    <crl-validity>....</crl-validity>
    <crl-version>
      crl-version
    </crl-version>
    <crl-issuer>
      crl-issuer
    </crl-issuer>
    <identifier>
      identifier
    </identifier>
    <crl-issuer-alternate-subject-list>....</crl-issuer-alternate-subject-list>
    <crl-issuer-detail>....</crl-issuer-detail>
  </x509-crl-information>
</x509-pki-crl-information-list>
```

Description Detailed information about X.509 certificate revocation list

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<x509-pki-certificate-info-list>

Usage

```
<x509-pki-certificate-info-list>
  <x509-certificate-info>....</x509-certificate-info>
</x509-pki-certificate-info-list>
```

Description X.509 certificate details

<x509-pki-crl-information-list>

Usage

```
<x509-pki-crl-information-list>
  <x509-crl-information>....</x509-crl-information>
</x509-pki-crl-information-list>
```

Description Detailed information about X.509 certificate revocation list

<x509-pkid-crl-information-list>

Usage

```
<x509-pkid-crl-information-list>
  <pkid-x509-crl-information>....</pkid-x509-crl-information>
</x509-pkid-crl-information-list>
```

Description Detailed information about X.509 certificate revocation list

Summary of Process Map Response Tags (Remove)

Summary of Process Monitoring Response Tags (Remove)

Summary of Periodic Packet Management Response Tags

<adjacency-data>

Usage

```
<ppm-adjacencies>
  <adjacency-data>
    <protocol>
      protocol
    </protocol>
    <adjacency-holdtime>
      adjacency-holdtime
    </adjacency-holdtime>
    <adjacency-interface-index>
      adjacency-interface-index
    </adjacency-interface-index>
    <adjacency-no-absorb>
      adjacency-no-absorb
```

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```
</adjacency-no-absorb>
<adjacency-no-refresh>
  adjacency-no-refresh
</adjacency-no-refresh>
<adjacency-do-not-age>
  adjacency-do-not-age
</adjacency-do-not-age>
<adjacency-hello-dropped>
  adjacency-hello-dropped
</adjacency-hello-dropped>
<adjacency-distributed>
  adjacency-distributed
</adjacency-distributed>
<adjacency-ospf-src-key>
  adjacency-ospf-src-key
</adjacency-ospf-src-key>
<adjacency-ospf-area-id>
  adjacency-ospf-area-id
</adjacency-ospf-area-id>
<adjacency-ospf-transit-area-id>
  adjacency-ospf-transit-area-id
</adjacency-ospf-transit-area-id>
<adjacency-ospf-routing-table-index>
  adjacency-ospf-routing-table-index
</adjacency-ospf-routing-table-index>
<adjacency-isis-level>
  adjacency-isis-level
</adjacency-isis-level>
<adjacency-isis-sysid>
  adjacency-isis-sysid
</adjacency-isis-sysid>
<adjacency-esis-type>
  adjacency-esis-type
</adjacency-esis-type>
<adjacency-bfd-discriminator>
  adjacency-bfd-discriminator
</adjacency-bfd-discriminator>
<adjacency-bfd-routing-table-index>
  adjacency-bfd-routing-table-index
</adjacency-bfd-routing-table-index>
<adjacency-host>
  adjacency-host
</adjacency-host>
<redirection-data>....</redirection-data>
<adjacency-ldp-source>
  adjacency-ldp-source
</adjacency-ldp-source>
<adjacency-ldp-routing-table-index>
  adjacency-ldp-routing-table-index
</adjacency-ldp-routing-table-index>
<adjacency-stp-source-key>
  adjacency-stp-source-key
</adjacency-stp-source-key>
<adjacency-cfm-source-key>
  adjacency-cfm-source-key
</adjacency-cfm-source-key>
```


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```
    <adjacency-pfe-handle>
      adjacency-pfe-handle
    </adjacency-pfe-handle>
    <adjacency-pfe-addr>
      adjacency-pfe-addr
    </adjacency-pfe-addr>
  </adjacency-data>
</ppm-adjacencies>
```

Description Information about an adjacency of the PPM process

<connection-data>

Usage

```
<ppm-connections>
  <connection-data>
    <protocol>
      protocol
    </protocol>
    <logical-system-id>
      logical-system-id
    </logical-system-id>
    <number-adjacencies>
      number-adjacencies
    </number-adjacencies>
    <number-transmissions>
      number-transmissions
    </number-transmissions>
  </connection-data>
</ppm-connections>
```

Description Information about a connection to the PPM process

<interface-data>

Usage

```
<ppm-interfaces>
  <interface-data>
    <interface-key>
      interface-key
    </interface-key>
    <protocol>
      protocol
    </protocol>
    <interface-index>
      interface-index
    </interface-index>
    <interface-distributed>
      interface-distributed
    </interface-distributed>
    <interface-pfe-handle>
      interface-pfe-handle
```

```
    </interface-pfe-handle>
    <interface-pfe-addr>
      interface-pfe-addr
    </interface-pfe-addr>
  </interface-data>
</ppm-interfaces>
```

Description Information about a interface of the PPM process

<object-data>

Usage

```
<ppm-objects>
  <object-data>
    <protocol>
      protocol
    </protocol>
    <object-id>
      object-id
    </object-id>
    <object-key>
      object-key
    </object-key>
  </object-data>
</ppm-objects>
```

Description Information about an adjacency of the PPM process

<ppm-adjacencies>

Usage

```
<ppm-adjacencies>
  <adjacency-data>....</adjacency-data>
  <total-adjacencies>
    total-adjacencies
  </total-adjacencies>
  <remote-adjacencies>
    remote-adjacencies
  </remote-adjacencies>
</ppm-adjacencies>
```

Description Information about one or more adjacencies of the periodic packet management process

<ppm-connections>

Usage

```
<ppm-connections>
  <connection-data>....</connection-data>
  <total-connections>
    total-connections
  </total-connections>
```


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```
  <remote-connections>
    remote-connections
  </remote-connections>
</ppm-connections>
```

Description Information about one or more connections to the periodic packet management process

<ppm-interfaces>

Usage

```
<ppm-interfaces>
  <interface-data>....</interface-data>
  <total-interfaces>
    total-interfaces
  </total-interfaces>
  <remote-interfaces>
    remote-interfaces
  </remote-interfaces>
</ppm-interfaces>
```

Description Information about one or more interfaces of the periodic packet management process

<ppm-objects>

Usage

```
<ppm-objects>
  <object-data>....</object-data>
  <total-objects>
    total-objects
  </total-objects>
  <remote-objects>
    remote-objects
  </remote-objects>
</ppm-objects>
```

Description Information about one or more opaque objects of the periodic packetmanagement process

<ppm-transmissions>

Usage

```
<ppm-transmissions>
  <transmission-data>....</transmission-data>
  <total-transmissions>
    total-transmissions
  </total-transmissions>
  <remote-transmissions>
    remote-transmissions
  </remote-transmissions>
</ppm-transmissions>
```

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Description Information about one or more transmissions of the periodic packet management process

<ppmd-rules>

Usage

```
<ppmd-rules>
  <rule-data>....</rule-data>
  <total-rules>
    total-rules
  </total-rules>
</ppmd-rules>
```

Description Information about one or more rules of the periodic packet management process

<redirection-data>

Usage

```
<ppm-adjacencies>
  <adjacency-data>
    <redirection-data>
      <redirection-type>
        redirection-type
      </redirection-type>
      <redirection-rule-type>
        redirection-rule-type
      </redirection-rule-type>
      <redirection-rule-term-src>
        redirection-rule-term-src
      </redirection-rule-term-src>
      <redirection-rule-term-port>
        redirection-rule-term-port
      </redirection-rule-term-port>
      <redirection-rule-term-action>
        redirection-rule-term-action
      </redirection-rule-term-action>
    </redirection-data>
  </adjacency-data>
</ppm-adjacencies>
```

Description Information about a PPMD Adjacency Host

<rule-data>

Usage

```
<ppmd-rules>
  <rule-data>
    <rule-key-source>
      rule-key-source
    </rule-key-source>
    <rule-key-port>
      rule-key-port
    </rule-key-port>
```


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```
    <rule-nexthop>
      rule-nexthop
    </rule-nexthop>
    <rule-program>
      rule-program
    </rule-program>
  </rule-data>
</ppmd-rules>
```

Description Information about a rule of the PPM process

<transmission-data>

Usage

```
<ppm-transmissions>
  <transmission-data>
    <transmission-destination>
      transmission-destination
    </transmission-destination>
    <protocol>
      protocol
    </protocol>
    <transmission-interval>
      transmission-interval
    </transmission-interval>
    <transmission-host>
      transmission-host
    </transmission-host>
    <transmission-distributed>
      transmission-distributed
    </transmission-distributed>
    <transmission-pfe-handle>
      transmission-pfe-handle
    </transmission-pfe-handle>
    <transmission-pfe-addr>
      transmission-pfe-addr
    </transmission-pfe-addr>
  </transmission-data>
</ppm-transmissions>
```

Description Information about a transmission of the PPM process

Summary of PPP Response Tags

<assigned-address-list>

Usage

```
<ppp-address-pool-information>
  <assigned-address-list>
    <pool-address-assignment>....</pool-address-assignment>
  </assigned-address-list>
```

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```
</ppp-address-pool-information>
```

Description List of addresses assigned in pool

<ipcp-address>

Usage

```
<ppp-session>
  <ppp-session-protocol-information>
    <ppp-negotiated-options>
      <ipcp-address>
        <local-address>
          local-address
        </local-address>
        <remote-address>
          remote-address
        </remote-address>
      </ipcp-address>
    </ppp-negotiated-options>
  </ppp-session-protocol-information>
</ppp-session>
```

Description Negotiated IP address Internet Protocol Control Protocol option

<ipcp-address>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipcp-address>
          <local-address>
            local-address
          </local-address>
          <remote-address>
            remote-address
          </remote-address>
        </ipcp-address>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-interface-information>
```

Description Negotiated IP address Internet Protocol Control Protocol option

<ipcp-address>

Usage

```
<ppp-summary-information>
  <ppp-session>
```


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```
<ppp-session-protocol-information>
 <ppp-negotiated-options>
  <ipcp-address>
   <local-address>
    local-address
   </local-address>
   <remote-address>
    remote-address
   </remote-address>
  </ipcp-address>
 </ppp-negotiated-options>
</ppp-session-protocol-information>
</ppp-session>
</ppp-summary-information>
```

Description Negotiated IP address Internet Protocol Control Protocol option

<ipcp-address>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <ipcp-address>
     <local-address>
      local-address
     </local-address>
     <remote-address>
      remote-address
     </remote-address>
    </ipcp-address>
   </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-subscriber-summary-information>
```

Description Negotiated IP address Internet Protocol Control Protocol option

<ipcp-address>

Usage

```
<ppp-subscriber-summary-noheader-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <ipcp-address>
     <local-address>
      local-address
     </local-address>
     <remote-address>
      remote-address
```

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```
        </remote-address>
       </ipcp-address>
      </ppp-negotiated-options>
     </ppp-session-protocol-information>
    </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Negotiated IP address Internet Protocol Control Protocol option

<ipv6cp-interface-identifier>

Usage

```
<ppp-session>
 <ppp-session-protocol-information>
  <ppp-negotiated-options>
   <ipv6cp-interface-identifier>
    <local-interface-identifier>
     local-interface-identifier
    </local-interface-identifier>
    <remote-interface-identifier>
     remote-interface-identifier
    </remote-interface-identifier>
   </ipv6cp-interface-identifier>
  </ppp-negotiated-options>
 </ppp-session-protocol-information>
</ppp-session>
```

Description Negotiated Internet Protocol Version 6 Control Protocol interface identifier option

<ipv6cp-interface-identifier>

Usage

```
<ppp-interface-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <ipv6cp-interface-identifier>
     <local-interface-identifier>
      local-interface-identifier
     </local-interface-identifier>
     <remote-interface-identifier>
      remote-interface-identifier
     </remote-interface-identifier>
    </ipv6cp-interface-identifier>
   </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-interface-information>
```

Description Negotiated Internet Protocol Version 6 Control Protocol interface identifier option

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<ipv6cp-interface-identifier>

Usage

```
<ppp-summary-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipv6cp-interface-identifier>
          <local-interface-identifier>
            local-interface-identifier
          </local-interface-identifier>
          <remote-interface-identifier>
            remote-interface-identifier
          </remote-interface-identifier>
        </ipv6cp-interface-identifier>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-summary-information>
```

Description Negotiated Internet Protocol Version 6 Control Protocol interface identifier option

<ipv6cp-interface-identifier>

Usage

```
<ppp-subscriber-summary-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipv6cp-interface-identifier>
          <local-interface-identifier>
            local-interface-identifier
          </local-interface-identifier>
          <remote-interface-identifier>
            remote-interface-identifier
          </remote-interface-identifier>
        </ipv6cp-interface-identifier>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-information>
```

Description Negotiated Internet Protocol Version 6 Control Protocol interface identifier option

<ipv6cp-interface-identifier>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipv6cp-interface-identifier>
```

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```
            <local-interface-identifier>
              local-interface-identifier
            </local-interface-identifier>
            <remote-interface-identifier>
              remote-interface-identifier
            </remote-interface-identifier>
          </ipv6cp-interface-identifier>
        </ppp-negotiated-options>
      </ppp-session-protocol-information>
    </ppp-session>
  </ppp-subscriber-summary-noheader-information>
```

Description Negotiated Internet Protocol Version 6 Control Protocol interface identifier option

<lcp-authentication-protocol>

Usage

```
<ppp-session>
  <ppp-session-protocol-information>
    <ppp-negotiated-options>
      <lcp-authentication-protocol>
        <authentication-protocol-name>
          authentication-protocol-name
        </authentication-protocol-name>
        <authentication-algorithm>
          authentication-algorithm
        </authentication-algorithm>
      </lcp-authentication-protocol>
    </ppp-negotiated-options>
  </ppp-session-protocol-information>
</ppp-session>
```

Description Link Control Protocol authentication protocol option

<lcp-authentication-protocol>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-authentication-protocol>
          <authentication-protocol-name>
            authentication-protocol-name
          </authentication-protocol-name>
          <authentication-algorithm>
            authentication-algorithm
          </authentication-algorithm>
        </lcp-authentication-protocol>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
```


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```
</ppp-interface-information>
```

Description Link Control Protocol authentication protocol option

<lcp-authentication-protocol>

Usage

```
<ppp-summary-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-authentication-protocol>
          <authentication-protocol-name>
            authentication-protocol-name
          </authentication-protocol-name>
          <authentication-algorithm>
            authentication-algorithm
          </authentication-algorithm>
        </lcp-authentication-protocol>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-summary-information>
```

Description Link Control Protocol authentication protocol option

<lcp-authentication-protocol>

Usage

```
<ppp-subscriber-summary-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-authentication-protocol>
          <authentication-protocol-name>
            authentication-protocol-name
          </authentication-protocol-name>
          <authentication-algorithm>
            authentication-algorithm
          </authentication-algorithm>
        </lcp-authentication-protocol>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-information>
```

Description Link Control Protocol authentication protocol option

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<lcp-authentication-protocol>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-authentication-protocol>
          <authentication-protocol-name>
            authentication-protocol-name
          </authentication-protocol-name>
          <authentication-algorithm>
            authentication-algorithm
          </authentication-algorithm>
        </lcp-authentication-protocol>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Link Control Protocol authentication protocol option

<lcp-endpoint-discriminator>

Usage

```
<ppp-session>
  <ppp-session-protocol-information>
    <ppp-negotiated-options>
      <lcp-endpoint-discriminator>
        <endpoint-discriminator-class>
          endpoint-discriminator-class
        </endpoint-discriminator-class>
        <endpoint-discriminator-identifier>
          endpoint-discriminator-identifier
        </endpoint-discriminator-identifier>
      </lcp-endpoint-discriminator>
    </ppp-negotiated-options>
  </ppp-session-protocol-information>
</ppp-session>
```

Description Link Control Protocol endpoint discriminator option

<lcp-endpoint-discriminator>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-endpoint-discriminator>
          <endpoint-discriminator-class>
            endpoint-discriminator-class
```


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```
        </endpoint-discriminator-class>
        <endpoint-discriminator-identifier>
          endpoint-discriminator-identifier
        </endpoint-discriminator-identifier>
      </lcp-endpoint-discriminator>
    </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-interface-information>
```

Description Link Control Protocol endpoint discriminator option

<lcp-endpoint-discriminator>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <lcp-endpoint-discriminator>
     <endpoint-discriminator-class>
      endpoint-discriminator-class
     </endpoint-discriminator-class>
     <endpoint-discriminator-identifier>
      endpoint-discriminator-identifier
     </endpoint-discriminator-identifier>
    </lcp-endpoint-discriminator>
   </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-summary-information>
```

Description Link Control Protocol endpoint discriminator option

<lcp-endpoint-discriminator>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <lcp-endpoint-discriminator>
     <endpoint-discriminator-class>
      endpoint-discriminator-class
     </endpoint-discriminator-class>
     <endpoint-discriminator-identifier>
      endpoint-discriminator-identifier
     </endpoint-discriminator-identifier>
    </lcp-endpoint-discriminator>
   </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
```

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```
</ppp-subscriber-summary-information>
```

Description Link Control Protocol endpoint discriminator option

<lcp-endpoint-discriminator>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-endpoint-discriminator>
          <endpoint-discriminator-class>
            endpoint-discriminator-class
          </endpoint-discriminator-class>
          <endpoint-discriminator-identifier>
            endpoint-discriminator-identifier
          </endpoint-discriminator-identifier>
        </lcp-endpoint-discriminator>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Link Control Protocol endpoint discriminator option

<lcp-multilink-header>

Usage

```
<ppp-session>
  <ppp-session-protocol-information>
    <ppp-negotiated-options>
      <lcp-multilink-header>
        <multilink-header-code>
          multilink-header-code
        </multilink-header-code>
        <multilink-header-suspendable-classes>
          multilink-header-suspendable-classes
        </multilink-header-suspendable-classes>
      </lcp-multilink-header>
    </ppp-negotiated-options>
  </ppp-session-protocol-information>
</ppp-session>
```

Description Link Control Protocol multilink header format option

<lcp-multilink-header>

Usage

```
<ppp-interface-information>
  <ppp-session>
```


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```
<ppp-session-protocol-information>
 <ppp-negotiated-options>
  <lcp-multilink-header>
   <multilink-header-code>
    multilink-header-code
   </multilink-header-code>
   <multilink-header-suspendable-classes>
    multilink-header-suspendable-classes
   </multilink-header-suspendable-classes>
  </lcp-multilink-header>
 </ppp-negotiated-options>
</ppp-session-protocol-information>
</ppp-session>
</ppp-interface-information>
```

Description Link Control Protocol multilink header format option

<lcp-multilink-header>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <lcp-multilink-header>
     <multilink-header-code>
      multilink-header-code
     </multilink-header-code>
     <multilink-header-suspendable-classes>
      multilink-header-suspendable-classes
     </multilink-header-suspendable-classes>
    </lcp-multilink-header>
   </ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-summary-information>
```

Description Link Control Protocol multilink header format option

<lcp-multilink-header>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <lcp-multilink-header>
     <multilink-header-code>
      multilink-header-code
     </multilink-header-code>
     <multilink-header-suspendable-classes>
      multilink-header-suspendable-classes
```

```
            </multilink-header-suspendable-classes>
          </lcp-multilink-header>
        </ppp-negotiated-options>
      </ppp-session-protocol-information>
    </ppp-session>
</ppp-subscriber-summary-information>
```

Description Link Control Protocol multilink header format option

<lcp-multilink-header>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <lcp-multilink-header>
          <multilink-header-code>
            multilink-header-code
          </multilink-header-code>
          <multilink-header-suspendable-classes>
            multilink-header-suspendable-classes
          </multilink-header-suspendable-classes>
        </lcp-multilink-header>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Link Control Protocol multilink header format option

<pool-address-assignment>

Usage

```
<pool-address-assignment>
  <pool-address>
    pool-address
  </pool-address>
  <session-name>
    session-name
  </session-name>
  <pool-address-blocked>
    pool-address-blocked
  </pool-address-blocked>
</pool-address-assignment>
```

Description Assignment information for one address in the pool

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<pool-address-assignment>

Usage

```
<ppp-address-pool-information>
  <assigned-address-list>
    <pool-address-assignment>
      <pool-address>
        pool-address
      </pool-address>
      <session-name>
        session-name
      </session-name>
      <pool-address-blocked>
        pool-address-blocked
      </pool-address-blocked>
    </pool-address-assignment>
  </assigned-address-list>
</ppp-address-pool-information>
```

Description Assignment information for one address in the pool

<pool-address-list>

Usage

```
<ppp-address-pool-information>
  <pool-address-list>
    <pool-address>
      pool-address
    </pool-address>
  </pool-address-list>
</ppp-address-pool-information>
```

Description List of addresses in pool

<pool-range>

Usage

```
<ppp-address-pool-information>
  <pool-range>
    <low-address>
      low-address
    </low-address>
    <high-address>
      high-address
    </high-address>
  </pool-range>
</ppp-address-pool-information>
```

Description Range of addresses in pool

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<ppp-address-pool-information>

Usage

```
<ppp-address-pool-information>
  <pool-name>
    pool-name
  </pool-name>
  <assigned-addresses>
    assigned-addresses
  </assigned-addresses>
  <configured-addresses>
    configured-addresses
  </configured-addresses>
  <pool-range>....</pool-range>
  <pool-address-list>....</pool-address-list>
  <assigned-address-list>....</assigned-address-list>
</ppp-address-pool-information>
```

Description PPP address pool information

<ppp-auth-protocol-information>

Usage

```
<ppp-session>
  <ppp-auth-protocol-information>
    <ppp-state>
      ppp-state
    </ppp-state>
    <ppp-last-started>
      ppp-last-started
    </ppp-last-started>
    <ppp-last-completed>
      ppp-last-completed
    </ppp-last-completed>
    <ppp-auth-proto>
      ppp-auth-proto
    </ppp-auth-proto>
  </ppp-auth-protocol-information>
</ppp-session>
```

Description Authentication protocol information for PPP session

<ppp-auth-protocol-information>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <ppp-auth-protocol-information>
      <ppp-state>
        ppp-state
      </ppp-state>
      <ppp-last-started>
```


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```
            ppp-last-started
           </ppp-last-started>
           <ppp-last-completed>
            ppp-last-completed
           </ppp-last-completed>
           <ppp-auth-proto>
            ppp-auth-proto
           </ppp-auth-proto>
          </ppp-auth-protocol-information>
         </ppp-session>
        </ppp-interface-information>
```

Description Authentication protocol information for PPP session

<ppp-auth-protocol-information>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <ppp-auth-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
   </ppp-last-completed>
   <ppp-auth-proto>
    ppp-auth-proto
   </ppp-auth-proto>
  </ppp-auth-protocol-information>
 </ppp-session>
</ppp-summary-information>
```

Description Authentication protocol information for PPP session

<ppp-auth-protocol-information>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-auth-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
```

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```
      </ppp-last-completed>
      <ppp-auth-proto>
        ppp-auth-proto
      </ppp-auth-proto>
    </ppp-auth-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-information>
```

Description Authentication protocol information for PPP session

<ppp-auth-protocol-information>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-auth-protocol-information>
      <ppp-state>
        ppp-state
      </ppp-state>
      <ppp-last-started>
        ppp-last-started
      </ppp-last-started>
      <ppp-last-completed>
        ppp-last-completed
      </ppp-last-completed>
      <ppp-auth-proto>
        ppp-auth-proto
      </ppp-auth-proto>
    </ppp-auth-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Authentication protocol information for PPP session

<ppp-destination-profile>

Usage

```
<ppp-session>
  <ppp-session-protocol-information>
    <ppp-destination-profile>
      <pool-name>
        pool-name
      </pool-name>
    </ppp-destination-profile>
  </ppp-session-protocol-information>
</ppp-session>
```

Description Destination profile information

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<ppp-destination-profile>

Usage

```
<ppp-interface-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-destination-profile>
    <pool-name>
     pool-name
    </pool-name>
   </ppp-destination-profile>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-interface-information>
```

Description Destination profile information

<ppp-destination-profile>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-destination-profile>
    <pool-name>
     pool-name
    </pool-name>
   </ppp-destination-profile>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-summary-information>
```

Description Destination profile information

<ppp-destination-profile>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-destination-profile>
    <pool-name>
     pool-name
    </pool-name>
   </ppp-destination-profile>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-subscriber-summary-information>
```

Description Destination profile information

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<ppp-destination-profile>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-destination-profile>
        <pool-name>
          pool-name
        </pool-name>
      </ppp-destination-profile>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description Destination profile information

<ppp-interface-information>

Usage

```
<ppp-interface-information>
  <interface-name>
    interface-name
  </interface-name>
  <ppp-session>....</ppp-session>
</ppp-interface-information>
```

Description PPP interface information

<ppp-l2tp-session-keepalive-config>

Usage

```
<ppp-l2tp-session-keepalive-config>
  <keepalive-interval>
    keepalive-interval
  </keepalive-interval>
  <keepalive-down-count>
    keepalive-down-count
  </keepalive-down-count>
  <keepalive-up-count>
    keepalive-up-count
  </keepalive-up-count>
</ppp-l2tp-session-keepalive-config>
```

Description Configured keepalive settings on this interface

<ppp-l2tp-session-keepalive-statistics>

Usage

```
<ppp-l2tp-session-keepalive-statistics>
```


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```
<keepalive-input-count>
  keepalive-input-count
</keepalive-input-count>
<keepalive-output-count>
  keepalive-output-count
</keepalive-output-count>
<keepalive-input-time>
  keepalive-input-time
</keepalive-input-time>
<keepalive-output-time>
  keepalive-output-time
</keepalive-output-time>
</ppp-l2tp-session-keepalive-statistics>
```

Description Keepalive statistics for this interface

<ppp-memory-statistics>

Usage

```
<ppp-statistics-information>
  <ppp-memory-statistics>
    <ppp-memory-tag>....</ppp-memory-tag>
  </ppp-memory-statistics>
</ppp-statistics-information>
```

Description PPP process memory statistics

<ppp-memory-tag>

Usage

```
<ppp-statistics-information>
  <ppp-memory-statistics>
    <ppp-memory-tag>
      <ppp-memory-tag-name>
        ppp-memory-tag-name
      </ppp-memory-tag-name>
      <ppp-memory-tag-size>
        ppp-memory-tag-size
      </ppp-memory-tag-size>
      <ppp-memory-tag-active>
        ppp-memory-tag-active
      </ppp-memory-tag-active>
      <ppp-memory-tag-free>
        ppp-memory-tag-free
      </ppp-memory-tag-free>
      <ppp-memory-tag-maximum-free>
        ppp-memory-tag-maximum-free
      </ppp-memory-tag-maximum-free>
      <ppp-memory-tag-requests>
        ppp-memory-tag-requests
      </ppp-memory-tag-requests>
      <ppp-memory-tag-failures>
```

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```
            ppp-memory-tag-failures
           </ppp-memory-tag-failures>
           <ppp-memory-tag-total>
            ppp-memory-tag-total
           </ppp-memory-tag-total>
          </ppp-memory-tag>
         </ppp-memory-statistics>
        </ppp-statistics-information>
```

Description Tag associated with memory blocks

<ppp-negotiated-options>

Usage

```
<ppp-session>
 <ppp-session-protocol-information>
  <ppp-negotiated-options>
   <ipcp-address>....</ipcp-address>
   <ipcp-compression-protocol>
    ipcp-compression-protocol
   </ipcp-compression-protocol>
   <ipcp-primary-dns>
    ipcp-primary-dns
   </ipcp-primary-dns>
   <ipcp-primary-wins>
    ipcp-primary-wins
   </ipcp-primary-wins>
   <ipcp-secondary-dns>
    ipcp-secondary-dns
   </ipcp-secondary-dns>
   <ipcp-secondary-wins>
    ipcp-secondary-wins
   </ipcp-secondary-wins>
   <ipv6cp-interface-identifier>....</ipv6cp-interface-identifier>
   <bcp-mac-support>
    bcp-mac-support
   </bcp-mac-support>
   <bcp-tagged-frame>
    bcp-tagged-frame
   </bcp-tagged-frame>
   <lcp-address-compression-field-compression>
    lcp-address-compression-field-compression
   </lcp-address-compression-field-compression>
   <lcp-async-map>
    lcp-async-map
   </lcp-async-map>
   <lcp-authentication-protocol>....</lcp-authentication-protocol>
   <lcp-endpoint-discriminator>....</lcp-endpoint-discriminator>
   <lcp-magic-number>
    lcp-magic-number
   </lcp-magic-number>
   <lcp-mrru>
    lcp-mrru
   </lcp-mrru>
```


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```
        <lcp-mru>
          lcp-mru
        </lcp-mru>
        <lcp-peer-mru>
          lcp-peer-mru
        </lcp-peer-mru>
        <lcp-multilink-header>....</lcp-multilink-header>
        <lcp-protocol-field-compression>
          lcp-protocol-field-compression
        </lcp-protocol-field-compression>
        <lcp-short-sequence>
          lcp-short-sequence
        </lcp-short-sequence>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
```

Description PPP options negotiated with the remote peer

<ppp-negotiated-options>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipcp-address>....</ipcp-address>
        <ipcp-compression-protocol>
          ipcp-compression-protocol
        </ipcp-compression-protocol>
        <ipcp-primary-dns>
          ipcp-primary-dns
        </ipcp-primary-dns>
        <ipcp-primary-wins>
          ipcp-primary-wins
        </ipcp-primary-wins>
        <ipcp-secondary-dns>
          ipcp-secondary-dns
        </ipcp-secondary-dns>
        <ipcp-secondary-wins>
          ipcp-secondary-wins
        </ipcp-secondary-wins>
        <ipv6cp-interface-identifier>....</ipv6cp-interface-identifier>
        <bcp-mac-support>
          bcp-mac-support
        </bcp-mac-support>
        <bcp-tagged-frame>
          bcp-tagged-frame
        </bcp-tagged-frame>
        <lcp-address-compression-field-compression>
          lcp-address-compression-field-compression
        </lcp-address-compression-field-compression>
        <lcp-async-map>
          lcp-async-map
```

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```
        </lcp-async-map>
        <lcp-authentication-protocol>....</lcp-authentication-protocol>
        <lcp-endpoint-discriminator>....</lcp-endpoint-discriminator>
        <lcp-magic-number>
          lcp-magic-number
        </lcp-magic-number>
        <lcp-mrru>
          lcp-mrru
        </lcp-mrru>
        <lcp-mru>
          lcp-mru
        </lcp-mru>
        <lcp-peer-mru>
          lcp-peer-mru
        </lcp-peer-mru>
        <lcp-multilink-header>....</lcp-multilink-header>
        <lcp-protocol-field-compression>
          lcp-protocol-field-compression
        </lcp-protocol-field-compression>
        <lcp-short-sequence>
          lcp-short-sequence
        </lcp-short-sequence>
      </ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-interface-information>
```

Description PPP options negotiated with the remote peer

<ppp-negotiated-options>

Usage

```
<ppp-summary-information>
  <ppp-session>
    <ppp-session-protocol-information>
      <ppp-negotiated-options>
        <ipcp-address>....</ipcp-address>
        <ipcp-compression-protocol>
          ipcp-compression-protocol
        </ipcp-compression-protocol>
        <ipcp-primary-dns>
          ipcp-primary-dns
        </ipcp-primary-dns>
        <ipcp-primary-wins>
          ipcp-primary-wins
        </ipcp-primary-wins>
        <ipcp-secondary-dns>
          ipcp-secondary-dns
        </ipcp-secondary-dns>
        <ipcp-secondary-wins>
          ipcp-secondary-wins
        </ipcp-secondary-wins>
        <ipv6cp-interface-identifier>....</ipv6cp-interface-identifier>
        <bcp-mac-support>
```


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```
            bcp-mac-support
           </bcp-mac-support>
           <bcp-tagged-frame>
            bcp-tagged-frame
           </bcp-tagged-frame>
           <lcp-address-compression-field-compression>
            lcp-address-compression-field-compression
           </lcp-address-compression-field-compression>
           <lcp-async-map>
            lcp-async-map
           </lcp-async-map>
           <lcp-authentication-protocol>....</lcp-authentication-protocol>
           <lcp-endpoint-discriminator>....</lcp-endpoint-discriminator>
           <lcp-magic-number>
            lcp-magic-number
           </lcp-magic-number>
           <lcp-mrru>
            lcp-mrru
           </lcp-mrru>
           <lcp-mru>
            lcp-mru
           </lcp-mru>
           <lcp-peer-mru>
            lcp-peer-mru
           </lcp-peer-mru>
           <lcp-multilink-header>....</lcp-multilink-header>
           <lcp-protocol-field-compression>
            lcp-protocol-field-compression
           </lcp-protocol-field-compression>
           <lcp-short-sequence>
            lcp-short-sequence
           </lcp-short-sequence>
          </ppp-negotiated-options>
         </ppp-session-protocol-information>
        </ppp-session>
       </ppp-summary-information>
```

Description PPP options negotiated with the remote peer

<ppp-negotiated-options>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-negotiated-options>
    <ipcp-address>....</ipcp-address>
    <ipcp-compression-protocol>
     ipcp-compression-protocol
    </ipcp-compression-protocol>
    <ipcp-primary-dns>
     ipcp-primary-dns
    </ipcp-primary-dns>
    <ipcp-primary-wins>
```

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```
                ipcp-primary-wins
              </ipcp-primary-wins>
              <ipcp-secondary-dns>
                ipcp-secondary-dns
              </ipcp-secondary-dns>
              <ipcp-secondary-wins>
                ipcp-secondary-wins
              </ipcp-secondary-wins>
              <ipv6cp-interface-identifier>....</ipv6cp-interface-identifier>
              <bcp-mac-support>
                bcp-mac-support
              </bcp-mac-support>
              <bcp-tagged-frame>
                bcp-tagged-frame
              </bcp-tagged-frame>
              <lcp-address-compression-field-compression>
                lcp-address-compression-field-compression
              </lcp-address-compression-field-compression>
              <lcp-async-map>
                lcp-async-map
              </lcp-async-map>
              <lcp-authentication-protocol>....</lcp-authentication-protocol>
              <lcp-endpoint-discriminator>....</lcp-endpoint-discriminator>
              <lcp-magic-number>
                lcp-magic-number
              </lcp-magic-number>
              <lcp-mrru>
                lcp-mrru
              </lcp-mrru>
              <lcp-mru>
                lcp-mru
              </lcp-mru>
              <lcp-peer-mru>
                lcp-peer-mru
              </lcp-peer-mru>
              <lcp-multilink-header>....</lcp-multilink-header>
              <lcp-protocol-field-compression>
                lcp-protocol-field-compression
              </lcp-protocol-field-compression>
              <lcp-short-sequence>
                lcp-short-sequence
              </lcp-short-sequence>
            </ppp-negotiated-options>
          </ppp-session-protocol-information>
        </ppp-session>
      </ppp-subscriber-summary-information>
```

Description PPP options negotiated with the remote peer

<ppp-negotiated-options>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>
```


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```
<ppp-session-protocol-information>
  <ppp-negotiated-options>
    <ipcp-address>....</ipcp-address>
    <ipcp-compression-protocol>
      ipcp-compression-protocol
    </ipcp-compression-protocol>
    <ipcp-primary-dns>
      ipcp-primary-dns
    </ipcp-primary-dns>
    <ipcp-primary-wins>
      ipcp-primary-wins
    </ipcp-primary-wins>
    <ipcp-secondary-dns>
      ipcp-secondary-dns
    </ipcp-secondary-dns>
    <ipcp-secondary-wins>
      ipcp-secondary-wins
    </ipcp-secondary-wins>
    <ipv6cp-interface-identifier>....</ipv6cp-interface-identifier>
    <bcp-mac-support>
      bcp-mac-support
    </bcp-mac-support>
    <bcp-tagged-frame>
      bcp-tagged-frame
    </bcp-tagged-frame>
    <lcp-address-compression-field-compression>
      lcp-address-compression-field-compression
    </lcp-address-compression-field-compression>
    <lcp-async-map>
      lcp-async-map
    </lcp-async-map>
    <lcp-authentication-protocol>....</lcp-authentication-protocol>
    <lcp-endpoint-discriminator>....</lcp-endpoint-discriminator>
    <lcp-magic-number>
      lcp-magic-number
    </lcp-magic-number>
    <lcp-mrru>
      lcp-mrru
    </lcp-mrru>
    <lcp-mru>
      lcp-mru
    </lcp-mru>
    <lcp-peer-mru>
      lcp-peer-mru
    </lcp-peer-mru>
    <lcp-multilink-header>....</lcp-multilink-header>
    <lcp-protocol-field-compression>
      lcp-protocol-field-compression
    </lcp-protocol-field-compression>
    <lcp-short-sequence>
      lcp-short-sequence
    </lcp-short-sequence>
  </ppp-negotiated-options>
 </ppp-session-protocol-information>
</ppp-session>
```

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```
</ppp-subscriber-summary-noheader-information>
```

Description PPP options negotiated with the remote peer

<ppp-session>

Usage

```
<ppp-session>
  <session-name>
    session-name
  </session-name>
  <session-type>
    session-type
  </session-type>
  <session-phase>
    session-phase
  </session-phase>
  <session-flags>....</session-flags>
  <ppp-last-started>
    ppp-last-started
  </ppp-last-started>
  <ppp-last-completed>
    ppp-last-completed
  </ppp-last-completed>
  <ppp-auth-protocol-information>....</ppp-auth-protocol-information>
  <ppp-session-protocol-information>....</ppp-session-protocol-information>
</ppp-session>
```

Description PPP session

<ppp-session>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <session-name>
      session-name
    </session-name>
    <session-type>
      session-type
    </session-type>
    <session-phase>
      session-phase
    </session-phase>
    <session-flags>....</session-flags>
    <ppp-last-started>
      ppp-last-started
    </ppp-last-started>
    <ppp-last-completed>
      ppp-last-completed
    </ppp-last-completed>
    <ppp-auth-protocol-information>....</ppp-auth-protocol-information>
```


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```
    <ppp-session-protocol-information>....</ppp-session-protocol-information>
   </ppp-session>
</ppp-interface-information>
```

Description PPP session

<ppp-session>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <session-name>
   session-name
  </session-name>
  <session-type>
   session-type
  </session-type>
  <session-phase>
   session-phase
  </session-phase>
  <session-flags>....</session-flags>
  <ppp-last-started>
   ppp-last-started
  </ppp-last-started>
  <ppp-last-completed>
   ppp-last-completed
  </ppp-last-completed>
  <ppp-auth-protocol-information>....</ppp-auth-protocol-information>
  <ppp-session-protocol-information>....</ppp-session-protocol-information>
 </ppp-session>
</ppp-summary-information>
```

Description PPP session

<ppp-session>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <session-name>
   session-name
  </session-name>
  <session-type>
   session-type
  </session-type>
  <session-phase>
   session-phase
  </session-phase>
  <session-flags>....</session-flags>
  <ppp-last-started>
   ppp-last-started
  </ppp-last-started>
```

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```
    <ppp-last-completed>
     ppp-last-completed
    </ppp-last-completed>
    <ppp-auth-protocol-information>....</ppp-auth-protocol-information>
    <ppp-session-protocol-information>....</ppp-session-protocol-information>
   </ppp-session>
</ppp-subscriber-summary-information>
```

Description PPP session

<ppp-session>

Usage

```
<ppp-subscriber-summary-noheader-information>
 <ppp-session>
  <session-name>
   session-name
  </session-name>
  <session-type>
   session-type
  </session-type>
  <session-phase>
   session-phase
  </session-phase>
  <session-flags>....</session-flags>
  <ppp-last-started>
   ppp-last-started
  </ppp-last-started>
  <ppp-last-completed>
   ppp-last-completed
  </ppp-last-completed>
  <ppp-auth-protocol-information>....</ppp-auth-protocol-information>
  <ppp-session-protocol-information>....</ppp-session-protocol-information>
 </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description PPP session

<ppp-session-protocol-information>

Usage

```
<ppp-session>
 <ppp-session-protocol-information>
  <ppp-state>
   ppp-state
  </ppp-state>
  <ppp-last-started>
   ppp-last-started
  </ppp-last-started>
  <ppp-last-completed>
   ppp-last-completed
  </ppp-last-completed>
```


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```
    <ppp-protocol>
     ppp-protocol
    </ppp-protocol>
    <ppp-destination-profile>....</ppp-destination-profile>
    <ppp-negotiated-options>....</ppp-negotiated-options>
   </ppp-session-protocol-information>
</ppp-session>
```

Description LCP/NCP protocol information for PPP session

<ppp-session-protocol-information>

Usage

```
<ppp-interface-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
   </ppp-last-completed>
   <ppp-protocol>
    ppp-protocol
   </ppp-protocol>
   <ppp-destination-profile>....</ppp-destination-profile>
   <ppp-negotiated-options>....</ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-interface-information>
```

Description LCP/NCP protocol information for PPP session

<ppp-session-protocol-information>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
   </ppp-last-completed>
   <ppp-protocol>
```

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```
        ppp-protocol
       </ppp-protocol>
       <ppp-destination-profile>....</ppp-destination-profile>
       <ppp-negotiated-options>....</ppp-negotiated-options>
      </ppp-session-protocol-information>
     </ppp-session>
    </ppp-summary-information>
```

Description LCP/NCP protocol information for PPP session

<ppp-session-protocol-information>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
   </ppp-last-completed>
   <ppp-protocol>
    ppp-protocol
   </ppp-protocol>
   <ppp-destination-profile>....</ppp-destination-profile>
   <ppp-negotiated-options>....</ppp-negotiated-options>
  </ppp-session-protocol-information>
 </ppp-session>
</ppp-subscriber-summary-information>
```

Description LCP/NCP protocol information for PPP session

<ppp-session-protocol-information>

Usage

```
<ppp-subscriber-summary-noheader-information>
 <ppp-session>
  <ppp-session-protocol-information>
   <ppp-state>
    ppp-state
   </ppp-state>
   <ppp-last-started>
    ppp-last-started
   </ppp-last-started>
   <ppp-last-completed>
    ppp-last-completed
   </ppp-last-completed>
   <ppp-protocol>
```


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```
        ppp-protocol
      </ppp-protocol>
      <ppp-destination-profile>....</ppp-destination-profile>
      <ppp-negotiated-options>....</ppp-negotiated-options>
    </ppp-session-protocol-information>
  </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description LCP/NCP protocol information for PPP session

<ppp-session-statistics>

Usage

```
<ppp-statistics-information>
  <ppp-session-statistics>
    <sessions-total>
      sessions-total
    </sessions-total>
    <sessions-ppp>
      sessions-ppp
    </sessions-ppp>
    <sessions-ciscohdlc>
      sessions-ciscohdlc
    </sessions-ciscohdlc>
    <sessions-disabled>
      sessions-disabled
    </sessions-disabled>
    <sessions-establish>
      sessions-establish
    </sessions-establish>
    <sessions-authenticate>
      sessions-authenticate
    </sessions-authenticate>
    <sessions-network>
      sessions-network
    </sessions-network>
    <bundles-pending>
      bundles-pending
    </bundles-pending>
  </ppp-session-statistics>
</ppp-statistics-information>
```

Description PPP session statistics

<ppp-statistics-information>

Usage

```
<ppp-statistics-information>
  <ppp-session-statistics>....</ppp-session-statistics>
  <ppp-memory-statistics>....</ppp-memory-statistics>
  <ppp-subscriber-statistics>....</ppp-subscriber-statistics>
```

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```
</ppp-statistics-information>
```

Description PPP statistics

<ppp-subscriber-memory-pool>

Usage

```
<ppp-statistics-information>
  <ppp-subscriber-statistics>
    <ppp-subscriber-memory-statistics>
      <ppp-subscriber-memory-pool>
        <ppp-subscriber-memory-pool-name>
          ppp-subscriber-memory-pool-name
        </ppp-subscriber-memory-pool-name>
        <ppp-subscriber-memory-pool-entry-size>
          ppp-subscriber-memory-pool-entry-size
        </ppp-subscriber-memory-pool-entry-size>
        <ppp-subscriber-memory-pool-entries>
          ppp-subscriber-memory-pool-entries
        </ppp-subscriber-memory-pool-entries>
        <ppp-subscriber-memory-pool-free>
          ppp-subscriber-memory-pool-free
        </ppp-subscriber-memory-pool-free>
        <ppp-subscriber-memory-pool-maximum-free>
          ppp-subscriber-memory-pool-maximum-free
        </ppp-subscriber-memory-pool-maximum-free>
        <ppp-subscriber-memory-pool-requests>
          ppp-subscriber-memory-pool-requests
        </ppp-subscriber-memory-pool-requests>
        <ppp-subscriber-memory-pool-failures>
          ppp-subscriber-memory-pool-failures
        </ppp-subscriber-memory-pool-failures>
        <ppp-subscriber-memory-pool-total>
          ppp-subscriber-memory-pool-total
        </ppp-subscriber-memory-pool-total>
      </ppp-subscriber-memory-pool>
    </ppp-subscriber-memory-statistics>
  </ppp-subscriber-statistics>
</ppp-statistics-information>
```

Description Tag associated with memory blocks

<ppp-subscriber-memory-statistics>

Usage

```
<ppp-statistics-information>
  <ppp-subscriber-statistics>
    <ppp-subscriber-memory-statistics>
      <ppp-subscriber-memory-pool>....</ppp-subscriber-memory-pool>
    </ppp-subscriber-memory-statistics>
  </ppp-subscriber-statistics>
```


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```
</ppp-statistics-information>
```

Description PPP universal edge process memory statistics

<ppp-subscriber-session-statistics>

Usage

```
<ppp-statistics-information>
  <ppp-subscriber-statistics>
    <ppp-subscriber-session-statistics>
      <subscriber-sessions-total>
        subscriber-sessions-total
      </subscriber-sessions-total>
      <subscriber-sessions-disabled>
        subscriber-sessions-disabled
      </subscriber-sessions-disabled>
      <subscriber-sessions-establish>
        subscriber-sessions-establish
      </subscriber-sessions-establish>
      <subscriber-sessions-authenticate>
        subscriber-sessions-authenticate
      </subscriber-sessions-authenticate>
      <subscriber-sessions-network>
        subscriber-sessions-network
      </subscriber-sessions-network>
    </ppp-subscriber-session-statistics>
  </ppp-subscriber-statistics>
</ppp-statistics-information>
```

Description PPP subscriber session statistics

<ppp-subscriber-statistics>

Usage

```
<ppp-statistics-information>
  <ppp-subscriber-statistics>
    <ppp-subscriber-session-statistics>....</ppp-subscriber-session-statistics>
    <ppp-subscriber-memory-statistics>....</ppp-subscriber-memory-statistics>
  </ppp-subscriber-statistics>
</ppp-statistics-information>
```

Description PPP subscriber statistics

<ppp-subscriber-summary-information>

Usage

```
<ppp-subscriber-summary-information>
  <ppp-session>....</ppp-session>
</ppp-subscriber-summary-information>
```

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Description PPP summary information

<ppp-subscriber-summary-noheader-information>

Usage

```
<ppp-subscriber-summary-noheader-information>
  <ppp-session>....</ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description PPP summary information

<ppp-summary-information>

Usage

```
<ppp-summary-information>
  <ppp-session>....</ppp-session>
</ppp-summary-information>
```

Description PPP summary information

<session-flags>

Usage

```
<session-flags>
  <session-bundled>
    session-bundled
  </session-bundled>
  <session-ncp-only>
    session-ncp-only
  </session-ncp-only>
  <session-always-up>
    session-always-up
  </session-always-up>
  <session-tcc>
    session-tcc
  </session-tcc>
  <session-looped>
    session-looped
  </session-looped>
  <session-monitored>
    session-monitored
  </session-monitored>
</session-flags>
```

Description PPP session flags

<session-flags>

Usage

```
<ppp-session>
```


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```
<session-flags>
  <session-bundled>
    session-bundled
  </session-bundled>
  <session-ncp-only>
    session-ncp-only
  </session-ncp-only>
  <session-always-up>
    session-always-up
  </session-always-up>
  <session-tcc>
    session-tcc
  </session-tcc>
  <session-looped>
    session-looped
  </session-looped>
  <session-monitored>
    session-monitored
  </session-monitored>
</session-flags>
</ppp-session>
```

Description PPP session flags

<session-flags>

Usage

```
<ppp-interface-information>
  <ppp-session>
    <session-flags>
      <session-bundled>
        session-bundled
      </session-bundled>
      <session-ncp-only>
        session-ncp-only
      </session-ncp-only>
      <session-always-up>
        session-always-up
      </session-always-up>
      <session-tcc>
        session-tcc
      </session-tcc>
      <session-looped>
        session-looped
      </session-looped>
      <session-monitored>
        session-monitored
      </session-monitored>
    </session-flags>
  </ppp-session>
</ppp-interface-information>
```

Description PPP session flags

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<session-flags>

Usage

```
<ppp-summary-information>
 <ppp-session>
  <session-flags>
   <session-bundled>
    session-bundled
   </session-bundled>
   <session-ncp-only>
    session-ncp-only
   </session-ncp-only>
   <session-always-up>
    session-always-up
   </session-always-up>
   <session-tcc>
    session-tcc
   </session-tcc>
   <session-looped>
    session-looped
   </session-looped>
   <session-monitored>
    session-monitored
   </session-monitored>
  </session-flags>
 </ppp-session>
</ppp-summary-information>
```

Description PPP session flags

<session-flags>

Usage

```
<ppp-subscriber-summary-information>
 <ppp-session>
  <session-flags>
   <session-bundled>
    session-bundled
   </session-bundled>
   <session-ncp-only>
    session-ncp-only
   </session-ncp-only>
   <session-always-up>
    session-always-up
   </session-always-up>
   <session-tcc>
    session-tcc
   </session-tcc>
   <session-looped>
    session-looped
   </session-looped>
   <session-monitored>
    session-monitored
```


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```
      </session-monitored>
     </session-flags>
    </ppp-session>
</ppp-subscriber-summary-information>
```

Description PPP session flags

<session-flags>

Usage

```
<ppp-subscriber-summary-noheader-information>
 <ppp-session>
  <session-flags>
   <session-bundled>
    session-bundled
   </session-bundled>
   <session-ncp-only>
    session-ncp-only
   </session-ncp-only>
   <session-always-up>
    session-always-up
   </session-always-up>
   <session-tcc>
    session-tcc
   </session-tcc>
   <session-looped>
    session-looped
   </session-looped>
   <session-monitored>
    session-monitored
   </session-monitored>
  </session-flags>
 </ppp-session>
</ppp-subscriber-summary-noheader-information>
```

Description PPP session flags

Summary of PPP over Ethernet Response Tags

<padq>

Usage

```
<pppoe-padq-received>
 <padq>
  <current-bandwidth>
   current-bandwidth
  </current-bandwidth>
  <max-bandwidth>
   max-bandwidth
  </max-bandwidth>
  <quality>
   quality
```

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```
    </quality>
    <resources>
     resources
    </resources>
    <latency>
     latency
    </latency>
   </padq>
</pppoe-padq-received>
```

Description

<pppoe-aci-ari-entry>

Usage

```
<pppoe-aci-ari-entry>
  <agent-circuit-id>
   agent-circuit-id
  </agent-circuit-id>
  <agent-remote-id>
   agent-remote-id
  </agent-remote-id>
  <service-action>
   service-action
  </service-action>
  <dynamic-profile>
   dynamic-profile
  </dynamic-profile>
  <routing-instance>
   routing-instance
  </routing-instance>
  <static-interface>
   static-interface
  </static-interface>
</pppoe-aci-ari-entry>
```

Description

<pppoe-aci-ari-entry>

Usage

```
<pppoe-service-name>
  <pppoe-aci-ari-entry>
    <agent-circuit-id>
     agent-circuit-id
    </agent-circuit-id>
    <agent-remote-id>
     agent-remote-id
    </agent-remote-id>
    <service-action>
     service-action
    </service-action>
    <dynamic-profile>
     dynamic-profile
```


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```
    </dynamic-profile>
    <routing-instance>
      routing-instance
    </routing-instance>
    <static-interface>
      static-interface
    </static-interface>
  </pppoe-aci-ari-entry>
</pppoe-service-name>
```

Description

<pppoe-aci-ari-entry>

Usage

```
<pppoe-service-name-table-information>
  <pppoe-service-name>
    <pppoe-aci-ari-entry>
      <agent-circuit-id>
        agent-circuit-id
      </agent-circuit-id>
      <agent-remote-id>
        agent-remote-id
      </agent-remote-id>
      <service-action>
        service-action
      </service-action>
      <dynamic-profile>
        dynamic-profile
      </dynamic-profile>
      <routing-instance>
        routing-instance
      </routing-instance>
      <static-interface>
        static-interface
      </static-interface>
    </pppoe-aci-ari-entry>
  </pppoe-service-name>
</pppoe-service-name-table-information>
```

Description

<pppoe-counters>

Usage

```
<pppoe-counters>
  <padi-sent>
    padi-sent
  </padi-sent>
  <padi-received>
    padi-received
  </padi-received>
  <pado-sent>
    pado-sent
```

```
</pado-sent>
<pado-received>
  pado-received
</pado-received>
<padr-sent>
  padr-sent
</padr-sent>
<padr-received>
  padr-received
</padr-received>
<pads-sent>
  pads-sent
</pads-sent>
<pads-received>
  pads-received
</pads-received>
<padt-sent>
  padt-sent
</padt-sent>
<padt-received>
  padt-received
</padt-received>
<padm-sent>
  padm-sent
</padm-sent>
<padm-received>
  padm-received
</padm-received>
<padn-sent>
  padn-sent
</padn-sent>
<padn-received>
  padn-received
</padn-received>
<padg-sent>
  padg-sent
</padg-sent>
<padg-received>
  padg-received
</padg-received>
<padc-sent>
  padc-sent
</padc-sent>
<padc-received>
  padc-received
</padc-received>
<padq-sent>
  padq-sent
</padq-sent>
<padq-received>
  padq-received
</padq-received>
<servname-err-sent>
  servname-err-sent
</servname-err-sent>
<servname-err-received>
```


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```
  servname-err-received
 </servname-err-received>
 <acsystem-err-sent>
  acsystem-err-sent
 </acsystem-err-sent>
 <acsystem-err-received>
  acsystem-err-received
 </acsystem-err-received>
 <generic-err-sent>
  generic-err-sent
 </generic-err-sent>
 <generic-err-received>
  generic-err-received
 </generic-err-received>
 <malformed-pkt-received>
  malformed-pkt-received
 </malformed-pkt-received>
 <unknown-pkt-received>
  unknown-pkt-received
 </unknown-pkt-received>
 <padi-tmo>
  padi-tmo
 </padi-tmo>
 <pado-tmo>
  pado-tmo
 </pado-tmo>
 <padr-tmo>
  padr-tmo
 </padr-tmo>
 <padi-recv-err>
  padi-recv-err
 </padi-recv-err>
 <pado-recv-err>
  pado-recv-err
 </pado-recv-err>
 <padr-recv-err>
  padr-recv-err
 </padr-recv-err>
 <pads-recv-err>
  pads-recv-err
 </pads-recv-err>
</pppoe-counters>
```

Description

<pppoe-counters>

Usage

```
<pppoe-statistics>
 <pppoe-counters>
  <padi-sent>
   padi-sent
  </padi-sent>
  <padi-received>
   padi-received
```

```
</padi-received>
<pado-sent>
  pado-sent
</pado-sent>
<pado-received>
  pado-received
</pado-received>
<padr-sent>
  padr-sent
</padr-sent>
<padr-received>
  padr-received
</padr-received>
<pads-sent>
  pads-sent
</pads-sent>
<pads-received>
  pads-received
</pads-received>
<padt-sent>
  padt-sent
</padt-sent>
<padt-received>
  padt-received
</padt-received>
<padm-sent>
  padm-sent
</padm-sent>
<padm-received>
  padm-received
</padm-received>
<padn-sent>
  padn-sent
</padn-sent>
<padn-received>
  padn-received
</padn-received>
<padg-sent>
  padg-sent
</padg-sent>
<padg-received>
  padg-received
</padg-received>
<padc-sent>
  padc-sent
</padc-sent>
<padc-received>
  padc-received
</padc-received>
<padq-sent>
  padq-sent
</padq-sent>
<padq-received>
  padq-received
</padq-received>
<servname-err-sent>
```


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```
      servname-err-sent
    </servname-err-sent>
    <servname-err-received>
      servname-err-received
    </servname-err-received>
    <acsystem-err-sent>
      acsystem-err-sent
    </acsystem-err-sent>
    <acsystem-err-received>
      acsystem-err-received
    </acsystem-err-received>
    <generic-err-sent>
      generic-err-sent
    </generic-err-sent>
    <generic-err-received>
      generic-err-received
    </generic-err-received>
    <malformed-pkt-received>
      malformed-pkt-received
    </malformed-pkt-received>
    <unknown-pkt-received>
      unknown-pkt-received
    </unknown-pkt-received>
    <padi-tmo>
      padi-tmo
    </padi-tmo>
    <pado-tmo>
      pado-tmo
    </pado-tmo>
    <padr-tmo>
      padr-tmo
    </padr-tmo>
    <padi-recv-err>
      padi-recv-err
    </padi-recv-err>
    <pado-recv-err>
      pado-recv-err
    </pado-recv-err>
    <padr-recv-err>
      padr-recv-err
    </padr-recv-err>
    <pads-recv-err>
      pads-recv-err
    </pads-recv-err>
  </pppoe-counters>
</pppoe-statistics>
```

Description

<pppoe-counters>

Usage

```
<pppoe-statistics-information>
  <pppoe-statistics>
    <pppoe-counters>
```

```
<padi-sent>
  padi-sent
</padi-sent>
<padi-received>
  padi-received
</padi-received>
<pado-sent>
  pado-sent
</pado-sent>
<pado-received>
  pado-received
</pado-received>
<padr-sent>
  padr-sent
</padr-sent>
<padr-received>
  padr-received
</padr-received>
<pads-sent>
  pads-sent
</pads-sent>
<pads-received>
  pads-received
</pads-received>
<padt-sent>
  padt-sent
</padt-sent>
<padt-received>
  padt-received
</padt-received>
<padm-sent>
  padm-sent
</padm-sent>
<padm-received>
  padm-received
</padm-received>
<padn-sent>
  padn-sent
</padn-sent>
<padn-received>
  padn-received
</padn-received>
<padg-sent>
  padg-sent
</padg-sent>
<padg-received>
  padg-received
</padg-received>
<padc-sent>
  padc-sent
</padc-sent>
<padc-received>
  padc-received
</padc-received>
<padq-sent>
  padq-sent
```


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```
        </padq-sent>
        <padq-received>
          padq-received
        </padq-received>
        <servname-err-sent>
          servname-err-sent
        </servname-err-sent>
        <servname-err-received>
          servname-err-received
        </servname-err-received>
        <acsystem-err-sent>
          acsystem-err-sent
        </acsystem-err-sent>
        <acsystem-err-received>
          acsystem-err-received
        </acsystem-err-received>
        <generic-err-sent>
          generic-err-sent
        </generic-err-sent>
        <generic-err-received>
          generic-err-received
        </generic-err-received>
        <malformed-pkt-received>
          malformed-pkt-received
        </malformed-pkt-received>
        <unknown-pkt-received>
          unknown-pkt-received
        </unknown-pkt-received>
        <padi-tmo>
          padi-tmo
        </padi-tmo>
        <pado-tmo>
          pado-tmo
        </pado-tmo>
        <padr-tmo>
          padr-tmo
        </padr-tmo>
        <padi-recv-err>
          padi-recv-err
        </padi-recv-err>
        <pado-recv-err>
          pado-recv-err
        </pado-recv-err>
        <padr-recv-err>
          padr-recv-err
        </padr-recv-err>
        <pads-recv-err>
          pads-recv-err
        </pads-recv-err>
      </pppoe-counters>
    </pppoe-statistics>
  </pppoe-statistics-information>
```

Description

<pppoe-interface>

Usage

```
<pppoe-interface>
 <interface-name>
  interface-name
 </interface-name>
 <interface-index>
  interface-index
 </interface-index>
 <underlying-interface-name>
  underlying-interface-name
 </underlying-interface-name>
 <underlying-interface-index>
  underlying-interface-index
 </underlying-interface-index>
 <state>
  state
 </state>
 <ifl-type>
  ifl-type
 </ifl-type>
 <session-id>
  session-id
 </session-id>
 <ac-name-config>
  ac-name-config
 </ac-name-config>
 <ac-name-session>
  ac-name-session
 </ac-name-session>
 <service-name>
  service-name
 </service-name>
 <remote-mac>
  remote-mac
 </remote-mac>
 <auto-reconnect>
  auto-reconnect
 </auto-reconnect>
 <idle-timeout>
  idle-timeout
 </idle-timeout>
 <session-uptime>
  session-uptime
 </session-uptime>
 <dynamic-profile>
  dynamic-profile
 </dynamic-profile>
 <pppoe-credits>
  pppoe-credits
 </pppoe-credits>
 <pppoe-credit-scale-factor>
  pppoe-credit-scale-factor
 </pppoe-credit-scale-factor>
```


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```
  <dynamic-interface-bandwidth>
    dynamic-interface-bandwidth
  </dynamic-interface-bandwidth>
  <agent-circuit-id>
    agent-circuit-id
  </agent-circuit-id>
  <agent-remote-id>
    agent-remote-id
  </agent-remote-id>
  <padm-motm>
    padm-motm
  </padm-motm>
  <padm-hurl>
    padm-hurl
  </padm-hurl>
  <padg-credits>
    padg-credits
  </padg-credits>
</pppoe-interface>
```

Description

<pppoe-interface>

Usage

```
<pppoe-interface-information>
  <pppoe-interface>
    <interface-name>
      interface-name
    </interface-name>
    <interface-index>
      interface-index
    </interface-index>
    <underlying-interface-name>
      underlying-interface-name
    </underlying-interface-name>
    <underlying-interface-index>
      underlying-interface-index
    </underlying-interface-index>
    <state>
      state
    </state>
    <ifl-type>
      ifl-type
    </ifl-type>
    <session-id>
      session-id
    </session-id>
    <ac-name-config>
      ac-name-config
    </ac-name-config>
    <ac-name-session>
      ac-name-session
    </ac-name-session>
    <service-name>
```

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```
      service-name
    </service-name>
    <remote-mac>
      remote-mac
    </remote-mac>
    <auto-reconnect>
      auto-reconnect
    </auto-reconnect>
    <idle-timeout>
      idle-timeout
    </idle-timeout>
    <session-uptime>
      session-uptime
    </session-uptime>
    <dynamic-profile>
      dynamic-profile
    </dynamic-profile>
    <pppoe-credits>
      pppoe-credits
    </pppoe-credits>
    <pppoe-credit-scale-factor>
      pppoe-credit-scale-factor
    </pppoe-credit-scale-factor>
    <dynamic-interface-bandwidth>
      dynamic-interface-bandwidth
    </dynamic-interface-bandwidth>
    <agent-circuit-id>
      agent-circuit-id
    </agent-circuit-id>
    <agent-remote-id>
      agent-remote-id
    </agent-remote-id>
    <padm-motm>
      padm-motm
    </padm-motm>
    <padm-hurl>
      padm-hurl
    </padm-hurl>
    <padg-credits>
      padg-credits
    </padg-credits>
  </pppoe-interface>
</pppoe-interface-information>
```

Description

<pppoe-interface-information>

Usage

```
<pppoe-interface-information>
  <pppoe-interface>....</pppoe-interface>
</pppoe-interface-information>
```

Description

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<pppoe-lockout>

Usage

```
<pppoe-lockout>
  <lockout-time-min>
    lockout-time-min
  </lockout-time-min>
  <lockout-time-max>
    lockout-time-max
  </lockout-time-max>
  <total-clients-in-lockout>
    total-clients-in-lockout
  </total-clients-in-lockout>
  <total-clients-in-grace-period>
    total-clients-in-grace-period
  </total-clients-in-grace-period>
  <client-mac>
    client-mac
  </client-mac>
  <current-time>
    current-time
  </current-time>
  <elapsed-time>
    elapsed-time
  </elapsed-time>
  <next-time>
    next-time
  </next-time>
</pppoe-lockout>
```

Description

<pppoe-oper-states>

Usage

```
<pppoe-oper-states>
  <state>
    state
  </state>
  <dynamic-profile>
    dynamic-profile
  </dynamic-profile>
  <max-sessions>
    max-sessions
  </max-sessions>
  <max-sessions-vsa-ignore>
    max-sessions-vsa-ignore
  </max-sessions-vsa-ignore>
  <active-sessions>
    active-sessions
  </active-sessions>
  <ac-name>
    ac-name
  </ac-name>
```

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```
<duplicate-protection>
  duplicate-protection
</duplicate-protection>
<service-name-table>
  service-name-table
</service-name-table>
</pppoe-oper-states>
```

Description

<pppoe-padq-received>

Usage

```
<pppoe-padq-received>
  <padq>....</padq>
</pppoe-padq-received>
```

Description

<pppoe-service-name>

Usage

```
<pppoe-service-name>
  <service-name>
    service-name
  </service-name>
  <service-action>
    service-action
  </service-action>
  <dynamic-profile>
    dynamic-profile
  </dynamic-profile>
  <routing-instance>
    routing-instance
  </routing-instance>
  <max-sessions>
    max-sessions
  </max-sessions>
  <active-sessions>
    active-sessions
  </active-sessions>
  <pppoe-aci-ari-entry>....</pppoe-aci-ari-entry>
</pppoe-service-name>
```

Description

<pppoe-service-name>

Usage

```
<pppoe-service-name-table-information>
  <pppoe-service-name>
    <service-name>
      service-name
```


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```
    </service-name>
    <service-action>
      service-action
    </service-action>
    <dynamic-profile>
      dynamic-profile
    </dynamic-profile>
    <routing-instance>
      routing-instance
    </routing-instance>
    <max-sessions>
      max-sessions
    </max-sessions>
    <active-sessions>
      active-sessions
    </active-sessions>
    <pppoe-aci-ari-entry>....</pppoe-aci-ari-entry>
  </pppoe-service-name>
</pppoe-service-name-table-information>
```

Description

<pppoe-service-name-table-information>

Usage

```
<pppoe-service-name-table-information>
  <service-name-table>
    service-name-table
  </service-name-table>
  <pppoe-service-name>....</pppoe-service-name>
</pppoe-service-name-table-information>
```

Description

<pppoe-statistics>

Usage

```
<pppoe-statistics>
  <active-sessions>
    active-sessions
  </active-sessions>
  <pppoe-counters>....</pppoe-counters>
</pppoe-statistics>
```

Description

<pppoe-statistics>

Usage

```
<pppoe-statistics-information>
  <pppoe-statistics>
    <active-sessions>
      active-sessions
```

```
    </active-sessions>
    <pppoe-counters>....</pppoe-counters>
  </pppoe-statistics>
</pppoe-statistics-information>
```

Description

<pppoe-statistics-information>

Usage

```
<pppoe-statistics-information>
  <pppoe-statistics>....</pppoe-statistics>
</pppoe-statistics-information>
```

Description

<pppoe-underlying-interface>

Usage

```
<pppoe-underlying-interface>
  <underlying-interface-name>
    underlying-interface-name
  </underlying-interface-name>
  <underlying-interface-index>
    underlying-interface-index
  </underlying-interface-index>
  <state>
    state
  </state>
  <dynamic-profile>
    dynamic-profile
  </dynamic-profile>
  <max-sessions>
    max-sessions
  </max-sessions>
  <max-sessions-vsa-ignore>
    max-sessions-vsa-ignore
  </max-sessions-vsa-ignore>
  <active-sessions>
    active-sessions
  </active-sessions>
  <ac-name>
    ac-name
  </ac-name>
  <service-name-table>
    service-name-table
  </service-name-table>
  <duplicate-protection>
    duplicate-protection
  </duplicate-protection>
  <short-cycle-protection>
    short-cycle-protection
  </short-cycle-protection>
```


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```
</pppoe-underlying-interface>
```

Description

<pppoe-underlying-interface>

Usage

```
<pppoe-underlying-interface-information>
  <pppoe-underlying-interface>
    <underlying-interface-name>
      underlying-interface-name
    </underlying-interface-name>
    <underlying-interface-index>
      underlying-interface-index
    </underlying-interface-index>
    <state>
      state
    </state>
    <dynamic-profile>
      dynamic-profile
    </dynamic-profile>
    <max-sessions>
      max-sessions
    </max-sessions>
    <max-sessions-vsa-ignore>
      max-sessions-vsa-ignore
    </max-sessions-vsa-ignore>
    <active-sessions>
      active-sessions
    </active-sessions>
    <ac-name>
      ac-name
    </ac-name>
    <service-name-table>
      service-name-table
    </service-name-table>
    <duplicate-protection>
      duplicate-protection
    </duplicate-protection>
    <short-cycle-protection>
      short-cycle-protection
    </short-cycle-protection>
  </pppoe-underlying-interface>
</pppoe-underlying-interface-information>
```

Description

<pppoe-underlying-interface-information>

Usage

```
<pppoe-underlying-interface-information>
  <pppoe-underlying-interface>....</pppoe-underlying-interface>
</pppoe-underlying-interface-information>
```

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Description

<pppoe-version>

Usage

```
<pppoe-version>
  <max-sessions>
    max-sessions
  </max-sessions>
  <padi-resend-tmo>
    padi-resend-tmo
  </padi-resend-tmo>
  <padr-resend-tmo>
    padr-resend-tmo
  </padr-resend-tmo>
  <max-resend-tmo>
    max-resend-tmo
  </max-resend-tmo>
  <max-ac-tmo>
    max-ac-tmo
  </max-ac-tmo>
</pppoe-version>
```

Description

Summary of Probe Tests Response Tags

<hop>

Usage

```
<hop>
  <ttl-value>
    ttl-value
  </ttl-value>
  <percent-loss>
    percent-loss
  </percent-loss>
  <icmp-extension>
    icmp-extension
  </icmp-extension>
  <last-host-name>
    last-host-name
  </last-host-name>
  <last-ip-address>
    last-ip-address
  </last-ip-address>
  <probe-result>....</probe-result>
</hop>
```

Description Traceroute results for a single hop (TTL value)

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<hop>

Usage

```
<traceroute-results>
  <hop>
    <ttl-value>
      ttl-value
    </ttl-value>
    <percent-loss>
      percent-loss
    </percent-loss>
    <icmp-extension>
      icmp-extension
    </icmp-extension>
    <last-host-name>
      last-host-name
    </last-host-name>
    <last-ip-address>
      last-ip-address
    </last-ip-address>
    <probe-result>....</probe-result>
  </hop>
</traceroute-results>
```

Description Traceroute results for a single hop (TTL value)

<icmp-code>

Usage

```
<icmp-code>
  <icmp-code-none>
    icmp-code-none
  </icmp-code-none>
  <icmp-unreach-net>
    icmp-unreach-net
  </icmp-unreach-net>
  <icmp-unreach-host>
    icmp-unreach-host
  </icmp-unreach-host>
  <icmp-unreach-protocol>
    icmp-unreach-protocol
  </icmp-unreach-protocol>
  <icmp-unreach-port>
    icmp-unreach-port
  </icmp-unreach-port>
  <icmp-unreach-needfrag>
    icmp-unreach-needfrag
  </icmp-unreach-needfrag>
  <icmp-unreach-srcfail>
    icmp-unreach-srcfail
  </icmp-unreach-srcfail>
  <icmp-unreach-net-unknown>
    icmp-unreach-net-unknown
```

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</icmp-unreach-net-unknown>
<icmp-unreach-host-unknown>
  icmp-unreach-host-unknown
</icmp-unreach-host-unknown>
<icmp-unreach-isolated>
  icmp-unreach-isolated
</icmp-unreach-isolated>
<icmp-unreach-net-prohib>
  icmp-unreach-net-prohib
</icmp-unreach-net-prohib>
<icmp-unreach-host-prohib>
  icmp-unreach-host-prohib
</icmp-unreach-host-prohib>
<icmp-unreach-tosnet>
  icmp-unreach-tosnet
</icmp-unreach-tosnet>
<icmp-unreach-toshost>
  icmp-unreach-toshost
</icmp-unreach-toshost>
<icmp-unreach-filter-prohib>
  icmp-unreach-filter-prohib
</icmp-unreach-filter-prohib>
<icmp-unreach-host-precedence>
  icmp-unreach-host-precedence
</icmp-unreach-host-precedence>
<icmp-unreach-precedence-cutoff>
  icmp-unreach-precedence-cutoff
</icmp-unreach-precedence-cutoff>
<icmp-redirect-net>
  icmp-redirect-net
</icmp-redirect-net>
<icmp-redirect-host>
  icmp-redirect-host
</icmp-redirect-host>
<icmp-redirect-tosnet>
  icmp-redirect-tosnet
</icmp-redirect-tosnet>
<icmp-redirect-toshost>
  icmp-redirect-toshost
</icmp-redirect-toshost>
<icmp-timxceed-intrans>
  icmp-timxceed-intrans
</icmp-timxceed-intrans>
<icmp-timxceed-reass>
  icmp-timxceed-reass
</icmp-timxceed-reass>
<icmp-paramprob-optabsent>
  icmp-paramprob-optabsent
</icmp-paramprob-optabsent>
<icmp6-unreach-noroute>
  icmp6-unreach-noroute
</icmp6-unreach-noroute>
<icmp6-unreach-admin>
  icmp6-unreach-admin
</icmp6-unreach-admin>
<icmp6-unreach-beyond-scope>

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```
  icmp6-unreach-beyond-scope
 </icmp6-unreach-beyond-scope>
 <icmp6-unreach-address>
  icmp6-unreach-address
 </icmp6-unreach-address>
 <icmp6-unreach-port>
  icmp6-unreach-port
 </icmp6-unreach-port>
 <icmp6-time-exceed-transit>
  icmp6-time-exceed-transit
 </icmp6-time-exceed-transit>
 <icmp6-time-exceed-reassembly>
  icmp6-time-exceed-reassembly
 </icmp6-time-exceed-reassembly>
 <icmp6-parameter-problem-header>
  icmp6-parameter-problem-header
 </icmp6-parameter-problem-header>
 <icmp6-parameter-problem-nextheader>
  icmp6-parameter-problem-nextheader
 </icmp6-parameter-problem-nextheader>
 <icmp6-parameter-problem-option>
  icmp6-parameter-problem-option
 </icmp6-parameter-problem-option>
 <icmp6-ni-subject-ipv6>
  icmp6-ni-subject-ipv6
 </icmp6-ni-subject-ipv6>
 <icmp6-ni-subject-fqdn>
  icmp6-ni-subject-fqdn
 </icmp6-ni-subject-fqdn>
 <icmp6-ni-subject-ipv4>
  icmp6-ni-subject-ipv4
 </icmp6-ni-subject-ipv4>
 <icmp6-ni-success>
  icmp6-ni-success
 </icmp6-ni-success>
 <icmp6-ni-refused>
  icmp6-ni-refused
 </icmp6-ni-refused>
 <icmp6-ni-unknown>
  icmp6-ni-unknown
 </icmp6-ni-unknown>
</icmp-code>
```

Description Type of ICMP message type sub code

<icmp-code>

Usage

```
<probe-result>
 <icmp-code>
  <icmp-code-none>
   icmp-code-none
  </icmp-code-none>
  <icmp-unreach-net>
```

```
  icmp-unreach-net
</icmp-unreach-net>
<icmp-unreach-host>
  icmp-unreach-host
</icmp-unreach-host>
<icmp-unreach-protocol>
  icmp-unreach-protocol
</icmp-unreach-protocol>
<icmp-unreach-port>
  icmp-unreach-port
</icmp-unreach-port>
<icmp-unreach-needfrag>
  icmp-unreach-needfrag
</icmp-unreach-needfrag>
<icmp-unreach-srcfail>
  icmp-unreach-srcfail
</icmp-unreach-srcfail>
<icmp-unreach-net-unknown>
  icmp-unreach-net-unknown
</icmp-unreach-net-unknown>
<icmp-unreach-host-unknown>
  icmp-unreach-host-unknown
</icmp-unreach-host-unknown>
<icmp-unreach-isolated>
  icmp-unreach-isolated
</icmp-unreach-isolated>
<icmp-unreach-net-prohib>
  icmp-unreach-net-prohib
</icmp-unreach-net-prohib>
<icmp-unreach-host-prohib>
  icmp-unreach-host-prohib
</icmp-unreach-host-prohib>
<icmp-unreach-tosnet>
  icmp-unreach-tosnet
</icmp-unreach-tosnet>
<icmp-unreach-toshost>
  icmp-unreach-toshost
</icmp-unreach-toshost>
<icmp-unreach-filter-prohib>
  icmp-unreach-filter-prohib
</icmp-unreach-filter-prohib>
<icmp-unreach-host-precedence>
  icmp-unreach-host-precedence
</icmp-unreach-host-precedence>
<icmp-unreach-precedence-cutoff>
  icmp-unreach-precedence-cutoff
</icmp-unreach-precedence-cutoff>
<icmp-redirect-net>
  icmp-redirect-net
</icmp-redirect-net>
<icmp-redirect-host>
  icmp-redirect-host
</icmp-redirect-host>
<icmp-redirect-tosnet>
  icmp-redirect-tosnet
</icmp-redirect-tosnet>
```


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```
<icmp-redirect-toshost>
  icmp-redirect-toshost
</icmp-redirect-toshost>
<icmp-timxceed-intrans>
  icmp-timxceed-intrans
</icmp-timxceed-intrans>
<icmp-timxceed-reass>
  icmp-timxceed-reass
</icmp-timxceed-reass>
<icmp-paramprob-optabsent>
  icmp-paramprob-optabsent
</icmp-paramprob-optabsent>
<icmp6-unreach-noroute>
  icmp6-unreach-noroute
</icmp6-unreach-noroute>
<icmp6-unreach-admin>
  icmp6-unreach-admin
</icmp6-unreach-admin>
<icmp6-unreach-beyond-scope>
  icmp6-unreach-beyond-scope
</icmp6-unreach-beyond-scope>
<icmp6-unreach-address>
  icmp6-unreach-address
</icmp6-unreach-address>
<icmp6-unreach-port>
  icmp6-unreach-port
</icmp6-unreach-port>
<icmp6-time-exceed-transit>
  icmp6-time-exceed-transit
</icmp6-time-exceed-transit>
<icmp6-time-exceed-reassembly>
  icmp6-time-exceed-reassembly
</icmp6-time-exceed-reassembly>
<icmp6-parameter-problem-header>
  icmp6-parameter-problem-header
</icmp6-parameter-problem-header>
<icmp6-parameter-problem-nextheader>
  icmp6-parameter-problem-nextheader
</icmp6-parameter-problem-nextheader>
<icmp6-parameter-problem-option>
  icmp6-parameter-problem-option
</icmp6-parameter-problem-option>
<icmp6-ni-subject-ipv6>
  icmp6-ni-subject-ipv6
</icmp6-ni-subject-ipv6>
<icmp6-ni-subject-fqdn>
  icmp6-ni-subject-fqdn
</icmp6-ni-subject-fqdn>
<icmp6-ni-subject-ipv4>
  icmp6-ni-subject-ipv4
</icmp6-ni-subject-ipv4>
<icmp6-ni-success>
  icmp6-ni-success
</icmp6-ni-success>
<icmp6-ni-refused>
  icmp6-ni-refused
```

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```
      </icmp6-ni-refused>
      <icmp6-ni-unknown>
       icmp6-ni-unknown
      </icmp6-ni-unknown>
     </icmp-code>
    </probe-result>
```

Description Type of ICMP message type sub code

<icmp-code>

Usage

```
<ping-results>
 <probe-result>
  <icmp-code>
   <icmp-code-none>
    icmp-code-none
   </icmp-code-none>
   <icmp-unreach-net>
    icmp-unreach-net
   </icmp-unreach-net>
   <icmp-unreach-host>
    icmp-unreach-host
   </icmp-unreach-host>
   <icmp-unreach-protocol>
    icmp-unreach-protocol
   </icmp-unreach-protocol>
   <icmp-unreach-port>
    icmp-unreach-port
   </icmp-unreach-port>
   <icmp-unreach-needfrag>
    icmp-unreach-needfrag
   </icmp-unreach-needfrag>
   <icmp-unreach-srcfail>
    icmp-unreach-srcfail
   </icmp-unreach-srcfail>
   <icmp-unreach-net-unknown>
    icmp-unreach-net-unknown
   </icmp-unreach-net-unknown>
   <icmp-unreach-host-unknown>
    icmp-unreach-host-unknown
   </icmp-unreach-host-unknown>
   <icmp-unreach-isolated>
    icmp-unreach-isolated
   </icmp-unreach-isolated>
   <icmp-unreach-net-prohib>
    icmp-unreach-net-prohib
   </icmp-unreach-net-prohib>
   <icmp-unreach-host-prohib>
    icmp-unreach-host-prohib
   </icmp-unreach-host-prohib>
   <icmp-unreach-tosnet>
    icmp-unreach-tosnet
   </icmp-unreach-tosnet>
```


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```
<icmp-unreach-toshost>
  icmp-unreach-toshost
</icmp-unreach-toshost>
<icmp-unreach-filter-prohib>
  icmp-unreach-filter-prohib
</icmp-unreach-filter-prohib>
<icmp-unreach-host-precedence>
  icmp-unreach-host-precedence
</icmp-unreach-host-precedence>
<icmp-unreach-precedence-cutoff>
  icmp-unreach-precedence-cutoff
</icmp-unreach-precedence-cutoff>
<icmp-redirect-net>
  icmp-redirect-net
</icmp-redirect-net>
<icmp-redirect-host>
  icmp-redirect-host
</icmp-redirect-host>
<icmp-redirect-tosnet>
  icmp-redirect-tosnet
</icmp-redirect-tosnet>
<icmp-redirect-toshost>
  icmp-redirect-toshost
</icmp-redirect-toshost>
<icmp-timxceed-intrans>
  icmp-timxceed-intrans
</icmp-timxceed-intrans>
<icmp-timxceed-reass>
  icmp-timxceed-reass
</icmp-timxceed-reass>
<icmp-paramprob-optabsent>
  icmp-paramprob-optabsent
</icmp-paramprob-optabsent>
<icmp6-unreach-noroute>
  icmp6-unreach-noroute
</icmp6-unreach-noroute>
<icmp6-unreach-admin>
  icmp6-unreach-admin
</icmp6-unreach-admin>
<icmp6-unreach-beyond-scope>
  icmp6-unreach-beyond-scope
</icmp6-unreach-beyond-scope>
<icmp6-unreach-address>
  icmp6-unreach-address
</icmp6-unreach-address>
<icmp6-unreach-port>
  icmp6-unreach-port
</icmp6-unreach-port>
<icmp6-time-exceed-transit>
  icmp6-time-exceed-transit
</icmp6-time-exceed-transit>
<icmp6-time-exceed-reassembly>
  icmp6-time-exceed-reassembly
</icmp6-time-exceed-reassembly>
<icmp6-parameter-problem-header>
  icmp6-parameter-problem-header
```

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```
        </icmp6-parameter-problem-header>
        <icmp6-parameter-problem-nextheader>
          icmp6-parameter-problem-nextheader
        </icmp6-parameter-problem-nextheader>
        <icmp6-parameter-problem-option>
          icmp6-parameter-problem-option
        </icmp6-parameter-problem-option>
        <icmp6-ni-subject-ipv6>
          icmp6-ni-subject-ipv6
        </icmp6-ni-subject-ipv6>
        <icmp6-ni-subject-fqdn>
          icmp6-ni-subject-fqdn
        </icmp6-ni-subject-fqdn>
        <icmp6-ni-subject-ipv4>
          icmp6-ni-subject-ipv4
        </icmp6-ni-subject-ipv4>
        <icmp6-ni-success>
          icmp6-ni-success
        </icmp6-ni-success>
        <icmp6-ni-refused>
          icmp6-ni-refused
        </icmp6-ni-refused>
        <icmp6-ni-unknown>
          icmp6-ni-unknown
        </icmp6-ni-unknown>
      </icmp-code>
    </probe-result>
  </ping-results>
```

Description Type of ICMP message type sub code

<icmp-code>

Usage

```
<hop>
  <probe-result>
    <icmp-code>
      <icmp-code-none>
        icmp-code-none
      </icmp-code-none>
      <icmp-unreach-net>
        icmp-unreach-net
      </icmp-unreach-net>
      <icmp-unreach-host>
        icmp-unreach-host
      </icmp-unreach-host>
      <icmp-unreach-protocol>
        icmp-unreach-protocol
      </icmp-unreach-protocol>
      <icmp-unreach-port>
        icmp-unreach-port
      </icmp-unreach-port>
      <icmp-unreach-needfrag>
        icmp-unreach-needfrag
```


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```
</icmp-unreach-needfrag>
<icmp-unreach-srcfail>
  icmp-unreach-srcfail
</icmp-unreach-srcfail>
<icmp-unreach-net-unknown>
  icmp-unreach-net-unknown
</icmp-unreach-net-unknown>
<icmp-unreach-host-unknown>
  icmp-unreach-host-unknown
</icmp-unreach-host-unknown>
<icmp-unreach-isolated>
  icmp-unreach-isolated
</icmp-unreach-isolated>
<icmp-unreach-net-prohib>
  icmp-unreach-net-prohib
</icmp-unreach-net-prohib>
<icmp-unreach-host-prohib>
  icmp-unreach-host-prohib
</icmp-unreach-host-prohib>
<icmp-unreach-tosnet>
  icmp-unreach-tosnet
</icmp-unreach-tosnet>
<icmp-unreach-toshost>
  icmp-unreach-toshost
</icmp-unreach-toshost>
<icmp-unreach-filter-prohib>
  icmp-unreach-filter-prohib
</icmp-unreach-filter-prohib>
<icmp-unreach-host-precedence>
  icmp-unreach-host-precedence
</icmp-unreach-host-precedence>
<icmp-unreach-precedence-cutoff>
  icmp-unreach-precedence-cutoff
</icmp-unreach-precedence-cutoff>
<icmp-redirect-net>
  icmp-redirect-net
</icmp-redirect-net>
<icmp-redirect-host>
  icmp-redirect-host
</icmp-redirect-host>
<icmp-redirect-tosnet>
  icmp-redirect-tosnet
</icmp-redirect-tosnet>
<icmp-redirect-toshost>
  icmp-redirect-toshost
</icmp-redirect-toshost>
<icmp-timxceed-intrans>
  icmp-timxceed-intrans
</icmp-timxceed-intrans>
<icmp-timxceed-reass>
  icmp-timxceed-reass
</icmp-timxceed-reass>
<icmp-paramprob-optabsent>
  icmp-paramprob-optabsent
</icmp-paramprob-optabsent>
<icmp6-unreach-noroute>
```

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```
          icmp6-unreach-noroute
        </icmp6-unreach-noroute>
        <icmp6-unreach-admin>
          icmp6-unreach-admin
        </icmp6-unreach-admin>
        <icmp6-unreach-beyond-scope>
          icmp6-unreach-beyond-scope
        </icmp6-unreach-beyond-scope>
        <icmp6-unreach-address>
          icmp6-unreach-address
        </icmp6-unreach-address>
        <icmp6-unreach-port>
          icmp6-unreach-port
        </icmp6-unreach-port>
        <icmp6-time-exceed-transit>
          icmp6-time-exceed-transit
        </icmp6-time-exceed-transit>
        <icmp6-time-exceed-reassembly>
          icmp6-time-exceed-reassembly
        </icmp6-time-exceed-reassembly>
        <icmp6-parameter-problem-header>
          icmp6-parameter-problem-header
        </icmp6-parameter-problem-header>
        <icmp6-parameter-problem-nextheader>
          icmp6-parameter-problem-nextheader
        </icmp6-parameter-problem-nextheader>
        <icmp6-parameter-problem-option>
          icmp6-parameter-problem-option
        </icmp6-parameter-problem-option>
        <icmp6-ni-subject-ipv6>
          icmp6-ni-subject-ipv6
        </icmp6-ni-subject-ipv6>
        <icmp6-ni-subject-fqdn>
          icmp6-ni-subject-fqdn
        </icmp6-ni-subject-fqdn>
        <icmp6-ni-subject-ipv4>
          icmp6-ni-subject-ipv4
        </icmp6-ni-subject-ipv4>
        <icmp6-ni-success>
          icmp6-ni-success
        </icmp6-ni-success>
        <icmp6-ni-refused>
          icmp6-ni-refused
        </icmp6-ni-refused>
        <icmp6-ni-unknown>
          icmp6-ni-unknown
        </icmp6-ni-unknown>
      </icmp-code>
    </probe-result>
  </hop>
```

Description Type of ICMP message type sub code

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<icmp-code>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <icmp-code>
        <icmp-code-none>
          icmp-code-none
        </icmp-code-none>
        <icmp-unreach-net>
          icmp-unreach-net
        </icmp-unreach-net>
        <icmp-unreach-host>
          icmp-unreach-host
        </icmp-unreach-host>
        <icmp-unreach-protocol>
          icmp-unreach-protocol
        </icmp-unreach-protocol>
        <icmp-unreach-port>
          icmp-unreach-port
        </icmp-unreach-port>
        <icmp-unreach-needfrag>
          icmp-unreach-needfrag
        </icmp-unreach-needfrag>
        <icmp-unreach-srcfail>
          icmp-unreach-srcfail
        </icmp-unreach-srcfail>
        <icmp-unreach-net-unknown>
          icmp-unreach-net-unknown
        </icmp-unreach-net-unknown>
        <icmp-unreach-host-unknown>
          icmp-unreach-host-unknown
        </icmp-unreach-host-unknown>
        <icmp-unreach-isolated>
          icmp-unreach-isolated
        </icmp-unreach-isolated>
        <icmp-unreach-net-prohib>
          icmp-unreach-net-prohib
        </icmp-unreach-net-prohib>
        <icmp-unreach-host-prohib>
          icmp-unreach-host-prohib
        </icmp-unreach-host-prohib>
        <icmp-unreach-tosnet>
          icmp-unreach-tosnet
        </icmp-unreach-tosnet>
        <icmp-unreach-toshost>
          icmp-unreach-toshost
        </icmp-unreach-toshost>
        <icmp-unreach-filter-prohib>
          icmp-unreach-filter-prohib
        </icmp-unreach-filter-prohib>
        <icmp-unreach-host-precedence>
          icmp-unreach-host-precedence
        </icmp-unreach-host-precedence>
```

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<icmp-unreach-precedence-cutoff>
  icmp-unreach-precedence-cutoff
</icmp-unreach-precedence-cutoff>
<icmp-redirect-net>
  icmp-redirect-net
</icmp-redirect-net>
<icmp-redirect-host>
  icmp-redirect-host
</icmp-redirect-host>
<icmp-redirect-tosnet>
  icmp-redirect-tosnet
</icmp-redirect-tosnet>
<icmp-redirect-toshost>
  icmp-redirect-toshost
</icmp-redirect-toshost>
<icmp-timxceed-intrans>
  icmp-timxceed-intrans
</icmp-timxceed-intrans>
<icmp-timxceed-reass>
  icmp-timxceed-reass
</icmp-timxceed-reass>
<icmp-paramprob-optabsent>
  icmp-paramprob-optabsent
</icmp-paramprob-optabsent>
<icmp6-unreach-noroute>
  icmp6-unreach-noroute
</icmp6-unreach-noroute>
<icmp6-unreach-admin>
  icmp6-unreach-admin
</icmp6-unreach-admin>
<icmp6-unreach-beyond-scope>
  icmp6-unreach-beyond-scope
</icmp6-unreach-beyond-scope>
<icmp6-unreach-address>
  icmp6-unreach-address
</icmp6-unreach-address>
<icmp6-unreach-port>
  icmp6-unreach-port
</icmp6-unreach-port>
<icmp6-time-exceed-transit>
  icmp6-time-exceed-transit
</icmp6-time-exceed-transit>
<icmp6-time-exceed-reassembly>
  icmp6-time-exceed-reassembly
</icmp6-time-exceed-reassembly>
<icmp6-parameter-problem-header>
  icmp6-parameter-problem-header
</icmp6-parameter-problem-header>
<icmp6-parameter-problem-nextheader>
  icmp6-parameter-problem-nextheader
</icmp6-parameter-problem-nextheader>
<icmp6-parameter-problem-option>
  icmp6-parameter-problem-option
</icmp6-parameter-problem-option>
<icmp6-ni-subject-ipv6>
  icmp6-ni-subject-ipv6

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```
        </icmp6-ni-subject-ipv6>
        <icmp6-ni-subject-fqdn>
          icmp6-ni-subject-fqdn
        </icmp6-ni-subject-fqdn>
        <icmp6-ni-subject-ipv4>
          icmp6-ni-subject-ipv4
        </icmp6-ni-subject-ipv4>
        <icmp6-ni-success>
          icmp6-ni-success
        </icmp6-ni-success>
        <icmp6-ni-refused>
          icmp6-ni-refused
        </icmp6-ni-refused>
        <icmp6-ni-unknown>
          icmp6-ni-unknown
        </icmp6-ni-unknown>
      </icmp-code>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Type of ICMP message type sub code

<icmp-type>

Usage

```
<icmp-type>
  <icmp-type-none>
    icmp-type-none
  </icmp-type-none>
  <icmp-echoreply>
    icmp-echoreply
  </icmp-echoreply>
  <icmp-unreach>
    icmp-unreach
  </icmp-unreach>
  <icmp-sourcequench>
    icmp-sourcequench
  </icmp-sourcequench>
  <icmp-redirect>
    icmp-redirect
  </icmp-redirect>
  <icmp-echo>
    icmp-echo
  </icmp-echo>
  <icmp-routeradvert>
    icmp-routeradvert
  </icmp-routeradvert>
  <icmp-routersolicit>
    icmp-routersolicit
  </icmp-routersolicit>
  <icmp-timxceed>
    icmp-timxceed
  </icmp-timxceed>
```

<icmp-paramprob>
  icmp-paramprob
</icmp-paramprob>
<icmp-tstamp>
  icmp-tstamp
</icmp-tstamp>
<icmp-tstampreply>
  icmp-tstampreply
</icmp-tstampreply>
<icmp-ireq>
  icmp-ireq
</icmp-ireq>
<icmp-ireqreply>
  icmp-ireqreply
</icmp-ireqreply>
<icmp-maskreq>
  icmp-maskreq
</icmp-maskreq>
<icmp-maskreply>
  icmp-maskreply
</icmp-maskreply>
<icmp6-unreach>
  icmp6-unreach
</icmp6-unreach>
<icmp6-packet-too-big>
  icmp6-packet-too-big
</icmp6-packet-too-big>
<icmp6-time-exceeded>
  icmp6-time-exceeded
</icmp6-time-exceeded>
<icmp6-parameter-problem>
  icmp6-parameter-problem
</icmp6-parameter-problem>
<icmp6-echo-request>
  icmp6-echo-request
</icmp6-echo-request>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<icmp6-membership-query>
  icmp6-membership-query
</icmp6-membership-query>
<icmp6-membership-report>
  icmp6-membership-report
</icmp6-membership-report>
<icmp6-membership-reduction>
  icmp6-membership-reduction
</icmp6-membership-reduction>
<icmp6-router-solicit>
  icmp6-router-solicit
</icmp6-router-solicit>
<icmp6-router-advert>
  icmp6-router-advert
</icmp6-router-advert>
<icmp6-neighbor-solicit>
  icmp6-neighbor-solicit

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```
</icmp6-neighbor-solicit>
<icmp6-neighbor-advert>
  icmp6-neighbor-advert
</icmp6-neighbor-advert>
<icmp6-redirect>
  icmp6-redirect
</icmp6-redirect>
<icmp6-router-renumbering>
  icmp6-router-renumbering
</icmp6-router-renumbering>
<icmp6-ni-query>
  icmp6-ni-query
</icmp6-ni-query>
<icmp6-ni-reply>
  icmp6-ni-reply
</icmp6-ni-reply>
</icmp-type>
```

Description Type of ICMP message

<icmp-type>

Usage

```
<probe-result>
  <icmp-type>
    <icmp-type-none>
      icmp-type-none
    </icmp-type-none>
    <icmp-echoreply>
      icmp-echoreply
    </icmp-echoreply>
    <icmp-unreach>
      icmp-unreach
    </icmp-unreach>
    <icmp-sourcequench>
      icmp-sourcequench
    </icmp-sourcequench>
    <icmp-redirect>
      icmp-redirect
    </icmp-redirect>
    <icmp-echo>
      icmp-echo
    </icmp-echo>
    <icmp-routeradvert>
      icmp-routeradvert
    </icmp-routeradvert>
    <icmp-routersolicit>
      icmp-routersolicit
    </icmp-routersolicit>
    <icmp-timxceed>
      icmp-timxceed
    </icmp-timxceed>
    <icmp-paramprob>
      icmp-paramprob
```

```
</icmp-paramprob>
<icmp-tstamp>
  icmp-tstamp
</icmp-tstamp>
<icmp-tstampreply>
  icmp-tstampreply
</icmp-tstampreply>
<icmp-ireq>
  icmp-ireq
</icmp-ireq>
<icmp-ireqreply>
  icmp-ireqreply
</icmp-ireqreply>
<icmp-maskreq>
  icmp-maskreq
</icmp-maskreq>
<icmp-maskreply>
  icmp-maskreply
</icmp-maskreply>
<icmp6-unreach>
  icmp6-unreach
</icmp6-unreach>
<icmp6-packet-too-big>
  icmp6-packet-too-big
</icmp6-packet-too-big>
<icmp6-time-exceeded>
  icmp6-time-exceeded
</icmp6-time-exceeded>
<icmp6-parameter-problem>
  icmp6-parameter-problem
</icmp6-parameter-problem>
<icmp6-echo-request>
  icmp6-echo-request
</icmp6-echo-request>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<icmp6-membership-query>
  icmp6-membership-query
</icmp6-membership-query>
<icmp6-membership-report>
  icmp6-membership-report
</icmp6-membership-report>
<icmp6-membership-reduction>
  icmp6-membership-reduction
</icmp6-membership-reduction>
<icmp6-router-solicit>
  icmp6-router-solicit
</icmp6-router-solicit>
<icmp6-router-advert>
  icmp6-router-advert
</icmp6-router-advert>
<icmp6-neighbor-solicit>
  icmp6-neighbor-solicit
</icmp6-neighbor-solicit>
<icmp6-neighbor-advert>
```


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```
        icmp6-neighbor-advert
      </icmp6-neighbor-advert>
      <icmp6-redirect>
        icmp6-redirect
      </icmp6-redirect>
      <icmp6-router-renumbering>
        icmp6-router-renumbering
      </icmp6-router-renumbering>
      <icmp6-ni-query>
        icmp6-ni-query
      </icmp6-ni-query>
      <icmp6-ni-reply>
        icmp6-ni-reply
      </icmp6-ni-reply>
    </icmp-type>
  </probe-result>
```

Description Type of ICMP message

<icmp-type>

Usage

```
<ping-results>
  <probe-result>
    <icmp-type>
      <icmp-type-none>
        icmp-type-none
      </icmp-type-none>
      <icmp-echoreply>
        icmp-echoreply
      </icmp-echoreply>
      <icmp-unreach>
        icmp-unreach
      </icmp-unreach>
      <icmp-sourcequench>
        icmp-sourcequench
      </icmp-sourcequench>
      <icmp-redirect>
        icmp-redirect
      </icmp-redirect>
      <icmp-echo>
        icmp-echo
      </icmp-echo>
      <icmp-routeradvert>
        icmp-routeradvert
      </icmp-routeradvert>
      <icmp-routersolicit>
        icmp-routersolicit
      </icmp-routersolicit>
      <icmp-timxceed>
        icmp-timxceed
      </icmp-timxceed>
      <icmp-paramprob>
        icmp-paramprob
```

```
</icmp-paramprob>
<icmp-tstamp>
  icmp-tstamp
</icmp-tstamp>
<icmp-tstampreply>
  icmp-tstampreply
</icmp-tstampreply>
<icmp-ireq>
  icmp-ireq
</icmp-ireq>
<icmp-ireqreply>
  icmp-ireqreply
</icmp-ireqreply>
<icmp-maskreq>
  icmp-maskreq
</icmp-maskreq>
<icmp-maskreply>
  icmp-maskreply
</icmp-maskreply>
<icmp6-unreach>
  icmp6-unreach
</icmp6-unreach>
<icmp6-packet-too-big>
  icmp6-packet-too-big
</icmp6-packet-too-big>
<icmp6-time-exceeded>
  icmp6-time-exceeded
</icmp6-time-exceeded>
<icmp6-parameter-problem>
  icmp6-parameter-problem
</icmp6-parameter-problem>
<icmp6-echo-request>
  icmp6-echo-request
</icmp6-echo-request>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<icmp6-membership-query>
  icmp6-membership-query
</icmp6-membership-query>
<icmp6-membership-report>
  icmp6-membership-report
</icmp6-membership-report>
<icmp6-membership-reduction>
  icmp6-membership-reduction
</icmp6-membership-reduction>
<icmp6-router-solicit>
  icmp6-router-solicit
</icmp6-router-solicit>
<icmp6-router-advert>
  icmp6-router-advert
</icmp6-router-advert>
<icmp6-neighbor-solicit>
  icmp6-neighbor-solicit
</icmp6-neighbor-solicit>
<icmp6-neighbor-advert>
```


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```
            icmp6-neighbor-advert
           </icmp6-neighbor-advert>
           <icmp6-redirect>
            icmp6-redirect
           </icmp6-redirect>
           <icmp6-router-renumbering>
            icmp6-router-renumbering
           </icmp6-router-renumbering>
           <icmp6-ni-query>
            icmp6-ni-query
           </icmp6-ni-query>
           <icmp6-ni-reply>
            icmp6-ni-reply
           </icmp6-ni-reply>
          </icmp-type>
         </probe-result>
        </ping-results>
```

Description Type of ICMP message

<icmp-type>

Usage

```
        <hop>
         <probe-result>
          <icmp-type>
           <icmp-type-none>
            icmp-type-none
           </icmp-type-none>
           <icmp-echoreply>
            icmp-echoreply
           </icmp-echoreply>
           <icmp-unreach>
            icmp-unreach
           </icmp-unreach>
           <icmp-sourcequench>
            icmp-sourcequench
           </icmp-sourcequench>
           <icmp-redirect>
            icmp-redirect
           </icmp-redirect>
           <icmp-echo>
            icmp-echo
           </icmp-echo>
           <icmp-routeradvert>
            icmp-routeradvert
           </icmp-routeradvert>
           <icmp-routersolicit>
            icmp-routersolicit
           </icmp-routersolicit>
           <icmp-timxceed>
            icmp-timxceed
           </icmp-timxceed>
           <icmp-paramprob>
```

```
  icmp-paramprob
</icmp-paramprob>
<icmp-tstamp>
  icmp-tstamp
</icmp-tstamp>
<icmp-tstampreply>
  icmp-tstampreply
</icmp-tstampreply>
<icmp-ireq>
  icmp-ireq
</icmp-ireq>
<icmp-ireqreply>
  icmp-ireqreply
</icmp-ireqreply>
<icmp-maskreq>
  icmp-maskreq
</icmp-maskreq>
<icmp-maskreply>
  icmp-maskreply
</icmp-maskreply>
<icmp6-unreach>
  icmp6-unreach
</icmp6-unreach>
<icmp6-packet-too-big>
  icmp6-packet-too-big
</icmp6-packet-too-big>
<icmp6-time-exceeded>
  icmp6-time-exceeded
</icmp6-time-exceeded>
<icmp6-parameter-problem>
  icmp6-parameter-problem
</icmp6-parameter-problem>
<icmp6-echo-request>
  icmp6-echo-request
</icmp6-echo-request>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<icmp6-membership-query>
  icmp6-membership-query
</icmp6-membership-query>
<icmp6-membership-report>
  icmp6-membership-report
</icmp6-membership-report>
<icmp6-membership-reduction>
  icmp6-membership-reduction
</icmp6-membership-reduction>
<icmp6-router-solicit>
  icmp6-router-solicit
</icmp6-router-solicit>
<icmp6-router-advert>
  icmp6-router-advert
</icmp6-router-advert>
<icmp6-neighbor-solicit>
  icmp6-neighbor-solicit
</icmp6-neighbor-solicit>
```


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```
      <icmp6-neighbor-advert>
       icmp6-neighbor-advert
      </icmp6-neighbor-advert>
      <icmp6-redirect>
       icmp6-redirect
      </icmp6-redirect>
      <icmp6-router-renumbering>
       icmp6-router-renumbering
      </icmp6-router-renumbering>
      <icmp6-ni-query>
       icmp6-ni-query
      </icmp6-ni-query>
      <icmp6-ni-reply>
       icmp6-ni-reply
      </icmp6-ni-reply>
     </icmp-type>
    </probe-result>
   </hop>
```

Description Type of ICMP message

<icmp-type>

Usage

```
<traceroute-results>
 <hop>
  <probe-result>
   <icmp-type>
    <icmp-type-none>
     icmp-type-none
    </icmp-type-none>
    <icmp-echoreply>
     icmp-echoreply
    </icmp-echoreply>
    <icmp-unreach>
     icmp-unreach
    </icmp-unreach>
    <icmp-sourcequench>
     icmp-sourcequench
    </icmp-sourcequench>
    <icmp-redirect>
     icmp-redirect
    </icmp-redirect>
    <icmp-echo>
     icmp-echo
    </icmp-echo>
    <icmp-routeradvert>
     icmp-routeradvert
    </icmp-routeradvert>
    <icmp-routersolicit>
     icmp-routersolicit
    </icmp-routersolicit>
    <icmp-timxceed>
     icmp-timxceed
```

```
</icmp-timxceed>
<icmp-paramprob>
  icmp-paramprob
</icmp-paramprob>
<icmp-tstamp>
  icmp-tstamp
</icmp-tstamp>
<icmp-tstampreply>
  icmp-tstampreply
</icmp-tstampreply>
<icmp-ireq>
  icmp-ireq
</icmp-ireq>
<icmp-ireqreply>
  icmp-ireqreply
</icmp-ireqreply>
<icmp-maskreq>
  icmp-maskreq
</icmp-maskreq>
<icmp-maskreply>
  icmp-maskreply
</icmp-maskreply>
<icmp6-unreach>
  icmp6-unreach
</icmp6-unreach>
<icmp6-packet-too-big>
  icmp6-packet-too-big
</icmp6-packet-too-big>
<icmp6-time-exceeded>
  icmp6-time-exceeded
</icmp6-time-exceeded>
<icmp6-parameter-problem>
  icmp6-parameter-problem
</icmp6-parameter-problem>
<icmp6-echo-request>
  icmp6-echo-request
</icmp6-echo-request>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<icmp6-membership-query>
  icmp6-membership-query
</icmp6-membership-query>
<icmp6-membership-report>
  icmp6-membership-report
</icmp6-membership-report>
<icmp6-membership-reduction>
  icmp6-membership-reduction
</icmp6-membership-reduction>
<icmp6-router-solicit>
  icmp6-router-solicit
</icmp6-router-solicit>
<icmp6-router-advert>
  icmp6-router-advert
</icmp6-router-advert>
<icmp6-neighbor-solicit>
```


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```
            icmp6-neighbor-solicit
           </icmp6-neighbor-solicit>
           <icmp6-neighbor-advert>
            icmp6-neighbor-advert
           </icmp6-neighbor-advert>
           <icmp6-redirect>
            icmp6-redirect
           </icmp6-redirect>
           <icmp6-router-renumbering>
            icmp6-router-renumbering
           </icmp6-router-renumbering>
           <icmp6-ni-query>
            icmp6-ni-query
           </icmp6-ni-query>
           <icmp6-ni-reply>
            icmp6-ni-reply
           </icmp6-ni-reply>
          </icmp-type>
         </probe-result>
        </hop>
       </traceroute-results>
```

Description Type of ICMP message

<ip-options>

Usage

```
<ip-options>
 <record-route>....</record-route>
 <loose-source-route>....</loose-source-route>
 <strict-source-route>....</strict-source-route>
</ip-options>
```

Description IP options contained in the response

<ip-options>

Usage

```
<probe-result>
 <ip-options>
  <record-route>....</record-route>
  <loose-source-route>....</loose-source-route>
  <strict-source-route>....</strict-source-route>
 </ip-options>
</probe-result>
```

Description IP options contained in the response

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<ip-options>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <record-route>....</record-route>
      <loose-source-route>....</loose-source-route>
      <strict-source-route>....</strict-source-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description IP options contained in the response

<ip-options>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <record-route>....</record-route>
      <loose-source-route>....</loose-source-route>
      <strict-source-route>....</strict-source-route>
    </ip-options>
  </probe-result>
</hop>
```

Description IP options contained in the response

<ip-options>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <ip-options>
        <record-route>....</record-route>
        <loose-source-route>....</loose-source-route>
        <strict-source-route>....</strict-source-route>
      </ip-options>
    </probe-result>
  </hop>
</traceroute-results>
```

Description IP options contained in the response

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<loose-source-route>

Usage

```
<ip-options>
  <loose-source-route>
    <record-route-host>....</record-route-host>
  </loose-source-route>
</ip-options>
```

Description Loose source route (LSRR) IP option

<loose-source-route>

Usage

```
<probe-result>
  <ip-options>
    <loose-source-route>
      <record-route-host>....</record-route-host>
    </loose-source-route>
  </ip-options>
</probe-result>
```

Description Loose source route (LSRR) IP option

<loose-source-route>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <loose-source-route>
        <record-route-host>....</record-route-host>
      </loose-source-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description Loose source route (LSRR) IP option

<loose-source-route>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <loose-source-route>
        <record-route-host>....</record-route-host>
      </loose-source-route>
    </ip-options>
  </probe-result>
```

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```
</hop>
```

Description Loose source route (LSRR) IP option

<loose-source-route>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <ip-options>
        <loose-source-route>
          <record-route-host>....</record-route-host>
        </loose-source-route>
      </ip-options>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Loose source route (LSRR) IP option

<lsping-probe-reply>

Usage

```
<lsping-probe-reply>
  <lsping-sequence-number>
    lsping-sequence-number
  </lsping-sequence-number>
  <lsping-return-code>
    lsping-return-code
  </lsping-return-code>
  <lsping-ip-address>
    lsping-ip-address
  </lsping-ip-address>
  <lsping-round-trip-time>
    lsping-round-trip-time
  </lsping-round-trip-time>
  <lsping-local-transmit-time>
    lsping-local-transmit-time
  </lsping-local-transmit-time>
  <lsping-local-transmit-time-us>
    lsping-local-transmit-time-us
  </lsping-local-transmit-time-us>
  <lsping-remote-receive-time>
    lsping-remote-receive-time
  </lsping-remote-receive-time>
  <lsping-remote-receive-time-us>
    lsping-remote-receive-time-us
  </lsping-remote-receive-time-us>
</lsping-probe-reply>
```


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Description

<lsping-probe-reply>

Usage

```
<lsping-results>
  <lsping-probe-reply>
    <lsping-sequence-number>
      lsping-sequence-number
    </lsping-sequence-number>
    <lsping-return-code>
      lsping-return-code
    </lsping-return-code>
    <lsping-ip-address>
      lsping-ip-address
    </lsping-ip-address>
    <lsping-round-trip-time>
      lsping-round-trip-time
    </lsping-round-trip-time>
    <lsping-local-transmit-time>
      lsping-local-transmit-time
    </lsping-local-transmit-time>
    <lsping-local-transmit-time-us>
      lsping-local-transmit-time-us
    </lsping-local-transmit-time-us>
    <lsping-remote-receive-time>
      lsping-remote-receive-time
    </lsping-remote-receive-time>
    <lsping-remote-receive-time-us>
      lsping-remote-receive-time-us
    </lsping-remote-receive-time-us>
  </lsping-probe-reply>
</lsping-results>
```

Description

<lsping-probe-request>

Usage

```
<lsping-probe-request>
  <lsping-sequence-number>
    lsping-sequence-number
  </lsping-sequence-number>
  <lsping-interface-index>
    lsping-interface-index
  </lsping-interface-index>
  <lsping-label>
    lsping-label
  </lsping-label>
  <lsping-packet-size>
    lsping-packet-size
  </lsping-packet-size>
</lsping-probe-request>
```

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Description One request probe

<lsping-probe-request>

Usage

```
<lsping-results>
  <lsping-probe-request>
    <lsping-sequence-number>
      lsping-sequence-number
    </lsping-sequence-number>
    <lsping-interface-index>
      lsping-interface-index
    </lsping-interface-index>
    <lsping-label>
      lsping-label
    </lsping-label>
    <lsping-packet-size>
      lsping-packet-size
    </lsping-packet-size>
  </lsping-probe-request>
</lsping-results>
```

Description One request probe

<lsping-results>

Usage

```
<lsping-results>
  <lsping-route-comment>
    lsping-route-comment
  </lsping-route-comment>
  <lsping-probe-request>....</lsping-probe-request>
  <lsping-probe-reply>....</lsping-probe-reply>
  <lsping-results-summary>....</lsping-results-summary>
  <vpls-ping-results-summary>....</vpls-ping-results-summary>
  <lsping-sweep-summary>....</lsping-sweep-summary>
  <lsping-success>
    lsping-success
  </lsping-success>
  <lsping-failure>
    lsping-failure
  </lsping-failure>
</lsping-results>
```

Description

<lsping-results-summary>

Usage

```
<lsping-results-summary>
  <lsping-packets-transmitted>
    lsping-packets-transmitted
  </lsping-packets-transmitted>
```


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```
<lsping-packets-received>
  lsping-packets-received
</lsping-packets-received>
<lsping-packet-loss>
  lsping-packet-loss
</lsping-packet-loss>
<lsping-error-packets>
  lsping-error-packets
</lsping-error-packets>
</lsping-results-summary>
```

Description Summary of lsping probe results

<lsping-results-summary>

Usage

```
<lsping-results>
  <lsping-results-summary>
    <lsping-packets-transmitted>
      lsping-packets-transmitted
    </lsping-packets-transmitted>
    <lsping-packets-received>
      lsping-packets-received
    </lsping-packets-received>
    <lsping-packet-loss>
      lsping-packet-loss
    </lsping-packet-loss>
    <lsping-error-packets>
      lsping-error-packets
    </lsping-error-packets>
  </lsping-results-summary>
</lsping-results>
```

Description Summary of lsping probe results

<lsping-sweep-summary>

Usage

```
<lsping-sweep-summary>
  <lsping-mtu>
    lsping-mtu
  </lsping-mtu>
</lsping-sweep-summary>
```

Description Ping sweep result

<lsping-sweep-summary>

Usage

```
<lsping-results>
  <lsping-sweep-summary>
```

```
    <lsping-mtu>
      lsping-mtu
    </lsping-mtu>
  </lsping-sweep-summary>
</lsping-results>
```

Description Ping sweep result

<ping-results>

Usage

```
<ping-results>
  <target-host>
    target-host
  </target-host>
  <source>
    source
  </source>
  <target-ip>
    target-ip
  </target-ip>
  <packet-size>
    packet-size
  </packet-size>
  <probe-result>....</probe-result>
  <probe-results-summary>....</probe-results-summary>
  <ping-success>
    ping-success
  </ping-success>
  <ping-failure>
    ping-failure
  </ping-failure>
</ping-results>
```

Description

<probe-result>

Usage

```
<probe-result>
  <date-determined>
    date-determined
  </date-determined>
  <probe-index>
    probe-index
  </probe-index>
  <sequence-number>
    sequence-number
  </sequence-number>
  <time-to-live>
    time-to-live
  </time-to-live>
  <response-size>
```


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```
  response-size
 </response-size>
 <rtt>
  rtt
 </rtt>
 <ingress-interface>
  ingress-interface
 </ingress-interface>
 <icmp-type>....</icmp-type>
 <icmp-code>....</icmp-code>
 <ip-address>
  ip-address
 </ip-address>
 <host-name>
  host-name
 </host-name>
 <ip-options>....</ip-options>
 <probe-success>
  probe-success
 </probe-success>
 <probe-duplicate>
  probe-duplicate
 </probe-duplicate>
 <probe-reached>
  probe-reached
 </probe-reached>
 <probe-failure>
  probe-failure
 </probe-failure>
</probe-result>
```

Description Result of one probe

<probe-result>

Usage

```
<ping-results>
 <probe-result>
  <date-determined>
   date-determined
  </date-determined>
  <probe-index>
   probe-index
  </probe-index>
  <sequence-number>
   sequence-number
  </sequence-number>
  <time-to-live>
   time-to-live
  </time-to-live>
  <response-size>
   response-size
  </response-size>
  <rtt>
```

```
      rtt
    </rtt>
    <ingress-interface>
      ingress-interface
    </ingress-interface>
    <icmp-type>....</icmp-type>
    <icmp-code>....</icmp-code>
    <ip-address>
      ip-address
    </ip-address>
    <host-name>
      host-name
    </host-name>
    <ip-options>....</ip-options>
    <probe-success>
      probe-success
    </probe-success>
    <probe-duplicate>
      probe-duplicate
    </probe-duplicate>
    <probe-reached>
      probe-reached
    </probe-reached>
    <probe-failure>
      probe-failure
    </probe-failure>
  </probe-result>
</ping-results>
```

Description Result of one probe

<probe-result>

Usage

```
<hop>
  <probe-result>
    <date-determined>
      date-determined
    </date-determined>
    <probe-index>
      probe-index
    </probe-index>
    <sequence-number>
      sequence-number
    </sequence-number>
    <time-to-live>
      time-to-live
    </time-to-live>
    <response-size>
      response-size
    </response-size>
    <rtt>
      rtt
    </rtt>
```


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```
    <ingress-interface>
      ingress-interface
    </ingress-interface>
    <icmp-type>....</icmp-type>
    <icmp-code>....</icmp-code>
    <ip-address>
      ip-address
    </ip-address>
    <host-name>
      host-name
    </host-name>
    <ip-options>....</ip-options>
    <probe-success>
      probe-success
    </probe-success>
    <probe-duplicate>
      probe-duplicate
    </probe-duplicate>
    <probe-reached>
      probe-reached
    </probe-reached>
    <probe-failure>
      probe-failure
    </probe-failure>
  </probe-result>
</hop>
```

Description Result of one probe

<probe-result>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <date-determined>
        date-determined
      </date-determined>
      <probe-index>
        probe-index
      </probe-index>
      <sequence-number>
        sequence-number
      </sequence-number>
      <time-to-live>
        time-to-live
      </time-to-live>
      <response-size>
        response-size
      </response-size>
      <rtt>
        rtt
      </rtt>
      <ingress-interface>
```

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```
            ingress-interface
           </ingress-interface>
           <icmp-type>....</icmp-type>
           <icmp-code>....</icmp-code>
           <ip-address>
            ip-address
           </ip-address>
           <host-name>
            host-name
           </host-name>
           <ip-options>....</ip-options>
           <probe-success>
            probe-success
           </probe-success>
           <probe-duplicate>
            probe-duplicate
           </probe-duplicate>
           <probe-reached>
            probe-reached
           </probe-reached>
           <probe-failure>
            probe-failure
           </probe-failure>
          </probe-result>
         </hop>
        </traceroute-results>
```

Description Result of one probe

<probe-results-summary>

Usage

```
<probe-results-summary>
 <probes-sent>
  probes-sent
 </probes-sent>
 <responses-received>
  responses-received
 </responses-received>
 <packet-loss>
  packet-loss
 </packet-loss>
 <response-duplicates>
  response-duplicates
 </response-duplicates>
 <response-unexpected-sequence>
  response-unexpected-sequence
 </response-unexpected-sequence>
 <rtt-minimum>
  rtt-minimum
 </rtt-minimum>
 <rtt-average>
  rtt-average
 </rtt-average>
```


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```
<rtt-maximum>
  rtt-maximum
</rtt-maximum>
<rtt-stddev>
  rtt-stddev
</rtt-stddev>
</probe-results-summary>
```

Description Summary of probe results

<probe-results-summary>

Usage

```
<ping-results>
  <probe-results-summary>
    <probes-sent>
      probes-sent
    </probes-sent>
    <responses-received>
      responses-received
    </responses-received>
    <packet-loss>
      packet-loss
    </packet-loss>
    <response-duplicates>
      response-duplicates
    </response-duplicates>
    <response-unexpected-sequence>
      response-unexpected-sequence
    </response-unexpected-sequence>
    <rtt-minimum>
      rtt-minimum
    </rtt-minimum>
    <rtt-average>
      rtt-average
    </rtt-average>
    <rtt-maximum>
      rtt-maximum
    </rtt-maximum>
    <rtt-stddev>
      rtt-stddev
    </rtt-stddev>
  </probe-results-summary>
</ping-results>
```

Description Summary of probe results

<record-route>

Usage

```
<ip-options>
  <record-route>
```

```
    <record-route-host>....</record-route-host>
  </record-route>
</ip-options>
```

Description Record route (RR) IP option

<record-route>

Usage

```
<probe-result>
  <ip-options>
    <record-route>
      <record-route-host>....</record-route-host>
    </record-route>
  </ip-options>
</probe-result>
```

Description Record route (RR) IP option

<record-route>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <record-route>
        <record-route-host>....</record-route-host>
      </record-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description Record route (RR) IP option

<record-route>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <record-route>
        <record-route-host>....</record-route-host>
      </record-route>
    </ip-options>
  </probe-result>
</hop>
```

Description Record route (RR) IP option

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<record-route>

Usage

```
<traceroute-results>
 <hop>
  <probe-result>
   <ip-options>
    <record-route>
     <record-route-host>....</record-route-host>
    </record-route>
   </ip-options>
  </probe-result>
 </hop>
</traceroute-results>
```

Description Record route (RR) IP option

<record-route-host>

Usage

```
<record-route-host>
 <ip-address>
  ip-address
 </ip-address>
 <host-name>
  host-name
 </host-name>
</record-route-host>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<ip-options>
 <record-route>
  <record-route-host>
   <ip-address>
    ip-address
   </ip-address>
   <host-name>
    host-name
   </host-name>
  </record-route-host>
 </record-route>
</ip-options>
```

Description Host entry in the record route

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<record-route-host>

Usage

```
<ip-options>
  <loose-source-route>
    <record-route-host>
      <ip-address>
        ip-address
      </ip-address>
      <host-name>
        host-name
      </host-name>
    </record-route-host>
  </loose-source-route>
</ip-options>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<ip-options>
  <strict-source-route>
    <record-route-host>
      <ip-address>
        ip-address
      </ip-address>
      <host-name>
        host-name
      </host-name>
    </record-route-host>
  </strict-source-route>
</ip-options>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<probe-result>
  <ip-options>
    <record-route>
      <record-route-host>
        <ip-address>
          ip-address
        </ip-address>
        <host-name>
          host-name
        </host-name>
      </record-route-host>
    </record-route>
  </ip-options>
```


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```
</probe-result>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<probe-result>
  <ip-options>
    <loose-source-route>
      <record-route-host>
        <ip-address>
          ip-address
        </ip-address>
        <host-name>
          host-name
        </host-name>
      </record-route-host>
    </loose-source-route>
  </ip-options>
</probe-result>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<probe-result>
  <ip-options>
    <strict-source-route>
      <record-route-host>
        <ip-address>
          ip-address
        </ip-address>
        <host-name>
          host-name
        </host-name>
      </record-route-host>
    </strict-source-route>
  </ip-options>
</probe-result>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <record-route>
```

```
            <record-route-host>
              <ip-address>
                ip-address
              </ip-address>
              <host-name>
                host-name
              </host-name>
            </record-route-host>
          </record-route>
        </ip-options>
      </probe-result>
    </ping-results>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <loose-source-route>
        <record-route-host>
          <ip-address>
            ip-address
          </ip-address>
          <host-name>
            host-name
          </host-name>
        </record-route-host>
      </loose-source-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <strict-source-route>
        <record-route-host>
          <ip-address>
            ip-address
          </ip-address>
          <host-name>
            host-name
          </host-name>
        </record-route-host>
```


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```
      </strict-source-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <record-route>
        <record-route-host>
          <ip-address>
            ip-address
          </ip-address>
          <host-name>
            host-name
          </host-name>
        </record-route-host>
      </record-route>
    </ip-options>
  </probe-result>
</hop>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <loose-source-route>
        <record-route-host>
          <ip-address>
            ip-address
          </ip-address>
          <host-name>
            host-name
          </host-name>
        </record-route-host>
      </loose-source-route>
    </ip-options>
  </probe-result>
</hop>
```

Description Host entry in the record route

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<record-route-host>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <strict-source-route>
        <record-route-host>
          <ip-address>
            ip-address
          </ip-address>
          <host-name>
            host-name
          </host-name>
        </record-route-host>
      </strict-source-route>
    </ip-options>
  </probe-result>
</hop>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <ip-options>
        <record-route>
          <record-route-host>
            <ip-address>
              ip-address
            </ip-address>
            <host-name>
              host-name
            </host-name>
          </record-route-host>
        </record-route>
      </ip-options>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
```


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```
<ip-options>
 <loose-source-route>
  <record-route-host>
   <ip-address>
    ip-address
   </ip-address>
   <host-name>
    host-name
   </host-name>
  </record-route-host>
 </loose-source-route>
</ip-options>
</probe-result>
</hop>
</traceroute-results>
```

Description Host entry in the record route

<record-route-host>

Usage

```
<traceroute-results>
 <hop>
  <probe-result>
   <ip-options>
    <strict-source-route>
     <record-route-host>
      <ip-address>
       ip-address
      </ip-address>
      <host-name>
       host-name
      </host-name>
     </record-route-host>
    </strict-source-route>
   </ip-options>
  </probe-result>
 </hop>
</traceroute-results>
```

Description Host entry in the record route

<strict-source-route>

Usage

```
<ip-options>
 <strict-source-route>
  <record-route-host>....</record-route-host>
 </strict-source-route>
</ip-options>
```

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Description Strict source route (SSRR) IP option

<strict-source-route>

Usage

```
<probe-result>
  <ip-options>
    <strict-source-route>
      <record-route-host>....</record-route-host>
    </strict-source-route>
  </ip-options>
</probe-result>
```

Description Strict source route (SSRR) IP option

<strict-source-route>

Usage

```
<ping-results>
  <probe-result>
    <ip-options>
      <strict-source-route>
        <record-route-host>....</record-route-host>
      </strict-source-route>
    </ip-options>
  </probe-result>
</ping-results>
```

Description Strict source route (SSRR) IP option

<strict-source-route>

Usage

```
<hop>
  <probe-result>
    <ip-options>
      <strict-source-route>
        <record-route-host>....</record-route-host>
      </strict-source-route>
    </ip-options>
  </probe-result>
</hop>
```

Description Strict source route (SSRR) IP option

<strict-source-route>

Usage

```
<traceroute-results>
  <hop>
```


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```
    <probe-result>
      <ip-options>
        <strict-source-route>
          <record-route-host>....</record-route-host>
        </strict-source-route>
      </ip-options>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Strict source route (SSRR) IP option

<traceroute-results>

Usage

```
<traceroute-results>
  <target-host>
    target-host
  </target-host>
  <source>
    source
  </source>
  <target-ip>
    target-ip
  </target-ip>
  <packet-size>
    packet-size
  </packet-size>
  <max-hop-index>
    max-hop-index
  </max-hop-index>
  <hop>....</hop>
  <traceroute-success>
    traceroute-success
  </traceroute-success>
  <traceroute-failure>
    traceroute-failure
  </traceroute-failure>
</traceroute-results>
```

Description

<vpls-ping-results-summary>

Usage

```
<vpls-ping-results-summary>
  <lsping-packets-transmitted>
    lsping-packets-transmitted
  </lsping-packets-transmitted>
  <lsping-packets-received>
    lsping-packets-received
  </lsping-packets-received>
  <lsping-packet-loss>
```

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```
    lsping-packet-loss
   </lsping-packet-loss>
   <lsping-error-packets>
    lsping-error-packets
   </lsping-error-packets>
  </vpls-ping-results-summary>
```

Description Summary of vpls ping probe results

<vpls-ping-results-summary>

Usage

```
<lsping-results>
  <vpls-ping-results-summary>
    <lsping-packets-transmitted>
      lsping-packets-transmitted
    </lsping-packets-transmitted>
    <lsping-packets-received>
      lsping-packets-received
    </lsping-packets-received>
    <lsping-packet-loss>
      lsping-packet-loss
    </lsping-packet-loss>
    <lsping-error-packets>
      lsping-error-packets
    </lsping-error-packets>
  </vpls-ping-results-summary>
</lsping-results>
```

Description Summary of vpls ping probe results

Summary of System Process Information Response Tags

<command-line-argument>

Usage

```
<command-line-argument-list>
  <command-line-argument>
    <argument-index>
      argument-index
    </argument-index>
    <argument>
      argument
    </argument>
  </command-line-argument>
</command-line-argument-list>
```

Description

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<command-line-argument>

Usage

```
<process>
  <command-line-argument-list>
    <command-line-argument>
      <argument-index>
        argument-index
      </argument-index>
      <argument>
        argument
      </argument>
    </command-line-argument>
  </command-line-argument-list>
</process>
```

Description

<command-line-argument>

Usage

```
<process-information>
  <process>
    <command-line-argument-list>
      <command-line-argument>
        <argument-index>
          argument-index
        </argument-index>
        <argument>
          argument
        </argument>
      </command-line-argument>
    </command-line-argument-list>
  </process>
</process-information>
```

Description

<command-line-argument-list>

Usage

```
<command-line-argument-list>
  <command-line-argument>....</command-line-argument>
</command-line-argument-list>
```

Description List of arguments that were passed to the command

<command-line-argument-list>

Usage

```
<process>
  <command-line-argument-list>
```

```
    <command-line-argument>....</command-line-argument>
  </command-line-argument-list>
</process>
```

Description List of arguments that were passed to the command

<command-line-argument-list>

Usage

```
<process-information>
  <process>
    <command-line-argument-list>
      <command-line-argument>....</command-line-argument>
    </command-line-argument-list>
  </process>
</process-information>
```

Description List of arguments that were passed to the command

<memory-statistics>

Usage

```
<memory-statistics>
  <memory-load>
    memory-load
  </memory-load>
  <virtual-size>
    virtual-size
  </virtual-size>
  <resident-set-size>
    resident-set-size
  </resident-set-size>
  <resident-set-before-swap>
    resident-set-before-swap
  </resident-set-before-swap>
  <text-size>
    text-size
  </text-size>
  <data-size>
    data-size
  </data-size>
  <stack-size>
    stack-size
  </stack-size>
</memory-statistics>
```

Description Memory usage statistics for the process

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<memory-statistics>

Usage

```
<process>
  <memory-statistics>
    <memory-load>
      memory-load
    </memory-load>
    <virtual-size>
      virtual-size
    </virtual-size>
    <resident-set-size>
      resident-set-size
    </resident-set-size>
    <resident-set-before-swap>
      resident-set-before-swap
    </resident-set-before-swap>
    <text-size>
      text-size
    </text-size>
    <data-size>
      data-size
    </data-size>
    <stack-size>
      stack-size
    </stack-size>
  </memory-statistics>
</process>
```

Description Memory usage statistics for the process

<memory-statistics>

Usage

```
<process-information>
  <process>
    <memory-statistics>
      <memory-load>
        memory-load
      </memory-load>
      <virtual-size>
        virtual-size
      </virtual-size>
      <resident-set-size>
        resident-set-size
      </resident-set-size>
      <resident-set-before-swap>
        resident-set-before-swap
      </resident-set-before-swap>
      <text-size>
        text-size
      </text-size>
      <data-size>
```

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```
            data-size
           </data-size>
           <stack-size>
            stack-size
           </stack-size>
          </memory-statistics>
         </process>
        </process-information>
```

Description Memory usage statistics for the process

<process>

Usage

```
<process>
 <process-id>
  process-id
 </process-id>
 <name>
  name
 </name>
 <alias>
  alias
 </alias>
 <external-identifier>
  external-identifier
 </external-identifier>
 <primary-instance>
  primary-instance
 </primary-instance>
 <login-id>
  login-id
 </login-id>
 <start-time>
  start-time
 </start-time>
 <parent-process-id>
  parent-process-id
 </parent-process-id>
 <process-group-id>
  process-group-id
 </process-group-id>
 <command>
  command
 </command>
 <command-line-argument-list>....</command-line-argument-list>
 <terminal-device>
  terminal-device
 </terminal-device>
 <priority>
  priority
 </priority>
 <nice>
  nice
```


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```
  </nice>
  <process-status>
    process-status
  </process-status>
  <process-flags>....</process-flags>
  <sleep-information>....</sleep-information>
  <resource-usage>....</resource-usage>
  <memory-statistics>....</memory-statistics>
</process>
```

Description Information about a running process

<process>

Usage

```
<process-information>
  <process>
    <process-id>
      process-id
    </process-id>
    <name>
      name
    </name>
    <alias>
      alias
    </alias>
    <external-identifier>
      external-identifier
    </external-identifier>
    <primary-instance>
      primary-instance
    </primary-instance>
    <login-id>
      login-id
    </login-id>
    <start-time>
      start-time
    </start-time>
    <parent-process-id>
      parent-process-id
    </parent-process-id>
    <process-group-id>
      process-group-id
    </process-group-id>
    <command>
      command
    </command>
    <command-line-argument-list>....</command-line-argument-list>
    <terminal-device>
      terminal-device
    </terminal-device>
    <priority>
      priority
    </priority>
```

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```
    <nice>
      nice
    </nice>
    <process-status>
      process-status
    </process-status>
    <process-flags>....</process-flags>
    <sleep-information>....</sleep-information>
    <resource-usage>....</resource-usage>
    <memory-statistics>....</memory-statistics>
  </process>
</process-information>
```

Description Information about a running process

<process-flags>

Usage

```
<process-flags>
  <interruptible>
    interruptible
  </interruptible>
  <advisory-lock>
    advisory-lock
  </advisory-lock>
  <controlling-terminal>
    controlling-terminal
  </controlling-terminal>
  <in-memory>
    in-memory
  </in-memory>
  <wait-child>
    wait-child
  </wait-child>
  <profiling>
    profiling
  </profiling>
  <select>
    select
  </select>
  <set-id-privileges>
    set-id-privileges
  </set-id-privileges>
  <system-process>
    system-process
  </system-process>
  <timing-out>
    timing-out
  </timing-out>
  <debug-trace>
    debug-trace
  </debug-trace>
  <debug-wait>
    debug-wait
```


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```
  </debug-wait>
  <exiting>
   exiting
  </exiting>
  <exec>
   exec
  </exec>
</process-flags>
```

Description Process flags

<process-flags>

Usage

```
<process>
  <process-flags>
   <interruptible>
    interruptible
   </interruptible>
   <advisory-lock>
    advisory-lock
   </advisory-lock>
   <controlling-terminal>
    controlling-terminal
   </controlling-terminal>
   <in-memory>
    in-memory
   </in-memory>
   <wait-child>
    wait-child
   </wait-child>
   <profiling>
    profiling
   </profiling>
   <select>
    select
   </select>
   <set-id-privileges>
    set-id-privileges
   </set-id-privileges>
   <system-process>
    system-process
   </system-process>
   <timing-out>
    timing-out
   </timing-out>
   <debug-trace>
    debug-trace
   </debug-trace>
   <debug-wait>
    debug-wait
   </debug-wait>
   <exiting>
    exiting
```

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```
    </exiting>
    <exec>
     exec
    </exec>
   </process-flags>
</process>
```

Description Process flags

<process-flags>

Usage

```
<process-information>
 <process>
  <process-flags>
   <interruptible>
    interruptible
   </interruptible>
   <advisory-lock>
    advisory-lock
   </advisory-lock>
   <controlling-terminal>
    controlling-terminal
   </controlling-terminal>
   <in-memory>
    in-memory
   </in-memory>
   <wait-child>
    wait-child
   </wait-child>
   <profiling>
    profiling
   </profiling>
   <select>
    select
   </select>
   <set-id-privileges>
    set-id-privileges
   </set-id-privileges>
   <system-process>
    system-process
   </system-process>
   <timing-out>
    timing-out
   </timing-out>
   <debug-trace>
    debug-trace
   </debug-trace>
   <debug-wait>
    debug-wait
   </debug-wait>
   <exiting>
    exiting
   </exiting>
```


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```
      <exec>
       exec
      </exec>
     </process-flags>
    </process>
   </process-information>
```

Description Process flags

<process-information>

Usage

```
<process-information>
 <scale-information>....</scale-information>
 <process>....</process>
 <system-information>....</system-information>
</process-information>
```

Description Information about running processes

<resource-usage>

Usage

```
<resource-usage>
 <cpu-load>
  cpu-load
 </cpu-load>
 <user-time>
  user-time
 </user-time>
 <system-time>
  system-time
 </system-time>
 <maximum-resident-set>
  maximum-resident-set
 </maximum-resident-set>
 <page-reclaims>
  page-reclaims
 </page-reclaims>
 <page-faults>
  page-faults
 </page-faults>
 <swaps>
  swaps
 </swaps>
 <block-input-operation>
  block-input-operation
 </block-input-operation>
 <block-output-operation>
  block-output-operation
 </block-output-operation>
 <messages-sent>
```

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```
      messages-sent
    </messages-sent>
    <messages-received>
      messages-received
    </messages-received>
    <signals>
      signals
    </signals>
    <voluntary-context-switch>
      voluntary-context-switch
    </voluntary-context-switch>
    <involuntary-context-switch>
      involuntary-context-switch
    </involuntary-context-switch>
  </resource-usage>
```

Description Resource usage statistics for the process

<resource-usage>

Usage

```
<process>
  <resource-usage>
    <cpu-load>
      cpu-load
    </cpu-load>
    <user-time>
      user-time
    </user-time>
    <system-time>
      system-time
    </system-time>
    <maximum-resident-set>
      maximum-resident-set
    </maximum-resident-set>
    <page-reclaims>
      page-reclaims
    </page-reclaims>
    <page-faults>
      page-faults
    </page-faults>
    <swaps>
      swaps
    </swaps>
    <block-input-operation>
      block-input-operation
    </block-input-operation>
    <block-output-operation>
      block-output-operation
    </block-output-operation>
    <messages-sent>
      messages-sent
    </messages-sent>
    <messages-received>
```


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```
    messages-received
   </messages-received>
   <signals>
    signals
   </signals>
   <voluntary-context-switch>
    voluntary-context-switch
   </voluntary-context-switch>
   <involuntary-context-switch>
    involuntary-context-switch
   </involuntary-context-switch>
  </resource-usage>
</process>
```

Description Resource usage statistics for the process

<resource-usage>

Usage

```
<process-information>
 <process>
  <resource-usage>
   <cpu-load>
    cpu-load
   </cpu-load>
   <user-time>
    user-time
   </user-time>
   <system-time>
    system-time
   </system-time>
   <maximum-resident-set>
    maximum-resident-set
   </maximum-resident-set>
   <page-reclaims>
    page-reclaims
   </page-reclaims>
   <page-faults>
    page-faults
   </page-faults>
   <swaps>
    swaps
   </swaps>
   <block-input-operation>
    block-input-operation
   </block-input-operation>
   <block-output-operation>
    block-output-operation
   </block-output-operation>
   <messages-sent>
    messages-sent
   </messages-sent>
   <messages-received>
    messages-received
```

```
      </messages-received>
      <signals>
        signals
      </signals>
      <voluntary-context-switch>
        voluntary-context-switch
      </voluntary-context-switch>
      <involuntary-context-switch>
        involuntary-context-switch
      </involuntary-context-switch>
    </resource-usage>
  </process>
</process-information>
```

Description Resource usage statistics for the process

<scale-information>

Usage

```
<scale-information>
  <memory-page-size>
    memory-page-size
  </memory-page-size>
  <physical-memory-pages>
    physical-memory-pages
  </physical-memory-pages>
</scale-information>
```

Description Information about values used in computing scales for this report

<scale-information>

Usage

```
<process-information>
  <scale-information>
    <memory-page-size>
      memory-page-size
    </memory-page-size>
    <physical-memory-pages>
      physical-memory-pages
    </physical-memory-pages>
  </scale-information>
</process-information>
```

Description Information about values used in computing scales for this report

<sleep-information>

Usage

```
<sleep-information>
  <reason>
```


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```
    reason
  </reason>
  <address>
    address
  </address>
</sleep-information>
```

Description

<sleep-information>

Usage

```
<process>
  <sleep-information>
    <reason>
      reason
    </reason>
    <address>
      address
    </address>
  </sleep-information>
</process>
```

Description

<sleep-information>

Usage

```
<process-information>
  <process>
    <sleep-information>
      <reason>
        reason
      </reason>
      <address>
        address
      </address>
    </sleep-information>
  </process>
</process-information>
```

Description

<system-cpu-states>

Usage

```
<system-cpu-states>
  <cpu-total-time>
    cpu-total-time
  </cpu-total-time>
  <cpu-user-time>
    cpu-user-time
  </cpu-user-time>
```

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```
<cpu-user-time-percent>
  cpu-user-time-percent
</cpu-user-time-percent>
<cpu-nice-time>
  cpu-nice-time
</cpu-nice-time>
<cpu-nice-time-percent>
  cpu-nice-time-percent
</cpu-nice-time-percent>
<cpu-system-time>
  cpu-system-time
</cpu-system-time>
<cpu-system-time-percent>
  cpu-system-time-percent
</cpu-system-time-percent>
<cpu-interrupts-time>
  cpu-interrupts-time
</cpu-interrupts-time>
<cpu-interrupts-time-percent>
  cpu-interrupts-time-percent
</cpu-interrupts-time-percent>
<cpu-idle-time>
  cpu-idle-time
</cpu-idle-time>
<cpu-idle-time-percent>
  cpu-idle-time-percent
</cpu-idle-time-percent>
</system-cpu-states>
```

Description Process state information

<system-cpu-states>

Usage

```
<system-information>
  <system-cpu-states>
    <cpu-total-time>
      cpu-total-time
    </cpu-total-time>
    <cpu-user-time>
      cpu-user-time
    </cpu-user-time>
    <cpu-user-time-percent>
      cpu-user-time-percent
    </cpu-user-time-percent>
    <cpu-nice-time>
      cpu-nice-time
    </cpu-nice-time>
    <cpu-nice-time-percent>
      cpu-nice-time-percent
    </cpu-nice-time-percent>
    <cpu-system-time>
      cpu-system-time
    </cpu-system-time>
```


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```
        <cpu-system-time-percent>
          cpu-system-time-percent
        </cpu-system-time-percent>
        <cpu-interrupts-time>
          cpu-interrupts-time
        </cpu-interrupts-time>
        <cpu-interrupts-time-percent>
          cpu-interrupts-time-percent
        </cpu-interrupts-time-percent>
        <cpu-idle-time>
          cpu-idle-time
        </cpu-idle-time>
        <cpu-idle-time-percent>
          cpu-idle-time-percent
        </cpu-idle-time-percent>
      </system-cpu-states>
    </system-information>
```

Description Process state information

<system-cpu-states>

Usage

```
<process-information>
  <system-information>
    <system-cpu-states>
      <cpu-total-time>
        cpu-total-time
      </cpu-total-time>
      <cpu-user-time>
        cpu-user-time
      </cpu-user-time>
      <cpu-user-time-percent>
        cpu-user-time-percent
      </cpu-user-time-percent>
      <cpu-nice-time>
        cpu-nice-time
      </cpu-nice-time>
      <cpu-nice-time-percent>
        cpu-nice-time-percent
      </cpu-nice-time-percent>
      <cpu-system-time>
        cpu-system-time
      </cpu-system-time>
      <cpu-system-time-percent>
        cpu-system-time-percent
      </cpu-system-time-percent>
      <cpu-interrupts-time>
        cpu-interrupts-time
      </cpu-interrupts-time>
      <cpu-interrupts-time-percent>
        cpu-interrupts-time-percent
      </cpu-interrupts-time-percent>
      <cpu-idle-time>
```

```
            cpu-idle-time
           </cpu-idle-time>
           <cpu-idle-time-percent>
            cpu-idle-time-percent
           </cpu-idle-time-percent>
          </system-cpu-states>
         </system-information>
        </process-information>
```

Description Process state information

<system-information>

Usage

```
<system-information>
 <system-hardware-cpu-architecture>
  system-hardware-cpu-architecture
 </system-hardware-cpu-architecture>
 <system-hardware-cpu-model>
  system-hardware-cpu-model
 </system-hardware-cpu-model>
 <system-hardware-cpu-count>
  system-hardware-cpu-count
 </system-hardware-cpu-count>
 <system-boot-device>
  system-boot-device
 </system-boot-device>
 <system-boot-next-device>
  system-boot-next-device
 </system-boot-next-device>
 <system-hardware-physical-memory>
  system-hardware-physical-memory
 </system-hardware-physical-memory>
 <system-hardware-user-memory>
  system-hardware-user-memory
 </system-hardware-user-memory>
 <system-hardware-page-size>
  system-hardware-page-size
 </system-hardware-page-size>
 <system-virtual-memory-page-size>
  system-virtual-memory-page-size
 </system-virtual-memory-page-size>
 <system-hardware-page-available>
  system-hardware-page-available
 </system-hardware-page-available>
 <system-hardware-routing-engine-name>
  system-hardware-routing-engine-name
 </system-hardware-routing-engine-name>
 <system-hardware-routing-engine-model>
  system-hardware-routing-engine-model
 </system-hardware-routing-engine-model>
 <system-hardware-routing-engine-serial-number>
  system-hardware-routing-engine-serial-number
 </system-hardware-routing-engine-serial-number>
```


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```
<system-hardware-routing-engine-other-present>
  system-hardware-routing-engine-other-present
</system-hardware-routing-engine-other-present>
<system-hardware-routing-engine-other-alive>
  system-hardware-routing-engine-other-alive
</system-hardware-routing-engine-other-alive>
<system-virtual-memory-swap-enabled>
  system-virtual-memory-swap-enabled
</system-virtual-memory-swap-enabled>
<system-virtual-memory-context-switches>
  system-virtual-memory-context-switches
</system-virtual-memory-context-switches>
<system-virtual-memory-trap>
  system-virtual-memory-trap
</system-virtual-memory-trap>
<system-virtual-memory-syscall>
  system-virtual-memory-syscall
</system-virtual-memory-syscall>
<system-virtual-memory-hard-interrupts>
  system-virtual-memory-hard-interrupts
</system-virtual-memory-hard-interrupts>
<system-virtual-memory-soft-interrupts>
  system-virtual-memory-soft-interrupts
</system-virtual-memory-soft-interrupts>
<system-virtual-memory-faults>
  system-virtual-memory-faults
</system-virtual-memory-faults>
<system-virtual-memory-copy-on-write-faults>
  system-virtual-memory-copy-on-write-faults
</system-virtual-memory-copy-on-write-faults>
<system-virtual-memory-copy-on-write-optimized>
  system-virtual-memory-copy-on-write-optimized
</system-virtual-memory-copy-on-write-optimized>
<system-virtual-memory-zeroed-pages>
  system-virtual-memory-zeroed-pages
</system-virtual-memory-zeroed-pages>
<system-virtual-memory-zeroed-pages-optimized>
  system-virtual-memory-zeroed-pages-optimized
</system-virtual-memory-zeroed-pages-optimized>
<system-virtual-memory-swapin>
  system-virtual-memory-swapin
</system-virtual-memory-swapin>
<system-virtual-memory-swapout>
  system-virtual-memory-swapout
</system-virtual-memory-swapout>
<system-virtual-memory-swapped-in-pages>
  system-virtual-memory-swapped-in-pages
</system-virtual-memory-swapped-in-pages>
<system-virtual-memory-swapped-out-pages>
  system-virtual-memory-swapped-out-pages
</system-virtual-memory-swapped-out-pages>
<system-virtual-memory-reactivated-pages>
  system-virtual-memory-reactivated-pages
</system-virtual-memory-reactivated-pages>
<system-virtual-memory-vnode-in>
  system-virtual-memory-vnode-in
```

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```
        </system-virtual-memory-vnode-in>
        <system-virtual-memory-vnode-out>
          system-virtual-memory-vnode-out
        </system-virtual-memory-vnode-out>
        <system-virtual-memory-vnode-page-ins>
          system-virtual-memory-vnode-page-ins
        </system-virtual-memory-vnode-page-ins>
        <system-virtual-memory-vnode-page-outs>
          system-virtual-memory-vnode-page-outs
        </system-virtual-memory-vnode-page-outs>
        <system-virtual-memory-pager-wakes>
          system-virtual-memory-pager-wakes
        </system-virtual-memory-pager-wakes>
        <system-virtual-memory-pager-scans>
          system-virtual-memory-pager-scans
        </system-virtual-memory-pager-scans>
        <system-virtual-memory-page-count>
          system-virtual-memory-page-count
        </system-virtual-memory-page-count>
        <system-virtual-memory-free-reserved>
          system-virtual-memory-free-reserved
        </system-virtual-memory-free-reserved>
        <system-virtual-memory-free-minimum>
          system-virtual-memory-free-minimum
        </system-virtual-memory-free-minimum>
        <system-virtual-memory-free-pages>
          system-virtual-memory-free-pages
        </system-virtual-memory-free-pages>
        <system-virtual-memory-wired-pages>
          system-virtual-memory-wired-pages
        </system-virtual-memory-wired-pages>
        <system-virtual-memory-active-pages>
          system-virtual-memory-active-pages
        </system-virtual-memory-active-pages>
        <system-virtual-memory-cache-pages>
          system-virtual-memory-cache-pages
        </system-virtual-memory-cache-pages>
        <system-virtual-memory-cache-pages-minimum>
          system-virtual-memory-cache-pages-minimum
        </system-virtual-memory-cache-pages-minimum>
        <system-virtual-memory-cache-pages-maximum>
          system-virtual-memory-cache-pages-maximum
        </system-virtual-memory-cache-pages-maximum>

      <system-virtual-memory-load-averages>....</system-virtual-memory-load-averages>

        <system-last-pid>
          system-last-pid
        </system-last-pid>
        <system-process-counts>....</system-process-counts>
        <system-cpu-states>....</system-cpu-states>
      </system-information>
```

Description Information about the system

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<system-information>

Usage

```
<process-information>
  <system-information>
    <system-hardware-cpu-architecture>
      system-hardware-cpu-architecture
    </system-hardware-cpu-architecture>
    <system-hardware-cpu-model>
      system-hardware-cpu-model
    </system-hardware-cpu-model>
    <system-hardware-cpu-count>
      system-hardware-cpu-count
    </system-hardware-cpu-count>
    <system-boot-device>
      system-boot-device
    </system-boot-device>
    <system-boot-next-device>
      system-boot-next-device
    </system-boot-next-device>
    <system-hardware-physical-memory>
      system-hardware-physical-memory
    </system-hardware-physical-memory>
    <system-hardware-user-memory>
      system-hardware-user-memory
    </system-hardware-user-memory>
    <system-hardware-page-size>
      system-hardware-page-size
    </system-hardware-page-size>
    <system-virtual-memory-page-size>
      system-virtual-memory-page-size
    </system-virtual-memory-page-size>
    <system-hardware-page-available>
      system-hardware-page-available
    </system-hardware-page-available>
    <system-hardware-routing-engine-name>
      system-hardware-routing-engine-name
    </system-hardware-routing-engine-name>
    <system-hardware-routing-engine-model>
      system-hardware-routing-engine-model
    </system-hardware-routing-engine-model>
    <system-hardware-routing-engine-serial-number>
      system-hardware-routing-engine-serial-number
    </system-hardware-routing-engine-serial-number>
    <system-hardware-routing-engine-other-present>
      system-hardware-routing-engine-other-present
    </system-hardware-routing-engine-other-present>
    <system-hardware-routing-engine-other-alive>
      system-hardware-routing-engine-other-alive
    </system-hardware-routing-engine-other-alive>
    <system-virtual-memory-swap-enabled>
      system-virtual-memory-swap-enabled
    </system-virtual-memory-swap-enabled>
    <system-virtual-memory-context-switches>
      system-virtual-memory-context-switches
```

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```
</system-virtual-memory-context-switches>
<system-virtual-memory-trap>
  system-virtual-memory-trap
</system-virtual-memory-trap>
<system-virtual-memory-syscall>
  system-virtual-memory-syscall
</system-virtual-memory-syscall>
<system-virtual-memory-hard-interrupts>
  system-virtual-memory-hard-interrupts
</system-virtual-memory-hard-interrupts>
<system-virtual-memory-soft-interrupts>
  system-virtual-memory-soft-interrupts
</system-virtual-memory-soft-interrupts>
<system-virtual-memory-faults>
  system-virtual-memory-faults
</system-virtual-memory-faults>
<system-virtual-memory-copy-on-write-faults>
  system-virtual-memory-copy-on-write-faults
</system-virtual-memory-copy-on-write-faults>
<system-virtual-memory-copy-on-write-optimized>
  system-virtual-memory-copy-on-write-optimized
</system-virtual-memory-copy-on-write-optimized>
<system-virtual-memory-zeroed-pages>
  system-virtual-memory-zeroed-pages
</system-virtual-memory-zeroed-pages>
<system-virtual-memory-zeroed-pages-optimized>
  system-virtual-memory-zeroed-pages-optimized
</system-virtual-memory-zeroed-pages-optimized>
<system-virtual-memory-swapin>
  system-virtual-memory-swapin
</system-virtual-memory-swapin>
<system-virtual-memory-swapout>
  system-virtual-memory-swapout
</system-virtual-memory-swapout>
<system-virtual-memory-swapped-in-pages>
  system-virtual-memory-swapped-in-pages
</system-virtual-memory-swapped-in-pages>
<system-virtual-memory-swapped-out-pages>
  system-virtual-memory-swapped-out-pages
</system-virtual-memory-swapped-out-pages>
<system-virtual-memory-reactivated-pages>
  system-virtual-memory-reactivated-pages
</system-virtual-memory-reactivated-pages>
<system-virtual-memory-vnode-in>
  system-virtual-memory-vnode-in
</system-virtual-memory-vnode-in>
<system-virtual-memory-vnode-out>
  system-virtual-memory-vnode-out
</system-virtual-memory-vnode-out>
<system-virtual-memory-vnode-page-ins>
  system-virtual-memory-vnode-page-ins
</system-virtual-memory-vnode-page-ins>
<system-virtual-memory-vnode-page-outs>
  system-virtual-memory-vnode-page-outs
</system-virtual-memory-vnode-page-outs>
<system-virtual-memory-pager-wakes>
```


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```
                system-virtual-memory-pager-wakes
              </system-virtual-memory-pager-wakes>
              <system-virtual-memory-pager-scans>
                system-virtual-memory-pager-scans
              </system-virtual-memory-pager-scans>
              <system-virtual-memory-page-count>
                system-virtual-memory-page-count
              </system-virtual-memory-page-count>
              <system-virtual-memory-free-reserved>
                system-virtual-memory-free-reserved
              </system-virtual-memory-free-reserved>
              <system-virtual-memory-free-minimum>
                system-virtual-memory-free-minimum
              </system-virtual-memory-free-minimum>
              <system-virtual-memory-free-pages>
                system-virtual-memory-free-pages
              </system-virtual-memory-free-pages>
              <system-virtual-memory-wired-pages>
                system-virtual-memory-wired-pages
              </system-virtual-memory-wired-pages>
              <system-virtual-memory-active-pages>
                system-virtual-memory-active-pages
              </system-virtual-memory-active-pages>
              <system-virtual-memory-cache-pages>
                system-virtual-memory-cache-pages
              </system-virtual-memory-cache-pages>
              <system-virtual-memory-cache-pages-minimum>
                system-virtual-memory-cache-pages-minimum
              </system-virtual-memory-cache-pages-minimum>
              <system-virtual-memory-cache-pages-maximum>
                system-virtual-memory-cache-pages-maximum
              </system-virtual-memory-cache-pages-maximum>

            <system-virtual-memory-load-averages>....</system-virtual-memory-load-averages>

              <system-last-pid>
                system-last-pid
              </system-last-pid>
              <system-process-counts>....</system-process-counts>
              <system-cpu-states>....</system-cpu-states>
            </system-information>
          </process-information>
```

Description Information about the system

<system-process-counts>

Usage

```
<system-process-counts>
  <process-total>
    process-total
  </process-total>
  <process-run>
    process-run
```

```
  </process-run>
  <process-sleep>
    process-sleep
  </process-sleep>
  <process-start>
    process-start
  </process-start>
  <process-stop>
    process-stop
  </process-stop>
  <process-zombie>
    process-zombie
  </process-zombie>
</system-process-counts>
```

Description Number of processes on system

<system-process-counts>

Usage

```
<system-information>
  <system-process-counts>
    <process-total>
      process-total
    </process-total>
    <process-run>
      process-run
    </process-run>
    <process-sleep>
      process-sleep
    </process-sleep>
    <process-start>
      process-start
    </process-start>
    <process-stop>
      process-stop
    </process-stop>
    <process-zombie>
      process-zombie
    </process-zombie>
  </system-process-counts>
</system-information>
```

Description Number of processes on system

<system-process-counts>

Usage

```
<process-information>
  <system-information>
    <system-process-counts>
      <process-total>
```


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```
    process-total
   </process-total>
   <process-run>
    process-run
   </process-run>
   <process-sleep>
    process-sleep
   </process-sleep>
   <process-start>
    process-start
   </process-start>
   <process-stop>
    process-stop
   </process-stop>
   <process-zombie>
    process-zombie
   </process-zombie>
  </system-process-counts>
 </system-information>
</process-information>
```

Description Number of processes on system

<system-virtual-memory-load-averages>

Usage

```
<system-virtual-memory-load-averages>
 <load-average-one-minute>
  load-average-one-minute
 </load-average-one-minute>
 <load-average-five-minute>
  load-average-five-minute
 </load-average-five-minute>
 <load-average-fifteen-minute>
  load-average-fifteen-minute
 </load-average-fifteen-minute>
</system-virtual-memory-load-averages>
```

Description Load averages

<system-virtual-memory-load-averages>

Usage

```
<system-information>
 <system-virtual-memory-load-averages>
  <load-average-one-minute>
   load-average-one-minute
  </load-average-one-minute>
  <load-average-five-minute>
   load-average-five-minute
  </load-average-five-minute>
  <load-average-fifteen-minute>
```

```
      load-average-fifteen-minute
    </load-average-fifteen-minute>
  </system-virtual-memory-load-averages>
</system-information>
```

Description Load averages

<system-virtual-memory-load-averages>

Usage

```
<process-information>
  <system-information>
    <system-virtual-memory-load-averages>
      <load-average-one-minute>
        load-average-one-minute
      </load-average-one-minute>
      <load-average-five-minute>
        load-average-five-minute
      </load-average-five-minute>
      <load-average-fifteen-minute>
        load-average-fifteen-minute
      </load-average-fifteen-minute>
    </system-virtual-memory-load-averages>
  </system-information>
</process-information>
```

Description Load averages

Summary of Product Metadata Response Tags

<product>

Usage

```
<product>
  <model>
    model
  </model>
  <product-number>
    product-number
  </product-number>
  <series>
    series
  </series>
  <product-line>
    product-line
  </product-line>
  <name>
    name
  </name>
  <description>
    description
  </description>
```


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```
<flag>
  flag
</flag>
<max-fpc-per-router>
  max-fpc-per-router
</max-fpc-per-router>
<max-fpc-per-chassis>
  max-fpc-per-chassis
</max-fpc-per-chassis>
<max-pics-per-slot>
  max-pics-per-slot
</max-pics-per-slot>
<max-sfm>
  max-sfm
</max-sfm>
<max-pfe-per-slot>
  max-pfe-per-slot
</max-pfe-per-slot>
<max-re>
  max-re
</max-re>
<max-chassis>
  max-chassis
</max-chassis>
<max-spmb-per-chassis>
  max-spmb-per-chassis
</max-spmb-per-chassis>
<max-sib-per-chassis>
  max-sib-per-chassis
</max-sib-per-chassis>
<max-pem-per-chassis>
  max-pem-per-chassis
</max-pem-per-chassis>
<max-fwd-classes>
  max-fwd-classes
</max-fwd-classes>
<defaults>
  defaults
</defaults>
<factory>
  factory
</factory>
</product>
```

Description Information about a product

<product>

Usage

```
<product-metadata-information>
  <product>
    <model>
      model
    </model>
```

```
<product-number>
  product-number
</product-number>
<series>
  series
</series>
<product-line>
  product-line
</product-line>
<name>
  name
</name>
<description>
  description
</description>
<flag>
  flag
</flag>
<max-fpc-per-router>
  max-fpc-per-router
</max-fpc-per-router>
<max-fpc-per-chassis>
  max-fpc-per-chassis
</max-fpc-per-chassis>
<max-pics-per-slot>
  max-pics-per-slot
</max-pics-per-slot>
<max-sfm>
  max-sfm
</max-sfm>
<max-pfe-per-slot>
  max-pfe-per-slot
</max-pfe-per-slot>
<max-re>
  max-re
</max-re>
<max-chassis>
  max-chassis
</max-chassis>
<max-spmb-per-chassis>
  max-spmb-per-chassis
</max-spmb-per-chassis>
<max-sib-per-chassis>
  max-sib-per-chassis
</max-sib-per-chassis>
<max-pem-per-chassis>
  max-pem-per-chassis
</max-pem-per-chassis>
<max-fwd-classes>
  max-fwd-classes
</max-fwd-classes>
<defaults>
  defaults
</defaults>
<factory>
  factory
```


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```
    </factory>
  </product>
</product-metadata-information>
```

Description Information about a product

<product-metadata-information>

Usage

```
<product-metadata-information>
  <product>....</product>
</product-metadata-information>
```

Description Informtation on one or more products

Summary of R2CP Deamon Response Tags

<r2cp-clear-result>

Usage

```
<r2cp-clear-result>
</r2cp-clear-result>
```

Description

<r2cp-counters>

Usage

```
<r2cp-counters>
  <r2cp-node-counters>....</r2cp-node-counters>
  <r2cp-session-counters>....</r2cp-session-counters>
</r2cp-counters>
```

Description

<r2cp-iflctl>

Usage

```
<r2cp-iflctl>
  <iflctl-name>
    iflctl-name
  </iflctl-name>
  <node-count>
    node-count
  </node-count>
</r2cp-iflctl>
```

Description

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<r2cp-iflctl>

Usage

```
<r2cp-iflctl-information>
  <r2cp-iflctl>
    <iflctl-name>
      iflctl-name
    </iflctl-name>
    <node-count>
      node-count
    </node-count>
  </r2cp-iflctl>
</r2cp-iflctl-information>
```

Description

<r2cp-iflctl-information>

Usage

```
<r2cp-iflctl-information>
  <r2cp-iflctl>....</r2cp-iflctl>
</r2cp-iflctl-information>
```

Description

<r2cp-ifldata>

Usage

```
<r2cp-ifldata>
  <ifldata-name>
    ifldata-name
  </ifldata-name>
</r2cp-ifldata>
```

Description

<r2cp-ifldata>

Usage

```
<r2cp-ifldata-information>
  <r2cp-ifldata>
    <ifldata-name>
      ifldata-name
    </ifldata-name>
  </r2cp-ifldata>
</r2cp-ifldata-information>
```

Description

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<r2cp-ifldata-information>

Usage

```
<r2cp-ifldata-information>
  <r2cp-ifldata>....</r2cp-ifldata>
</r2cp-ifldata-information>
```

Description

<r2cp-node>

Usage

```
<r2cp-node>
  <node-name>
    node-name
  </node-name>
  <node-client-address>
    node-client-address
  </node-client-address>
  <node-client-port>
    node-client-port
  </node-client-port>
  <node-sessions>
    node-sessions
  </node-sessions>
  <node-uptime>
    node-uptime
  </node-uptime>
  <node-status>
    node-status
  </node-status>
  <node-hbinterval>
    node-hbinterval
  </node-hbinterval>
  <node-hbtime>
    node-hbtime
  </node-hbtime>
</r2cp-node>
```

Description

<r2cp-node>

Usage

```
<r2cp-node-information>
  <r2cp-node>
    <node-name>
      node-name
    </node-name>
    <node-client-address>
      node-client-address
    </node-client-address>
    <node-client-port>
```

```
      node-client-port
    </node-client-port>
    <node-sessions>
      node-sessions
    </node-sessions>
    <node-uptime>
      node-uptime
    </node-uptime>
    <node-status>
      node-status
    </node-status>
    <node-hbinterval>
      node-hbinterval
    </node-hbinterval>
    <node-hbtime>
      node-hbtime
    </node-hbtime>
  </r2cp-node>
</r2cp-node-information>
```

Description

<r2cp-node-counters>

Usage

```
<r2cp-node-counters>
  <mim-recv>
    mim-recv
  </mim-recv>
  <heartbeat-recv>
    heartbeat-recv
  </heartbeat-recv>
  <nterm-recv>
    nterm-recv
  </nterm-recv>
  <nterm-ack-recv>
    nterm-ack-recv
  </nterm-ack-recv>
  <rom-sent>
    rom-sent
  </rom-sent>
  <heartbeat-sent>
    heartbeat-sent
  </heartbeat-sent>
  <nterm-sent>
    nterm-sent
  </nterm-sent>
  <nterm-ack-sent>
    nterm-ack-sent
  </nterm-ack-sent>
  <mim-err>
    mim-err
  </mim-err>
  <heartbeat-err>
    heartbeat-err
```


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```
  </heartbeat-err>
  <nterm-err>
    nterm-err
  </nterm-err>
  <nterm-ack-err>
    nterm-ack-err
  </nterm-ack-err>
  <heartbeat-tmo>
    heartbeat-tmo
  </heartbeat-tmo>
  <nterm-tmo>
    nterm-tmo
  </nterm-tmo>
</r2cp-node-counters>
```

Description

<r2cp-node-counters>

Usage

```
<r2cp-counters>
  <r2cp-node-counters>
    <mim-recv>
      mim-recv
    </mim-recv>
    <heartbeat-recv>
      heartbeat-recv
    </heartbeat-recv>
    <nterm-recv>
      nterm-recv
    </nterm-recv>
    <nterm-ack-recv>
      nterm-ack-recv
    </nterm-ack-recv>
    <rom-sent>
      rom-sent
    </rom-sent>
    <heartbeat-sent>
      heartbeat-sent
    </heartbeat-sent>
    <nterm-sent>
      nterm-sent
    </nterm-sent>
    <nterm-ack-sent>
      nterm-ack-sent
    </nterm-ack-sent>
    <mim-err>
      mim-err
    </mim-err>
    <heartbeat-err>
      heartbeat-err
    </heartbeat-err>
    <nterm-err>
      nterm-err
    </nterm-err>
```

```
    <nterm-ack-err>
      nterm-ack-err
    </nterm-ack-err>
    <heartbeat-tmo>
      heartbeat-tmo
    </heartbeat-tmo>
    <nterm-tmo>
      nterm-tmo
    </nterm-tmo>
  </r2cp-node-counters>
</r2cp-counters>
```

Description

<r2cp-node-information>

Usage

```
<r2cp-node-information>
  <r2cp-node>....</r2cp-node>
</r2cp-node-information>
```

Description

<r2cp-session>

Usage

```
<r2cp-session>
  <session-id>
    session-id
  </session-id>
  <vc-id>
    vc-id
  </vc-id>
  <mac-address>
    mac-address
  </mac-address>
  <uptime>
    uptime
  </uptime>
  <vlan-ids>
    vlan-ids
  </vlan-ids>
  <term-vlan-ids>
    term-vlan-ids
  </term-vlan-ids>
  <packets-out>
    packets-out
  </packets-out>
  <session-status>
    session-status
  </session-status>
  <r2cp-session-update>....</r2cp-session-update>
  <r2cp-session-bandwidth>....</r2cp-session-bandwidth>
```


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```
</r2cp-session>
```

Description

<r2cp-session>

Usage

```
<r2cp-session-information>
  <r2cp-session>
    <session-id>
      session-id
    </session-id>
    <vc-id>
      vc-id
    </vc-id>
    <mac-address>
      mac-address
    </mac-address>
    <uptime>
      uptime
    </uptime>
    <vlan-ids>
      vlan-ids
    </vlan-ids>
    <term-vlan-ids>
      term-vlan-ids
    </term-vlan-ids>
    <packets-out>
      packets-out
    </packets-out>
    <session-status>
      session-status
    </session-status>
    <r2cp-session-update>....</r2cp-session-update>
    <r2cp-session-bandwidth>....</r2cp-session-bandwidth>
  </r2cp-session>
</r2cp-session-information>
```

Description

<r2cp-session-bandwidth>

Usage

```
<r2cp-session>
  <r2cp-session-bandwidth>
    <effective-bandwidth>
      effective-bandwidth
    </effective-bandwidth>
    <last-change>
      last-change
    </last-change>
    <below-threshold>
      below-threshold
    </below-threshold>
```

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```
  </r2cp-session-bandwidth>
</r2cp-session>
```

Description

<r2cp-session-bandwidth>

Usage

```
<r2cp-session-information>
  <r2cp-session>
    <r2cp-session-bandwidth>
      <effective-bandwidth>
        effective-bandwidth
      </effective-bandwidth>
      <last-change>
        last-change
      </last-change>
      <below-threshold>
        below-threshold
      </below-threshold>
    </r2cp-session-bandwidth>
  </r2cp-session>
</r2cp-session-information>
```

Description

<r2cp-session-counters>

Usage

```
<r2cp-session-counters>
  <sin-recv>
    sin-recv
  </sin-recv>
  <sup-recv>
    sup-recv
  </sup-recv>
  <sterm-recv>
    sterm-recv
  </sterm-recv>
  <sterm-ack-recv>
    sterm-ack-recv
  </sterm-ack-recv>
  <sin-ack-sent>
    sin-ack-sent
  </sin-ack-sent>
  <sterm-sent>
    sterm-sent
  </sterm-sent>
  <sterm-ack-sent>
    sterm-ack-sent
  </sterm-ack-sent>
  <sin-err>
    sin-err
  </sin-err>
```


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```
  <sup-err>
    sup-err
  </sup-err>
  <sterm-err>
    sterm-err
  </sterm-err>
  <sterm-ack-err>
    sterm-ack-err
  </sterm-ack-err>
  <sterm-tmo>
    sterm-tmo
  </sterm-tmo>
</r2cp-session-counters>
```

Description

<r2cp-session-counters>

Usage

```
<r2cp-counters>
  <r2cp-session-counters>
    <sin-recv>
      sin-recv
    </sin-recv>
    <sup-recv>
      sup-recv
    </sup-recv>
    <sterm-recv>
      sterm-recv
    </sterm-recv>
    <sterm-ack-recv>
      sterm-ack-recv
    </sterm-ack-recv>
    <sin-ack-sent>
      sin-ack-sent
    </sin-ack-sent>
    <sterm-sent>
      sterm-sent
    </sterm-sent>
    <sterm-ack-sent>
      sterm-ack-sent
    </sterm-ack-sent>
    <sin-err>
      sin-err
    </sin-err>
    <sup-err>
      sup-err
    </sup-err>
    <sterm-err>
      sterm-err
    </sterm-err>
    <sterm-ack-err>
      sterm-ack-err
    </sterm-ack-err>
    <sterm-tmo>
```

```
      sterm-tmo
    </sterm-tmo>
  </r2cp-session-counters>
</r2cp-counters>
```

Description

<r2cp-session-information>

Usage

```
<r2cp-session-information>
  <r2cp-session>....</r2cp-session>
  <r2cp-session-update>....</r2cp-session-update>
</r2cp-session-information>
```

Description

<r2cp-session-update>

Usage

```
<r2cp-session>
  <r2cp-session-update>
    <last-received>
      last-received
    </last-received>
    <current-bandwidth>
      current-bandwidth
    </current-bandwidth>
    <max-bandwidth>
      max-bandwidth
    </max-bandwidth>
    <quality>
      quality
    </quality>
    <resources>
      resources
    </resources>
    <latency>
      latency
    </latency>
  </r2cp-session-update>
</r2cp-session>
```

Description Late processed Session Update message

<r2cp-session-update>

Usage

```
<r2cp-session-information>
  <r2cp-session>
    <r2cp-session-update>
      <last-received>
```


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```
        last-received
       </last-received>
       <current-bandwidth>
        current-bandwidth
       </current-bandwidth>
       <max-bandwidth>
        max-bandwidth
       </max-bandwidth>
       <quality>
        quality
       </quality>
       <resources>
        resources
       </resources>
       <latency>
        latency
       </latency>
      </r2cp-session-update>
     </r2cp-session>
    </r2cp-session-information>
```

Description Late processed Session Update message

<r2cp-session-update>

Usage

```
<r2cp-session-information>
 <r2cp-session-update>
  <last-received>
   last-received
  </last-received>
  <current-bandwidth>
   current-bandwidth
  </current-bandwidth>
  <max-bandwidth>
   max-bandwidth
  </max-bandwidth>
  <quality>
   quality
  </quality>
  <resources>
   resources
  </resources>
  <latency>
   latency
  </latency>
 </r2cp-session-update>
</r2cp-session-information>
```

Description Late processed Session Update message

<r2cp-version>

Usage

```
<r2cp-version>
</r2cp-version>
```

Description

Summary of Redundant Interfaces Response Tags

<interface-load-balancing>

Usage

```
<interface-load-balancing>
  <interface-name>
    interface-name
  </interface-name>
  <state>
    state
  </state>
  <last-change>
    last-change
  </last-change>
  <member-count>
    member-count
  </member-count>
  <ha-type>
    ha-type
  </ha-type>
</interface-load-balancing>
```

Description

<interface-load-balancing>

Usage

```
<interface-load-balancing-information>
  <interface-load-balancing>
    <interface-name>
      interface-name
    </interface-name>
    <state>
      state
    </state>
    <last-change>
      last-change
    </last-change>
    <member-count>
      member-count
    </member-count>
    <ha-type>
      ha-type
    </ha-type>
```


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```
  </interface-load-balancing>
</interface-load-balancing-information>
```

Description

<interface-load-balancing-detail>

Usage

```
<interface-load-balancing-detail>
  <interface-name>
    interface-name
  </interface-name>
  <state>
    state
  </state>
  <last-change>
    last-change
  </last-change>
  <member-count>
    member-count
  </member-count>
  <ha-type>
    ha-type
  </ha-type>
</interface-load-balancing-detail>
```

Description

<interface-load-balancing-detail>

Usage

```
<interface-load-balancing-detail-information>
  <interface-load-balancing-detail>
    <interface-name>
      interface-name
    </interface-name>
    <state>
      state
    </state>
    <last-change>
      last-change
    </last-change>
    <member-count>
      member-count
    </member-count>
    <ha-type>
      ha-type
    </ha-type>
  </interface-load-balancing-detail>
</interface-load-balancing-detail-information>
```

Description

<interface-load-balancing-detail-information>

Usage

```
<interface-load-balancing-detail-information>
  <interface-load-balancing-detail>....</interface-load-balancing-detail>

<interface-load-balancing-member-detail>....</interface-load-balancing-member-detail>

</interface-load-balancing-detail-information>
```

Description

<interface-load-balancing-information>

Usage

```
<interface-load-balancing-information>
  <interface-load-balancing>....</interface-load-balancing>
</interface-load-balancing-information>
```

Description

<interface-load-balancing-member-detail>

Usage

```
<interface-load-balancing-member-detail>
  <member-interface>....</member-interface>
</interface-load-balancing-member-detail>
```

Description

<interface-load-balancing-member-detail>

Usage

```
<interface-load-balancing-detail-information>
  <interface-load-balancing-member-detail>
    <member-interface>....</member-interface>
  </interface-load-balancing-member-detail>
</interface-load-balancing-detail-information>
```

Description

<interface-redundancy>

Usage

```
<interface-redundancy>
  <interface-name>
    interface-name
  </interface-name>
  <state>
    state
  </state>
  <last-change>
```


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```
    last-change
  </last-change>
  <primary>
    primary
  </primary>
  <secondary>
    secondary
  </secondary>
  <current-status>
    current-status
  </current-status>
</interface-redundancy>
```

Description

<interface-redundancy>

Usage

```
<interface-redundancy-information>
  <interface-redundancy>
    <interface-name>
      interface-name
    </interface-name>
    <state>
      state
    </state>
    <last-change>
      last-change
    </last-change>
    <primary>
      primary
    </primary>
    <secondary>
      secondary
    </secondary>
    <current-status>
      current-status
    </current-status>
  </interface-redundancy>
</interface-redundancy-information>
```

Description

<interface-redundancy-detail>

Usage

```
<interface-redundancy-detail>
  <interface-name>
    interface-name
  </interface-name>
  <state>
    state
  </state>
  <last-change>
```

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```
    last-change
  </last-change>
  <primary>
    primary
  </primary>
  <secondary>
    secondary
  </secondary>
  <current-status>
    current-status
  </current-status>
  <mode>
    mode
  </mode>
  <replication-state>
    replication-state
  </replication-state>
</interface-redundancy-detail>
```

Description

<interface-redundancy-detail>

Usage

```
<interface-redundancy-detail-information>
  <interface-redundancy-detail>
    <interface-name>
      interface-name
    </interface-name>
    <state>
      state
    </state>
    <last-change>
      last-change
    </last-change>
    <primary>
      primary
    </primary>
    <secondary>
      secondary
    </secondary>
    <current-status>
      current-status
    </current-status>
    <mode>
      mode
    </mode>
    <replication-state>
      replication-state
    </replication-state>
  </interface-redundancy-detail>
</interface-redundancy-detail-information>
```

Description

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<interface-redundancy-detail-information>

Usage

```
<interface-redundancy-detail-information>
  <interface-redundancy-detail>....</interface-redundancy-detail>
</interface-redundancy-detail-information>
```

Description

<interface-redundancy-information>

Usage

```
<interface-redundancy-information>
  <interface-redundancy>....</interface-redundancy>
</interface-redundancy-information>
```

Description

<member-interface>

Usage

```
<member-interface>
  <member-name>
    member-name
  </member-name>
  <member-weight>
    member-weight
  </member-weight>
  <member-state>
    member-state
  </member-state>
</member-interface>
```

Description

<member-interface>

Usage

```
<interface-load-balancing-member-detail>
  <member-interface>
    <member-name>
      member-name
    </member-name>
    <member-weight>
      member-weight
    </member-weight>
    <member-state>
      member-state
    </member-state>
  </member-interface>
</interface-load-balancing-member-detail>
```

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Description

<member-interface>

Usage

```
<interface-load-balancing-detail-information>
  <interface-load-balancing-member-detail>
    <member-interface>
      <member-name>
        member-name
      </member-name>
      <member-weight>
        member-weight
      </member-weight>
      <member-state>
        member-state
      </member-state>
    </member-interface>
  </interface-load-balancing-member-detail>
</interface-load-balancing-detail-information>
```

Description

Summary of Relay Response Tags

<relay-group>

Usage

```
<relay-group>
  <relay-vks-group>....</relay-vks-group>
</relay-group>
```

Description

<relay-group-information>

Usage

```
<relay-group>
  <relay-vks-group>
    <relay-group-information>
      <group-id>
        group-id
      </group-id>
      <group-state>
        group-state
      </group-state>
      <group-type>
        group-type
      </group-type>
      <group-member-count>
        group-member-count
      </group-member-count>
      <message-total>
        message-total
```


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```
    </message-total>
    <message-total-size>
      message-total-size
    </message-total-size>
    <message-pending>
      message-pending
    </message-pending>
    <message-pending-size>
      message-pending-size
    </message-pending-size>
    <socket-full-count>
      socket-full-count
    </socket-full-count>
  </relay-group-information>
 </relay-vks-group>
</relay-group>
```

Description Relay group information

<relay-information>

Usage

```
<relay-information>
 <relay-state>
  relay-state
 </relay-state>
 <relay-server-information>....</relay-server-information>
</relay-information>
```

Description Relay information

<relay-member>

Usage

```
<relay-member>
 <relay-member-vks>....</relay-member-vks>
</relay-member>
```

Description Relay group member information

<relay-member-information>

Usage

```
<relay-member>
 <relay-member-vks>
  <relay-member-information>
   <member-name>
    member-name
   </member-name>
   <member-local-index>
    member-local-index
```

```
      </member-local-index>
      <member-state>
        member-state
      </member-state>
      <message-total>
        message-total
      </message-total>
      <message-total-size>
        message-total-size
      </message-total-size>
      <message-pending>
        message-pending
      </message-pending>
      <message-pending-size>
        message-pending-size
      </message-pending-size>
      <reverse-message-total>
        reverse-message-total
      </reverse-message-total>
      <reverse-message-total-size>
        reverse-message-total-size
      </reverse-message-total-size>
      <reverse-message-pending>
        reverse-message-pending
      </reverse-message-pending>
      <reverse-message-pending-size>
        reverse-message-pending-size
      </reverse-message-pending-size>
      <socket-full-count>
        socket-full-count
      </socket-full-count>
    </relay-member-information>
  </relay-member-vks>
</relay-member>
```

Description

<relay-member-vks>

Usage

```
<relay-member>
  <relay-member-vks>
    <relay-vks>
      relay-vks
    </relay-vks>
    <relay-member-information>....</relay-member-information>
  </relay-member-vks>
</relay-member>
```

Description

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<relay-server-information>

Usage

```
<relay-server-information>
  <relay-vks>
    relay-vks
  </relay-vks>
  <relay-server-name>
    relay-server-name
  </relay-server-name>
  <protocol-name>
    protocol-name
  </protocol-name>
  <connection-state>
    connection-state
  </connection-state>
  <group-count>
    group-count
  </group-count>
</relay-server-information>
```

Description Relay server information

<relay-server-information>

Usage

```
<relay-information>
  <relay-server-information>
    <relay-vks>
      relay-vks
    </relay-vks>
    <relay-server-name>
      relay-server-name
    </relay-server-name>
    <protocol-name>
      protocol-name
    </protocol-name>
    <connection-state>
      connection-state
    </connection-state>
    <group-count>
      group-count
    </group-count>
  </relay-server-information>
</relay-information>
```

Description Relay server information

<relay-vks-group>

Usage

```
<relay-group>
```

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```
<relay-vks-group>
  <relay-vks>
    relay-vks
  </relay-vks>
  <relay-group-information>....</relay-group-information>
</relay-vks-group>
</relay-group>
```

Description

Summary of Resource Cleanup Response Tags

<cleanup-resources>

Usage

```
<system-resource-cleanup-processes-information>
  <process-resource-cleanup>
    <cleanup-resources>
      <resource>....</resource>
    </cleanup-resources>
  </process-resource-cleanup>
</system-resource-cleanup-processes-information>
```

Description Resources that can be cleaned up

<process-resource-cleanup>

Usage

```
<system-resource-cleanup-processes-information>
  <process-resource-cleanup>
    <pid>
      pid
    </pid>
    <process-name>
      process-name
    </process-name>
    <cleanup-resources>....</cleanup-resources>
  </process-resource-cleanup>
</system-resource-cleanup-processes-information>
```

Description Resource clean up information for a process

<resource>

Usage

```
<system-resource-cleanup-processes-information>
  <process-resource-cleanup>
    <cleanup-resources>
      <resource>
        <type>
          type
```


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```
        </type>
        <major-number>
          major-number
        </major-number>
        <minor-number>
          minor-number
        </minor-number>
        <id>
          id
        </id>
        <key>
          key
        </key>
      </resource>
    </cleanup-resources>
  </process-resource-cleanup>
</system-resource-cleanup-processes-information>
```

Description Resource information

<resource-type>

Usage

```
<system-resource-cleanup-resources-information>
  <resource-type>
    <type>
      type
    </type>
  </resource-type>
</system-resource-cleanup-resources-information>
```

Description Type of resource

<system-resource-cleanup-processes-information>

Usage

```
<system-resource-cleanup-processes-information>
  <process-resource-cleanup>....</process-resource-cleanup>
</system-resource-cleanup-processes-information>
```

Description Resource clean up information for one or more processes

<system-resource-cleanup-resources-information>

Usage

```
<system-resource-cleanup-resources-information>
  <resource-type>....</resource-type>
</system-resource-cleanup-resources-information>
```

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Description Resources types that can be cleaned up

Summary of Routing Protocols Response Tags

<accepted-prefix-limit>

Usage

```
<bgp-option-information>
  <accepted-prefix-limit>
    <nlri-type>
      nlri-type
    </nlri-type>
    <prefix-count>
      prefix-count
    </prefix-count>
    <limit-action>
      limit-action
    </limit-action>
    <warning-percentage>
      warning-percentage
    </warning-percentage>
  </accepted-prefix-limit>
</bgp-option-information>
```

Description Limit number of prefixes accepted by policy

<accepted-prefix-limit>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <accepted-prefix-limit>
      <nlri-type>
        nlri-type
      </nlri-type>
      <prefix-count>
        prefix-count
      </prefix-count>
      <limit-action>
        limit-action
      </limit-action>
      <warning-percentage>
        warning-percentage
      </warning-percentage>
    </accepted-prefix-limit>
  </bgp-option-information>
</bgp-peer>
```

Description Limit number of prefixes accepted by policy

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<accepted-prefix-limit>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <accepted-prefix-limit>
        <nlri-type>
          nlri-type
        </nlri-type>
        <prefix-count>
          prefix-count
        </prefix-count>
        <limit-action>
          limit-action
        </limit-action>
        <warning-percentage>
          warning-percentage
        </warning-percentage>
      </accepted-prefix-limit>
    </bgp-option-information>
  </bgp-peer>
</bgp-group>
```

Description Limit number of prefixes accepted by policy

<accepted-prefix-limit>

Usage

```
<bgp-group>
  <bgp-option-information>
    <accepted-prefix-limit>
      <nlri-type>
        nlri-type
      </nlri-type>
      <prefix-count>
        prefix-count
      </prefix-count>
      <limit-action>
        limit-action
      </limit-action>
      <warning-percentage>
        warning-percentage
      </warning-percentage>
    </accepted-prefix-limit>
  </bgp-option-information>
</bgp-group>
```

Description Limit number of prefixes accepted by policy

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<accepted-prefix-limit>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <accepted-prefix-limit>
        <nlri-type>
          nlri-type
        </nlri-type>
        <prefix-count>
          prefix-count
        </prefix-count>
        <limit-action>
          limit-action
        </limit-action>
        <warning-percentage>
          warning-percentage
        </warning-percentage>
      </accepted-prefix-limit>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```

Description Limit number of prefixes accepted by policy

<accepted-prefix-limit>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <accepted-prefix-limit>
          <nlri-type>
            nlri-type
          </nlri-type>
          <prefix-count>
            prefix-count
          </prefix-count>
          <limit-action>
            limit-action
          </limit-action>
          <warning-percentage>
            warning-percentage
          </warning-percentage>
        </accepted-prefix-limit>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```


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Description Limit number of prefixes accepted by policy

<accepted-prefix-limit>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-option-information>
      <accepted-prefix-limit>
        <nlri-type>
          nlri-type
        </nlri-type>
        <prefix-count>
          prefix-count
        </prefix-count>
        <limit-action>
          limit-action
        </limit-action>
        <warning-percentage>
          warning-percentage
        </warning-percentage>
      </accepted-prefix-limit>
    </bgp-option-information>
  </bgp-group>
</bgp-group-information>
```

Description Limit number of prefixes accepted by policy

<accepted-prefix-limit>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <bgp-option-information>
        <accepted-prefix-limit>
          <nlri-type>
            nlri-type
          </nlri-type>
          <prefix-count>
            prefix-count
          </prefix-count>
          <limit-action>
            limit-action
          </limit-action>
          <warning-percentage>
            warning-percentage
          </warning-percentage>
        </accepted-prefix-limit>
      </bgp-option-information>
    </bgp-peer>
  </bgp-information>
```

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```
</bgp-group-information>
```

Description Limit number of prefixes accepted by policy

<addpath-receive>

Usage

```
<bgp-option-information>
  <addpath-receive>
    <nlri-type>
      nlri-type
    </nlri-type>
    <addpath-receive-type>
      addpath-receive-type
    </addpath-receive-type>
  </addpath-receive>
</bgp-option-information>
```

Description

<addpath-receive>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <addpath-receive>
      <nlri-type>
        nlri-type
      </nlri-type>
      <addpath-receive-type>
        addpath-receive-type
      </addpath-receive-type>
    </addpath-receive>
  </bgp-option-information>
</bgp-peer>
```

Description

<addpath-receive>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <addpath-receive>
        <nlri-type>
          nlri-type
        </nlri-type>
        <addpath-receive-type>
          addpath-receive-type
        </addpath-receive-type>
      </addpath-receive>
```


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```
    </bgp-option-information>
  </bgp-peer>
</bgp-group>
```

Description

<addpath-receive>

Usage

```
<bgp-group>
  <bgp-option-information>
    <addpath-receive>
      <nlri-type>
        nlri-type
      </nlri-type>
      <addpath-receive-type>
        addpath-receive-type
      </addpath-receive-type>
    </addpath-receive>
  </bgp-option-information>
</bgp-group>
```

Description

<addpath-receive>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <addpath-receive>
        <nlri-type>
          nlri-type
        </nlri-type>
        <addpath-receive-type>
          addpath-receive-type
        </addpath-receive-type>
      </addpath-receive>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```

Description

<addpath-receive>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <addpath-receive>
          <nlri-type>
```

```
            nlri-type
           </nlri-type>
           <addpath-receive-type>
            addpath-receive-type
           </addpath-receive-type>
          </addpath-receive>
         </bgp-option-information>
        </bgp-peer>
       </bgp-group>
      </bgp-group-information>
```

Description

<addpath-receive>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-option-information>
   <addpath-receive>
    <nlri-type>
     nlri-type
    </nlri-type>
    <addpath-receive-type>
     addpath-receive-type
    </addpath-receive-type>
   </addpath-receive>
  </bgp-option-information>
 </bgp-group>
</bgp-group-information>
```

Description

<addpath-receive>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
   <bgp-option-information>
    <addpath-receive>
     <nlri-type>
      nlri-type
     </nlri-type>
     <addpath-receive-type>
      addpath-receive-type
     </addpath-receive-type>
    </addpath-receive>
   </bgp-option-information>
  </bgp-peer>
 </bgp-information>
</bgp-group-information>
```


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Description

<addpath-send>

Usage

```
<bgp-option-information>
  <addpath-send>
    <nlri-type>
      nlri-type
    </nlri-type>
    <addpath-send-type>
      addpath-send-type
    </addpath-send-type>
    <addpath-send-count>
      addpath-send-count
    </addpath-send-count>
    <addpath-send-policy>
      addpath-send-policy
    </addpath-send-policy>
  </addpath-send>
</bgp-option-information>
```

Description

<addpath-send>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <addpath-send>
      <nlri-type>
        nlri-type
      </nlri-type>
      <addpath-send-type>
        addpath-send-type
      </addpath-send-type>
      <addpath-send-count>
        addpath-send-count
      </addpath-send-count>
      <addpath-send-policy>
        addpath-send-policy
      </addpath-send-policy>
    </addpath-send>
  </bgp-option-information>
</bgp-peer>
```

Description

<addpath-send>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
```

```
      <addpath-send>
       <nlri-type>
        nlri-type
       </nlri-type>
       <addpath-send-type>
        addpath-send-type
       </addpath-send-type>
       <addpath-send-count>
        addpath-send-count
       </addpath-send-count>
       <addpath-send-policy>
        addpath-send-policy
       </addpath-send-policy>
      </addpath-send>
     </bgp-option-information>
    </bgp-peer>
   </bgp-group>
```

Description

<addpath-send>

Usage

```
<bgp-group>
 <bgp-option-information>
  <addpath-send>
   <nlri-type>
    nlri-type
   </nlri-type>
   <addpath-send-type>
    addpath-send-type
   </addpath-send-type>
   <addpath-send-count>
    addpath-send-count
   </addpath-send-count>
   <addpath-send-policy>
    addpath-send-policy
   </addpath-send-policy>
  </addpath-send>
 </bgp-option-information>
</bgp-group>
```

Description

<addpath-send>

Usage

```
<bgp-information>
 <bgp-peer>
  <bgp-option-information>
   <addpath-send>
    <nlri-type>
     nlri-type
    </nlri-type>
```


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```
        <addpath-send-type>
          addpath-send-type
        </addpath-send-type>
        <addpath-send-count>
          addpath-send-count
        </addpath-send-count>
        <addpath-send-policy>
          addpath-send-policy
        </addpath-send-policy>
      </addpath-send>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```

Description

<addpath-send>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <addpath-send>
          <nlri-type>
            nlri-type
          </nlri-type>
          <addpath-send-type>
            addpath-send-type
          </addpath-send-type>
          <addpath-send-count>
            addpath-send-count
          </addpath-send-count>
          <addpath-send-policy>
            addpath-send-policy
          </addpath-send-policy>
        </addpath-send>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<addpath-send>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-option-information>
      <addpath-send>
        <nlri-type>
          nlri-type
        </nlri-type>
```

```
        <addpath-send-type>
          addpath-send-type
        </addpath-send-type>
        <addpath-send-count>
          addpath-send-count
        </addpath-send-count>
        <addpath-send-policy>
          addpath-send-policy
        </addpath-send-policy>
      </addpath-send>
    </bgp-option-information>
  </bgp-group>
</bgp-group-information>
```

Description

<addpath-send>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <bgp-option-information>
        <addpath-send>
          <nlri-type>
            nlri-type
          </nlri-type>
          <addpath-send-type>
            addpath-send-type
          </addpath-send-type>
          <addpath-send-count>
            addpath-send-count
          </addpath-send-count>
          <addpath-send-policy>
            addpath-send-policy
          </addpath-send-policy>
        </addpath-send>
      </bgp-option-information>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<admin-groups>

Usage

```
<admin-groups>
  <color>
    color
  </color>
  <no-group-flag>
    no-group-flag
  </no-group-flag>
```


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```
  <admin-group-name>
   admin-group-name
  </admin-group-name>
  <admin-group-number>
   admin-group-number
  </admin-group-number>
</admin-groups>
```

Description

<admin-groups>

Usage

```
<isis-tlv>
  <reachability-tlv>
    <isis-reachability-subtlv>
      <admin-groups>
        <color>
          color
        </color>
        <no-group-flag>
          no-group-flag
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
    </isis-reachability-subtlv>
  </reachability-tlv>
</isis-tlv>
```

Description

<admin-groups>

Usage

```
<isis-tlv>
  <isis-reachability-subtlv>
    <admin-groups>
      <color>
        color
      </color>
      <no-group-flag>
        no-group-flag
      </no-group-flag>
      <admin-group-name>
        admin-group-name
      </admin-group-name>
      <admin-group-number>
        admin-group-number
      </admin-group-number>
```

```
    </admin-groups>
  </isis-reachability-subtlv>
</isis-tlv>
```

Description

<admin-groups>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <reachability-tlv>
      <isis-reachability-subtlv>
        <admin-groups>
          <color>
            color
          </color>
          <no-group-flag>
            no-group-flag
          </no-group-flag>
          <admin-group-name>
            admin-group-name
          </admin-group-name>
          <admin-group-number>
            admin-group-number
          </admin-group-number>
        </admin-groups>
      </isis-reachability-subtlv>
    </reachability-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<admin-groups>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-reachability-subtlv>
      <admin-groups>
        <color>
          color
        </color>
        <no-group-flag>
          no-group-flag
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
```


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```
    </isis-reachability-subtlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<admin-groups>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <reachability-tlv>
        <isis-reachability-subtlv>
          <admin-groups>
            <color>
              color
            </color>
            <no-group-flag>
              no-group-flag
            </no-group-flag>
            <admin-group-name>
              admin-group-name
            </admin-group-name>
            <admin-group-number>
              admin-group-number
            </admin-group-number>
          </admin-groups>
        </isis-reachability-subtlv>
      </reachability-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<admin-groups>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-reachability-subtlv>
        <admin-groups>
          <color>
            color
          </color>
          <no-group-flag>
            no-group-flag
          </no-group-flag>
          <admin-group-name>
            admin-group-name
          </admin-group-name>
          <admin-group-number>
```

```
                admin-group-number
              </admin-group-number>
            </admin-groups>
          </isis-reachability-subtlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
```

Description

<admin-groups>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <reachability-tlv>
          <isis-reachability-subtlv>
            <admin-groups>
              <color>
                color
              </color>
              <no-group-flag>
                no-group-flag
              </no-group-flag>
              <admin-group-name>
                admin-group-name
              </admin-group-name>
              <admin-group-number>
                admin-group-number
              </admin-group-number>
            </admin-groups>
          </isis-reachability-subtlv>
        </reachability-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<admin-groups>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-reachability-subtlv>
          <admin-groups>
            <color>
              color
            </color>
```


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```
            <no-group-flag>
              no-group-flag
            </no-group-flag>
            <admin-group-name>
              admin-group-name
            </admin-group-name>
            <admin-group-number>
              admin-group-number
            </admin-group-number>
          </admin-groups>
        </isis-reachability-subtlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<admin-groups>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <admin-groups>
        <color>
          color
        </color>
        <no-group-flag>
          no-group-flag
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

Description

<admin-groups>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <admin-groups>
          <color>
            color
```

```
        </color>
        <no-group-flag>
          no-group-flag
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
    </mpls-lsp-path>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description

<admin-groups>

Usage

```
<rsvp-session>
 <mpls-lsp>
  <admin-groups>
   <color>
    color
   </color>
   <no-group-flag>
    no-group-flag
   </no-group-flag>
   <admin-group-name>
    admin-group-name
   </admin-group-name>
   <admin-group-number>
    admin-group-number
   </admin-group-number>
  </admin-groups>
 </mpls-lsp>
</rsvp-session>
```

Description

<admin-groups>

Usage

```
<rsvp-session>
 <mpls-lsp>
  <mpls-lsp-path>
   <admin-groups>
    <color>
     color
    </color>
    <no-group-flag>
     no-group-flag
```


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```
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description

<admin-groups>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <admin-groups>
          <color>
            color
          </color>
          <no-group-flag>
            no-group-flag
          </no-group-flag>
          <admin-group-name>
            admin-group-name
          </admin-group-name>
          <admin-group-number>
            admin-group-number
          </admin-group-number>
        </admin-groups>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<admin-groups>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <admin-groups>
            <color>
              color
            </color>
```

```
            <no-group-flag>
              no-group-flag
            </no-group-flag>
            <admin-group-name>
              admin-group-name
            </admin-group-name>
            <admin-group-number>
              admin-group-number
            </admin-group-number>
          </admin-groups>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<admin-groups>

Usage

```
<mpls-lsp-path>
  <admin-groups>
    <color>
      color
    </color>
    <no-group-flag>
      no-group-flag
    </no-group-flag>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
  </admin-groups>
</mpls-lsp-path>
```

Description

<admin-groups>

Usage

```
<mpls-lsp>
  <admin-groups>
    <color>
      color
    </color>
    <no-group-flag>
      no-group-flag
    </no-group-flag>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
```


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```
    <admin-group-number>
     admin-group-number
    </admin-group-number>
   </admin-groups>
</mpls-lsp>
```

Description

<admin-groups>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <admin-groups>
   <color>
    color
   </color>
   <no-group-flag>
    no-group-flag
   </no-group-flag>
   <admin-group-name>
    admin-group-name
   </admin-group-name>
   <admin-group-number>
    admin-group-number
   </admin-group-number>
  </admin-groups>
 </mpls-lsp-path>
</mpls-lsp>
```

Description

<admin-groups>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <admin-groups>
     <color>
      color
     </color>
     <no-group-flag>
      no-group-flag
     </no-group-flag>
     <admin-group-name>
      admin-group-name
     </admin-group-name>
     <admin-group-number>
      admin-group-number
     </admin-group-number>
    </admin-groups>
   </mpls-lsp>
```

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```
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<admin-groups>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <admin-groups>
            <color>
              color
            </color>
            <no-group-flag>
              no-group-flag
            </no-group-flag>
            <admin-group-name>
              admin-group-name
            </admin-group-name>
            <admin-group-number>
              admin-group-number
            </admin-group-number>
          </admin-groups>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<admin-groups>

Usage

```
<ted-link>
  <admin-groups>
    <color>
      color
    </color>
    <no-group-flag>
      no-group-flag
    </no-group-flag>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
  </admin-groups>
```


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```
</ted-link>
```

Description

<admin-groups>

Usage

```
<ted-database>
 <ted-link>
  <admin-groups>
   <color>
    color
   </color>
   <no-group-flag>
    no-group-flag
   </no-group-flag>
   <admin-group-name>
    admin-group-name
   </admin-group-name>
   <admin-group-number>
    admin-group-number
   </admin-group-number>
  </admin-groups>
 </ted-link>
</ted-database>
```

Description

<admin-groups>

Usage

```
<ted-database-information>
 <ted-database>
  <ted-link>
   <admin-groups>
    <color>
     color
    </color>
    <no-group-flag>
     no-group-flag
    </no-group-flag>
    <admin-group-name>
     admin-group-name
    </admin-group-name>
    <admin-group-number>
     admin-group-number
    </admin-group-number>
   </admin-groups>
  </ted-link>
 </ted-database>
</ted-database-information>
```

Description

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<admin-groups>

Usage

```
<ted-link-information>
  <ted-link>
    <admin-groups>
      <color>
        color
      </color>
      <no-group-flag>
        no-group-flag
      </no-group-flag>
      <admin-group-name>
        admin-group-name
      </admin-group-name>
      <admin-group-number>
        admin-group-number
      </admin-group-number>
    </admin-groups>
  </ted-link>
</ted-link-information>
```

Description

<admin-groups>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <admin-groups>
        <color>
          color
        </color>
        <no-group-flag>
          no-group-flag
        </no-group-flag>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
        <admin-group-number>
          admin-group-number
        </admin-group-number>
      </admin-groups>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

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<admin-groups>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <admin-groups>
     <color>
      color
     </color>
     <no-group-flag>
      no-group-flag
     </no-group-flag>
     <admin-group-name>
      admin-group-name
     </admin-group-name>
     <admin-group-number>
      admin-group-number
     </admin-group-number>
    </admin-groups>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<admin-groups-extended>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <mpls-lsp>
   <admin-groups-extended>
    <admin-group-name>
     admin-group-name
    </admin-group-name>
    <admin-group-number>
     admin-group-number
    </admin-group-number>
   </admin-groups-extended>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description

<admin-groups-extended>

Usage

```
<rsvp-session-data>
 <rsvp-session>
```

```
    <mpls-lsp>
     <mpls-lsp-path>
      <admin-groups-extended>
       <admin-group-name>
        admin-group-name
       </admin-group-name>
       <admin-group-number>
        admin-group-number
       </admin-group-number>
      </admin-groups-extended>
     </mpls-lsp-path>
    </mpls-lsp>
   </rsvp-session>
</rsvp-session-data>
```

Description

<admin-groups-extended>

Usage

```
<rsvp-session>
 <mpls-lsp>
  <admin-groups-extended>
   <admin-group-name>
    admin-group-name
   </admin-group-name>
   <admin-group-number>
    admin-group-number
   </admin-group-number>
  </admin-groups-extended>
 </mpls-lsp>
</rsvp-session>
```

Description

<admin-groups-extended>

Usage

```
<rsvp-session>
 <mpls-lsp>
  <mpls-lsp-path>
   <admin-groups-extended>
    <admin-group-name>
     admin-group-name
    </admin-group-name>
    <admin-group-number>
     admin-group-number
    </admin-group-number>
   </admin-groups-extended>
  </mpls-lsp-path>
 </mpls-lsp>
</rsvp-session>
```


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Description

<admin-groups-extended>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <admin-groups-extended>
          <admin-group-name>
            admin-group-name
          </admin-group-name>
          <admin-group-number>
            admin-group-number
          </admin-group-number>
        </admin-groups-extended>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<admin-groups-extended>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <admin-groups-extended>
            <admin-group-name>
              admin-group-name
            </admin-group-name>
            <admin-group-number>
              admin-group-number
            </admin-group-number>
          </admin-groups-extended>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<admin-groups-extended>

Usage

```
<mpls-lsp-path>
  <admin-groups-extended>
    <admin-group-name>
```

```
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
  </admin-groups-extended>
</mpls-lsp-path>
```

Description

<admin-groups-extended>

Usage

```
<mpls-lsp>
  <admin-groups-extended>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
  </admin-groups-extended>
</mpls-lsp>
```

Description

<admin-groups-extended>

Usage

```
<mpls-lsp>
  <mpls-lsp-path>
    <admin-groups-extended>
      <admin-group-name>
        admin-group-name
      </admin-group-name>
      <admin-group-number>
        admin-group-number
      </admin-group-number>
    </admin-groups-extended>
  </mpls-lsp-path>
</mpls-lsp>
```

Description

<admin-groups-extended>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <admin-groups-extended>
          <admin-group-name>
```


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```
                admin-group-name
               </admin-group-name>
               <admin-group-number>
                admin-group-number
               </admin-group-number>
              </admin-groups-extended>
             </mpls-lsp>
            </rsvp-session>
           </rsvp-session-data>
          </mpls-lsp-information>
```

Description

<admin-groups-extended>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <admin-groups-extended>
      <admin-group-name>
       admin-group-name
      </admin-group-name>
      <admin-group-number>
       admin-group-number
      </admin-group-number>
     </admin-groups-extended>
    </mpls-lsp-path>
   </mpls-lsp>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description

<admin-groups-extended>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <admin-groups-extended>
    <admin-group-name>
     admin-group-name
    </admin-group-name>
    <admin-group-number>
     admin-group-number
    </admin-group-number>
   </admin-groups-extended>
  </mpls-lsp>
 </mpls-call-admission-control>
```

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```
</mpls-call-admission-control-information>
```

Description

<admin-groups-extended>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <admin-groups-extended>
     <admin-group-name>
      admin-group-name
     </admin-group-name>
     <admin-group-number>
      admin-group-number
     </admin-group-number>
    </admin-groups-extended>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<aggregate>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <aggregate>
     <aggregate-flags>
      aggregate-flags
     </aggregate-flags>
     <aggregate-depth>
      aggregate-depth
     </aggregate-depth>
     <aggregate-active>
      aggregate-active
     </aggregate-active>
     <aggregate-as-path>....</aggregate-as-path>
     <contributing-route-count>
      contributing-route-count
     </contributing-route-count>
     <aggregated-route>....</aggregated-route>
    </aggregate>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```


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Description

<aggregate>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <aggregate>
          <aggregate-flags>
            aggregate-flags
          </aggregate-flags>
          <aggregate-depth>
            aggregate-depth
          </aggregate-depth>
          <aggregate-active>
            aggregate-active
          </aggregate-active>
          <aggregate-as-path>....</aggregate-as-path>
          <contributing-route-count>
            contributing-route-count
          </contributing-route-count>
          <aggregated-route>....</aggregated-route>
        </aggregate>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

Description

<aggregate-as-path>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <aggregate>
          <aggregate-as-path>
            <as-path>
              as-path
            </as-path>
            <reference-count>
              reference-count
            </reference-count>
          </aggregate-as-path>
        </aggregate>
      </rt-entry>
    </rt>
  </route-table>
</route-information>
```

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Description

<aggregate-as-path>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <aggregate>
     <aggregate-as-path>
      <as-path>
       as-path
      </as-path>
      <reference-count>
       reference-count
      </reference-count>
     </aggregate-as-path>
    </aggregate>
   </rt-entry>
  </rt>
 </route-table>
</route-summary-information>
```

Description

<aggregated-route>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <aggregate>
     <aggregated-route>
      <destination-prefix>
       destination-prefix
      </destination-prefix>
      <protocol-name>
       protocol-name
      </protocol-name>
     </aggregated-route>
    </aggregate>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```

Description

<aggregated-route>

Usage

```
<route-summary-information>
```


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```
<route-table>
 <rt>
  <rt-entry>
   <aggregate>
    <aggregated-route>
     <destination-prefix>
      destination-prefix
     </destination-prefix>
     <protocol-name>
      protocol-name
     </protocol-name>
    </aggregated-route>
   </aggregate>
  </rt-entry>
 </rt>
</route-table>
</route-summary-information>
```

Description

<amt-instance-statistics>

Usage

```
<amt-instance-statistics>
 <amt-relay-discovery-messages>
  amt-relay-discovery-messages
 </amt-relay-discovery-messages>
 <amt-relay-advertisement-messages>
  amt-relay-advertisement-messages
 </amt-relay-advertisement-messages>
 <amt-membership-request-messages>
  amt-membership-request-messages
 </amt-membership-request-messages>
 <amt-membership-query-messages>
  amt-membership-query-messages
 </amt-membership-query-messages>
 <amt-membership-update-messages>
  amt-membership-update-messages
 </amt-membership-update-messages>
 <amt-relay-discovery-invalid-address>
  amt-relay-discovery-invalid-address
 </amt-relay-discovery-invalid-address>
 <amt-membership-request-invalid-address>
  amt-membership-request-invalid-address
 </amt-membership-request-invalid-address>
 <amt-membership-update-invalid-address>
  amt-membership-update-invalid-address
 </amt-membership-update-invalid-address>
 <amt-incomplete-packet>
  amt-incomplete-packet
 </amt-incomplete-packet>
 <amt-invalid-mac>
  amt-invalid-mac
 </amt-invalid-mac>
 <amt-unexpected-type>
```

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```
    amt-unexpected-type
  </amt-unexpected-type>
  <amt-incomplete-relay-discovery>
    amt-incomplete-relay-discovery
  </amt-incomplete-relay-discovery>
  <amt-incomplete-membership-request>
    amt-incomplete-membership-request
  </amt-incomplete-membership-request>
  <amt-incomplete-membership-update>
    amt-incomplete-membership-update
  </amt-incomplete-membership-update>
  <amt-no-active-gateway>
    amt-no-active-gateway
  </amt-no-active-gateway>
  <amt-invalid-inner-packet-checksum>
    amt-invalid-inner-packet-checksum
  </amt-invalid-inner-packet-checksum>
  <amt-gateways-timed-out>
    amt-gateways-timed-out
  </amt-gateways-timed-out>
</amt-instance-statistics>
```

Description Display a summary of AMT instance statistics

<amt-summary>

Usage

```
<amt-summary>
  <amt-anycast-prefix>
    amt-anycast-prefix
  </amt-anycast-prefix>
  <amt-anycast-address>
    amt-anycast-address
  </amt-anycast-address>
  <amt-local-address>
    amt-local-address
  </amt-local-address>
  <amt-tunnel-limit>
    amt-tunnel-limit
  </amt-tunnel-limit>
  <amt-active-tunnels>
    amt-active-tunnels
  </amt-active-tunnels>
</amt-summary>
```

Description Display a summary of AMT configuration

<amt-tunnel>

Usage

```
<amt-tunnel>
  <amt-tunnel-gateway-address>
```


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```
  amt-tunnel-gateway-address
 </amt-tunnel-gateway-address>
 <amt-tunnel-gateway-port>
  amt-tunnel-gateway-port
 </amt-tunnel-gateway-port>
 <amt-tunnel-interface>
  amt-tunnel-interface
 </amt-tunnel-interface>
 <amt-tunnel-state>
  amt-tunnel-state
 </amt-tunnel-state>
 <amt-inactivity-timeout>
  amt-inactivity-timeout
 </amt-inactivity-timeout>
 <amt-tunnel-gateway-nonce>
  amt-tunnel-gateway-nonce
 </amt-tunnel-gateway-nonce>
 <amt-tunnel-gateway-mac>
  amt-tunnel-gateway-mac
 </amt-tunnel-gateway-mac>
 <amt-tunnel-multicast-groups>
  amt-tunnel-multicast-groups
 </amt-tunnel-multicast-groups>
 <mgm-group>....</mgm-group>
 <amt-tunnel-message-count>....</amt-tunnel-message-count>
</amt-tunnel>
```

Description Display AMT tunnel information

<amt-tunnel>

Usage

```
<amt-tunnel-information>
 <amt-tunnel>
  <amt-tunnel-gateway-address>
   amt-tunnel-gateway-address
  </amt-tunnel-gateway-address>
  <amt-tunnel-gateway-port>
   amt-tunnel-gateway-port
  </amt-tunnel-gateway-port>
  <amt-tunnel-interface>
   amt-tunnel-interface
  </amt-tunnel-interface>
  <amt-tunnel-state>
   amt-tunnel-state
  </amt-tunnel-state>
  <amt-inactivity-timeout>
   amt-inactivity-timeout
  </amt-inactivity-timeout>
  <amt-tunnel-gateway-nonce>
   amt-tunnel-gateway-nonce
  </amt-tunnel-gateway-nonce>
  <amt-tunnel-gateway-mac>
   amt-tunnel-gateway-mac
```

```
    </amt-tunnel-gateway-mac>
    <amt-tunnel-multicast-groups>
     amt-tunnel-multicast-groups
    </amt-tunnel-multicast-groups>
    <mgm-group>....</mgm-group>
    <amt-tunnel-message-count>....</amt-tunnel-message-count>
   </amt-tunnel>
</amt-tunnel-information>
```

Description Display AMT tunnel information

<amt-tunnel-information>

Usage

```
<amt-tunnel-information>
  <amt-tunnel>....</amt-tunnel>
</amt-tunnel-information>
```

Description Display AMT tunnel information

<amt-tunnel-message-count>

Usage

```
<amt-tunnel>
  <amt-tunnel-message-count>
    <amt-request-message>
     amt-request-message
    </amt-request-message>
    <amt-membership-update-message>
     amt-membership-update-message
    </amt-membership-update-message>
  </amt-tunnel-message-count>
</amt-tunnel>
```

Description Control packets received from the gateway

<amt-tunnel-message-count>

Usage

```
<amt-tunnel-information>
  <amt-tunnel>
    <amt-tunnel-message-count>
      <amt-request-message>
       amt-request-message
      </amt-request-message>
      <amt-membership-update-message>
       amt-membership-update-message
      </amt-membership-update-message>
    </amt-tunnel-message-count>
  </amt-tunnel>
```


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```
</amt-tunnel-information>
```

Description Control packets received from the gateway

<area-address-tlv>

Usage

```
<isis-tlv>
  <area-address-tlv>
    <address>
      address
    </address>
    <tlv-length>
      tlv-length
    </tlv-length>
  </area-address-tlv>
</isis-tlv>
```

Description

<area-address-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <area-address-tlv>
      <address>
        address
      </address>
      <tlv-length>
        tlv-length
      </tlv-length>
    </area-address-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<area-address-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <area-address-tlv>
        <address>
          address
        </address>
        <tlv-length>
          tlv-length
        </tlv-length>
      </area-address-tlv>
```

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```
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<area-address-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <area-address-tlv>
          <address>
            address
          </address>
          <tlv-length>
            tlv-length
          </tlv-length>
        </area-address-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<aspath-bucket>

Usage

```
<aspath-bucket>
  <aspath-entry>....</aspath-entry>
  <bucket>
    bucket
  </bucket>
  <count>
    count
  </count>
</aspath-bucket>
```

Description

<aspath-bucket>

Usage

```
<aspath-table>
  <aspath-bucket>
    <aspath-entry>....</aspath-entry>
    <bucket>
      bucket
    </bucket>
    <count>
```


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```
      count
    </count>
  </aspath-bucket>
</aspath-table>
```

Description

<aspath-bucket>

Usage

```
<juniper-routing-aspath>
  <aspath-table>
    <aspath-bucket>
      <aspath-entry>....</aspath-entry>
      <bucket>
        bucket
      </bucket>
      <count>
        count
      </count>
    </aspath-bucket>
  </aspath-table>
</juniper-routing-aspath>
```

Description

<aspath-domain>

Usage

```
<aspath-domain>
  <identifier>
    identifier
  </identifier>
  <domain-flags>
    domain-flags
  </domain-flags>
  <primary>
    primary
  </primary>
  <references>
    references
  </references>
  <path-count>
    path-count
  </path-count>
  <local-asn>....</local-asn>
</aspath-domain>
```

Description

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<aspath-domain>

Usage

```
<juniper-routing-aspath>
  <aspath-domain>
    <identifier>
      identifier
    </identifier>
    <domain-flags>
      domain-flags
    </domain-flags>
    <primary>
      primary
    </primary>
    <references>
      references
    </references>
    <path-count>
      path-count
    </path-count>
    <local-asn>....</local-asn>
  </aspath-domain>
</juniper-routing-aspath>
```

Description

<aspath-entry>

Usage

```
<aspath-entry>
  <as-path>
    as-path
  </as-path>
  <domain>
    domain
  </domain>
  <path-references>
    path-references
  </path-references>
  <length>
    length
  </length>
  <segments>
    segments
  </segments>
  <overhead>
    overhead
  </overhead>
  <compare-length>
    compare-length
  </compare-length>
  <neighbor-as>
    neighbor-as
  </neighbor-as>
```


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```
  <entry-state>
   entry-state
  </entry-state>
</aspath-entry>
```

Description

<aspath-entry>

Usage

```
<aspath-bucket>
  <aspath-entry>
    <as-path>
      as-path
    </as-path>
    <domain>
      domain
    </domain>
    <path-references>
      path-references
    </path-references>
    <length>
      length
    </length>
    <segments>
      segments
    </segments>
    <overhead>
      overhead
    </overhead>
    <compare-length>
      compare-length
    </compare-length>
    <neighbor-as>
      neighbor-as
    </neighbor-as>
    <entry-state>
      entry-state
    </entry-state>
  </aspath-entry>
</aspath-bucket>
```

Description

<aspath-entry>

Usage

```
<aspath-table>
  <aspath-bucket>
    <aspath-entry>
      <as-path>
        as-path
      </as-path>
      <domain>
```

```
            domain
          </domain>
          <path-references>
            path-references
          </path-references>
          <length>
            length
          </length>
          <segments>
            segments
          </segments>
          <overhead>
            overhead
          </overhead>
          <compare-length>
            compare-length
          </compare-length>
          <neighbor-as>
            neighbor-as
          </neighbor-as>
          <entry-state>
            entry-state
          </entry-state>
        </aspath-entry>
      </aspath-bucket>
    </aspath-table>
```

Description

<aspath-entry>

Usage

```
<juniper-routing-aspath>
  <aspath-table>
    <aspath-bucket>
      <aspath-entry>
        <as-path>
          as-path
        </as-path>
        <domain>
          domain
        </domain>
        <path-references>
          path-references
        </path-references>
        <length>
          length
        </length>
        <segments>
          segments
        </segments>
        <overhead>
          overhead
        </overhead>
        <compare-length>
```


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```
        compare-length
       </compare-length>
       <neighbor-as>
        neighbor-as
       </neighbor-as>
       <entry-state>
        entry-state
       </entry-state>
      </aspath-entry>
     </aspath-bucket>
    </aspath-table>
</juniper-routing-aspath>
```

Description

<aspath-table>

Usage

```
<aspath-table>
 <path-count>
  path-count
 </path-count>
 <bucket-count>
  bucket-count
 </bucket-count>
 <bucket-max-entries>
  bucket-max-entries
 </bucket-max-entries>
 <bucket-min-entries>
  bucket-min-entries
 </bucket-min-entries>
 <bucket-avg-entries>
  bucket-avg-entries
 </bucket-avg-entries>
 <bucket-std-deviation>
  bucket-std-deviation
 </bucket-std-deviation>
 <aspath-bucket>....</aspath-bucket>
</aspath-table>
```

Description

<aspath-table>

Usage

```
<juniper-routing-aspath>
 <aspath-table>
  <path-count>
   path-count
  </path-count>
  <bucket-count>
   bucket-count
  </bucket-count>
  <bucket-max-entries>
```

```
      bucket-max-entries
    </bucket-max-entries>
    <bucket-min-entries>
      bucket-min-entries
    </bucket-min-entries>
    <bucket-avg-entries>
      bucket-avg-entries
    </bucket-avg-entries>
    <bucket-std-deviation>
      bucket-std-deviation
    </bucket-std-deviation>
    <aspath-bucket>....</aspath-bucket>
  </aspath-table>
</juniper-routing-aspath>
```

Description

<attrset>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <attrset>
          <attrset-as>
            attrset-as
          </attrset-as>
          <med>
            med
          </med>
          <local-preference>
            local-preference
          </local-preference>
          <as-path>
            as-path
          </as-path>
          <communities>....</communities>
          <cluster-id>
            cluster-id
          </cluster-id>
          <pmsi>
            pmsi
          </pmsi>
          <originator>
            originator
          </originator>
        </attrset>
      </rt-entry>
    </rt>
  </route-table>
</route-information>
```

Description

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<attrset>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <attrset>
          <attrset-as>
            attrset-as
          </attrset-as>
          <med>
            med
          </med>
          <local-preference>
            local-preference
          </local-preference>
          <as-path>
            as-path
          </as-path>
          <communities>....</communities>
          <cluster-id>
            cluster-id
          </cluster-id>
          <pmsi>
            pmsi
          </pmsi>
          <originator>
            originator
          </originator>
        </attrset>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

Description

<authentication-tlv>

Usage

```
<isis-tlv>
  <authentication-tlv>
    <tlv-length>
      tlv-length
    </tlv-length>
  </authentication-tlv>
</isis-tlv>
```

Description

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<authentication-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <authentication-tlv>
      <tlv-length>
        tlv-length
      </tlv-length>
    </authentication-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<authentication-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <authentication-tlv>
        <tlv-length>
          tlv-length
        </tlv-length>
      </authentication-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<authentication-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <authentication-tlv>
          <tlv-length>
            tlv-length
          </tlv-length>
        </authentication-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

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<automatic-site-timers>

Usage

```
<automatic-site-timers>
  <automatic-site-startup-wait-time>
    automatic-site-startup-wait-time
  </automatic-site-startup-wait-time>
  <automatic-site-new-site-wait-time>
    automatic-site-new-site-wait-time
  </automatic-site-new-site-wait-time>
  <automatic-site-collision-detect-time>
    automatic-site-collision-detect-time
  </automatic-site-collision-detect-time>
  <automatic-site-reclaim-wait-time>
    automatic-site-reclaim-wait-time
  </automatic-site-reclaim-wait-time>
</automatic-site-timers>
```

Description

<automatic-site-timers>

Usage

```
<instance>
  <reference-site>
    <automatic-site-timers>
      <automatic-site-startup-wait-time>
        automatic-site-startup-wait-time
      </automatic-site-startup-wait-time>
      <automatic-site-new-site-wait-time>
        automatic-site-new-site-wait-time
      </automatic-site-new-site-wait-time>
      <automatic-site-collision-detect-time>
        automatic-site-collision-detect-time
      </automatic-site-collision-detect-time>
      <automatic-site-reclaim-wait-time>
        automatic-site-reclaim-wait-time
      </automatic-site-reclaim-wait-time>
    </automatic-site-timers>
  </reference-site>
</instance>
```

Description

<automatic-site-timers>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <automatic-site-timers>
        <automatic-site-startup-wait-time>
          automatic-site-startup-wait-time
```

```
      </automatic-site-startup-wait-time>
      <automatic-site-new-site-wait-time>
       automatic-site-new-site-wait-time
      </automatic-site-new-site-wait-time>
      <automatic-site-collision-detect-time>
       automatic-site-collision-detect-time
      </automatic-site-collision-detect-time>
      <automatic-site-reclaim-wait-time>
       automatic-site-reclaim-wait-time
      </automatic-site-reclaim-wait-time>
     </automatic-site-timers>
    </reference-site>
   </vpls-protocol-state>
  </instance>
```

Description

<automatic-site-timers>

Usage

```
<l2vpn-connection-information>
 <instance>
  <reference-site>
   <automatic-site-timers>
    <automatic-site-startup-wait-time>
     automatic-site-startup-wait-time
    </automatic-site-startup-wait-time>
    <automatic-site-new-site-wait-time>
     automatic-site-new-site-wait-time
    </automatic-site-new-site-wait-time>
    <automatic-site-collision-detect-time>
     automatic-site-collision-detect-time
    </automatic-site-collision-detect-time>
    <automatic-site-reclaim-wait-time>
     automatic-site-reclaim-wait-time
    </automatic-site-reclaim-wait-time>
   </automatic-site-timers>
  </reference-site>
 </instance>
</l2vpn-connection-information>
```

Description

<automatic-site-timers>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <automatic-site-timers>
     <automatic-site-startup-wait-time>
      automatic-site-startup-wait-time
     </automatic-site-startup-wait-time>
```


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```
        <automatic-site-new-site-wait-time>
          automatic-site-new-site-wait-time
        </automatic-site-new-site-wait-time>
        <automatic-site-collision-detect-time>
          automatic-site-collision-detect-time
        </automatic-site-collision-detect-time>
        <automatic-site-reclaim-wait-time>
          automatic-site-reclaim-wait-time
        </automatic-site-reclaim-wait-time>
      </automatic-site-timers>
    </reference-site>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <automatic-site-timers>
    <automatic-site-startup-wait-time>
     automatic-site-startup-wait-time
    </automatic-site-startup-wait-time>
    <automatic-site-new-site-wait-time>
     automatic-site-new-site-wait-time
    </automatic-site-new-site-wait-time>
    <automatic-site-collision-detect-time>
     automatic-site-collision-detect-time
    </automatic-site-collision-detect-time>
    <automatic-site-reclaim-wait-time>
     automatic-site-reclaim-wait-time
    </automatic-site-reclaim-wait-time>
   </automatic-site-timers>
  </reference-site>
 </instance>
</vpls-connection-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <automatic-site-timers>
     <automatic-site-startup-wait-time>
      automatic-site-startup-wait-time
     </automatic-site-startup-wait-time>
```

```
            <automatic-site-new-site-wait-time>
              automatic-site-new-site-wait-time
            </automatic-site-new-site-wait-time>
            <automatic-site-collision-detect-time>
              automatic-site-collision-detect-time
            </automatic-site-collision-detect-time>
            <automatic-site-reclaim-wait-time>
              automatic-site-reclaim-wait-time
            </automatic-site-reclaim-wait-time>
          </automatic-site-timers>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-connection-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <automatic-site-timers>
        <automatic-site-startup-wait-time>
          automatic-site-startup-wait-time
        </automatic-site-startup-wait-time>
        <automatic-site-new-site-wait-time>
          automatic-site-new-site-wait-time
        </automatic-site-new-site-wait-time>
        <automatic-site-collision-detect-time>
          automatic-site-collision-detect-time
        </automatic-site-collision-detect-time>
        <automatic-site-reclaim-wait-time>
          automatic-site-reclaim-wait-time
        </automatic-site-reclaim-wait-time>
      </automatic-site-timers>
    </reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <automatic-site-timers>
          <automatic-site-startup-wait-time>
            automatic-site-startup-wait-time
          </automatic-site-startup-wait-time>
```


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```
        <automatic-site-new-site-wait-time>
          automatic-site-new-site-wait-time
        </automatic-site-new-site-wait-time>
        <automatic-site-collision-detect-time>
          automatic-site-collision-detect-time
        </automatic-site-collision-detect-time>
        <automatic-site-reclaim-wait-time>
          automatic-site-reclaim-wait-time
        </automatic-site-reclaim-wait-time>
      </automatic-site-timers>
    </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <automatic-site-timers>
    <automatic-site-startup-wait-time>
     automatic-site-startup-wait-time
    </automatic-site-startup-wait-time>
    <automatic-site-new-site-wait-time>
     automatic-site-new-site-wait-time
    </automatic-site-new-site-wait-time>
    <automatic-site-collision-detect-time>
     automatic-site-collision-detect-time
    </automatic-site-collision-detect-time>
    <automatic-site-reclaim-wait-time>
     automatic-site-reclaim-wait-time
    </automatic-site-reclaim-wait-time>
   </automatic-site-timers>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<automatic-site-timers>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <automatic-site-timers>
     <automatic-site-startup-wait-time>
      automatic-site-startup-wait-time
     </automatic-site-startup-wait-time>
```

```
            <automatic-site-new-site-wait-time>
              automatic-site-new-site-wait-time
            </automatic-site-new-site-wait-time>
            <automatic-site-collision-detect-time>
              automatic-site-collision-detect-time
            </automatic-site-collision-detect-time>
            <automatic-site-reclaim-wait-time>
              automatic-site-reclaim-wait-time
            </automatic-site-reclaim-wait-time>
          </automatic-site-timers>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<automatic-site-timers>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <automatic-site-timers>
          <automatic-site-startup-wait-time>
            automatic-site-startup-wait-time
          </automatic-site-startup-wait-time>
          <automatic-site-new-site-wait-time>
            automatic-site-new-site-wait-time
          </automatic-site-new-site-wait-time>
          <automatic-site-collision-detect-time>
            automatic-site-collision-detect-time
          </automatic-site-collision-detect-time>
          <automatic-site-reclaim-wait-time>
            automatic-site-reclaim-wait-time
          </automatic-site-reclaim-wait-time>
        </automatic-site-timers>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<automatic-site-timers>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <automatic-site-timers>
```


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```
            <automatic-site-startup-wait-time>
              automatic-site-startup-wait-time
            </automatic-site-startup-wait-time>
            <automatic-site-new-site-wait-time>
              automatic-site-new-site-wait-time
            </automatic-site-new-site-wait-time>
            <automatic-site-collision-detect-time>
              automatic-site-collision-detect-time
            </automatic-site-collision-detect-time>
            <automatic-site-reclaim-wait-time>
              automatic-site-reclaim-wait-time
            </automatic-site-reclaim-wait-time>
          </automatic-site-timers>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<backup-next-hop-element>

Usage

```
<backup-next-hop-element>
  <interface-name>
    interface-name
  </interface-name>
  <isis-next-hop-type>
    isis-next-hop-type
  </isis-next-hop-type>
  <isis-next-hop>
    isis-next-hop
  </isis-next-hop>
  <snpa>
    snpa
  </snpa>
</backup-next-hop-element>
```

Description

<backup-next-hop-element>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-backup-spf-result>
        <backup-next-hop-element>
          <interface-name>
            interface-name
          </interface-name>
          <isis-next-hop-type>
            isis-next-hop-type
```

```
        </isis-next-hop-type>
        <isis-next-hop>
          isis-next-hop
        </isis-next-hop>
        <snpa>
          snpa
        </snpa>
      </backup-next-hop-element>
    </isis-backup-spf-result>
  </isis-spf>
 </isis-spf-information>
</isis-overview>
```

Description

<backup-next-hop-element>

Usage

```
<isis-overview-information>
 <isis-overview>
  <isis-spf-information>
   <isis-spf>
    <isis-backup-spf-result>
     <backup-next-hop-element>
      <interface-name>
       interface-name
      </interface-name>
      <isis-next-hop-type>
       isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
       isis-next-hop
      </isis-next-hop>
      <snpa>
       snpa
      </snpa>
     </backup-next-hop-element>
    </isis-backup-spf-result>
   </isis-spf>
  </isis-spf-information>
 </isis-overview>
</isis-overview-information>
```

Description

<backup-next-hop-element>

Usage

```
<isis-backup-spf-result>
 <backup-next-hop-element>
  <interface-name>
   interface-name
  </interface-name>
  <isis-next-hop-type>
```


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```
      isis-next-hop-type
    </isis-next-hop-type>
    <isis-next-hop>
      isis-next-hop
    </isis-next-hop>
    <snpa>
      snpa
    </snpa>
  </backup-next-hop-element>
</isis-backup-spf-result>
```

Description

<backup-next-hop-element>

Usage

```
<isis-spf>
  <isis-backup-spf-result>
    <backup-next-hop-element>
      <interface-name>
        interface-name
      </interface-name>
      <isis-next-hop-type>
        isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
        isis-next-hop
      </isis-next-hop>
      <snpa>
        snpa
      </snpa>
    </backup-next-hop-element>
  </isis-backup-spf-result>
</isis-spf>
```

Description

<backup-next-hop-element>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-backup-spf-result>
      <backup-next-hop-element>
        <interface-name>
          interface-name
        </interface-name>
        <isis-next-hop-type>
          isis-next-hop-type
        </isis-next-hop-type>
        <isis-next-hop>
          isis-next-hop
        </isis-next-hop>
        <snpa>
```

```
            snpa
           </snpa>
          </backup-next-hop-element>
         </isis-backup-spf-result>
        </isis-spf>
       </isis-spf-information>
```

Description

<backup-pes>

Usage

```
<multicast-backup-pe-groups-information>
 <multicast-backup-pe-groups>
  <multicast-backup-pe-group>
   <backup-pes>
    <multicast-backup-pe-address>
     multicast-backup-pe-address
    </multicast-backup-pe-address>
   </backup-pes>
  </multicast-backup-pe-group>
 </multicast-backup-pe-groups>
</multicast-backup-pe-groups-information>
```

Description Backup PE addresses

<bgp-bfd>

Usage

```
<bgp-bfd>
 <bfd-configuration-state>
  bfd-configuration-state
 </bfd-configuration-state>
 <bfd-operational-state>
  bfd-operational-state
 </bfd-operational-state>
</bgp-bfd>
```

Description

<bgp-bfd>

Usage

```
<bgp-peer>
 <bgp-bfd>
  <bfd-configuration-state>
   bfd-configuration-state
  </bfd-configuration-state>
  <bfd-operational-state>
   bfd-operational-state
  </bfd-operational-state>
 </bgp-bfd>
```


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```
</bgp-peer>
```

Description

<bgp-bfd>

Usage

```
<bgp-group>
 <bgp-peer>
  <bgp-bfd>
   <bfd-configuration-state>
    bfd-configuration-state
   </bfd-configuration-state>
   <bfd-operational-state>
    bfd-operational-state
   </bfd-operational-state>
  </bgp-bfd>
 </bgp-peer>
</bgp-group>
```

Description

<bgp-bfd>

Usage

```
<bgp-information>
 <bgp-peer>
  <bgp-bfd>
   <bfd-configuration-state>
    bfd-configuration-state
   </bfd-configuration-state>
   <bfd-operational-state>
    bfd-operational-state
   </bfd-operational-state>
  </bgp-bfd>
 </bgp-peer>
</bgp-information>
```

Description

<bgp-bfd>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <bgp-bfd>
    <bfd-configuration-state>
     bfd-configuration-state
    </bfd-configuration-state>
    <bfd-operational-state>
     bfd-operational-state
    </bfd-operational-state>
```

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```
    </bgp-bfd>
   </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<bgp-bfd>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
   <bgp-bfd>
    <bfd-configuration-state>
     bfd-configuration-state
    </bfd-configuration-state>
    <bfd-operational-state>
     bfd-operational-state
    </bfd-operational-state>
   </bgp-bfd>
  </bgp-peer>
 </bgp-information>
</bgp-group-information>
```

Description

<bgp-bmp-information>

Usage

```
<bgp-bmp-information>
 <bmp-addr-port>
  bmp-addr-port
 </bmp-addr-port>
 <bmp-state>
  bmp-state
 </bmp-state>
 <bmp-memory-consumed>
  bmp-memory-consumed
 </bmp-memory-consumed>
 <bmp-statistics-timeout>
  bmp-statistics-timeout
 </bmp-statistics-timeout>
 <bmp-memory-limit>
  bmp-memory-limit
 </bmp-memory-limit>
 <bmp-memory-delay>
  bmp-memory-delay
 </bmp-memory-delay>
</bgp-bmp-information>
```

Description BGP BMP configuration and operational information

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<bgp-error>

Usage

```
<bgp-error>
  <name>
    name
  </name>
  <send-count>
    send-count
  </send-count>
  <receive-count>
    receive-count
  </receive-count>
</bgp-error>
```

Description

<bgp-error>

Usage

```
<bgp-peer>
  <bgp-error>
    <name>
      name
    </name>
    <send-count>
      send-count
    </send-count>
    <receive-count>
      receive-count
    </receive-count>
  </bgp-error>
</bgp-peer>
```

Description

<bgp-error>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-error>
      <name>
        name
      </name>
      <send-count>
        send-count
      </send-count>
      <receive-count>
        receive-count
      </receive-count>
    </bgp-error>
  </bgp-peer>
```

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```
</bgp-group>
```

Description

<bgp-error>

Usage

```
<bgp-information>
 <bgp-peer>
  <bgp-error>
   <name>
    name
   </name>
   <send-count>
    send-count
   </send-count>
   <receive-count>
    receive-count
   </receive-count>
  </bgp-error>
 </bgp-peer>
</bgp-information>
```

Description

<bgp-error>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <bgp-error>
    <name>
     name
    </name>
    <send-count>
     send-count
    </send-count>
    <receive-count>
     receive-count
    </receive-count>
   </bgp-error>
  </bgp-peer>
 </bgp-group>
</bgp-group-information>
```

Description

<bgp-error>

Usage

```
<bgp-group-information>
 <bgp-information>
```


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```
    <bgp-peer>
      <bgp-error>
        <name>
          name
        </name>
        <send-count>
          send-count
        </send-count>
        <receive-count>
          receive-count
        </receive-count>
      </bgp-error>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<bgp-group>

Usage

```
<bgp-group>
  <type>
    type
  </type>
  <peer-as>
    peer-as
  </peer-as>
  <local-as>
    local-as
  </local-as>
  <group-index>
    group-index
  </group-index>
  <group-state>
    group-state
  </group-state>
  <name>
    name
  </name>
  <bgp-options>
    bgp-options
  </bgp-options>
  <bgp-options2>
    bgp-options2
  </bgp-options2>
  <group-flags>
    group-flags
  </group-flags>
  <peer-count>
    peer-count
  </peer-count>
  <established-count>
    established-count
  </established-count>
```

```
<peer-address>
  peer-address
</peer-address>
<flap-count>
  flap-count
</flap-count>
<unconfigured-peers>....</unconfigured-peers>
<igp-protocol>
  igp-protocol
</igp-protocol>
<route-queue>....</route-queue>
<bgp-peer>....</bgp-peer>
<bgp-option-information>....</bgp-option-information>
<tracing-information>....</tracing-information>
<bgp-rib>....</bgp-rib>
</bgp-group>
```

Description Operational and configuration information for a BGP group

<bgp-group>

Usage

```
<bgp-group-information>
  <bgp-group>
    <type>
      type
    </type>
    <peer-as>
      peer-as
    </peer-as>
    <local-as>
      local-as
    </local-as>
    <group-index>
      group-index
    </group-index>
    <group-state>
      group-state
    </group-state>
    <name>
      name
    </name>
    <bgp-options>
      bgp-options
    </bgp-options>
    <bgp-options2>
      bgp-options2
    </bgp-options2>
    <group-flags>
      group-flags
    </group-flags>
    <peer-count>
      peer-count
    </peer-count>
```


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```
    <established-count>
      established-count
    </established-count>
    <peer-address>
      peer-address
    </peer-address>
    <flap-count>
      flap-count
    </flap-count>
    <unconfigured-peers>....</unconfigured-peers>
    <igp-protocol>
      igp-protocol
    </igp-protocol>
    <route-queue>....</route-queue>
    <bgp-peer>....</bgp-peer>
    <bgp-option-information>....</bgp-option-information>
    <tracing-information>....</tracing-information>
    <bgp-rib>....</bgp-rib>
  </bgp-group>
</bgp-group-information>
```

Description Operational and configuration information for a BGP group

<bgp-group-information>

Usage

```
<bgp-group-information>
  <bgp-group>....</bgp-group>
  <bgp-information>....</bgp-information>
</bgp-group-information>
```

Description Operational and configuration information for BGP groups

<bgp-information>

Usage

```
<bgp-information>
  <group-count>
    group-count
  </group-count>
  <peer-count>
    peer-count
  </peer-count>
  <external-peer-count>
    external-peer-count
  </external-peer-count>
  <internal-peer-count>
    internal-peer-count
  </internal-peer-count>
  <down-peer-count>
    down-peer-count
  </down-peer-count>
```

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```
<unconfigured-peer-count>
  unconfigured-peer-count
</unconfigured-peer-count>
<half-open-peer-count>
  half-open-peer-count
</half-open-peer-count>
<igp-converging>
  igp-converging
</igp-converging>
<flap-count>
  flap-count
</flap-count>
<bgp-rib>....</bgp-rib>
<bgp-peer>....</bgp-peer>
</bgp-information>
```

Description Operational and configuration information for BGP

<bgp-information>

Usage

```
<bgp-group-information>
  <bgp-information>
    <group-count>
      group-count
    </group-count>
    <peer-count>
      peer-count
    </peer-count>
    <external-peer-count>
      external-peer-count
    </external-peer-count>
    <internal-peer-count>
      internal-peer-count
    </internal-peer-count>
    <down-peer-count>
      down-peer-count
    </down-peer-count>
    <unconfigured-peer-count>
      unconfigured-peer-count
    </unconfigured-peer-count>
    <half-open-peer-count>
      half-open-peer-count
    </half-open-peer-count>
    <igp-converging>
      igp-converging
    </igp-converging>
    <flap-count>
      flap-count
    </flap-count>
    <bgp-rib>....</bgp-rib>
    <bgp-peer>....</bgp-peer>
  </bgp-information>
```


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```
</bgp-group-information>
```

Description Operational and configuration information for BGP

<bgp-option-information>

Usage

```
<bgp-option-information>
  <export-policy>
    export-policy
  </export-policy>
  <import-policy>
    import-policy
  </import-policy>
  <bgp-options>
    bgp-options
  </bgp-options>
  <bgp-options2>
    bgp-options2
  </bgp-options2>
  <authentication-key>
    authentication-key
  </authentication-key>
  <authentication-key-chain>
    authentication-key-chain
  </authentication-key-chain>
  <authentication-algorithm>
    authentication-algorithm
  </authentication-algorithm>
  <authentication-configured>
    authentication-configured
  </authentication-configured>
  <address-families>
    address-families
  </address-families>
  <drop-path-attributes>
    drop-path-attributes
  </drop-path-attributes>
  <ignore-path-attributes>
    ignore-path-attributes
  </ignore-path-attributes>
  <local-address>
    local-address
  </local-address>
  <holdtime>
    holdtime
  </holdtime>
  <metric-out>
    metric-out
  </metric-out>
  <preference>
    preference
  </preference>
  <local-preference>
```

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```
    local-preference
  </local-preference>
  <prefix-limit>....</prefix-limit>
  <accepted-prefix-limit>....</accepted-prefix-limit>
  <addpath-send>....</addpath-send>
  <addpath-receive>....</addpath-receive>
  <nlri-information>....</nlri-information>
  <local-as>
    local-as
  </local-as>
  <local-as-private>
    local-as-private
  </local-as-private>
  <local-system-as>
    local-system-as
  </local-system-as>
  <receive-buffer-size>
    receive-buffer-size
  </receive-buffer-size>
  <send-buffer-size>
    send-buffer-size
  </send-buffer-size>
  <outbound-timer>
    outbound-timer
  </outbound-timer>
  <med-action>
    med-action
  </med-action>
  <ipsec-sa>
    ipsec-sa
  </ipsec-sa>
</bgp-option-information>
```

Description

<bgp-option-information>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <export-policy>
      export-policy
    </export-policy>
    <import-policy>
      import-policy
    </import-policy>
    <bgp-options>
      bgp-options
    </bgp-options>
    <bgp-options2>
      bgp-options2
    </bgp-options2>
    <authentication-key>
      authentication-key
    </authentication-key>
```


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```
<authentication-key-chain>
  authentication-key-chain
</authentication-key-chain>
<authentication-algorithm>
  authentication-algorithm
</authentication-algorithm>
<authentication-configured>
  authentication-configured
</authentication-configured>
<address-families>
  address-families
</address-families>
<drop-path-attributes>
  drop-path-attributes
</drop-path-attributes>
<ignore-path-attributes>
  ignore-path-attributes
</ignore-path-attributes>
<local-address>
  local-address
</local-address>
<holdtime>
  holdtime
</holdtime>
<metric-out>
  metric-out
</metric-out>
<preference>
  preference
</preference>
<local-preference>
  local-preference
</local-preference>
<prefix-limit>....</prefix-limit>
<accepted-prefix-limit>....</accepted-prefix-limit>
<addpath-send>....</addpath-send>
<addpath-receive>....</addpath-receive>
<nlri-information>....</nlri-information>
<local-as>
  local-as
</local-as>
<local-as-private>
  local-as-private
</local-as-private>
<local-system-as>
  local-system-as
</local-system-as>
<receive-buffer-size>
  receive-buffer-size
</receive-buffer-size>
<send-buffer-size>
  send-buffer-size
</send-buffer-size>
<outbound-timer>
  outbound-timer
</outbound-timer>
```

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```
    <med-action>
     med-action
    </med-action>
    <ipsec-sa>
     ipsec-sa
    </ipsec-sa>
   </bgp-option-information>
  </bgp-peer>
```

Description

<bgp-option-information>

Usage

```
<bgp-group>
 <bgp-peer>
  <bgp-option-information>
   <export-policy>
    export-policy
   </export-policy>
   <import-policy>
    import-policy
   </import-policy>
   <bgp-options>
    bgp-options
   </bgp-options>
   <bgp-options2>
    bgp-options2
   </bgp-options2>
   <authentication-key>
    authentication-key
   </authentication-key>
   <authentication-key-chain>
    authentication-key-chain
   </authentication-key-chain>
   <authentication-algorithm>
    authentication-algorithm
   </authentication-algorithm>
   <authentication-configured>
    authentication-configured
   </authentication-configured>
   <address-families>
    address-families
   </address-families>
   <drop-path-attributes>
    drop-path-attributes
   </drop-path-attributes>
   <ignore-path-attributes>
    ignore-path-attributes
   </ignore-path-attributes>
   <local-address>
    local-address
   </local-address>
   <holdtime>
    holdtime
```


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```
        </holdtime>
        <metric-out>
          metric-out
        </metric-out>
        <preference>
          preference
        </preference>
        <local-preference>
          local-preference
        </local-preference>
        <prefix-limit>....</prefix-limit>
        <accepted-prefix-limit>....</accepted-prefix-limit>
        <addpath-send>....</addpath-send>
        <addpath-receive>....</addpath-receive>
        <nlri-information>....</nlri-information>
        <local-as>
          local-as
        </local-as>
        <local-as-private>
          local-as-private
        </local-as-private>
        <local-system-as>
          local-system-as
        </local-system-as>
        <receive-buffer-size>
          receive-buffer-size
        </receive-buffer-size>
        <send-buffer-size>
          send-buffer-size
        </send-buffer-size>
        <outbound-timer>
          outbound-timer
        </outbound-timer>
        <med-action>
          med-action
        </med-action>
        <ipsec-sa>
          ipsec-sa
        </ipsec-sa>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
```

Description

<bgp-option-information>

Usage

```
<bgp-group>
  <bgp-option-information>
    <export-policy>
      export-policy
    </export-policy>
    <import-policy>
      import-policy
```

```
</import-policy>
<bgp-options>
  bgp-options
</bgp-options>
<bgp-options2>
  bgp-options2
</bgp-options2>
<authentication-key>
  authentication-key
</authentication-key>
<authentication-key-chain>
  authentication-key-chain
</authentication-key-chain>
<authentication-algorithm>
  authentication-algorithm
</authentication-algorithm>
<authentication-configured>
  authentication-configured
</authentication-configured>
<address-families>
  address-families
</address-families>
<drop-path-attributes>
  drop-path-attributes
</drop-path-attributes>
<ignore-path-attributes>
  ignore-path-attributes
</ignore-path-attributes>
<local-address>
  local-address
</local-address>
<holdtime>
  holdtime
</holdtime>
<metric-out>
  metric-out
</metric-out>
<preference>
  preference
</preference>
<local-preference>
  local-preference
</local-preference>
<prefix-limit>....</prefix-limit>
<accepted-prefix-limit>....</accepted-prefix-limit>
<addpath-send>....</addpath-send>
<addpath-receive>....</addpath-receive>
<nlri-information>....</nlri-information>
<local-as>
  local-as
</local-as>
<local-as-private>
  local-as-private
</local-as-private>
<local-system-as>
  local-system-as
```


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```
    </local-system-as>
    <receive-buffer-size>
      receive-buffer-size
    </receive-buffer-size>
    <send-buffer-size>
      send-buffer-size
    </send-buffer-size>
    <outbound-timer>
      outbound-timer
    </outbound-timer>
    <med-action>
      med-action
    </med-action>
    <ipsec-sa>
      ipsec-sa
    </ipsec-sa>
  </bgp-option-information>
</bgp-group>
```

Description

<bgp-option-information>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <export-policy>
        export-policy
      </export-policy>
      <import-policy>
        import-policy
      </import-policy>
      <bgp-options>
        bgp-options
      </bgp-options>
      <bgp-options2>
        bgp-options2
      </bgp-options2>
      <authentication-key>
        authentication-key
      </authentication-key>
      <authentication-key-chain>
        authentication-key-chain
      </authentication-key-chain>
      <authentication-algorithm>
        authentication-algorithm
      </authentication-algorithm>
      <authentication-configured>
        authentication-configured
      </authentication-configured>
      <address-families>
        address-families
      </address-families>
      <drop-path-attributes>
```

```
            drop-path-attributes
          </drop-path-attributes>
          <ignore-path-attributes>
            ignore-path-attributes
          </ignore-path-attributes>
          <local-address>
            local-address
          </local-address>
          <holdtime>
            holdtime
          </holdtime>
          <metric-out>
            metric-out
          </metric-out>
          <preference>
            preference
          </preference>
          <local-preference>
            local-preference
          </local-preference>
          <prefix-limit>....</prefix-limit>
          <accepted-prefix-limit>....</accepted-prefix-limit>
          <addpath-send>....</addpath-send>
          <addpath-receive>....</addpath-receive>
          <nlri-information>....</nlri-information>
          <local-as>
            local-as
          </local-as>
          <local-as-private>
            local-as-private
          </local-as-private>
          <local-system-as>
            local-system-as
          </local-system-as>
          <receive-buffer-size>
            receive-buffer-size
          </receive-buffer-size>
          <send-buffer-size>
            send-buffer-size
          </send-buffer-size>
          <outbound-timer>
            outbound-timer
          </outbound-timer>
          <med-action>
            med-action
          </med-action>
          <ipsec-sa>
            ipsec-sa
          </ipsec-sa>
        </bgp-option-information>
      </bgp-peer>
    </bgp-information>
```

Description

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<bgp-option-information>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <export-policy>
          export-policy
        </export-policy>
        <import-policy>
          import-policy
        </import-policy>
        <bgp-options>
          bgp-options
        </bgp-options>
        <bgp-options2>
          bgp-options2
        </bgp-options2>
        <authentication-key>
          authentication-key
        </authentication-key>
        <authentication-key-chain>
          authentication-key-chain
        </authentication-key-chain>
        <authentication-algorithm>
          authentication-algorithm
        </authentication-algorithm>
        <authentication-configured>
          authentication-configured
        </authentication-configured>
        <address-families>
          address-families
        </address-families>
        <drop-path-attributes>
          drop-path-attributes
        </drop-path-attributes>
        <ignore-path-attributes>
          ignore-path-attributes
        </ignore-path-attributes>
        <local-address>
          local-address
        </local-address>
        <holdtime>
          holdtime
        </holdtime>
        <metric-out>
          metric-out
        </metric-out>
        <preference>
          preference
        </preference>
        <local-preference>
          local-preference
        </local-preference>
```

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```
        <prefix-limit>....</prefix-limit>
        <accepted-prefix-limit>....</accepted-prefix-limit>
        <addpath-send>....</addpath-send>
        <addpath-receive>....</addpath-receive>
        <nlri-information>....</nlri-information>
        <local-as>
          local-as
        </local-as>
        <local-as-private>
          local-as-private
        </local-as-private>
        <local-system-as>
          local-system-as
        </local-system-as>
        <receive-buffer-size>
          receive-buffer-size
        </receive-buffer-size>
        <send-buffer-size>
          send-buffer-size
        </send-buffer-size>
        <outbound-timer>
          outbound-timer
        </outbound-timer>
        <med-action>
          med-action
        </med-action>
        <ipsec-sa>
          ipsec-sa
        </ipsec-sa>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<bgp-option-information>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-option-information>
      <export-policy>
        export-policy
      </export-policy>
      <import-policy>
        import-policy
      </import-policy>
      <bgp-options>
        bgp-options
      </bgp-options>
      <bgp-options2>
        bgp-options2
      </bgp-options2>
      <authentication-key>
```


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```
  authentication-key
</authentication-key>
<authentication-key-chain>
  authentication-key-chain
</authentication-key-chain>
<authentication-algorithm>
  authentication-algorithm
</authentication-algorithm>
<authentication-configured>
  authentication-configured
</authentication-configured>
<address-families>
  address-families
</address-families>
<drop-path-attributes>
  drop-path-attributes
</drop-path-attributes>
<ignore-path-attributes>
  ignore-path-attributes
</ignore-path-attributes>
<local-address>
  local-address
</local-address>
<holdtime>
  holdtime
</holdtime>
<metric-out>
  metric-out
</metric-out>
<preference>
  preference
</preference>
<local-preference>
  local-preference
</local-preference>
<prefix-limit>....</prefix-limit>
<accepted-prefix-limit>....</accepted-prefix-limit>
<addpath-send>....</addpath-send>
<addpath-receive>....</addpath-receive>
<nlri-information>....</nlri-information>
<local-as>
  local-as
</local-as>
<local-as-private>
  local-as-private
</local-as-private>
<local-system-as>
  local-system-as
</local-system-as>
<receive-buffer-size>
  receive-buffer-size
</receive-buffer-size>
<send-buffer-size>
  send-buffer-size
</send-buffer-size>
<outbound-timer>
```

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```
                outbound-timer
               </outbound-timer>
               <med-action>
                med-action
               </med-action>
               <ipsec-sa>
                ipsec-sa
               </ipsec-sa>
              </bgp-option-information>
             </bgp-group>
            </bgp-group-information>
```

Description

<bgp-option-information>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
   <bgp-option-information>
    <export-policy>
     export-policy
    </export-policy>
    <import-policy>
     import-policy
    </import-policy>
    <bgp-options>
     bgp-options
    </bgp-options>
    <bgp-options2>
     bgp-options2
    </bgp-options2>
    <authentication-key>
     authentication-key
    </authentication-key>
    <authentication-key-chain>
     authentication-key-chain
    </authentication-key-chain>
    <authentication-algorithm>
     authentication-algorithm
    </authentication-algorithm>
    <authentication-configured>
     authentication-configured
    </authentication-configured>
    <address-families>
     address-families
    </address-families>
    <drop-path-attributes>
     drop-path-attributes
    </drop-path-attributes>
    <ignore-path-attributes>
     ignore-path-attributes
    </ignore-path-attributes>
    <local-address>
```


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```
                local-address
               </local-address>
               <holdtime>
                holdtime
               </holdtime>
               <metric-out>
                metric-out
               </metric-out>
               <preference>
                preference
               </preference>
               <local-preference>
                local-preference
               </local-preference>
               <prefix-limit>....</prefix-limit>
               <accepted-prefix-limit>....</accepted-prefix-limit>
               <addpath-send>....</addpath-send>
               <addpath-receive>....</addpath-receive>
               <nlri-information>....</nlri-information>
               <local-as>
                local-as
               </local-as>
               <local-as-private>
                local-as-private
               </local-as-private>
               <local-system-as>
                local-system-as
               </local-system-as>
               <receive-buffer-size>
                receive-buffer-size
               </receive-buffer-size>
               <send-buffer-size>
                send-buffer-size
               </send-buffer-size>
               <outbound-timer>
                outbound-timer
               </outbound-timer>
               <med-action>
                med-action
               </med-action>
               <ipsec-sa>
                ipsec-sa
               </ipsec-sa>
              </bgp-option-information>
             </bgp-peer>
            </bgp-information>
           </bgp-group-information>
```

Description

<bgp-orf>

Usage

```
<bgp-orf>
 <peer-address>
```

```
    peer-address
  </peer-address>
  <peer-type>
    peer-type
  </peer-type>
  <group-name>
    group-name
  </group-name>
  <bgp-orf-nlri-info>....</bgp-orf-nlri-info>
</bgp-orf>
```

Description

<bgp-orf>

Usage

```
<bgp-orf-information>
  <bgp-orf>
    <peer-address>
      peer-address
    </peer-address>
    <peer-type>
      peer-type
    </peer-type>
    <group-name>
      group-name
    </group-name>
    <bgp-orf-nlri-info>....</bgp-orf-nlri-info>
  </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-orf-extcomm-filter>

Usage

```
<bgp-orf-filter-info>
  <bgp-orf-extcomm-filter>
    <extended-community>
      extended-community
    </extended-community>
  </bgp-orf-extcomm-filter>
</bgp-orf-filter-info>
```

Description

<bgp-orf-extcomm-filter>

Usage

```
<bgp-orf-filter-information>
  <bgp-orf-filter-info>
    <bgp-orf-extcomm-filter>
      <extended-community>
```


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```
            extended-community
          </extended-community>
        </bgp-orf-extcomm-filter>
      </bgp-orf-filter-info>
    </bgp-orf-filter-information>
```

Description

<bgp-orf-extcomm-filter>

Usage

```
<bgp-orf-nlri-info>
  <bgp-orf-filter-information>
    <bgp-orf-filter-info>
      <bgp-orf-extcomm-filter>
        <extended-community>
          extended-community
        </extended-community>
      </bgp-orf-extcomm-filter>
    </bgp-orf-filter-info>
  </bgp-orf-filter-information>
</bgp-orf-nlri-info>
```

Description

<bgp-orf-extcomm-filter>

Usage

```
<bgp-orf>
  <bgp-orf-nlri-info>
    <bgp-orf-filter-information>
      <bgp-orf-filter-info>
        <bgp-orf-extcomm-filter>
          <extended-community>
            extended-community
          </extended-community>
        </bgp-orf-extcomm-filter>
      </bgp-orf-filter-info>
    </bgp-orf-filter-information>
  </bgp-orf-nlri-info>
</bgp-orf>
```

Description

<bgp-orf-extcomm-filter>

Usage

```
<bgp-orf-information>
  <bgp-orf>
    <bgp-orf-nlri-info>
      <bgp-orf-filter-information>
        <bgp-orf-filter-info>
          <bgp-orf-extcomm-filter>
```

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```
            <extended-community>
              extended-community
            </extended-community>
          </bgp-orf-extcomm-filter>
        </bgp-orf-filter-info>
      </bgp-orf-filter-information>
    </bgp-orf-nlri-info>
  </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-orf-filter-info>

Usage

```
<bgp-orf-filter-info>
  <bgp-orf-extcomm-filter>....</bgp-orf-extcomm-filter>
  <bgp-orf-prefix-filter>....</bgp-orf-prefix-filter>
</bgp-orf-filter-info>
```

Description

<bgp-orf-filter-info>

Usage

```
<bgp-orf-filter-information>
  <bgp-orf-filter-info>
    <bgp-orf-extcomm-filter>....</bgp-orf-extcomm-filter>
    <bgp-orf-prefix-filter>....</bgp-orf-prefix-filter>
  </bgp-orf-filter-info>
</bgp-orf-filter-information>
```

Description

<bgp-orf-filter-info>

Usage

```
<bgp-orf-nlri-info>
  <bgp-orf-filter-information>
    <bgp-orf-filter-info>
      <bgp-orf-extcomm-filter>....</bgp-orf-extcomm-filter>
      <bgp-orf-prefix-filter>....</bgp-orf-prefix-filter>
    </bgp-orf-filter-info>
  </bgp-orf-filter-information>
</bgp-orf-nlri-info>
```

Description

<bgp-orf-filter-info>

Usage

```
<bgp-orf>
```


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```
  <bgp-orf-nlri-info>
   <bgp-orf-filter-information>
    <bgp-orf-filter-info>
     <bgp-orf-extcomm-filter>....</bgp-orf-extcomm-filter>
     <bgp-orf-prefix-filter>....</bgp-orf-prefix-filter>
    </bgp-orf-filter-info>
   </bgp-orf-filter-information>
  </bgp-orf-nlri-info>
</bgp-orf>
```

Description

<bgp-orf-filter-info>

Usage

```
<bgp-orf-information>
 <bgp-orf>
  <bgp-orf-nlri-info>
   <bgp-orf-filter-information>
    <bgp-orf-filter-info>
     <bgp-orf-extcomm-filter>....</bgp-orf-extcomm-filter>
     <bgp-orf-prefix-filter>....</bgp-orf-prefix-filter>
    </bgp-orf-filter-info>
   </bgp-orf-filter-information>
  </bgp-orf-nlri-info>
 </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-orf-filter-information>

Usage

```
<bgp-orf-filter-information>
 <filter-type>
  filter-type
 </filter-type>
 <filter-mode>
  filter-mode
 </filter-mode>
 <filter-in-updates>
  filter-in-updates
 </filter-in-updates>
 <filter-out-updates>
  filter-out-updates
 </filter-out-updates>
 <filter-qcount>
  filter-qcount
 </filter-qcount>
 <bgp-orf-filter-info>....</bgp-orf-filter-info>
</bgp-orf-filter-information>
```

Description

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<bgp-orf-filter-information>

Usage

```
<bgp-orf-nlri-info>
  <bgp-orf-filter-information>
    <filter-type>
      filter-type
    </filter-type>
    <filter-mode>
      filter-mode
    </filter-mode>
    <filter-in-updates>
      filter-in-updates
    </filter-in-updates>
    <filter-out-updates>
      filter-out-updates
    </filter-out-updates>
    <filter-qcount>
      filter-qcount
    </filter-qcount>
    <bgp-orf-filter-info>....</bgp-orf-filter-info>
  </bgp-orf-filter-information>
</bgp-orf-nlri-info>
```

Description

<bgp-orf-filter-information>

Usage

```
<bgp-orf>
  <bgp-orf-nlri-info>
    <bgp-orf-filter-information>
      <filter-type>
        filter-type
      </filter-type>
      <filter-mode>
        filter-mode
      </filter-mode>
      <filter-in-updates>
        filter-in-updates
      </filter-in-updates>
      <filter-out-updates>
        filter-out-updates
      </filter-out-updates>
      <filter-qcount>
        filter-qcount
      </filter-qcount>
      <bgp-orf-filter-info>....</bgp-orf-filter-info>
    </bgp-orf-filter-information>
  </bgp-orf-nlri-info>
</bgp-orf>
```

Description

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<bgp-orf-filter-information>

Usage

```
<bgp-orf-information>
  <bgp-orf>
    <bgp-orf-nlri-info>
      <bgp-orf-filter-information>
        <filter-type>
          filter-type
        </filter-type>
        <filter-mode>
          filter-mode
        </filter-mode>
        <filter-in-updates>
          filter-in-updates
        </filter-in-updates>
        <filter-out-updates>
          filter-out-updates
        </filter-out-updates>
        <filter-qcount>
          filter-qcount
        </filter-qcount>
        <bgp-orf-filter-info>....</bgp-orf-filter-info>
      </bgp-orf-filter-information>
    </bgp-orf-nlri-info>
  </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-orf-information>

Usage

```
<bgp-orf-information>
  <bgp-orf>....</bgp-orf>
</bgp-orf-information>
```

Description Operational information on BGP Outbound Route filtering

<bgp-orf-nlri-info>

Usage

```
<bgp-orf-nlri-info>
  <nlri-name>
    nlri-name
  </nlri-name>
  <filter-in-updates>
    filter-in-updates
  </filter-in-updates>
  <filter-out-updates>
    filter-out-updates
  </filter-out-updates>
  <filter-qcount>
```

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```
    filter-qcount
   </filter-qcount>
   <immediate-count>
    immediate-count
   </immediate-count>
   <bgp-orf-filter-information>....</bgp-orf-filter-information>
</bgp-orf-nlri-info>
```

Description

<bgp-orf-nlri-info>

Usage

```
<bgp-orf>
  <bgp-orf-nlri-info>
    <nlri-name>
     nlri-name
    </nlri-name>
    <filter-in-updates>
     filter-in-updates
    </filter-in-updates>
    <filter-out-updates>
     filter-out-updates
    </filter-out-updates>
    <filter-qcount>
     filter-qcount
    </filter-qcount>
    <immediate-count>
     immediate-count
    </immediate-count>
    <bgp-orf-filter-information>....</bgp-orf-filter-information>
  </bgp-orf-nlri-info>
</bgp-orf>
```

Description

<bgp-orf-nlri-info>

Usage

```
<bgp-orf-information>
  <bgp-orf>
    <bgp-orf-nlri-info>
      <nlri-name>
       nlri-name
      </nlri-name>
      <filter-in-updates>
       filter-in-updates
      </filter-in-updates>
      <filter-out-updates>
       filter-out-updates
      </filter-out-updates>
      <filter-qcount>
       filter-qcount
      </filter-qcount>
```


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```
      <immediate-count>
        immediate-count
      </immediate-count>
      <bgp-orf-filter-information>....</bgp-orf-filter-information>
    </bgp-orf-nlri-info>
  </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-orf-prefix-filter>

Usage

```
<bgp-orf-filter-info>
  <bgp-orf-prefix-filter>
    <prefix-orf>
      prefix-orf
    </prefix-orf>
  </bgp-orf-prefix-filter>
</bgp-orf-filter-info>
```

Description

<bgp-orf-prefix-filter>

Usage

```
<bgp-orf-filter-information>
  <bgp-orf-filter-info>
    <bgp-orf-prefix-filter>
      <prefix-orf>
        prefix-orf
      </prefix-orf>
    </bgp-orf-prefix-filter>
  </bgp-orf-filter-info>
</bgp-orf-filter-information>
```

Description

<bgp-orf-prefix-filter>

Usage

```
<bgp-orf-nlri-info>
  <bgp-orf-filter-information>
    <bgp-orf-filter-info>
      <bgp-orf-prefix-filter>
        <prefix-orf>
          prefix-orf
        </prefix-orf>
      </bgp-orf-prefix-filter>
    </bgp-orf-filter-info>
  </bgp-orf-filter-information>
</bgp-orf-nlri-info>
```

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Description

<bgp-orf-prefix-filter>

Usage

```
<bgp-orf>
  <bgp-orf-nlri-info>
    <bgp-orf-filter-information>
      <bgp-orf-filter-info>
        <bgp-orf-prefix-filter>
          <prefix-orf>
            prefix-orf
          </prefix-orf>
        </bgp-orf-prefix-filter>
      </bgp-orf-filter-info>
    </bgp-orf-filter-information>
  </bgp-orf-nlri-info>
</bgp-orf>
```

Description

<bgp-orf-prefix-filter>

Usage

```
<bgp-orf-information>
  <bgp-orf>
    <bgp-orf-nlri-info>
      <bgp-orf-filter-information>
        <bgp-orf-filter-info>
          <bgp-orf-prefix-filter>
            <prefix-orf>
              prefix-orf
            </prefix-orf>
          </bgp-orf-prefix-filter>
        </bgp-orf-filter-info>
      </bgp-orf-filter-information>
    </bgp-orf-nlri-info>
  </bgp-orf>
</bgp-orf-information>
```

Description

<bgp-output-queue>

Usage

```
<bgp-peer>
  <bgp-output-queue>
    <number>
      number
    </number>
    <count>
      count
    </count>
  </bgp-output-queue>
```


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```
</bgp-peer>
```

Description

<bgp-output-queue>

Usage

```
<bgp-group>
 <bgp-peer>
  <bgp-output-queue>
   <number>
    number
   </number>
   <count>
    count
   </count>
  </bgp-output-queue>
 </bgp-peer>
</bgp-group>
```

Description

<bgp-output-queue>

Usage

```
<bgp-information>
 <bgp-peer>
  <bgp-output-queue>
   <number>
    number
   </number>
   <count>
    count
   </count>
  </bgp-output-queue>
 </bgp-peer>
</bgp-information>
```

Description

<bgp-output-queue>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <bgp-output-queue>
    <number>
     number
    </number>
    <count>
     count
    </count>
```

```
      </bgp-output-queue>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<bgp-output-queue>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <bgp-output-queue>
        <number>
          number
        </number>
        <count>
          count
        </count>
      </bgp-output-queue>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<bgp-peer>

Usage

```
<bgp-peer>
  <peer-address>
    peer-address
  </peer-address>
  <peer-as>
    peer-as
  </peer-as>
  <local-address>
    local-address
  </local-address>
  <local-as>
    local-as
  </local-as>
  <description>
    description
  </description>
  <peer-type>
    peer-type
  </peer-type>
  <route-reflector-client>
    route-reflector-client
  </route-reflector-client>
  <peer-state>
    peer-state
```


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```
</peer-state>
<peer-flags>
  peer-flags
</peer-flags>
<last-state>
  last-state
</last-state>
<last-event>
  last-event
</last-event>
<last-error>
  last-error
</last-error>
<bgp-option-information>....</bgp-option-information>
<flap-count>
  flap-count
</flap-count>
<last-flap-event>
  last-flap-event
</last-flap-event>
<peer-id>
  peer-id
</peer-id>
<local-id>
  local-id
</local-id>
<active-holdtime>
  active-holdtime
</active-holdtime>
<keepalive-interval>
  keepalive-interval
</keepalive-interval>
<peer-index>
  peer-index
</peer-index>
<bgp-bfd>....</bgp-bfd>
<local-interface-name>
  local-interface-name
</local-interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<nlri-type-peer>
  nlri-type-peer
</nlri-type-peer>
<nlri-type-session>
  nlri-type-session
</nlri-type-session>
<peer-no-refresh>
  peer-no-refresh
</peer-no-refresh>
<peer-refresh-capability>
  peer-refresh-capability
</peer-refresh-capability>
<peer-4byte-as-capability-not-supported>
  peer-4byte-as-capability-not-supported
```

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```
</peer-4byte-as-capability-not-supported>
<peer-4byte-as-capability-advertised>
  peer-4byte-as-capability-advertised
</peer-4byte-as-capability-advertised>
<peer-addpath-not-supported>
  peer-addpath-not-supported
</peer-addpath-not-supported>
<peer-addpath-ronly-nlri>
  peer-addpath-ronly-nlri
</peer-addpath-ronly-nlri>
<peer-addpath-sonly-nlri>
  peer-addpath-sonly-nlri
</peer-addpath-sonly-nlri>
<peer-addpath-rs-nlri>
  peer-addpath-rs-nlri
</peer-addpath-rs-nlri>
<peer-restart-nlri-configured>
  peer-restart-nlri-configured
</peer-restart-nlri-configured>
<peer-restart-time-configured>
  peer-restart-time-configured
</peer-restart-time-configured>
<peer-stale-route-time-configured>
  peer-stale-route-time-configured
</peer-stale-route-time-configured>
<peer-restart-time-received>
  peer-restart-time-received
</peer-restart-time-received>
<peer-restart-flags-received>
  peer-restart-flags-received
</peer-restart-flags-received>
<peer-restart-nlri-received>
  peer-restart-nlri-received
</peer-restart-nlri-received>
<peer-restart-nlri-can-save-state>
  peer-restart-nlri-can-save-state
</peer-restart-nlri-can-save-state>
<peer-restart-nlri-state-saved>
  peer-restart-nlri-state-saved
</peer-restart-nlri-state-saved>
<peer-no-restart>
  peer-no-restart
</peer-no-restart>
<peer-restart-nlri-negotiated>
  peer-restart-nlri-negotiated
</peer-restart-nlri-negotiated>
<peer-end-of-rib-received>
  peer-end-of-rib-received
</peer-end-of-rib-received>
<peer-end-of-rib-sent>
  peer-end-of-rib-sent
</peer-end-of-rib-sent>
<peer-no-helper>
  peer-no-helper
</peer-no-helper>
<peer-end-of-rib-scheduled>
```


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```
  peer-end-of-rib-scheduled
</peer-end-of-rib-scheduled>
<last-received>
  last-received
</last-received>
<last-sent>
  last-sent
</last-sent>
<last-checked>
  last-checked
</last-checked>
<input-messages>
  input-messages
</input-messages>
<input-checksum>
  input-checksum
</input-checksum>
<input-checksum-err>
  input-checksum-err
</input-checksum-err>
<input-updates>
  input-updates
</input-updates>
<input-refreshes>
  input-refreshes
</input-refreshes>
<input-octets>
  input-octets
</input-octets>
<output-messages>
  output-messages
</output-messages>
<output-checksum>
  output-checksum
</output-checksum>
<output-updates>
  output-updates
</output-updates>
<output-refreshes>
  output-refreshes
</output-refreshes>
<output-octets>
  output-octets
</output-octets>
<input-drop-path-attributes>
  input-drop-path-attributes
</input-drop-path-attributes>
<input-ignore-path-attributes>
  input-ignore-path-attributes
</input-ignore-path-attributes>
<buffered-octets-rx>
  buffered-octets-rx
</buffered-octets-rx>
<buffered-octets-tx>
  buffered-octets-tx
</buffered-octets-tx>
```

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```
<bgp-output-queue>....</bgp-output-queue>
<route-queue-count>
  route-queue-count
</route-queue-count>
<bgp-rib>....</bgp-rib>
<elapsed-time>
  elapsed-time
</elapsed-time>
<extended-information>
  extended-information
</extended-information>
<bgp-error>....</bgp-error>
<route-queue>....</route-queue>
<tracing-information>....</tracing-information>
</bgp-peer>
```

Description Operational and configuration information for a BGP peer

<bgp-peer>

Usage

```
<bgp-group>
  <bgp-peer>
    <peer-address>
      peer-address
    </peer-address>
    <peer-as>
      peer-as
    </peer-as>
    <local-address>
      local-address
    </local-address>
    <local-as>
      local-as
    </local-as>
    <description>
      description
    </description>
    <peer-type>
      peer-type
    </peer-type>
    <route-reflector-client>
      route-reflector-client
    </route-reflector-client>
    <peer-state>
      peer-state
    </peer-state>
    <peer-flags>
      peer-flags
    </peer-flags>
    <last-state>
      last-state
    </last-state>
    <last-event>
```


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```
  last-event
</last-event>
<last-error>
  last-error
</last-error>
<bgp-option-information>....</bgp-option-information>
<flap-count>
  flap-count
</flap-count>
<last-flap-event>
  last-flap-event
</last-flap-event>
<peer-id>
  peer-id
</peer-id>
<local-id>
  local-id
</local-id>
<active-holdtime>
  active-holdtime
</active-holdtime>
<keepalive-interval>
  keepalive-interval
</keepalive-interval>
<peer-index>
  peer-index
</peer-index>
<bgp-bfd>....</bgp-bfd>
<local-interface-name>
  local-interface-name
</local-interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<nlri-type-peer>
  nlri-type-peer
</nlri-type-peer>
<nlri-type-session>
  nlri-type-session
</nlri-type-session>
<peer-no-refresh>
  peer-no-refresh
</peer-no-refresh>
<peer-refresh-capability>
  peer-refresh-capability
</peer-refresh-capability>
<peer-4byte-as-capability-not-supported>
  peer-4byte-as-capability-not-supported
</peer-4byte-as-capability-not-supported>
<peer-4byte-as-capability-advertised>
  peer-4byte-as-capability-advertised
</peer-4byte-as-capability-advertised>
<peer-addpath-not-supported>
  peer-addpath-not-supported
</peer-addpath-not-supported>
<peer-addpath-ronly-nlri>
```

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```
  peer-addpath-ronly-nlri
</peer-addpath-ronly-nlri>
<peer-addpath-sonly-nlri>
  peer-addpath-sonly-nlri
</peer-addpath-sonly-nlri>
<peer-addpath-rs-nlri>
  peer-addpath-rs-nlri
</peer-addpath-rs-nlri>
<peer-restart-nlri-configured>
  peer-restart-nlri-configured
</peer-restart-nlri-configured>
<peer-restart-time-configured>
  peer-restart-time-configured
</peer-restart-time-configured>
<peer-stale-route-time-configured>
  peer-stale-route-time-configured
</peer-stale-route-time-configured>
<peer-restart-time-received>
  peer-restart-time-received
</peer-restart-time-received>
<peer-restart-flags-received>
  peer-restart-flags-received
</peer-restart-flags-received>
<peer-restart-nlri-received>
  peer-restart-nlri-received
</peer-restart-nlri-received>
<peer-restart-nlri-can-save-state>
  peer-restart-nlri-can-save-state
</peer-restart-nlri-can-save-state>
<peer-restart-nlri-state-saved>
  peer-restart-nlri-state-saved
</peer-restart-nlri-state-saved>
<peer-no-restart>
  peer-no-restart
</peer-no-restart>
<peer-restart-nlri-negotiated>
  peer-restart-nlri-negotiated
</peer-restart-nlri-negotiated>
<peer-end-of-rib-received>
  peer-end-of-rib-received
</peer-end-of-rib-received>
<peer-end-of-rib-sent>
  peer-end-of-rib-sent
</peer-end-of-rib-sent>
<peer-no-helper>
  peer-no-helper
</peer-no-helper>
<peer-end-of-rib-scheduled>
  peer-end-of-rib-scheduled
</peer-end-of-rib-scheduled>
<last-received>
  last-received
</last-received>
<last-sent>
  last-sent
</last-sent>
```


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```
<last-checked>
  last-checked
</last-checked>
<input-messages>
  input-messages
</input-messages>
<input-checksum>
  input-checksum
</input-checksum>
<input-checksum-err>
  input-checksum-err
</input-checksum-err>
<input-updates>
  input-updates
</input-updates>
<input-refreshes>
  input-refreshes
</input-refreshes>
<input-octets>
  input-octets
</input-octets>
<output-messages>
  output-messages
</output-messages>
<output-checksum>
  output-checksum
</output-checksum>
<output-updates>
  output-updates
</output-updates>
<output-refreshes>
  output-refreshes
</output-refreshes>
<output-octets>
  output-octets
</output-octets>
<input-drop-path-attributes>
  input-drop-path-attributes
</input-drop-path-attributes>
<input-ignore-path-attributes>
  input-ignore-path-attributes
</input-ignore-path-attributes>
<buffered-octets-rx>
  buffered-octets-rx
</buffered-octets-rx>
<buffered-octets-tx>
  buffered-octets-tx
</buffered-octets-tx>
<bgp-output-queue>....</bgp-output-queue>
<route-queue-count>
  route-queue-count
</route-queue-count>
<bgp-rib>....</bgp-rib>
<elapsed-time>
  elapsed-time
</elapsed-time>
```

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```
    <extended-information>
     extended-information
    </extended-information>
    <bgp-error>....</bgp-error>
    <route-queue>....</route-queue>
    <tracing-information>....</tracing-information>
   </bgp-peer>
</bgp-group>
```

Description Operational and configuration information for a BGP peer

<bgp-peer>

Usage

```
<bgp-information>
 <bgp-peer>
  <peer-address>
   peer-address
  </peer-address>
  <peer-as>
   peer-as
  </peer-as>
  <local-address>
   local-address
  </local-address>
  <local-as>
   local-as
  </local-as>
  <description>
   description
  </description>
  <peer-type>
   peer-type
  </peer-type>
  <route-reflector-client>
   route-reflector-client
  </route-reflector-client>
  <peer-state>
   peer-state
  </peer-state>
  <peer-flags>
   peer-flags
  </peer-flags>
  <last-state>
   last-state
  </last-state>
  <last-event>
   last-event
  </last-event>
  <last-error>
   last-error
  </last-error>
  <bgp-option-information>....</bgp-option-information>
  <flap-count>
```


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```
  flap-count
</flap-count>
<last-flap-event>
  last-flap-event
</last-flap-event>
<peer-id>
  peer-id
</peer-id>
<local-id>
  local-id
</local-id>
<active-holdtime>
  active-holdtime
</active-holdtime>
<keepalive-interval>
  keepalive-interval
</keepalive-interval>
<peer-index>
  peer-index
</peer-index>
<bgp-bfd>....</bgp-bfd>
<local-interface-name>
  local-interface-name
</local-interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<nlri-type-peer>
  nlri-type-peer
</nlri-type-peer>
<nlri-type-session>
  nlri-type-session
</nlri-type-session>
<peer-no-refresh>
  peer-no-refresh
</peer-no-refresh>
<peer-refresh-capability>
  peer-refresh-capability
</peer-refresh-capability>
<peer-4byte-as-capability-not-supported>
  peer-4byte-as-capability-not-supported
</peer-4byte-as-capability-not-supported>
<peer-4byte-as-capability-advertised>
  peer-4byte-as-capability-advertised
</peer-4byte-as-capability-advertised>
<peer-addpath-not-supported>
  peer-addpath-not-supported
</peer-addpath-not-supported>
<peer-addpath-ronly-nlri>
  peer-addpath-ronly-nlri
</peer-addpath-ronly-nlri>
<peer-addpath-sonly-nlri>
  peer-addpath-sonly-nlri
</peer-addpath-sonly-nlri>
<peer-addpath-rs-nlri>
  peer-addpath-rs-nlri
```

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```
</peer-addpath-rs-nlri>
<peer-restart-nlri-configured>
  peer-restart-nlri-configured
</peer-restart-nlri-configured>
<peer-restart-time-configured>
  peer-restart-time-configured
</peer-restart-time-configured>
<peer-stale-route-time-configured>
  peer-stale-route-time-configured
</peer-stale-route-time-configured>
<peer-restart-time-received>
  peer-restart-time-received
</peer-restart-time-received>
<peer-restart-flags-received>
  peer-restart-flags-received
</peer-restart-flags-received>
<peer-restart-nlri-received>
  peer-restart-nlri-received
</peer-restart-nlri-received>
<peer-restart-nlri-can-save-state>
  peer-restart-nlri-can-save-state
</peer-restart-nlri-can-save-state>
<peer-restart-nlri-state-saved>
  peer-restart-nlri-state-saved
</peer-restart-nlri-state-saved>
<peer-no-restart>
  peer-no-restart
</peer-no-restart>
<peer-restart-nlri-negotiated>
  peer-restart-nlri-negotiated
</peer-restart-nlri-negotiated>
<peer-end-of-rib-received>
  peer-end-of-rib-received
</peer-end-of-rib-received>
<peer-end-of-rib-sent>
  peer-end-of-rib-sent
</peer-end-of-rib-sent>
<peer-no-helper>
  peer-no-helper
</peer-no-helper>
<peer-end-of-rib-scheduled>
  peer-end-of-rib-scheduled
</peer-end-of-rib-scheduled>
<last-received>
  last-received
</last-received>
<last-sent>
  last-sent
</last-sent>
<last-checked>
  last-checked
</last-checked>
<input-messages>
  input-messages
</input-messages>
<input-checksum>
```


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```
  input-checksum
 </input-checksum>
 <input-checksum-err>
  input-checksum-err
 </input-checksum-err>
 <input-updates>
  input-updates
 </input-updates>
 <input-refreshes>
  input-refreshes
 </input-refreshes>
 <input-octets>
  input-octets
 </input-octets>
 <output-messages>
  output-messages
 </output-messages>
 <output-checksum>
  output-checksum
 </output-checksum>
 <output-updates>
  output-updates
 </output-updates>
 <output-refreshes>
  output-refreshes
 </output-refreshes>
 <output-octets>
  output-octets
 </output-octets>
 <input-drop-path-attributes>
  input-drop-path-attributes
 </input-drop-path-attributes>
 <input-ignore-path-attributes>
  input-ignore-path-attributes
 </input-ignore-path-attributes>
 <buffered-octets-rx>
  buffered-octets-rx
 </buffered-octets-rx>
 <buffered-octets-tx>
  buffered-octets-tx
 </buffered-octets-tx>
 <bgp-output-queue>....</bgp-output-queue>
 <route-queue-count>
  route-queue-count
 </route-queue-count>
 <bgp-rib>....</bgp-rib>
 <elapsed-time>
  elapsed-time
 </elapsed-time>
 <extended-information>
  extended-information
 </extended-information>
 <bgp-error>....</bgp-error>
 <route-queue>....</route-queue>
 <tracing-information>....</tracing-information>
</bgp-peer>
```

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```
</bgp-information>
```

Description Operational and configuration information for a BGP peer

<bgp-peer>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <peer-address>
    peer-address
   </peer-address>
   <peer-as>
    peer-as
   </peer-as>
   <local-address>
    local-address
   </local-address>
   <local-as>
    local-as
   </local-as>
   <description>
    description
   </description>
   <peer-type>
    peer-type
   </peer-type>
   <route-reflector-client>
    route-reflector-client
   </route-reflector-client>
   <peer-state>
    peer-state
   </peer-state>
   <peer-flags>
    peer-flags
   </peer-flags>
   <last-state>
    last-state
   </last-state>
   <last-event>
    last-event
   </last-event>
   <last-error>
    last-error
   </last-error>
   <bgp-option-information>....</bgp-option-information>
   <flap-count>
    flap-count
   </flap-count>
   <last-flap-event>
    last-flap-event
   </last-flap-event>
   <peer-id>
```


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```
  peer-id
</peer-id>
<local-id>
  local-id
</local-id>
<active-holdtime>
  active-holdtime
</active-holdtime>
<keepalive-interval>
  keepalive-interval
</keepalive-interval>
<peer-index>
  peer-index
</peer-index>
<bgp-bfd>....</bgp-bfd>
<local-interface-name>
  local-interface-name
</local-interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<nlri-type-peer>
  nlri-type-peer
</nlri-type-peer>
<nlri-type-session>
  nlri-type-session
</nlri-type-session>
<peer-no-refresh>
  peer-no-refresh
</peer-no-refresh>
<peer-refresh-capability>
  peer-refresh-capability
</peer-refresh-capability>
<peer-4byte-as-capability-not-supported>
  peer-4byte-as-capability-not-supported
</peer-4byte-as-capability-not-supported>
<peer-4byte-as-capability-advertised>
  peer-4byte-as-capability-advertised
</peer-4byte-as-capability-advertised>
<peer-addpath-not-supported>
  peer-addpath-not-supported
</peer-addpath-not-supported>
<peer-addpath-ronly-nlri>
  peer-addpath-ronly-nlri
</peer-addpath-ronly-nlri>
<peer-addpath-sonly-nlri>
  peer-addpath-sonly-nlri
</peer-addpath-sonly-nlri>
<peer-addpath-rs-nlri>
  peer-addpath-rs-nlri
</peer-addpath-rs-nlri>
<peer-restart-nlri-configured>
  peer-restart-nlri-configured
</peer-restart-nlri-configured>
<peer-restart-time-configured>
  peer-restart-time-configured
```

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```
</peer-restart-time-configured>
<peer-stale-route-time-configured>
  peer-stale-route-time-configured
</peer-stale-route-time-configured>
<peer-restart-time-received>
  peer-restart-time-received
</peer-restart-time-received>
<peer-restart-flags-received>
  peer-restart-flags-received
</peer-restart-flags-received>
<peer-restart-nlri-received>
  peer-restart-nlri-received
</peer-restart-nlri-received>
<peer-restart-nlri-can-save-state>
  peer-restart-nlri-can-save-state
</peer-restart-nlri-can-save-state>
<peer-restart-nlri-state-saved>
  peer-restart-nlri-state-saved
</peer-restart-nlri-state-saved>
<peer-no-restart>
  peer-no-restart
</peer-no-restart>
<peer-restart-nlri-negotiated>
  peer-restart-nlri-negotiated
</peer-restart-nlri-negotiated>
<peer-end-of-rib-received>
  peer-end-of-rib-received
</peer-end-of-rib-received>
<peer-end-of-rib-sent>
  peer-end-of-rib-sent
</peer-end-of-rib-sent>
<peer-no-helper>
  peer-no-helper
</peer-no-helper>
<peer-end-of-rib-scheduled>
  peer-end-of-rib-scheduled
</peer-end-of-rib-scheduled>
<last-received>
  last-received
</last-received>
<last-sent>
  last-sent
</last-sent>
<last-checked>
  last-checked
</last-checked>
<input-messages>
  input-messages
</input-messages>
<input-checksum>
  input-checksum
</input-checksum>
<input-checksum-err>
  input-checksum-err
</input-checksum-err>
<input-updates>
```


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```
      input-updates
    </input-updates>
    <input-refreshes>
      input-refreshes
    </input-refreshes>
    <input-octets>
      input-octets
    </input-octets>
    <output-messages>
      output-messages
    </output-messages>
    <output-checksum>
      output-checksum
    </output-checksum>
    <output-updates>
      output-updates
    </output-updates>
    <output-refreshes>
      output-refreshes
    </output-refreshes>
    <output-octets>
      output-octets
    </output-octets>
    <input-drop-path-attributes>
      input-drop-path-attributes
    </input-drop-path-attributes>
    <input-ignore-path-attributes>
      input-ignore-path-attributes
    </input-ignore-path-attributes>
    <buffered-octets-rx>
      buffered-octets-rx
    </buffered-octets-rx>
    <buffered-octets-tx>
      buffered-octets-tx
    </buffered-octets-tx>
    <bgp-output-queue>....</bgp-output-queue>
    <route-queue-count>
      route-queue-count
    </route-queue-count>
    <bgp-rib>....</bgp-rib>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
    <extended-information>
      extended-information
    </extended-information>
    <bgp-error>....</bgp-error>
    <route-queue>....</route-queue>
    <tracing-information>....</tracing-information>
  </bgp-peer>
 </bgp-group>
</bgp-group-information>
```

Description Operational and configuration information for a BGP peer

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<bgp-peer>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <peer-address>
        peer-address
      </peer-address>
      <peer-as>
        peer-as
      </peer-as>
      <local-address>
        local-address
      </local-address>
      <local-as>
        local-as
      </local-as>
      <description>
        description
      </description>
      <peer-type>
        peer-type
      </peer-type>
      <route-reflector-client>
        route-reflector-client
      </route-reflector-client>
      <peer-state>
        peer-state
      </peer-state>
      <peer-flags>
        peer-flags
      </peer-flags>
      <last-state>
        last-state
      </last-state>
      <last-event>
        last-event
      </last-event>
      <last-error>
        last-error
      </last-error>
      <bgp-option-information>....</bgp-option-information>
      <flap-count>
        flap-count
      </flap-count>
      <last-flap-event>
        last-flap-event
      </last-flap-event>
      <peer-id>
        peer-id
      </peer-id>
      <local-id>
        local-id
      </local-id>
```


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```
<active-holdtime>
  active-holdtime
</active-holdtime>
<keepalive-interval>
  keepalive-interval
</keepalive-interval>
<peer-index>
  peer-index
</peer-index>
<bgp-bfd>....</bgp-bfd>
<local-interface-name>
  local-interface-name
</local-interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<nlri-type-peer>
  nlri-type-peer
</nlri-type-peer>
<nlri-type-session>
  nlri-type-session
</nlri-type-session>
<peer-no-refresh>
  peer-no-refresh
</peer-no-refresh>
<peer-refresh-capability>
  peer-refresh-capability
</peer-refresh-capability>
<peer-4byte-as-capability-not-supported>
  peer-4byte-as-capability-not-supported
</peer-4byte-as-capability-not-supported>
<peer-4byte-as-capability-advertised>
  peer-4byte-as-capability-advertised
</peer-4byte-as-capability-advertised>
<peer-addpath-not-supported>
  peer-addpath-not-supported
</peer-addpath-not-supported>
<peer-addpath-ronly-nlri>
  peer-addpath-ronly-nlri
</peer-addpath-ronly-nlri>
<peer-addpath-sonly-nlri>
  peer-addpath-sonly-nlri
</peer-addpath-sonly-nlri>
<peer-addpath-rs-nlri>
  peer-addpath-rs-nlri
</peer-addpath-rs-nlri>
<peer-restart-nlri-configured>
  peer-restart-nlri-configured
</peer-restart-nlri-configured>
<peer-restart-time-configured>
  peer-restart-time-configured
</peer-restart-time-configured>
<peer-stale-route-time-configured>
  peer-stale-route-time-configured
</peer-stale-route-time-configured>
<peer-restart-time-received>
```

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```
  peer-restart-time-received
</peer-restart-time-received>
<peer-restart-flags-received>
  peer-restart-flags-received
</peer-restart-flags-received>
<peer-restart-nlri-received>
  peer-restart-nlri-received
</peer-restart-nlri-received>
<peer-restart-nlri-can-save-state>
  peer-restart-nlri-can-save-state
</peer-restart-nlri-can-save-state>
<peer-restart-nlri-state-saved>
  peer-restart-nlri-state-saved
</peer-restart-nlri-state-saved>
<peer-no-restart>
  peer-no-restart
</peer-no-restart>
<peer-restart-nlri-negotiated>
  peer-restart-nlri-negotiated
</peer-restart-nlri-negotiated>
<peer-end-of-rib-received>
  peer-end-of-rib-received
</peer-end-of-rib-received>
<peer-end-of-rib-sent>
  peer-end-of-rib-sent
</peer-end-of-rib-sent>
<peer-no-helper>
  peer-no-helper
</peer-no-helper>
<peer-end-of-rib-scheduled>
  peer-end-of-rib-scheduled
</peer-end-of-rib-scheduled>
<last-received>
  last-received
</last-received>
<last-sent>
  last-sent
</last-sent>
<last-checked>
  last-checked
</last-checked>
<input-messages>
  input-messages
</input-messages>
<input-checksum>
  input-checksum
</input-checksum>
<input-checksum-err>
  input-checksum-err
</input-checksum-err>
<input-updates>
  input-updates
</input-updates>
<input-refreshes>
  input-refreshes
</input-refreshes>
```


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```
<input-octets>
  input-octets
</input-octets>
<output-messages>
  output-messages
</output-messages>
<output-checksum>
  output-checksum
</output-checksum>
<output-updates>
  output-updates
</output-updates>
<output-refreshes>
  output-refreshes
</output-refreshes>
<output-octets>
  output-octets
</output-octets>
<input-drop-path-attributes>
  input-drop-path-attributes
</input-drop-path-attributes>
<input-ignore-path-attributes>
  input-ignore-path-attributes
</input-ignore-path-attributes>
<buffered-octets-rx>
  buffered-octets-rx
</buffered-octets-rx>
<buffered-octets-tx>
  buffered-octets-tx
</buffered-octets-tx>
<bgp-output-queue>....</bgp-output-queue>
<route-queue-count>
  route-queue-count
</route-queue-count>
<bgp-rib>....</bgp-rib>
<elapsed-time>
  elapsed-time
</elapsed-time>
<extended-information>
  extended-information
</extended-information>
<bgp-error>....</bgp-error>
<route-queue>....</route-queue>
<tracing-information>....</tracing-information>
</bgp-peer>
</bgp-information>
</bgp-group-information>
```

Description Operational and configuration information for a BGP peer

<bgp-rib>

Usage

<bgp-rib>

```
<name>
  name
</name>
<rib-bit>
  rib-bit
</rib-bit>
<bgp-rib-state>
  bgp-rib-state
</bgp-rib-state>
<vpn-rib-state>
  vpn-rib-state
</vpn-rib-state>
<send-state>
  send-state
</send-state>
<total-external-prefix-count>
  total-external-prefix-count
</total-external-prefix-count>
<active-external-prefix-count>
  active-external-prefix-count
</active-external-prefix-count>
<accepted-external-prefix-count>
  accepted-external-prefix-count
</accepted-external-prefix-count>
<suppressed-external-prefix-count>
  suppressed-external-prefix-count
</suppressed-external-prefix-count>
<total-internal-prefix-count>
  total-internal-prefix-count
</total-internal-prefix-count>
<active-internal-prefix-count>
  active-internal-prefix-count
</active-internal-prefix-count>
<accepted-internal-prefix-count>
  accepted-internal-prefix-count
</accepted-internal-prefix-count>
<suppressed-internal-prefix-count>
  suppressed-internal-prefix-count
</suppressed-internal-prefix-count>
<total-prefix-count>
  total-prefix-count
</total-prefix-count>
<active-prefix-count>
  active-prefix-count
</active-prefix-count>
<received-prefix-count>
  received-prefix-count
</received-prefix-count>
<accepted-prefix-count>
  accepted-prefix-count
</accepted-prefix-count>
<damped-prefix-count>
  damped-prefix-count
</damped-prefix-count>
<suppressed-prefix-count>
  suppressed-prefix-count
```


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```
  </suppressed-prefix-count>
  <history-prefix-count>
   history-prefix-count
  </history-prefix-count>
  <pending-prefix-count>
   pending-prefix-count
  </pending-prefix-count>
  <advertised-prefix-count>
   advertised-prefix-count
  </advertised-prefix-count>
</bgp-rib>
```

Description

<bgp-rib>

Usage

```
<bgp-peer>
  <bgp-rib>
    <name>
     name
    </name>
    <rib-bit>
     rib-bit
    </rib-bit>
    <bgp-rib-state>
     bgp-rib-state
    </bgp-rib-state>
    <vpn-rib-state>
     vpn-rib-state
    </vpn-rib-state>
    <send-state>
     send-state
    </send-state>
    <total-external-prefix-count>
     total-external-prefix-count
    </total-external-prefix-count>
    <active-external-prefix-count>
     active-external-prefix-count
    </active-external-prefix-count>
    <accepted-external-prefix-count>
     accepted-external-prefix-count
    </accepted-external-prefix-count>
    <suppressed-external-prefix-count>
     suppressed-external-prefix-count
    </suppressed-external-prefix-count>
    <total-internal-prefix-count>
     total-internal-prefix-count
    </total-internal-prefix-count>
    <active-internal-prefix-count>
     active-internal-prefix-count
    </active-internal-prefix-count>
    <accepted-internal-prefix-count>
     accepted-internal-prefix-count
    </accepted-internal-prefix-count>
```

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```
      <suppressed-internal-prefix-count>
        suppressed-internal-prefix-count
      </suppressed-internal-prefix-count>
      <total-prefix-count>
        total-prefix-count
      </total-prefix-count>
      <active-prefix-count>
        active-prefix-count
      </active-prefix-count>
      <received-prefix-count>
        received-prefix-count
      </received-prefix-count>
      <accepted-prefix-count>
        accepted-prefix-count
      </accepted-prefix-count>
      <damped-prefix-count>
        damped-prefix-count
      </damped-prefix-count>
      <suppressed-prefix-count>
        suppressed-prefix-count
      </suppressed-prefix-count>
      <history-prefix-count>
        history-prefix-count
      </history-prefix-count>
      <pending-prefix-count>
        pending-prefix-count
      </pending-prefix-count>
      <advertised-prefix-count>
        advertised-prefix-count
      </advertised-prefix-count>
    </bgp-rib>
  </bgp-peer>
```

Description

<bgp-rib>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-rib>
      <name>
        name
      </name>
      <rib-bit>
        rib-bit
      </rib-bit>
      <bgp-rib-state>
        bgp-rib-state
      </bgp-rib-state>
      <vpn-rib-state>
        vpn-rib-state
      </vpn-rib-state>
      <send-state>
        send-state
```


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```
        </send-state>
        <total-external-prefix-count>
          total-external-prefix-count
        </total-external-prefix-count>
        <active-external-prefix-count>
          active-external-prefix-count
        </active-external-prefix-count>
        <accepted-external-prefix-count>
          accepted-external-prefix-count
        </accepted-external-prefix-count>
        <suppressed-external-prefix-count>
          suppressed-external-prefix-count
        </suppressed-external-prefix-count>
        <total-internal-prefix-count>
          total-internal-prefix-count
        </total-internal-prefix-count>
        <active-internal-prefix-count>
          active-internal-prefix-count
        </active-internal-prefix-count>
        <accepted-internal-prefix-count>
          accepted-internal-prefix-count
        </accepted-internal-prefix-count>
        <suppressed-internal-prefix-count>
          suppressed-internal-prefix-count
        </suppressed-internal-prefix-count>
        <total-prefix-count>
          total-prefix-count
        </total-prefix-count>
        <active-prefix-count>
          active-prefix-count
        </active-prefix-count>
        <received-prefix-count>
          received-prefix-count
        </received-prefix-count>
        <accepted-prefix-count>
          accepted-prefix-count
        </accepted-prefix-count>
        <damped-prefix-count>
          damped-prefix-count
        </damped-prefix-count>
        <suppressed-prefix-count>
          suppressed-prefix-count
        </suppressed-prefix-count>
        <history-prefix-count>
          history-prefix-count
        </history-prefix-count>
        <pending-prefix-count>
          pending-prefix-count
        </pending-prefix-count>
        <advertised-prefix-count>
          advertised-prefix-count
        </advertised-prefix-count>
      </bgp-rib>
    </bgp-peer>
  </bgp-group>
```

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Description

<bgp-rib>

Usage

```
<bgp-group>
  <bgp-rib>
    <name>
      name
    </name>
    <rib-bit>
      rib-bit
    </rib-bit>
    <bgp-rib-state>
      bgp-rib-state
    </bgp-rib-state>
    <vpn-rib-state>
      vpn-rib-state
    </vpn-rib-state>
    <send-state>
      send-state
    </send-state>
    <total-external-prefix-count>
      total-external-prefix-count
    </total-external-prefix-count>
    <active-external-prefix-count>
      active-external-prefix-count
    </active-external-prefix-count>
    <accepted-external-prefix-count>
      accepted-external-prefix-count
    </accepted-external-prefix-count>
    <suppressed-external-prefix-count>
      suppressed-external-prefix-count
    </suppressed-external-prefix-count>
    <total-internal-prefix-count>
      total-internal-prefix-count
    </total-internal-prefix-count>
    <active-internal-prefix-count>
      active-internal-prefix-count
    </active-internal-prefix-count>
    <accepted-internal-prefix-count>
      accepted-internal-prefix-count
    </accepted-internal-prefix-count>
    <suppressed-internal-prefix-count>
      suppressed-internal-prefix-count
    </suppressed-internal-prefix-count>
    <total-prefix-count>
      total-prefix-count
    </total-prefix-count>
    <active-prefix-count>
      active-prefix-count
    </active-prefix-count>
    <received-prefix-count>
      received-prefix-count
    </received-prefix-count>
    <accepted-prefix-count>
```


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```
      accepted-prefix-count
    </accepted-prefix-count>
    <damped-prefix-count>
      damped-prefix-count
    </damped-prefix-count>
    <suppressed-prefix-count>
      suppressed-prefix-count
    </suppressed-prefix-count>
    <history-prefix-count>
      history-prefix-count
    </history-prefix-count>
    <pending-prefix-count>
      pending-prefix-count
    </pending-prefix-count>
    <advertised-prefix-count>
      advertised-prefix-count
    </advertised-prefix-count>
  </bgp-rib>
</bgp-group>
```

Description

<bgp-rib>

Usage

```
<bgp-information>
  <bgp-rib>
    <name>
      name
    </name>
    <rib-bit>
      rib-bit
    </rib-bit>
    <bgp-rib-state>
      bgp-rib-state
    </bgp-rib-state>
    <vpn-rib-state>
      vpn-rib-state
    </vpn-rib-state>
    <send-state>
      send-state
    </send-state>
    <total-external-prefix-count>
      total-external-prefix-count
    </total-external-prefix-count>
    <active-external-prefix-count>
      active-external-prefix-count
    </active-external-prefix-count>
    <accepted-external-prefix-count>
      accepted-external-prefix-count
    </accepted-external-prefix-count>
    <suppressed-external-prefix-count>
      suppressed-external-prefix-count
    </suppressed-external-prefix-count>
    <total-internal-prefix-count>
```

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```
        total-internal-prefix-count
      </total-internal-prefix-count>
      <active-internal-prefix-count>
        active-internal-prefix-count
      </active-internal-prefix-count>
      <accepted-internal-prefix-count>
        accepted-internal-prefix-count
      </accepted-internal-prefix-count>
      <suppressed-internal-prefix-count>
        suppressed-internal-prefix-count
      </suppressed-internal-prefix-count>
      <total-prefix-count>
        total-prefix-count
      </total-prefix-count>
      <active-prefix-count>
        active-prefix-count
      </active-prefix-count>
      <received-prefix-count>
        received-prefix-count
      </received-prefix-count>
      <accepted-prefix-count>
        accepted-prefix-count
      </accepted-prefix-count>
      <damped-prefix-count>
        damped-prefix-count
      </damped-prefix-count>
      <suppressed-prefix-count>
        suppressed-prefix-count
      </suppressed-prefix-count>
      <history-prefix-count>
        history-prefix-count
      </history-prefix-count>
      <pending-prefix-count>
        pending-prefix-count
      </pending-prefix-count>
      <advertised-prefix-count>
        advertised-prefix-count
      </advertised-prefix-count>
    </bgp-rib>
  </bgp-information>
```

Description

<bgp-rib>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-rib>
      <name>
        name
      </name>
      <rib-bit>
        rib-bit
      </rib-bit>
```


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```
<bgp-rib-state>
  bgp-rib-state
</bgp-rib-state>
<vpn-rib-state>
  vpn-rib-state
</vpn-rib-state>
<send-state>
  send-state
</send-state>
<total-external-prefix-count>
  total-external-prefix-count
</total-external-prefix-count>
<active-external-prefix-count>
  active-external-prefix-count
</active-external-prefix-count>
<accepted-external-prefix-count>
  accepted-external-prefix-count
</accepted-external-prefix-count>
<suppressed-external-prefix-count>
  suppressed-external-prefix-count
</suppressed-external-prefix-count>
<total-internal-prefix-count>
  total-internal-prefix-count
</total-internal-prefix-count>
<active-internal-prefix-count>
  active-internal-prefix-count
</active-internal-prefix-count>
<accepted-internal-prefix-count>
  accepted-internal-prefix-count
</accepted-internal-prefix-count>
<suppressed-internal-prefix-count>
  suppressed-internal-prefix-count
</suppressed-internal-prefix-count>
<total-prefix-count>
  total-prefix-count
</total-prefix-count>
<active-prefix-count>
  active-prefix-count
</active-prefix-count>
<received-prefix-count>
  received-prefix-count
</received-prefix-count>
<accepted-prefix-count>
  accepted-prefix-count
</accepted-prefix-count>
<damped-prefix-count>
  damped-prefix-count
</damped-prefix-count>
<suppressed-prefix-count>
  suppressed-prefix-count
</suppressed-prefix-count>
<history-prefix-count>
  history-prefix-count
</history-prefix-count>
<pending-prefix-count>
  pending-prefix-count
```

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```
        </pending-prefix-count>
        <advertised-prefix-count>
          advertised-prefix-count
        </advertised-prefix-count>
      </bgp-rib>
    </bgp-peer>
  </bgp-information>
```

Description

<bgp-rib>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-rib>
        <name>
          name
        </name>
        <rib-bit>
          rib-bit
        </rib-bit>
        <bgp-rib-state>
          bgp-rib-state
        </bgp-rib-state>
        <vpn-rib-state>
          vpn-rib-state
        </vpn-rib-state>
        <send-state>
          send-state
        </send-state>
        <total-external-prefix-count>
          total-external-prefix-count
        </total-external-prefix-count>
        <active-external-prefix-count>
          active-external-prefix-count
        </active-external-prefix-count>
        <accepted-external-prefix-count>
          accepted-external-prefix-count
        </accepted-external-prefix-count>
        <suppressed-external-prefix-count>
          suppressed-external-prefix-count
        </suppressed-external-prefix-count>
        <total-internal-prefix-count>
          total-internal-prefix-count
        </total-internal-prefix-count>
        <active-internal-prefix-count>
          active-internal-prefix-count
        </active-internal-prefix-count>
        <accepted-internal-prefix-count>
          accepted-internal-prefix-count
        </accepted-internal-prefix-count>
        <suppressed-internal-prefix-count>
          suppressed-internal-prefix-count
```


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```
        </suppressed-internal-prefix-count>
        <total-prefix-count>
          total-prefix-count
        </total-prefix-count>
        <active-prefix-count>
          active-prefix-count
        </active-prefix-count>
        <received-prefix-count>
          received-prefix-count
        </received-prefix-count>
        <accepted-prefix-count>
          accepted-prefix-count
        </accepted-prefix-count>
        <damped-prefix-count>
          damped-prefix-count
        </damped-prefix-count>
        <suppressed-prefix-count>
          suppressed-prefix-count
        </suppressed-prefix-count>
        <history-prefix-count>
          history-prefix-count
        </history-prefix-count>
        <pending-prefix-count>
          pending-prefix-count
        </pending-prefix-count>
        <advertised-prefix-count>
          advertised-prefix-count
        </advertised-prefix-count>
      </bgp-rib>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<bgp-rib>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-rib>
      <name>
        name
      </name>
      <rib-bit>
        rib-bit
      </rib-bit>
      <bgp-rib-state>
        bgp-rib-state
      </bgp-rib-state>
      <vpn-rib-state>
        vpn-rib-state
      </vpn-rib-state>
      <send-state>
        send-state
```

```
        </send-state>
        <total-external-prefix-count>
          total-external-prefix-count
        </total-external-prefix-count>
        <active-external-prefix-count>
          active-external-prefix-count
        </active-external-prefix-count>
        <accepted-external-prefix-count>
          accepted-external-prefix-count
        </accepted-external-prefix-count>
        <suppressed-external-prefix-count>
          suppressed-external-prefix-count
        </suppressed-external-prefix-count>
        <total-internal-prefix-count>
          total-internal-prefix-count
        </total-internal-prefix-count>
        <active-internal-prefix-count>
          active-internal-prefix-count
        </active-internal-prefix-count>
        <accepted-internal-prefix-count>
          accepted-internal-prefix-count
        </accepted-internal-prefix-count>
        <suppressed-internal-prefix-count>
          suppressed-internal-prefix-count
        </suppressed-internal-prefix-count>
        <total-prefix-count>
          total-prefix-count
        </total-prefix-count>
        <active-prefix-count>
          active-prefix-count
        </active-prefix-count>
        <received-prefix-count>
          received-prefix-count
        </received-prefix-count>
        <accepted-prefix-count>
          accepted-prefix-count
        </accepted-prefix-count>
        <damped-prefix-count>
          damped-prefix-count
        </damped-prefix-count>
        <suppressed-prefix-count>
          suppressed-prefix-count
        </suppressed-prefix-count>
        <history-prefix-count>
          history-prefix-count
        </history-prefix-count>
        <pending-prefix-count>
          pending-prefix-count
        </pending-prefix-count>
        <advertised-prefix-count>
          advertised-prefix-count
        </advertised-prefix-count>
      </bgp-rib>
    </bgp-group>
  </bgp-group-information>
```


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Description

<bgp-rib>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-rib>
   <name>
    name
   </name>
   <rib-bit>
    rib-bit
   </rib-bit>
   <bgp-rib-state>
    bgp-rib-state
   </bgp-rib-state>
   <vpn-rib-state>
    vpn-rib-state
   </vpn-rib-state>
   <send-state>
    send-state
   </send-state>
   <total-external-prefix-count>
    total-external-prefix-count
   </total-external-prefix-count>
   <active-external-prefix-count>
    active-external-prefix-count
   </active-external-prefix-count>
   <accepted-external-prefix-count>
    accepted-external-prefix-count
   </accepted-external-prefix-count>
   <suppressed-external-prefix-count>
    suppressed-external-prefix-count
   </suppressed-external-prefix-count>
   <total-internal-prefix-count>
    total-internal-prefix-count
   </total-internal-prefix-count>
   <active-internal-prefix-count>
    active-internal-prefix-count
   </active-internal-prefix-count>
   <accepted-internal-prefix-count>
    accepted-internal-prefix-count
   </accepted-internal-prefix-count>
   <suppressed-internal-prefix-count>
    suppressed-internal-prefix-count
   </suppressed-internal-prefix-count>
   <total-prefix-count>
    total-prefix-count
   </total-prefix-count>
   <active-prefix-count>
    active-prefix-count
   </active-prefix-count>
   <received-prefix-count>
    received-prefix-count
   </received-prefix-count>
```

```
        <accepted-prefix-count>
          accepted-prefix-count
        </accepted-prefix-count>
        <damped-prefix-count>
          damped-prefix-count
        </damped-prefix-count>
        <suppressed-prefix-count>
          suppressed-prefix-count
        </suppressed-prefix-count>
        <history-prefix-count>
          history-prefix-count
        </history-prefix-count>
        <pending-prefix-count>
          pending-prefix-count
        </pending-prefix-count>
        <advertised-prefix-count>
          advertised-prefix-count
        </advertised-prefix-count>
      </bgp-rib>
    </bgp-information>
  </bgp-group-information>
```

Description

<bgp-rib>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <bgp-rib>
        <name>
          name
        </name>
        <rib-bit>
          rib-bit
        </rib-bit>
        <bgp-rib-state>
          bgp-rib-state
        </bgp-rib-state>
        <vpn-rib-state>
          vpn-rib-state
        </vpn-rib-state>
        <send-state>
          send-state
        </send-state>
        <total-external-prefix-count>
          total-external-prefix-count
        </total-external-prefix-count>
        <active-external-prefix-count>
          active-external-prefix-count
        </active-external-prefix-count>
        <accepted-external-prefix-count>
          accepted-external-prefix-count
        </accepted-external-prefix-count>
```


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```
            <suppressed-external-prefix-count>
              suppressed-external-prefix-count
            </suppressed-external-prefix-count>
            <total-internal-prefix-count>
              total-internal-prefix-count
            </total-internal-prefix-count>
            <active-internal-prefix-count>
              active-internal-prefix-count
            </active-internal-prefix-count>
            <accepted-internal-prefix-count>
              accepted-internal-prefix-count
            </accepted-internal-prefix-count>
            <suppressed-internal-prefix-count>
              suppressed-internal-prefix-count
            </suppressed-internal-prefix-count>
            <total-prefix-count>
              total-prefix-count
            </total-prefix-count>
            <active-prefix-count>
              active-prefix-count
            </active-prefix-count>
            <received-prefix-count>
              received-prefix-count
            </received-prefix-count>
            <accepted-prefix-count>
              accepted-prefix-count
            </accepted-prefix-count>
            <damped-prefix-count>
              damped-prefix-count
            </damped-prefix-count>
            <suppressed-prefix-count>
              suppressed-prefix-count
            </suppressed-prefix-count>
            <history-prefix-count>
              history-prefix-count
            </history-prefix-count>
            <pending-prefix-count>
              pending-prefix-count
            </pending-prefix-count>
            <advertised-prefix-count>
              advertised-prefix-count
            </advertised-prefix-count>
          </bgp-rib>
        </bgp-peer>
      </bgp-information>
    </bgp-group-information>
```

Description

<bgp-rsync-ack-queue>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-ack-queue>
    <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
```

```
  </bgp-rsync-ack-queue>
</bgp-rsync-master>
```

Description

<bgp-rsync-ack-queue>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-ack-queue>
      <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
    </bgp-rsync-ack-queue>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-error-queue>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-error-queue>
    <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
  </bgp-rsync-error-queue>
</bgp-rsync-master>
```

Description

<bgp-rsync-error-queue>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-error-queue>
      <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
    </bgp-rsync-error-queue>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-estab-queue>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-estab-queue>
    <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
  </bgp-rsync-estab-queue>
</bgp-rsync-master>
```


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Description

<bgp-rsync-estab-queue>

Usage

```
<bgp-sync-information>
 <bgp-rsync-master>
  <bgp-rsync-estab-queue>
   <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
  </bgp-rsync-estab-queue>
 </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-estab-type>

Usage

```
<bgp-rsync-master>
 <bgp-rsync-estab-type>
  <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
 </bgp-rsync-estab-type>
</bgp-rsync-master>
```

Description

<bgp-rsync-estab-type>

Usage

```
<bgp-sync-information>
 <bgp-rsync-master>
  <bgp-rsync-estab-type>
   <bgp-rsync-queue-entry>....</bgp-rsync-queue-entry>
  </bgp-rsync-estab-type>
 </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-master>

Usage

```
<bgp-rsync-master>
 <bgp-rsync-session-state>
  bgp-rsync-session-state
 </bgp-rsync-session-state>
 <bgp-rsync-session-time>
  bgp-rsync-session-time
 </bgp-rsync-session-time>
 <bgp-rsync-session-flaps>
  bgp-rsync-session-flaps
 </bgp-rsync-session-flaps>
 <bgp-rsync-session-last-flap-reason>
```

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```
      bgp-rsync-session-last-flap-reason
    </bgp-rsync-session-last-flap-reason>
    <bgp-rsync-session-last-flap-error>
      bgp-rsync-session-last-flap-error
    </bgp-rsync-session-last-flap-error>
    <bgp-rsync-state>
      bgp-rsync-state
    </bgp-rsync-state>
    <bgp-rsync-state-time>
      bgp-rsync-state-time
    </bgp-rsync-state-time>
    <bgp-rsync-flags>
      bgp-rsync-flags
    </bgp-rsync-flags>
    <bgp-rsync-rt-state>
      bgp-rsync-rt-state
    </bgp-rsync-rt-state>
    <bgp-rsync-ackwait>
      bgp-rsync-ackwait
    </bgp-rsync-ackwait>
    <bgp-rsync-sowait>
      bgp-rsync-sowait
    </bgp-rsync-sowait>
    <bgp-rsync-sched>
      bgp-rsync-sched
    </bgp-rsync-sched>
    <bgp-rsync-sendbuf-count>
      bgp-rsync-sendbuf-count
    </bgp-rsync-sendbuf-count>
    <bgp-rsync-walker>
      bgp-rsync-walker
    </bgp-rsync-walker>
    <bgp-rsync-walk>....</bgp-rsync-walk>
    <bgp-rsync-estab-type>....</bgp-rsync-estab-type>
    <bgp-rsync-ack-queue>....</bgp-rsync-ack-queue>
    <bgp-rsync-estab-tm>
      bgp-rsync-estab-tm
    </bgp-rsync-estab-tm>
    <bgp-rsync-error-queue>....</bgp-rsync-error-queue>
    <bgp-rsync-stats>....</bgp-rsync-stats>
    <bgp-rsync-estab-queue>....</bgp-rsync-estab-queue>
  </bgp-rsync-master>
```

Description

<bgp-rsync-master>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-session-state>
      bgp-rsync-session-state
    </bgp-rsync-session-state>
    <bgp-rsync-session-time>
      bgp-rsync-session-time
```


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```
    </bgp-rsync-session-time>
    <bgp-rsync-session-flaps>
      bgp-rsync-session-flaps
    </bgp-rsync-session-flaps>
    <bgp-rsync-session-last-flap-reason>
      bgp-rsync-session-last-flap-reason
    </bgp-rsync-session-last-flap-reason>
    <bgp-rsync-session-last-flap-error>
      bgp-rsync-session-last-flap-error
    </bgp-rsync-session-last-flap-error>
    <bgp-rsync-state>
      bgp-rsync-state
    </bgp-rsync-state>
    <bgp-rsync-state-time>
      bgp-rsync-state-time
    </bgp-rsync-state-time>
    <bgp-rsync-flags>
      bgp-rsync-flags
    </bgp-rsync-flags>
    <bgp-rsync-rt-state>
      bgp-rsync-rt-state
    </bgp-rsync-rt-state>
    <bgp-rsync-ackwait>
      bgp-rsync-ackwait
    </bgp-rsync-ackwait>
    <bgp-rsync-sowait>
      bgp-rsync-sowait
    </bgp-rsync-sowait>
    <bgp-rsync-sched>
      bgp-rsync-sched
    </bgp-rsync-sched>
    <bgp-rsync-sendbuf-count>
      bgp-rsync-sendbuf-count
    </bgp-rsync-sendbuf-count>
    <bgp-rsync-walker>
      bgp-rsync-walker
    </bgp-rsync-walker>
    <bgp-rsync-walk>....</bgp-rsync-walk>
    <bgp-rsync-estab-type>....</bgp-rsync-estab-type>
    <bgp-rsync-ack-queue>....</bgp-rsync-ack-queue>
    <bgp-rsync-estab-tm>
      bgp-rsync-estab-tm
    </bgp-rsync-estab-tm>
    <bgp-rsync-error-queue>....</bgp-rsync-error-queue>
    <bgp-rsync-stats>....</bgp-rsync-stats>
    <bgp-rsync-estab-queue>....</bgp-rsync-estab-queue>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-queue-entry>

Usage

<bgp-rsync-queue-entry>

```
  <rsy-queue-instance>
   rsy-queue-instance
  </rsy-queue-instance>
  <rsy-queue-addr>
   rsy-queue-addr
  </rsy-queue-addr>
  <rsy-queue-more>
   rsy-queue-more
  </rsy-queue-more>
</bgp-rsync-queue-entry>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-estab-type>
    <bgp-rsync-queue-entry>
      <rsy-queue-instance>
        rsy-queue-instance
      </rsy-queue-instance>
      <rsy-queue-addr>
        rsy-queue-addr
      </rsy-queue-addr>
      <rsy-queue-more>
        rsy-queue-more
      </rsy-queue-more>
    </bgp-rsync-queue-entry>
  </bgp-rsync-estab-type>
</bgp-rsync-master>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-ack-queue>
    <bgp-rsync-queue-entry>
      <rsy-queue-instance>
        rsy-queue-instance
      </rsy-queue-instance>
      <rsy-queue-addr>
        rsy-queue-addr
      </rsy-queue-addr>
      <rsy-queue-more>
        rsy-queue-more
      </rsy-queue-more>
    </bgp-rsync-queue-entry>
  </bgp-rsync-ack-queue>
</bgp-rsync-master>
```


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Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-error-queue>
    <bgp-rsync-queue-entry>
      <rsy-queue-instance>
        rsy-queue-instance
      </rsy-queue-instance>
      <rsy-queue-addr>
        rsy-queue-addr
      </rsy-queue-addr>
      <rsy-queue-more>
        rsy-queue-more
      </rsy-queue-more>
    </bgp-rsync-queue-entry>
  </bgp-rsync-error-queue>
</bgp-rsync-master>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-estab-queue>
    <bgp-rsync-queue-entry>
      <rsy-queue-instance>
        rsy-queue-instance
      </rsy-queue-instance>
      <rsy-queue-addr>
        rsy-queue-addr
      </rsy-queue-addr>
      <rsy-queue-more>
        rsy-queue-more
      </rsy-queue-more>
    </bgp-rsync-queue-entry>
  </bgp-rsync-estab-queue>
</bgp-rsync-master>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-estab-type>
      <bgp-rsync-queue-entry>
        <rsy-queue-instance>
          rsy-queue-instance
        </rsy-queue-instance>
```

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```
        <rsy-queue-addr>
          rsy-queue-addr
        </rsy-queue-addr>
        <rsy-queue-more>
          rsy-queue-more
        </rsy-queue-more>
      </bgp-rsync-queue-entry>
    </bgp-rsync-estab-type>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-ack-queue>
      <bgp-rsync-queue-entry>
        <rsy-queue-instance>
          rsy-queue-instance
        </rsy-queue-instance>
        <rsy-queue-addr>
          rsy-queue-addr
        </rsy-queue-addr>
        <rsy-queue-more>
          rsy-queue-more
        </rsy-queue-more>
      </bgp-rsync-queue-entry>
    </bgp-rsync-ack-queue>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-error-queue>
      <bgp-rsync-queue-entry>
        <rsy-queue-instance>
          rsy-queue-instance
        </rsy-queue-instance>
        <rsy-queue-addr>
          rsy-queue-addr
        </rsy-queue-addr>
        <rsy-queue-more>
          rsy-queue-more
        </rsy-queue-more>
      </bgp-rsync-queue-entry>
    </bgp-rsync-error-queue>
```


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```
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-queue-entry>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-estab-queue>
      <bgp-rsync-queue-entry>
        <rsy-queue-instance>
          rsy-queue-instance
        </rsy-queue-instance>
        <rsy-queue-addr>
          rsy-queue-addr
        </rsy-queue-addr>
        <rsy-queue-more>
          rsy-queue-more
        </rsy-queue-more>
      </bgp-rsync-queue-entry>
    </bgp-rsync-estab-queue>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rsync-stats>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-stats>
    <open-send-count>
      open-send-count
    </open-send-count>
    <estab-send-count>
      estab-send-count
    </estab-send-count>
    <update-send-count>
      update-send-count
    </update-send-count>
    <error-send-count>
      error-send-count
    </error-send-count>
    <complete-send-count>
      complete-send-count
    </complete-send-count>
    <open-receive-count>
      open-receive-count
    </open-receive-count>
    <request-wild-receive-count>
      request-wild-receive-count
    </request-wild-receive-count>
```

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```
    <request-tgt-receive-count>
     request-tgt-receive-count
    </request-tgt-receive-count>
    <estab-ack-receive-count>
     estab-ack-receive-count
    </estab-ack-receive-count>
    <complete-ack-receive-count>
     complete-ack-receive-count
    </complete-ack-receive-count>
   </bgp-rsync-stats>
  </bgp-rsync-master>
```

Description

<bgp-rsync-stats>

Usage

```
<bgp-sync-information>
 <bgp-rsync-master>
  <bgp-rsync-stats>
   <open-send-count>
    open-send-count
   </open-send-count>
   <estab-send-count>
    estab-send-count
   </estab-send-count>
   <update-send-count>
    update-send-count
   </update-send-count>
   <error-send-count>
    error-send-count
   </error-send-count>
   <complete-send-count>
    complete-send-count
   </complete-send-count>
   <open-receive-count>
    open-receive-count
   </open-receive-count>
   <request-wild-receive-count>
    request-wild-receive-count
   </request-wild-receive-count>
   <request-tgt-receive-count>
    request-tgt-receive-count
   </request-tgt-receive-count>
   <estab-ack-receive-count>
    estab-ack-receive-count
   </estab-ack-receive-count>
   <complete-ack-receive-count>
    complete-ack-receive-count
   </complete-ack-receive-count>
  </bgp-rsync-stats>
 </bgp-rsync-master>
</bgp-sync-information>
```


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Description

<bgp-rsync-walk>

Usage

```
<bgp-rsync-master>
  <bgp-rsync-walk>
    <bgp-rsync-walk-table>
      bgp-rsync-walk-table
    </bgp-rsync-walk-table>
    <bgp-rsync-walk-prefix>
      bgp-rsync-walk-prefix
    </bgp-rsync-walk-prefix>
    <bgp-rsync-walk-prefixlen>
      bgp-rsync-walk-prefixlen
    </bgp-rsync-walk-prefixlen>
    <queue-count>
      queue-count
    </queue-count>
  </bgp-rsync-walk>
</bgp-rsync-master>
```

Description

<bgp-rsync-walk>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>
    <bgp-rsync-walk>
      <bgp-rsync-walk-table>
        bgp-rsync-walk-table
      </bgp-rsync-walk-table>
      <bgp-rsync-walk-prefix>
        bgp-rsync-walk-prefix
      </bgp-rsync-walk-prefix>
      <bgp-rsync-walk-prefixlen>
        bgp-rsync-walk-prefixlen
      </bgp-rsync-walk-prefixlen>
      <queue-count>
        queue-count
      </queue-count>
    </bgp-rsync-walk>
  </bgp-rsync-master>
</bgp-sync-information>
```

Description

<bgp-rtf-brief>

Usage

```
<bgp-rtf-brief>
  <group-name>
    group-name
```

```
  </group-name>
  <table-name>
   table-name
  </table-name>
  <bgp-rtf-state-flags>
   bgp-rtf-state-flags
  </bgp-rtf-state-flags>
  <bgp-rtf-entries>
   bgp-rtf-entries
  </bgp-rtf-entries>
</bgp-rtf-brief>
```

Description

<bgp-rtf-brief>

Usage

```
<bgp-rtf-information>
  <bgp-rtf-brief>
    <group-name>
     group-name
    </group-name>
    <table-name>
     table-name
    </table-name>
    <bgp-rtf-state-flags>
     bgp-rtf-state-flags
    </bgp-rtf-state-flags>
    <bgp-rtf-entries>
     bgp-rtf-entries
    </bgp-rtf-entries>
  </bgp-rtf-brief>
</bgp-rtf-information>
```

Description

<bgp-rtf-entry>

Usage

```
<bgp-rtf-entry>
  <rtarget>
   rtarget
  </rtarget>
  <rtarget-mask>
   rtarget-mask
  </rtarget-mask>
</bgp-rtf-entry>
```

Description

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<bgp-rtf-entry>

Usage

```
<bgp-rtf-state>
  <bgp-rtf-entry>
    <rtarget>
      rtarget
    </rtarget>
    <rtarget-mask>
      rtarget-mask
    </rtarget-mask>
  </bgp-rtf-entry>
</bgp-rtf-state>
```

Description

<bgp-rtf-entry>

Usage

```
<bgp-rtf-group>
  <bgp-rtf-state>
    <bgp-rtf-entry>
      <rtarget>
        rtarget
      </rtarget>
      <rtarget-mask>
        rtarget-mask
      </rtarget-mask>
    </bgp-rtf-entry>
  </bgp-rtf-state>
</bgp-rtf-group>
```

Description

<bgp-rtf-entry>

Usage

```
<bgp-rtf-information>
  <bgp-rtf-group>
    <bgp-rtf-state>
      <bgp-rtf-entry>
        <rtarget>
          rtarget
        </rtarget>
        <rtarget-mask>
          rtarget-mask
        </rtarget-mask>
      </bgp-rtf-entry>
    </bgp-rtf-state>
  </bgp-rtf-group>
</bgp-rtf-information>
```

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Description

<bgp-rtf-group>

Usage

```
<bgp-rtf-group>
  <group-name>
    group-name
  </group-name>
  <rtarget-recv-mask>
    rtarget-recv-mask
  </rtarget-recv-mask>
  <default-mask>
    default-mask
  </default-mask>
  <bgp-rtf-state>....</bgp-rtf-state>
</bgp-rtf-group>
```

Description

<bgp-rtf-group>

Usage

```
<bgp-rtf-information>
  <bgp-rtf-group>
    <group-name>
      group-name
    </group-name>
    <rtarget-recv-mask>
      rtarget-recv-mask
    </rtarget-recv-mask>
    <default-mask>
      default-mask
    </default-mask>
    <bgp-rtf-state>....</bgp-rtf-state>
  </bgp-rtf-group>
</bgp-rtf-information>
```

Description

<bgp-rtf-information>

Usage

```
<bgp-rtf-information>
  <bgp-rtf-brief>....</bgp-rtf-brief>
  <bgp-rtf-group>....</bgp-rtf-group>
</bgp-rtf-information>
```

Description BGP route target filtering information

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<bgp-rtf-state>

Usage

```
<bgp-rtf-state>
  <table-name>
    table-name
  </table-name>
  <bgp-rtf-state-flags>
    bgp-rtf-state-flags
  </bgp-rtf-state-flags>
  <bgp-rtf-entries>
    bgp-rtf-entries
  </bgp-rtf-entries>
  <bgp-rtf-entry>....</bgp-rtf-entry>
</bgp-rtf-state>
```

Description

<bgp-rtf-state>

Usage

```
<bgp-rtf-group>
  <bgp-rtf-state>
    <table-name>
      table-name
    </table-name>
    <bgp-rtf-state-flags>
      bgp-rtf-state-flags
    </bgp-rtf-state-flags>
    <bgp-rtf-entries>
      bgp-rtf-entries
    </bgp-rtf-entries>
    <bgp-rtf-entry>....</bgp-rtf-entry>
  </bgp-rtf-state>
</bgp-rtf-group>
```

Description

<bgp-rtf-state>

Usage

```
<bgp-rtf-information>
  <bgp-rtf-group>
    <bgp-rtf-state>
      <table-name>
        table-name
      </table-name>
      <bgp-rtf-state-flags>
        bgp-rtf-state-flags
      </bgp-rtf-state-flags>
      <bgp-rtf-entries>
        bgp-rtf-entries
      </bgp-rtf-entries>
```

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```
      <bgp-rtf-entry>....</bgp-rtf-entry>
    </bgp-rtf-state>
  </bgp-rtf-group>
</bgp-rtf-information>
```

Description

<bgp-standby>

Usage

```
<bgp-standby>
  <bgp-standby-state>
    bgp-standby-state
  </bgp-standby-state>
  <bgp-standby-last-trans>
    bgp-standby-last-trans
  </bgp-standby-last-trans>
  <bgp-standby-sendbuf>
    bgp-standby-sendbuf
  </bgp-standby-sendbuf>
  <bgp-unsync-timer>
    bgp-unsync-timer
  </bgp-unsync-timer>
  <bgp-unsync-pending-tm>
    bgp-unsync-pending-tm
  </bgp-unsync-pending-tm>
  <bgp-unsync-queue>....</bgp-unsync-queue>
  <bgp-unsync-pending>....</bgp-unsync-pending>
  <bgp-standby-sync-queue>....</bgp-standby-sync-queue>
</bgp-standby>
```

Description

<bgp-standby>

Usage

```
<bgp-sync-information>
  <bgp-standby>
    <bgp-standby-state>
      bgp-standby-state
    </bgp-standby-state>
    <bgp-standby-last-trans>
      bgp-standby-last-trans
    </bgp-standby-last-trans>
    <bgp-standby-sendbuf>
      bgp-standby-sendbuf
    </bgp-standby-sendbuf>
    <bgp-unsync-timer>
      bgp-unsync-timer
    </bgp-unsync-timer>
    <bgp-unsync-pending-tm>
      bgp-unsync-pending-tm
    </bgp-unsync-pending-tm>
    <bgp-unsync-queue>....</bgp-unsync-queue>
```


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```
    <bgp-unsync-pending>....</bgp-unsync-pending>
    <bgp-standby-sync-queue>....</bgp-standby-sync-queue>
   </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-standby-sync-entry>

Usage

```
<bgp-standby-sync-entry>
 <bstandby-iid>
  bstandby-iid
 </bstandby-iid>
 <bstandby-addr>
  bstandby-addr
 </bstandby-addr>
</bgp-standby-sync-entry>
```

Description

<bgp-standby-sync-entry>

Usage

```
<bgp-standby>
 <bgp-standby-sync-queue>
  <bgp-standby-sync-entry>
   <bstandby-iid>
    bstandby-iid
   </bstandby-iid>
   <bstandby-addr>
    bstandby-addr
   </bstandby-addr>
  </bgp-standby-sync-entry>
 </bgp-standby-sync-queue>
</bgp-standby>
```

Description

<bgp-standby-sync-entry>

Usage

```
<bgp-sync-information>
 <bgp-standby>
  <bgp-standby-sync-queue>
   <bgp-standby-sync-entry>
    <bstandby-iid>
     bstandby-iid
    </bstandby-iid>
    <bstandby-addr>
     bstandby-addr
    </bstandby-addr>
   </bgp-standby-sync-entry>
```

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```
    </bgp-standby-sync-queue>
  </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-standby-sync-queue>

Usage

```
<bgp-standby>
  <bgp-standby-sync-queue>
    <bgp-standby-sync-entry>....</bgp-standby-sync-entry>
  </bgp-standby-sync-queue>
</bgp-standby>
```

Description

<bgp-standby-sync-queue>

Usage

```
<bgp-sync-information>
  <bgp-standby>
    <bgp-standby-sync-queue>
      <bgp-standby-sync-entry>....</bgp-standby-sync-entry>
    </bgp-standby-sync-queue>
  </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-sync-information>

Usage

```
<bgp-sync-information>
  <bgp-rsync-master>....</bgp-rsync-master>
  <bgp-standby>....</bgp-standby>
</bgp-sync-information>
```

Description BGP synchronization information

<bgp-traffic-statistics>

Usage

```
<bgp-traffic-statistics>
  <bgp-prefix>
    bgp-prefix
  </bgp-prefix>
  <bgp-traffic-type>
    bgp-traffic-type
  </bgp-traffic-type>
  <bgp-traffic-error>
```


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```
  bgp-traffic-error
 </bgp-traffic-error>
 <bgp-traffic-statistics-packet-count>
  bgp-traffic-statistics-packet-count
 </bgp-traffic-statistics-packet-count>
 <bgp-traffic-statistics-byte-count>
  bgp-traffic-statistics-byte-count
 </bgp-traffic-statistics-byte-count>
 <bgp-traffic-statistics-egress-as>
  bgp-traffic-statistics-egress-as
 </bgp-traffic-statistics-egress-as>
 <bgp-traffic-statistics-advertised-fec-label>
  bgp-traffic-statistics-advertised-fec-label
 </bgp-traffic-statistics-advertised-fec-label>
</bgp-traffic-statistics>
```

Description

<bgp-traffic-statistics>

Usage

```
<bgp-traffic-statistics-information>
 <bgp-traffic-statistics>
  <bgp-prefix>
   bgp-prefix
  </bgp-prefix>
  <bgp-traffic-type>
   bgp-traffic-type
  </bgp-traffic-type>
  <bgp-traffic-error>
   bgp-traffic-error
  </bgp-traffic-error>
  <bgp-traffic-statistics-packet-count>
   bgp-traffic-statistics-packet-count
  </bgp-traffic-statistics-packet-count>
  <bgp-traffic-statistics-byte-count>
   bgp-traffic-statistics-byte-count
  </bgp-traffic-statistics-byte-count>
  <bgp-traffic-statistics-egress-as>
   bgp-traffic-statistics-egress-as
  </bgp-traffic-statistics-egress-as>
  <bgp-traffic-statistics-advertised-fec-label>
   bgp-traffic-statistics-advertised-fec-label
  </bgp-traffic-statistics-advertised-fec-label>
 </bgp-traffic-statistics>
</bgp-traffic-statistics-information>
```

Description

<bgp-traffic-statistics-error>

Usage

```
<bgp-traffic-statistics-error>
 <bgp-traffic-error>
```

```
    bgp-traffic-error
   </bgp-traffic-error>
  </bgp-traffic-statistics-error>
```

Description

<bgp-traffic-statistics-error>

Usage

```
<bgp-traffic-statistics-information>
  <bgp-traffic-statistics-error>
    <bgp-traffic-error>
      bgp-traffic-error
    </bgp-traffic-error>
  </bgp-traffic-statistics-error>
</bgp-traffic-statistics-information>
```

Description

<bgp-traffic-statistics-header>

Usage

```
<bgp-traffic-statistics-header>
  <group-name>
    group-name
  </group-name>
  <group-index>
    group-index
  </group-index>
  <nlri-name>
    nlri-name
  </nlri-name>
</bgp-traffic-statistics-header>
```

Description

<bgp-traffic-statistics-header>

Usage

```
<bgp-traffic-statistics-information>
  <bgp-traffic-statistics-header>
    <group-name>
      group-name
    </group-name>
    <group-index>
      group-index
    </group-index>
    <nlri-name>
      nlri-name
    </nlri-name>
  </bgp-traffic-statistics-header>
</bgp-traffic-statistics-information>
```


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Description

<bgp-traffic-statistics-information>

Usage

```
<bgp-traffic-statistics-information>
  <bgp-traffic-statistics-header>....</bgp-traffic-statistics-header>
  <bgp-traffic-statistics>....</bgp-traffic-statistics>
  <bgp-traffic-statistics-error>....</bgp-traffic-statistics-error>
</bgp-traffic-statistics-information>
```

Description

<bgp-unsync-entry>

Usage

```
<bgp-unsync-entry>
  <usy-iid>
    usy-iid
  </usy-iid>
  <usy-addr>
    usy-addr
  </usy-addr>
  <usy-elapsed>
    usy-elapsed
  </usy-elapsed>
  <usy-flags>
    usy-flags
  </usy-flags>
  <usy-more>
    usy-more
  </usy-more>
</bgp-unsync-entry>
```

Description

<bgp-unsync-entry>

Usage

```
<bgp-standby>
  <bgp-unsync-queue>
    <bgp-unsync-entry>
      <usy-iid>
        usy-iid
      </usy-iid>
      <usy-addr>
        usy-addr
      </usy-addr>
      <usy-elapsed>
        usy-elapsed
      </usy-elapsed>
      <usy-flags>
        usy-flags
      </usy-flags>
```

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```
        <usy-more>
          usy-more
        </usy-more>
      </bgp-unsync-entry>
    </bgp-unsync-queue>
  </bgp-standby>
```

Description

<bgp-unsync-entry>

Usage

```
<bgp-standby>
  <bgp-unsync-pending>
    <bgp-unsync-entry>
      <usy-iid>
        usy-iid
      </usy-iid>
      <usy-addr>
        usy-addr
      </usy-addr>
      <usy-elapsed>
        usy-elapsed
      </usy-elapsed>
      <usy-flags>
        usy-flags
      </usy-flags>
      <usy-more>
        usy-more
      </usy-more>
    </bgp-unsync-entry>
  </bgp-unsync-pending>
</bgp-standby>
```

Description

<bgp-unsync-entry>

Usage

```
<bgp-sync-information>
  <bgp-standby>
    <bgp-unsync-queue>
      <bgp-unsync-entry>
        <usy-iid>
          usy-iid
        </usy-iid>
        <usy-addr>
          usy-addr
        </usy-addr>
        <usy-elapsed>
          usy-elapsed
        </usy-elapsed>
        <usy-flags>
          usy-flags
```


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```
        </usy-flags>
        <usy-more>
          usy-more
        </usy-more>
      </bgp-unsync-entry>
    </bgp-unsync-queue>
  </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-unsync-entry>

Usage

```
<bgp-sync-information>
  <bgp-standby>
    <bgp-unsync-pending>
      <bgp-unsync-entry>
        <usy-iid>
          usy-iid
        </usy-iid>
        <usy-addr>
          usy-addr
        </usy-addr>
        <usy-elapsed>
          usy-elapsed
        </usy-elapsed>
        <usy-flags>
          usy-flags
        </usy-flags>
        <usy-more>
          usy-more
        </usy-more>
      </bgp-unsync-entry>
    </bgp-unsync-pending>
  </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-unsync-pending>

Usage

```
<bgp-standby>
  <bgp-unsync-pending>
    <bgp-unsync-entry>....</bgp-unsync-entry>
  </bgp-unsync-pending>
</bgp-standby>
```

Description

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<bgp-unsync-pending>

Usage

```
<bgp-sync-information>
 <bgp-standby>
  <bgp-unsync-pending>
   <bgp-unsync-entry>....</bgp-unsync-entry>
  </bgp-unsync-pending>
 </bgp-standby>
</bgp-sync-information>
```

Description

<bgp-unsync-queue>

Usage

```
<bgp-standby>
 <bgp-unsync-queue>
  <bgp-unsync-entry>....</bgp-unsync-entry>
 </bgp-unsync-queue>
</bgp-standby>
```

Description

<bgp-unsync-queue>

Usage

```
<bgp-sync-information>
 <bgp-standby>
  <bgp-unsync-queue>
   <bgp-unsync-entry>....</bgp-unsync-entry>
  </bgp-unsync-queue>
 </bgp-standby>
</bgp-sync-information>
```

Description

<bootstrap-family>

Usage

```
<pim-bootstrap-information>
 <bootstrap-family>
  <address-family>
   address-family
  </address-family>
  <address>
   address
  </address>
  <bootstrap-priority>
   bootstrap-priority
  </bootstrap-priority>
  <local-address>
```


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```
      local-address
    </local-address>
    <local-priority>
      local-priority
    </local-priority>
    <bootstrap-state>
      bootstrap-state
    </bootstrap-state>
    <bootstrap-timeout>
      bootstrap-timeout
    </bootstrap-timeout>
  </bootstrap-family>
</pim-bootstrap-information>
```

Description

<bypass-info>

Usage

```
<rsvp-interface>
  <bypass-info>
    <lp-status>
      lp-status
    </lp-status>
    <lp-requested>
      lp-requested
    </lp-requested>
    <lp-granted>
      lp-granted
    </lp-granted>
    <lp-failure>
      lp-failure
    </lp-failure>
    <total-bypass>
      total-bypass
    </total-bypass>
    <bypass-name>
      bypass-name
    </bypass-name>
    <bypass-state>
      bypass-state
    </bypass-state>
    <bypass-type>
      bypass-type
    </bypass-type>
    <rsvp-lp-psb-cnt>
      rsvp-lp-psb-cnt
    </rsvp-lp-psb-cnt>
    <rsvp-lp-backup-lsp-cnt>
      rsvp-lp-backup-lsp-cnt
    </rsvp-lp-backup-lsp-cnt>
    <lp-history>....</lp-history>
  </bypass-info>
</rsvp-interface>
```

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Description

<bypass-info>

Usage

```
<bypass-info>
  <lp-status>
    lp-status
  </lp-status>
  <lp-requested>
    lp-requested
  </lp-requested>
  <lp-granted>
    lp-granted
  </lp-granted>
  <lp-failure>
    lp-failure
  </lp-failure>
  <total-bypass>
    total-bypass
  </total-bypass>
  <bypass-name>
    bypass-name
  </bypass-name>
  <bypass-state>
    bypass-state
  </bypass-state>
  <bypass-type>
    bypass-type
  </bypass-type>
  <rsvp-lp-psb-cnt>
    rsvp-lp-psb-cnt
  </rsvp-lp-psb-cnt>
  <rsvp-lp-backup-lsp-cnt>
    rsvp-lp-backup-lsp-cnt
  </rsvp-lp-backup-lsp-cnt>
  <lp-history>....</lp-history>
</bypass-info>
```

Description

<bypass-info>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <bypass-info>
      <lp-status>
        lp-status
      </lp-status>
      <lp-requested>
        lp-requested
      </lp-requested>
      <lp-granted>
        lp-granted
```


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```
      </lp-granted>
      <lp-failure>
       lp-failure
      </lp-failure>
      <total-bypass>
       total-bypass
      </total-bypass>
      <bypass-name>
       bypass-name
      </bypass-name>
      <bypass-state>
       bypass-state
      </bypass-state>
      <bypass-type>
       bypass-type
      </bypass-type>
      <rsvp-lp-psb-cnt>
       rsvp-lp-psb-cnt
      </rsvp-lp-psb-cnt>
      <rsvp-lp-backup-lsp-cnt>
       rsvp-lp-backup-lsp-cnt
      </rsvp-lp-backup-lsp-cnt>
      <lp-history>....</lp-history>
     </bypass-info>
    </rsvp-interface>
</rsvp-interface-information>
```

Description

<c-multicast-ipv4>

Usage

```
<c-multicast-ipv4>
  <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
</c-multicast-ipv4>
```

Description

<c-multicast-ipv4>

Usage

```
<instance-entry>
  <c-multicast-ipv4>
    <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
  </c-multicast-ipv4>
</instance-entry>
```

Description

<c-multicast-ipv4>

Usage

```
<instance-family>
```

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```
  <instance-entry>
    <c-multicast-ipv4>
      <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
    </c-multicast-ipv4>
  </instance-entry>
</instance-family>
```

Description

<c-multicast-ipv4>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv4>
        <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
      </c-multicast-ipv4>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```

Description

<c-multicast-ipv4>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <instance-entry>
        <c-multicast-ipv4>
          <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
        </c-multicast-ipv4>
      </instance-entry>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<c-multicast-ipv4>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv4>
        <c-multicast-ipv4-entry>....</c-multicast-ipv4-entry>
      </c-multicast-ipv4>
    </instance-entry>
  </instance-family>
```


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```
</mvpn-instance-information>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<c-multicast-ipv4-entry>
  <c-multicast-address>
    c-multicast-address
  </c-multicast-address>
  <provider-tunnel-id>
    provider-tunnel-id
  </provider-tunnel-id>
  <c-multicast-property>
    c-multicast-property
  </c-multicast-property>
</c-multicast-ipv4-entry>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<c-multicast-ipv4>
  <c-multicast-ipv4-entry>
    <c-multicast-address>
      c-multicast-address
    </c-multicast-address>
    <provider-tunnel-id>
      provider-tunnel-id
    </provider-tunnel-id>
    <c-multicast-property>
      c-multicast-property
    </c-multicast-property>
  </c-multicast-ipv4-entry>
</c-multicast-ipv4>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<instance-entry>
  <c-multicast-ipv4>
    <c-multicast-ipv4-entry>
      <c-multicast-address>
        c-multicast-address
      </c-multicast-address>
      <provider-tunnel-id>
        provider-tunnel-id
      </provider-tunnel-id>
      <c-multicast-property>
```

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```
            c-multicast-property
          </c-multicast-property>
        </c-multicast-ipv4-entry>
      </c-multicast-ipv4>
    </instance-entry>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<instance-family>
  <instance-entry>
    <c-multicast-ipv4>
      <c-multicast-ipv4-entry>
        <c-multicast-address>
          c-multicast-address
        </c-multicast-address>
        <provider-tunnel-id>
          provider-tunnel-id
        </provider-tunnel-id>
        <c-multicast-property>
          c-multicast-property
        </c-multicast-property>
      </c-multicast-ipv4-entry>
    </c-multicast-ipv4>
  </instance-entry>
</instance-family>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv4>
        <c-multicast-ipv4-entry>
          <c-multicast-address>
            c-multicast-address
          </c-multicast-address>
          <provider-tunnel-id>
            provider-tunnel-id
          </provider-tunnel-id>
          <c-multicast-property>
            c-multicast-property
          </c-multicast-property>
        </c-multicast-ipv4-entry>
      </c-multicast-ipv4>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```


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Description

<c-multicast-ipv4-entry>

Usage

```
<mvpn-instance-information>
 <mvpn-instance>
  <instance-family>
   <instance-entry>
    <c-multicast-ipv4>
     <c-multicast-ipv4-entry>
      <c-multicast-address>
       c-multicast-address
      </c-multicast-address>
      <provider-tunnel-id>
       provider-tunnel-id
      </provider-tunnel-id>
      <c-multicast-property>
       c-multicast-property
      </c-multicast-property>
     </c-multicast-ipv4-entry>
    </c-multicast-ipv4>
   </instance-entry>
  </instance-family>
 </mvpn-instance>
</mvpn-instance-information>
```

Description

<c-multicast-ipv4-entry>

Usage

```
<mvpn-instance-information>
 <instance-family>
  <instance-entry>
   <c-multicast-ipv4>
    <c-multicast-ipv4-entry>
     <c-multicast-address>
      c-multicast-address
     </c-multicast-address>
     <provider-tunnel-id>
      provider-tunnel-id
     </provider-tunnel-id>
     <c-multicast-property>
      c-multicast-property
     </c-multicast-property>
    </c-multicast-ipv4-entry>
   </c-multicast-ipv4>
  </instance-entry>
 </instance-family>
</mvpn-instance-information>
```

Description

<c-multicast-ipv6>

Usage

```
<c-multicast-ipv6>
  <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
</c-multicast-ipv6>
```

Description

<c-multicast-ipv6>

Usage

```
<instance-entry>
  <c-multicast-ipv6>
    <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
  </c-multicast-ipv6>
</instance-entry>
```

Description

<c-multicast-ipv6>

Usage

```
<instance-family>
  <instance-entry>
    <c-multicast-ipv6>
      <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
    </c-multicast-ipv6>
  </instance-entry>
</instance-family>
```

Description

<c-multicast-ipv6>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv6>
        <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
      </c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```

Description

<c-multicast-ipv6>

Usage

```
<mvpn-instance-information>
```


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```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv6>
        <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
      </c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance>
</mvpn-instance-information>
```

Description

<c-multicast-ipv6>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv6>
        <c-multicast-ipv6-entry>....</c-multicast-ipv6-entry>
      </c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance-information>
```

Description

<c-multicast-ipv6-entry>

Usage

```
<c-multicast-ipv6-entry>
  <c-multicast-address>
    c-multicast-address
  </c-multicast-address>
  <provider-tunnel-id>
    provider-tunnel-id
  </provider-tunnel-id>
  <c-multicast-property>
    c-multicast-property
  </c-multicast-property>
</c-multicast-ipv6-entry>
```

Description

<c-multicast-ipv6-entry>

Usage

```
<c-multicast-ipv6>
  <c-multicast-ipv6-entry>
    <c-multicast-address>
      c-multicast-address
    </c-multicast-address>
```

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```
    <provider-tunnel-id>
     provider-tunnel-id
    </provider-tunnel-id>
    <c-multicast-property>
     c-multicast-property
    </c-multicast-property>
   </c-multicast-ipv6-entry>
  </c-multicast-ipv6>
```

Description

<c-multicast-ipv6-entry>

Usage

```
<instance-entry>
 <c-multicast-ipv6>
  <c-multicast-ipv6-entry>
   <c-multicast-address>
    c-multicast-address
   </c-multicast-address>
   <provider-tunnel-id>
    provider-tunnel-id
   </provider-tunnel-id>
   <c-multicast-property>
    c-multicast-property
   </c-multicast-property>
  </c-multicast-ipv6-entry>
 </c-multicast-ipv6>
</instance-entry>
```

Description

<c-multicast-ipv6-entry>

Usage

```
<instance-family>
 <instance-entry>
  <c-multicast-ipv6>
   <c-multicast-ipv6-entry>
    <c-multicast-address>
     c-multicast-address
    </c-multicast-address>
    <provider-tunnel-id>
     provider-tunnel-id
    </provider-tunnel-id>
    <c-multicast-property>
     c-multicast-property
    </c-multicast-property>
   </c-multicast-ipv6-entry>
  </c-multicast-ipv6>
 </instance-entry>
</instance-family>
```


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Description

<c-multicast-ipv6-entry>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv6>
        <c-multicast-ipv6-entry>
          <c-multicast-address>
            c-multicast-address
          </c-multicast-address>
          <provider-tunnel-id>
            provider-tunnel-id
          </provider-tunnel-id>
          <c-multicast-property>
            c-multicast-property
          </c-multicast-property>
        </c-multicast-ipv6-entry>
      </c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```

Description

<c-multicast-ipv6-entry>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <instance-entry>
        <c-multicast-ipv6>
          <c-multicast-ipv6-entry>
            <c-multicast-address>
              c-multicast-address
            </c-multicast-address>
            <provider-tunnel-id>
              provider-tunnel-id
            </provider-tunnel-id>
            <c-multicast-property>
              c-multicast-property
            </c-multicast-property>
          </c-multicast-ipv6-entry>
        </c-multicast-ipv6>
      </instance-entry>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

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<c-multicast-ipv6-entry>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <c-multicast-ipv6>
        <c-multicast-ipv6-entry>
          <c-multicast-address>
            c-multicast-address
          </c-multicast-address>
          <provider-tunnel-id>
            provider-tunnel-id
          </provider-tunnel-id>
          <c-multicast-property>
            c-multicast-property
          </c-multicast-property>
        </c-multicast-ipv6-entry>
      </c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance-information>
```

Description

<c-multicast-ipv6-summary>

Usage

```
<c-multicast-ipv6-summary>
  <c-multicast-ipv6-count>
    c-multicast-ipv6-count
  </c-multicast-ipv6-count>
</c-multicast-ipv6-summary>
```

Description

<c-multicast-ipv6-summary>

Usage

```
<instance-entry-summary>
  <c-multicast-ipv6-summary>
    <c-multicast-ipv6-count>
      c-multicast-ipv6-count
    </c-multicast-ipv6-count>
  </c-multicast-ipv6-summary>
</instance-entry-summary>
```

Description

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<c-multicast-ipv6-summary>

Usage

```
<instance-family>
  <instance-entry-summary>
    <c-multicast-ipv6-summary>
      <c-multicast-ipv6-count>
        c-multicast-ipv6-count
      </c-multicast-ipv6-count>
    </c-multicast-ipv6-summary>
  </instance-entry-summary>
</instance-family>
```

Description

<c-multicast-ipv6-summary>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry-summary>
      <c-multicast-ipv6-summary>
        <c-multicast-ipv6-count>
          c-multicast-ipv6-count
        </c-multicast-ipv6-count>
      </c-multicast-ipv6-summary>
    </instance-entry-summary>
  </instance-family>
</mvpn-instance>
```

Description

<c-multicast-ipv6-summary>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <instance-entry-summary>
        <c-multicast-ipv6-summary>
          <c-multicast-ipv6-count>
            c-multicast-ipv6-count
          </c-multicast-ipv6-count>
        </c-multicast-ipv6-summary>
      </instance-entry-summary>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<c-multicast-ipv6-summary>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry-summary>
      <c-multicast-ipv6-summary>
        <c-multicast-ipv6-count>
          c-multicast-ipv6-count
        </c-multicast-ipv6-count>
      </c-multicast-ipv6-summary>
    </instance-entry-summary>
  </instance-family>
</mvpn-instance-information>
```

Description

<c-multicast-summary>

Usage

```
<c-multicast-summary>
  <c-multicast-ipv4-count>
    c-multicast-ipv4-count
  </c-multicast-ipv4-count>
</c-multicast-summary>
```

Description

<c-multicast-summary>

Usage

```
<instance-entry-summary>
  <c-multicast-summary>
    <c-multicast-ipv4-count>
      c-multicast-ipv4-count
    </c-multicast-ipv4-count>
  </c-multicast-summary>
</instance-entry-summary>
```

Description

<c-multicast-summary>

Usage

```
<instance-family>
  <instance-entry-summary>
    <c-multicast-summary>
      <c-multicast-ipv4-count>
        c-multicast-ipv4-count
      </c-multicast-ipv4-count>
    </c-multicast-summary>
  </instance-entry-summary>
```


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```
</instance-family>
```

Description

<c-multicast-summary>

Usage

```
<mvpn-instance>
 <instance-family>
  <instance-entry-summary>
   <c-multicast-summary>
    <c-multicast-ipv4-count>
     c-multicast-ipv4-count
    </c-multicast-ipv4-count>
   </c-multicast-summary>
  </instance-entry-summary>
 </instance-family>
</mvpn-instance>
```

Description

<c-multicast-summary>

Usage

```
<mvpn-instance-information>
 <mvpn-instance>
  <instance-family>
   <instance-entry-summary>
    <c-multicast-summary>
     <c-multicast-ipv4-count>
      c-multicast-ipv4-count
     </c-multicast-ipv4-count>
    </c-multicast-summary>
   </instance-entry-summary>
  </instance-family>
 </mvpn-instance>
</mvpn-instance-information>
```

Description

<c-multicast-summary>

Usage

```
<mvpn-instance-information>
 <instance-family>
  <instance-entry-summary>
   <c-multicast-summary>
    <c-multicast-ipv4-count>
     c-multicast-ipv4-count
    </c-multicast-ipv4-count>
   </c-multicast-summary>
  </instance-entry-summary>
 </instance-family>
```

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```
</mvpn-instance-information>
```

Description

<ccc-connection>

Usage

```
<ccc-connection>
  <ccc-connection-name>
    ccc-connection-name
  </ccc-connection-name>
  <ccc-connection-type>
    ccc-connection-type
  </ccc-connection-type>
  <ccc-connection-status>
    ccc-connection-status
  </ccc-connection-status>
  <ccc-connection-last-uptime>
    ccc-connection-last-uptime
  </ccc-connection-last-uptime>
  <ccc-connection-up-transitions>
    ccc-connection-up-transitions
  </ccc-connection-up-transitions>
  <ccc-connection-circuit>....</ccc-connection-circuit>
  <ccc-connection-in-labels>....</ccc-connection-in-labels>
  <ccc-connection-out-labels>....</ccc-connection-out-labels>
  <ccc-connection-history>....</ccc-connection-history>
</ccc-connection>
```

Description

<ccc-connection>

Usage

```
<ccc-information>
  <ccc-connection>
    <ccc-connection-name>
      ccc-connection-name
    </ccc-connection-name>
    <ccc-connection-type>
      ccc-connection-type
    </ccc-connection-type>
    <ccc-connection-status>
      ccc-connection-status
    </ccc-connection-status>
    <ccc-connection-last-uptime>
      ccc-connection-last-uptime
    </ccc-connection-last-uptime>
    <ccc-connection-up-transitions>
      ccc-connection-up-transitions
    </ccc-connection-up-transitions>
    <ccc-connection-circuit>....</ccc-connection-circuit>
    <ccc-connection-in-labels>....</ccc-connection-in-labels>
    <ccc-connection-out-labels>....</ccc-connection-out-labels>
```


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```
    <ccc-connection-history>....</ccc-connection-history>
  </ccc-connection>
</ccc-information>
```

Description

<ccc-connection-circuit>

Usage

```
<ccc-connection>
  <ccc-connection-circuit>
    <ccc-circuit-name>
      ccc-circuit-name
    </ccc-circuit-name>
    <ccc-circuit-type>
      ccc-circuit-type
    </ccc-circuit-type>
    <ccc-circuit-status>
      ccc-circuit-status
    </ccc-circuit-status>
  </ccc-connection-circuit>
</ccc-connection>
```

Description

<ccc-connection-circuit>

Usage

```
<ccc-information>
  <ccc-connection>
    <ccc-connection-circuit>
      <ccc-circuit-name>
        ccc-circuit-name
      </ccc-circuit-name>
      <ccc-circuit-type>
        ccc-circuit-type
      </ccc-circuit-type>
      <ccc-circuit-status>
        ccc-circuit-status
      </ccc-circuit-status>
    </ccc-connection-circuit>
  </ccc-connection>
</ccc-information>
```

Description

<ccc-connection-history>

Usage

```
<ccc-connection>
  <ccc-connection-history>
    <ccc-connection-history-log>....</ccc-connection-history-log>
  </ccc-connection-history>
```

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```
</ccc-connection>
```

Description

<ccc-connection-history>

Usage

```
<ccc-information>
 <ccc-connection>
  <ccc-connection-history>
   <ccc-connection-history-log>....</ccc-connection-history-log>
  </ccc-connection-history>
 </ccc-connection>
</ccc-information>
```

Description

<ccc-connection-history-log>

Usage

```
<ccc-connection>
 <ccc-connection-history>
  <ccc-connection-history-log>
   <event-time>
    event-time
   </event-time>
   <event-name>
    event-name
   </event-name>
   <interface-label-info>
    interface-label-info
   </interface-label-info>
   <receive-lsp-count>
    receive-lsp-count
   </receive-lsp-count>
   <transmit-lsp-count>
    transmit-lsp-count
   </transmit-lsp-count>
  </ccc-connection-history-log>
 </ccc-connection-history>
</ccc-connection>
```

Description

<ccc-connection-history-log>

Usage

```
<ccc-information>
 <ccc-connection>
  <ccc-connection-history>
   <ccc-connection-history-log>
    <event-time>
     event-time
```


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```
        </event-time>
        <event-name>
          event-name
        </event-name>
        <interface-label-info>
          interface-label-info
        </interface-label-info>
        <receive-lsp-count>
          receive-lsp-count
        </receive-lsp-count>
        <transmit-lsp-count>
          transmit-lsp-count
        </transmit-lsp-count>
      </ccc-connection-history-log>
    </ccc-connection-history>
  </ccc-connection>
</ccc-information>
```

Description

<ccc-connection-in-labels>

Usage

```
<ccc-connection>
  <ccc-connection-in-labels>
    <mpls-label>
      mpls-label
    </mpls-label>
    <no-label>
      no-label
    </no-label>
  </ccc-connection-in-labels>
</ccc-connection>
```

Description Incoming labels for this CCC connection

<ccc-connection-in-labels>

Usage

```
<ccc-information>
  <ccc-connection>
    <ccc-connection-in-labels>
      <mpls-label>
        mpls-label
      </mpls-label>
      <no-label>
        no-label
      </no-label>
    </ccc-connection-in-labels>
  </ccc-connection>
</ccc-information>
```

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Description Incoming labels for this CCC connection

<ccc-connection-out-labels>

Usage

```
<ccc-connection>
  <ccc-connection-out-labels>
    <mpls-label>
      mpls-label
    </mpls-label>
    <no-label>
      no-label
    </no-label>
  </ccc-connection-out-labels>
</ccc-connection>
```

Description Outgoing labels for this CCC connection

<ccc-connection-out-labels>

Usage

```
<ccc-information>
  <ccc-connection>
    <ccc-connection-out-labels>
      <mpls-label>
        mpls-label
      </mpls-label>
      <no-label>
        no-label
      </no-label>
    </ccc-connection-out-labels>
  </ccc-connection>
</ccc-information>
```

Description Outgoing labels for this CCC connection

<ccc-information>

Usage

```
<ccc-information>
  <ccc-no-connections>
    ccc-no-connections
  </ccc-no-connections>
  <ccc-link-monitoring-status>
    ccc-link-monitoring-status
  </ccc-link-monitoring-status>
  <ccc-restarting>
    ccc-restarting
  </ccc-restarting>
  <ccc-connection>....</ccc-connection>
</ccc-information>
```


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Description

<communities>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <communities>
     <community>
      community
     </community>
     <extended-community>
      extended-community
     </extended-community>
    </communities>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```

Description

<communities>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <attrset>
     <communities>
      <community>
       community
      </community>
      <extended-community>
       extended-community
      </extended-community>
     </communities>
    </attrset>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```

Description

<communities>

Usage

```
<route-information>
 <route-table>
  <rt>
```

```
      <communities>
       <community>
        community
       </community>
       <extended-community>
        extended-community
       </extended-community>
      </communities>
     </rt>
    </route-table>
</route-information>
```

Description

<communities>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <communities>
     <community>
      community
     </community>
     <extended-community>
      extended-community
     </extended-community>
    </communities>
   </rt-entry>
  </rt>
 </route-table>
</route-summary-information>
```

Description

<communities>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <attrset>
     <communities>
      <community>
       community
      </community>
      <extended-community>
       extended-community
      </extended-community>
     </communities>
    </attrset>
   </rt-entry>
```


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```
    </rt>
  </route-table>
</route-summary-information>
```

Description

<communities>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <communities>
        <community>
          community
        </community>
        <extended-community>
          extended-community
        </extended-community>
      </communities>
    </rt>
  </route-table>
</route-summary-information>
```

Description

<connection>

Usage

```
<connection>
  <connection-id>
    connection-id
  </connection-id>
  <connection-type>
    connection-type
  </connection-type>
  <connection-status>
    connection-status
  </connection-status>
  <last-change>
    last-change
  </last-change>
  <up-transitions>
    up-transitions
  </up-transitions>
  <local-interface>....</local-interface>
  <remote-interface>....</remote-interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <control-word>
    control-word
  </control-word>
  <control-word-type>
```

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```
    control-word-type
  </control-word-type>
  <interface-encapsulation>
    interface-encapsulation
  </interface-encapsulation>
  <inbound-label>
    inbound-label
  </inbound-label>
  <outbound-label>
    outbound-label
  </outbound-label>
  <connection-bandwidth>....</connection-bandwidth>
  <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
  <connection-protection>
    connection-protection
  </connection-protection>
  <history>....</history>
  <l2vpn-local-site-id>
    l2vpn-local-site-id
  </l2vpn-local-site-id>
  <l2vpn-remote-site-id>
    l2vpn-remote-site-id
  </l2vpn-remote-site-id>
  <pw-status-tlv>
    pw-status-tlv
  </pw-status-tlv>
  <local-pw-status-code>
    local-pw-status-code
  </local-pw-status-code>
  <remote-pw-status-code>
    remote-pw-status-code
  </remote-pw-status-code>
  <mesh-group-name>
    mesh-group-name
  </mesh-group-name>
  <egress-protection-protector>....</egress-protection-protector>
  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
</connection>
```

Description

<connection>

Usage

```
<mesh-group-connection>
  <connection>
    <connection-id>
      connection-id
    </connection-id>
    <connection-type>
      connection-type
    </connection-type>
    <connection-status>
      connection-status
    </connection-status>
```


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```
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
      <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
    </connection>
  </mesh-group-connection>
```

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Description

<connection>

Usage

```
<instance>
  <reference-site>
    <connection>
      <connection-id>
        connection-id
      </connection-id>
      <connection-type>
        connection-type
      </connection-type>
      <connection-status>
        connection-status
      </connection-status>
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
     <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
```


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```
      <pw-status-tlv>
       pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
       local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
       remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
       mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
     </connection>
    </reference-site>
   </instance>
```

Description

<connection>

Usage

```
<instance>
 <reference-site>
  <mesh-group-connection>
   <connection>
    <connection-id>
     connection-id
    </connection-id>
    <connection-type>
     connection-type
    </connection-type>
    <connection-status>
     connection-status
    </connection-status>
    <last-change>
     last-change
    </last-change>
    <up-transitions>
     up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
     remote-pe
    </remote-pe>
    <control-word>
     control-word
    </control-word>
    <control-word-type>
     control-word-type
    </control-word-type>
    <interface-encapsulation>
     interface-encapsulation
```

```
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

    </connection>
  </mesh-group-connection>
 </reference-site>
</instance>
```

Description

<connection>

Usage

```
<instance>
 <ldp-vpls-reference-site>
  <connection>
   <connection-id>
    connection-id
   </connection-id>
   <connection-type>
    connection-type
   </connection-type>
   <connection-status>
```


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```
    connection-status
  </connection-status>
  <last-change>
    last-change
  </last-change>
  <up-transitions>
    up-transitions
  </up-transitions>
  <local-interface>....</local-interface>
  <remote-interface>....</remote-interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <control-word>
    control-word
  </control-word>
  <control-word-type>
    control-word-type
  </control-word-type>
  <interface-encapsulation>
    interface-encapsulation
  </interface-encapsulation>
  <inbound-label>
    inbound-label
  </inbound-label>
  <outbound-label>
    outbound-label
  </outbound-label>
  <connection-bandwidth>....</connection-bandwidth>
 <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

  <connection-protection>
    connection-protection
  </connection-protection>
  <history>....</history>
  <l2vpn-local-site-id>
    l2vpn-local-site-id
  </l2vpn-local-site-id>
  <l2vpn-remote-site-id>
    l2vpn-remote-site-id
  </l2vpn-remote-site-id>
  <pw-status-tlv>
    pw-status-tlv
  </pw-status-tlv>
  <local-pw-status-code>
    local-pw-status-code
  </local-pw-status-code>
  <remote-pw-status-code>
    remote-pw-status-code
  </remote-pw-status-code>
  <mesh-group-name>
    mesh-group-name
  </mesh-group-name>
  <egress-protection-protector>....</egress-protection-protector>
  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
</connection>
```

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```
  </ldp-vpls-reference-site>
</instance>
```

Description

<connection>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
        </remote-pe>
        <control-word>
          control-word
        </control-word>
        <control-word-type>
          control-word-type
        </control-word-type>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
        <inbound-label>
          inbound-label
        </inbound-label>
        <outbound-label>
          outbound-label
        </outbound-label>
        <connection-bandwidth>....</connection-bandwidth>
      <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

        <connection-protection>
          connection-protection
        </connection-protection>
        <history>....</history>
        <l2vpn-local-site-id>
```


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```
        l2vpn-local-site-id
       </l2vpn-local-site-id>
       <l2vpn-remote-site-id>
        l2vpn-remote-site-id
       </l2vpn-remote-site-id>
       <pw-status-tlv>
        pw-status-tlv
       </pw-status-tlv>
       <local-pw-status-code>
        local-pw-status-code
       </local-pw-status-code>
       <remote-pw-status-code>
        remote-pw-status-code
       </remote-pw-status-code>
       <mesh-group-name>
        mesh-group-name
       </mesh-group-name>
       <egress-protection-protector>....</egress-protection-protector>
       <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

      </connection>
     </mesh-group-connection>
    </ldp-vpls-reference-site>
   </instance>
```

Description

<connection>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-connection>
   <connection>
    <connection-id>
     connection-id
    </connection-id>
    <connection-type>
     connection-type
    </connection-type>
    <connection-status>
     connection-status
    </connection-status>
    <last-change>
     last-change
    </last-change>
    <up-transitions>
     up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
     remote-pe
    </remote-pe>
    <control-word>
```

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```
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
          <outbound-label>
            outbound-label
          </outbound-label>
          <connection-bandwidth>....</connection-bandwidth>
        <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

          <connection-protection>
            connection-protection
          </connection-protection>
          <history>....</history>
          <l2vpn-local-site-id>
            l2vpn-local-site-id
          </l2vpn-local-site-id>
          <l2vpn-remote-site-id>
            l2vpn-remote-site-id
          </l2vpn-remote-site-id>
          <pw-status-tlv>
            pw-status-tlv
          </pw-status-tlv>
          <local-pw-status-code>
            local-pw-status-code
          </local-pw-status-code>
          <remote-pw-status-code>
            remote-pw-status-code
          </remote-pw-status-code>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
```

Description

<connection>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
```


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```
<connection>
  <connection-id>
    connection-id
  </connection-id>
  <connection-type>
    connection-type
  </connection-type>
  <connection-status>
    connection-status
  </connection-status>
  <last-change>
    last-change
  </last-change>
  <up-transitions>
    up-transitions
  </up-transitions>
  <local-interface>....</local-interface>
  <remote-interface>....</remote-interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <control-word>
    control-word
  </control-word>
  <control-word-type>
    control-word-type
  </control-word-type>
  <interface-encapsulation>
    interface-encapsulation
  </interface-encapsulation>
  <inbound-label>
    inbound-label
  </inbound-label>
  <outbound-label>
    outbound-label
  </outbound-label>
  <connection-bandwidth>....</connection-bandwidth>
<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

  <connection-protection>
    connection-protection
  </connection-protection>
  <history>....</history>
  <l2vpn-local-site-id>
    l2vpn-local-site-id
  </l2vpn-local-site-id>
  <l2vpn-remote-site-id>
    l2vpn-remote-site-id
  </l2vpn-remote-site-id>
  <pw-status-tlv>
    pw-status-tlv
  </pw-status-tlv>
  <local-pw-status-code>
    local-pw-status-code
  </local-pw-status-code>
  <remote-pw-status-code>
```

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```
            remote-pw-status-code
          </remote-pw-status-code>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
```

Description

<connection>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
```


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```
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
```

```
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

    </connection>
  </reference-site>
```


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```
  </instance>
</l2vpn-connection-information>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
          <outbound-label>
            outbound-label
          </outbound-label>
          <connection-bandwidth>....</connection-bandwidth>
        <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

          <connection-protection>
            connection-protection
          </connection-protection>
          <history>....</history>
```

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```
                <l2vpn-local-site-id>
                  l2vpn-local-site-id
                </l2vpn-local-site-id>
                <l2vpn-remote-site-id>
                  l2vpn-remote-site-id
                </l2vpn-remote-site-id>
                <pw-status-tlv>
                  pw-status-tlv
                </pw-status-tlv>
                <local-pw-status-code>
                  local-pw-status-code
                </local-pw-status-code>
                <remote-pw-status-code>
                  remote-pw-status-code
                </remote-pw-status-code>
                <mesh-group-name>
                  mesh-group-name
                </mesh-group-name>
                <egress-protection-protector>....</egress-protection-protector>
              <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

              </connection>
            </mesh-group-connection>
          </reference-site>
        </instance>
      </l2vpn-connection-information>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
```


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```
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
            <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </l2vpn-connection-information>
```

Description

<connection>

Usage

<l2vpn-connection-information>

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
        </remote-pe>
        <control-word>
          control-word
        </control-word>
        <control-word-type>
          control-word-type
        </control-word-type>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
        <inbound-label>
          inbound-label
        </inbound-label>
        <outbound-label>
          outbound-label
        </outbound-label>
        <connection-bandwidth>....</connection-bandwidth>
      <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

        <connection-protection>
          connection-protection
        </connection-protection>
        <history>....</history>
        <l2vpn-local-site-id>
          l2vpn-local-site-id
        </l2vpn-local-site-id>
        <l2vpn-remote-site-id>
          l2vpn-remote-site-id
        </l2vpn-remote-site-id>
        <pw-status-tlv>
          pw-status-tlv
        </pw-status-tlv>
        <local-pw-status-code>
```


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```
            local-pw-status-code
           </local-pw-status-code>
           <remote-pw-status-code>
            remote-pw-status-code
           </remote-pw-status-code>
           <mesh-group-name>
            mesh-group-name
           </mesh-group-name>
           <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </l2vpn-connection-information>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <connection-id>
      connection-id
     </connection-id>
     <connection-type>
      connection-type
     </connection-type>
     <connection-status>
      connection-status
     </connection-status>
     <last-change>
      last-change
     </last-change>
     <up-transitions>
      up-transitions
     </up-transitions>
     <local-interface>....</local-interface>
     <remote-interface>....</remote-interface>
     <remote-pe>
      remote-pe
     </remote-pe>
     <control-word>
      control-word
     </control-word>
     <control-word-type>
      control-word-type
     </control-word-type>
     <interface-encapsulation>
      interface-encapsulation
```

```
                    </interface-encapsulation>
                    <inbound-label>
                      inbound-label
                    </inbound-label>
                    <outbound-label>
                      outbound-label
                    </outbound-label>
                    <connection-bandwidth>....</connection-bandwidth>
                  <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

                    <connection-protection>
                      connection-protection
                    </connection-protection>
                    <history>....</history>
                    <l2vpn-local-site-id>
                      l2vpn-local-site-id
                    </l2vpn-local-site-id>
                    <l2vpn-remote-site-id>
                      l2vpn-remote-site-id
                    </l2vpn-remote-site-id>
                    <pw-status-tlv>
                      pw-status-tlv
                    </pw-status-tlv>
                    <local-pw-status-code>
                      local-pw-status-code
                    </local-pw-status-code>
                    <remote-pw-status-code>
                      remote-pw-status-code
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                    </connection>
                  </mesh-group-connection>
                </vpls-protocol-state>
              </instance>
            </l2vpn-connection-information>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
```


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```
      connection-type
    </connection-type>
    <connection-status>
      connection-status
    </connection-status>
    <last-change>
      last-change
    </last-change>
    <up-transitions>
      up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
      remote-pe
    </remote-pe>
    <control-word>
      control-word
    </control-word>
    <control-word-type>
      control-word-type
    </control-word-type>
    <interface-encapsulation>
      interface-encapsulation
    </interface-encapsulation>
    <inbound-label>
      inbound-label
    </inbound-label>
    <outbound-label>
      outbound-label
    </outbound-label>
    <connection-bandwidth>....</connection-bandwidth>
  <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

    <connection-protection>
      connection-protection
    </connection-protection>
    <history>....</history>
    <l2vpn-local-site-id>
      l2vpn-local-site-id
    </l2vpn-local-site-id>
    <l2vpn-remote-site-id>
      l2vpn-remote-site-id
    </l2vpn-remote-site-id>
    <pw-status-tlv>
      pw-status-tlv
    </pw-status-tlv>
    <local-pw-status-code>
      local-pw-status-code
    </local-pw-status-code>
    <remote-pw-status-code>
      remote-pw-status-code
    </remote-pw-status-code>
    <mesh-group-name>
      mesh-group-name
    </mesh-group-name>
```

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```
            <egress-protection-protector>....</egress-protection-protector>
           <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

           </connection>
         </reference-site>
       </vpls-protocol-state>
     </instance>
   </l2vpn-connection-information>
```

Description

<connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
```


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```
                    <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
                    <connection-protection>
                      connection-protection
                    </connection-protection>
                    <history>....</history>
                    <l2vpn-local-site-id>
                      l2vpn-local-site-id
                    </l2vpn-local-site-id>
                    <l2vpn-remote-site-id>
                      l2vpn-remote-site-id
                    </l2vpn-remote-site-id>
                    <pw-status-tlv>
                      pw-status-tlv
                    </pw-status-tlv>
                    <local-pw-status-code>
                      local-pw-status-code
                    </local-pw-status-code>
                    <remote-pw-status-code>
                      remote-pw-status-code
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                    </connection>
                  </mesh-group-connection>
                </reference-site>
              </vpls-protocol-state>
            </instance>
          </l2vpn-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
```

```
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

    </connection>
  </reference-site>
</instance>
```


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```
</vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <connection-id>
      connection-id
     </connection-id>
     <connection-type>
      connection-type
     </connection-type>
     <connection-status>
      connection-status
     </connection-status>
     <last-change>
      last-change
     </last-change>
     <up-transitions>
      up-transitions
     </up-transitions>
     <local-interface>....</local-interface>
     <remote-interface>....</remote-interface>
     <remote-pe>
      remote-pe
     </remote-pe>
     <control-word>
      control-word
     </control-word>
     <control-word-type>
      control-word-type
     </control-word-type>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <inbound-label>
      inbound-label
     </inbound-label>
     <outbound-label>
      outbound-label
     </outbound-label>
     <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

     <connection-protection>
      connection-protection
     </connection-protection>
     <history>....</history>
     <l2vpn-local-site-id>
```

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```
                    l2vpn-local-site-id
                   </l2vpn-local-site-id>
                   <l2vpn-remote-site-id>
                    l2vpn-remote-site-id
                   </l2vpn-remote-site-id>
                   <pw-status-tlv>
                    pw-status-tlv
                   </pw-status-tlv>
                   <local-pw-status-code>
                    local-pw-status-code
                   </local-pw-status-code>
                   <remote-pw-status-code>
                    remote-pw-status-code
                   </remote-pw-status-code>
                   <mesh-group-name>
                    mesh-group-name
                   </mesh-group-name>
                   <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                  </connection>
                 </mesh-group-connection>
                </reference-site>
               </instance>
              </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <connection-id>
     connection-id
    </connection-id>
    <connection-type>
     connection-type
    </connection-type>
    <connection-status>
     connection-status
    </connection-status>
    <last-change>
     last-change
    </last-change>
    <up-transitions>
     up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
     remote-pe
    </remote-pe>
```


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```
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
            <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
  <instance>
```

```
<ldp-vpls-reference-site>
  <mesh-group-connection>
    <connection>
      <connection-id>
        connection-id
      </connection-id>
      <connection-type>
        connection-type
      </connection-type>
      <connection-status>
        connection-status
      </connection-status>
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
  <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
```


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```
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
```

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```
                <inbound-label>
                  inbound-label
                </inbound-label>
                <outbound-label>
                  outbound-label
                </outbound-label>
                <connection-bandwidth>....</connection-bandwidth>
              <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

                <connection-protection>
                  connection-protection
                </connection-protection>
                <history>....</history>
                <l2vpn-local-site-id>
                  l2vpn-local-site-id
                </l2vpn-local-site-id>
                <l2vpn-remote-site-id>
                  l2vpn-remote-site-id
                </l2vpn-remote-site-id>
                <pw-status-tlv>
                  pw-status-tlv
                </pw-status-tlv>
                <local-pw-status-code>
                  local-pw-status-code
                </local-pw-status-code>
                <remote-pw-status-code>
                  remote-pw-status-code
                </remote-pw-status-code>
                <mesh-group-name>
                  mesh-group-name
                </mesh-group-name>
                <egress-protection-protector>....</egress-protection-protector>
              <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                </connection>
              </mesh-group-connection>
            </vpls-protocol-state>
          </instance>
        </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
```


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```
    </connection-type>
    <connection-status>
      connection-status
    </connection-status>
    <last-change>
      last-change
    </last-change>
    <up-transitions>
      up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
      remote-pe
    </remote-pe>
    <control-word>
      control-word
    </control-word>
    <control-word-type>
      control-word-type
    </control-word-type>
    <interface-encapsulation>
      interface-encapsulation
    </interface-encapsulation>
    <inbound-label>
      inbound-label
    </inbound-label>
    <outbound-label>
      outbound-label
    </outbound-label>
    <connection-bandwidth>....</connection-bandwidth>
<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

    <connection-protection>
      connection-protection
    </connection-protection>
    <history>....</history>
    <l2vpn-local-site-id>
      l2vpn-local-site-id
    </l2vpn-local-site-id>
    <l2vpn-remote-site-id>
      l2vpn-remote-site-id
    </l2vpn-remote-site-id>
    <pw-status-tlv>
      pw-status-tlv
    </pw-status-tlv>
    <local-pw-status-code>
      local-pw-status-code
    </local-pw-status-code>
    <remote-pw-status-code>
      remote-pw-status-code
    </remote-pw-status-code>
    <mesh-group-name>
      mesh-group-name
    </mesh-group-name>
    <egress-protection-protector>....</egress-protection-protector>
```

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```
                    <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                    </connection>
                  </reference-site>
                </vpls-protocol-state>
              </instance>
            </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
```


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```
<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-connection-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
```

```
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
            <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </reference-site>
      </instance>
    </vpls-statistics-information>
```


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Description

<connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
          <outbound-label>
            outbound-label
          </outbound-label>
          <connection-bandwidth>....</connection-bandwidth>
        <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

          <connection-protection>
            connection-protection
          </connection-protection>
          <history>....</history>
          <l2vpn-local-site-id>
            l2vpn-local-site-id
          </l2vpn-local-site-id>
          <l2vpn-remote-site-id>
```

```
                    l2vpn-remote-site-id
                   </l2vpn-remote-site-id>
                   <pw-status-tlv>
                    pw-status-tlv
                   </pw-status-tlv>
                   <local-pw-status-code>
                    local-pw-status-code
                   </local-pw-status-code>
                   <remote-pw-status-code>
                    remote-pw-status-code
                   </remote-pw-status-code>
                   <mesh-group-name>
                    mesh-group-name
                   </mesh-group-name>
                   <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                  </connection>
                 </mesh-group-connection>
                </reference-site>
               </instance>
              </vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <connection-id>
     connection-id
    </connection-id>
    <connection-type>
     connection-type
    </connection-type>
    <connection-status>
     connection-status
    </connection-status>
    <last-change>
     last-change
    </last-change>
    <up-transitions>
     up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
     remote-pe
    </remote-pe>
    <control-word>
     control-word
    </control-word>
```


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```
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
            <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
```

```
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
        </remote-pe>
        <control-word>
          control-word
        </control-word>
        <control-word-type>
          control-word-type
        </control-word-type>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
        <inbound-label>
          inbound-label
        </inbound-label>
        <outbound-label>
          outbound-label
        </outbound-label>
        <connection-bandwidth>....</connection-bandwidth>
      <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

        <connection-protection>
          connection-protection
        </connection-protection>
        <history>....</history>
        <l2vpn-local-site-id>
          l2vpn-local-site-id
        </l2vpn-local-site-id>
        <l2vpn-remote-site-id>
          l2vpn-remote-site-id
        </l2vpn-remote-site-id>
        <pw-status-tlv>
          pw-status-tlv
        </pw-status-tlv>
        <local-pw-status-code>
          local-pw-status-code
        </local-pw-status-code>
        <remote-pw-status-code>
          remote-pw-status-code
```


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```
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>
                   <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                   </connection>
                  </mesh-group-connection>
                 </ldp-vpls-reference-site>
                </instance>
               </vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <connection-id>
      connection-id
     </connection-id>
     <connection-type>
      connection-type
     </connection-type>
     <connection-status>
      connection-status
     </connection-status>
     <last-change>
      last-change
     </last-change>
     <up-transitions>
      up-transitions
     </up-transitions>
     <local-interface>....</local-interface>
     <remote-interface>....</remote-interface>
     <remote-pe>
      remote-pe
     </remote-pe>
     <control-word>
      control-word
     </control-word>
     <control-word-type>
      control-word-type
     </control-word-type>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <inbound-label>
      inbound-label
     </inbound-label>
```

```
                <outbound-label>
                  outbound-label
                </outbound-label>
                <connection-bandwidth>....</connection-bandwidth>
              <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

                <connection-protection>
                  connection-protection
                </connection-protection>
                <history>....</history>
                <l2vpn-local-site-id>
                  l2vpn-local-site-id
                </l2vpn-local-site-id>
                <l2vpn-remote-site-id>
                  l2vpn-remote-site-id
                </l2vpn-remote-site-id>
                <pw-status-tlv>
                  pw-status-tlv
                </pw-status-tlv>
                <local-pw-status-code>
                  local-pw-status-code
                </local-pw-status-code>
                <remote-pw-status-code>
                  remote-pw-status-code
                </remote-pw-status-code>
                <mesh-group-name>
                  mesh-group-name
                </mesh-group-name>
                <egress-protection-protector>....</egress-protection-protector>
              <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                </connection>
              </mesh-group-connection>
            </vpls-protocol-state>
          </instance>
        </vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
```


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```
      </connection-status>
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
    <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

    </connection>
```

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```
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
            <connection-protection>
```


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```
                connection-protection
              </connection-protection>
              <history>....</history>
              <l2vpn-local-site-id>
                l2vpn-local-site-id
              </l2vpn-local-site-id>
              <l2vpn-remote-site-id>
                l2vpn-remote-site-id
              </l2vpn-remote-site-id>
              <pw-status-tlv>
                pw-status-tlv
              </pw-status-tlv>
              <local-pw-status-code>
                local-pw-status-code
              </local-pw-status-code>
              <remote-pw-status-code>
                remote-pw-status-code
              </remote-pw-status-code>
              <mesh-group-name>
                mesh-group-name
              </mesh-group-name>
              <egress-protection-protector>....</egress-protection-protector>
            <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

              </connection>
            </mesh-group-connection>
          </reference-site>
        </vpls-protocol-state>
      </instance>
    </vpls-statistics-information>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
```

```
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
        </remote-pe>
        <control-word>
          control-word
        </control-word>
        <control-word-type>
          control-word-type
        </control-word-type>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
        <inbound-label>
          inbound-label
        </inbound-label>
        <outbound-label>
          outbound-label
        </outbound-label>
        <connection-bandwidth>....</connection-bandwidth>
      <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

        <connection-protection>
          connection-protection
        </connection-protection>
        <history>....</history>
        <l2vpn-local-site-id>
          l2vpn-local-site-id
        </l2vpn-local-site-id>
        <l2vpn-remote-site-id>
          l2vpn-remote-site-id
        </l2vpn-remote-site-id>
        <pw-status-tlv>
          pw-status-tlv
        </pw-status-tlv>
        <local-pw-status-code>
          local-pw-status-code
        </local-pw-status-code>
        <remote-pw-status-code>
          remote-pw-status-code
        </remote-pw-status-code>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <egress-protection-protector>....</egress-protection-protector>
        <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

      </connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

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<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <connection-id>
      connection-id
     </connection-id>
     <connection-type>
      connection-type
     </connection-type>
     <connection-status>
      connection-status
     </connection-status>
     <last-change>
      last-change
     </last-change>
     <up-transitions>
      up-transitions
     </up-transitions>
     <local-interface>....</local-interface>
     <remote-interface>....</remote-interface>
     <remote-pe>
      remote-pe
     </remote-pe>
     <control-word>
      control-word
     </control-word>
     <control-word-type>
      control-word-type
     </control-word-type>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <inbound-label>
      inbound-label
     </inbound-label>
     <outbound-label>
      outbound-label
     </outbound-label>
     <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

     <connection-protection>
      connection-protection
     </connection-protection>
     <history>....</history>
     <l2vpn-local-site-id>
      l2vpn-local-site-id
     </l2vpn-local-site-id>
     <l2vpn-remote-site-id>
      l2vpn-remote-site-id
```

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```
                    </l2vpn-remote-site-id>
                    <pw-status-tlv>
                      pw-status-tlv
                    </pw-status-tlv>
                    <local-pw-status-code>
                      local-pw-status-code
                    </local-pw-status-code>
                    <remote-pw-status-code>
                      remote-pw-status-code
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                  </connection>
                </mesh-group-connection>
              </reference-site>
            </instance>
          </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <connection-id>
          connection-id
        </connection-id>
        <connection-type>
          connection-type
        </connection-type>
        <connection-status>
          connection-status
        </connection-status>
        <last-change>
          last-change
        </last-change>
        <up-transitions>
          up-transitions
        </up-transitions>
        <local-interface>....</local-interface>
        <remote-interface>....</remote-interface>
        <remote-pe>
          remote-pe
        </remote-pe>
        <control-word>
          control-word
        </control-word>
        <control-word-type>
```


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```
            control-word-type
           </control-word-type>
           <interface-encapsulation>
            interface-encapsulation
           </interface-encapsulation>
           <inbound-label>
            inbound-label
           </inbound-label>
           <outbound-label>
            outbound-label
           </outbound-label>
           <connection-bandwidth>....</connection-bandwidth>
         <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

           <connection-protection>
            connection-protection
           </connection-protection>
           <history>....</history>
           <l2vpn-local-site-id>
            l2vpn-local-site-id
           </l2vpn-local-site-id>
           <l2vpn-remote-site-id>
            l2vpn-remote-site-id
           </l2vpn-remote-site-id>
           <pw-status-tlv>
            pw-status-tlv
           </pw-status-tlv>
           <local-pw-status-code>
            local-pw-status-code
           </local-pw-status-code>
           <remote-pw-status-code>
            remote-pw-status-code
           </remote-pw-status-code>
           <mesh-group-name>
            mesh-group-name
           </mesh-group-name>
           <egress-protection-protector>....</egress-protection-protector>
           <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <connection-id>
```

```
      connection-id
    </connection-id>
    <connection-type>
      connection-type
    </connection-type>
    <connection-status>
      connection-status
    </connection-status>
    <last-change>
      last-change
    </last-change>
    <up-transitions>
      up-transitions
    </up-transitions>
    <local-interface>....</local-interface>
    <remote-interface>....</remote-interface>
    <remote-pe>
      remote-pe
    </remote-pe>
    <control-word>
      control-word
    </control-word>
    <control-word-type>
      control-word-type
    </control-word-type>
    <interface-encapsulation>
      interface-encapsulation
    </interface-encapsulation>
    <inbound-label>
      inbound-label
    </inbound-label>
    <outbound-label>
      outbound-label
    </outbound-label>
    <connection-bandwidth>....</connection-bandwidth>
<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

    <connection-protection>
      connection-protection
    </connection-protection>
    <history>....</history>
    <l2vpn-local-site-id>
      l2vpn-local-site-id
    </l2vpn-local-site-id>
    <l2vpn-remote-site-id>
      l2vpn-remote-site-id
    </l2vpn-remote-site-id>
    <pw-status-tlv>
      pw-status-tlv
    </pw-status-tlv>
    <local-pw-status-code>
      local-pw-status-code
    </local-pw-status-code>
    <remote-pw-status-code>
      remote-pw-status-code
    </remote-pw-status-code>
```


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```
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <egress-protection-protector>....</egress-protection-protector>
       <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

       </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
          <outbound-label>
```

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```
                    outbound-label
                   </outbound-label>
                   <connection-bandwidth>....</connection-bandwidth>
                 <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

                   <connection-protection>
                    connection-protection
                   </connection-protection>
                   <history>....</history>
                   <l2vpn-local-site-id>
                    l2vpn-local-site-id
                   </l2vpn-local-site-id>
                   <l2vpn-remote-site-id>
                    l2vpn-remote-site-id
                   </l2vpn-remote-site-id>
                   <pw-status-tlv>
                    pw-status-tlv
                   </pw-status-tlv>
                   <local-pw-status-code>
                    local-pw-status-code
                   </local-pw-status-code>
                   <remote-pw-status-code>
                    remote-pw-status-code
                   </remote-pw-status-code>
                   <mesh-group-name>
                    mesh-group-name
                   </mesh-group-name>
                   <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                  </connection>
                 </mesh-group-connection>
                </vpls-protocol-state>
               </instance>
              </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <connection-id>
      connection-id
     </connection-id>
     <connection-type>
      connection-type
     </connection-type>
     <connection-status>
      connection-status
     </connection-status>
```


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```
      <last-change>
        last-change
      </last-change>
      <up-transitions>
        up-transitions
      </up-transitions>
      <local-interface>....</local-interface>
      <remote-interface>....</remote-interface>
      <remote-pe>
        remote-pe
      </remote-pe>
      <control-word>
        control-word
      </control-word>
      <control-word-type>
        control-word-type
      </control-word-type>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <inbound-label>
        inbound-label
      </inbound-label>
      <outbound-label>
        outbound-label
      </outbound-label>
      <connection-bandwidth>....</connection-bandwidth>
    <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

      <connection-protection>
        connection-protection
      </connection-protection>
      <history>....</history>
      <l2vpn-local-site-id>
        l2vpn-local-site-id
      </l2vpn-local-site-id>
      <l2vpn-remote-site-id>
        l2vpn-remote-site-id
      </l2vpn-remote-site-id>
      <pw-status-tlv>
        pw-status-tlv
      </pw-status-tlv>
      <local-pw-status-code>
        local-pw-status-code
      </local-pw-status-code>
      <remote-pw-status-code>
        remote-pw-status-code
      </remote-pw-status-code>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <egress-protection-protector>....</egress-protection-protector>
    <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

    </connection>
  </reference-site>
```

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```
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
            <connection-protection>
              connection-protection
```


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```
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
```

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```
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```


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Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
```

```
                <l2vpn-remote-site-id>
                  l2vpn-remote-site-id
                </l2vpn-remote-site-id>
                <pw-status-tlv>
                  pw-status-tlv
                </pw-status-tlv>
                <local-pw-status-code>
                  local-pw-status-code
                </local-pw-status-code>
                <remote-pw-status-code>
                  remote-pw-status-code
                </remote-pw-status-code>
                <mesh-group-name>
                  mesh-group-name
                </mesh-group-name>
                <egress-protection-protector>....</egress-protection-protector>
              <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                </connection>
              </mesh-group-connection>
            </reference-site>
          </instance>
        </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
```


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```
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
            </control-word-type>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <inbound-label>
              inbound-label
            </inbound-label>
            <outbound-label>
              outbound-label
            </outbound-label>
            <connection-bandwidth>....</connection-bandwidth>
          <vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

            <connection-protection>
              connection-protection
            </connection-protection>
            <history>....</history>
            <l2vpn-local-site-id>
              l2vpn-local-site-id
            </l2vpn-local-site-id>
            <l2vpn-remote-site-id>
              l2vpn-remote-site-id
            </l2vpn-remote-site-id>
            <pw-status-tlv>
              pw-status-tlv
            </pw-status-tlv>
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

<vpls-dynamic-interface-repository-information>

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <connection-id>
            connection-id
          </connection-id>
          <connection-type>
            connection-type
          </connection-type>
          <connection-status>
            connection-status
          </connection-status>
          <last-change>
            last-change
          </last-change>
          <up-transitions>
            up-transitions
          </up-transitions>
          <local-interface>....</local-interface>
          <remote-interface>....</remote-interface>
          <remote-pe>
            remote-pe
          </remote-pe>
          <control-word>
            control-word
          </control-word>
          <control-word-type>
            control-word-type
          </control-word-type>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <inbound-label>
            inbound-label
          </inbound-label>
          <outbound-label>
            outbound-label
          </outbound-label>
          <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
          <connection-protection>
            connection-protection
          </connection-protection>
          <history>....</history>
          <l2vpn-local-site-id>
            l2vpn-local-site-id
          </l2vpn-local-site-id>
          <l2vpn-remote-site-id>
            l2vpn-remote-site-id
          </l2vpn-remote-site-id>
          <pw-status-tlv>
            pw-status-tlv
          </pw-status-tlv>
```


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```
            <local-pw-status-code>
              local-pw-status-code
            </local-pw-status-code>
            <remote-pw-status-code>
              remote-pw-status-code
            </remote-pw-status-code>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <egress-protection-protector>....</egress-protection-protector>
          <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

            </connection>
          </mesh-group-connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <mesh-group-connection>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
              connection-type
            </connection-type>
            <connection-status>
              connection-status
            </connection-status>
            <last-change>
              last-change
            </last-change>
            <up-transitions>
              up-transitions
            </up-transitions>
            <local-interface>....</local-interface>
            <remote-interface>....</remote-interface>
            <remote-pe>
              remote-pe
            </remote-pe>
            <control-word>
              control-word
            </control-word>
            <control-word-type>
              control-word-type
```

```
                    </control-word-type>
                    <interface-encapsulation>
                      interface-encapsulation
                    </interface-encapsulation>
                    <inbound-label>
                      inbound-label
                    </inbound-label>
                    <outbound-label>
                      outbound-label
                    </outbound-label>
                    <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
                    <connection-protection>
                      connection-protection
                    </connection-protection>
                    <history>....</history>
                    <l2vpn-local-site-id>
                      l2vpn-local-site-id
                    </l2vpn-local-site-id>
                    <l2vpn-remote-site-id>
                      l2vpn-remote-site-id
                    </l2vpn-remote-site-id>
                    <pw-status-tlv>
                      pw-status-tlv
                    </pw-status-tlv>
                    <local-pw-status-code>
                      local-pw-status-code
                    </local-pw-status-code>
                    <remote-pw-status-code>
                      remote-pw-status-code
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>
                  <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                    </connection>
                  </mesh-group-connection>
                </vpls-protocol-state>
              </instance>
            </vpls-ldp-dynamic-interface-repository-entity>
          </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
```


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```
<connection>
  <connection-id>
    connection-id
  </connection-id>
  <connection-type>
    connection-type
  </connection-type>
  <connection-status>
    connection-status
  </connection-status>
  <last-change>
    last-change
  </last-change>
  <up-transitions>
    up-transitions
  </up-transitions>
  <local-interface>....</local-interface>
  <remote-interface>....</remote-interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <control-word>
    control-word
  </control-word>
  <control-word-type>
    control-word-type
  </control-word-type>
  <interface-encapsulation>
    interface-encapsulation
  </interface-encapsulation>
  <inbound-label>
    inbound-label
  </inbound-label>
  <outbound-label>
    outbound-label
  </outbound-label>
  <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
  <connection-protection>
    connection-protection
  </connection-protection>
  <history>....</history>
  <l2vpn-local-site-id>
    l2vpn-local-site-id
  </l2vpn-local-site-id>
  <l2vpn-remote-site-id>
    l2vpn-remote-site-id
  </l2vpn-remote-site-id>
  <pw-status-tlv>
    pw-status-tlv
  </pw-status-tlv>
  <local-pw-status-code>
    local-pw-status-code
  </local-pw-status-code>
  <remote-pw-status-code>
```

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```
                    remote-pw-status-code
                  </remote-pw-status-code>
                  <mesh-group-name>
                    mesh-group-name
                  </mesh-group-name>
                  <egress-protection-protector>....</egress-protection-protector>
                <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>

                </connection>
              </reference-site>
            </vpls-protocol-state>
          </instance>
        </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
              <connection-id>
                connection-id
              </connection-id>
              <connection-type>
                connection-type
              </connection-type>
              <connection-status>
                connection-status
              </connection-status>
              <last-change>
                last-change
              </last-change>
              <up-transitions>
                up-transitions
              </up-transitions>
              <local-interface>....</local-interface>
              <remote-interface>....</remote-interface>
              <remote-pe>
                remote-pe
              </remote-pe>
              <control-word>
                control-word
              </control-word>
              <control-word-type>
                control-word-type
              </control-word-type>
              <interface-encapsulation>
                interface-encapsulation
```


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```
                    </interface-encapsulation>
                    <inbound-label>
                      inbound-label
                    </inbound-label>
                    <outbound-label>
                      outbound-label
                    </outbound-label>
                    <connection-bandwidth>....</connection-bandwidth>

<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>
                    <connection-protection>
                      connection-protection
                    </connection-protection>
                    <history>....</history>
                    <l2vpn-local-site-id>
                      l2vpn-local-site-id
                    </l2vpn-local-site-id>
                    <l2vpn-remote-site-id>
                      l2vpn-remote-site-id
                    </l2vpn-remote-site-id>
                    <pw-status-tlv>
                      pw-status-tlv
                    </pw-status-tlv>
                    <local-pw-status-code>
                      local-pw-status-code
                    </local-pw-status-code>
                    <remote-pw-status-code>
                      remote-pw-status-code
                    </remote-pw-status-code>
                    <mesh-group-name>
                      mesh-group-name
                    </mesh-group-name>
                    <egress-protection-protector>....</egress-protection-protector>

<egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
                  </connection>
                </mesh-group-connection>
              </reference-site>
            </vpls-protocol-state>
          </instance>
        </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<connection>

Usage

```
      <l2circuit-connection-information>
        <l2circuit-neighbor>
          <connection>
            <connection-id>
              connection-id
            </connection-id>
            <connection-type>
```

```
  connection-type
 </connection-type>
 <connection-status>
  connection-status
 </connection-status>
 <last-change>
  last-change
 </last-change>
 <up-transitions>
  up-transitions
 </up-transitions>
 <local-interface>....</local-interface>
 <remote-interface>....</remote-interface>
 <remote-pe>
  remote-pe
 </remote-pe>
 <control-word>
  control-word
 </control-word>
 <control-word-type>
  control-word-type
 </control-word-type>
 <interface-encapsulation>
  interface-encapsulation
 </interface-encapsulation>
 <inbound-label>
  inbound-label
 </inbound-label>
 <outbound-label>
  outbound-label
 </outbound-label>
 <connection-bandwidth>....</connection-bandwidth>
<vpls-rsvp-te-p2mp-lsp-information>....</vpls-rsvp-te-p2mp-lsp-information>

 <connection-protection>
  connection-protection
 </connection-protection>
 <history>....</history>
 <l2vpn-local-site-id>
  l2vpn-local-site-id
 </l2vpn-local-site-id>
 <l2vpn-remote-site-id>
  l2vpn-remote-site-id
 </l2vpn-remote-site-id>
 <pw-status-tlv>
  pw-status-tlv
 </pw-status-tlv>
 <local-pw-status-code>
  local-pw-status-code
 </local-pw-status-code>
 <remote-pw-status-code>
  remote-pw-status-code
 </remote-pw-status-code>
 <mesh-group-name>
  mesh-group-name
 </mesh-group-name>
```


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```
      <egress-protection-protector>....</egress-protection-protector>
      <egress-protection-protected-l2ckt>....</egress-protection-protected-l2ckt>
    </connection>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<connection-bandwidth>

Usage

```
<connection-bandwidth>
  <bandwidth>
    bandwidth
  </bandwidth>
  <class-type>
    class-type
  </class-type>
  <class-bandwidth>
    class-bandwidth
  </class-bandwidth>
</connection-bandwidth>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </rt-entry>
    </rt>
  </route-table>
</route-information>
```

Description Bandwidth of a layer 2 connection

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<connection-bandwidth>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <layer2-connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </layer2-connection>
      </mpls-lsp-path>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth of a layer 2 connection

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<connection-bandwidth>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <layer2-connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </layer2-connection>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <layer2-connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
                class-type
              </class-type>
              <class-bandwidth>
                class-bandwidth
              </class-bandwidth>
            </connection-bandwidth>
          </layer2-connection>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

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Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<mpls-lsp-path>
  <layer2-connection>
    <connection-bandwidth>
      <bandwidth>
        bandwidth
      </bandwidth>
      <class-type>
        class-type
      </class-type>
      <class-bandwidth>
        class-bandwidth
      </class-bandwidth>
    </connection-bandwidth>
  </layer2-connection>
</mpls-lsp-path>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<mpls-lsp>
  <mpls-lsp-path>
    <layer2-connection>
      <connection-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
      </connection-bandwidth>
    </layer2-connection>
  </mpls-lsp-path>
</mpls-lsp>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
```


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```
<mpls-lsp>
 <mpls-lsp-path>
  <layer2-connection>
   <connection-bandwidth>
    <bandwidth>
     bandwidth
    </bandwidth>
    <class-type>
     class-type
    </class-type>
    <class-bandwidth>
     class-bandwidth
    </class-bandwidth>
   </connection-bandwidth>
  </layer2-connection>
 </mpls-lsp-path>
</mpls-lsp>
</rsvp-session>
</rsvp-session-data>
</mpls-lsp-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <layer2-connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </layer2-connection>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description Bandwidth of a layer 2 connection

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<connection-bandwidth>

Usage

```
<connection>
  <connection-bandwidth>
    <bandwidth>
      bandwidth
    </bandwidth>
    <class-type>
      class-type
    </class-type>
    <class-bandwidth>
      class-bandwidth
    </class-bandwidth>
  </connection-bandwidth>
</connection>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<mesh-group-connection>
  <connection>
    <connection-bandwidth>
      <bandwidth>
        bandwidth
      </bandwidth>
      <class-type>
        class-type
      </class-type>
      <class-bandwidth>
        class-bandwidth
      </class-bandwidth>
    </connection-bandwidth>
  </connection>
</mesh-group-connection>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <reference-site>
    <connection>
      <connection-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
```


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```
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
      </connection-bandwidth>
    </connection>
  </reference-site>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <connection-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
```

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```
      </connection-bandwidth>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <vpls-protocol-state>
    <mesh-group-connection>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </mesh-group-connection>
```


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```
  </vpls-protocol-state>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </reference-site>
```

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```
  </vpls-protocol-state>
</instance>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </reference-site>
```


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```
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
```

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```
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
```


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```
        </reference-site>
      </vpls-protocol-state>
    </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
                class-type
              </class-type>
              <class-bandwidth>
                class-bandwidth
              </class-bandwidth>
            </connection-bandwidth>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
```

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```
            </class-bandwidth>
           </connection-bandwidth>
          </connection>
         </reference-site>
        </instance>
       </vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <connection-bandwidth>
     <bandwidth>
      bandwidth
     </bandwidth>
     <class-type>
      class-type
     </class-type>
     <class-bandwidth>
      class-bandwidth
```


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```
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
```

```
                    class-bandwidth
                  </class-bandwidth>
                </connection-bandwidth>
              </connection>
            </mesh-group-connection>
          </vpls-protocol-state>
        </instance>
      </vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
```


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```
                    class-type
                   </class-type>
                   <class-bandwidth>
                    class-bandwidth
                   </class-bandwidth>
                  </connection-bandwidth>
                 </connection>
                </mesh-group-connection>
               </reference-site>
              </vpls-protocol-state>
             </instance>
            </vpls-connection-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connection>
    <connection-bandwidth>
     <bandwidth>
      bandwidth
     </bandwidth>
     <class-type>
      class-type
     </class-type>
     <class-bandwidth>
      class-bandwidth
     </class-bandwidth>
    </connection-bandwidth>
   </connection>
  </reference-site>
 </instance>
</vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
```

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```
                <class-type>
                  class-type
                </class-type>
                <class-bandwidth>
                  class-bandwidth
                </class-bandwidth>
              </connection-bandwidth>
            </connection>
          </mesh-group-connection>
        </reference-site>
      </instance>
    </vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <connection-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </connection-bandwidth>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
```


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```
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <connection-bandwidth>
            <bandwidth>
```

```
                bandwidth
               </bandwidth>
               <class-type>
                class-type
               </class-type>
               <class-bandwidth>
                class-bandwidth
               </class-bandwidth>
              </connection-bandwidth>
             </connection>
            </reference-site>
           </vpls-protocol-state>
          </instance>
         </vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <connection-bandwidth>
       <bandwidth>
        bandwidth
       </bandwidth>
       <class-type>
        class-type
       </class-type>
       <class-bandwidth>
        class-bandwidth
       </class-bandwidth>
      </connection-bandwidth>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
```


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```
      <connection>
       <connection-bandwidth>
        <bandwidth>
         bandwidth
        </bandwidth>
        <class-type>
         class-type
        </class-type>
        <class-bandwidth>
         class-bandwidth
        </class-bandwidth>
       </connection-bandwidth>
      </connection>
     </reference-site>
    </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
```

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```
<connection>
  <connection-bandwidth>
    <bandwidth>
      bandwidth
    </bandwidth>
    <class-type>
      class-type
    </class-type>
    <class-bandwidth>
      class-bandwidth
    </class-bandwidth>
  </connection-bandwidth>
 </connection>
</ldp-vpls-reference-site>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </connection>
   </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
```


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```
<mesh-group-connection>
 <connection>
  <connection-bandwidth>
   <bandwidth>
    bandwidth
   </bandwidth>
   <class-type>
    class-type
   </class-type>
   <class-bandwidth>
    class-bandwidth
   </class-bandwidth>
  </connection-bandwidth>
 </connection>
</mesh-group-connection>
</vpls-protocol-state>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
```

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <connection-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </connection-bandwidth>
        </connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

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<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <connection-bandwidth>
       <bandwidth>
        bandwidth
       </bandwidth>
       <class-type>
        class-type
       </class-type>
       <class-bandwidth>
        class-bandwidth
       </class-bandwidth>
      </connection-bandwidth>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <connection>
     <connection-bandwidth>
      <bandwidth>
       bandwidth
      </bandwidth>
      <class-type>
       class-type
      </class-type>
      <class-bandwidth>
       class-bandwidth
      </class-bandwidth>
     </connection-bandwidth>
    </connection>
   </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
```

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```
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <mesh-group-connection>
          <connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
                class-type
              </class-type>
              <class-bandwidth>
                class-bandwidth
              </class-bandwidth>
            </connection-bandwidth>
          </connection>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <mesh-group-connection>
          <connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
                class-type
              </class-type>
              <class-bandwidth>
                class-bandwidth
              </class-bandwidth>
```


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```
            </connection-bandwidth>
          </connection>
        </mesh-group-connection>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <connection>
            <connection-bandwidth>
              <bandwidth>
                bandwidth
              </bandwidth>
              <class-type>
                class-type
              </class-type>
              <class-bandwidth>
                class-bandwidth
              </class-bandwidth>
            </connection-bandwidth>
          </connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
              <connection-bandwidth>
                <bandwidth>
                  bandwidth
```

```
                    </bandwidth>
                    <class-type>
                      class-type
                    </class-type>
                    <class-bandwidth>
                      class-bandwidth
                    </class-bandwidth>
                  </connection-bandwidth>
                </connection>
              </mesh-group-connection>
            </reference-site>
          </vpls-protocol-state>
        </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description Bandwidth of a layer 2 connection

<connection-bandwidth>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <connection-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
      </connection-bandwidth>
    </connection>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description Bandwidth of a layer 2 connection

<connections-summary>

Usage

```
<connections-summary>
  <vc-up-count>
    vc-up-count
  </vc-up-count>
  <vc-down-count>
    vc-down-count
  </vc-down-count>
```


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```
</connections-summary>
```

Description

<connections-summary>

Usage

```
<mesh-group-connection>
 <connections-summary>
  <vc-up-count>
   vc-up-count
  </vc-up-count>
  <vc-down-count>
   vc-down-count
  </vc-down-count>
 </connections-summary>
</mesh-group-connection>
```

Description

<connections-summary>

Usage

```
<instance>
 <reference-site>
  <mesh-group-connection>
   <connections-summary>
    <vc-up-count>
     vc-up-count
    </vc-up-count>
    <vc-down-count>
     vc-down-count
    </vc-down-count>
   </connections-summary>
  </mesh-group-connection>
 </reference-site>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
 <reference-site>
  <connections-summary>
   <vc-up-count>
    vc-up-count
   </vc-up-count>
   <vc-down-count>
    vc-down-count
   </vc-down-count>
  </connections-summary>
```

```
  </reference-site>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connections-summary>
      <vc-up-count>
        vc-up-count
      </vc-up-count>
      <vc-down-count>
        vc-down-count
      </vc-down-count>
    </connections-summary>
  </ldp-vpls-reference-site>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
  <vpls-protocol-state>
    <mesh-group-connection>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
```


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```
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </mesh-group-connection>
  </vpls-protocol-state>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description

<connections-summary>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description

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<connections-summary>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
```


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```
        <vc-down-count>
          vc-down-count
        </vc-down-count>
       </connections-summary>
      </mesh-group-connection>
     </ldp-vpls-reference-site>
    </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<l2vpn-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connections-summary>
    <vc-up-count>
     vc-up-count
    </vc-up-count>
    <vc-down-count>
     vc-down-count
    </vc-down-count>
   </connections-summary>
  </ldp-vpls-reference-site>
 </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

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<connections-summary>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connections-summary>
            <vc-up-count>
              vc-up-count
            </vc-up-count>
            <vc-down-count>
              vc-down-count
            </vc-down-count>
          </connections-summary>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
```


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```
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
```

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```
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connections-summary>
    <vc-up-count>
     vc-up-count
    </vc-up-count>
    <vc-down-count>
     vc-down-count
    </vc-down-count>
   </connections-summary>
  </ldp-vpls-reference-site>
 </instance>
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
```


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```
            <mesh-group-connection>
              <connections-summary>
                <vc-up-count>
                  vc-up-count
                </vc-up-count>
                <vc-down-count>
                  vc-down-count
                </vc-down-count>
              </connections-summary>
            </mesh-group-connection>
          </reference-site>
        </vpls-protocol-state>
      </instance>
    </vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
```

```
    </mesh-group-connection>
   </reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connections-summary>
    <vc-up-count>
     vc-up-count
    </vc-up-count>
    <vc-down-count>
     vc-down-count
    </vc-down-count>
   </connections-summary>
  </reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
```


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```
<instance>
 <ldp-vpls-reference-site>
  <connections-summary>
   <vc-up-count>
    vc-up-count
   </vc-up-count>
   <vc-down-count>
    vc-down-count
   </vc-down-count>
  </connections-summary>
 </ldp-vpls-reference-site>
</instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connections-summary>
      <vc-up-count>
       vc-up-count
      </vc-up-count>
      <vc-down-count>
       vc-down-count
      </vc-down-count>
     </connections-summary>
```

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```
        </mesh-group-connection>
       </reference-site>
      </vpls-protocol-state>
     </instance>
    </vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

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<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
          vc-down-count
        </vc-down-count>
      </connections-summary>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <connections-summary>
        <vc-up-count>
          vc-up-count
        </vc-up-count>
        <vc-down-count>
```

```
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </ldp-vpls-reference-site>
    </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
        </connections-summary>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connections-summary>
            <vc-up-count>
              vc-up-count
            </vc-up-count>
            <vc-down-count>
              vc-down-count
            </vc-down-count>
          </connections-summary>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```


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Description

<connections-summary>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connections-summary>
     <vc-up-count>
      vc-up-count
     </vc-up-count>
     <vc-down-count>
      vc-down-count
     </vc-down-count>
    </connections-summary>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <mesh-group-connection>
     <connections-summary>
      <vc-up-count>
       vc-up-count
      </vc-up-count>
      <vc-down-count>
       vc-down-count
      </vc-down-count>
     </connections-summary>
    </mesh-group-connection>
   </reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
```

```
        <reference-site>
          <connections-summary>
            <vc-up-count>
              vc-up-count
            </vc-up-count>
            <vc-down-count>
              vc-down-count
            </vc-down-count>
          </connections-summary>
        </reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <mesh-group-connection>
          <connections-summary>
            <vc-up-count>
              vc-up-count
            </vc-up-count>
            <vc-down-count>
              vc-down-count
            </vc-down-count>
          </connections-summary>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connections-summary>
          <vc-up-count>
            vc-up-count
          </vc-up-count>
          <vc-down-count>
            vc-down-count
          </vc-down-count>
```


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```
        </connections-summary>
       </ldp-vpls-reference-site>
      </instance>
     </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-connection>
     <connections-summary>
      <vc-up-count>
       vc-up-count
      </vc-up-count>
      <vc-down-count>
       vc-down-count
      </vc-down-count>
     </connections-summary>
    </mesh-group-connection>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <mesh-group-connection>
      <connections-summary>
       <vc-up-count>
        vc-up-count
       </vc-up-count>
       <vc-down-count>
        vc-down-count
       </vc-down-count>
      </connections-summary>
     </mesh-group-connection>
    </reference-site>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
```

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```
</vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <connections-summary>
      <vc-up-count>
       vc-up-count
      </vc-up-count>
      <vc-down-count>
       vc-down-count
      </vc-down-count>
     </connections-summary>
    </reference-site>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<connections-summary>

Usage

```
<l2circuit-connection-information>
 <l2circuit-neighbor>
  <connections-summary>
   <vc-up-count>
    vc-up-count
   </vc-up-count>
   <vc-down-count>
    vc-down-count
   </vc-down-count>
  </connections-summary>
 </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<cos-info>

Usage

```
<rsvp-interface>
 <cos-info>
  <queue-number>
   queue-number
```


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```
    </queue-number>
    <tx-rate>
     tx-rate
    </tx-rate>
    <tx-rate-percent>
     tx-rate-percent
    </tx-rate-percent>
    <high-priority>
     high-priority
    </high-priority>
    <bw-exact>
     bw-exact
    </bw-exact>
  </cos-info>
</rsvp-interface>
```

Description

<cos-info>

Usage

```
<cos-info>
  <queue-number>
   queue-number
  </queue-number>
  <tx-rate>
   tx-rate
  </tx-rate>
  <tx-rate-percent>
   tx-rate-percent
  </tx-rate-percent>
  <high-priority>
   high-priority
  </high-priority>
  <bw-exact>
   bw-exact
  </bw-exact>
</cos-info>
```

Description

<cos-info>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <cos-info>
      <queue-number>
       queue-number
      </queue-number>
      <tx-rate>
       tx-rate
      </tx-rate>
      <tx-rate-percent>
```

```
        tx-rate-percent
       </tx-rate-percent>
       <high-priority>
        high-priority
       </high-priority>
       <bw-exact>
        bw-exact
       </bw-exact>
      </cos-info>
     </rsvp-interface>
    </rsvp-interface-information>
```

Description

<cspf-paths>

Usage

```
<mpls-cspf>
 <cspf-paths>
  <total-paths>
   total-paths
  </total-paths>
  <successful>
   successful
  </successful>
  <no-route>
   no-route
  </no-route>
  <sys-error>
   sys-error
  </sys-error>
  <cspfs>
   cspfs
  </cspfs>
 </cspf-paths>
</mpls-cspf>
```

Description CSPF path computations statistics

<cspf-paths>

Usage

```
<mpls-cspf-information>
 <mpls-cspf>
  <cspf-paths>
   <total-paths>
    total-paths
   </total-paths>
   <successful>
    successful
   </successful>
   <no-route>
    no-route
```


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```
      </no-route>
      <sys-error>
        sys-error
      </sys-error>
      <cspfs>
        cspfs
      </cspfs>
    </cspf-paths>
  </mpls-cspf>
</mpls-cspf-information>
```

Description CSPF path computations statistics

<cspf-queue>

Usage

```
<mpls-cspf>
  <cspf-queue>
    <current>
      current
    </current>
    <maximum>
      maximum
    </maximum>
    <dequeued>
      dequeued
    </dequeued>
  </cspf-queue>
</mpls-cspf>
```

Description CSPF queue statistics

<cspf-queue>

Usage

```
<mpls-cspf-information>
  <mpls-cspf>
    <cspf-queue>
      <current>
        current
      </current>
      <maximum>
        maximum
      </maximum>
      <dequeued>
        dequeued
      </dequeued>
    </cspf-queue>
  </mpls-cspf>
</mpls-cspf-information>
```

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Description CSPF queue statistics

<cspf-timing>

Usage

```
<mpls-cspf>
  <cspf-timing>
    <total-time>
      total-time
    </total-time>
    <cspf-time>
      cspf-time
    </cspf-time>
    <average-time>
      average-time
    </average-time>
    <rpd-time>
      rpd-time
    </rpd-time>
  </cspf-timing>
</mpls-cspf>
```

Description CSPF timing statistics

<cspf-timing>

Usage

```
<mpls-cspf-information>
  <mpls-cspf>
    <cspf-timing>
      <total-time>
        total-time
      </total-time>
      <cspf-time>
        cspf-time
      </cspf-time>
      <average-time>
        average-time
      </average-time>
      <rpd-time>
        rpd-time
      </rpd-time>
    </cspf-timing>
  </mpls-cspf>
</mpls-cspf-information>
```

Description CSPF timing statistics

<dense-event>

Usage

```
<pim-join-information>
```


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```
  <join-family>
    <join-group>
      <dense-event>
        <dense-receive-prune>....</dense-receive-prune>
        <dense-send-prune>....</dense-send-prune>
        <dense-join>....</dense-join>
        <dense-graft>....</dense-graft>
      </dense-event>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<dense-graft>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <dense-event>
        <dense-graft>
          <pim-interface-name>
            pim-interface-name
          </pim-interface-name>
          <dense-timeout>
            dense-timeout
          </dense-timeout>
        </dense-graft>
      </dense-event>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<dense-join>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <dense-event>
        <dense-join>
          <pim-interface-name>
            pim-interface-name
          </pim-interface-name>
          <dense-timeout>
            dense-timeout
          </dense-timeout>
        </dense-join>
      </dense-event>
    </join-group>
  </join-family>
```

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```
</pim-join-information>
```

Description

<dense-receive-prune>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <dense-event>
        <dense-receive-prune>
          <pim-interface-name>
            pim-interface-name
          </pim-interface-name>
          <dense-timeout>
            dense-timeout
          </dense-timeout>
        </dense-receive-prune>
      </dense-event>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<dense-send-prune>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <dense-event>
        <dense-send-prune>
          <pim-interface-name>
            pim-interface-name
          </pim-interface-name>
          <dense-timeout>
            dense-timeout
          </dense-timeout>
        </dense-send-prune>
      </dense-event>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<destination-network>

Usage

```
<destination-network>
  <prefix>
```


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```
    prefix
  </prefix>
  <destination-network-deleted>
    destination-network-deleted
  </destination-network-deleted>
  <dynamic-tunnel>....</dynamic-tunnel>
</destination-network>
```

Description

<destination-network>

Usage

```
<dynamic-tunnel-table>
  <destination-network>
    <prefix>
      prefix
    </prefix>
    <destination-network-deleted>
      destination-network-deleted
    </destination-network-deleted>
    <dynamic-tunnel>....</dynamic-tunnel>
  </destination-network>
</dynamic-tunnel-table>
```

Description

<destination-network>

Usage

```
<dynamic-tunnels-information>
  <dynamic-tunnel-table>
    <destination-network>
      <prefix>
        prefix
      </prefix>
      <destination-network-deleted>
        destination-network-deleted
      </destination-network-deleted>
      <dynamic-tunnel>....</dynamic-tunnel>
    </destination-network>
  </dynamic-tunnel-table>
</dynamic-tunnels-information>
```

Description

<detour>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour>
      <lsp-state>
```

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```
            lsp-state
          </lsp-state>
          <sender-tspec>
            sender-tspec
          </sender-tspec>
          <adspec>
            adspec
          </adspec>
          <path-mtu>
            path-mtu
          </path-mtu>
          <path-mtu-in-kernel>
            path-mtu-in-kernel
          </path-mtu-in-kernel>
          <packet-information>....</packet-information>
          <explicit-route>....</explicit-route>
          <record-route>....</record-route>
          <label-out>
            label-out
          </label-out>
          <lsp-diffserv-info>
            lsp-diffserv-info
          </lsp-diffserv-info>
          <ct-bw>
            ct-bw
          </ct-bw>
        </detour>
      </rsvp-session>
    </rsvp-session-data>
```

Description Detour session

<detour>

Usage

```
<rsvp-session>
  <detour>
    <lsp-state>
      lsp-state
    </lsp-state>
    <sender-tspec>
      sender-tspec
    </sender-tspec>
    <adspec>
      adspec
    </adspec>
    <path-mtu>
      path-mtu
    </path-mtu>
    <path-mtu-in-kernel>
      path-mtu-in-kernel
    </path-mtu-in-kernel>
    <packet-information>....</packet-information>
    <explicit-route>....</explicit-route>
```


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```
    <record-route>....</record-route>
    <label-out>
     label-out
    </label-out>
    <lsp-diffserv-info>
     lsp-diffserv-info
    </lsp-diffserv-info>
    <ct-bw>
     ct-bw
    </ct-bw>
   </detour>
</rsvp-session>
```

Description Detour session

<detour>

Usage

```
<detour>
  <lsp-state>
   lsp-state
  </lsp-state>
  <sender-tspec>
   sender-tspec
  </sender-tspec>
  <adspec>
   adspec
  </adspec>
  <path-mtu>
   path-mtu
  </path-mtu>
  <path-mtu-in-kernel>
   path-mtu-in-kernel
  </path-mtu-in-kernel>
  <packet-information>....</packet-information>
  <explicit-route>....</explicit-route>
  <record-route>....</record-route>
  <label-out>
   label-out
  </label-out>
  <lsp-diffserv-info>
   lsp-diffserv-info
  </lsp-diffserv-info>
  <ct-bw>
   ct-bw
  </ct-bw>
</detour>
```

Description Detour session

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<detour>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <lsp-state>
          lsp-state
        </lsp-state>
        <sender-tspec>
          sender-tspec
        </sender-tspec>
        <adspec>
          adspec
        </adspec>
        <path-mtu>
          path-mtu
        </path-mtu>
        <path-mtu-in-kernel>
          path-mtu-in-kernel
        </path-mtu-in-kernel>
        <packet-information>....</packet-information>
        <explicit-route>....</explicit-route>
        <record-route>....</record-route>
        <label-out>
          label-out
        </label-out>
        <lsp-diffserv-info>
          lsp-diffserv-info
        </lsp-diffserv-info>
        <ct-bw>
          ct-bw
        </ct-bw>
      </detour>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Detour session

<detour>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <lsp-state>
          lsp-state
        </lsp-state>
        <sender-tspec>
          sender-tspec
```


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```
            </sender-tspec>
            <adspec>
              adspec
            </adspec>
            <path-mtu>
              path-mtu
            </path-mtu>
            <path-mtu-in-kernel>
              path-mtu-in-kernel
            </path-mtu-in-kernel>
            <packet-information>....</packet-information>
            <explicit-route>....</explicit-route>
            <record-route>....</record-route>
            <label-out>
              label-out
            </label-out>
            <lsp-diffserv-info>
              lsp-diffserv-info
            </lsp-diffserv-info>
            <ct-bw>
              ct-bw
            </ct-bw>
          </detour>
        </rsvp-session>
      </rsvp-session-data>
    </mpls-lsp-information>
```

Description Detour session

<detour-bandwidth>

Usage

```
    <rsvp-telink>
      <detour-bandwidth>
        <bandwidth-priority>
          bandwidth-priority
        </bandwidth-priority>
        <total-reserved-bandwidth>
          total-reserved-bandwidth
        </total-reserved-bandwidth>
        <interface-address>
          interface-address
        </interface-address>
      </detour-bandwidth>
    </rsvp-telink>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
    <rsvp-session-data>
```

```
<rsvp-session>
  <rsvp-telink>
    <detour-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
      <interface-address>
        interface-address
      </interface-address>
    </detour-bandwidth>
  </rsvp-telink>
 </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
<rsvp-session>
  <rsvp-telink>
    <detour-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
      <interface-address>
        interface-address
      </interface-address>
    </detour-bandwidth>
  </rsvp-telink>
</rsvp-session>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <detour-bandwidth>
          <bandwidth-priority>
            bandwidth-priority
          </bandwidth-priority>
          <total-reserved-bandwidth>
```


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```
                    total-reserved-bandwidth
                   </total-reserved-bandwidth>
                   <interface-address>
                    interface-address
                   </interface-address>
                  </detour-bandwidth>
                 </rsvp-telink>
                </rsvp-session>
               </rsvp-session-data>
              </rsvp-session-information>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
<rsvp-interface>
 <rsvp-telink>
  <detour-bandwidth>
   <bandwidth-priority>
    bandwidth-priority
   </bandwidth-priority>
   <total-reserved-bandwidth>
    total-reserved-bandwidth
   </total-reserved-bandwidth>
   <interface-address>
    interface-address
   </interface-address>
  </detour-bandwidth>
 </rsvp-telink>
</rsvp-interface>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
<rsvp-interface-information>
 <rsvp-interface>
  <rsvp-telink>
   <detour-bandwidth>
    <bandwidth-priority>
     bandwidth-priority
    </bandwidth-priority>
    <total-reserved-bandwidth>
     total-reserved-bandwidth
    </total-reserved-bandwidth>
    <interface-address>
     interface-address
    </interface-address>
   </detour-bandwidth>
  </rsvp-telink>
```

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```
  </rsvp-interface>
</rsvp-interface-information>
```

Description Bandwidth reserved on detour at different priority levels

<detour-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <detour-bandwidth>
          <bandwidth-priority>
            bandwidth-priority
          </bandwidth-priority>
          <total-reserved-bandwidth>
            total-reserved-bandwidth
          </total-reserved-bandwidth>
          <interface-address>
            interface-address
          </interface-address>
        </detour-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Bandwidth reserved on detour at different priority levels

<detour-branch>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour-branch>
      <source-address>
        source-address
      </source-address>
      <skip-address>
        skip-address
      </skip-address>
      <lsp-state>
        lsp-state
      </lsp-state>
      <sender-tspec>
        sender-tspec
      </sender-tspec>
      <adspec>
        adspec
      </adspec>
      <path-mtu>
```


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```
      path-mtu
     </path-mtu>
     <explicit-route>....</explicit-route>
     <record-route>....</record-route>
     <packet-information>....</packet-information>
     <detour-branch-labels>....</detour-branch-labels>
    </detour-branch>
   </rsvp-session>
</rsvp-session-data>
```

Description Branch of some detour session

<detour-branch>

Usage

```
<rsvp-session>
 <detour-branch>
  <source-address>
   source-address
  </source-address>
  <skip-address>
   skip-address
  </skip-address>
  <lsp-state>
   lsp-state
  </lsp-state>
  <sender-tspec>
   sender-tspec
  </sender-tspec>
  <adspec>
   adspec
  </adspec>
  <path-mtu>
   path-mtu
  </path-mtu>
  <explicit-route>....</explicit-route>
  <record-route>....</record-route>
  <packet-information>....</packet-information>
  <detour-branch-labels>....</detour-branch-labels>
 </detour-branch>
</rsvp-session>
```

Description Branch of some detour session

<detour-branch>

Usage

```
<detour-branch>
 <source-address>
  source-address
 </source-address>
 <skip-address>
```

```
    skip-address
  </skip-address>
  <lsp-state>
    lsp-state
  </lsp-state>
  <sender-tspec>
    sender-tspec
  </sender-tspec>
  <adspec>
    adspec
  </adspec>
  <path-mtu>
    path-mtu
  </path-mtu>
  <explicit-route>....</explicit-route>
  <record-route>....</record-route>
  <packet-information>....</packet-information>
  <detour-branch-labels>....</detour-branch-labels>
</detour-branch>
```

Description Branch of some detour session

<detour-branch>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <source-address>
          source-address
        </source-address>
        <skip-address>
          skip-address
        </skip-address>
        <lsp-state>
          lsp-state
        </lsp-state>
        <sender-tspec>
          sender-tspec
        </sender-tspec>
        <adspec>
          adspec
        </adspec>
        <path-mtu>
          path-mtu
        </path-mtu>
        <explicit-route>....</explicit-route>
        <record-route>....</record-route>
        <packet-information>....</packet-information>
        <detour-branch-labels>....</detour-branch-labels>
      </detour-branch>
    </rsvp-session>
  </rsvp-session-data>
```


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```
</rsvp-session-information>
```

Description Branch of some detour session

<detour-branch>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <source-address>
          source-address
        </source-address>
        <skip-address>
          skip-address
        </skip-address>
        <lsp-state>
          lsp-state
        </lsp-state>
        <sender-tspec>
          sender-tspec
        </sender-tspec>
        <adspec>
          adspec
        </adspec>
        <path-mtu>
          path-mtu
        </path-mtu>
        <explicit-route>....</explicit-route>
        <record-route>....</record-route>
        <packet-information>....</packet-information>
        <detour-branch-labels>....</detour-branch-labels>
      </detour-branch>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Branch of some detour session

<detour-branch-labels>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour-branch>
      <detour-branch-labels>
        <label-in>
          label-in
        </label-in>
        <label-out>
          label-out
```

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```
        </label-out>
       </detour-branch-labels>
     </detour-branch>
   </rsvp-session>
</rsvp-session-data>
```

Description

<detour-branch-labels>

Usage

```
<rsvp-session>
  <detour-branch>
    <detour-branch-labels>
      <label-in>
        label-in
      </label-in>
      <label-out>
        label-out
      </label-out>
    </detour-branch-labels>
  </detour-branch>
</rsvp-session>
```

Description

<detour-branch-labels>

Usage

```
<detour-branch>
  <detour-branch-labels>
    <label-in>
      label-in
    </label-in>
    <label-out>
      label-out
    </label-out>
  </detour-branch-labels>
</detour-branch>
```

Description

<detour-branch-labels>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <detour-branch-labels>
          <label-in>
            label-in
          </label-in>
```


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```
        <label-out>
          label-out
        </label-out>
      </detour-branch-labels>
    </detour-branch>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description

<detour-branch-labels>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <detour-branch>
    <detour-branch-labels>
     <label-in>
      label-in
     </label-in>
     <label-out>
      label-out
     </label-out>
    </detour-branch-labels>
   </detour-branch>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description

<downstream-assert-neighbor>

Usage

```
<pim-join-information>
 <join-family>
  <join-group>
   <sparse-downstream-interface>
    <downstream-assert-neighbor>
     <neighbor-address>
      neighbor-address
     </neighbor-address>
     <neighbor-assert-metric>
      neighbor-assert-metric
     </neighbor-assert-metric>
     <neighbor-assert-preference>
      neighbor-assert-preference
     </neighbor-assert-preference>
     <neighbor-assert-timeout>
      neighbor-assert-timeout
     </neighbor-assert-timeout>
    </downstream-assert-neighbor>
```

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```
      </sparse-downstream-interface>
    </join-group>
  </join-family>
</pim-join-information>
```

Description Information about the neighbor that won the assert

<downstream-interface>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <downstream-interface>
        <pim-interface-name>
          pim-interface-name
        </pim-interface-name>
        <pruned-timeout>
          pruned-timeout
        </pruned-timeout>
        <pim-interface-state>
          pim-interface-state
        </pim-interface-state>
      </downstream-interface>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<downstream-interface-names>

Usage

```
<multicast-route-information>
  <route-family>
    <multicast-route>
      <downstream-interface-names>
        <interface-name>
          interface-name
        </interface-name>
        <interface-nh-index>
          interface-nh-index
        </interface-nh-index>
        <sub-mcnh-index>
          sub-mcnh-index
        </sub-mcnh-index>
      </downstream-interface-names>
    </multicast-route>
  </route-family>
</multicast-route-information>
```

Description

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<downstream-last-jp>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <sparse-downstream-interface>
        <downstream-neighbor>
          <downstream-last-jp>
            <downstream-last-jp-oper>
              downstream-last-jp-oper
            </downstream-last-jp-oper>
            <downstream-last-jp-time>
              downstream-last-jp-time
            </downstream-last-jp-time>
          </downstream-last-jp>
        </downstream-neighbor>
      </sparse-downstream-interface>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<downstream-neighbor>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <sparse-downstream-interface>
        <downstream-neighbor>
          <neighbor-address>
            neighbor-address
          </neighbor-address>
          <neighbor-state>
            neighbor-state
          </neighbor-state>
          <terse-sparse>
            terse-sparse
          </terse-sparse>
          <terse-rpt>
            terse-rpt
          </terse-rpt>
          <terse-wc>
            terse-wc
          </terse-wc>
          <neighbor-timeout>
            neighbor-timeout
          </neighbor-timeout>
          <downstream-if-uptime>
            downstream-if-uptime
          </downstream-if-uptime>
          <downstream-last-jp>....</downstream-last-jp>
```

```
        </downstream-neighbor>
       </sparse-downstream-interface>
      </join-group>
     </join-family>
    </pim-join-information>
```

Description

<dvmrp-capability-flags>

Usage

```
<dvmrp-interfaces-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-capability-flags>
    <dvmrp-neighbor-one-way>
     dvmrp-neighbor-one-way
    </dvmrp-neighbor-one-way>
    <dvmrp-neighbor-prune>
     dvmrp-neighbor-prune
    </dvmrp-neighbor-prune>
    <dvmrp-neighbor-generation-id>
     dvmrp-neighbor-generation-id
    </dvmrp-neighbor-generation-id>
    <dvmrp-neighbor-mtrace>
     dvmrp-neighbor-mtrace
    </dvmrp-neighbor-mtrace>
    <dvmrp-neighbor-leave>
     dvmrp-neighbor-leave
    </dvmrp-neighbor-leave>
    <dvmrp-neighbor-snmp>
     dvmrp-neighbor-snmp
    </dvmrp-neighbor-snmp>
    <dvmrp-neighbor-netmask>
     dvmrp-neighbor-netmask
    </dvmrp-neighbor-netmask>
   </dvmrp-capability-flags>
  </dvmrp-neighbor>
 </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-capability-flags>

Usage

```
<dvmrp-graft-queue-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-capability-flags>
    <dvmrp-neighbor-one-way>
     dvmrp-neighbor-one-way
    </dvmrp-neighbor-one-way>
    <dvmrp-neighbor-prune>
```


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```
            dvmrp-neighbor-prune
           </dvmrp-neighbor-prune>
           <dvmrp-neighbor-generation-id>
            dvmrp-neighbor-generation-id
           </dvmrp-neighbor-generation-id>
           <dvmrp-neighbor-mtrace>
            dvmrp-neighbor-mtrace
           </dvmrp-neighbor-mtrace>
           <dvmrp-neighbor-leave>
            dvmrp-neighbor-leave
           </dvmrp-neighbor-leave>
           <dvmrp-neighbor-snmp>
            dvmrp-neighbor-snmp
           </dvmrp-neighbor-snmp>
           <dvmrp-neighbor-netmask>
            dvmrp-neighbor-netmask
           </dvmrp-neighbor-netmask>
          </dvmrp-capability-flags>
         </dvmrp-neighbor>
        </dvmrp-instance>
       </dvmrp-graft-queue-information>
```

Description

<dvmrp-capability-flags>

Usage

```
<dvmrp-neighbors-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-capability-flags>
    <dvmrp-neighbor-one-way>
     dvmrp-neighbor-one-way
    </dvmrp-neighbor-one-way>
    <dvmrp-neighbor-prune>
     dvmrp-neighbor-prune
    </dvmrp-neighbor-prune>
    <dvmrp-neighbor-generation-id>
     dvmrp-neighbor-generation-id
    </dvmrp-neighbor-generation-id>
    <dvmrp-neighbor-mtrace>
     dvmrp-neighbor-mtrace
    </dvmrp-neighbor-mtrace>
    <dvmrp-neighbor-leave>
     dvmrp-neighbor-leave
    </dvmrp-neighbor-leave>
    <dvmrp-neighbor-snmp>
     dvmrp-neighbor-snmp
    </dvmrp-neighbor-snmp>
    <dvmrp-neighbor-netmask>
     dvmrp-neighbor-netmask
    </dvmrp-neighbor-netmask>
   </dvmrp-capability-flags>
  </dvmrp-neighbor>
 </dvmrp-instance>
```

```
</dvmrp-neighbors-information>
```

Description

<dvmrp-capability-flags>

Usage

```
<dvmrp-prefix-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-capability-flags>
    <dvmrp-neighbor-one-way>
     dvmrp-neighbor-one-way
    </dvmrp-neighbor-one-way>
    <dvmrp-neighbor-prune>
     dvmrp-neighbor-prune
    </dvmrp-neighbor-prune>
    <dvmrp-neighbor-generation-id>
     dvmrp-neighbor-generation-id
    </dvmrp-neighbor-generation-id>
    <dvmrp-neighbor-mtrace>
     dvmrp-neighbor-mtrace
    </dvmrp-neighbor-mtrace>
    <dvmrp-neighbor-leave>
     dvmrp-neighbor-leave
    </dvmrp-neighbor-leave>
    <dvmrp-neighbor-snmp>
     dvmrp-neighbor-snmp
    </dvmrp-neighbor-snmp>
    <dvmrp-neighbor-netmask>
     dvmrp-neighbor-netmask
    </dvmrp-neighbor-netmask>
   </dvmrp-capability-flags>
  </dvmrp-neighbor>
 </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-capability-flags>

Usage

```
<dvmrp-prunes-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-capability-flags>
    <dvmrp-neighbor-one-way>
     dvmrp-neighbor-one-way
    </dvmrp-neighbor-one-way>
    <dvmrp-neighbor-prune>
     dvmrp-neighbor-prune
    </dvmrp-neighbor-prune>
    <dvmrp-neighbor-generation-id>
     dvmrp-neighbor-generation-id
```


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```
            </dvmrp-neighbor-generation-id>
            <dvmrp-neighbor-mtrace>
              dvmrp-neighbor-mtrace
            </dvmrp-neighbor-mtrace>
            <dvmrp-neighbor-leave>
              dvmrp-neighbor-leave
            </dvmrp-neighbor-leave>
            <dvmrp-neighbor-snmp>
              dvmrp-neighbor-snmp
            </dvmrp-neighbor-snmp>
            <dvmrp-neighbor-netmask>
              dvmrp-neighbor-netmask
            </dvmrp-neighbor-netmask>
          </dvmrp-capability-flags>
        </dvmrp-neighbor>
      </dvmrp-instance>
    </dvmrp-prunes-information>
```

Description

<dvmrp-designated-querier-information>

Usage

```
<dvmrp-designated-querier-information>
</dvmrp-designated-querier-information>
```

Description

<dvmrp-graft>

Usage

```
<dvmrp-interfaces-information>
  <dvmrp-instance>
    <dvmrp-graft>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <dvmrp-graft-expire-time>
        dvmrp-graft-expire-time
      </dvmrp-graft-expire-time>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
    </dvmrp-graft>
  </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

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<dvmrp-graft>

Usage

```
<dvmrp-graft-queue-information>
  <dvmrp-instance>
    <dvmrp-graft>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <dvmrp-graft-expire-time>
        dvmrp-graft-expire-time
      </dvmrp-graft-expire-time>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
    </dvmrp-graft>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-graft>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <dvmrp-graft>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <dvmrp-graft-expire-time>
        dvmrp-graft-expire-time
      </dvmrp-graft-expire-time>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
    </dvmrp-graft>
  </dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-graft>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
```


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```
    <dvmrp-graft>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <dvmrp-graft-expire-time>
        dvmrp-graft-expire-time
      </dvmrp-graft-expire-time>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
    </dvmrp-graft>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-graft>

Usage

```
<dvmrp-prunes-information>
  <dvmrp-instance>
    <dvmrp-graft>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <dvmrp-graft-expire-time>
        dvmrp-graft-expire-time
      </dvmrp-graft-expire-time>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
    </dvmrp-graft>
  </dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dvmrp-graft-queue-information>

Usage

```
<dvmrp-graft-queue-information>
  <dvmrp-instance>....</dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

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<dvmrp-group>

Usage

```
<dvmrp-interfaces-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-group>
    <multicast-group-address>
     multicast-group-address
    </multicast-group-address>
    <dvmrp-prunes-sent>
     dvmrp-prunes-sent
    </dvmrp-prunes-sent>
    <dvmrp-grafts-sent>
     dvmrp-grafts-sent
    </dvmrp-grafts-sent>
    <dvmrp-cache-lifetime>
     dvmrp-cache-lifetime
    </dvmrp-cache-lifetime>
    <dvmrp-prune-time>
     dvmrp-prune-time
    </dvmrp-prune-time>
    <dvmrp-prune-lifetime>
     dvmrp-prune-lifetime
    </dvmrp-prune-lifetime>
    <dvmrp-prune>....</dvmrp-prune>
   </dvmrp-group>
  </dvmrp-prefix-entry>
 </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-group>

Usage

```
<dvmrp-graft-queue-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-group>
    <multicast-group-address>
     multicast-group-address
    </multicast-group-address>
    <dvmrp-prunes-sent>
     dvmrp-prunes-sent
    </dvmrp-prunes-sent>
    <dvmrp-grafts-sent>
     dvmrp-grafts-sent
    </dvmrp-grafts-sent>
    <dvmrp-cache-lifetime>
     dvmrp-cache-lifetime
    </dvmrp-cache-lifetime>
    <dvmrp-prune-time>
     dvmrp-prune-time
```


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```
        </dvmrp-prune-time>
        <dvmrp-prune-lifetime>
          dvmrp-prune-lifetime
        </dvmrp-prune-lifetime>
        <dvmrp-prune>....</dvmrp-prune>
      </dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-group>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-group>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <dvmrp-prunes-sent>
          dvmrp-prunes-sent
        </dvmrp-prunes-sent>
        <dvmrp-grafts-sent>
          dvmrp-grafts-sent
        </dvmrp-grafts-sent>
        <dvmrp-cache-lifetime>
          dvmrp-cache-lifetime
        </dvmrp-cache-lifetime>
        <dvmrp-prune-time>
          dvmrp-prune-time
        </dvmrp-prune-time>
        <dvmrp-prune-lifetime>
          dvmrp-prune-lifetime
        </dvmrp-prune-lifetime>
        <dvmrp-prune>....</dvmrp-prune>
      </dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-group>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-group>
        <multicast-group-address>
          multicast-group-address
```

```
        </multicast-group-address>
        <dvmrp-prunes-sent>
          dvmrp-prunes-sent
        </dvmrp-prunes-sent>
        <dvmrp-grafts-sent>
          dvmrp-grafts-sent
        </dvmrp-grafts-sent>
        <dvmrp-cache-lifetime>
          dvmrp-cache-lifetime
        </dvmrp-cache-lifetime>
        <dvmrp-prune-time>
          dvmrp-prune-time
        </dvmrp-prune-time>
        <dvmrp-prune-lifetime>
          dvmrp-prune-lifetime
        </dvmrp-prune-lifetime>
        <dvmrp-prune>....</dvmrp-prune>
      </dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-group>

Usage

```
<dvmrp-prunes-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-group>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <dvmrp-prunes-sent>
          dvmrp-prunes-sent
        </dvmrp-prunes-sent>
        <dvmrp-grafts-sent>
          dvmrp-grafts-sent
        </dvmrp-grafts-sent>
        <dvmrp-cache-lifetime>
          dvmrp-cache-lifetime
        </dvmrp-cache-lifetime>
        <dvmrp-prune-time>
          dvmrp-prune-time
        </dvmrp-prune-time>
        <dvmrp-prune-lifetime>
          dvmrp-prune-lifetime
        </dvmrp-prune-lifetime>
        <dvmrp-prune>....</dvmrp-prune>
      </dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-prunes-information>
```


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Description

<dvmrp-instance>

Usage

```
<dvmrp-interfaces-information>
  <dvmrp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <dvmrp-interface>....</dvmrp-interface>
    <dvmrp-graft>....</dvmrp-graft>
    <dvmrp-neighbor>....</dvmrp-neighbor>
    <dvmrp-prefix-entry>....</dvmrp-prefix-entry>
    <dvmrp-prune>....</dvmrp-prune>
  </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-instance>

Usage

```
<dvmrp-graft-queue-information>
  <dvmrp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <dvmrp-interface>....</dvmrp-interface>
    <dvmrp-graft>....</dvmrp-graft>
    <dvmrp-neighbor>....</dvmrp-neighbor>
    <dvmrp-prefix-entry>....</dvmrp-prefix-entry>
    <dvmrp-prune>....</dvmrp-prune>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-instance>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <dvmrp-interface>....</dvmrp-interface>
    <dvmrp-graft>....</dvmrp-graft>
    <dvmrp-neighbor>....</dvmrp-neighbor>
    <dvmrp-prefix-entry>....</dvmrp-prefix-entry>
    <dvmrp-prune>....</dvmrp-prune>
  </dvmrp-instance>
</dvmrp-neighbors-information>
```

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Description

<dvmrp-instance>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <dvmrp-interface>....</dvmrp-interface>
    <dvmrp-graft>....</dvmrp-graft>
    <dvmrp-neighbor>....</dvmrp-neighbor>
    <dvmrp-prefix-entry>....</dvmrp-prefix-entry>
    <dvmrp-prune>....</dvmrp-prune>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-instance>

Usage

```
<dvmrp-prunes-information>
  <dvmrp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <dvmrp-interface>....</dvmrp-interface>
    <dvmrp-graft>....</dvmrp-graft>
    <dvmrp-neighbor>....</dvmrp-neighbor>
    <dvmrp-prefix-entry>....</dvmrp-prefix-entry>
    <dvmrp-prune>....</dvmrp-prune>
  </dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dvmrp-interface>

Usage

```
<dvmrp-interfaces-information>
  <dvmrp-instance>
    <dvmrp-interface>
      <interface-name>
        interface-name
      </interface-name>
      <dvmrp-interface-state>
        dvmrp-interface-state
      </dvmrp-interface-state>
      <dvmrp-interface-leaf>
        dvmrp-interface-leaf
      </dvmrp-interface-leaf>
      <dvmrp-interface-metric>
```


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```
      dvmrp-interface-metric
     </dvmrp-interface-metric>
     <dvmrp-interface-announcements>
      dvmrp-interface-announcements
     </dvmrp-interface-announcements>
     <dvmrp-interface-mode>
      dvmrp-interface-mode
     </dvmrp-interface-mode>
     <dvmrp-interface-holdtime>
      dvmrp-interface-holdtime
     </dvmrp-interface-holdtime>
    </dvmrp-interface>
   </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-interface>

Usage

```
<dvmrp-graft-queue-information>
 <dvmrp-instance>
  <dvmrp-interface>
   <interface-name>
    interface-name
   </interface-name>
   <dvmrp-interface-state>
    dvmrp-interface-state
   </dvmrp-interface-state>
   <dvmrp-interface-leaf>
    dvmrp-interface-leaf
   </dvmrp-interface-leaf>
   <dvmrp-interface-metric>
    dvmrp-interface-metric
   </dvmrp-interface-metric>
   <dvmrp-interface-announcements>
    dvmrp-interface-announcements
   </dvmrp-interface-announcements>
   <dvmrp-interface-mode>
    dvmrp-interface-mode
   </dvmrp-interface-mode>
   <dvmrp-interface-holdtime>
    dvmrp-interface-holdtime
   </dvmrp-interface-holdtime>
  </dvmrp-interface>
 </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-interface>

Usage

```
<dvmrp-neighbors-information>
```

```
<dvmrp-instance>
 <dvmrp-interface>
  <interface-name>
   interface-name
  </interface-name>
  <dvmrp-interface-state>
   dvmrp-interface-state
  </dvmrp-interface-state>
  <dvmrp-interface-leaf>
   dvmrp-interface-leaf
  </dvmrp-interface-leaf>
  <dvmrp-interface-metric>
   dvmrp-interface-metric
  </dvmrp-interface-metric>
  <dvmrp-interface-announcements>
   dvmrp-interface-announcements
  </dvmrp-interface-announcements>
  <dvmrp-interface-mode>
   dvmrp-interface-mode
  </dvmrp-interface-mode>
  <dvmrp-interface-holdtime>
   dvmrp-interface-holdtime
  </dvmrp-interface-holdtime>
 </dvmrp-interface>
</dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-interface>

Usage

```
<dvmrp-prefix-information>
 <dvmrp-instance>
  <dvmrp-interface>
   <interface-name>
    interface-name
   </interface-name>
   <dvmrp-interface-state>
    dvmrp-interface-state
   </dvmrp-interface-state>
   <dvmrp-interface-leaf>
    dvmrp-interface-leaf
   </dvmrp-interface-leaf>
   <dvmrp-interface-metric>
    dvmrp-interface-metric
   </dvmrp-interface-metric>
   <dvmrp-interface-announcements>
    dvmrp-interface-announcements
   </dvmrp-interface-announcements>
   <dvmrp-interface-mode>
    dvmrp-interface-mode
   </dvmrp-interface-mode>
   <dvmrp-interface-holdtime>
    dvmrp-interface-holdtime
```


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```
      </dvmrp-interface-holdtime>
    </dvmrp-interface>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-interface>

Usage

```
<dvmrp-prunes-information>
  <dvmrp-instance>
    <dvmrp-interface>
      <interface-name>
        interface-name
      </interface-name>
      <dvmrp-interface-state>
        dvmrp-interface-state
      </dvmrp-interface-state>
      <dvmrp-interface-leaf>
        dvmrp-interface-leaf
      </dvmrp-interface-leaf>
      <dvmrp-interface-metric>
        dvmrp-interface-metric
      </dvmrp-interface-metric>
      <dvmrp-interface-announcements>
        dvmrp-interface-announcements
      </dvmrp-interface-announcements>
      <dvmrp-interface-mode>
        dvmrp-interface-mode
      </dvmrp-interface-mode>
      <dvmrp-interface-holdtime>
        dvmrp-interface-holdtime
      </dvmrp-interface-holdtime>
    </dvmrp-interface>
  </dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dvmrp-interfaces-information>

Usage

```
<dvmrp-interfaces-information>
  <dvmrp-instance>....</dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-neighbor>

Usage

```
<dvmrp-interfaces-information>
```

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```
<dvmrp-instance>
 <dvmrp-neighbor>
  <dvmrp-neighbor-address>
   dvmrp-neighbor-address
  </dvmrp-neighbor-address>
  <interface-name>
   interface-name
  </interface-name>
  <dvmrp-major-version>
   dvmrp-major-version
  </dvmrp-major-version>
  <dvmrp-minor-version>
   dvmrp-minor-version
  </dvmrp-minor-version>
  <dvmrp-capability-flags>....</dvmrp-capability-flags>
  <dvmrp-neighbor-routes>
   dvmrp-neighbor-routes
  </dvmrp-neighbor-routes>
  <dvmrp-neighbor-timeout>
   dvmrp-neighbor-timeout
  </dvmrp-neighbor-timeout>
  <dvmrp-neighbor-transitions>
   dvmrp-neighbor-transitions
  </dvmrp-neighbor-transitions>
 </dvmrp-neighbor>
</dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-neighbor>

Usage

```
<dvmrp-graft-queue-information>
 <dvmrp-instance>
  <dvmrp-neighbor>
   <dvmrp-neighbor-address>
    dvmrp-neighbor-address
   </dvmrp-neighbor-address>
   <interface-name>
    interface-name
   </interface-name>
   <dvmrp-major-version>
    dvmrp-major-version
   </dvmrp-major-version>
   <dvmrp-minor-version>
    dvmrp-minor-version
   </dvmrp-minor-version>
   <dvmrp-capability-flags>....</dvmrp-capability-flags>
   <dvmrp-neighbor-routes>
    dvmrp-neighbor-routes
   </dvmrp-neighbor-routes>
   <dvmrp-neighbor-timeout>
    dvmrp-neighbor-timeout
   </dvmrp-neighbor-timeout>
```


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```
      <dvmrp-neighbor-transitions>
        dvmrp-neighbor-transitions
      </dvmrp-neighbor-transitions>
    </dvmrp-neighbor>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-neighbor>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <dvmrp-neighbor>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <interface-name>
        interface-name
      </interface-name>
      <dvmrp-major-version>
        dvmrp-major-version
      </dvmrp-major-version>
      <dvmrp-minor-version>
        dvmrp-minor-version
      </dvmrp-minor-version>
      <dvmrp-capability-flags>....</dvmrp-capability-flags>
      <dvmrp-neighbor-routes>
        dvmrp-neighbor-routes
      </dvmrp-neighbor-routes>
      <dvmrp-neighbor-timeout>
        dvmrp-neighbor-timeout
      </dvmrp-neighbor-timeout>
      <dvmrp-neighbor-transitions>
        dvmrp-neighbor-transitions
      </dvmrp-neighbor-transitions>
    </dvmrp-neighbor>
  </dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-neighbor>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
    <dvmrp-neighbor>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <interface-name>
        interface-name
```

```
      </interface-name>
      <dvmrp-major-version>
        dvmrp-major-version
      </dvmrp-major-version>
      <dvmrp-minor-version>
        dvmrp-minor-version
      </dvmrp-minor-version>
      <dvmrp-capability-flags>....</dvmrp-capability-flags>
      <dvmrp-neighbor-routes>
        dvmrp-neighbor-routes
      </dvmrp-neighbor-routes>
      <dvmrp-neighbor-timeout>
        dvmrp-neighbor-timeout
      </dvmrp-neighbor-timeout>
      <dvmrp-neighbor-transitions>
        dvmrp-neighbor-transitions
      </dvmrp-neighbor-transitions>
    </dvmrp-neighbor>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-neighbor>

Usage

```
<dvmrp-prunes-information>
  <dvmrp-instance>
    <dvmrp-neighbor>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <interface-name>
        interface-name
      </interface-name>
      <dvmrp-major-version>
        dvmrp-major-version
      </dvmrp-major-version>
      <dvmrp-minor-version>
        dvmrp-minor-version
      </dvmrp-minor-version>
      <dvmrp-capability-flags>....</dvmrp-capability-flags>
      <dvmrp-neighbor-routes>
        dvmrp-neighbor-routes
      </dvmrp-neighbor-routes>
      <dvmrp-neighbor-timeout>
        dvmrp-neighbor-timeout
      </dvmrp-neighbor-timeout>
      <dvmrp-neighbor-transitions>
        dvmrp-neighbor-transitions
      </dvmrp-neighbor-transitions>
    </dvmrp-neighbor>
  </dvmrp-instance>
</dvmrp-prunes-information>
```


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Description

<dvmrp-neighbors-information>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>....</dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-prefix-entry>

Usage

```
<dvmrp-interfaces-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-prefix>
        dvmrp-prefix
      </dvmrp-prefix>
      <dvmrp-prefix-length>
        dvmrp-prefix-length
      </dvmrp-prefix-length>
      <dvmrp-next-hop>
        dvmrp-next-hop
      </dvmrp-next-hop>
      <dvmrp-prefix-age>
        dvmrp-prefix-age
      </dvmrp-prefix-age>
      <dvmrp-group>....</dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-prefix-entry>

Usage

```
<dvmrp-graft-queue-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-prefix>
        dvmrp-prefix
      </dvmrp-prefix>
      <dvmrp-prefix-length>
        dvmrp-prefix-length
      </dvmrp-prefix-length>
      <dvmrp-next-hop>
        dvmrp-next-hop
      </dvmrp-next-hop>
      <dvmrp-prefix-age>
        dvmrp-prefix-age
      </dvmrp-prefix-age>
```

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```
    <dvmrp-group>....</dvmrp-group>
   </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-prefix-entry>

Usage

```
<dvmrp-neighbors-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-prefix>
    dvmrp-prefix
   </dvmrp-prefix>
   <dvmrp-prefix-length>
    dvmrp-prefix-length
   </dvmrp-prefix-length>
   <dvmrp-next-hop>
    dvmrp-next-hop
   </dvmrp-next-hop>
   <dvmrp-prefix-age>
    dvmrp-prefix-age
   </dvmrp-prefix-age>
   <dvmrp-group>....</dvmrp-group>
  </dvmrp-prefix-entry>
 </dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

<dvmrp-prefix-entry>

Usage

```
<dvmrp-prefix-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-prefix>
    dvmrp-prefix
   </dvmrp-prefix>
   <dvmrp-prefix-length>
    dvmrp-prefix-length
   </dvmrp-prefix-length>
   <dvmrp-next-hop>
    dvmrp-next-hop
   </dvmrp-next-hop>
   <dvmrp-prefix-age>
    dvmrp-prefix-age
   </dvmrp-prefix-age>
   <dvmrp-group>....</dvmrp-group>
  </dvmrp-prefix-entry>
 </dvmrp-instance>
```


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```
</dvmrp-prefix-information>
```

Description

<dvmrp-prefix-entry>

Usage

```
<dvmrp-prunes-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-prefix>
    dvmrp-prefix
   </dvmrp-prefix>
   <dvmrp-prefix-length>
    dvmrp-prefix-length
   </dvmrp-prefix-length>
   <dvmrp-next-hop>
    dvmrp-next-hop
   </dvmrp-next-hop>
   <dvmrp-prefix-age>
    dvmrp-prefix-age
   </dvmrp-prefix-age>
   <dvmrp-group>....</dvmrp-group>
  </dvmrp-prefix-entry>
 </dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dvmrp-prefix-information>

Usage

```
<dvmrp-prefix-information>
 <dvmrp-instance>....</dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-interfaces-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-group>
    <dvmrp-prune>
     <dvmrp-neighbor-address>
      dvmrp-neighbor-address
     </dvmrp-neighbor-address>
     <multicast-group-address>
      multicast-group-address
     </multicast-group-address>
     <multicast-source-address>
```

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```
                multicast-source-address
               </multicast-source-address>
               <multicast-source-prefix-length>
                multicast-source-prefix-length
               </multicast-source-prefix-length>
               <dvmrp-prune-timeout>
                dvmrp-prune-timeout
               </dvmrp-prune-timeout>
              </dvmrp-prune>
             </dvmrp-group>
            </dvmrp-prefix-entry>
           </dvmrp-instance>
          </dvmrp-interfaces-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-interfaces-information>
 <dvmrp-instance>
  <dvmrp-prune>
   <dvmrp-neighbor-address>
    dvmrp-neighbor-address
   </dvmrp-neighbor-address>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-source-address>
    multicast-source-address
   </multicast-source-address>
   <multicast-source-prefix-length>
    multicast-source-prefix-length
   </multicast-source-prefix-length>
   <dvmrp-prune-timeout>
    dvmrp-prune-timeout
   </dvmrp-prune-timeout>
  </dvmrp-prune>
 </dvmrp-instance>
</dvmrp-interfaces-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-graft-queue-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-group>
    <dvmrp-prune>
     <dvmrp-neighbor-address>
      dvmrp-neighbor-address
     </dvmrp-neighbor-address>
```


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```
            <multicast-group-address>
              multicast-group-address
            </multicast-group-address>
            <multicast-source-address>
              multicast-source-address
            </multicast-source-address>
            <multicast-source-prefix-length>
              multicast-source-prefix-length
            </multicast-source-prefix-length>
            <dvmrp-prune-timeout>
              dvmrp-prune-timeout
            </dvmrp-prune-timeout>
          </dvmrp-prune>
        </dvmrp-group>
      </dvmrp-prefix-entry>
    </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-graft-queue-information>
  <dvmrp-instance>
    <dvmrp-prune>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <multicast-source-prefix-length>
        multicast-source-prefix-length
      </multicast-source-prefix-length>
      <dvmrp-prune-timeout>
        dvmrp-prune-timeout
      </dvmrp-prune-timeout>
    </dvmrp-prune>
  </dvmrp-instance>
</dvmrp-graft-queue-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-group>
```

```
            <dvmrp-prune>
              <dvmrp-neighbor-address>
                dvmrp-neighbor-address
              </dvmrp-neighbor-address>
              <multicast-group-address>
                multicast-group-address
              </multicast-group-address>
              <multicast-source-address>
                multicast-source-address
              </multicast-source-address>
              <multicast-source-prefix-length>
                multicast-source-prefix-length
              </multicast-source-prefix-length>
              <dvmrp-prune-timeout>
                dvmrp-prune-timeout
              </dvmrp-prune-timeout>
            </dvmrp-prune>
          </dvmrp-group>
        </dvmrp-prefix-entry>
      </dvmrp-instance>
    </dvmrp-neighbors-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-neighbors-information>
  <dvmrp-instance>
    <dvmrp-prune>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <multicast-source-prefix-length>
        multicast-source-prefix-length
      </multicast-source-prefix-length>
      <dvmrp-prune-timeout>
        dvmrp-prune-timeout
      </dvmrp-prune-timeout>
    </dvmrp-prune>
  </dvmrp-instance>
</dvmrp-neighbors-information>
```

Description

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<dvmrp-prune>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
    <dvmrp-prefix-entry>
      <dvmrp-group>
        <dvmrp-prune>
          <dvmrp-neighbor-address>
            dvmrp-neighbor-address
          </dvmrp-neighbor-address>
          <multicast-group-address>
            multicast-group-address
          </multicast-group-address>
          <multicast-source-address>
            multicast-source-address
          </multicast-source-address>
          <multicast-source-prefix-length>
            multicast-source-prefix-length
          </multicast-source-prefix-length>
          <dvmrp-prune-timeout>
            dvmrp-prune-timeout
          </dvmrp-prune-timeout>
        </dvmrp-prune>
      </dvmrp-group>
    </dvmrp-prefix-entry>
  </dvmrp-instance>
</dvmrp-prefix-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-prefix-information>
  <dvmrp-instance>
    <dvmrp-prune>
      <dvmrp-neighbor-address>
        dvmrp-neighbor-address
      </dvmrp-neighbor-address>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <multicast-source-prefix-length>
        multicast-source-prefix-length
      </multicast-source-prefix-length>
      <dvmrp-prune-timeout>
        dvmrp-prune-timeout
      </dvmrp-prune-timeout>
    </dvmrp-prune>
  </dvmrp-instance>
```

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```
</dvmrp-prefix-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-prunes-information>
 <dvmrp-instance>
  <dvmrp-prefix-entry>
   <dvmrp-group>
    <dvmrp-prune>
     <dvmrp-neighbor-address>
      dvmrp-neighbor-address
     </dvmrp-neighbor-address>
     <multicast-group-address>
      multicast-group-address
     </multicast-group-address>
     <multicast-source-address>
      multicast-source-address
     </multicast-source-address>
     <multicast-source-prefix-length>
      multicast-source-prefix-length
     </multicast-source-prefix-length>
     <dvmrp-prune-timeout>
      dvmrp-prune-timeout
     </dvmrp-prune-timeout>
    </dvmrp-prune>
   </dvmrp-group>
  </dvmrp-prefix-entry>
 </dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dvmrp-prune>

Usage

```
<dvmrp-prunes-information>
 <dvmrp-instance>
  <dvmrp-prune>
   <dvmrp-neighbor-address>
    dvmrp-neighbor-address
   </dvmrp-neighbor-address>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-source-address>
    multicast-source-address
   </multicast-source-address>
   <multicast-source-prefix-length>
    multicast-source-prefix-length
   </multicast-source-prefix-length>
   <dvmrp-prune-timeout>
```


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```
        dvmrp-prune-timeout
       </dvmrp-prune-timeout>
      </dvmrp-prune>
     </dvmrp-instance>
    </dvmrp-prunes-information>
```

Description

<dvmrp-prunes-information>

Usage

```
<dvmrp-prunes-information>
 <dvmrp-instance>....</dvmrp-instance>
</dvmrp-prunes-information>
```

Description

<dynamic-tunnel>

Usage

```
<dynamic-tunnel>
 <tunnel-destination>
  tunnel-destination
 </tunnel-destination>
 <tunnel-state>
  tunnel-state
 </tunnel-state>
 <tunnel-expiry>
  tunnel-expiry
 </tunnel-expiry>
 <tunnel-reference-count>
  tunnel-reference-count
 </tunnel-reference-count>
 <tunnel-nexthop>....</tunnel-nexthop>
</dynamic-tunnel>
```

Description

<dynamic-tunnel>

Usage

```
<destination-network>
 <dynamic-tunnel>
  <tunnel-destination>
   tunnel-destination
  </tunnel-destination>
  <tunnel-state>
   tunnel-state
  </tunnel-state>
  <tunnel-expiry>
   tunnel-expiry
  </tunnel-expiry>
  <tunnel-reference-count>
```

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```
      tunnel-reference-count
    </tunnel-reference-count>
    <tunnel-nexthop>....</tunnel-nexthop>
  </dynamic-tunnel>
</destination-network>
```

Description

<dynamic-tunnel>

Usage

```
<dynamic-tunnel-table>
  <destination-network>
    <dynamic-tunnel>
      <tunnel-destination>
        tunnel-destination
      </tunnel-destination>
      <tunnel-state>
        tunnel-state
      </tunnel-state>
      <tunnel-expiry>
        tunnel-expiry
      </tunnel-expiry>
      <tunnel-reference-count>
        tunnel-reference-count
      </tunnel-reference-count>
      <tunnel-nexthop>....</tunnel-nexthop>
    </dynamic-tunnel>
  </destination-network>
</dynamic-tunnel-table>
```

Description

<dynamic-tunnel>

Usage

```
<dynamic-tunnels-information>
  <dynamic-tunnel-table>
    <destination-network>
      <dynamic-tunnel>
        <tunnel-destination>
          tunnel-destination
        </tunnel-destination>
        <tunnel-state>
          tunnel-state
        </tunnel-state>
        <tunnel-expiry>
          tunnel-expiry
        </tunnel-expiry>
        <tunnel-reference-count>
          tunnel-reference-count
        </tunnel-reference-count>
        <tunnel-nexthop>....</tunnel-nexthop>
      </dynamic-tunnel>
```


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```
    </destination-network>
  </dynamic-tunnel-table>
</dynamic-tunnels-information>
```

Description

<dynamic-tunnel-table>

Usage

```
<dynamic-tunnel-table>
  <table-name>
    table-name
  </table-name>
  <destination-network>....</destination-network>
</dynamic-tunnel-table>
```

Description

<dynamic-tunnel-table>

Usage

```
<dynamic-tunnels-information>
  <dynamic-tunnel-table>
    <table-name>
      table-name
    </table-name>
    <destination-network>....</destination-network>
  </dynamic-tunnel-table>
</dynamic-tunnels-information>
```

Description

<dynamic-tunnels-information>

Usage

```
<dynamic-tunnels-information>
  <dynamic-tunnel-table>....</dynamic-tunnel-table>
</dynamic-tunnels-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<connection>
  <egress-protection-protected-l2ckt>
    <protected-l2ckt-state>
      protected-l2ckt-state
    </protected-l2ckt-state>
    <protected-l2ckt-ingress>
      protected-l2ckt-ingress
    </protected-l2ckt-ingress>
```

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```
    <protected-l2ckt-egress>
     protected-l2ckt-egress
    </protected-l2ckt-egress>
    <protected-l2ckt-vcid>
     protected-l2ckt-vcid
    </protected-l2ckt-vcid>
   </egress-protection-protected-l2ckt>
  </connection>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<mesh-group-connection>
 <connection>
  <egress-protection-protected-l2ckt>
   <protected-l2ckt-state>
    protected-l2ckt-state
   </protected-l2ckt-state>
   <protected-l2ckt-ingress>
    protected-l2ckt-ingress
   </protected-l2ckt-ingress>
   <protected-l2ckt-egress>
    protected-l2ckt-egress
   </protected-l2ckt-egress>
   <protected-l2ckt-vcid>
    protected-l2ckt-vcid
   </protected-l2ckt-vcid>
  </egress-protection-protected-l2ckt>
 </connection>
</mesh-group-connection>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
 <reference-site>
  <connection>
   <egress-protection-protected-l2ckt>
    <protected-l2ckt-state>
     protected-l2ckt-state
    </protected-l2ckt-state>
    <protected-l2ckt-ingress>
     protected-l2ckt-ingress
    </protected-l2ckt-ingress>
    <protected-l2ckt-egress>
     protected-l2ckt-egress
    </protected-l2ckt-egress>
    <protected-l2ckt-vcid>
     protected-l2ckt-vcid
    </protected-l2ckt-vcid>
```


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```
      </egress-protection-protected-l2ckt>
    </connection>
  </reference-site>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <egress-protection-protected-l2ckt>
        <protected-l2ckt-state>
          protected-l2ckt-state
        </protected-l2ckt-state>
        <protected-l2ckt-ingress>
          protected-l2ckt-ingress
        </protected-l2ckt-ingress>
        <protected-l2ckt-egress>
          protected-l2ckt-egress
        </protected-l2ckt-egress>
        <protected-l2ckt-vcid>
          protected-l2ckt-vcid
        </protected-l2ckt-vcid>
```

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```
      </egress-protection-protected-l2ckt>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <vpls-protocol-state>
    <mesh-group-connection>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
```


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```
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
```

```
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
```


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```
                protected-l2ckt-ingress
               </protected-l2ckt-ingress>
               <protected-l2ckt-egress>
                protected-l2ckt-egress
               </protected-l2ckt-egress>
               <protected-l2ckt-vcid>
                protected-l2ckt-vcid
               </protected-l2ckt-vcid>
              </egress-protection-protected-l2ckt>
             </connection>
            </mesh-group-connection>
           </reference-site>
          </instance>
         </l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <egress-protection-protected-l2ckt>
     <protected-l2ckt-state>
      protected-l2ckt-state
     </protected-l2ckt-state>
     <protected-l2ckt-ingress>
      protected-l2ckt-ingress
     </protected-l2ckt-ingress>
     <protected-l2ckt-egress>
      protected-l2ckt-egress
     </protected-l2ckt-egress>
     <protected-l2ckt-vcid>
      protected-l2ckt-vcid
     </protected-l2ckt-vcid>
    </egress-protection-protected-l2ckt>
   </connection>
  </ldp-vpls-reference-site>
 </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protected-l2ckt>
```

```
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

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<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
```

```
        </mesh-group-connection>
       </reference-site>
      </vpls-protocol-state>
     </instance>
    </l2vpn-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <connection>
    <egress-protection-protected-l2ckt>
     <protected-l2ckt-state>
      protected-l2ckt-state
     </protected-l2ckt-state>
     <protected-l2ckt-ingress>
      protected-l2ckt-ingress
     </protected-l2ckt-ingress>
     <protected-l2ckt-egress>
      protected-l2ckt-egress
     </protected-l2ckt-egress>
     <protected-l2ckt-vcid>
      protected-l2ckt-vcid
     </protected-l2ckt-vcid>
    </egress-protection-protected-l2ckt>
   </connection>
  </reference-site>
 </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protected-l2ckt>
      <protected-l2ckt-state>
       protected-l2ckt-state
      </protected-l2ckt-state>
      <protected-l2ckt-ingress>
       protected-l2ckt-ingress
      </protected-l2ckt-ingress>
      <protected-l2ckt-egress>
       protected-l2ckt-egress
      </protected-l2ckt-egress>
```


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```
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
```

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```
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
```


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```
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <connection>
        <egress-protection-protected-l2ckt>
          <protected-l2ckt-state>
            protected-l2ckt-state
          </protected-l2ckt-state>
          <protected-l2ckt-ingress>
            protected-l2ckt-ingress
          </protected-l2ckt-ingress>
          <protected-l2ckt-egress>
            protected-l2ckt-egress
          </protected-l2ckt-egress>
          <protected-l2ckt-vcid>
            protected-l2ckt-vcid
          </protected-l2ckt-vcid>
        </egress-protection-protected-l2ckt>
      </connection>
    </reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
```


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```
</vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <egress-protection-protected-l2ckt>
     <protected-l2ckt-state>
      protected-l2ckt-state
     </protected-l2ckt-state>
     <protected-l2ckt-ingress>
      protected-l2ckt-ingress
     </protected-l2ckt-ingress>
     <protected-l2ckt-egress>
      protected-l2ckt-egress
     </protected-l2ckt-egress>
     <protected-l2ckt-vcid>
      protected-l2ckt-vcid
     </protected-l2ckt-vcid>
    </egress-protection-protected-l2ckt>
   </connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protected-l2ckt>
      <protected-l2ckt-state>
       protected-l2ckt-state
      </protected-l2ckt-state>
      <protected-l2ckt-ingress>
       protected-l2ckt-ingress
      </protected-l2ckt-ingress>
      <protected-l2ckt-egress>
       protected-l2ckt-egress
      </protected-l2ckt-egress>
      <protected-l2ckt-vcid>
       protected-l2ckt-vcid
      </protected-l2ckt-vcid>
     </egress-protection-protected-l2ckt>
```

```
        </connection>
       </mesh-group-connection>
      </ldp-vpls-reference-site>
     </instance>
    </vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <egress-protection-protected-l2ckt>
      <protected-l2ckt-state>
       protected-l2ckt-state
      </protected-l2ckt-state>
      <protected-l2ckt-ingress>
       protected-l2ckt-ingress
      </protected-l2ckt-ingress>
      <protected-l2ckt-egress>
       protected-l2ckt-egress
      </protected-l2ckt-egress>
      <protected-l2ckt-vcid>
       protected-l2ckt-vcid
      </protected-l2ckt-vcid>
     </egress-protection-protected-l2ckt>
    </connection>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <egress-protection-protected-l2ckt>
      <protected-l2ckt-state>
       protected-l2ckt-state
      </protected-l2ckt-state>
      <protected-l2ckt-ingress>
       protected-l2ckt-ingress
      </protected-l2ckt-ingress>
      <protected-l2ckt-egress>
```


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```
                protected-l2ckt-egress
               </protected-l2ckt-egress>
               <protected-l2ckt-vcid>
                protected-l2ckt-vcid
               </protected-l2ckt-vcid>
              </egress-protection-protected-l2ckt>
             </connection>
            </reference-site>
           </vpls-protocol-state>
          </instance>
         </vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <egress-protection-protected-l2ckt>
       <protected-l2ckt-state>
        protected-l2ckt-state
       </protected-l2ckt-state>
       <protected-l2ckt-ingress>
        protected-l2ckt-ingress
       </protected-l2ckt-ingress>
       <protected-l2ckt-egress>
        protected-l2ckt-egress
       </protected-l2ckt-egress>
       <protected-l2ckt-vcid>
        protected-l2ckt-vcid
       </protected-l2ckt-vcid>
      </egress-protection-protected-l2ckt>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <connection>
    <egress-protection-protected-l2ckt>
```

```
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
```


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```
<instance>
 <ldp-vpls-reference-site>
  <connection>
   <egress-protection-protected-l2ckt>
    <protected-l2ckt-state>
     protected-l2ckt-state
    </protected-l2ckt-state>
    <protected-l2ckt-ingress>
     protected-l2ckt-ingress
    </protected-l2ckt-ingress>
    <protected-l2ckt-egress>
     protected-l2ckt-egress
    </protected-l2ckt-egress>
    <protected-l2ckt-vcid>
     protected-l2ckt-vcid
    </protected-l2ckt-vcid>
   </egress-protection-protected-l2ckt>
  </connection>
 </ldp-vpls-reference-site>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protected-l2ckt>
      <protected-l2ckt-state>
       protected-l2ckt-state
      </protected-l2ckt-state>
      <protected-l2ckt-ingress>
       protected-l2ckt-ingress
      </protected-l2ckt-ingress>
      <protected-l2ckt-egress>
       protected-l2ckt-egress
      </protected-l2ckt-egress>
      <protected-l2ckt-vcid>
       protected-l2ckt-vcid
      </protected-l2ckt-vcid>
     </egress-protection-protected-l2ckt>
    </connection>
   </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
              protected-l2ckt-egress
            </protected-l2ckt-egress>
            <protected-l2ckt-vcid>
              protected-l2ckt-vcid
            </protected-l2ckt-vcid>
          </egress-protection-protected-l2ckt>
        </connection>
      </reference-site>
```


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```
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <egress-protection-protected-l2ckt>
            <protected-l2ckt-state>
              protected-l2ckt-state
            </protected-l2ckt-state>
            <protected-l2ckt-ingress>
              protected-l2ckt-ingress
            </protected-l2ckt-ingress>
            <protected-l2ckt-egress>
```

```
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connection>
```


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```
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <mesh-group-connection>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
            </egress-protection-protected-l2ckt>
          </connection>
        </mesh-group-connection>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <connection>
            <egress-protection-protected-l2ckt>
              <protected-l2ckt-state>
                protected-l2ckt-state
              </protected-l2ckt-state>
              <protected-l2ckt-ingress>
                protected-l2ckt-ingress
              </protected-l2ckt-ingress>
              <protected-l2ckt-egress>
                protected-l2ckt-egress
              </protected-l2ckt-egress>
              <protected-l2ckt-vcid>
                protected-l2ckt-vcid
              </protected-l2ckt-vcid>
```


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```
            </egress-protection-protected-l2ckt>
          </connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
              <egress-protection-protected-l2ckt>
                <protected-l2ckt-state>
                  protected-l2ckt-state
                </protected-l2ckt-state>
                <protected-l2ckt-ingress>
                  protected-l2ckt-ingress
                </protected-l2ckt-ingress>
                <protected-l2ckt-egress>
                  protected-l2ckt-egress
                </protected-l2ckt-egress>
                <protected-l2ckt-vcid>
                  protected-l2ckt-vcid
                </protected-l2ckt-vcid>
              </egress-protection-protected-l2ckt>
            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protected-l2ckt>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <egress-protection-protected-l2ckt>
        <protected-l2ckt-state>
          protected-l2ckt-state
        </protected-l2ckt-state>
```

```
        <protected-l2ckt-ingress>
          protected-l2ckt-ingress
        </protected-l2ckt-ingress>
        <protected-l2ckt-egress>
          protected-l2ckt-egress
        </protected-l2ckt-egress>
        <protected-l2ckt-vcid>
          protected-l2ckt-vcid
        </protected-l2ckt-vcid>
      </egress-protection-protected-l2ckt>
    </connection>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<connection>
  <egress-protection-protector>
    <protector-state>
      protector-state
    </protector-state>
    <protector-interface>
      protector-interface
    </protector-interface>
    <interface-status>
      interface-status
    </interface-status>
    <protector-pe>
      protector-pe
    </protector-pe>
    <protector-pe-status>
      protector-pe-status
    </protector-pe-status>
    <protection-context>
      protection-context
    </protection-context>
    <context-status>
      context-status
    </context-status>
    <context-lsp>
      context-lsp
    </context-lsp>
  </egress-protection-protector>
</connection>
```

Description

<egress-protection-protector>

Usage

```
<mesh-group-connection>
```


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```
<connection>
  <egress-protection-protector>
    <protector-state>
      protector-state
    </protector-state>
    <protector-interface>
      protector-interface
    </protector-interface>
    <interface-status>
      interface-status
    </interface-status>
    <protector-pe>
      protector-pe
    </protector-pe>
    <protector-pe-status>
      protector-pe-status
    </protector-pe-status>
    <protection-context>
      protection-context
    </protection-context>
    <context-status>
      context-status
    </context-status>
    <context-lsp>
      context-lsp
    </context-lsp>
  </egress-protection-protector>
 </connection>
</mesh-group-connection>
```

Description

<egress-protection-protector>

Usage

```
<instance>
  <reference-site>
    <connection>
      <egress-protection-protector>
        <protector-state>
          protector-state
        </protector-state>
        <protector-interface>
          protector-interface
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
```

```
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </reference-site>
  </instance>
```

Description

<egress-protection-protector>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
          <protector-pe>
            protector-pe
          </protector-pe>
          <protector-pe-status>
            protector-pe-status
          </protector-pe-status>
          <protection-context>
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description

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<egress-protection-protector>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <egress-protection-protector>
        <protector-state>
          protector-state
        </protector-state>
        <protector-interface>
          protector-interface
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<egress-protection-protector>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
```

```
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </mesh-group-connection>
 </ldp-vpls-reference-site>
</instance>
```

Description

<egress-protection-protector>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-connection>
   <connection>
    <egress-protection-protector>
     <protector-state>
      protector-state
     </protector-state>
     <protector-interface>
      protector-interface
     </protector-interface>
     <interface-status>
      interface-status
     </interface-status>
     <protector-pe>
      protector-pe
     </protector-pe>
     <protector-pe-status>
      protector-pe-status
     </protector-pe-status>
     <protection-context>
      protection-context
     </protection-context>
     <context-status>
      context-status
     </context-status>
     <context-lsp>
      context-lsp
```


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```
        </context-lsp>
       </egress-protection-protector>
      </connection>
     </mesh-group-connection>
    </vpls-protocol-state>
   </instance>
```

Description

<egress-protection-protector>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <connection>
    <egress-protection-protector>
     <protector-state>
      protector-state
     </protector-state>
     <protector-interface>
      protector-interface
     </protector-interface>
     <interface-status>
      interface-status
     </interface-status>
     <protector-pe>
      protector-pe
     </protector-pe>
     <protector-pe-status>
      protector-pe-status
     </protector-pe-status>
     <protection-context>
      protection-context
     </protection-context>
     <context-status>
      context-status
     </context-status>
     <context-lsp>
      context-lsp
     </context-lsp>
    </egress-protection-protector>
   </connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
```

Description

<egress-protection-protector>

Usage

```
<instance>
 <vpls-protocol-state>
```

```
                <reference-site>
                  <mesh-group-connection>
                    <connection>
                      <egress-protection-protector>
                        <protector-state>
                          protector-state
                        </protector-state>
                        <protector-interface>
                          protector-interface
                        </protector-interface>
                        <interface-status>
                          interface-status
                        </interface-status>
                        <protector-pe>
                          protector-pe
                        </protector-pe>
                        <protector-pe-status>
                          protector-pe-status
                        </protector-pe-status>
                        <protection-context>
                          protection-context
                        </protection-context>
                        <context-status>
                          context-status
                        </context-status>
                        <context-lsp>
                          context-lsp
                        </context-lsp>
                      </egress-protection-protector>
                    </connection>
                  </mesh-group-connection>
                </reference-site>
              </vpls-protocol-state>
            </instance>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
          <protector-pe>
```


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```
            protector-pe
           </protector-pe>
           <protector-pe-status>
            protector-pe-status
           </protector-pe-status>
           <protection-context>
            protection-context
           </protection-context>
           <context-status>
            context-status
           </context-status>
           <context-lsp>
            context-lsp
           </context-lsp>
          </egress-protection-protector>
        </connection>
      </reference-site>
    </instance>
  </l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
```

```
            </egress-protection-protector>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </instance>
  </l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
          <protector-pe>
            protector-pe
          </protector-pe>
          <protector-pe-status>
            protector-pe-status
          </protector-pe-status>
          <protection-context>
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
```


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```
<ldp-vpls-reference-site>
  <mesh-group-connection>
    <connection>
      <egress-protection-protector>
        <protector-state>
          protector-state
        </protector-state>
        <protector-interface>
          protector-interface
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </mesh-group-connection>
 </ldp-vpls-reference-site>
</instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
```

```
                <protector-pe>
                  protector-pe
                </protector-pe>
                <protector-pe-status>
                  protector-pe-status
                </protector-pe-status>
                <protection-context>
                  protection-context
                </protection-context>
                <context-status>
                  context-status
                </context-status>
                <context-lsp>
                  context-lsp
                </context-lsp>
              </egress-protection-protector>
            </connection>
          </mesh-group-connection>
        </vpls-protocol-state>
      </instance>
    </l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
```


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```
                context-lsp
               </context-lsp>
              </egress-protection-protector>
             </connection>
            </reference-site>
           </vpls-protocol-state>
          </instance>
         </l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <egress-protection-protector>
       <protector-state>
        protector-state
       </protector-state>
       <protector-interface>
        protector-interface
       </protector-interface>
       <interface-status>
        interface-status
       </interface-status>
       <protector-pe>
        protector-pe
       </protector-pe>
       <protector-pe-status>
        protector-pe-status
       </protector-pe-status>
       <protection-context>
        protection-context
       </protection-context>
       <context-status>
        context-status
       </context-status>
       <context-lsp>
        context-lsp
       </context-lsp>
      </egress-protection-protector>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
          <protector-pe>
            protector-pe
          </protector-pe>
          <protector-pe-status>
            protector-pe-status
          </protector-pe-status>
          <protection-context>
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
```


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```
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </mesh-group-connection>
 </reference-site>
</instance>
</vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <egress-protection-protector>
     <protector-state>
      protector-state
     </protector-state>
     <protector-interface>
      protector-interface
     </protector-interface>
     <interface-status>
      interface-status
     </interface-status>
     <protector-pe>
      protector-pe
     </protector-pe>
     <protector-pe-status>
      protector-pe-status
     </protector-pe-status>
     <protection-context>
      protection-context
     </protection-context>
     <context-status>
```

```
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

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<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
```

```
                <protector-interface>
                  protector-interface
                </protector-interface>
                <interface-status>
                  interface-status
                </interface-status>
                <protector-pe>
                  protector-pe
                </protector-pe>
                <protector-pe-status>
                  protector-pe-status
                </protector-pe-status>
                <protection-context>
                  protection-context
                </protection-context>
                <context-status>
                  context-status
                </context-status>
                <context-lsp>
                  context-lsp
                </context-lsp>
              </egress-protection-protector>
            </connection>
          </reference-site>
        </vpls-protocol-state>
      </instance>
    </vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protector>
              <protector-state>
                protector-state
              </protector-state>
              <protector-interface>
                protector-interface
              </protector-interface>
              <interface-status>
                interface-status
              </interface-status>
              <protector-pe>
                protector-pe
              </protector-pe>
              <protector-pe-status>
                protector-pe-status
              </protector-pe-status>
```


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```
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connection>
    <egress-protection-protector>
     <protector-state>
      protector-state
     </protector-state>
     <protector-interface>
      protector-interface
     </protector-interface>
     <interface-status>
      interface-status
     </interface-status>
     <protector-pe>
      protector-pe
     </protector-pe>
     <protector-pe-status>
      protector-pe-status
     </protector-pe-status>
     <protection-context>
      protection-context
     </protection-context>
     <context-status>
      context-status
     </context-status>
     <context-lsp>
      context-lsp
     </context-lsp>
    </egress-protection-protector>
   </connection>
  </reference-site>
 </instance>
```

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```
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protector>
      <protector-state>
       protector-state
      </protector-state>
      <protector-interface>
       protector-interface
      </protector-interface>
      <interface-status>
       interface-status
      </interface-status>
      <protector-pe>
       protector-pe
      </protector-pe>
      <protector-pe-status>
       protector-pe-status
      </protector-pe-status>
      <protection-context>
       protection-context
      </protection-context>
      <context-status>
       context-status
      </context-status>
      <context-lsp>
       context-lsp
      </context-lsp>
     </egress-protection-protector>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <egress-protection-protector>
```


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```
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
```

```
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </mesh-group-connection>
```


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```
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
```

```
<reference-site>
  <mesh-group-connection>
    <connection>
      <egress-protection-protector>
        <protector-state>
          protector-state
        </protector-state>
        <protector-interface>
          protector-interface
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </mesh-group-connection>
</reference-site>
</vpls-protocol-state>
</instance>
</vpls-statistics-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
```


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```
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <egress-protection-protector>
      <protector-state>
       protector-state
      </protector-state>
      <protector-interface>
       protector-interface
      </protector-interface>
      <interface-status>
       interface-status
      </interface-status>
      <protector-pe>
       protector-pe
      </protector-pe>
      <protector-pe-status>
       protector-pe-status
      </protector-pe-status>
      <protection-context>
       protection-context
      </protection-context>
      <context-status>
       context-status
      </context-status>
      <context-lsp>
       context-lsp
```

```
            </context-lsp>
           </egress-protection-protector>
          </connection>
         </mesh-group-connection>
        </reference-site>
       </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <egress-protection-protector>
     <protector-state>
      protector-state
     </protector-state>
     <protector-interface>
      protector-interface
     </protector-interface>
     <interface-status>
      interface-status
     </interface-status>
     <protector-pe>
      protector-pe
     </protector-pe>
     <protector-pe-status>
      protector-pe-status
     </protector-pe-status>
     <protection-context>
      protection-context
     </protection-context>
     <context-status>
      context-status
     </context-status>
     <context-lsp>
      context-lsp
     </context-lsp>
    </egress-protection-protector>
   </connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
```


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```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
          </interface-status>
          <protector-pe>
            protector-pe
          </protector-pe>
          <protector-pe-status>
            protector-pe-status
          </protector-pe-status>
          <protection-context>
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
    <mesh-group-connection>
      <connection>
        <egress-protection-protector>
          <protector-state>
            protector-state
          </protector-state>
          <protector-interface>
            protector-interface
          </protector-interface>
          <interface-status>
            interface-status
```

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```
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
        <protector-pe-status>
          protector-pe-status
        </protector-pe-status>
        <protection-context>
          protection-context
        </protection-context>
        <context-status>
          context-status
        </context-status>
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </mesh-group-connection>
 </vpls-protocol-state>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <egress-protection-protector>
      <protector-state>
       protector-state
      </protector-state>
      <protector-interface>
       protector-interface
      </protector-interface>
      <interface-status>
       interface-status
      </interface-status>
      <protector-pe>
       protector-pe
      </protector-pe>
      <protector-pe-status>
       protector-pe-status
      </protector-pe-status>
      <protection-context>
       protection-context
      </protection-context>
      <context-status>
       context-status
      </context-status>
```


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```
        <context-lsp>
          context-lsp
        </context-lsp>
      </egress-protection-protector>
    </connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<egress-protection-protector>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <egress-protection-protector>
       <protector-state>
        protector-state
       </protector-state>
       <protector-interface>
        protector-interface
       </protector-interface>
       <interface-status>
        interface-status
       </interface-status>
       <protector-pe>
        protector-pe
       </protector-pe>
       <protector-pe-status>
        protector-pe-status
       </protector-pe-status>
       <protection-context>
        protection-context
       </protection-context>
       <context-status>
        context-status
       </context-status>
       <context-lsp>
        context-lsp
       </context-lsp>
      </egress-protection-protector>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

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Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <egress-protection-protector>
            <protector-state>
              protector-state
            </protector-state>
            <protector-interface>
              protector-interface
            </protector-interface>
            <interface-status>
              interface-status
            </interface-status>
            <protector-pe>
              protector-pe
            </protector-pe>
            <protector-pe-status>
              protector-pe-status
            </protector-pe-status>
            <protection-context>
              protection-context
            </protection-context>
            <context-status>
              context-status
            </context-status>
            <context-lsp>
              context-lsp
            </context-lsp>
          </egress-protection-protector>
        </connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <egress-protection-protector>
              <protector-state>
```


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```
                protector-state
               </protector-state>
               <protector-interface>
                protector-interface
               </protector-interface>
               <interface-status>
                interface-status
               </interface-status>
               <protector-pe>
                protector-pe
               </protector-pe>
               <protector-pe-status>
                protector-pe-status
               </protector-pe-status>
               <protection-context>
                protection-context
               </protection-context>
               <context-status>
                context-status
               </context-status>
               <context-lsp>
                context-lsp
               </context-lsp>
              </egress-protection-protector>
             </connection>
            </mesh-group-connection>
           </reference-site>
          </instance>
         </vpls-ldp-dynamic-interface-repository-entity>
        </vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <connection>
     <egress-protection-protector>
      <protector-state>
       protector-state
      </protector-state>
      <protector-interface>
       protector-interface
      </protector-interface>
      <interface-status>
       interface-status
      </interface-status>
      <protector-pe>
       protector-pe
      </protector-pe>
      <protector-pe-status>
```

```
            protector-pe-status
          </protector-pe-status>
          <protection-context>
            protection-context
          </protection-context>
          <context-status>
            context-status
          </context-status>
          <context-lsp>
            context-lsp
          </context-lsp>
        </egress-protection-protector>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <mesh-group-connection>
     <connection>
      <egress-protection-protector>
       <protector-state>
        protector-state
       </protector-state>
       <protector-interface>
        protector-interface
       </protector-interface>
       <interface-status>
        interface-status
       </interface-status>
       <protector-pe>
        protector-pe
       </protector-pe>
       <protector-pe-status>
        protector-pe-status
       </protector-pe-status>
       <protection-context>
        protection-context
       </protection-context>
       <context-status>
        context-status
       </context-status>
       <context-lsp>
        context-lsp
       </context-lsp>
      </egress-protection-protector>
```


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```
        </connection>
       </mesh-group-connection>
      </ldp-vpls-reference-site>
     </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
   </vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-connection>
     <connection>
      <egress-protection-protector>
       <protector-state>
        protector-state
       </protector-state>
       <protector-interface>
        protector-interface
       </protector-interface>
       <interface-status>
        interface-status
       </interface-status>
       <protector-pe>
        protector-pe
       </protector-pe>
       <protector-pe-status>
        protector-pe-status
       </protector-pe-status>
       <protection-context>
        protection-context
       </protection-context>
       <context-status>
        context-status
       </context-status>
       <context-lsp>
        context-lsp
       </context-lsp>
      </egress-protection-protector>
     </connection>
    </mesh-group-connection>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <connection>
            <egress-protection-protector>
              <protector-state>
                protector-state
              </protector-state>
              <protector-interface>
                protector-interface
              </protector-interface>
              <interface-status>
                interface-status
              </interface-status>
              <protector-pe>
                protector-pe
              </protector-pe>
              <protector-pe-status>
                protector-pe-status
              </protector-pe-status>
              <protection-context>
                protection-context
              </protection-context>
              <context-status>
                context-status
              </context-status>
              <context-lsp>
                context-lsp
              </context-lsp>
            </egress-protection-protector>
          </connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
```


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```
                    <egress-protection-protector>
                      <protector-state>
                        protector-state
                      </protector-state>
                      <protector-interface>
                        protector-interface
                      </protector-interface>
                      <interface-status>
                        interface-status
                      </interface-status>
                      <protector-pe>
                        protector-pe
                      </protector-pe>
                      <protector-pe-status>
                        protector-pe-status
                      </protector-pe-status>
                      <protection-context>
                        protection-context
                      </protection-context>
                      <context-status>
                        context-status
                      </context-status>
                      <context-lsp>
                        context-lsp
                      </context-lsp>
                    </egress-protection-protector>
                  </connection>
                </mesh-group-connection>
              </reference-site>
            </vpls-protocol-state>
          </instance>
        </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<egress-protection-protector>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <egress-protection-protector>
        <protector-state>
          protector-state
        </protector-state>
        <protector-interface>
          protector-interface
        </protector-interface>
        <interface-status>
          interface-status
        </interface-status>
        <protector-pe>
          protector-pe
        </protector-pe>
```

```
                <protector-pe-status>
                  protector-pe-status
                </protector-pe-status>
                <protection-context>
                  protection-context
                </protection-context>
                <context-status>
                  context-status
                </context-status>
                <context-lsp>
                  context-lsp
                </context-lsp>
              </egress-protection-protector>
            </connection>
          </l2circuit-neighbor>
        </l2circuit-connection-information>
```

Description

<end-system-element>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-spf-result>
        <end-system-element>
          <end-system-id>
            end-system-id
          </end-system-id>
          <end-system-metric>
            end-system-metric
          </end-system-metric>
        </end-system-element>
      </isis-spf-result>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

<end-system-element>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-result>
          <end-system-element>
            <end-system-id>
              end-system-id
            </end-system-id>
            <end-system-metric>
```


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```
                    end-system-metric
                  </end-system-metric>
                </end-system-element>
              </isis-spf-result>
            </isis-spf>
          </isis-spf-information>
        </isis-overview>
      </isis-overview-information>
```

Description

<end-system-element>

Usage

```
<isis-spf-result>
  <end-system-element>
    <end-system-id>
      end-system-id
    </end-system-id>
    <end-system-metric>
      end-system-metric
    </end-system-metric>
  </end-system-element>
</isis-spf-result>
```

Description

<end-system-element>

Usage

```
<isis-spf>
  <isis-spf-result>
    <end-system-element>
      <end-system-id>
        end-system-id
      </end-system-id>
      <end-system-metric>
        end-system-metric
      </end-system-metric>
    </end-system-element>
  </isis-spf-result>
</isis-spf>
```

Description

<end-system-element>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-result>
      <end-system-element>
        <end-system-id>
```

```
            end-system-id
          </end-system-id>
          <end-system-metric>
            end-system-metric
          </end-system-metric>
        </end-system-element>
      </isis-spf-result>
    </isis-spf>
  </isis-spf-information>
```

Description

<esis-adjacency>

Usage

```
<esis-adjacency>
  <esis-neighbor-type>
    esis-neighbor-type
  </esis-neighbor-type>
  <esis-neighbor-id>
    esis-neighbor-id
  </esis-neighbor-id>
  <holdtime>
    holdtime
  </holdtime>
  <esis-adjacency-advertised-holdtime>
    esis-adjacency-advertised-holdtime
  </esis-adjacency-advertised-holdtime>
  <snpa>
    snpa
  </snpa>
  <interface-name>
    interface-name
  </interface-name>
  <esis-adjacency-log>....</esis-adjacency-log>
</esis-adjacency>
```

Description

<esis-adjacency>

Usage

```
<esis-adjacency-information>
  <esis-adjacency>
    <esis-neighbor-type>
      esis-neighbor-type
    </esis-neighbor-type>
    <esis-neighbor-id>
      esis-neighbor-id
    </esis-neighbor-id>
    <holdtime>
      holdtime
    </holdtime>
    <esis-adjacency-advertised-holdtime>
```


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```
      esis-adjacency-advertised-holdtime
    </esis-adjacency-advertised-holdtime>
    <snpa>
      snpa
    </snpa>
    <interface-name>
      interface-name
    </interface-name>
    <esis-adjacency-log>....</esis-adjacency-log>
  </esis-adjacency>
</esis-adjacency-information>
```

Description

<esis-adjacency-information>

Usage

```
<esis-adjacency-information>
  <esis-adjacency>....</esis-adjacency>
</esis-adjacency-information>
```

Description

<esis-adjacency-log>

Usage

```
<esis-adjacency>
  <esis-adjacency-log>
    <esis-adjacency-when>
      esis-adjacency-when
    </esis-adjacency-when>
    <esis-adjacency-state>
      esis-adjacency-state
    </esis-adjacency-state>
    <esis-adjacency-event>
      esis-adjacency-event
    </esis-adjacency-event>
    <esis-adjacency-down-reason>
      esis-adjacency-down-reason
    </esis-adjacency-down-reason>
  </esis-adjacency-log>
</esis-adjacency>
```

Description Entry describing ES-IS adjacency transition

<esis-adjacency-log>

Usage

```
<esis-adjacency-information>
  <esis-adjacency>
    <esis-adjacency-log>
      <esis-adjacency-when>
```

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```
            esis-adjacency-when
          </esis-adjacency-when>
          <esis-adjacency-state>
            esis-adjacency-state
          </esis-adjacency-state>
          <esis-adjacency-event>
            esis-adjacency-event
          </esis-adjacency-event>
          <esis-adjacency-down-reason>
            esis-adjacency-down-reason
          </esis-adjacency-down-reason>
        </esis-adjacency-log>
      </esis-adjacency>
    </esis-adjacency-information>
```

Description Entry describing ES-IS adjacency transition

<esis-interface>

Usage

```
<esis-interface>
  <interface-name>
    interface-name
  </interface-name>
  <esis-interface-receives>
    esis-interface-receives
  </esis-interface-receives>
  <esis-interface-sends>
    esis-interface-sends
  </esis-interface-sends>
  <interface-index>
    interface-index
  </interface-index>
  <esis-interface-state-value>
    esis-interface-state-value
  </esis-interface-state-value>
  <esis-hello-interval>
    esis-hello-interval
  </esis-hello-interval>
  <holdtime>
    holdtime
  </holdtime>
  <esis-esct>
    esis-esct
  </esis-esct>
  <esis-adjacency-count>
    esis-adjacency-count
  </esis-adjacency-count>
  <esis-interface-net>
    esis-interface-net
  </esis-interface-net>
</esis-interface>
```


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Description

<esis-interface>

Usage

```
<esis-interface-information>
  <esis-interface>
    <interface-name>
      interface-name
    </interface-name>
    <esis-interface-receives>
      esis-interface-receives
    </esis-interface-receives>
    <esis-interface-sends>
      esis-interface-sends
    </esis-interface-sends>
    <interface-index>
      interface-index
    </interface-index>
    <esis-interface-state-value>
      esis-interface-state-value
    </esis-interface-state-value>
    <esis-hello-interval>
      esis-hello-interval
    </esis-hello-interval>
    <holdtime>
      holdtime
    </holdtime>
    <esis-esct>
      esis-esct
    </esis-esct>
    <esis-adjacency-count>
      esis-adjacency-count
    </esis-adjacency-count>
    <esis-interface-net>
      esis-interface-net
    </esis-interface-net>
  </esis-interface>
</esis-interface-information>
```

Description

<esis-interface-information>

Usage

```
<esis-interface-information>
  <esis-interface>....</esis-interface>
</esis-interface-information>
```

Description

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<esis-pdu-statistics>

Usage

```
<esis-pdu-statistics>
  <esis-pdu-type>
    esis-pdu-type
  </esis-pdu-type>
  <packets-received>
    packets-received
  </packets-received>
  <packets-processed>
    packets-processed
  </packets-processed>
  <packets-dropped>
    packets-dropped
  </packets-dropped>
  <packets-sent>
    packets-sent
  </packets-sent>
  <packets-retransmitted>
    packets-retransmitted
  </packets-retransmitted>
</esis-pdu-statistics>
```

Description

<esis-pdu-statistics>

Usage

```
<esis-statistics-information>
  <esis-pdu-statistics>
    <esis-pdu-type>
      esis-pdu-type
    </esis-pdu-type>
    <packets-received>
      packets-received
    </packets-received>
    <packets-processed>
      packets-processed
    </packets-processed>
    <packets-dropped>
      packets-dropped
    </packets-dropped>
    <packets-sent>
      packets-sent
    </packets-sent>
    <packets-retransmitted>
      packets-retransmitted
    </packets-retransmitted>
  </esis-pdu-statistics>
</esis-statistics-information>
```

Description

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<esis-statistics-information>

Usage

```
<esis-statistics-information>
  <esis-pdu-statistics>....</esis-pdu-statistics>
  <esis-totals-information>....</esis-totals-information>
</esis-statistics-information>
```

Description

<esis-totals-information>

Usage

```
<esis-totals-information>
  <packets-received>
    packets-received
  </packets-received>
  <packets-sent>
    packets-sent
  </packets-sent>
</esis-totals-information>
```

Description

<esis-totals-information>

Usage

```
<esis-statistics-information>
  <esis-totals-information>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent>
      packets-sent
    </packets-sent>
  </esis-totals-information>
</esis-statistics-information>
```

Description

<everything>

Usage

```
<pim-statistics-information>
  <everything>
    <pim-statistics-global>....</pim-statistics-global>
    <pim-statistics-other>....</pim-statistics-other>
  </everything>
</pim-statistics-information>
```

Description

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<explicit-route>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </rsvp-session>
</rsvp-session-data>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour>
      <explicit-route>
        <address>
          address
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </detour>
  </rsvp-session>
</rsvp-session-data>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour-branch>
      <explicit-route>
        <address>
```


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```
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </detour-branch>
 </rsvp-session>
</rsvp-session-data>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <mpls-lsp>
   <mpls-lsp-path>
    <explicit-route>
     <address>
      address
     </address>
     <explicit-route-type>
      explicit-route-type
     </explicit-route-type>
     <telink-id>
      telink-id
     </telink-id>
    </explicit-route>
   </mpls-lsp-path>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session>
 <explicit-route>
  <address>
   address
  </address>
  <explicit-route-type>
   explicit-route-type
  </explicit-route-type>
  <telink-id>
```

```
        telink-id
      </telink-id>
    </explicit-route>
  </rsvp-session>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session>
  <detour>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </detour>
</rsvp-session>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session>
  <detour-branch>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </detour-branch>
</rsvp-session>
```

Description Explicit Route Object (ERO)

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<explicit-route>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <explicit-route>
        <address>
          address
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<detour>
  <explicit-route>
    <address>
      address
    </address>
    <explicit-route-type>
      explicit-route-type
    </explicit-route-type>
    <telink-id>
      telink-id
    </telink-id>
  </explicit-route>
</detour>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<detour-branch>
  <explicit-route>
    <address>
      address
    </address>
    <explicit-route-type>
      explicit-route-type
```

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```
    </explicit-route-type>
    <telink-id>
     telink-id
    </telink-id>
   </explicit-route>
  </detour-branch>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <explicit-route>
    <address>
     address
    </address>
    <explicit-route-type>
     explicit-route-type
    </explicit-route-type>
    <telink-id>
     telink-id
    </telink-id>
   </explicit-route>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <detour>
    <explicit-route>
     <address>
      address
     </address>
     <explicit-route-type>
      explicit-route-type
     </explicit-route-type>
     <telink-id>
      telink-id
     </telink-id>
    </explicit-route>
   </detour>
  </rsvp-session>
```


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```
  </rsvp-session-data>
</rsvp-session-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <explicit-route>
          <address>
            address
          </address>
          <explicit-route-type>
            explicit-route-type
          </explicit-route-type>
          <telink-id>
            telink-id
          </telink-id>
        </explicit-route>
      </detour-branch>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <explicit-route>
            <address>
              address
            </address>
            <explicit-route-type>
              explicit-route-type
            </explicit-route-type>
            <telink-id>
              telink-id
            </telink-id>
          </explicit-route>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
```

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```
  </rsvp-session-data>
</rsvp-session-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-path>
  <explicit-route>
    <address>
      address
    </address>
    <explicit-route-type>
      explicit-route-type
    </explicit-route-type>
    <telink-id>
      telink-id
    </telink-id>
  </explicit-route>
</mpls-lsp-path>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp>
  <mpls-lsp-path>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </mpls-lsp-path>
</mpls-lsp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
```


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```
<explicit-route>
  <address>
    address
  </address>
  <explicit-route-type>
    explicit-route-type
  </explicit-route-type>
  <telink-id>
    telink-id
  </telink-id>
</explicit-route>
</rsvp-session>
</rsvp-session-data>
</mpls-lsp-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <explicit-route>
          <address>
            address
          </address>
          <explicit-route-type>
            explicit-route-type
          </explicit-route-type>
          <telink-id>
            telink-id
          </telink-id>
        </explicit-route>
      </detour>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <explicit-route>
          <address>
            address
```

```
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </detour-branch>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <explicit-route>
      <address>
       address
      </address>
      <explicit-route-type>
       explicit-route-type
      </explicit-route-type>
      <telink-id>
       telink-id
      </telink-id>
     </explicit-route>
    </mpls-lsp-path>
   </mpls-lsp>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-rsvp>
 <explicit-route>
  <address>
   address
  </address>
  <explicit-route-type>
   explicit-route-type
```


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```
    </explicit-route-type>
    <telink-id>
     telink-id
    </telink-id>
   </explicit-route>
</mpls-restart-rsvp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-path>
  <explicit-route>
    <address>
     address
    </address>
    <explicit-route-type>
     explicit-route-type
    </explicit-route-type>
    <telink-id>
     telink-id
    </telink-id>
  </explicit-route>
</mpls-restart-path>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-path>
  <mpls-restart-rsvp>
    <explicit-route>
      <address>
       address
      </address>
      <explicit-route-type>
       explicit-route-type
      </explicit-route-type>
      <telink-id>
       telink-id
      </telink-id>
    </explicit-route>
  </mpls-restart-rsvp>
</mpls-restart-path>
```

Description Explicit Route Object (ERO)

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<explicit-route>

Usage

```
<mpls-restart-lsp>
  <mpls-restart-path>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
  </mpls-restart-path>
</mpls-restart-lsp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-lsp>
  <mpls-restart-path>
    <mpls-restart-rsvp>
      <explicit-route>
        <address>
          address
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </mpls-restart-rsvp>
  </mpls-restart-path>
</mpls-restart-lsp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>
    <mpls-restart-lsp>
      <mpls-restart-path>
        <explicit-route>
```


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```
            <address>
              address
            </address>
            <explicit-route-type>
              explicit-route-type
            </explicit-route-type>
            <telink-id>
              telink-id
            </telink-id>
          </explicit-route>
        </mpls-restart-path>
      </mpls-restart-lsp>
    </mpls-restart-database>
</mpls-restart-database-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>
    <mpls-restart-lsp>
      <mpls-restart-path>
        <mpls-restart-rsvp>
          <explicit-route>
            <address>
              address
            </address>
            <explicit-route-type>
              explicit-route-type
            </explicit-route-type>
            <telink-id>
              telink-id
            </telink-id>
          </explicit-route>
        </mpls-restart-rsvp>
      </mpls-restart-path>
    </mpls-restart-lsp>
  </mpls-restart-database>
</mpls-restart-database-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-p2mp-restart-lsp>
  <mpls-restart-lsp>
    <mpls-restart-path>
      <explicit-route>
        <address>
```

```
                address
              </address>
              <explicit-route-type>
                explicit-route-type
              </explicit-route-type>
              <telink-id>
                telink-id
              </telink-id>
            </explicit-route>
          </mpls-restart-path>
        </mpls-restart-lsp>
      </mpls-p2mp-restart-lsp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-p2mp-restart-lsp>
  <mpls-restart-lsp>
    <mpls-restart-path>
      <mpls-restart-rsvp>
        <explicit-route>
          <address>
            address
          </address>
          <explicit-route-type>
            explicit-route-type
          </explicit-route-type>
          <telink-id>
            telink-id
          </telink-id>
        </explicit-route>
      </mpls-restart-rsvp>
    </mpls-restart-path>
  </mpls-restart-lsp>
</mpls-p2mp-restart-lsp>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-p2mp-restart-database-information>
  <mpls-p2mp-restart-database>
    <mpls-p2mp-restart-lsp>
      <mpls-restart-lsp>
        <mpls-restart-path>
          <explicit-route>
            <address>
              address
            </address>
```


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```
            <explicit-route-type>
              explicit-route-type
            </explicit-route-type>
            <telink-id>
              telink-id
            </telink-id>
          </explicit-route>
        </mpls-restart-path>
      </mpls-restart-lsp>
    </mpls-p2mp-restart-lsp>
  </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-p2mp-restart-database-information>
  <mpls-p2mp-restart-database>
    <mpls-p2mp-restart-lsp>
      <mpls-restart-lsp>
        <mpls-restart-path>
          <mpls-restart-rsvp>
            <explicit-route>
              <address>
                address
              </address>
              <explicit-route-type>
                explicit-route-type
              </explicit-route-type>
              <telink-id>
                telink-id
              </telink-id>
            </explicit-route>
          </mpls-restart-rsvp>
        </mpls-restart-path>
      </mpls-restart-lsp>
    </mpls-p2mp-restart-lsp>
  </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-lsp-path>
        <explicit-route>
```

```
            <address>
              address
            </address>
            <explicit-route-type>
              explicit-route-type
            </explicit-route-type>
            <telink-id>
              telink-id
            </telink-id>
          </explicit-route>
        </mpls-lsp-path>
      </mpls-lsp>
    </mpls-call-admission-control>
  </mpls-call-admission-control-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-path-inst-repl>
  <explicit-route>
    <address>
      address
    </address>
    <explicit-route-type>
      explicit-route-type
    </explicit-route-type>
    <telink-id>
      telink-id
    </telink-id>
  </explicit-route>
</mpls-path-inst-repl>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-path-replication>
  <mpls-path-inst-repl>
    <explicit-route>
      <address>
        address
      </address>
      <explicit-route-type>
        explicit-route-type
      </explicit-route-type>
      <telink-id>
        telink-id
      </telink-id>
    </explicit-route>
```


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```
  </mpls-path-inst-repl>
</mpls-path-replication>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-path-replication-information>
  <mpls-path-replication>
    <mpls-path-inst-repl>
      <explicit-route>
        <address>
          address
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </mpls-path-inst-repl>
  </mpls-path-replication>
</mpls-path-replication-information>
```

Description Explicit Route Object (ERO)

<explicit-route>

Usage

```
<mpls-lsp-replication>
  <mpls-path-replication>
    <mpls-path-inst-repl>
      <explicit-route>
        <address>
          address
        </address>
        <explicit-route-type>
          explicit-route-type
        </explicit-route-type>
        <telink-id>
          telink-id
        </telink-id>
      </explicit-route>
    </mpls-path-inst-repl>
  </mpls-path-replication>
</mpls-lsp-replication>
```

Description Explicit Route Object (ERO)

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<explicit-route>

Usage

```
<mpls-lsp-replication-information>
  <mpls-lsp-replication>
    <mpls-path-replication>
      <mpls-path-inst-repl>
        <explicit-route>
          <address>
            address
          </address>
          <explicit-route-type>
            explicit-route-type
          </explicit-route-type>
          <telink-id>
            telink-id
          </telink-id>
        </explicit-route>
      </mpls-path-inst-repl>
    </mpls-path-replication>
  </mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description Explicit Route Object (ERO)

<fabric-summary-information>

Usage

```
<fabric-summary-information>
  <autonomous-system>
    autonomous-system
  </autonomous-system>
  <ine-id>
    ine-id
  </ine-id>
  <ine-type>
    ine-type
  </ine-type>
  <simulation-mode>
    simulation-mode
  </simulation-mode>
</fabric-summary-information>
```

Description

<fdep-depnode>

Usage

```
<fdep-depnode>
  <dep-rtnode-prefix>
    dep-rtnode-prefix
  </dep-rtnode-prefix>
  <dep-rtnode-prefixlen>
```


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```
    dep-rtnode-prefixlen
  </dep-rtnode-prefixlen>
  <dep-entries>
    dep-entries
  </dep-entries>
  <dep-active>
    dep-active
  </dep-active>
  <dep-flags>
    dep-flags
  </dep-flags>
</fdep-depnode>
```

Description

<fdep-depnode>

Usage

```
<rtflow-dep-information>
  <rtflow-dep-table>
    <fdep-node>
      <fdep-depnode>
        <dep-rtnode-prefix>
          dep-rtnode-prefix
        </dep-rtnode-prefix>
        <dep-rtnode-prefixlen>
          dep-rtnode-prefixlen
        </dep-rtnode-prefixlen>
        <dep-entries>
          dep-entries
        </dep-entries>
        <dep-active>
          dep-active
        </dep-active>
        <dep-flags>
          dep-flags
        </dep-flags>
      </fdep-depnode>
    </fdep-node>
  </rtflow-dep-table>
</rtflow-dep-information>
```

Description

<fdep-inode>

Usage

```
<fdep-inode>
  <fdep-inode-color>
    fdep-inode-color
  </fdep-inode-color>
  <fdep-inode-consist>
    fdep-inode-consist
  </fdep-inode-consist>
```

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```
  <fdep-inode-asn>
   fdep-inode-asn
  </fdep-inode-asn>
</fdep-inode>
```

Description

<fdep-inode>

Usage

```
<rtflow-dep-information>
 <rtflow-dep-table>
  <fdep-node>
   <fdep-inode>
    <fdep-inode-color>
     fdep-inode-color
    </fdep-inode-color>
    <fdep-inode-consist>
     fdep-inode-consist
    </fdep-inode-consist>
    <fdep-inode-asn>
     fdep-inode-asn
    </fdep-inode-asn>
   </fdep-inode>
  </fdep-node>
 </rtflow-dep-table>
</rtflow-dep-information>
```

Description

<fdep-node>

Usage

```
<rtflow-dep-information>
 <rtflow-dep-table>
  <fdep-node>
   <fdep-destination>
    fdep-destination
   </fdep-destination>
   <fdep-prefixlen>
    fdep-prefixlen
   </fdep-prefixlen>
   <fdep-inode>....</fdep-inode>
   <fdep-rtnode>....</fdep-rtnode>
   <fdep-depnode>....</fdep-depnode>
  </fdep-node>
 </rtflow-dep-table>
</rtflow-dep-information>
```

Description

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<fdep-rtnode>

Usage

```
<fdep-rtnode>
  <rtnode-state>
    rtnode-state
  </rtnode-state>
  <rtnode-refcount>
    rtnode-refcount
  </rtnode-refcount>
  <rtnode-origin>
    rtnode-origin
  </rtnode-origin>
  <rtnode-next-as>
    rtnode-next-as
  </rtnode-next-as>
  <rtnode-flags>
    rtnode-flags
  </rtnode-flags>
</fdep-rtnode>
```

Description Entry that corresponding to a unicast route that is being tracked

<fdep-rtnode>

Usage

```
<rtflow-dep-information>
  <rtflow-dep-table>
    <fdep-node>
      <fdep-rtnode>
        <rtnode-state>
          rtnode-state
        </rtnode-state>
        <rtnode-refcount>
          rtnode-refcount
        </rtnode-refcount>
        <rtnode-origin>
          rtnode-origin
        </rtnode-origin>
        <rtnode-next-as>
          rtnode-next-as
        </rtnode-next-as>
        <rtnode-flags>
          rtnode-flags
        </rtnode-flags>
      </fdep-rtnode>
    </fdep-node>
  </rtflow-dep-table>
</rtflow-dep-information>
```

Description Entry that corresponding to a unicast route that is being tracked

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<flow-ucast-rt>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <rtd-flow-dep>
     <flow-ucast-rt>
      <flow-rtn-dest>
       flow-rtn-dest
      </flow-rtn-dest>
      <flow-rtn-plen>
       flow-rtn-plen
      </flow-rtn-plen>
      <flow-rtn-state>
       flow-rtn-state
      </flow-rtn-state>
     </flow-ucast-rt>
    </rtd-flow-dep>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```

Description Unicast route used for resolution

<flow-ucast-rt>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <rtd-flow-dep>
     <flow-ucast-rt>
      <flow-rtn-dest>
       flow-rtn-dest
      </flow-rtn-dest>
      <flow-rtn-plen>
       flow-rtn-plen
      </flow-rtn-plen>
      <flow-rtn-state>
       flow-rtn-state
      </flow-rtn-state>
     </flow-ucast-rt>
    </rtd-flow-dep>
   </rt-entry>
  </rt>
 </route-table>
</route-summary-information>
```


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Description Unicast route used for resolution

<hakr-keychain>

Usage

```
<hakr-keychain>
  <hakr-keychain-name>
    hakr-keychain-name
  </hakr-keychain-name>
  <hakr-keychain-active-send-key>
    hakr-keychain-active-send-key
  </hakr-keychain-active-send-key>
  <hakr-keychain-active-receive-key>
    hakr-keychain-active-receive-key
  </hakr-keychain-active-receive-key>
  <hakr-keychain-next-send-key>
    hakr-keychain-next-send-key
  </hakr-keychain-next-send-key>
  <hakr-keychain-next-receive-key>
    hakr-keychain-next-receive-key
  </hakr-keychain-next-receive-key>
  <hakr-keychain-next-key-time>
    hakr-keychain-next-key-time
  </hakr-keychain-next-key-time>
  <hakr-keychain-tolerance>
    hakr-keychain-tolerance
  </hakr-keychain-tolerance>
  <hakr-sa-clients>
    hakr-sa-clients
  </hakr-sa-clients>
  <hakr-keys>....</hakr-keys>
</hakr-keychain>
```

Description Information about Keychain

<hakr-keychain>

Usage

```
<hakr-keychain-information>
  <hakr-keychain>
    <hakr-keychain-name>
      hakr-keychain-name
    </hakr-keychain-name>
    <hakr-keychain-active-send-key>
      hakr-keychain-active-send-key
    </hakr-keychain-active-send-key>
    <hakr-keychain-active-receive-key>
      hakr-keychain-active-receive-key
    </hakr-keychain-active-receive-key>
    <hakr-keychain-next-send-key>
      hakr-keychain-next-send-key
    </hakr-keychain-next-send-key>
    <hakr-keychain-next-receive-key>
```

```
        hakr-keychain-next-receive-key
      </hakr-keychain-next-receive-key>
      <hakr-keychain-next-key-time>
        hakr-keychain-next-key-time
      </hakr-keychain-next-key-time>
      <hakr-keychain-tolerance>
        hakr-keychain-tolerance
      </hakr-keychain-tolerance>
      <hakr-sa-clients>
        hakr-sa-clients
      </hakr-sa-clients>
      <hakr-keys>....</hakr-keys>
    </hakr-keychain>
  </hakr-keychain-information>
```

Description Information about Keychain

<hakr-keychain-information>

Usage

```
<hakr-keychain-information>
  <hakr-keychain>....</hakr-keychain>
  <hakr-keys>....</hakr-keys>
</hakr-keychain-information>
```

Description

<hakr-keys>

Usage

```
<hakr-keychain>
  <hakr-keys>
    <hakr-key-id>
      hakr-key-id
    </hakr-key-id>
    <hakr-key-secret>
      hakr-key-secret
    </hakr-key-secret>
    <hakr-key-algorithm>
      hakr-key-algorithm
    </hakr-key-algorithm>
    <hakr-key-mode>
      hakr-key-mode
    </hakr-key-mode>
    <hakr-key-state>
      hakr-key-state
    </hakr-key-state>
    <hakr-key-options>
      hakr-key-options
    </hakr-key-options>
    <hakr-key-start-time>
      hakr-key-start-time
    </hakr-key-start-time>
```


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```
  </hakr-keys>
</hakr-keychain>
```

Description Information about the clients

<hakr-keys>

Usage

```
<hakr-keychain-information>
  <hakr-keychain>
    <hakr-keys>
      <hakr-key-id>
        hakr-key-id
      </hakr-key-id>
      <hakr-key-secret>
        hakr-key-secret
      </hakr-key-secret>
      <hakr-key-algorithm>
        hakr-key-algorithm
      </hakr-key-algorithm>
      <hakr-key-mode>
        hakr-key-mode
      </hakr-key-mode>
      <hakr-key-state>
        hakr-key-state
      </hakr-key-state>
      <hakr-key-options>
        hakr-key-options
      </hakr-key-options>
      <hakr-key-start-time>
        hakr-key-start-time
      </hakr-key-start-time>
    </hakr-keys>
  </hakr-keychain>
</hakr-keychain-information>
```

Description Information about the clients

<hakr-keys>

Usage

```
<hakr-keychain-information>
  <hakr-keys>
    <hakr-key-id>
      hakr-key-id
    </hakr-key-id>
    <hakr-key-secret>
      hakr-key-secret
    </hakr-key-secret>
    <hakr-key-algorithm>
      hakr-key-algorithm
    </hakr-key-algorithm>
```

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```
        <hakr-key-mode>
          hakr-key-mode
        </hakr-key-mode>
        <hakr-key-state>
          hakr-key-state
        </hakr-key-state>
        <hakr-key-options>
          hakr-key-options
        </hakr-key-options>
        <hakr-key-start-time>
          hakr-key-start-time
        </hakr-key-start-time>
      </hakr-keys>
    </hakr-keychain-information>
```

Description Information about the clients

<history>

Usage

```
<connection>
  <history>
    <log-time-stamp>
      log-time-stamp
    </log-time-stamp>
    <log-event>
      log-event
    </log-event>
    <changed-entity>
      changed-entity
    </changed-entity>
  </history>
</connection>
```

Description

<history>

Usage

```
<mesh-group-connection>
  <connection>
    <history>
      <log-time-stamp>
        log-time-stamp
      </log-time-stamp>
      <log-event>
        log-event
      </log-event>
      <changed-entity>
        changed-entity
      </changed-entity>
    </history>
  </connection>
```


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```
</mesh-group-connection>
```

Description

<history>

Usage

```
<instance>
  <reference-site>
    <connection>
      <history>
        <log-time-stamp>
          log-time-stamp
        </log-time-stamp>
        <log-event>
          log-event
        </log-event>
        <changed-entity>
          changed-entity
        </changed-entity>
      </history>
    </connection>
  </reference-site>
</instance>
```

Description

<history>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description

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<history>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <history>
        <log-time-stamp>
          log-time-stamp
        </log-time-stamp>
        <log-event>
          log-event
        </log-event>
        <changed-entity>
          changed-entity
        </changed-entity>
      </history>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<history>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<history>

Usage

```
<instance>
  <vpls-protocol-state>
```


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```
    <mesh-group-connection>
     <connection>
      <history>
       <log-time-stamp>
        log-time-stamp
       </log-time-stamp>
       <log-event>
        log-event
       </log-event>
       <changed-entity>
        changed-entity
       </changed-entity>
      </history>
     </connection>
    </mesh-group-connection>
   </vpls-protocol-state>
  </instance>
```

Description

<history>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <connection>
    <history>
     <log-time-stamp>
      log-time-stamp
     </log-time-stamp>
     <log-event>
      log-event
     </log-event>
     <changed-entity>
      changed-entity
     </changed-entity>
    </history>
   </connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
```

Description

<history>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <history>
```

```
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
```


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```
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
```

```
                log-event
               </log-event>
               <changed-entity>
                changed-entity
               </changed-entity>
              </history>
             </connection>
            </mesh-group-connection>
           </ldp-vpls-reference-site>
          </instance>
         </l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
      </changed-entity>
     </history>
    </connection>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
```


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```
                log-event
               </log-event>
               <changed-entity>
                changed-entity
               </changed-entity>
              </history>
             </connection>
            </reference-site>
           </vpls-protocol-state>
          </instance>
        </l2vpn-connection-information>
```

Description

<history>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <history>
       <log-time-stamp>
        log-time-stamp
       </log-time-stamp>
       <log-event>
        log-event
       </log-event>
       <changed-entity>
        changed-entity
       </changed-entity>
      </history>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <connection>
    <history>
     <log-time-stamp>
      log-time-stamp
     </log-time-stamp>
```

```
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </reference-site>
    </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
```


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```
        </log-event>
        <changed-entity>
          changed-entity
        </changed-entity>
      </history>
    </connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
      </changed-entity>
     </history>
    </connection>
   </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
```

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```
                <changed-entity>
                  changed-entity
                </changed-entity>
              </history>
            </connection>
          </mesh-group-connection>
        </vpls-protocol-state>
      </instance>
    </vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <history>
              <log-time-stamp>
                log-time-stamp
              </log-time-stamp>
              <log-event>
                log-event
```


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```
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connection>
    <history>
     <log-time-stamp>
      log-time-stamp
     </log-time-stamp>
     <log-event>
      log-event
     </log-event>
     <changed-entity>
      changed-entity
     </changed-entity>
    </history>
   </connection>
  </reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
```

```
                <changed-entity>
                  changed-entity
                </changed-entity>
              </history>
            </connection>
          </mesh-group-connection>
        </reference-site>
      </instance>
    </vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
```


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```
            </changed-entity>
           </history>
          </connection>
         </mesh-group-connection>
        </ldp-vpls-reference-site>
       </instance>
      </vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
      </changed-entity>
     </history>
    </connection>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
```

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```
            </changed-entity>
          </history>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <history>
              <log-time-stamp>
                log-time-stamp
              </log-time-stamp>
              <log-event>
                log-event
              </log-event>
              <changed-entity>
                changed-entity
              </changed-entity>
            </history>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
```


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```
            changed-entity
          </changed-entity>
        </history>
      </connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <history>
          <log-time-stamp>
            log-time-stamp
          </log-time-stamp>
          <log-event>
            log-event
          </log-event>
          <changed-entity>
            changed-entity
          </changed-entity>
```

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```
        </history>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
```


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```
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <history>
              <log-time-stamp>
                log-time-stamp
              </log-time-stamp>
              <log-event>
                log-event
              </log-event>
              <changed-entity>
                changed-entity
              </changed-entity>
```

```
            </history>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <history>
            <log-time-stamp>
              log-time-stamp
            </log-time-stamp>
            <log-event>
              log-event
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <history>
              <log-time-stamp>
                log-time-stamp
              </log-time-stamp>
              <log-event>
                log-event
              </log-event>
              <changed-entity>
```


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```
                changed-entity
               </changed-entity>
              </history>
             </connection>
            </mesh-group-connection>
           </reference-site>
          </instance>
         </vpls-ldp-dynamic-interface-repository-entity>
        </vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
      </changed-entity>
     </history>
    </connection>
   </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <mesh-group-connection>
     <connection>
      <history>
       <log-time-stamp>
        log-time-stamp
       </log-time-stamp>
       <log-event>
        log-event
```

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```
            </log-event>
            <changed-entity>
              changed-entity
            </changed-entity>
          </history>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-connection>
     <connection>
      <history>
       <log-time-stamp>
        log-time-stamp
       </log-time-stamp>
       <log-event>
        log-event
       </log-event>
       <changed-entity>
        changed-entity
       </changed-entity>
      </history>
     </connection>
    </mesh-group-connection>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <connection>
      <history>
       <log-time-stamp>
```


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```
                log-time-stamp
               </log-time-stamp>
               <log-event>
                log-event
               </log-event>
               <changed-entity>
                changed-entity
               </changed-entity>
              </history>
             </connection>
            </reference-site>
           </vpls-protocol-state>
          </instance>
         </vpls-ldp-dynamic-interface-repository-entity>
        </vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <mesh-group-connection>
      <connection>
       <history>
        <log-time-stamp>
         log-time-stamp
        </log-time-stamp>
        <log-event>
         log-event
        </log-event>
        <changed-entity>
         changed-entity
        </changed-entity>
       </history>
      </connection>
     </mesh-group-connection>
    </reference-site>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<history>

Usage

```
<l2circuit-connection-information>
 <l2circuit-neighbor>
```

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```
    <connection>
     <history>
      <log-time-stamp>
       log-time-stamp
      </log-time-stamp>
      <log-event>
       log-event
      </log-event>
      <changed-entity>
       changed-entity
      </changed-entity>
     </history>
    </connection>
   </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<host-record>

Usage

```
<mgm-interface-groups>
 <mgm-group>
  <host-record>
   <record-type>
    record-type
   </record-type>
   <receiver>
    receiver
   </receiver>
   <record-timeout>
    record-timeout
   </record-timeout>
  </host-record>
 </mgm-group>
</mgm-interface-groups>
```

Description

<host-record>

Usage

```
<igmp-group-information>
 <mgm-interface-groups>
  <mgm-group>
   <host-record>
    <record-type>
     record-type
    </record-type>
    <receiver>
     receiver
    </receiver>
    <record-timeout>
     record-timeout
```


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```
        </record-timeout>
       </host-record>
      </mgm-group>
     </mgm-interface-groups>
    </igmp-group-information>
```

Description

<host-record>

Usage

```
<mld-group-information>
 <mgm-interface-groups>
  <mgm-group>
   <host-record>
    <record-type>
     record-type
    </record-type>
    <receiver>
     receiver
    </receiver>
    <record-timeout>
     record-timeout
    </record-timeout>
   </host-record>
  </mgm-group>
 </mgm-interface-groups>
</mld-group-information>
```

Description

<host-record>

Usage

```
<amt-tunnel>
 <mgm-group>
  <host-record>
   <record-type>
    record-type
   </record-type>
   <receiver>
    receiver
   </receiver>
   <record-timeout>
    record-timeout
   </record-timeout>
  </host-record>
 </mgm-group>
</amt-tunnel>
```

Description

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<host-record>

Usage

```
<amt-tunnel-information>
  <amt-tunnel>
    <mgm-group>
      <host-record>
        <record-type>
          record-type
        </record-type>
        <receiver>
          receiver
        </receiver>
        <record-timeout>
          record-timeout
        </record-timeout>
      </host-record>
    </mgm-group>
  </amt-tunnel>
</amt-tunnel-information>
```

Description

<hostname-tlv>

Usage

```
<isis-tlv>
  <hostname-tlv>
    <hostname>
      hostname
    </hostname>
  </hostname-tlv>
</isis-tlv>
```

Description

<hostname-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <hostname-tlv>
      <hostname>
        hostname
      </hostname>
    </hostname-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

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<hostname-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <hostname-tlv>
        <hostname>
          hostname
        </hostname>
      </hostname-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<hostname-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <hostname-tlv>
          <hostname>
            hostname
          </hostname>
        </hostname-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<idrp-tlv>

Usage

```
<isis-tlv>
  <idrp-tlv>
    <tlv-length>
      tlv-length
    </tlv-length>
  </idrp-tlv>
</isis-tlv>
```

Description

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<idrp-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <idrp-tlv>
      <tlv-length>
        tlv-length
      </tlv-length>
    </idrp-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<idrp-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <idrp-tlv>
        <tlv-length>
          tlv-length
        </tlv-length>
      </idrp-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<idrp-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <idrp-tlv>
          <tlv-length>
            tlv-length
          </tlv-length>
        </idrp-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

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<iflist-next-hop>

Usage

```
<multicast-next-hops-information>
  <next-hops-family>
    <iflist-next-hop>
      <next-hop-id>
        next-hop-id
      </next-hop-id>
      <next-hop-ref-count>
        next-hop-ref-count
      </next-hop-ref-count>
      <next-hop-kernel-ref-count>
        next-hop-kernel-ref-count
      </next-hop-kernel-ref-count>
      <next-hop-downstream-interface>....</next-hop-downstream-interface>
    </iflist-next-hop>
  </next-hops-family>
</multicast-next-hops-information>
```

Description

<igmp-group-information>

Usage

```
<igmp-group-information>
  <mgm-interface-groups>....</mgm-interface-groups>
</igmp-group-information>
```

Description

<igmp-hosts-information>

Usage

```
<igmp-hosts-information>
  <mgm-disabled-interface-name>
    mgm-disabled-interface-name
  </mgm-disabled-interface-name>
  <mgm-interface>....</mgm-interface>
</igmp-hosts-information>
```

Description

<igmp-interface-information>

Usage

```
<igmp-interface-information>
  <mgm-interface>....</mgm-interface>
  <mgm-configured-parameters>....</mgm-configured-parameters>
  <mgm-derived-parameters>....</mgm-derived-parameters>
  <mgm-amt-configured-parameters>....</mgm-amt-configured-parameters>
  <mgm-amt-derived-parameters>....</mgm-amt-derived-parameters>
```

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```
</igmp-interface-information>
```

Description

<igmp-output-group-information>

Usage

```
<igmp-output-group-information>
  <mgm-interface-output-groups>....</mgm-interface-output-groups>
</igmp-output-group-information>
```

Description

<igmp-statistics-information>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>....</mgm-statistics-interface>
  <mgm-statistics-other>....</mgm-statistics-other>
  <mgm-statistics-global>....</mgm-statistics-global>
  <mgm-statistics-all>....</mgm-statistics-all>
</igmp-statistics-information>
```

Description

<ingress-replication-information>

Usage

```
<ingress-replication-information>
  <ir-tunnel>....</ir-tunnel>
  <ir-unicast-tunnel>....</ir-unicast-tunnel>
</ingress-replication-information>
```

Description

<instance>

Usage

```
<instance>
  <instance-name>
    instance-name
  </instance-name>
  <instance-display-error>
    instance-display-error
  </instance-display-error>
  <reference-site>....</reference-site>
  <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
  <vpls-protocol-state>....</vpls-protocol-state>
  <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
</instance>
```


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Description

<instance>

Usage

```
<l2vpn-connection-information>
  <instance>
    <instance-name>
      instance-name
    </instance-name>
    <instance-display-error>
      instance-display-error
    </instance-display-error>
    <reference-site>....</reference-site>
    <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
    <vpls-protocol-state>....</vpls-protocol-state>
    <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
  </instance>
</l2vpn-connection-information>
```

Description

<instance>

Usage

```
<vpls-connection-information>
  <instance>
    <instance-name>
      instance-name
    </instance-name>
    <instance-display-error>
      instance-display-error
    </instance-display-error>
    <reference-site>....</reference-site>
    <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
    <vpls-protocol-state>....</vpls-protocol-state>
    <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
  </instance>
</vpls-connection-information>
```

Description

<instance>

Usage

```
<vpls-statistics-information>
  <instance>
    <instance-name>
      instance-name
    </instance-name>
    <instance-display-error>
      instance-display-error
    </instance-display-error>
    <reference-site>....</reference-site>
```

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```
    <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
    <vpls-protocol-state>....</vpls-protocol-state>
    <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
   </instance>
</vpls-statistics-information>
```

Description

<instance>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <instance-name>
      instance-name
    </instance-name>
    <instance-display-error>
      instance-display-error
    </instance-display-error>
    <reference-site>....</reference-site>
    <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
    <vpls-protocol-state>....</vpls-protocol-state>
    <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<instance>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <instance-name>
        instance-name
      </instance-name>
      <instance-display-error>
        instance-display-error
      </instance-display-error>
      <reference-site>....</reference-site>
      <ldp-vpls-reference-site>....</ldp-vpls-reference-site>
      <vpls-protocol-state>....</vpls-protocol-state>
      <vpls-rsvp-te-ingress-p2mp-lsp>....</vpls-rsvp-te-ingress-p2mp-lsp>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

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<instance-core>

Usage

```
<instance-core>
  <instance-name>
    instance-name
  </instance-name>
  <instance-description>
    instance-description
  </instance-description>
  <router-id>
    router-id
  </router-id>
  <instance-type>
    instance-type
  </instance-type>
  <instance-state>
    instance-state
  </instance-state>
  <instance-restart-state>
    instance-restart-state
  </instance-restart-state>
  <instance-pathsel-timeout>
    instance-pathsel-timeout
  </instance-pathsel-timeout>
  <instance-rib>....</instance-rib>
  <instance-interface>....</instance-interface>
  <instance-vrf>....</instance-vrf>
  <instance-vpls-meshgroup>....</instance-vpls-meshgroup>
</instance-core>
```

Description

<instance-core>

Usage

```
<instance-information>
  <instance-core>
    <instance-name>
      instance-name
    </instance-name>
    <instance-description>
      instance-description
    </instance-description>
    <router-id>
      router-id
    </router-id>
    <instance-type>
      instance-type
    </instance-type>
    <instance-state>
      instance-state
    </instance-state>
    <instance-restart-state>
```

```
      instance-restart-state
    </instance-restart-state>
    <instance-pathsel-timeout>
      instance-pathsel-timeout
    </instance-pathsel-timeout>
    <instance-rib>....</instance-rib>
    <instance-interface>....</instance-interface>
    <instance-vrf>....</instance-vrf>
    <instance-vpls-meshgroup>....</instance-vpls-meshgroup>
  </instance-core>
</instance-information>
```

Description

<instance-entry>

Usage

```
<instance-entry>
  <instance-name>
    instance-name
  </instance-name>
  <ngen-mvpn-mode>
    ngen-mvpn-mode
  </ngen-mvpn-mode>
  <instance-display-error>
    instance-display-error
  </instance-display-error>
  <provider-tunnel>....</provider-tunnel>
  <neighbor>....</neighbor>
  <c-multicast-ipv4>....</c-multicast-ipv4>
  <c-multicast-ipv6>....</c-multicast-ipv6>
</instance-entry>
```

Description

<instance-entry>

Usage

```
<instance-family>
  <instance-entry>
    <instance-name>
      instance-name
    </instance-name>
    <ngen-mvpn-mode>
      ngen-mvpn-mode
    </ngen-mvpn-mode>
    <instance-display-error>
      instance-display-error
    </instance-display-error>
    <provider-tunnel>....</provider-tunnel>
    <neighbor>....</neighbor>
    <c-multicast-ipv4>....</c-multicast-ipv4>
    <c-multicast-ipv6>....</c-multicast-ipv6>
  </instance-entry>
```


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```
</instance-family>
```

Description

<instance-entry>

Usage

```
<mvpn-instance>
 <instance-family>
  <instance-entry>
   <instance-name>
    instance-name
   </instance-name>
   <ngen-mvpn-mode>
    ngen-mvpn-mode
   </ngen-mvpn-mode>
   <instance-display-error>
    instance-display-error
   </instance-display-error>
   <provider-tunnel>....</provider-tunnel>
   <neighbor>....</neighbor>
   <c-multicast-ipv4>....</c-multicast-ipv4>
   <c-multicast-ipv6>....</c-multicast-ipv6>
  </instance-entry>
 </instance-family>
</mvpn-instance>
```

Description

<instance-entry>

Usage

```
<mvpn-instance-information>
 <mvpn-instance>
  <instance-family>
   <instance-entry>
    <instance-name>
     instance-name
    </instance-name>
    <ngen-mvpn-mode>
     ngen-mvpn-mode
    </ngen-mvpn-mode>
    <instance-display-error>
     instance-display-error
    </instance-display-error>
    <provider-tunnel>....</provider-tunnel>
    <neighbor>....</neighbor>
    <c-multicast-ipv4>....</c-multicast-ipv4>
    <c-multicast-ipv6>....</c-multicast-ipv6>
   </instance-entry>
  </instance-family>
 </mvpn-instance>
</mvpn-instance-information>
```

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Description

<instance-entry>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <instance-name>
        instance-name
      </instance-name>
      <ngen-mvpn-mode>
        ngen-mvpn-mode
      </ngen-mvpn-mode>
      <instance-display-error>
        instance-display-error
      </instance-display-error>
      <provider-tunnel>....</provider-tunnel>
      <neighbor>....</neighbor>
      <c-multicast-ipv4>....</c-multicast-ipv4>
      <c-multicast-ipv6>....</c-multicast-ipv6>
    </instance-entry>
  </instance-family>
</mvpn-instance-information>
```

Description

<instance-entry-summary>

Usage

```
<instance-entry-summary>
  <neighbor-summary>....</neighbor-summary>
  <c-multicast-summary>....</c-multicast-summary>
  <c-multicast-ipv6-summary>....</c-multicast-ipv6-summary>
</instance-entry-summary>
```

Description

<instance-entry-summary>

Usage

```
<instance-family>
  <instance-entry-summary>
    <neighbor-summary>....</neighbor-summary>
    <c-multicast-summary>....</c-multicast-summary>
    <c-multicast-ipv6-summary>....</c-multicast-ipv6-summary>
  </instance-entry-summary>
</instance-family>
```

Description

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<instance-entry-summary>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry-summary>
      <neighbor-summary>....</neighbor-summary>
      <c-multicast-summary>....</c-multicast-summary>
      <c-multicast-ipv6-summary>....</c-multicast-ipv6-summary>
    </instance-entry-summary>
  </instance-family>
</mvpn-instance>
```

Description

<instance-entry-summary>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <instance-entry-summary>
        <neighbor-summary>....</neighbor-summary>
        <c-multicast-summary>....</c-multicast-summary>
        <c-multicast-ipv6-summary>....</c-multicast-ipv6-summary>
      </instance-entry-summary>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<instance-entry-summary>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry-summary>
      <neighbor-summary>....</neighbor-summary>
      <c-multicast-summary>....</c-multicast-summary>
      <c-multicast-ipv6-summary>....</c-multicast-ipv6-summary>
    </instance-entry-summary>
  </instance-family>
</mvpn-instance-information>
```

Description

<instance-family>

Usage

```
<instance-family>
  <address-family>
```

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```
    address-family
  </address-family>
  <instance-entry>....</instance-entry>
  <instance-entry-summary>....</instance-entry-summary>
</instance-family>
```

Description

<instance-family>

Usage

```
<mvpn-instance>
  <instance-family>
    <address-family>
      address-family
    </address-family>
    <instance-entry>....</instance-entry>
    <instance-entry-summary>....</instance-entry-summary>
  </instance-family>
</mvpn-instance>
```

Description

<instance-family>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <address-family>
        address-family
      </address-family>
      <instance-entry>....</instance-entry>
      <instance-entry-summary>....</instance-entry-summary>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<instance-family>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <address-family>
      address-family
    </address-family>
    <instance-entry>....</instance-entry>
    <instance-entry-summary>....</instance-entry-summary>
  </instance-family>
</mvpn-instance-information>
```


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Description

<instance-information>

Usage

```
<instance-information>
  <instance-core>....</instance-core>
</instance-information>
```

Description Operational and configuration information for routing instances

<instance-interface>

Usage

```
<instance-core>
  <instance-interface>
    <interface-name>
      interface-name
    </interface-name>
  </instance-interface>
</instance-core>
```

Description

<instance-interface>

Usage

```
<instance-interface>
  <interface-name>
    interface-name
  </interface-name>
</instance-interface>
```

Description

<instance-interface>

Usage

```
<instance-information>
  <instance-core>
    <instance-interface>
      <interface-name>
        interface-name
      </interface-name>
    </instance-interface>
  </instance-core>
</instance-information>
```

Description

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<instance-rib>

Usage

```
<instance-rib>
  <irib-name>
    irib-name
  </irib-name>
  <irib-route-count>
    irib-route-count
  </irib-route-count>
  <irib-active-count>
    irib-active-count
  </irib-active-count>
  <irib-holddown-count>
    irib-holddown-count
  </irib-holddown-count>
  <irib-hidden-count>
    irib-hidden-count
  </irib-hidden-count>
  <irib-restart-state>
    irib-restart-state
  </irib-restart-state>
</instance-rib>
```

Description

<instance-rib>

Usage

```
<instance-core>
  <instance-rib>
    <irib-name>
      irib-name
    </irib-name>
    <irib-route-count>
      irib-route-count
    </irib-route-count>
    <irib-active-count>
      irib-active-count
    </irib-active-count>
    <irib-holddown-count>
      irib-holddown-count
    </irib-holddown-count>
    <irib-hidden-count>
      irib-hidden-count
    </irib-hidden-count>
    <irib-restart-state>
      irib-restart-state
    </irib-restart-state>
  </instance-rib>
</instance-core>
```

Description

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<instance-rib>

Usage

```
<instance-information>
  <instance-core>
    <instance-rib>
      <irib-name>
        irib-name
      </irib-name>
      <irib-route-count>
        irib-route-count
      </irib-route-count>
      <irib-active-count>
        irib-active-count
      </irib-active-count>
      <irib-holddown-count>
        irib-holddown-count
      </irib-holddown-count>
      <irib-hidden-count>
        irib-hidden-count
      </irib-hidden-count>
      <irib-restart-state>
        irib-restart-state
      </irib-restart-state>
    </instance-rib>
  </instance-core>
</instance-information>
```

Description

<instance-vpls-meshgroup>

Usage

```
<instance-core>
  <instance-vpls-meshgroup>
    <meshgroup-name>
      meshgroup-name
    </meshgroup-name>
    <route-distinguisher>
      route-distinguisher
    </route-distinguisher>
    <meshgroup-vrf-import>
      meshgroup-vrf-import
    </meshgroup-vrf-import>
    <meshgroup-vrf-export>
      meshgroup-vrf-export
    </meshgroup-vrf-export>
    <meshgroup-vrf-import-target>
      meshgroup-vrf-import-target
    </meshgroup-vrf-import-target>
    <meshgroup-vrf-export-target>
      meshgroup-vrf-export-target
    </meshgroup-vrf-export-target>
  </instance-vpls-meshgroup>
```

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```
</instance-core>
```

Description

<instance-vpls-meshgroup>

Usage

```
<instance-vpls-meshgroup>
  <meshgroup-name>
    meshgroup-name
  </meshgroup-name>
  <route-distinguisher>
    route-distinguisher
  </route-distinguisher>
  <meshgroup-vrf-import>
    meshgroup-vrf-import
  </meshgroup-vrf-import>
  <meshgroup-vrf-export>
    meshgroup-vrf-export
  </meshgroup-vrf-export>
  <meshgroup-vrf-import-target>
    meshgroup-vrf-import-target
  </meshgroup-vrf-import-target>
  <meshgroup-vrf-export-target>
    meshgroup-vrf-export-target
  </meshgroup-vrf-export-target>
</instance-vpls-meshgroup>
```

Description

<instance-vpls-meshgroup>

Usage

```
<instance-information>
  <instance-core>
    <instance-vpls-meshgroup>
      <meshgroup-name>
        meshgroup-name
      </meshgroup-name>
      <route-distinguisher>
        route-distinguisher
      </route-distinguisher>
      <meshgroup-vrf-import>
        meshgroup-vrf-import
      </meshgroup-vrf-import>
      <meshgroup-vrf-export>
        meshgroup-vrf-export
      </meshgroup-vrf-export>
      <meshgroup-vrf-import-target>
        meshgroup-vrf-import-target
      </meshgroup-vrf-import-target>
      <meshgroup-vrf-export-target>
        meshgroup-vrf-export-target
      </meshgroup-vrf-export-target>
```


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```
    </instance-vpls-meshgroup>
  </instance-core>
</instance-information>
```

Description

<instance-vrf>

Usage

```
<instance-core>
  <instance-vrf>
    <route-distinguisher>
      route-distinguisher
    </route-distinguisher>
    <vrf-import>
      vrf-import
    </vrf-import>
    <vrf-export>
      vrf-export
    </vrf-export>
    <vrf-import-target>
      vrf-import-target
    </vrf-import-target>
    <vrf-export-target>
      vrf-export-target
    </vrf-export-target>
    <vrf-label-allocation>
      vrf-label-allocation
    </vrf-label-allocation>
    <vrf-label-substitution>
      vrf-label-substitution
    </vrf-label-substitution>
    <fast-reroute-priority>
      fast-reroute-priority
    </fast-reroute-priority>
  </instance-vrf>
</instance-core>
```

Description

<instance-vrf>

Usage

```
<instance-vrf>
  <route-distinguisher>
    route-distinguisher
  </route-distinguisher>
  <vrf-import>
    vrf-import
  </vrf-import>
  <vrf-export>
    vrf-export
  </vrf-export>
  <vrf-import-target>
```

```
    vrf-import-target
  </vrf-import-target>
  <vrf-export-target>
    vrf-export-target
  </vrf-export-target>
  <vrf-label-allocation>
    vrf-label-allocation
  </vrf-label-allocation>
  <vrf-label-substitution>
    vrf-label-substitution
  </vrf-label-substitution>
  <fast-reroute-priority>
    fast-reroute-priority
  </fast-reroute-priority>
</instance-vrf>
```

Description

<instance-vrf>

Usage

```
<instance-information>
  <instance-core>
    <instance-vrf>
      <route-distinguisher>
        route-distinguisher
      </route-distinguisher>
      <vrf-import>
        vrf-import
      </vrf-import>
      <vrf-export>
        vrf-export
      </vrf-export>
      <vrf-import-target>
        vrf-import-target
      </vrf-import-target>
      <vrf-export-target>
        vrf-export-target
      </vrf-export-target>
      <vrf-label-allocation>
        vrf-label-allocation
      </vrf-label-allocation>
      <vrf-label-substitution>
        vrf-label-substitution
      </vrf-label-substitution>
      <fast-reroute-priority>
        fast-reroute-priority
      </fast-reroute-priority>
    </instance-vrf>
  </instance-core>
</instance-information>
```

Description

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<interface-level-data>

Usage

```
<interface-level-data>
  <level>
    level
  </level>
  <adjacency-count>
    adjacency-count
  </adjacency-count>
  <interface-priority>
    interface-priority
  </interface-priority>
  <metric>
    metric
  </metric>
  <te-metric>
    te-metric
  </te-metric>
  <passive>
    passive
  </passive>
  <hello-time>
    hello-time
  </hello-time>
  <holdtime>
    holdtime
  </holdtime>
  <dr-id-one>
    dr-id-one
  </dr-id-one>
  <dr-id-two>
    dr-id-two
  </dr-id-two>
  <dr-flag>
    dr-flag
  </dr-flag>
  <isis-interface-level-topology>....</isis-interface-level-topology>
</interface-level-data>
```

Description

<interface-level-data>

Usage

```
<isis-interface>
  <interface-level-data>
    <level>
      level
    </level>
    <adjacency-count>
      adjacency-count
    </adjacency-count>
    <interface-priority>
```

```
      interface-priority
    </interface-priority>
    <metric>
      metric
    </metric>
    <te-metric>
      te-metric
    </te-metric>
    <passive>
      passive
    </passive>
    <hello-time>
      hello-time
    </hello-time>
    <holdtime>
      holdtime
    </holdtime>
    <dr-id-one>
      dr-id-one
    </dr-id-one>
    <dr-id-two>
      dr-id-two
    </dr-id-two>
    <dr-flag>
      dr-flag
    </dr-flag>
    <isis-interface-level-topology>....</isis-interface-level-topology>
  </interface-level-data>
</isis-interface>
```

Description

<interface-level-data>

Usage

```
<isis-interface-information>
  <isis-interface>
    <interface-level-data>
      <level>
        level
      </level>
      <adjacency-count>
        adjacency-count
      </adjacency-count>
      <interface-priority>
        interface-priority
      </interface-priority>
      <metric>
        metric
      </metric>
      <te-metric>
        te-metric
      </te-metric>
      <passive>
        passive
```


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```
      </passive>
      <hello-time>
        hello-time
      </hello-time>
      <holdtime>
        holdtime
      </holdtime>
      <dr-id-one>
        dr-id-one
      </dr-id-one>
      <dr-id-two>
        dr-id-two
      </dr-id-two>
      <dr-flag>
        dr-flag
      </dr-flag>
      <isis-interface-level-topology>....</isis-interface-level-topology>
    </interface-level-data>
  </isis-interface>
</isis-interface-information>
```

Description

<interface-statistics>

Usage

```
<interface-statistics>
  <interface>
    interface
  </interface>
  <remote-pe>
    remote-pe
  </remote-pe>
  <broadcast-packets>
    broadcast-packets
  </broadcast-packets>
  <broadcast-bytes>
    broadcast-bytes
  </broadcast-bytes>
  <multicast-packets>
    multicast-packets
  </multicast-packets>
  <multicast-bytes>
    multicast-bytes
  </multicast-bytes>
  <flooded-packets>
    flooded-packets
  </flooded-packets>
  <flooded-bytes>
    flooded-bytes
  </flooded-bytes>
  <unicast-packets>
    unicast-packets
  </unicast-packets>
  <unicast-bytes>
```

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```
    unicast-bytes
   </unicast-bytes>
   <mac-limit>
    mac-limit
   </mac-limit>
   <num-mac-count>
    num-mac-count
   </num-mac-count>
  </interface-statistics>
```

Description

<interface-statistics>

Usage

```
<vpls-statistics-information>
  <interface-statistics>
    <interface>
      interface
    </interface>
    <remote-pe>
      remote-pe
    </remote-pe>
    <broadcast-packets>
      broadcast-packets
    </broadcast-packets>
    <broadcast-bytes>
      broadcast-bytes
    </broadcast-bytes>
    <multicast-packets>
      multicast-packets
    </multicast-packets>
    <multicast-bytes>
      multicast-bytes
    </multicast-bytes>
    <flooded-packets>
      flooded-packets
    </flooded-packets>
    <flooded-bytes>
      flooded-bytes
    </flooded-bytes>
    <unicast-packets>
      unicast-packets
    </unicast-packets>
    <unicast-bytes>
      unicast-bytes
    </unicast-bytes>
    <mac-limit>
      mac-limit
    </mac-limit>
    <num-mac-count>
      num-mac-count
    </num-mac-count>
  </interface-statistics>
```


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```
</vpls-statistics-information>
```

Description

<ip-prefix-tlv>

Usage

```
<isis-tlv>
  <ip-prefix-tlv>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
    <address-prefix>
      address-prefix
    </address-prefix>
    <metric>
      metric
    </metric>
    <prefix-status>
      prefix-status
    </prefix-status>
    <subtlv-size>
      subtlv-size
    </subtlv-size>
    <isis-prefix-subtlv>....</isis-prefix-subtlv>
  </ip-prefix-tlv>
</isis-tlv>
```

Description

<ip-prefix-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ip-prefix-tlv>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <address-prefix>
        address-prefix
      </address-prefix>
      <metric>
        metric
      </metric>
      <prefix-status>
        prefix-status
      </prefix-status>
      <subtlv-size>
        subtlv-size
      </subtlv-size>
      <isis-prefix-subtlv>....</isis-prefix-subtlv>
    </ip-prefix-tlv>
  </isis-tlv>
```

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```
</isis-database-entry>
```

Description

<ip-prefix-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ip-prefix-tlv>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
        <address-prefix>
          address-prefix
        </address-prefix>
        <metric>
          metric
        </metric>
        <prefix-status>
          prefix-status
        </prefix-status>
        <subtlv-size>
          subtlv-size
        </subtlv-size>
        <isis-prefix-subtlv>....</isis-prefix-subtlv>
      </ip-prefix-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<ip-prefix-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ip-prefix-tlv>
          <isis-topology-id>
            isis-topology-id
          </isis-topology-id>
          <address-prefix>
            address-prefix
          </address-prefix>
          <metric>
            metric
          </metric>
          <prefix-status>
            prefix-status
          </prefix-status>
```


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```
            <subtlv-size>
              subtlv-size
            </subtlv-size>
            <isis-prefix-subtlv>....</isis-prefix-subtlv>
          </ip-prefix-tlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
  </isis-database-information>
```

Description

<ipaddress-tlv>

Usage

```
<isis-tlv>
  <ipaddress-tlv>
    <address>
      address
    </address>
  </ipaddress-tlv>
</isis-tlv>
```

Description

<ipaddress-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ipaddress-tlv>
      <address>
        address
      </address>
    </ipaddress-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<ipaddress-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ipaddress-tlv>
        <address>
          address
        </address>
      </ipaddress-tlv>
    </isis-tlv>
  </isis-database-entry>
```

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```
</isis-database>
```

Description

<ipaddress-tlv>

Usage

```
<isis-database-information>
 <isis-database>
  <isis-database-entry>
   <isis-tlv>
    <ipaddress-tlv>
     <address>
      address
     </address>
    </ipaddress-tlv>
   </isis-tlv>
  </isis-database-entry>
 </isis-database>
</isis-database-information>
```

Description

<ipv6-ra-advertisement>

Usage

```
<ipv6-ra-interface>
 <ipv6-ra-advertisement>
  <ipv6-source-address>
   ipv6-source-address
  </ipv6-source-address>
  <ipv6-ra-time-since>
   ipv6-ra-time-since
  </ipv6-ra-time-since>
  <ipv6-ra-managed-flag>
   ipv6-ra-managed-flag
  </ipv6-ra-managed-flag>
  <ipv6-ra-managed-flag-conflict>
   ipv6-ra-managed-flag-conflict
  </ipv6-ra-managed-flag-conflict>
  <ipv6-ra-other-config-flag>
   ipv6-ra-other-config-flag
  </ipv6-ra-other-config-flag>
  <ipv6-ra-other-config-flag-conflict>
   ipv6-ra-other-config-flag-conflict
  </ipv6-ra-other-config-flag-conflict>
  <ipv6-ra-link-mtu>
   ipv6-ra-link-mtu
  </ipv6-ra-link-mtu>
  <ipv6-ra-link-mtu-conflict>
   ipv6-ra-link-mtu-conflict
  </ipv6-ra-link-mtu-conflict>
  <ipv6-ra-reachable-time>
   ipv6-ra-reachable-time
```


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```
    </ipv6-ra-reachable-time>
    <ipv6-ra-reachable-time-conflict>
      ipv6-ra-reachable-time-conflict
    </ipv6-ra-reachable-time-conflict>
    <ipv6-ra-default-lifetime>
      ipv6-ra-default-lifetime
    </ipv6-ra-default-lifetime>
    <ipv6-ra-default-lifetime-conflict>
      ipv6-ra-default-lifetime-conflict
    </ipv6-ra-default-lifetime-conflict>
    <ipv6-ra-retransmit-timer>
      ipv6-ra-retransmit-timer
    </ipv6-ra-retransmit-timer>
    <ipv6-ra-retransmit-timer-conflict>
      ipv6-ra-retransmit-timer-conflict
    </ipv6-ra-retransmit-timer-conflict>
    <ipv6-ra-current-hop-limit>
      ipv6-ra-current-hop-limit
    </ipv6-ra-current-hop-limit>
    <ipv6-ra-current-hop-limit-conflict>
      ipv6-ra-current-hop-limit-conflict
    </ipv6-ra-current-hop-limit-conflict>
    <ipv6-ra-prefix>....</ipv6-ra-prefix>
  </ipv6-ra-advertisement>
</ipv6-ra-interface>
```

Description

<ipv6-ra-advertisement>

Usage

```
<ipv6-ra-information>
  <ipv6-ra-interface>
    <ipv6-ra-advertisement>
      <ipv6-source-address>
        ipv6-source-address
      </ipv6-source-address>
      <ipv6-ra-time-since>
        ipv6-ra-time-since
      </ipv6-ra-time-since>
      <ipv6-ra-managed-flag>
        ipv6-ra-managed-flag
      </ipv6-ra-managed-flag>
      <ipv6-ra-managed-flag-conflict>
        ipv6-ra-managed-flag-conflict
      </ipv6-ra-managed-flag-conflict>
      <ipv6-ra-other-config-flag>
        ipv6-ra-other-config-flag
      </ipv6-ra-other-config-flag>
      <ipv6-ra-other-config-flag-conflict>
        ipv6-ra-other-config-flag-conflict
      </ipv6-ra-other-config-flag-conflict>
      <ipv6-ra-link-mtu>
        ipv6-ra-link-mtu
      </ipv6-ra-link-mtu>
```

```
        <ipv6-ra-link-mtu-conflict>
          ipv6-ra-link-mtu-conflict
        </ipv6-ra-link-mtu-conflict>
        <ipv6-ra-reachable-time>
          ipv6-ra-reachable-time
        </ipv6-ra-reachable-time>
        <ipv6-ra-reachable-time-conflict>
          ipv6-ra-reachable-time-conflict
        </ipv6-ra-reachable-time-conflict>
        <ipv6-ra-default-lifetime>
          ipv6-ra-default-lifetime
        </ipv6-ra-default-lifetime>
        <ipv6-ra-default-lifetime-conflict>
          ipv6-ra-default-lifetime-conflict
        </ipv6-ra-default-lifetime-conflict>
        <ipv6-ra-retransmit-timer>
          ipv6-ra-retransmit-timer
        </ipv6-ra-retransmit-timer>
        <ipv6-ra-retransmit-timer-conflict>
          ipv6-ra-retransmit-timer-conflict
        </ipv6-ra-retransmit-timer-conflict>
        <ipv6-ra-current-hop-limit>
          ipv6-ra-current-hop-limit
        </ipv6-ra-current-hop-limit>
        <ipv6-ra-current-hop-limit-conflict>
          ipv6-ra-current-hop-limit-conflict
        </ipv6-ra-current-hop-limit-conflict>
        <ipv6-ra-prefix>....</ipv6-ra-prefix>
      </ipv6-ra-advertisement>
    </ipv6-ra-interface>
  </ipv6-ra-information>
```

Description

<ipv6-ra-information>

Usage

```
<ipv6-ra-information>
  <ipv6-ra-interface>....</ipv6-ra-interface>
</ipv6-ra-information>
```

Description

<ipv6-ra-interface>

Usage

```
<ipv6-ra-interface>
  <interface-name>
    interface-name
  </interface-name>
  <ipv6-ra-advertisements-sent>
    ipv6-ra-advertisements-sent
  </ipv6-ra-advertisements-sent>
  <ipv6-ra-advertisement-sent-time>
```


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```
    ipv6-ra-advertisement-sent-time
   </ipv6-ra-advertisement-sent-time>
   <ipv6-ra-solicits-received>
    ipv6-ra-solicits-received
   </ipv6-ra-solicits-received>
   <ipv6-ra-solicit-receive-time>
    ipv6-ra-solicit-receive-time
   </ipv6-ra-solicit-receive-time>
   <ipv6-ra-advertisements-received>
    ipv6-ra-advertisements-received
   </ipv6-ra-advertisements-received>
   <vrrp-group>....</vrrp-group>
   <ipv6-ra-advertisement>....</ipv6-ra-advertisement>
  </ipv6-ra-interface>
```

Description

<ipv6-ra-interface>

Usage

```
<ipv6-ra-information>
  <ipv6-ra-interface>
    <interface-name>
      interface-name
    </interface-name>
    <ipv6-ra-advertisements-sent>
      ipv6-ra-advertisements-sent
    </ipv6-ra-advertisements-sent>
    <ipv6-ra-advertisement-sent-time>
      ipv6-ra-advertisement-sent-time
    </ipv6-ra-advertisement-sent-time>
    <ipv6-ra-solicits-received>
      ipv6-ra-solicits-received
    </ipv6-ra-solicits-received>
    <ipv6-ra-solicit-receive-time>
      ipv6-ra-solicit-receive-time
    </ipv6-ra-solicit-receive-time>
    <ipv6-ra-advertisements-received>
      ipv6-ra-advertisements-received
    </ipv6-ra-advertisements-received>
    <vrrp-group>....</vrrp-group>
    <ipv6-ra-advertisement>....</ipv6-ra-advertisement>
  </ipv6-ra-interface>
</ipv6-ra-information>
```

Description

<ipv6-ra-prefix>

Usage

```
<ipv6-ra-interface>
  <ipv6-ra-advertisement>
    <ipv6-ra-prefix>
      <ipv6-ra-prefix-address>
```

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```
            ipv6-ra-prefix-address
          </ipv6-ra-prefix-address>
          <ipv6-ra-prefix-valid-lifetime>
            ipv6-ra-prefix-valid-lifetime
          </ipv6-ra-prefix-valid-lifetime>
          <ipv6-ra-prefix-valid-lifetime-conflict>
            ipv6-ra-prefix-valid-lifetime-conflict
          </ipv6-ra-prefix-valid-lifetime-conflict>
          <ipv6-ra-prefix-preferred-lifetime>
            ipv6-ra-prefix-preferred-lifetime
          </ipv6-ra-prefix-preferred-lifetime>
          <ipv6-ra-prefix-preferred-lifetime-conflict>
            ipv6-ra-prefix-preferred-lifetime-conflict
          </ipv6-ra-prefix-preferred-lifetime-conflict>
          <ipv6-ra-prefix-on-link>
            ipv6-ra-prefix-on-link
          </ipv6-ra-prefix-on-link>
          <ipv6-ra-prefix-on-link-conflict>
            ipv6-ra-prefix-on-link-conflict
          </ipv6-ra-prefix-on-link-conflict>
          <ipv6-ra-prefix-autonomous>
            ipv6-ra-prefix-autonomous
          </ipv6-ra-prefix-autonomous>
          <ipv6-ra-prefix-autonomous-conflict>
            ipv6-ra-prefix-autonomous-conflict
          </ipv6-ra-prefix-autonomous-conflict>
        </ipv6-ra-prefix>
      </ipv6-ra-advertisement>
    </ipv6-ra-interface>
```

Description

<ipv6-ra-prefix>

Usage

```
<ipv6-ra-information>
  <ipv6-ra-interface>
    <ipv6-ra-advertisement>
      <ipv6-ra-prefix>
        <ipv6-ra-prefix-address>
          ipv6-ra-prefix-address
        </ipv6-ra-prefix-address>
        <ipv6-ra-prefix-valid-lifetime>
          ipv6-ra-prefix-valid-lifetime
        </ipv6-ra-prefix-valid-lifetime>
        <ipv6-ra-prefix-valid-lifetime-conflict>
          ipv6-ra-prefix-valid-lifetime-conflict
        </ipv6-ra-prefix-valid-lifetime-conflict>
        <ipv6-ra-prefix-preferred-lifetime>
          ipv6-ra-prefix-preferred-lifetime
        </ipv6-ra-prefix-preferred-lifetime>
        <ipv6-ra-prefix-preferred-lifetime-conflict>
          ipv6-ra-prefix-preferred-lifetime-conflict
        </ipv6-ra-prefix-preferred-lifetime-conflict>
        <ipv6-ra-prefix-on-link>
```


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```
        ipv6-ra-prefix-on-link
       </ipv6-ra-prefix-on-link>
       <ipv6-ra-prefix-on-link-conflict>
        ipv6-ra-prefix-on-link-conflict
       </ipv6-ra-prefix-on-link-conflict>
       <ipv6-ra-prefix-autonomous>
        ipv6-ra-prefix-autonomous
       </ipv6-ra-prefix-autonomous>
       <ipv6-ra-prefix-autonomous-conflict>
        ipv6-ra-prefix-autonomous-conflict
       </ipv6-ra-prefix-autonomous-conflict>
      </ipv6-ra-prefix>
     </ipv6-ra-advertisement>
    </ipv6-ra-interface>
</ipv6-ra-information>
```

Description

<ipv6-reachability-tlv>

Usage

```
<isis-tlv>
 <ipv6-reachability-tlv>
  <isis-topology-id>
   isis-topology-id
  </isis-topology-id>
  <ipv6-address>
   ipv6-address
  </ipv6-address>
  <metric>
   metric
  </metric>
  <prefix-extern>
   prefix-extern
  </prefix-extern>
  <prefix-downflag>
   prefix-downflag
  </prefix-downflag>
  <subtlv-size>
   subtlv-size
  </subtlv-size>
  <isis-prefix-subtlv>....</isis-prefix-subtlv>
 </ipv6-reachability-tlv>
</isis-tlv>
```

Description

<ipv6-reachability-tlv>

Usage

```
<isis-database-entry>
 <isis-tlv>
  <ipv6-reachability-tlv>
   <isis-topology-id>
```

```
        isis-topology-id
      </isis-topology-id>
      <ipv6-address>
        ipv6-address
      </ipv6-address>
      <metric>
        metric
      </metric>
      <prefix-extern>
        prefix-extern
      </prefix-extern>
      <prefix-downflag>
        prefix-downflag
      </prefix-downflag>
      <subtlv-size>
        subtlv-size
      </subtlv-size>
      <isis-prefix-subtlv>....</isis-prefix-subtlv>
    </ipv6-reachability-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<ipv6-reachability-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ipv6-reachability-tlv>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
        <ipv6-address>
          ipv6-address
        </ipv6-address>
        <metric>
          metric
        </metric>
        <prefix-extern>
          prefix-extern
        </prefix-extern>
        <prefix-downflag>
          prefix-downflag
        </prefix-downflag>
        <subtlv-size>
          subtlv-size
        </subtlv-size>
        <isis-prefix-subtlv>....</isis-prefix-subtlv>
      </ipv6-reachability-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```


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Description

<ipv6-reachability-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ipv6-reachability-tlv>
          <isis-topology-id>
            isis-topology-id
          </isis-topology-id>
          <ipv6-address>
            ipv6-address
          </ipv6-address>
          <metric>
            metric
          </metric>
          <prefix-extern>
            prefix-extern
          </prefix-extern>
          <prefix-downflag>
            prefix-downflag
          </prefix-downflag>
          <subtlv-size>
            subtlv-size
          </subtlv-size>
          <isis-prefix-subtlv>....</isis-prefix-subtlv>
        </ipv6-reachability-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<ipv6address-tlv>

Usage

```
<isis-tlv>
  <ipv6address-tlv>
    <address>
      address
    </address>
  </ipv6address-tlv>
</isis-tlv>
```

Description

<ipv6address-tlv>

Usage

```
<isis-database-entry>
```

```
  <isis-tlv>
   <ipv6address-tlv>
    <address>
     address
    </address>
   </ipv6address-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<ipv6address-tlv>

Usage

```
<isis-database>
 <isis-database-entry>
  <isis-tlv>
   <ipv6address-tlv>
    <address>
     address
    </address>
   </ipv6address-tlv>
  </isis-tlv>
 </isis-database-entry>
</isis-database>
```

Description

<ipv6address-tlv>

Usage

```
<isis-database-information>
 <isis-database>
  <isis-database-entry>
   <isis-tlv>
    <ipv6address-tlv>
     <address>
      address
     </address>
    </ipv6address-tlv>
   </isis-tlv>
  </isis-database-entry>
 </isis-database>
</isis-database-information>
```

Description

<ir-tunnel>

Usage

```
<ir-tunnel>
 <ir-tunnel-entry>....</ir-tunnel-entry>
```


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```
</ir-tunnel>
```

Description

<ir-tunnel>

Usage

```
<ingress-replication-information>
  <ir-tunnel>
    <ir-tunnel-entry>....</ir-tunnel-entry>
  </ir-tunnel>
</ingress-replication-information>
```

Description

<ir-tunnel-entry>

Usage

```
<ir-tunnel-entry>
  <ir-tunnel-name>
    ir-tunnel-name
  </ir-tunnel-name>
  <ir-tunnel-application>
    ir-tunnel-application
  </ir-tunnel-application>
  <ir-unicast-tunnel>....</ir-unicast-tunnel>
</ir-tunnel-entry>
```

Description

<ir-tunnel-entry>

Usage

```
<ir-tunnel>
  <ir-tunnel-entry>
    <ir-tunnel-name>
      ir-tunnel-name
    </ir-tunnel-name>
    <ir-tunnel-application>
      ir-tunnel-application
    </ir-tunnel-application>
    <ir-unicast-tunnel>....</ir-unicast-tunnel>
  </ir-tunnel-entry>
</ir-tunnel>
```

Description

<ir-tunnel-entry>

Usage

```
<ingress-replication-information>
  <ir-tunnel>
```

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```
    <ir-tunnel-entry>
     <ir-tunnel-name>
      ir-tunnel-name
     </ir-tunnel-name>
     <ir-tunnel-application>
      ir-tunnel-application
     </ir-tunnel-application>
     <ir-unicast-tunnel>....</ir-unicast-tunnel>
    </ir-tunnel-entry>
   </ir-tunnel>
</ingress-replication-information>
```

Description

<ir-unicast-tunnel>

Usage

```
<ir-unicast-tunnel>
 <ir-unicast-tunnel-entry>....</ir-unicast-tunnel-entry>
</ir-unicast-tunnel>
```

Description

<ir-unicast-tunnel>

Usage

```
<ir-tunnel-entry>
 <ir-unicast-tunnel>
  <ir-unicast-tunnel-entry>....</ir-unicast-tunnel-entry>
 </ir-unicast-tunnel>
</ir-tunnel-entry>
```

Description

<ir-unicast-tunnel>

Usage

```
<ir-tunnel>
 <ir-tunnel-entry>
  <ir-unicast-tunnel>
   <ir-unicast-tunnel-entry>....</ir-unicast-tunnel-entry>
  </ir-unicast-tunnel>
 </ir-tunnel-entry>
</ir-tunnel>
```

Description

<ir-unicast-tunnel>

Usage

```
<ingress-replication-information>
 <ir-tunnel>
```


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```
    <ir-tunnel-entry>
      <ir-unicast-tunnel>
        <ir-unicast-tunnel-entry>....</ir-unicast-tunnel-entry>
      </ir-unicast-tunnel>
    </ir-tunnel-entry>
  </ir-tunnel>
</ingress-replication-information>
```

Description

<ir-unicast-tunnel>

Usage

```
<ingress-replication-information>
  <ir-unicast-tunnel>
    <ir-unicast-tunnel-entry>....</ir-unicast-tunnel-entry>
  </ir-unicast-tunnel>
</ingress-replication-information>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ir-unicast-tunnel-entry>
  <ir-unicast-tunnel-dst>
    ir-unicast-tunnel-dst
  </ir-unicast-tunnel-dst>
  <ir-unicast-tunnel-type>
    ir-unicast-tunnel-type
  </ir-unicast-tunnel-type>
  <ir-unicast-tunnel-mode>
    ir-unicast-tunnel-mode
  </ir-unicast-tunnel-mode>
  <ir-unicast-tunnel-state>
    ir-unicast-tunnel-state
  </ir-unicast-tunnel-state>
</ir-unicast-tunnel-entry>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ir-unicast-tunnel>
  <ir-unicast-tunnel-entry>
    <ir-unicast-tunnel-dst>
      ir-unicast-tunnel-dst
    </ir-unicast-tunnel-dst>
    <ir-unicast-tunnel-type>
      ir-unicast-tunnel-type
    </ir-unicast-tunnel-type>
    <ir-unicast-tunnel-mode>
```

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```
      ir-unicast-tunnel-mode
    </ir-unicast-tunnel-mode>
    <ir-unicast-tunnel-state>
      ir-unicast-tunnel-state
    </ir-unicast-tunnel-state>
  </ir-unicast-tunnel-entry>
</ir-unicast-tunnel>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ir-tunnel-entry>
  <ir-unicast-tunnel>
    <ir-unicast-tunnel-entry>
      <ir-unicast-tunnel-dst>
        ir-unicast-tunnel-dst
      </ir-unicast-tunnel-dst>
      <ir-unicast-tunnel-type>
        ir-unicast-tunnel-type
      </ir-unicast-tunnel-type>
      <ir-unicast-tunnel-mode>
        ir-unicast-tunnel-mode
      </ir-unicast-tunnel-mode>
      <ir-unicast-tunnel-state>
        ir-unicast-tunnel-state
      </ir-unicast-tunnel-state>
    </ir-unicast-tunnel-entry>
  </ir-unicast-tunnel>
</ir-tunnel-entry>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ir-tunnel>
  <ir-tunnel-entry>
    <ir-unicast-tunnel>
      <ir-unicast-tunnel-entry>
        <ir-unicast-tunnel-dst>
          ir-unicast-tunnel-dst
        </ir-unicast-tunnel-dst>
        <ir-unicast-tunnel-type>
          ir-unicast-tunnel-type
        </ir-unicast-tunnel-type>
        <ir-unicast-tunnel-mode>
          ir-unicast-tunnel-mode
        </ir-unicast-tunnel-mode>
        <ir-unicast-tunnel-state>
          ir-unicast-tunnel-state
        </ir-unicast-tunnel-state>
      </ir-unicast-tunnel-entry>
```


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```
    </ir-unicast-tunnel>
  </ir-tunnel-entry>
</ir-tunnel>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ingress-replication-information>
  <ir-tunnel>
    <ir-tunnel-entry>
      <ir-unicast-tunnel>
        <ir-unicast-tunnel-entry>
          <ir-unicast-tunnel-dst>
            ir-unicast-tunnel-dst
          </ir-unicast-tunnel-dst>
          <ir-unicast-tunnel-type>
            ir-unicast-tunnel-type
          </ir-unicast-tunnel-type>
          <ir-unicast-tunnel-mode>
            ir-unicast-tunnel-mode
          </ir-unicast-tunnel-mode>
          <ir-unicast-tunnel-state>
            ir-unicast-tunnel-state
          </ir-unicast-tunnel-state>
        </ir-unicast-tunnel-entry>
      </ir-unicast-tunnel>
    </ir-tunnel-entry>
  </ir-tunnel>
</ingress-replication-information>
```

Description

<ir-unicast-tunnel-entry>

Usage

```
<ingress-replication-information>
  <ir-unicast-tunnel>
    <ir-unicast-tunnel-entry>
      <ir-unicast-tunnel-dst>
        ir-unicast-tunnel-dst
      </ir-unicast-tunnel-dst>
      <ir-unicast-tunnel-type>
        ir-unicast-tunnel-type
      </ir-unicast-tunnel-type>
      <ir-unicast-tunnel-mode>
        ir-unicast-tunnel-mode
      </ir-unicast-tunnel-mode>
      <ir-unicast-tunnel-state>
        ir-unicast-tunnel-state
      </ir-unicast-tunnel-state>
    </ir-unicast-tunnel-entry>
  </ir-unicast-tunnel>
```

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```
</ingress-replication-information>
```

Description

<is-reachability>

Usage

```
<isis-database-local>
 <isis-database-local-entry>
  <isis-database-local-data>
   <is-reachability>
    <isis-fragment>
     isis-fragment
    </isis-fragment>
    <isis-topology-id>
     isis-topology-id
    </isis-topology-id>
    <is-neighbor-id>
     is-neighbor-id
    </is-neighbor-id>
    <flags>
     flags
    </flags>
    <isis-pseudonode>
     isis-pseudonode
    </isis-pseudonode>
    <interface-name>
     interface-name
    </interface-name>
    <metric>
     metric
    </metric>
    <subtlv-size>
     subtlv-size
    </subtlv-size>
    <srlgtlv-size>
     srlgtlv-size
    </srlgtlv-size>
    <te-metric>
     te-metric
    </te-metric>
    <local-address>
     local-address
    </local-address>
    <remote-address>
     remote-address
    </remote-address>
    <local-ifindex>
     local-ifindex
    </local-ifindex>
    <remote-ifindex>
     remote-ifindex
    </remote-ifindex>
    <level>
     level
```


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```
        </level>
       </is-reachability>
      </isis-database-local-data>
     </isis-database-local-entry>
    </isis-database-local>
```

Description

<is-reachability>

Usage

```
<isis-database-local-information>
 <isis-database-local>
  <isis-database-local-entry>
   <isis-database-local-data>
    <is-reachability>
     <isis-fragment>
      isis-fragment
     </isis-fragment>
     <isis-topology-id>
      isis-topology-id
     </isis-topology-id>
     <is-neighbor-id>
      is-neighbor-id
     </is-neighbor-id>
     <flags>
      flags
     </flags>
     <isis-pseudonode>
      isis-pseudonode
     </isis-pseudonode>
     <interface-name>
      interface-name
     </interface-name>
     <metric>
      metric
     </metric>
     <subtlv-size>
      subtlv-size
     </subtlv-size>
     <srlgtlv-size>
      srlgtlv-size
     </srlgtlv-size>
     <te-metric>
      te-metric
     </te-metric>
     <local-address>
      local-address
     </local-address>
     <remote-address>
      remote-address
     </remote-address>
     <local-ifindex>
      local-ifindex
     </local-ifindex>
```

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```
            <remote-ifindex>
              remote-ifindex
            </remote-ifindex>
            <level>
              level
            </level>
          </is-reachability>
        </isis-database-local-data>
      </isis-database-local-entry>
    </isis-database-local>
  </isis-database-local-information>
```

Description

<isis-adjacency>

Usage

```
<isis-adjacency>
  <interface-name>
    interface-name
  </interface-name>
  <system-name>
    system-name
  </system-name>
  <not-remote-address>
    not-remote-address
  </not-remote-address>
  <level>
    level
  </level>
  <adjacency-state>
    adjacency-state
  </adjacency-state>
  <holdtime>
    holdtime
  </holdtime>
  <interface-priority>
    interface-priority
  </interface-priority>
  <transition-count>
    transition-count
  </transition-count>
  <last-transition-time>
    last-transition-time
  </last-transition-time>
  <circuit-type>
    circuit-type
  </circuit-type>
  <adjacency-restart-capable>
    adjacency-restart-capable
  </adjacency-restart-capable>
  <adjacency-advertisement>
    adjacency-advertisement
  </adjacency-advertisement>
  <adjacency-flag>
```


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```
    adjacency-flag
   </adjacency-flag>
   <adjacency-topologies>
    adjacency-topologies
   </adjacency-topologies>
   <mac-address>
    mac-address
   </mac-address>
   <lan-id>
    lan-id
   </lan-id>
   <ip-address>
    ip-address
   </ip-address>
   <ipv6-address>
    ipv6-address
   </ipv6-address>
   <snpa>
    snpa
   </snpa>
   <isis-adjacency-log>....</isis-adjacency-log>
  </isis-adjacency>
```

Description

<isis-adjacency>

Usage

```
<isis-adjacency-information>
 <isis-adjacency>
  <interface-name>
   interface-name
  </interface-name>
  <system-name>
   system-name
  </system-name>
  <not-remote-address>
   not-remote-address
  </not-remote-address>
  <level>
   level
  </level>
  <adjacency-state>
   adjacency-state
  </adjacency-state>
  <holdtime>
   holdtime
  </holdtime>
  <interface-priority>
   interface-priority
  </interface-priority>
  <transition-count>
   transition-count
  </transition-count>
  <last-transition-time>
```

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```
    last-transition-time
   </last-transition-time>
   <circuit-type>
    circuit-type
   </circuit-type>
   <adjacency-restart-capable>
    adjacency-restart-capable
   </adjacency-restart-capable>
   <adjacency-advertisement>
    adjacency-advertisement
   </adjacency-advertisement>
   <adjacency-flag>
    adjacency-flag
   </adjacency-flag>
   <adjacency-topologies>
    adjacency-topologies
   </adjacency-topologies>
   <mac-address>
    mac-address
   </mac-address>
   <lan-id>
    lan-id
   </lan-id>
   <ip-address>
    ip-address
   </ip-address>
   <ipv6-address>
    ipv6-address
   </ipv6-address>
   <snpa>
    snpa
   </snpa>
   <isis-adjacency-log>....</isis-adjacency-log>
  </isis-adjacency>
</isis-adjacency-information>
```

Description

<isis-adjacency-information>

Usage

```
<isis-adjacency-information>
  <isis-adjacency>....</isis-adjacency>
</isis-adjacency-information>
```

Description

<isis-adjacency-log>

Usage

```
<isis-adjacency>
  <isis-adjacency-log>
    <adjacency-when>
     adjacency-when
```


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```
    </adjacency-when>
    <adjacency-state>
     adjacency-state
    </adjacency-state>
    <adjacency-event>
     adjacency-event
    </adjacency-event>
    <adjacency-down-reason>
     adjacency-down-reason
    </adjacency-down-reason>
   </isis-adjacency-log>
</isis-adjacency>
```

Description Entry describing adjacency transition

<isis-adjacency-log>

Usage

```
<isis-adjacency-information>
  <isis-adjacency>
    <isis-adjacency-log>
      <adjacency-when>
       adjacency-when
      </adjacency-when>
      <adjacency-state>
       adjacency-state
      </adjacency-state>
      <adjacency-event>
       adjacency-event
      </adjacency-event>
      <adjacency-down-reason>
       adjacency-down-reason
      </adjacency-down-reason>
    </isis-adjacency-log>
  </isis-adjacency>
</isis-adjacency-information>
```

Description Entry describing adjacency transition

<isis-authentication-information>

Usage

```
<isis-authentication-information>
  <isis-interface-authentication>....</isis-interface-authentication>
  <isis-lsp-authentication>....</isis-lsp-authentication>
</isis-authentication-information>
```

Description ISIS authentication information

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<isis-backup-coverage>

Usage

```
<isis-backup-coverage>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
  <level>
    level
  </level>
  <isis-node-coverage>
    isis-node-coverage
  </isis-node-coverage>
  <isis-route-coverage-ipv4>
    isis-route-coverage-ipv4
  </isis-route-coverage-ipv4>
  <isis-route-coverage-ipv6>
    isis-route-coverage-ipv6
  </isis-route-coverage-ipv6>
  <isis-route-coverage-clns>
    isis-route-coverage-clns
  </isis-route-coverage-clns>
</isis-backup-coverage>
```

Description

<isis-backup-coverage>

Usage

```
<isis-backup-coverage-information>
  <isis-backup-coverage>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
    <level>
      level
    </level>
    <isis-node-coverage>
      isis-node-coverage
    </isis-node-coverage>
    <isis-route-coverage-ipv4>
      isis-route-coverage-ipv4
    </isis-route-coverage-ipv4>
    <isis-route-coverage-ipv6>
      isis-route-coverage-ipv6
    </isis-route-coverage-ipv6>
    <isis-route-coverage-clns>
      isis-route-coverage-clns
    </isis-route-coverage-clns>
  </isis-backup-coverage>
</isis-backup-coverage-information>
```

Description

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<isis-backup-coverage-information>

Usage

```
<isis-backup-coverage-information>
  <isis-backup-coverage>....</isis-backup-coverage>
</isis-backup-coverage-information>
```

Description ISIS backup coverage information

<isis-backup-mplsp>

Usage

```
<isis-backup-mplsp>
  <lsp-name>
    lsp-name
  </lsp-name>
  <lsp-status>
    lsp-status
  </lsp-status>
  <lsp-addr>
    lsp-addr
  </lsp-addr>
  <metric>
    metric
  </metric>
  <te-metric>
    te-metric
  </te-metric>
  <lsp-last-change>
    lsp-last-change
  </lsp-last-change>
  <lsp-refcount>
    lsp-refcount
  </lsp-refcount>
</isis-backup-mplsp>
```

Description

<isis-backup-mplsp>

Usage

```
<isis-backup-mplsp-information>
  <isis-backup-mplsp>
    <lsp-name>
      lsp-name
    </lsp-name>
    <lsp-status>
      lsp-status
    </lsp-status>
    <lsp-addr>
      lsp-addr
    </lsp-addr>
    <metric>
```

```
            metric
          </metric>
          <te-metric>
            te-metric
          </te-metric>
          <lsp-last-change>
            lsp-last-change
          </lsp-last-change>
          <lsp-refcount>
            lsp-refcount
          </lsp-refcount>
        </isis-backup-mplsp>
      </isis-backup-mplsp-information>
```

Description

<isis-backup-mplsp-information>

Usage

```
<isis-backup-mplsp-information>
  <isis-backup-mplsp>....</isis-backup-mplsp>
</isis-backup-mplsp-information>
```

Description ISIS backup MPLSP information

<isis-backup-spf-result>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-backup-spf-result>
        <node-id>
          node-id
        </node-id>
        <node-address>
          node-address
        </node-address>
        <no-first-fragment>
          no-first-fragment
        </no-first-fragment>
        <backup-root>
          backup-root
        </backup-root>
        <backup-root-metric>
          backup-root-metric
        </backup-root-metric>
        <metric>
          metric
        </metric>
        <backup-root-preference>
          backup-root-preference
        </backup-root-preference>
```


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```
        <track-item>
          track-item
        </track-item>
        <next-hop-element>....</next-hop-element>
        <backup-next-hop-element>....</backup-next-hop-element>
        <no-coverage-reason>
          no-coverage-reason
        </no-coverage-reason>
      </isis-backup-spf-result>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

<isis-backup-spf-result>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-backup-spf-result>
          <node-id>
            node-id
          </node-id>
          <node-address>
            node-address
          </node-address>
          <no-first-fragment>
            no-first-fragment
          </no-first-fragment>
          <backup-root>
            backup-root
          </backup-root>
          <backup-root-metric>
            backup-root-metric
          </backup-root-metric>
          <metric>
            metric
          </metric>
          <backup-root-preference>
            backup-root-preference
          </backup-root-preference>
          <track-item>
            track-item
          </track-item>
          <next-hop-element>....</next-hop-element>
          <backup-next-hop-element>....</backup-next-hop-element>
          <no-coverage-reason>
            no-coverage-reason
          </no-coverage-reason>
        </isis-backup-spf-result>
      </isis-spf>
    </isis-spf-information>
```

```
  </isis-overview>
</isis-overview-information>
```

Description

<isis-backup-spf-result>

Usage

```
<isis-backup-spf-result>
  <node-id>
    node-id
  </node-id>
  <node-address>
    node-address
  </node-address>
  <no-first-fragment>
    no-first-fragment
  </no-first-fragment>
  <backup-root>
    backup-root
  </backup-root>
  <backup-root-metric>
    backup-root-metric
  </backup-root-metric>
  <metric>
    metric
  </metric>
  <backup-root-preference>
    backup-root-preference
  </backup-root-preference>
  <track-item>
    track-item
  </track-item>
  <next-hop-element>....</next-hop-element>
  <backup-next-hop-element>....</backup-next-hop-element>
  <no-coverage-reason>
    no-coverage-reason
  </no-coverage-reason>
</isis-backup-spf-result>
```

Description

<isis-backup-spf-result>

Usage

```
<isis-spf>
  <isis-backup-spf-result>
    <node-id>
      node-id
    </node-id>
    <node-address>
      node-address
    </node-address>
    <no-first-fragment>
```


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```
      no-first-fragment
    </no-first-fragment>
    <backup-root>
      backup-root
    </backup-root>
    <backup-root-metric>
      backup-root-metric
    </backup-root-metric>
    <metric>
      metric
    </metric>
    <backup-root-preference>
      backup-root-preference
    </backup-root-preference>
    <track-item>
      track-item
    </track-item>
    <next-hop-element>....</next-hop-element>
    <backup-next-hop-element>....</backup-next-hop-element>
    <no-coverage-reason>
      no-coverage-reason
    </no-coverage-reason>
  </isis-backup-spf-result>
</isis-spf>
```

Description

<isis-backup-spf-result>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-backup-spf-result>
      <node-id>
        node-id
      </node-id>
      <node-address>
        node-address
      </node-address>
      <no-first-fragment>
        no-first-fragment
      </no-first-fragment>
      <backup-root>
        backup-root
      </backup-root>
      <backup-root-metric>
        backup-root-metric
      </backup-root-metric>
      <metric>
        metric
      </metric>
      <backup-root-preference>
        backup-root-preference
      </backup-root-preference>
      <track-item>
```

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```
            track-item
          </track-item>
          <next-hop-element>....</next-hop-element>
          <backup-next-hop-element>....</backup-next-hop-element>
          <no-coverage-reason>
            no-coverage-reason
          </no-coverage-reason>
        </isis-backup-spf-result>
      </isis-spf>
    </isis-spf-information>
```

Description

<isis-context>

Usage

```
<isis-context>
  <isis-context-id>
    isis-context-id
  </isis-context-id>
  <isis-context-level>
    isis-context-level
  </isis-context-level>
  <isis-context-owner-proto>
    isis-context-owner-proto
  </isis-context-owner-proto>
  <isis-context-role>
    isis-context-role
  </isis-context-role>
  <isis-context-primary>
    isis-context-primary
  </isis-context-primary>
  <isis-context-metric>
    isis-context-metric
  </isis-context-metric>
  <isis-context-advertiser-router-id>
    isis-context-advertiser-router-id
  </isis-context-advertiser-router-id>
  <isis-context-advertiser>
    isis-context-advertiser
  </isis-context-advertiser>
  <isis-context-advertiser-metric>
    isis-context-advertiser-metric
  </isis-context-advertiser-metric>
  <isis-context-advertiser-level>
    isis-context-advertiser-level
  </isis-context-advertiser-level>
</isis-context>
```

Description

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<isis-context>

Usage

```
<isis-context-information>
  <isis-context>
    <isis-context-id>
      isis-context-id
    </isis-context-id>
    <isis-context-level>
      isis-context-level
    </isis-context-level>
    <isis-context-owner-proto>
      isis-context-owner-proto
    </isis-context-owner-proto>
    <isis-context-role>
      isis-context-role
    </isis-context-role>
    <isis-context-primary>
      isis-context-primary
    </isis-context-primary>
    <isis-context-metric>
      isis-context-metric
    </isis-context-metric>
    <isis-context-advertiser-router-id>
      isis-context-advertiser-router-id
    </isis-context-advertiser-router-id>
    <isis-context-advertiser>
      isis-context-advertiser
    </isis-context-advertiser>
    <isis-context-advertiser-metric>
      isis-context-advertiser-metric
    </isis-context-advertiser-metric>
    <isis-context-advertiser-level>
      isis-context-advertiser-level
    </isis-context-advertiser-level>
  </isis-context>
</isis-context-information>
```

Description

<isis-context-information>

Usage

```
<isis-context-information>
  <isis-context>....</isis-context>
</isis-context-information>
```

Description Context information for an IS-IS instance

<isis-context-information-local>

Usage

```
<isis-context-information-local>
```

```
  <isis-context-local>....</isis-context-local>
</isis-context-information-local>
```

Description Context information for an IS-IS instance

<isis-context-local>

Usage

```
<isis-context-local>
  <context-id-local>
    context-id-local
  </context-id-local>
  <context-level1-state>
    context-level1-state
  </context-level1-state>
  <context-level2-state>
    context-level2-state
  </context-level2-state>
  <metric-one>
    metric-one
  </metric-one>
  <metric-two>
    metric-two
  </metric-two>
</isis-context-local>
```

Description

<isis-context-local>

Usage

```
<isis-context-information-local>
  <isis-context-local>
    <context-id-local>
      context-id-local
    </context-id-local>
    <context-level1-state>
      context-level1-state
    </context-level1-state>
    <context-level2-state>
      context-level2-state
    </context-level2-state>
    <metric-one>
      metric-one
    </metric-one>
    <metric-two>
      metric-two
    </metric-two>
  </isis-context-local>
</isis-context-information-local>
```

Description

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<isis-database>

Usage

```
<isis-database>
  <level>
    level
  </level>
  <isis-database-entry>....</isis-database-entry>
  <lsp-count>
    lsp-count
  </lsp-count>
</isis-database>
```

Description

<isis-database>

Usage

```
<isis-database-information>
  <isis-database>
    <level>
      level
    </level>
    <isis-database-entry>....</isis-database-entry>
    <lsp-count>
      lsp-count
    </lsp-count>
  </isis-database>
</isis-database-information>
```

Description

<isis-database-entry>

Usage

```
<isis-database-entry>
  <lsp-id>
    lsp-id
  </lsp-id>
  <sequence-number>
    sequence-number
  </sequence-number>
  <checksum>
    checksum
  </checksum>
  <remaining-lifetime>
    remaining-lifetime
  </remaining-lifetime>
  <lsp-attributes>
    lsp-attributes
  </lsp-attributes>
  <isis-neighbor>....</isis-neighbor>
  <isis-prefix>....</isis-prefix>
```

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```
  <isis-header>....</isis-header>
  <isis-packet>....</isis-packet>
  <lsp-stub>
    lsp-stub
  </lsp-stub>
  <isis-tlv>....</isis-tlv>
  <transmission-status>....</transmission-status>
  <isis-es-neighbor>....</isis-es-neighbor>
</isis-database-entry>
```

Description

<isis-database-entry>

Usage

```
<isis-database>
  <isis-database-entry>
    <lsp-id>
      lsp-id
    </lsp-id>
    <sequence-number>
      sequence-number
    </sequence-number>
    <checksum>
      checksum
    </checksum>
    <remaining-lifetime>
      remaining-lifetime
    </remaining-lifetime>
    <lsp-attributes>
      lsp-attributes
    </lsp-attributes>
    <isis-neighbor>....</isis-neighbor>
    <isis-prefix>....</isis-prefix>
    <isis-header>....</isis-header>
    <isis-packet>....</isis-packet>
    <lsp-stub>
      lsp-stub
    </lsp-stub>
    <isis-tlv>....</isis-tlv>
    <transmission-status>....</transmission-status>
    <isis-es-neighbor>....</isis-es-neighbor>
  </isis-database-entry>
</isis-database>
```

Description

<isis-database-entry>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <lsp-id>
```


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```
      lsp-id
    </lsp-id>
    <sequence-number>
      sequence-number
    </sequence-number>
    <checksum>
      checksum
    </checksum>
    <remaining-lifetime>
      remaining-lifetime
    </remaining-lifetime>
    <lsp-attributes>
      lsp-attributes
    </lsp-attributes>
    <isis-neighbor>....</isis-neighbor>
    <isis-prefix>....</isis-prefix>
    <isis-header>....</isis-header>
    <isis-packet>....</isis-packet>
    <lsp-stub>
      lsp-stub
    </lsp-stub>
    <isis-tlv>....</isis-tlv>
    <transmission-status>....</transmission-status>
    <isis-es-neighbor>....</isis-es-neighbor>
  </isis-database-entry>
 </isis-database>
</isis-database-information>
```

Description

<isis-database-information>

Usage

```
<isis-database-information>
  <isis-database>....</isis-database>
</isis-database-information>
```

Description

<isis-database-local>

Usage

```
<isis-database-local>
  <level>
    level
  </level>
  <isis-database-local-entry>....</isis-database-local-entry>
</isis-database-local>
```

Description Information about one or more entries in the IS-IS database that originated locally

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<isis-database-local>

Usage

```
<isis-database-local-information>
  <isis-database-local>
    <level>
      level
    </level>
    <isis-database-local-entry>....</isis-database-local-entry>
  </isis-database-local>
</isis-database-local-information>
```

Description Information about one or more entries in the IS-IS database that originated locally

<isis-database-local-data>

Usage

```
<isis-database-local>
  <isis-database-local-entry>
    <isis-database-local-data>
      <isis-database-local-data-type>
        isis-database-local-data-type
      </isis-database-local-data-type>
      <isis-database-local-data-name>
        isis-database-local-data-name
      </isis-database-local-data-name>
      <tlv-size>
        tlv-size
      </tlv-size>
      <address>
        address
      </address>
      <protocol>
        protocol
      </protocol>
      <mtid>
        mtid
      </mtid>
      <router-id>
        router-id
      </router-id>
      <hostname>
        hostname
      </hostname>
      <prefix-reachability>....</prefix-reachability>
      <is-reachability>....</is-reachability>
      <unknown-local-data>
        unknown-local-data
      </unknown-local-data>
    </isis-database-local-data>
  </isis-database-local-entry>
</isis-database-local>
```


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Description

<isis-database-local-data>

Usage

```
<isis-database-local-information>
  <isis-database-local>
    <isis-database-local-entry>
      <isis-database-local-data>
        <isis-database-local-data-type>
          isis-database-local-data-type
        </isis-database-local-data-type>
        <isis-database-local-data-name>
          isis-database-local-data-name
        </isis-database-local-data-name>
        <tlv-size>
          tlv-size
        </tlv-size>
        <address>
          address
        </address>
        <protocol>
          protocol
        </protocol>
        <mtid>
          mtid
        </mtid>
        <router-id>
          router-id
        </router-id>
        <hostname>
          hostname
        </hostname>
        <prefix-reachability>....</prefix-reachability>
        <is-reachability>....</is-reachability>
        <unknown-local-data>
          unknown-local-data
        </unknown-local-data>
      </isis-database-local-data>
    </isis-database-local-entry>
  </isis-database-local>
</isis-database-local-information>
```

Description

<isis-database-local-entry>

Usage

```
<isis-database-local>
  <isis-database-local-entry>
    <lsp-id>
      lsp-id
    </lsp-id>
    <sequence-number>
      sequence-number
```

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```
    </sequence-number>
    <checksum>
      checksum
    </checksum>
    <remaining-lifetime>
      remaining-lifetime
    </remaining-lifetime>
    <lsp-attributes>
      lsp-attributes
    </lsp-attributes>
    <isis-database-local-data>....</isis-database-local-data>
    <estimated-free-bytes>
      estimated-free-bytes
    </estimated-free-bytes>
  </isis-database-local-entry>
</isis-database-local>
```

Description Information about an entry that originated locally

<isis-database-local-entry>

Usage

```
<isis-database-local-information>
  <isis-database-local>
    <isis-database-local-entry>
      <lsp-id>
        lsp-id
      </lsp-id>
      <sequence-number>
        sequence-number
      </sequence-number>
      <checksum>
        checksum
      </checksum>
      <remaining-lifetime>
        remaining-lifetime
      </remaining-lifetime>
      <lsp-attributes>
        lsp-attributes
      </lsp-attributes>
      <isis-database-local-data>....</isis-database-local-data>
      <estimated-free-bytes>
        estimated-free-bytes
      </estimated-free-bytes>
    </isis-database-local-entry>
  </isis-database-local>
</isis-database-local-information>
```

Description Information about an entry that originated locally

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<isis-database-local-information>

Usage

```
<isis-database-local-information>
  <isis-database-local>....</isis-database-local>
</isis-database-local-information>
```

Description

<isis-es-neighbor>

Usage

```
<isis-es-neighbor>
  <es-neighbor-id>
    es-neighbor-id
  </es-neighbor-id>
  <metric>
    metric
  </metric>
  <reachability-delay>
    reachability-delay
  </reachability-delay>
  <reachability-expense>
    reachability-expense
  </reachability-expense>
  <reachability-error>
    reachability-error
  </reachability-error>
  <es-neighbor-status>
    es-neighbor-status
  </es-neighbor-status>
</isis-es-neighbor>
```

Description

<isis-es-neighbor>

Usage

```
<isis-database-entry>
  <isis-es-neighbor>
    <es-neighbor-id>
      es-neighbor-id
    </es-neighbor-id>
    <metric>
      metric
    </metric>
    <reachability-delay>
      reachability-delay
    </reachability-delay>
    <reachability-expense>
      reachability-expense
    </reachability-expense>
    <reachability-error>
```

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```
        reachability-error
      </reachability-error>
      <es-neighbor-status>
        es-neighbor-status
      </es-neighbor-status>
    </isis-es-neighbor>
  </isis-database-entry>
</isis-database>
```

Description

<isis-es-neighbor>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-es-neighbor>
      <es-neighbor-id>
        es-neighbor-id
      </es-neighbor-id>
      <metric>
        metric
      </metric>
      <reachability-delay>
        reachability-delay
      </reachability-delay>
      <reachability-expense>
        reachability-expense
      </reachability-expense>
      <reachability-error>
        reachability-error
      </reachability-error>
      <es-neighbor-status>
        es-neighbor-status
      </es-neighbor-status>
    </isis-es-neighbor>
  </isis-database-entry>
</isis-database>
```

Description

<isis-es-neighbor>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-es-neighbor>
        <es-neighbor-id>
          es-neighbor-id
        </es-neighbor-id>
        <metric>
          metric
        </metric>
        <reachability-delay>
```


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```
            reachability-delay
          </reachability-delay>
          <reachability-expense>
            reachability-expense
          </reachability-expense>
          <reachability-error>
            reachability-error
          </reachability-error>
          <es-neighbor-status>
            es-neighbor-status
          </es-neighbor-status>
        </isis-es-neighbor>
      </isis-database-entry>
    </isis-database>
  </isis-database-information>
```

Description

<isis-header>

Usage

```
<isis-header>
  <lsp-id>
    lsp-id
  </lsp-id>
  <pdu-length>
    pdu-length
  </pdu-length>
  <allocated-length>
    allocated-length
  </allocated-length>
  <router-id>
    router-id
  </router-id>
  <remaining-lifetime>
    remaining-lifetime
  </remaining-lifetime>
  <level>
    level
  </level>
  <interface-index>
    interface-index
  </interface-index>
  <estimated-free-bytes>
    estimated-free-bytes
  </estimated-free-bytes>
  <actual-free-bytes>
    actual-free-bytes
  </actual-free-bytes>
  <lsdb-timer-type>
    lsdb-timer-type
  </lsdb-timer-type>
  <lsdb-expiration-time>
    lsdb-expiration-time
  </lsdb-expiration-time>
```

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```
  <needs-rebuild>
   needs-rebuild
  </needs-rebuild>
  <protocol>
   protocol
  </protocol>
</isis-header>
```

Description

<isis-header>

Usage

```
<isis-database-entry>
  <isis-header>
    <lsp-id>
     lsp-id
    </lsp-id>
    <pdu-length>
     pdu-length
    </pdu-length>
    <allocated-length>
     allocated-length
    </allocated-length>
    <router-id>
     router-id
    </router-id>
    <remaining-lifetime>
     remaining-lifetime
    </remaining-lifetime>
    <level>
     level
    </level>
    <interface-index>
     interface-index
    </interface-index>
    <estimated-free-bytes>
     estimated-free-bytes
    </estimated-free-bytes>
    <actual-free-bytes>
     actual-free-bytes
    </actual-free-bytes>
    <lsdb-timer-type>
     lsdb-timer-type
    </lsdb-timer-type>
    <lsdb-expiration-time>
     lsdb-expiration-time
    </lsdb-expiration-time>
    <needs-rebuild>
     needs-rebuild
    </needs-rebuild>
    <protocol>
     protocol
    </protocol>
  </isis-header>
```


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```
</isis-database-entry>
```

Description

<isis-header>

Usage

```
<isis-database>
 <isis-database-entry>
  <isis-header>
   <lsp-id>
    lsp-id
   </lsp-id>
   <pdu-length>
    pdu-length
   </pdu-length>
   <allocated-length>
    allocated-length
   </allocated-length>
   <router-id>
    router-id
   </router-id>
   <remaining-lifetime>
    remaining-lifetime
   </remaining-lifetime>
   <level>
    level
   </level>
   <interface-index>
    interface-index
   </interface-index>
   <estimated-free-bytes>
    estimated-free-bytes
   </estimated-free-bytes>
   <actual-free-bytes>
    actual-free-bytes
   </actual-free-bytes>
   <lsdb-timer-type>
    lsdb-timer-type
   </lsdb-timer-type>
   <lsdb-expiration-time>
    lsdb-expiration-time
   </lsdb-expiration-time>
   <needs-rebuild>
    needs-rebuild
   </needs-rebuild>
   <protocol>
    protocol
   </protocol>
  </isis-header>
 </isis-database-entry>
</isis-database>
```

Description

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<isis-header>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-header>
        <lsp-id>
          lsp-id
        </lsp-id>
        <pdu-length>
          pdu-length
        </pdu-length>
        <allocated-length>
          allocated-length
        </allocated-length>
        <router-id>
          router-id
        </router-id>
        <remaining-lifetime>
          remaining-lifetime
        </remaining-lifetime>
        <level>
          level
        </level>
        <interface-index>
          interface-index
        </interface-index>
        <estimated-free-bytes>
          estimated-free-bytes
        </estimated-free-bytes>
        <actual-free-bytes>
          actual-free-bytes
        </actual-free-bytes>
        <lsdb-timer-type>
          lsdb-timer-type
        </lsdb-timer-type>
        <lsdb-expiration-time>
          lsdb-expiration-time
        </lsdb-expiration-time>
        <needs-rebuild>
          needs-rebuild
        </needs-rebuild>
        <protocol>
          protocol
        </protocol>
      </isis-header>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

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<isis-hostname>

Usage

```
<isis-hostname>
  <system-id>
    system-id
  </system-id>
  <system-name>
    system-name
  </system-name>
  <isis-hostname-type>
    isis-hostname-type
  </isis-hostname-type>
</isis-hostname>
```

Description Entry in the system-ID-to-hostname mapping table

<isis-hostname>

Usage

```
<isis-hostname-information>
  <isis-hostname>
    <system-id>
      system-id
    </system-id>
    <system-name>
      system-name
    </system-name>
    <isis-hostname-type>
      isis-hostname-type
    </isis-hostname-type>
  </isis-hostname>
</isis-hostname-information>
```

Description Entry in the system-ID-to-hostname mapping table

<isis-hostname-information>

Usage

```
<isis-hostname-information>
  <isis-hostname>....</isis-hostname>
</isis-hostname-information>
```

Description System-ID-to-hostname mapping table

<isis-interface>

Usage

```
<isis-interface>
  <interface-name>
```

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```
  interface-name
</interface-name>
<circuit-type>
  circuit-type
</circuit-type>
<circuit-id>
  circuit-id
</circuit-id>
<isis-interface-state-one>
  isis-interface-state-one
</isis-interface-state-one>
<isis-interface-state-two>
  isis-interface-state-two
</isis-interface-state-two>
<interface-disabled-flag>
  interface-disabled-flag
</interface-disabled-flag>
<dr-id-one>
  dr-id-one
</dr-id-one>
<dr-id-two>
  dr-id-two
</dr-id-two>
<metric-one>
  metric-one
</metric-one>
<metric-two>
  metric-two
</metric-two>
<interface-index>
  interface-index
</interface-index>
<interface-state-value>
  interface-state-value
</interface-state-value>
<lsp-interval>
  lsp-interval
</lsp-interval>
<csnp-interval>
  csnp-interval
</csnp-interval>
<hello-padding>
  hello-padding
</hello-padding>
<interface-protection-type>
  interface-protection-type
</interface-protection-type>
<no-eligible-backup>
  no-eligible-backup
</no-eligible-backup>
<system-name>
  system-name
</system-name>
<mesh-group>
  mesh-group
</mesh-group>
```


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```
<adjacency-advertisement>
  adjacency-advertisement
</adjacency-advertisement>
<interface-level-data>....</interface-level-data>
<igp-ldp-sync-holdtime>
  igp-ldp-sync-holdtime
</igp-ldp-sync-holdtime>
<igp-ldp-sync-state>
  igp-ldp-sync-state
</igp-ldp-sync-state>
<igp-ldp-sync-last-change>
  igp-ldp-sync-last-change
</igp-ldp-sync-last-change>
<igp-ldp-sync-reason>
  igp-ldp-sync-reason
</igp-ldp-sync-reason>
<igp-ldp-sync-timeleft>
  igp-ldp-sync-timeleft
</igp-ldp-sync-timeleft>
</isis-interface>
```

Description

<isis-interface>

Usage

```
<isis-interface-information>
  <isis-interface>
    <interface-name>
      interface-name
    </interface-name>
    <circuit-type>
      circuit-type
    </circuit-type>
    <circuit-id>
      circuit-id
    </circuit-id>
    <isis-interface-state-one>
      isis-interface-state-one
    </isis-interface-state-one>
    <isis-interface-state-two>
      isis-interface-state-two
    </isis-interface-state-two>
    <interface-disabled-flag>
      interface-disabled-flag
    </interface-disabled-flag>
    <dr-id-one>
      dr-id-one
    </dr-id-one>
    <dr-id-two>
      dr-id-two
    </dr-id-two>
    <metric-one>
      metric-one
    </metric-one>
```

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```
<metric-two>
  metric-two
</metric-two>
<interface-index>
  interface-index
</interface-index>
<interface-state-value>
  interface-state-value
</interface-state-value>
<lsp-interval>
  lsp-interval
</lsp-interval>
<csnp-interval>
  csnp-interval
</csnp-interval>
<hello-padding>
  hello-padding
</hello-padding>
<interface-protection-type>
  interface-protection-type
</interface-protection-type>
<no-eligible-backup>
  no-eligible-backup
</no-eligible-backup>
<system-name>
  system-name
</system-name>
<mesh-group>
  mesh-group
</mesh-group>
<adjacency-advertisement>
  adjacency-advertisement
</adjacency-advertisement>
<interface-level-data>....</interface-level-data>
<igp-ldp-sync-holdtime>
  igp-ldp-sync-holdtime
</igp-ldp-sync-holdtime>
<igp-ldp-sync-state>
  igp-ldp-sync-state
</igp-ldp-sync-state>
<igp-ldp-sync-last-change>
  igp-ldp-sync-last-change
</igp-ldp-sync-last-change>
<igp-ldp-sync-reason>
  igp-ldp-sync-reason
</igp-ldp-sync-reason>
<igp-ldp-sync-timeleft>
  igp-ldp-sync-timeleft
</igp-ldp-sync-timeleft>
</isis-interface>
</isis-interface-information>
```

Description

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<isis-interface-authentication>

Usage

```
<isis-interface-authentication>
  <interface-name>
    interface-name
  </interface-name>
  <isis-interface-level-authentication>....</isis-interface-level-authentication>
</isis-interface-authentication>
```

Description

<isis-interface-authentication>

Usage

```
<isis-authentication-information>
  <isis-interface-authentication>
    <interface-name>
      interface-name
    </interface-name>
    <isis-interface-level-authentication>....</isis-interface-level-authentication>
  </isis-interface-authentication>
</isis-authentication-information>
```

Description

<isis-interface-information>

Usage

```
<isis-interface-information>
  <isis-interface>....</isis-interface>
</isis-interface-information>
```

Description

<isis-interface-level-authentication>

Usage

```
<isis-interface-level-authentication>
  <level>
    level
  </level>
  <isis-interface-level-iih-authentication>
    isis-interface-level-iih-authentication
  </isis-interface-level-iih-authentication>
  <isis-interface-level-csn-authentication>
    isis-interface-level-csn-authentication
  </isis-interface-level-csn-authentication>
  <isis-interface-level-psn-authentication>
    isis-interface-level-psn-authentication
  </isis-interface-level-psn-authentication>
```

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```
</isis-interface-level-authentication>
```

Description

<isis-interface-level-authentication>

Usage

```
<isis-interface-authentication>
  <isis-interface-level-authentication>
    <level>
      level
    </level>
    <isis-interface-level-iih-authentication>
      isis-interface-level-iih-authentication
    </isis-interface-level-iih-authentication>
    <isis-interface-level-csn-authentication>
      isis-interface-level-csn-authentication
    </isis-interface-level-csn-authentication>
    <isis-interface-level-psn-authentication>
      isis-interface-level-psn-authentication
    </isis-interface-level-psn-authentication>
  </isis-interface-level-authentication>
</isis-interface-authentication>
```

Description

<isis-interface-level-authentication>

Usage

```
<isis-authentication-information>
  <isis-interface-authentication>
    <isis-interface-level-authentication>
      <level>
        level
      </level>
      <isis-interface-level-iih-authentication>
        isis-interface-level-iih-authentication
      </isis-interface-level-iih-authentication>
      <isis-interface-level-csn-authentication>
        isis-interface-level-csn-authentication
      </isis-interface-level-csn-authentication>
      <isis-interface-level-psn-authentication>
        isis-interface-level-psn-authentication
      </isis-interface-level-psn-authentication>
    </isis-interface-level-authentication>
  </isis-interface-authentication>
</isis-authentication-information>
```

Description

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<isis-interface-level-topology>

Usage

```
<interface-level-data>
  <isis-interface-level-topology>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
    <isis-topology-metric>
      isis-topology-metric
    </isis-topology-metric>
  </isis-interface-level-topology>
</interface-level-data>
```

Description Topology-specific information for an interface level

<isis-interface-level-topology>

Usage

```
<isis-interface>
  <interface-level-data>
    <isis-interface-level-topology>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <isis-topology-metric>
        isis-topology-metric
      </isis-topology-metric>
    </isis-interface-level-topology>
  </interface-level-data>
</isis-interface>
```

Description Topology-specific information for an interface level

<isis-interface-level-topology>

Usage

```
<isis-interface-information>
  <isis-interface>
    <interface-level-data>
      <isis-interface-level-topology>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
        <isis-topology-metric>
          isis-topology-metric
        </isis-topology-metric>
      </isis-interface-level-topology>
    </interface-level-data>
  </isis-interface>
</isis-interface-information>
```

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Description Topology-specific information for an interface level

<isis-iso-prefix-tlv>

Usage

```
<isis-tlv>
  <isis-iso-prefix-tlv>
    <metric>
      metric
    </metric>
    <metric-flag>
      metric-flag
    </metric-flag>
    <reachability-delay>
      reachability-delay
    </reachability-delay>
    <reachability-expense>
      reachability-expense
    </reachability-expense>
    <reachability-error>
      reachability-error
    </reachability-error>
    <prefix-status>
      prefix-status
    </prefix-status>
    <iso-prefix>
      iso-prefix
    </iso-prefix>
  </isis-iso-prefix-tlv>
</isis-tlv>
```

Description

<isis-iso-prefix-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-iso-prefix-tlv>
      <metric>
        metric
      </metric>
      <metric-flag>
        metric-flag
      </metric-flag>
      <reachability-delay>
        reachability-delay
      </reachability-delay>
      <reachability-expense>
        reachability-expense
      </reachability-expense>
      <reachability-error>
        reachability-error
      </reachability-error>
```


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```
      <prefix-status>
        prefix-status
      </prefix-status>
      <iso-prefix>
        iso-prefix
      </iso-prefix>
    </isis-iso-prefix-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-iso-prefix-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-iso-prefix-tlv>
        <metric>
          metric
        </metric>
        <metric-flag>
          metric-flag
        </metric-flag>
        <reachability-delay>
          reachability-delay
        </reachability-delay>
        <reachability-expense>
          reachability-expense
        </reachability-expense>
        <reachability-error>
          reachability-error
        </reachability-error>
        <prefix-status>
          prefix-status
        </prefix-status>
        <iso-prefix>
          iso-prefix
        </iso-prefix>
      </isis-iso-prefix-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-iso-prefix-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
```

```
        <isis-iso-prefix-tlv>
          <metric>
            metric
          </metric>
          <metric-flag>
            metric-flag
          </metric-flag>
          <reachability-delay>
            reachability-delay
          </reachability-delay>
          <reachability-expense>
            reachability-expense
          </reachability-expense>
          <reachability-error>
            reachability-error
          </reachability-error>
          <prefix-status>
            prefix-status
          </prefix-status>
          <iso-prefix>
            iso-prefix
          </iso-prefix>
        </isis-iso-prefix-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-level-information>

Usage

```
<isis-overview>
  <isis-level-information>
    <isis-level>
      isis-level
    </isis-level>
    <isis-preference>
      isis-preference
    </isis-preference>
    <isis-external-preference>
      isis-external-preference
    </isis-external-preference>
    <isis-prefix-export-limit>
      isis-prefix-export-limit
    </isis-prefix-export-limit>
    <isis-narrow-metrics>
      isis-narrow-metrics
    </isis-narrow-metrics>
    <isis-wide-metrics>
      isis-wide-metrics
    </isis-wide-metrics>
  </isis-level-information>
```


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```
</isis-overview>
```

Description IS-IS Level Information

<isis-level-information>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-level-information>
      <isis-level>
        isis-level
      </isis-level>
      <isis-preference>
        isis-preference
      </isis-preference>
      <isis-external-preference>
        isis-external-preference
      </isis-external-preference>
      <isis-prefix-export-limit>
        isis-prefix-export-limit
      </isis-prefix-export-limit>
      <isis-narrow-metrics>
        isis-narrow-metrics
      </isis-narrow-metrics>
      <isis-wide-metrics>
        isis-wide-metrics
      </isis-wide-metrics>
    </isis-level-information>
  </isis-overview>
</isis-overview-information>
```

Description IS-IS Level Information

<isis-lsp-authentication>

Usage

```
<isis-lsp-authentication>
  <level>
    level
  </level>
  <isis-level-lsp-authentication>
    isis-level-lsp-authentication
  </isis-level-lsp-authentication>
</isis-lsp-authentication>
```

Description Authentication type for LSP packets

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<isis-lsp-authentication>

Usage

```
<isis-authentication-information>
  <isis-lsp-authentication>
    <level>
      level
    </level>
    <isis-level-lsp-authentication>
      isis-level-lsp-authentication
    </isis-level-lsp-authentication>
  </isis-lsp-authentication>
</isis-authentication-information>
```

Description Authentication type for LSP packets

<isis-neighbor>

Usage

```
<isis-neighbor>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
  <is-neighbor-id>
    is-neighbor-id
  </is-neighbor-id>
  <metric>
    metric
  </metric>
  <two-way-lsp-id>
    two-way-lsp-id
  </two-way-lsp-id>
  <firstfrag-lsp-id>
    firstfrag-lsp-id
  </firstfrag-lsp-id>
  <reachability-delay>
    reachability-delay
  </reachability-delay>
  <reachability-expense>
    reachability-expense
  </reachability-expense>
  <reachability-error>
    reachability-error
  </reachability-error>
</isis-neighbor>
```

Description

<isis-neighbor>

Usage

```
<isis-database-entry>
  <isis-neighbor>
```


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```
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <is-neighbor-id>
        is-neighbor-id
      </is-neighbor-id>
      <metric>
        metric
      </metric>
      <two-way-lsp-id>
        two-way-lsp-id
      </two-way-lsp-id>
      <firstfrag-lsp-id>
        firstfrag-lsp-id
      </firstfrag-lsp-id>
      <reachability-delay>
        reachability-delay
      </reachability-delay>
      <reachability-expense>
        reachability-expense
      </reachability-expense>
      <reachability-error>
        reachability-error
      </reachability-error>
    </isis-neighbor>
  </isis-database-entry>
```

Description

<isis-neighbor>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-neighbor>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <is-neighbor-id>
        is-neighbor-id
      </is-neighbor-id>
      <metric>
        metric
      </metric>
      <two-way-lsp-id>
        two-way-lsp-id
      </two-way-lsp-id>
      <firstfrag-lsp-id>
        firstfrag-lsp-id
      </firstfrag-lsp-id>
      <reachability-delay>
        reachability-delay
      </reachability-delay>
      <reachability-expense>
        reachability-expense
```

```
      </reachability-expense>
      <reachability-error>
        reachability-error
      </reachability-error>
    </isis-neighbor>
  </isis-database-entry>
</isis-database>
```

Description

<isis-neighbor>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-neighbor>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
        <is-neighbor-id>
          is-neighbor-id
        </is-neighbor-id>
        <metric>
          metric
        </metric>
        <two-way-lsp-id>
          two-way-lsp-id
        </two-way-lsp-id>
        <firstfrag-lsp-id>
          firstfrag-lsp-id
        </firstfrag-lsp-id>
        <reachability-delay>
          reachability-delay
        </reachability-delay>
        <reachability-expense>
          reachability-expense
        </reachability-expense>
        <reachability-error>
          reachability-error
        </reachability-error>
      </isis-neighbor>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-overload-information>

Usage

```
<isis-overview>
  <isis-overload-information>
    <isis-overload-enabled>
```


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```
      isis-overload-enabled
    </isis-overload-enabled>
    <isis-overload-high-metrics>
      isis-overload-high-metrics
    </isis-overload-high-metrics>
    <isis-overload-allow-route-leaking>
      isis-overload-allow-route-leaking
    </isis-overload-allow-route-leaking>
    <isis-overload-timeout>
      isis-overload-timeout
    </isis-overload-timeout>
    <isis-overload-remaining-time>
      isis-overload-remaining-time
    </isis-overload-remaining-time>
  </isis-overload-information>
</isis-overview>
```

Description Overload bit behaviour at startup

<isis-overload-information>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-overload-information>
      <isis-overload-enabled>
        isis-overload-enabled
      </isis-overload-enabled>
      <isis-overload-high-metrics>
        isis-overload-high-metrics
      </isis-overload-high-metrics>
      <isis-overload-allow-route-leaking>
        isis-overload-allow-route-leaking
      </isis-overload-allow-route-leaking>
      <isis-overload-timeout>
        isis-overload-timeout
      </isis-overload-timeout>
      <isis-overload-remaining-time>
        isis-overload-remaining-time
      </isis-overload-remaining-time>
    </isis-overload-information>
  </isis-overview>
</isis-overview-information>
```

Description Overload bit behaviour at startup

<isis-overview>

Usage

```
<isis-overview>
  <instance-name>
    instance-name
```

```
</instance-name>
<isis-router-id>
  isis-router-id
</isis-router-id>
<isis-max-areas>
  isis-max-areas
</isis-max-areas>
<isis-lsp-lifetime>
  isis-lsp-lifetime
</isis-lsp-lifetime>
<isis-reference-bandwidth>
  isis-reference-bandwidth
</isis-reference-bandwidth>
<isis-adjacency-holddown>
  isis-adjacency-holddown
</isis-adjacency-holddown>
<isis-attached-bit-evaluation>
  isis-attached-bit-evaluation
</isis-attached-bit-evaluation>
<isis-spf-information>....</isis-spf-information>
<isis-overload-information>....</isis-overload-information>
<isis-routing>....</isis-routing>
<isis-traffic-engineering>....</isis-traffic-engineering>
<isis-restart>....</isis-restart>
<isis-level-information>....</isis-level-information>
</isis-overview>
```

Description Overview information for an IS-IS instance

<isis-overview>

Usage

```
<isis-overview-information>
  <isis-overview>
    <instance-name>
      instance-name
    </instance-name>
    <isis-router-id>
      isis-router-id
    </isis-router-id>
    <isis-max-areas>
      isis-max-areas
    </isis-max-areas>
    <isis-lsp-lifetime>
      isis-lsp-lifetime
    </isis-lsp-lifetime>
    <isis-reference-bandwidth>
      isis-reference-bandwidth
    </isis-reference-bandwidth>
    <isis-adjacency-holddown>
      isis-adjacency-holddown
    </isis-adjacency-holddown>
    <isis-attached-bit-evaluation>
      isis-attached-bit-evaluation
```


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```
    </isis-attached-bit-evaluation>
    <isis-spf-information>....</isis-spf-information>
    <isis-overload-information>....</isis-overload-information>
    <isis-routing>....</isis-routing>
    <isis-traffic-engineering>....</isis-traffic-engineering>
    <isis-restart>....</isis-restart>
    <isis-level-information>....</isis-level-information>
  </isis-overview>
</isis-overview-information>
```

Description Overview information for an IS-IS instance

<isis-overview-information>

Usage

```
<isis-overview-information>
  <isis-overview>....</isis-overview>
</isis-overview-information>
```

Description ISIS overview information

<isis-packet>

Usage

```
<isis-packet>
  <lsp-id>
    lsp-id
  </lsp-id>
  <pdu-length>
    pdu-length
  </pdu-length>
  <pdu-lifetime>
    pdu-lifetime
  </pdu-lifetime>
  <checksum>
    checksum
  </checksum>
  <sequence-number>
    sequence-number
  </sequence-number>
  <lsp-attributes>
    lsp-attributes
  </lsp-attributes>
  <nlp-id>
    nlp-id
  </nlp-id>
  <mtid>
    mtid
  </mtid>
  <lsp-length>
    lsp-length
  </lsp-length>
```

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```
<pdu-version>
  pdu-version
</pdu-version>
<system-id-length>
  system-id-length
</system-id-length>
<isis-packet-type>
  isis-packet-type
</isis-packet-type>
<packet-version>
  packet-version
</packet-version>
<maximum-area>
  maximum-area
</maximum-area>
</isis-packet>
```

Description

<isis-packet>

Usage

```
<isis-database-entry>
  <isis-packet>
    <lsp-id>
      lsp-id
    </lsp-id>
    <pdu-length>
      pdu-length
    </pdu-length>
    <pdu-lifetime>
      pdu-lifetime
    </pdu-lifetime>
    <checksum>
      checksum
    </checksum>
    <sequence-number>
      sequence-number
    </sequence-number>
    <lsp-attributes>
      lsp-attributes
    </lsp-attributes>
    <nlp-id>
      nlp-id
    </nlp-id>
    <mtid>
      mtid
    </mtid>
    <lsp-length>
      lsp-length
    </lsp-length>
    <pdu-version>
      pdu-version
    </pdu-version>
    <system-id-length>
```


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```
      system-id-length
    </system-id-length>
    <isis-packet-type>
      isis-packet-type
    </isis-packet-type>
    <packet-version>
      packet-version
    </packet-version>
    <maximum-area>
      maximum-area
    </maximum-area>
  </isis-packet>
</isis-database-entry>
```

Description

<isis-packet>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-packet>
      <lsp-id>
        lsp-id
      </lsp-id>
      <pdu-length>
        pdu-length
      </pdu-length>
      <pdu-lifetime>
        pdu-lifetime
      </pdu-lifetime>
      <checksum>
        checksum
      </checksum>
      <sequence-number>
        sequence-number
      </sequence-number>
      <lsp-attributes>
        lsp-attributes
      </lsp-attributes>
      <nlp-id>
        nlp-id
      </nlp-id>
      <mtid>
        mtid
      </mtid>
      <lsp-length>
        lsp-length
      </lsp-length>
      <pdu-version>
        pdu-version
      </pdu-version>
      <system-id-length>
        system-id-length
      </system-id-length>
```

```
        <isis-packet-type>
          isis-packet-type
        </isis-packet-type>
        <packet-version>
          packet-version
        </packet-version>
        <maximum-area>
          maximum-area
        </maximum-area>
      </isis-packet>
    </isis-database-entry>
  </isis-database>
```

Description

<isis-packet>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-packet>
        <lsp-id>
          lsp-id
        </lsp-id>
        <pdu-length>
          pdu-length
        </pdu-length>
        <pdu-lifetime>
          pdu-lifetime
        </pdu-lifetime>
        <checksum>
          checksum
        </checksum>
        <sequence-number>
          sequence-number
        </sequence-number>
        <lsp-attributes>
          lsp-attributes
        </lsp-attributes>
        <nlp-id>
          nlp-id
        </nlp-id>
        <mtid>
          mtid
        </mtid>
        <lsp-length>
          lsp-length
        </lsp-length>
        <pdu-version>
          pdu-version
        </pdu-version>
        <system-id-length>
          system-id-length
        </system-id-length>
```


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```
        <isis-packet-type>
          isis-packet-type
        </isis-packet-type>
        <packet-version>
          packet-version
        </packet-version>
        <maximum-area>
          maximum-area
        </maximum-area>
      </isis-packet>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-pdu-statistics>

Usage

```
<isis-pdu-statistics>
  <isis-pdu-type>
    isis-pdu-type
  </isis-pdu-type>
  <packets-received>
    packets-received
  </packets-received>
  <packets-processed>
    packets-processed
  </packets-processed>
  <packets-dropped>
    packets-dropped
  </packets-dropped>
  <packets-sent>
    packets-sent
  </packets-sent>
  <packets-retransmitted>
    packets-retransmitted
  </packets-retransmitted>
</isis-pdu-statistics>
```

Description

<isis-pdu-statistics>

Usage

```
<isis-statistics>
  <isis-pdu-statistics>
    <isis-pdu-type>
      isis-pdu-type
    </isis-pdu-type>
    <packets-received>
      packets-received
    </packets-received>
    <packets-processed>
```

```
      packets-processed
    </packets-processed>
    <packets-dropped>
      packets-dropped
    </packets-dropped>
    <packets-sent>
      packets-sent
    </packets-sent>
    <packets-retransmitted>
      packets-retransmitted
    </packets-retransmitted>
  </isis-pdu-statistics>
</isis-statistics>
```

Description

<isis-pdu-statistics>

Usage

```
<isis-statistics-information>
  <isis-statistics>
    <isis-pdu-statistics>
      <isis-pdu-type>
        isis-pdu-type
      </isis-pdu-type>
      <packets-received>
        packets-received
      </packets-received>
      <packets-processed>
        packets-processed
      </packets-processed>
      <packets-dropped>
        packets-dropped
      </packets-dropped>
      <packets-sent>
        packets-sent
      </packets-sent>
      <packets-retransmitted>
        packets-retransmitted
      </packets-retransmitted>
    </isis-pdu-statistics>
  </isis-statistics>
</isis-statistics-information>
```

Description

<isis-prefix>

Usage

```
<isis-prefix>
  <protocol-name>
    protocol-name
  </protocol-name>
  <isis-topology-id>
```


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```
    isis-topology-id
   </isis-topology-id>
   <address-prefix>
    address-prefix
   </address-prefix>
   <metric>
    metric
   </metric>
   <prefix-flag>
    prefix-flag
   </prefix-flag>
   <prefix-status>
    prefix-status
   </prefix-status>
   <reachability-delay>
    reachability-delay
   </reachability-delay>
   <reachability-expense>
    reachability-expense
   </reachability-expense>
   <reachability-error>
    reachability-error
   </reachability-error>
  </isis-prefix>
```

Description

<isis-prefix>

Usage

```
<isis-database-entry>
 <isis-prefix>
  <protocol-name>
   protocol-name
  </protocol-name>
  <isis-topology-id>
   isis-topology-id
  </isis-topology-id>
  <address-prefix>
   address-prefix
  </address-prefix>
  <metric>
   metric
  </metric>
  <prefix-flag>
   prefix-flag
  </prefix-flag>
  <prefix-status>
   prefix-status
  </prefix-status>
  <reachability-delay>
   reachability-delay
  </reachability-delay>
  <reachability-expense>
   reachability-expense
```

```
    </reachability-expense>
    <reachability-error>
      reachability-error
    </reachability-error>
  </isis-prefix>
</isis-database-entry>
```

Description

<isis-prefix>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-prefix>
      <protocol-name>
        protocol-name
      </protocol-name>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <address-prefix>
        address-prefix
      </address-prefix>
      <metric>
        metric
      </metric>
      <prefix-flag>
        prefix-flag
      </prefix-flag>
      <prefix-status>
        prefix-status
      </prefix-status>
      <reachability-delay>
        reachability-delay
      </reachability-delay>
      <reachability-expense>
        reachability-expense
      </reachability-expense>
      <reachability-error>
        reachability-error
      </reachability-error>
    </isis-prefix>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
```


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```
<isis-prefix>
  <protocol-name>
    protocol-name
  </protocol-name>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
  <address-prefix>
    address-prefix
  </address-prefix>
  <metric>
    metric
  </metric>
  <prefix-flag>
    prefix-flag
  </prefix-flag>
  <prefix-status>
    prefix-status
  </prefix-status>
  <reachability-delay>
    reachability-delay
  </reachability-delay>
  <reachability-expense>
    reachability-expense
  </reachability-expense>
  <reachability-error>
    reachability-error
  </reachability-error>
 </isis-prefix>
 </isis-database-entry>
</isis-database>
</isis-database-information>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-tlv>
  <isis-prefix-subtlv>
    <isis-prefix-tag>....</isis-prefix-tag>
  </isis-prefix-subtlv>
</isis-tlv>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-tlv>
  <ipv6-reachability-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>....</isis-prefix-tag>
    </isis-prefix-subtlv>
```

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```
  </ipv6-reachability-tlv>
</isis-tlv>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-tlv>
  <ip-prefix-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>....</isis-prefix-tag>
    </isis-prefix-subtlv>
  </ip-prefix-tlv>
</isis-tlv>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>....</isis-prefix-tag>
    </isis-prefix-subtlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ipv6-reachability-tlv>
      <isis-prefix-subtlv>
        <isis-prefix-tag>....</isis-prefix-tag>
      </isis-prefix-subtlv>
    </ipv6-reachability-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ip-prefix-tlv>
```


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```
      <isis-prefix-subtlv>
        <isis-prefix-tag>....</isis-prefix-tag>
      </isis-prefix-subtlv>
    </ip-prefix-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-prefix-subtlv>
        <isis-prefix-tag>....</isis-prefix-tag>
      </isis-prefix-subtlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ipv6-reachability-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>....</isis-prefix-tag>
        </isis-prefix-subtlv>
      </ipv6-reachability-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ip-prefix-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>....</isis-prefix-tag>
        </isis-prefix-subtlv>
      </ip-prefix-tlv>
    </isis-tlv>
```

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```
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>....</isis-prefix-tag>
        </isis-prefix-subtlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ipv6-reachability-tlv>
          <isis-prefix-subtlv>
            <isis-prefix-tag>....</isis-prefix-tag>
          </isis-prefix-subtlv>
        </ipv6-reachability-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-prefix-subtlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ip-prefix-tlv>
          <isis-prefix-subtlv>
            <isis-prefix-tag>....</isis-prefix-tag>
          </isis-prefix-subtlv>
        </ip-prefix-tlv>
```


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```
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-prefix-tag>

Usage

```
<isis-tlv>
  <isis-prefix-subtlv>
    <isis-prefix-tag>
      <isis-prefix-tag-index>
        isis-prefix-tag-index
      </isis-prefix-tag-index>
      <isis-prefix-tag-value>
        isis-prefix-tag-value
      </isis-prefix-tag-value>
    </isis-prefix-tag>
  </isis-prefix-subtlv>
</isis-tlv>
```

Description

<isis-prefix-tag>

Usage

```
<isis-tlv>
  <ipv6-reachability-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>
        <isis-prefix-tag-index>
          isis-prefix-tag-index
        </isis-prefix-tag-index>
        <isis-prefix-tag-value>
          isis-prefix-tag-value
        </isis-prefix-tag-value>
      </isis-prefix-tag>
    </isis-prefix-subtlv>
  </ipv6-reachability-tlv>
</isis-tlv>
```

Description

<isis-prefix-tag>

Usage

```
<isis-tlv>
  <ip-prefix-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>
        <isis-prefix-tag-index>
```

```
            isis-prefix-tag-index
          </isis-prefix-tag-index>
          <isis-prefix-tag-value>
            isis-prefix-tag-value
          </isis-prefix-tag-value>
        </isis-prefix-tag>
      </isis-prefix-subtlv>
    </ip-prefix-tlv>
  </isis-tlv>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-prefix-subtlv>
      <isis-prefix-tag>
        <isis-prefix-tag-index>
          isis-prefix-tag-index
        </isis-prefix-tag-index>
        <isis-prefix-tag-value>
          isis-prefix-tag-value
        </isis-prefix-tag-value>
      </isis-prefix-tag>
    </isis-prefix-subtlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ipv6-reachability-tlv>
      <isis-prefix-subtlv>
        <isis-prefix-tag>
          <isis-prefix-tag-index>
            isis-prefix-tag-index
          </isis-prefix-tag-index>
          <isis-prefix-tag-value>
            isis-prefix-tag-value
          </isis-prefix-tag-value>
        </isis-prefix-tag>
      </isis-prefix-subtlv>
    </ipv6-reachability-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

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<isis-prefix-tag>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <ip-prefix-tlv>
      <isis-prefix-subtlv>
        <isis-prefix-tag>
          <isis-prefix-tag-index>
            isis-prefix-tag-index
          </isis-prefix-tag-index>
          <isis-prefix-tag-value>
            isis-prefix-tag-value
          </isis-prefix-tag-value>
        </isis-prefix-tag>
      </isis-prefix-subtlv>
    </ip-prefix-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-prefix-subtlv>
        <isis-prefix-tag>
          <isis-prefix-tag-index>
            isis-prefix-tag-index
          </isis-prefix-tag-index>
          <isis-prefix-tag-value>
            isis-prefix-tag-value
          </isis-prefix-tag-value>
        </isis-prefix-tag>
      </isis-prefix-subtlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ipv6-reachability-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>
```

```
            <isis-prefix-tag-index>
              isis-prefix-tag-index
            </isis-prefix-tag-index>
            <isis-prefix-tag-value>
              isis-prefix-tag-value
            </isis-prefix-tag-value>
          </isis-prefix-tag>
        </isis-prefix-subtlv>
      </ipv6-reachability-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <ip-prefix-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>
            <isis-prefix-tag-index>
              isis-prefix-tag-index
            </isis-prefix-tag-index>
            <isis-prefix-tag-value>
              isis-prefix-tag-value
            </isis-prefix-tag-value>
          </isis-prefix-tag>
        </isis-prefix-subtlv>
      </ip-prefix-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-prefix-subtlv>
          <isis-prefix-tag>
            <isis-prefix-tag-index>
              isis-prefix-tag-index
            </isis-prefix-tag-index>
            <isis-prefix-tag-value>
              isis-prefix-tag-value
            </isis-prefix-tag-value>
```


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```
            </isis-prefix-tag>
          </isis-prefix-subtlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
</isis-database-information>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ipv6-reachability-tlv>
          <isis-prefix-subtlv>
            <isis-prefix-tag>
              <isis-prefix-tag-index>
                isis-prefix-tag-index
              </isis-prefix-tag-index>
              <isis-prefix-tag-value>
                isis-prefix-tag-value
              </isis-prefix-tag-value>
            </isis-prefix-tag>
          </isis-prefix-subtlv>
        </ipv6-reachability-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <ip-prefix-tlv>
          <isis-prefix-subtlv>
            <isis-prefix-tag>
              <isis-prefix-tag-index>
                isis-prefix-tag-index
              </isis-prefix-tag-index>
              <isis-prefix-tag-value>
                isis-prefix-tag-value
              </isis-prefix-tag-value>
            </isis-prefix-tag>
          </isis-prefix-subtlv>
        </ip-prefix-tlv>
```

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```
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-local>
  <isis-database-local-entry>
    <isis-database-local-data>
      <prefix-reachability>
        <isis-prefix-tag>
          <isis-prefix-tag-index>
            isis-prefix-tag-index
          </isis-prefix-tag-index>
          <isis-prefix-tag-value>
            isis-prefix-tag-value
          </isis-prefix-tag-value>
        </isis-prefix-tag>
      </prefix-reachability>
    </isis-database-local-data>
  </isis-database-local-entry>
</isis-database-local>
```

Description

<isis-prefix-tag>

Usage

```
<isis-database-local-information>
  <isis-database-local>
    <isis-database-local-entry>
      <isis-database-local-data>
        <prefix-reachability>
          <isis-prefix-tag>
            <isis-prefix-tag-index>
              isis-prefix-tag-index
            </isis-prefix-tag-index>
            <isis-prefix-tag-value>
              isis-prefix-tag-value
            </isis-prefix-tag-value>
          </isis-prefix-tag>
        </prefix-reachability>
      </isis-database-local-data>
    </isis-database-local-entry>
  </isis-database-local>
</isis-database-local-information>
```

Description

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<isis-reachability-subtlv>

Usage

```
<isis-tlv>
  <reachability-tlv>
    <isis-reachability-subtlv>
      <isis-subtlv-type>
        isis-subtlv-type
      </isis-subtlv-type>
      <subtlv-length>
        subtlv-length
      </subtlv-length>
      <max-bandwidth>
        max-bandwidth
      </max-bandwidth>
      <max-reserve-bandwidth>
        max-reserve-bandwidth
      </max-reserve-bandwidth>
      <current-bandwidth-header>
        current-bandwidth-header
      </current-bandwidth-header>
      <current-reserve-bandwidth>
        current-reserve-bandwidth
      </current-reserve-bandwidth>
      <admin-groups>....</admin-groups>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <local-ifindex>
        local-ifindex
      </local-ifindex>
      <remote-ifindex>
        remote-ifindex
      </remote-ifindex>
      <address>
        address
      </address>
      <neighbor-prefix>
        neighbor-prefix
      </neighbor-prefix>
      <address-prefix>
        address-prefix
      </address-prefix>
      <prefix-err-message>
        prefix-err-message
      </prefix-err-message>
      <te-metric>
        te-metric
      </te-metric>
      <dste-bc-header>
        dste-bc-header
      </dste-bc-header>
      <dste-bc-model>
        dste-bc-model
      </dste-bc-model>
```

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```
      <dste-bc-count>
        dste-bc-count
      </dste-bc-count>
      <dste-bc-bw>
        dste-bc-bw
      </dste-bc-bw>
    </isis-reachability-subtlv>
  </reachability-tlv>
</isis-tlv>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-tlv>
  <isis-reachability-subtlv>
    <isis-subtlv-type>
      isis-subtlv-type
    </isis-subtlv-type>
    <subtlv-length>
      subtlv-length
    </subtlv-length>
    <max-bandwidth>
      max-bandwidth
    </max-bandwidth>
    <max-reserve-bandwidth>
      max-reserve-bandwidth
    </max-reserve-bandwidth>
    <current-bandwidth-header>
      current-bandwidth-header
    </current-bandwidth-header>
    <current-reserve-bandwidth>
      current-reserve-bandwidth
    </current-reserve-bandwidth>
    <admin-groups>....</admin-groups>
    <bandwidth-priority>
      bandwidth-priority
    </bandwidth-priority>
    <local-ifindex>
      local-ifindex
    </local-ifindex>
    <remote-ifindex>
      remote-ifindex
    </remote-ifindex>
    <address>
      address
    </address>
    <neighbor-prefix>
      neighbor-prefix
    </neighbor-prefix>
    <address-prefix>
      address-prefix
    </address-prefix>
    <prefix-err-message>
```


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```
      prefix-err-message
    </prefix-err-message>
    <te-metric>
      te-metric
    </te-metric>
    <dste-bc-header>
      dste-bc-header
    </dste-bc-header>
    <dste-bc-model>
      dste-bc-model
    </dste-bc-model>
    <dste-bc-count>
      dste-bc-count
    </dste-bc-count>
    <dste-bc-bw>
      dste-bc-bw
    </dste-bc-bw>
  </isis-reachability-subtlv>
</isis-tlv>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <reachability-tlv>
      <isis-reachability-subtlv>
        <isis-subtlv-type>
          isis-subtlv-type
        </isis-subtlv-type>
        <subtlv-length>
          subtlv-length
        </subtlv-length>
        <max-bandwidth>
          max-bandwidth
        </max-bandwidth>
        <max-reserve-bandwidth>
          max-reserve-bandwidth
        </max-reserve-bandwidth>
        <current-bandwidth-header>
          current-bandwidth-header
        </current-bandwidth-header>
        <current-reserve-bandwidth>
          current-reserve-bandwidth
        </current-reserve-bandwidth>
        <admin-groups>....</admin-groups>
        <bandwidth-priority>
          bandwidth-priority
        </bandwidth-priority>
        <local-ifindex>
          local-ifindex
        </local-ifindex>
        <remote-ifindex>
```

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```
            remote-ifindex
           </remote-ifindex>
           <address>
            address
           </address>
           <neighbor-prefix>
            neighbor-prefix
           </neighbor-prefix>
           <address-prefix>
            address-prefix
           </address-prefix>
           <prefix-err-message>
            prefix-err-message
           </prefix-err-message>
           <te-metric>
            te-metric
           </te-metric>
           <dste-bc-header>
            dste-bc-header
           </dste-bc-header>
           <dste-bc-model>
            dste-bc-model
           </dste-bc-model>
           <dste-bc-count>
            dste-bc-count
           </dste-bc-count>
           <dste-bc-bw>
            dste-bc-bw
           </dste-bc-bw>
          </isis-reachability-subtlv>
         </reachability-tlv>
        </isis-tlv>
       </isis-database-entry>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database-entry>
 <isis-tlv>
  <isis-reachability-subtlv>
   <isis-subtlv-type>
    isis-subtlv-type
   </isis-subtlv-type>
   <subtlv-length>
    subtlv-length
   </subtlv-length>
   <max-bandwidth>
    max-bandwidth
   </max-bandwidth>
   <max-reserve-bandwidth>
    max-reserve-bandwidth
   </max-reserve-bandwidth>
   <current-bandwidth-header>
```


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```
      current-bandwidth-header
    </current-bandwidth-header>
    <current-reserve-bandwidth>
      current-reserve-bandwidth
    </current-reserve-bandwidth>
    <admin-groups>....</admin-groups>
    <bandwidth-priority>
      bandwidth-priority
    </bandwidth-priority>
    <local-ifindex>
      local-ifindex
    </local-ifindex>
    <remote-ifindex>
      remote-ifindex
    </remote-ifindex>
    <address>
      address
    </address>
    <neighbor-prefix>
      neighbor-prefix
    </neighbor-prefix>
    <address-prefix>
      address-prefix
    </address-prefix>
    <prefix-err-message>
      prefix-err-message
    </prefix-err-message>
    <te-metric>
      te-metric
    </te-metric>
    <dste-bc-header>
      dste-bc-header
    </dste-bc-header>
    <dste-bc-model>
      dste-bc-model
    </dste-bc-model>
    <dste-bc-count>
      dste-bc-count
    </dste-bc-count>
    <dste-bc-bw>
      dste-bc-bw
    </dste-bc-bw>
  </isis-reachability-subtlv>
 </isis-tlv>
</isis-database-entry>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database>
 <isis-database-entry>
  <isis-tlv>
   <reachability-tlv>
```

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```
<isis-reachability-subtlv>
  <isis-subtlv-type>
    isis-subtlv-type
  </isis-subtlv-type>
  <subtlv-length>
    subtlv-length
  </subtlv-length>
  <max-bandwidth>
    max-bandwidth
  </max-bandwidth>
  <max-reserve-bandwidth>
    max-reserve-bandwidth
  </max-reserve-bandwidth>
  <current-bandwidth-header>
    current-bandwidth-header
  </current-bandwidth-header>
  <current-reserve-bandwidth>
    current-reserve-bandwidth
  </current-reserve-bandwidth>
  <admin-groups>....</admin-groups>
  <bandwidth-priority>
    bandwidth-priority
  </bandwidth-priority>
  <local-ifindex>
    local-ifindex
  </local-ifindex>
  <remote-ifindex>
    remote-ifindex
  </remote-ifindex>
  <address>
    address
  </address>
  <neighbor-prefix>
    neighbor-prefix
  </neighbor-prefix>
  <address-prefix>
    address-prefix
  </address-prefix>
  <prefix-err-message>
    prefix-err-message
  </prefix-err-message>
  <te-metric>
    te-metric
  </te-metric>
  <dste-bc-header>
    dste-bc-header
  </dste-bc-header>
  <dste-bc-model>
    dste-bc-model
  </dste-bc-model>
  <dste-bc-count>
    dste-bc-count
  </dste-bc-count>
  <dste-bc-bw>
    dste-bc-bw
  </dste-bc-bw>
```


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```
        </isis-reachability-subtlv>
       </reachability-tlv>
      </isis-tlv>
     </isis-database-entry>
    </isis-database>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database>
 <isis-database-entry>
  <isis-tlv>
   <isis-reachability-subtlv>
    <isis-subtlv-type>
     isis-subtlv-type
    </isis-subtlv-type>
    <subtlv-length>
     subtlv-length
    </subtlv-length>
    <max-bandwidth>
     max-bandwidth
    </max-bandwidth>
    <max-reserve-bandwidth>
     max-reserve-bandwidth
    </max-reserve-bandwidth>
    <current-bandwidth-header>
     current-bandwidth-header
    </current-bandwidth-header>
    <current-reserve-bandwidth>
     current-reserve-bandwidth
    </current-reserve-bandwidth>
    <admin-groups>....</admin-groups>
    <bandwidth-priority>
     bandwidth-priority
    </bandwidth-priority>
    <local-ifindex>
     local-ifindex
    </local-ifindex>
    <remote-ifindex>
     remote-ifindex
    </remote-ifindex>
    <address>
     address
    </address>
    <neighbor-prefix>
     neighbor-prefix
    </neighbor-prefix>
    <address-prefix>
     address-prefix
    </address-prefix>
    <prefix-err-message>
     prefix-err-message
    </prefix-err-message>
```

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```
            <te-metric>
              te-metric
            </te-metric>
            <dste-bc-header>
              dste-bc-header
            </dste-bc-header>
            <dste-bc-model>
              dste-bc-model
            </dste-bc-model>
            <dste-bc-count>
              dste-bc-count
            </dste-bc-count>
            <dste-bc-bw>
              dste-bc-bw
            </dste-bc-bw>
          </isis-reachability-subtlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <reachability-tlv>
          <isis-reachability-subtlv>
            <isis-subtlv-type>
              isis-subtlv-type
            </isis-subtlv-type>
            <subtlv-length>
              subtlv-length
            </subtlv-length>
            <max-bandwidth>
              max-bandwidth
            </max-bandwidth>
            <max-reserve-bandwidth>
              max-reserve-bandwidth
            </max-reserve-bandwidth>
            <current-bandwidth-header>
              current-bandwidth-header
            </current-bandwidth-header>
            <current-reserve-bandwidth>
              current-reserve-bandwidth
            </current-reserve-bandwidth>
            <admin-groups>....</admin-groups>
            <bandwidth-priority>
              bandwidth-priority
            </bandwidth-priority>
            <local-ifindex>
              local-ifindex
```


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```
            </local-ifindex>
            <remote-ifindex>
              remote-ifindex
            </remote-ifindex>
            <address>
              address
            </address>
            <neighbor-prefix>
              neighbor-prefix
            </neighbor-prefix>
            <address-prefix>
              address-prefix
            </address-prefix>
            <prefix-err-message>
              prefix-err-message
            </prefix-err-message>
            <te-metric>
              te-metric
            </te-metric>
            <dste-bc-header>
              dste-bc-header
            </dste-bc-header>
            <dste-bc-model>
              dste-bc-model
            </dste-bc-model>
            <dste-bc-count>
              dste-bc-count
            </dste-bc-count>
            <dste-bc-bw>
              dste-bc-bw
            </dste-bc-bw>
          </isis-reachability-subtlv>
        </reachability-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-reachability-subtlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-reachability-subtlv>
          <isis-subtlv-type>
            isis-subtlv-type
          </isis-subtlv-type>
          <subtlv-length>
            subtlv-length
          </subtlv-length>
          <max-bandwidth>
```

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```
            max-bandwidth
           </max-bandwidth>
           <max-reserve-bandwidth>
            max-reserve-bandwidth
           </max-reserve-bandwidth>
           <current-bandwidth-header>
            current-bandwidth-header
           </current-bandwidth-header>
           <current-reserve-bandwidth>
            current-reserve-bandwidth
           </current-reserve-bandwidth>
           <admin-groups>....</admin-groups>
           <bandwidth-priority>
            bandwidth-priority
           </bandwidth-priority>
           <local-ifindex>
            local-ifindex
           </local-ifindex>
           <remote-ifindex>
            remote-ifindex
           </remote-ifindex>
           <address>
            address
           </address>
           <neighbor-prefix>
            neighbor-prefix
           </neighbor-prefix>
           <address-prefix>
            address-prefix
           </address-prefix>
           <prefix-err-message>
            prefix-err-message
           </prefix-err-message>
           <te-metric>
            te-metric
           </te-metric>
           <dste-bc-header>
            dste-bc-header
           </dste-bc-header>
           <dste-bc-model>
            dste-bc-model
           </dste-bc-model>
           <dste-bc-count>
            dste-bc-count
           </dste-bc-count>
           <dste-bc-bw>
            dste-bc-bw
           </dste-bc-bw>
          </isis-reachability-subtlv>
         </isis-tlv>
        </isis-database-entry>
       </isis-database>
      </isis-database-information>
```


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Description

<isis-replication-adjacency>

Usage

```
<isis-replication-adjacency>
  <interface-name>
    interface-name
  </interface-name>
  <system-name>
    system-name
  </system-name>
  <level>
    level
  </level>
  <adjacency-state>
    adjacency-state
  </adjacency-state>
  <snpa>
    snpa
  </snpa>
  <instance-name>
    instance-name
  </instance-name>
  <interface-index>
    interface-index
  </interface-index>
  <reference-count>
    reference-count
  </reference-count>
  <transition-count>
    transition-count
  </transition-count>
  <last-transition-time>
    last-transition-time
  </last-transition-time>
  <adjacency-event>
    adjacency-event
  </adjacency-event>
</isis-replication-adjacency>
```

Description

<isis-replication-adjacency>

Usage

```
<isis-replication-adjacency-information>
  <isis-replication-adjacency>
    <interface-name>
      interface-name
    </interface-name>
    <system-name>
      system-name
    </system-name>
    <level>
```

```
      level
    </level>
    <adjacency-state>
      adjacency-state
    </adjacency-state>
    <snpa>
      snpa
    </snpa>
    <instance-name>
      instance-name
    </instance-name>
    <interface-index>
      interface-index
    </interface-index>
    <reference-count>
      reference-count
    </reference-count>
    <transition-count>
      transition-count
    </transition-count>
    <last-transition-time>
      last-transition-time
    </last-transition-time>
    <adjacency-event>
      adjacency-event
    </adjacency-event>
  </isis-replication-adjacency>
</isis-replication-adjacency-information>
```

Description

<isis-replication-adjacency-information>

Usage

```
<isis-replication-adjacency-information>
  <isis-replication-adjacency>....</isis-replication-adjacency>
</isis-replication-adjacency-information>
```

Description Information about the IS-IS adjacency replication

<isis-replication-database>

Usage

```
<isis-replication-database>
  <instance-name>
    instance-name
  </instance-name>
  <level>
    level
  </level>
  <isis-replication-database-entry>....</isis-replication-database-entry>
  <isis-replication-database-entry-count>
    isis-replication-database-entry-count
```


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```
  </isis-replication-database-entry-count>
</isis-replication-database>
```

Description

<isis-replication-database>

Usage

```
<isis-replication-database-information>
  <isis-replication-database>
    <instance-name>
      instance-name
    </instance-name>
    <level>
      level
    </level>
    <isis-replication-database-entry>....</isis-replication-database-entry>
    <isis-replication-database-entry-count>
      isis-replication-database-entry-count
    </isis-replication-database-entry-count>
  </isis-replication-database>
</isis-replication-database-information>
```

Description

<isis-replication-database-entry>

Usage

```
<isis-replication-database-entry>
  <lsp-id>
    lsp-id
  </lsp-id>
  <sequence-number>
    sequence-number
  </sequence-number>
  <checksum>
    checksum
  </checksum>
  <remaining-lifetime>
    remaining-lifetime
  </remaining-lifetime>
  <replication-entry-in-use>
    replication-entry-in-use
  </replication-entry-in-use>
</isis-replication-database-entry>
```

Description

<isis-replication-database-entry>

Usage

```
<isis-replication-database>
  <isis-replication-database-entry>
```

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```
    <lsp-id>
      lsp-id
    </lsp-id>
    <sequence-number>
      sequence-number
    </sequence-number>
    <checksum>
      checksum
    </checksum>
    <remaining-lifetime>
      remaining-lifetime
    </remaining-lifetime>
    <replication-entry-in-use>
      replication-entry-in-use
    </replication-entry-in-use>
  </isis-replication-database-entry>
</isis-replication-database>
```

Description

<isis-replication-database-entry>

Usage

```
<isis-replication-database-information>
  <isis-replication-database>
    <isis-replication-database-entry>
      <lsp-id>
        lsp-id
      </lsp-id>
      <sequence-number>
        sequence-number
      </sequence-number>
      <checksum>
        checksum
      </checksum>
      <remaining-lifetime>
        remaining-lifetime
      </remaining-lifetime>
      <replication-entry-in-use>
        replication-entry-in-use
      </replication-entry-in-use>
    </isis-replication-database-entry>
  </isis-replication-database>
</isis-replication-database-information>
```

Description

<isis-replication-database-information>

Usage

```
<isis-replication-database-information>
  <isis-replication-database>....</isis-replication-database>
</isis-replication-database-information>
```


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Description Information about the IS-IS link-state database replication

<isis-replication-interface>

Usage

```
<isis-replication-interface>
  <interface-name>
    interface-name
  </interface-name>
  <instance-name>
    instance-name
  </instance-name>
  <circuit-id>
    circuit-id
  </circuit-id>
  <dr-id-one>
    dr-id-one
  </dr-id-one>
  <dr-id-two>
    dr-id-two
  </dr-id-two>
  <isis-interface-state-one>
    isis-interface-state-one
  </isis-interface-state-one>
  <isis-interface-state-two>
    isis-interface-state-two
  </isis-interface-state-two>
  <replication-entry-in-use>
    replication-entry-in-use
  </replication-entry-in-use>
</isis-replication-interface>
```

Description Information about the IS-IS interface replication

<isis-replication-interface>

Usage

```
<isis-replication-interface-information>
  <isis-replication-interface>
    <interface-name>
      interface-name
    </interface-name>
    <instance-name>
      instance-name
    </instance-name>
    <circuit-id>
      circuit-id
    </circuit-id>
    <dr-id-one>
      dr-id-one
    </dr-id-one>
    <dr-id-two>
      dr-id-two
```

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```
    </dr-id-two>
    <isis-interface-state-one>
      isis-interface-state-one
    </isis-interface-state-one>
    <isis-interface-state-two>
      isis-interface-state-two
    </isis-interface-state-two>
    <replication-entry-in-use>
      replication-entry-in-use
    </replication-entry-in-use>
  </isis-replication-interface>
</isis-replication-interface-information>
```

Description Information about the IS-IS interface replication

<isis-replication-interface-information>

Usage

```
<isis-replication-interface-information>
  <isis-replication-interface>....</isis-replication-interface>
</isis-replication-interface-information>
```

Description

<isis-replication-statistics>

Usage

```
<isis-replication-statistics>
  <isis-replication-type>
    isis-replication-type
  </isis-replication-type>
  <add-messages>
    add-messages
  </add-messages>
  <change-messages>
    change-messages
  </change-messages>
  <delete-messages>
    delete-messages
  </delete-messages>
</isis-replication-statistics>
```

Description Statistics from an IS-IS replication

<isis-replication-statistics>

Usage

```
<isis-replication-statistics-information>
  <isis-replication-statistics>
    <isis-replication-type>
      isis-replication-type
```


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```
    </isis-replication-type>
    <add-messages>
      add-messages
    </add-messages>
    <change-messages>
      change-messages
    </change-messages>
    <delete-messages>
      delete-messages
    </delete-messages>
  </isis-replication-statistics>
</isis-replication-statistics-information>
```

Description Statistics from an IS-IS replication

<isis-replication-statistics-information>

Usage

```
<isis-replication-statistics-information>
  <isis-replication-statistics>....</isis-replication-statistics>
</isis-replication-statistics-information>
```

Description

<isis-replication-system-id>

Usage

```
<isis-replication-system-id>
  <instance-name>
    instance-name
  </instance-name>
  <system-id>
    system-id
  </system-id>
  <replication-entry-in-use>
    replication-entry-in-use
  </replication-entry-in-use>
</isis-replication-system-id>
```

Description Information about the IS-IS system ID replication

<isis-replication-system-id>

Usage

```
<isis-replication-system-id-information>
  <isis-replication-system-id>
    <instance-name>
      instance-name
    </instance-name>
    <system-id>
      system-id
```

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```
    </system-id>
    <replication-entry-in-use>
     replication-entry-in-use
    </replication-entry-in-use>
   </isis-replication-system-id>
</isis-replication-system-id-information>
```

Description Information about the IS-IS system ID replication

<isis-replication-system-id-information>

Usage

```
<isis-replication-system-id-information>
  <isis-replication-system-id>....</isis-replication-system-id>
</isis-replication-system-id-information>
```

Description

<isis-restart>

Usage

```
<isis-overview>
  <isis-restart>
    <isis-restart-enabled>
     isis-restart-enabled
    </isis-restart-enabled>
    <isis-restart-duration>
     isis-restart-duration
    </isis-restart-duration>
    <isis-restart-helper-mode-enabled>
     isis-restart-helper-mode-enabled
    </isis-restart-helper-mode-enabled>
  </isis-restart>
</isis-overview>
```

Description IS-IS restart parameters

<isis-restart>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-restart>
      <isis-restart-enabled>
       isis-restart-enabled
      </isis-restart-enabled>
      <isis-restart-duration>
       isis-restart-duration
      </isis-restart-duration>
      <isis-restart-helper-mode-enabled>
       isis-restart-helper-mode-enabled
```


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```
      </isis-restart-helper-mode-enabled>
    </isis-restart>
  </isis-overview>
</isis-overview-information>
```

Description IS-IS restart parameters

<isis-route>

Usage

```
<isis-route>
  <address-prefix>
    address-prefix
  </address-prefix>
  <level>
    level
  </level>
  <route-version>
    route-version
  </route-version>
  <metric>
    metric
  </metric>
  <metric-type>
    metric-type
  </metric-type>
  <interface-name>
    interface-name
  </interface-name>
  <isis-next-hop-type>
    isis-next-hop-type
  </isis-next-hop-type>
  <isis-next-hop>
    isis-next-hop
  </isis-next-hop>
  <snpa>
    snpa
  </snpa>
</isis-route>
```

Description

<isis-route>

Usage

```
<isis-routing-table>
  <isis-route>
    <address-prefix>
      address-prefix
    </address-prefix>
    <level>
      level
    </level>
```

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```
      <route-version>
        route-version
      </route-version>
      <metric>
        metric
      </metric>
      <metric-type>
        metric-type
      </metric-type>
      <interface-name>
        interface-name
      </interface-name>
      <isis-next-hop-type>
        isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
        isis-next-hop
      </isis-next-hop>
      <snpa>
        snpa
      </snpa>
    </isis-route>
  </isis-routing-table>
```

Description

<isis-route>

Usage

```
<isis-route-information>
  <isis-routing-table>
    <isis-route>
      <address-prefix>
        address-prefix
      </address-prefix>
      <level>
        level
      </level>
      <route-version>
        route-version
      </route-version>
      <metric>
        metric
      </metric>
      <metric-type>
        metric-type
      </metric-type>
      <interface-name>
        interface-name
      </interface-name>
      <isis-next-hop-type>
        isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
        isis-next-hop
```


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```
      </isis-next-hop>
      <snpa>
        snpa
      </snpa>
    </isis-route>
  </isis-routing-table>
</isis-route-information>
```

Description

<isis-route-information>

Usage

```
<isis-route-information>
  <isis-routing-table>....</isis-routing-table>
</isis-route-information>
```

Description

<isis-routing>

Usage

```
<isis-overview>
  <isis-routing>
    <isis-routing-ipv4>
      isis-routing-ipv4
    </isis-routing-ipv4>
    <isis-routing-ipv6>
      isis-routing-ipv6
    </isis-routing-ipv6>
    <isis-routing-clns>
      isis-routing-clns
    </isis-routing-clns>
  </isis-routing>
</isis-overview>
```

Description List of routed IS-IS address families

<isis-routing>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-routing>
      <isis-routing-ipv4>
        isis-routing-ipv4
      </isis-routing-ipv4>
      <isis-routing-ipv6>
        isis-routing-ipv6
      </isis-routing-ipv6>
      <isis-routing-clns>
        isis-routing-clns
```

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```
      </isis-routing-clns>
    </isis-routing>
  </isis-overview>
</isis-overview-information>
```

Description List of routed IS-IS address families

<isis-routing-table>

Usage

```
<isis-routing-table>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
  <level-one-version>
    level-one-version
  </level-one-version>
  <level-two-version>
    level-two-version
  </level-two-version>
  <isis-route>....</isis-route>
</isis-routing-table>
```

Description

<isis-routing-table>

Usage

```
<isis-route-information>
  <isis-routing-table>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
    <level-one-version>
      level-one-version
    </level-one-version>
    <level-two-version>
      level-two-version
    </level-two-version>
    <isis-route>....</isis-route>
  </isis-routing-table>
</isis-route-information>
```

Description

<isis-spf>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-spf-results-header>....</isis-spf-results-header>
```


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```
      <isis-spf-result>....</isis-spf-result>
      <node-count>
       node-count
      </node-count>
      <isis-spf-log-header>....</isis-spf-log-header>
      <isis-spf-log>....</isis-spf-log>
      <isis-backup-spf-result>....</isis-backup-spf-result>
     </isis-spf>
    </isis-spf-information>
  </isis-overview>
```

Description

<isis-spf>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-results-header>....</isis-spf-results-header>
        <isis-spf-result>....</isis-spf-result>
        <node-count>
         node-count
        </node-count>
        <isis-spf-log-header>....</isis-spf-log-header>
        <isis-spf-log>....</isis-spf-log>
        <isis-backup-spf-result>....</isis-backup-spf-result>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<isis-spf>

Usage

```
<isis-spf>
  <isis-spf-results-header>....</isis-spf-results-header>
  <isis-spf-result>....</isis-spf-result>
  <node-count>
   node-count
  </node-count>
  <isis-spf-log-header>....</isis-spf-log-header>
  <isis-spf-log>....</isis-spf-log>
  <isis-backup-spf-result>....</isis-backup-spf-result>
</isis-spf>
```

Description

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<isis-spf>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-results-header>....</isis-spf-results-header>
    <isis-spf-result>....</isis-spf-result>
    <node-count>
      node-count
    </node-count>
    <isis-spf-log-header>....</isis-spf-log-header>
    <isis-spf-log>....</isis-spf-log>
    <isis-backup-spf-result>....</isis-backup-spf-result>
  </isis-spf>
</isis-spf-information>
```

Description

<isis-spf-information>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf-delay>
      isis-spf-delay
    </isis-spf-delay>
    <isis-spf-holddown>
      isis-spf-holddown
    </isis-spf-holddown>
    <isis-spf-rapid-runs>
      isis-spf-rapid-runs
    </isis-spf-rapid-runs>
    <isis-spf>....</isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description SPF options

<isis-spf-information>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf-delay>
        isis-spf-delay
      </isis-spf-delay>
      <isis-spf-holddown>
        isis-spf-holddown
      </isis-spf-holddown>
      <isis-spf-rapid-runs>
        isis-spf-rapid-runs
      </isis-spf-rapid-runs>
```


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```
      <isis-spf>....</isis-spf>
     </isis-spf-information>
    </isis-overview>
</isis-overview-information>
```

Description SPF options

<isis-spf-information>

Usage

```
<isis-spf-information>
 <isis-spf-delay>
  isis-spf-delay
 </isis-spf-delay>
 <isis-spf-holddown>
  isis-spf-holddown
 </isis-spf-holddown>
 <isis-spf-rapid-runs>
  isis-spf-rapid-runs
 </isis-spf-rapid-runs>
 <isis-spf>....</isis-spf>
</isis-spf-information>
```

Description SPF options

<isis-spf-log>

Usage

```
<isis-overview>
 <isis-spf-information>
  <isis-spf>
   <isis-spf-log>
    <start-time>
     start-time
    </start-time>
    <elapsed-time>
     elapsed-time
    </elapsed-time>
    <spf-trigger-count>
     spf-trigger-count
    </spf-trigger-count>
    <logging-reason>
     logging-reason
    </logging-reason>
    <lsp-name>
     lsp-name
    </lsp-name>
    <system-name>
     system-name
    </system-name>
    <interface-name>
     interface-name
```

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```
        </interface-name>
      </isis-spf-log>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

<isis-spf-log>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-log>
          <start-time>
            start-time
          </start-time>
          <elapsed-time>
            elapsed-time
          </elapsed-time>
          <spf-trigger-count>
            spf-trigger-count
          </spf-trigger-count>
          <logging-reason>
            logging-reason
          </logging-reason>
          <lsp-name>
            lsp-name
          </lsp-name>
          <system-name>
            system-name
          </system-name>
          <interface-name>
            interface-name
          </interface-name>
        </isis-spf-log>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<isis-spf-log>

Usage

```
<isis-spf-log>
  <start-time>
    start-time
  </start-time>
  <elapsed-time>
    elapsed-time
```


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```
  </elapsed-time>
  <spf-trigger-count>
    spf-trigger-count
  </spf-trigger-count>
  <logging-reason>
    logging-reason
  </logging-reason>
  <lsp-name>
    lsp-name
  </lsp-name>
  <system-name>
    system-name
  </system-name>
  <interface-name>
    interface-name
  </interface-name>
</isis-spf-log>
```

Description

<isis-spf-log>

Usage

```
<isis-spf>
  <isis-spf-log>
    <start-time>
      start-time
    </start-time>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
    <spf-trigger-count>
      spf-trigger-count
    </spf-trigger-count>
    <logging-reason>
      logging-reason
    </logging-reason>
    <lsp-name>
      lsp-name
    </lsp-name>
    <system-name>
      system-name
    </system-name>
    <interface-name>
      interface-name
    </interface-name>
  </isis-spf-log>
</isis-spf>
```

Description

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<isis-spf-log>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-log>
      <start-time>
        start-time
      </start-time>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
      <spf-trigger-count>
        spf-trigger-count
      </spf-trigger-count>
      <logging-reason>
        logging-reason
      </logging-reason>
      <lsp-name>
        lsp-name
      </lsp-name>
      <system-name>
        system-name
      </system-name>
      <interface-name>
        interface-name
      </interface-name>
    </isis-spf-log>
  </isis-spf>
</isis-spf-information>
```

Description

<isis-spf-log-header>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-spf-log-header>
        <level>
          level
        </level>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
      </isis-spf-log-header>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

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<isis-spf-log-header>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-log-header>
          <level>
            level
          </level>
          <isis-topology-id>
            isis-topology-id
          </isis-topology-id>
        </isis-spf-log-header>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<isis-spf-log-header>

Usage

```
<isis-spf-log-header>
  <level>
    level
  </level>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
</isis-spf-log-header>
```

Description

<isis-spf-log-header>

Usage

```
<isis-spf>
  <isis-spf-log-header>
    <level>
      level
    </level>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
  </isis-spf-log-header>
</isis-spf>
```

Description

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<isis-spf-log-header>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-log-header>
      <level>
        level
      </level>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
    </isis-spf-log-header>
  </isis-spf>
</isis-spf-information>
```

Description

<isis-spf-result>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-spf-result>
        <node-id>
          node-id
        </node-id>
        <node-address>
          node-address
        </node-address>
        <disconnected>
          disconnected
        </disconnected>
        <metric>
          metric
        </metric>
        <no-first-fragment>
          no-first-fragment
        </no-first-fragment>
        <next-hop-element>....</next-hop-element>
        <prefix-element>....</prefix-element>
        <end-system-element>....</end-system-element>
      </isis-spf-result>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

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<isis-spf-result>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-result>
          <node-id>
            node-id
          </node-id>
          <node-address>
            node-address
          </node-address>
          <disconnected>
            disconnected
          </disconnected>
          <metric>
            metric
          </metric>
          <no-first-fragment>
            no-first-fragment
          </no-first-fragment>
          <next-hop-element>....</next-hop-element>
          <prefix-element>....</prefix-element>
          <end-system-element>....</end-system-element>
        </isis-spf-result>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<isis-spf-result>

Usage

```
<isis-spf-result>
  <node-id>
    node-id
  </node-id>
  <node-address>
    node-address
  </node-address>
  <disconnected>
    disconnected
  </disconnected>
  <metric>
    metric
  </metric>
  <no-first-fragment>
    no-first-fragment
  </no-first-fragment>
  <next-hop-element>....</next-hop-element>
```

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```
  <prefix-element>....</prefix-element>
  <end-system-element>....</end-system-element>
</isis-spf-result>
```

Description

<isis-spf-result>

Usage

```
<isis-spf>
  <isis-spf-result>
    <node-id>
      node-id
    </node-id>
    <node-address>
      node-address
    </node-address>
    <disconnected>
      disconnected
    </disconnected>
    <metric>
      metric
    </metric>
    <no-first-fragment>
      no-first-fragment
    </no-first-fragment>
    <next-hop-element>....</next-hop-element>
    <prefix-element>....</prefix-element>
    <end-system-element>....</end-system-element>
  </isis-spf-result>
</isis-spf>
```

Description

<isis-spf-result>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-result>
      <node-id>
        node-id
      </node-id>
      <node-address>
        node-address
      </node-address>
      <disconnected>
        disconnected
      </disconnected>
      <metric>
        metric
      </metric>
      <no-first-fragment>
        no-first-fragment
```


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```
      </no-first-fragment>
      <next-hop-element>....</next-hop-element>
      <prefix-element>....</prefix-element>
      <end-system-element>....</end-system-element>
    </isis-spf-result>
  </isis-spf>
</isis-spf-information>
```

Description

<isis-spf-results-header>

Usage

```
<isis-overview>
  <isis-spf-information>
    <isis-spf>
      <isis-spf-results-header>
        <level>
          level
        </level>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
      </isis-spf-results-header>
    </isis-spf>
  </isis-spf-information>
</isis-overview>
```

Description

<isis-spf-results-header>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-results-header>
          <level>
            level
          </level>
          <isis-topology-id>
            isis-topology-id
          </isis-topology-id>
        </isis-spf-results-header>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

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<isis-spf-results-header>

Usage

```
<isis-spf-results-header>
  <level>
    level
  </level>
  <isis-topology-id>
    isis-topology-id
  </isis-topology-id>
</isis-spf-results-header>
```

Description

<isis-spf-results-header>

Usage

```
<isis-spf>
  <isis-spf-results-header>
    <level>
      level
    </level>
    <isis-topology-id>
      isis-topology-id
    </isis-topology-id>
  </isis-spf-results-header>
</isis-spf>
```

Description

<isis-spf-results-header>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-results-header>
      <level>
        level
      </level>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
    </isis-spf-results-header>
  </isis-spf>
</isis-spf-information>
```

Description

<isis-srlg-tlv>

Usage

```
<isis-tlv>
```


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```
  <isis-srlg-tlv>
   <address-prefix>
    address-prefix
   </address-prefix>
   <srlg-flag>
    srlg-flag
   </srlg-flag>
   <srlg-local-ifindex>
    srlg-local-ifindex
   </srlg-local-ifindex>
   <srlg-remote-ifindex>
    srlg-remote-ifindex
   </srlg-remote-ifindex>
   <srlg-address>
    srlg-address
   </srlg-address>
   <srlg-neighbor-prefix>
    srlg-neighbor-prefix
   </srlg-neighbor-prefix>
   <isis-srlg-value>....</isis-srlg-value>
  </isis-srlg-tlv>
</isis-tlv>
```

Description

<isis-srlg-tlv>

Usage

```
<isis-database-entry>
 <isis-tlv>
  <isis-srlg-tlv>
   <address-prefix>
    address-prefix
   </address-prefix>
   <srlg-flag>
    srlg-flag
   </srlg-flag>
   <srlg-local-ifindex>
    srlg-local-ifindex
   </srlg-local-ifindex>
   <srlg-remote-ifindex>
    srlg-remote-ifindex
   </srlg-remote-ifindex>
   <srlg-address>
    srlg-address
   </srlg-address>
   <srlg-neighbor-prefix>
    srlg-neighbor-prefix
   </srlg-neighbor-prefix>
   <isis-srlg-value>....</isis-srlg-value>
  </isis-srlg-tlv>
 </isis-tlv>
</isis-database-entry>
```

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Description

<isis-srlg-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-srlg-tlv>
        <address-prefix>
          address-prefix
        </address-prefix>
        <srlg-flag>
          srlg-flag
        </srlg-flag>
        <srlg-local-ifindex>
          srlg-local-ifindex
        </srlg-local-ifindex>
        <srlg-remote-ifindex>
          srlg-remote-ifindex
        </srlg-remote-ifindex>
        <srlg-address>
          srlg-address
        </srlg-address>
        <srlg-neighbor-prefix>
          srlg-neighbor-prefix
        </srlg-neighbor-prefix>
        <isis-srlg-value>....</isis-srlg-value>
      </isis-srlg-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-srlg-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-srlg-tlv>
          <address-prefix>
            address-prefix
          </address-prefix>
          <srlg-flag>
            srlg-flag
          </srlg-flag>
          <srlg-local-ifindex>
            srlg-local-ifindex
          </srlg-local-ifindex>
          <srlg-remote-ifindex>
            srlg-remote-ifindex
          </srlg-remote-ifindex>
```


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```
            <srlg-address>
              srlg-address
            </srlg-address>
            <srlg-neighbor-prefix>
              srlg-neighbor-prefix
            </srlg-neighbor-prefix>
            <isis-srlg-value>....</isis-srlg-value>
          </isis-srlg-tlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
</isis-database-information>
```

Description

<isis-srlg-value>

Usage

```
<isis-tlv>
  <isis-srlg-tlv>
    <isis-srlg-value>
      <isis-srlg-name>
        isis-srlg-name
      </isis-srlg-name>
    </isis-srlg-value>
  </isis-srlg-tlv>
</isis-tlv>
```

Description

<isis-srlg-value>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-srlg-tlv>
      <isis-srlg-value>
        <isis-srlg-name>
          isis-srlg-name
        </isis-srlg-name>
      </isis-srlg-value>
    </isis-srlg-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-srlg-value>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
```

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```
      <isis-srlg-tlv>
       <isis-srlg-value>
        <isis-srlg-name>
         isis-srlg-name
        </isis-srlg-name>
       </isis-srlg-value>
      </isis-srlg-tlv>
     </isis-tlv>
    </isis-database-entry>
   </isis-database>
```

Description

<isis-srlg-value>

Usage

```
<isis-database-information>
 <isis-database>
  <isis-database-entry>
   <isis-tlv>
    <isis-srlg-tlv>
     <isis-srlg-value>
      <isis-srlg-name>
       isis-srlg-name
      </isis-srlg-name>
     </isis-srlg-value>
    </isis-srlg-tlv>
   </isis-tlv>
  </isis-database-entry>
 </isis-database>
</isis-database-information>
```

Description

<isis-statistics>

Usage

```
<isis-statistics>
 <system-name>
  system-name
 </system-name>
 <isis-pdu-statistics>....</isis-pdu-statistics>
 <totals-information>....</totals-information>
 <snp-queue-length>
  snp-queue-length
 </snp-queue-length>
 <snp-queue-drops>
  snp-queue-drops
 </snp-queue-drops>
 <lsp-queue-length>
  lsp-queue-length
 </lsp-queue-length>
 <lsp-queue-drops>
  lsp-queue-drops
```


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```
  </lsp-queue-drops>
  <spf-runs>
   spf-runs
  </spf-runs>
  <fragments-rebuilt>
   fragments-rebuilt
  </fragments-rebuilt>
  <lsps-regenerated>
   lsps-regenerated
  </lsps-regenerated>
  <purges-initiated>
   purges-initiated
  </purges-initiated>
</isis-statistics>
```

Description

<isis-statistics>

Usage

```
<isis-statistics-information>
  <isis-statistics>
    <system-name>
     system-name
    </system-name>
    <isis-pdu-statistics>....</isis-pdu-statistics>
    <totals-information>....</totals-information>
    <snp-queue-length>
     snp-queue-length
    </snp-queue-length>
    <snp-queue-drops>
     snp-queue-drops
    </snp-queue-drops>
    <lsp-queue-length>
     lsp-queue-length
    </lsp-queue-length>
    <lsp-queue-drops>
     lsp-queue-drops
    </lsp-queue-drops>
    <spf-runs>
     spf-runs
    </spf-runs>
    <fragments-rebuilt>
     fragments-rebuilt
    </fragments-rebuilt>
    <lsps-regenerated>
     lsps-regenerated
    </lsps-regenerated>
    <purges-initiated>
     purges-initiated
    </purges-initiated>
  </isis-statistics>
</isis-statistics-information>
```

Description

<isis-statistics-information>

Usage

```
<isis-statistics-information>
  <isis-statistics>....</isis-statistics>
</isis-statistics-information>
```

Description

<isis-tlv>

Usage

```
<isis-tlv>
  <isis-tlv-overhead>....</isis-tlv-overhead>
  <area-address-tlv>....</area-address-tlv>
  <protocols-tlv>....</protocols-tlv>
  <mt-tlv>....</mt-tlv>
  <hostname-tlv>....</hostname-tlv>
  <ipaddress-tlv>....</ipaddress-tlv>
  <ipv6address-tlv>....</ipv6address-tlv>
  <router-id-tlv>....</router-id-tlv>
  <reachability-tlv>....</reachability-tlv>
  <isis-iso-prefix-tlv>....</isis-iso-prefix-tlv>
  <isis-prefix-subtlv>....</isis-prefix-subtlv>
  <ipv6-reachability-tlv>....</ipv6-reachability-tlv>
  <isis-reachability-subtlv>....</isis-reachability-subtlv>
  <authentication-tlv>....</authentication-tlv>
  <idrp-tlv>....</idrp-tlv>
  <ip-prefix-tlv>....</ip-prefix-tlv>
  <isis-srlg-tlv>....</isis-srlg-tlv>
  <unknown-tlv>....</unknown-tlv>
  <tlv-stragglers>....</tlv-stragglers>
</isis-tlv>
```

Description

<isis-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-tlv-overhead>....</isis-tlv-overhead>
    <area-address-tlv>....</area-address-tlv>
    <protocols-tlv>....</protocols-tlv>
    <mt-tlv>....</mt-tlv>
    <hostname-tlv>....</hostname-tlv>
    <ipaddress-tlv>....</ipaddress-tlv>
    <ipv6address-tlv>....</ipv6address-tlv>
    <router-id-tlv>....</router-id-tlv>
    <reachability-tlv>....</reachability-tlv>
    <isis-iso-prefix-tlv>....</isis-iso-prefix-tlv>
    <isis-prefix-subtlv>....</isis-prefix-subtlv>
```


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```
    <ipv6-reachability-tlv>....</ipv6-reachability-tlv>
    <isis-reachability-subtlv>....</isis-reachability-subtlv>
    <authentication-tlv>....</authentication-tlv>
    <idrp-tlv>....</idrp-tlv>
    <ip-prefix-tlv>....</ip-prefix-tlv>
    <isis-srlg-tlv>....</isis-srlg-tlv>
    <unknown-tlv>....</unknown-tlv>
    <tlv-stragglers>....</tlv-stragglers>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-tlv-overhead>....</isis-tlv-overhead>
      <area-address-tlv>....</area-address-tlv>
      <protocols-tlv>....</protocols-tlv>
      <mt-tlv>....</mt-tlv>
      <hostname-tlv>....</hostname-tlv>
      <ipaddress-tlv>....</ipaddress-tlv>
      <ipv6address-tlv>....</ipv6address-tlv>
      <router-id-tlv>....</router-id-tlv>
      <reachability-tlv>....</reachability-tlv>
      <isis-iso-prefix-tlv>....</isis-iso-prefix-tlv>
      <isis-prefix-subtlv>....</isis-prefix-subtlv>
      <ipv6-reachability-tlv>....</ipv6-reachability-tlv>
      <isis-reachability-subtlv>....</isis-reachability-subtlv>
      <authentication-tlv>....</authentication-tlv>
      <idrp-tlv>....</idrp-tlv>
      <ip-prefix-tlv>....</ip-prefix-tlv>
      <isis-srlg-tlv>....</isis-srlg-tlv>
      <unknown-tlv>....</unknown-tlv>
      <tlv-stragglers>....</tlv-stragglers>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-tlv-overhead>....</isis-tlv-overhead>
        <area-address-tlv>....</area-address-tlv>
        <protocols-tlv>....</protocols-tlv>
```

```
        <mt-tlv>....</mt-tlv>
        <hostname-tlv>....</hostname-tlv>
        <ipaddress-tlv>....</ipaddress-tlv>
        <ipv6address-tlv>....</ipv6address-tlv>
        <router-id-tlv>....</router-id-tlv>
        <reachability-tlv>....</reachability-tlv>
        <isis-iso-prefix-tlv>....</isis-iso-prefix-tlv>
        <isis-prefix-subtlv>....</isis-prefix-subtlv>
        <ipv6-reachability-tlv>....</ipv6-reachability-tlv>
        <isis-reachability-subtlv>....</isis-reachability-subtlv>
        <authentication-tlv>....</authentication-tlv>
        <idrp-tlv>....</idrp-tlv>
        <ip-prefix-tlv>....</ip-prefix-tlv>
        <isis-srlg-tlv>....</isis-srlg-tlv>
        <unknown-tlv>....</unknown-tlv>
        <tlv-stragglers>....</tlv-stragglers>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<isis-tlv-overhead>

Usage

```
<isis-tlv>
  <isis-tlv-overhead>
    <isis-tlv-type>
      isis-tlv-type
    </isis-tlv-type>
    <tlv-length>
      tlv-length
    </tlv-length>
    <bytes-left>
      bytes-left
    </bytes-left>
  </isis-tlv-overhead>
</isis-tlv>
```

Description

<isis-tlv-overhead>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <isis-tlv-overhead>
      <isis-tlv-type>
        isis-tlv-type
      </isis-tlv-type>
      <tlv-length>
        tlv-length
      </tlv-length>
```


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```
      <bytes-left>
        bytes-left
      </bytes-left>
    </isis-tlv-overhead>
  </isis-tlv>
</isis-database-entry>
```

Description

<isis-tlv-overhead>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <isis-tlv-overhead>
        <isis-tlv-type>
          isis-tlv-type
        </isis-tlv-type>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
      </isis-tlv-overhead>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<isis-tlv-overhead>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <isis-tlv-overhead>
          <isis-tlv-type>
            isis-tlv-type
          </isis-tlv-type>
          <tlv-length>
            tlv-length
          </tlv-length>
          <bytes-left>
            bytes-left
          </bytes-left>
        </isis-tlv-overhead>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
```

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```
</isis-database-information>
```

Description

<isis-traffic-engineering>

Usage

```
<isis-overview>
  <isis-traffic-engineering>
    <isis-te-status>
      isis-te-status
    </isis-te-status>
    <isis-te-shortcuts-ipv4>
      isis-te-shortcuts-ipv4
    </isis-te-shortcuts-ipv4>
    <isis-te-shortcuts-ipv6>
      isis-te-shortcuts-ipv6
    </isis-te-shortcuts-ipv6>
    <isis-te-shortcuts-clns>
      isis-te-shortcuts-clns
    </isis-te-shortcuts-clns>
    <isis-ipv4-multicast-rpf-routes>
      isis-ipv4-multicast-rpf-routes
    </isis-ipv4-multicast-rpf-routes>
    <isis-ignore-lsp-metrics>
      isis-ignore-lsp-metrics
    </isis-ignore-lsp-metrics>
    <isis-ted-credibility-preference>
      isis-ted-credibility-preference
    </isis-ted-credibility-preference>
  </isis-traffic-engineering>
</isis-overview>
```

Description Traffic engineering

<isis-traffic-engineering>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-traffic-engineering>
      <isis-te-status>
        isis-te-status
      </isis-te-status>
      <isis-te-shortcuts-ipv4>
        isis-te-shortcuts-ipv4
      </isis-te-shortcuts-ipv4>
      <isis-te-shortcuts-ipv6>
        isis-te-shortcuts-ipv6
      </isis-te-shortcuts-ipv6>
      <isis-te-shortcuts-clns>
        isis-te-shortcuts-clns
      </isis-te-shortcuts-clns>
```


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```
      <isis-ipv4-multicast-rpf-routes>
        isis-ipv4-multicast-rpf-routes
      </isis-ipv4-multicast-rpf-routes>
      <isis-ignore-lsp-metrics>
        isis-ignore-lsp-metrics
      </isis-ignore-lsp-metrics>
      <isis-ted-credibility-preference>
        isis-ted-credibility-preference
      </isis-ted-credibility-preference>
    </isis-traffic-engineering>
  </isis-overview>
</isis-overview-information>
```

Description Traffic engineering

<join-family>

Usage

```
<pim-join-information>
  <join-family>
    <pim-instance>
      pim-instance
    </pim-instance>
    <address-family>
      address-family
    </address-family>
    <join-summary>....</join-summary>
    <join-group>....</join-group>
  </join-family>
</pim-join-information>
```

Description

<join-group>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <rendezvous-point-address>
        rendezvous-point-address
      </rendezvous-point-address>
      <pim-group-flags>....</pim-group-flags>
      <upstream-protocol-name>
        upstream-protocol-name
      </upstream-protocol-name>
      <upstream-interface-name>
```

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```
      upstream-interface-name
    </upstream-interface-name>
    <pim-interface-state>
      pim-interface-state
    </pim-interface-state>
    <upstream-neighbor>
      upstream-neighbor
    </upstream-neighbor>
    <upstream-neighbor-rpf-origin>
      upstream-neighbor-rpf-origin
    </upstream-neighbor-rpf-origin>
    <dense-event>....</dense-event>
    <downstream-interface>....</downstream-interface>
    <upstream-state-flags>....</upstream-state-flags>
    <uptime>
      uptime
    </uptime>
    <keepalive-timeout>
      keepalive-timeout
    </keepalive-timeout>
    <no-keepalive-timeout>
      no-keepalive-timeout
    </no-keepalive-timeout>
    <sparse-downstream-interface>....</sparse-downstream-interface>
   </join-group>
  </join-family>
</pim-join-information>
```

Description

<join-summary>

Usage

```
<pim-join-information>
  <join-family>
    <join-summary>
      <multicast-route-type>
        multicast-route-type
      </multicast-route-type>
      <multicast-route-count>
        multicast-route-count
      </multicast-route-count>
    </join-summary>
  </join-family>
</pim-join-information>
```

Description

<juniper-routing-aspath>

Usage

```
<juniper-routing-aspath>
  <aspath-domain>....</aspath-domain>
  <aspath-table>....</aspath-table>
```


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```
</juniper-routing-aspath>
```

Description

<l2circuit-connection-information>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>....</l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<l2circuit-neighbor>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <neighbor-address>
      neighbor-address
    </neighbor-address>
    <neighbor-display-error>
      neighbor-display-error
    </neighbor-display-error>
    <lsw-interface-name>
      lsw-interface-name
    </lsw-interface-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<l2ckt-label-repository>

Usage

```
<l2ckt-label-repository>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <vc-id>
    vc-id
  </vc-id>
  <vc-label>
    vc-label
  </vc-label>
  <label-repository-state>
    label-repository-state
  </label-repository-state>
</l2ckt-label-repository>
```

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Description Information about one or more Layer-2 circuit label replication entries

<l2ckt-label-repository>

Usage

```
<l2ckt-label-repository-information>
  <l2ckt-label-repository>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <vc-id>
      vc-id
    </vc-id>
    <vc-label>
      vc-label
    </vc-label>
    <label-repository-state>
      label-repository-state
    </label-repository-state>
  </l2ckt-label-repository>
</l2ckt-label-repository-information>
```

Description Information about one or more Layer-2 circuit label replication entries

<l2ckt-label-repository-information>

Usage

```
<l2ckt-label-repository-information>
  <l2ckt-label-repository>....</l2ckt-label-repository>
</l2ckt-label-repository-information>
```

Description Information about the Layer-2 circuit label replication

<l2iw-domain>

Usage

```
<l2iw-domain>
  <l2iw-domain-name>
    l2iw-domain-name
  </l2iw-domain-name>
</l2iw-domain>
```

Description

<l2iw-domain>

Usage

```
<l2iw-peering-information>
  <l2iw-domain>
    <l2iw-domain-name>
      l2iw-domain-name
```


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```
    </l2iw-domain-name>
  </l2iw-domain>
</l2iw-peering-information>
```

Description

<l2iw-peering-information>

Usage

```
<l2iw-peering-information>
  <l2iw-domain>....</l2iw-domain>
</l2iw-peering-information>
```

Description

<l2vpn-connection-information>

Usage

```
<l2vpn-connection-information>
  <instance>....</instance>
</l2vpn-connection-information>
```

Description

<l2vpn-label-repository-information>

Usage

```
<l2vpn-label-repository-information>
<l2vpn-route-distinguisher-information>....</l2vpn-route-distinguisher-information>

</l2vpn-label-repository-information>
```

Description Information about Layer 2 VPN network label replication

<l2vpn-labels>

Usage

```
<l2vpn-labels>
  <instance-id>
    instance-id
  </instance-id>
  <site-id>
    site-id
  </site-id>
  <label-block-offset>
    label-block-offset
  </label-block-offset>
  <label-block-base>
    label-block-base
  </label-block-base>
  <label-block-range>
```

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```
    label-block-range
  </label-block-range>
</l2vpn-labels>
```

Description Information about a Layer 2 VPN allocated label block entry

<l2vpn-labels>

Usage

```
<l2vpn-labels-information>
  <l2vpn-labels>
    <instance-id>
      instance-id
    </instance-id>
    <site-id>
      site-id
    </site-id>
    <label-block-offset>
      label-block-offset
    </label-block-offset>
    <label-block-base>
      label-block-base
    </label-block-base>
    <label-block-range>
      label-block-range
    </label-block-range>
  </l2vpn-labels>
</l2vpn-labels-information>
```

Description Information about a Layer 2 VPN allocated label block entry

<l2vpn-labels-information>

Usage

```
<l2vpn-labels-information>
  <l2vpn-labels>....</l2vpn-labels>
</l2vpn-labels-information>
```

Description Information about the l2vpn allocated label blocks

<l2vpn-nlri-advertisement>

Usage

```
<l2vpn-nlri-advertisement>
  <site-id>
    site-id
  </site-id>
  <label-block-offset>
    label-block-offset
  </label-block-offset>
  <label-block-base>
```


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```
    label-block-base
  </label-block-base>
  <label-block-range>
    label-block-range
  </label-block-range>
  <label-repository-state>
    label-repository-state
  </label-repository-state>
</l2vpn-nlri-advertisement>
```

Description Information about a Layer 2 VPN network layer reachability information replication entry

<l2vpn-nlri-advertisement>

Usage

```
<l2vpn-route-distinguisher-information>
  <l2vpn-nlri-advertisement>
    <site-id>
      site-id
    </site-id>
    <label-block-offset>
      label-block-offset
    </label-block-offset>
    <label-block-base>
      label-block-base
    </label-block-base>
    <label-block-range>
      label-block-range
    </label-block-range>
    <label-repository-state>
      label-repository-state
    </label-repository-state>
  </l2vpn-nlri-advertisement>
</l2vpn-route-distinguisher-information>
```

Description Information about a Layer 2 VPN network layer reachability information replication entry

<l2vpn-nlri-advertisement>

Usage

```
<l2vpn-label-repository-information>
  <l2vpn-route-distinguisher-information>
    <l2vpn-nlri-advertisement>
      <site-id>
        site-id
      </site-id>
      <label-block-offset>
        label-block-offset
      </label-block-offset>
      <label-block-base>
        label-block-base
      </label-block-base>
```

```
      <label-block-range>
        label-block-range
      </label-block-range>
      <label-repository-state>
        label-repository-state
      </label-repository-state>
    </l2vpn-nlri-advertisement>
  </l2vpn-route-distinguisher-information>
</l2vpn-label-repository-information>
```

Description Information about a Layer 2 VPN network layer reachability information replication entry

<l2vpn-nlri-advertisement>

Usage

```
<vpls-bgp-route-distinguisher-information>
  <l2vpn-nlri-advertisement>
    <site-id>
      site-id
    </site-id>
    <label-block-offset>
      label-block-offset
    </label-block-offset>
    <label-block-base>
      label-block-base
    </label-block-base>
    <label-block-range>
      label-block-range
    </label-block-range>
    <label-repository-state>
      label-repository-state
    </label-repository-state>
  </l2vpn-nlri-advertisement>
</vpls-bgp-route-distinguisher-information>
```

Description Information about a Layer 2 VPN network layer reachability information replication entry

<l2vpn-nlri-advertisement>

Usage

```
<vpls-bgp-label-repository-information>
  <vpls-bgp-route-distinguisher-information>
    <l2vpn-nlri-advertisement>
      <site-id>
        site-id
      </site-id>
      <label-block-offset>
        label-block-offset
      </label-block-offset>
      <label-block-base>
        label-block-base
      </label-block-base>
```


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```
      <label-block-range>
        label-block-range
      </label-block-range>
      <label-repository-state>
        label-repository-state
      </label-repository-state>
    </l2vpn-nlri-advertisement>
  </vpls-bgp-route-distinguisher-information>
</vpls-bgp-label-repository-information>
```

Description Information about a Layer 2 VPN network layer reachability information replication entry

<l2vpn-route-distinguisher-information>

Usage

```
<l2vpn-route-distinguisher-information>
  <route-distinguisher>
    route-distinguisher
  </route-distinguisher>
  <instance-id>
    instance-id
  </instance-id>
  <l2vpn-nlri-advertisement>....</l2vpn-nlri-advertisement>
</l2vpn-route-distinguisher-information>
```

Description Information about a route distinguisher replication entry

<l2vpn-route-distinguisher-information>

Usage

```
<l2vpn-label-repository-information>
  <l2vpn-route-distinguisher-information>
    <route-distinguisher>
      route-distinguisher
    </route-distinguisher>
    <instance-id>
      instance-id
    </instance-id>
    <l2vpn-nlri-advertisement>....</l2vpn-nlri-advertisement>
  </l2vpn-route-distinguisher-information>
</l2vpn-label-repository-information>
```

Description Information about a route distinguisher replication entry

<label-block>

Usage

```
<label-block>
  <label-block-base>
    label-block-base
  </label-block-base>
```

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```
  <label-block-offset>
   label-block-offset
  </label-block-offset>
  <label-block-range>
   label-block-range
  </label-block-range>
  <label-block-size>
   label-block-size
  </label-block-size>
  <label-block-preference>
   label-block-preference
  </label-block-preference>
  <label-block-status-vector>
   label-block-status-vector
  </label-block-status-vector>
</label-block>
```

Description

<label-block>

Usage

```
<instance>
 <reference-site>
  <label-block>
   <label-block-base>
    label-block-base
   </label-block-base>
   <label-block-offset>
    label-block-offset
   </label-block-offset>
   <label-block-range>
    label-block-range
   </label-block-range>
   <label-block-size>
    label-block-size
   </label-block-size>
   <label-block-preference>
    label-block-preference
   </label-block-preference>
   <label-block-status-vector>
    label-block-status-vector
   </label-block-status-vector>
  </label-block>
 </reference-site>
</instance>
```

Description

<label-block>

Usage

```
<instance>
 <vpls-protocol-state>
```


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```
    <reference-site>
     <label-block>
      <label-block-base>
       label-block-base
      </label-block-base>
      <label-block-offset>
       label-block-offset
      </label-block-offset>
      <label-block-range>
       label-block-range
      </label-block-range>
      <label-block-size>
       label-block-size
      </label-block-size>
      <label-block-preference>
       label-block-preference
      </label-block-preference>
      <label-block-status-vector>
       label-block-status-vector
      </label-block-status-vector>
     </label-block>
    </reference-site>
   </vpls-protocol-state>
</instance>
```

Description

<label-block>

Usage

```
<l2vpn-connection-information>
 <instance>
  <reference-site>
   <label-block>
    <label-block-base>
     label-block-base
    </label-block-base>
    <label-block-offset>
     label-block-offset
    </label-block-offset>
    <label-block-range>
     label-block-range
    </label-block-range>
    <label-block-size>
     label-block-size
    </label-block-size>
    <label-block-preference>
     label-block-preference
    </label-block-preference>
    <label-block-status-vector>
     label-block-status-vector
    </label-block-status-vector>
   </label-block>
  </reference-site>
 </instance>
```

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```
</l2vpn-connection-information>
```

Description

<label-block>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <label-block>
          <label-block-base>
            label-block-base
          </label-block-base>
          <label-block-offset>
            label-block-offset
          </label-block-offset>
          <label-block-range>
            label-block-range
          </label-block-range>
          <label-block-size>
            label-block-size
          </label-block-size>
          <label-block-preference>
            label-block-preference
          </label-block-preference>
          <label-block-status-vector>
            label-block-status-vector
          </label-block-status-vector>
        </label-block>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<label-block>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <label-block>
        <label-block-base>
          label-block-base
        </label-block-base>
        <label-block-offset>
          label-block-offset
        </label-block-offset>
        <label-block-range>
          label-block-range
        </label-block-range>
```


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```
            <label-block-size>
              label-block-size
            </label-block-size>
            <label-block-preference>
              label-block-preference
            </label-block-preference>
            <label-block-status-vector>
              label-block-status-vector
            </label-block-status-vector>
          </label-block>
        </reference-site>
      </instance>
    </vpls-connection-information>
```

Description

<label-block>

Usage

```
    <vpls-connection-information>
      <instance>
        <vpls-protocol-state>
          <reference-site>
            <label-block>
              <label-block-base>
                label-block-base
              </label-block-base>
              <label-block-offset>
                label-block-offset
              </label-block-offset>
              <label-block-range>
                label-block-range
              </label-block-range>
              <label-block-size>
                label-block-size
              </label-block-size>
              <label-block-preference>
                label-block-preference
              </label-block-preference>
              <label-block-status-vector>
                label-block-status-vector
              </label-block-status-vector>
            </label-block>
          </reference-site>
        </vpls-protocol-state>
      </instance>
    </vpls-connection-information>
```

Description

<label-block>

Usage

```
    <vpls-statistics-information>
```

```
<instance>
 <reference-site>
  <label-block>
   <label-block-base>
    label-block-base
   </label-block-base>
   <label-block-offset>
    label-block-offset
   </label-block-offset>
   <label-block-range>
    label-block-range
   </label-block-range>
   <label-block-size>
    label-block-size
   </label-block-size>
   <label-block-preference>
    label-block-preference
   </label-block-preference>
   <label-block-status-vector>
    label-block-status-vector
   </label-block-status-vector>
  </label-block>
 </reference-site>
</instance>
</vpls-statistics-information>
```

Description

<label-block>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <label-block>
     <label-block-base>
      label-block-base
     </label-block-base>
     <label-block-offset>
      label-block-offset
     </label-block-offset>
     <label-block-range>
      label-block-range
     </label-block-range>
     <label-block-size>
      label-block-size
     </label-block-size>
     <label-block-preference>
      label-block-preference
     </label-block-preference>
     <label-block-status-vector>
      label-block-status-vector
     </label-block-status-vector>
    </label-block>
```


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```
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<label-block>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <label-block>
        <label-block-base>
          label-block-base
        </label-block-base>
        <label-block-offset>
          label-block-offset
        </label-block-offset>
        <label-block-range>
          label-block-range
        </label-block-range>
        <label-block-size>
          label-block-size
        </label-block-size>
        <label-block-preference>
          label-block-preference
        </label-block-preference>
        <label-block-status-vector>
          label-block-status-vector
        </label-block-status-vector>
      </label-block>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<label-block>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <label-block>
          <label-block-base>
            label-block-base
          </label-block-base>
          <label-block-offset>
            label-block-offset
          </label-block-offset>
          <label-block-range>
```

```
            label-block-range
          </label-block-range>
          <label-block-size>
            label-block-size
          </label-block-size>
          <label-block-preference>
            label-block-preference
          </label-block-preference>
          <label-block-status-vector>
            label-block-status-vector
          </label-block-status-vector>
        </label-block>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<label-block>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <label-block>
          <label-block-base>
            label-block-base
          </label-block-base>
          <label-block-offset>
            label-block-offset
          </label-block-offset>
          <label-block-range>
            label-block-range
          </label-block-range>
          <label-block-size>
            label-block-size
          </label-block-size>
          <label-block-preference>
            label-block-preference
          </label-block-preference>
          <label-block-status-vector>
            label-block-status-vector
          </label-block-status-vector>
        </label-block>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

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<label-block>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <label-block>
            <label-block-base>
              label-block-base
            </label-block-base>
            <label-block-offset>
              label-block-offset
            </label-block-offset>
            <label-block-range>
              label-block-range
            </label-block-range>
            <label-block-size>
              label-block-size
            </label-block-size>
            <label-block-preference>
              label-block-preference
            </label-block-preference>
            <label-block-status-vector>
              label-block-status-vector
            </label-block-status-vector>
          </label-block>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<layer2-connection>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <layer2-connection>
          <neighbor-address>
            neighbor-address
          </neighbor-address>
          <interface-name>
            interface-name
          </interface-name>
          <vc-id>
            vc-id
          </vc-id>
          <connection-bandwidth>....</connection-bandwidth>
```

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```
        </layer2-connection>
       </mpls-lsp-path>
      </mpls-lsp>
     </rsvp-session>
    </rsvp-session-data>
```

Description Layer 2 connection using the LSP path

<layer2-connection>

Usage

```
<rsvp-session>
 <mpls-lsp>
  <mpls-lsp-path>
   <layer2-connection>
    <neighbor-address>
     neighbor-address
    </neighbor-address>
    <interface-name>
     interface-name
    </interface-name>
    <vc-id>
     vc-id
    </vc-id>
    <connection-bandwidth>....</connection-bandwidth>
   </layer2-connection>
  </mpls-lsp-path>
 </mpls-lsp>
</rsvp-session>
```

Description Layer 2 connection using the LSP path

<layer2-connection>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <layer2-connection>
      <neighbor-address>
       neighbor-address
      </neighbor-address>
      <interface-name>
       interface-name
      </interface-name>
      <vc-id>
       vc-id
      </vc-id>
      <connection-bandwidth>....</connection-bandwidth>
     </layer2-connection>
```


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```
        </mpls-lsp-path>
       </mpls-lsp>
      </rsvp-session>
     </rsvp-session-data>
    </rsvp-session-information>
```

Description Layer 2 connection using the LSP path

<layer2-connection>

Usage

```
<mpls-lsp-path>
 <layer2-connection>
  <neighbor-address>
   neighbor-address
  </neighbor-address>
  <interface-name>
   interface-name
  </interface-name>
  <vc-id>
   vc-id
  </vc-id>
  <connection-bandwidth>....</connection-bandwidth>
 </layer2-connection>
</mpls-lsp-path>
```

Description Layer 2 connection using the LSP path

<layer2-connection>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <layer2-connection>
   <neighbor-address>
    neighbor-address
   </neighbor-address>
   <interface-name>
    interface-name
   </interface-name>
   <vc-id>
    vc-id
   </vc-id>
   <connection-bandwidth>....</connection-bandwidth>
  </layer2-connection>
 </mpls-lsp-path>
</mpls-lsp>
```

Description Layer 2 connection using the LSP path

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<layer2-connection>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <layer2-connection>
            <neighbor-address>
              neighbor-address
            </neighbor-address>
            <interface-name>
              interface-name
            </interface-name>
            <vc-id>
              vc-id
            </vc-id>
            <connection-bandwidth>....</connection-bandwidth>
          </layer2-connection>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Layer 2 connection using the LSP path

<layer2-connection>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-lsp-path>
        <layer2-connection>
          <neighbor-address>
            neighbor-address
          </neighbor-address>
          <interface-name>
            interface-name
          </interface-name>
          <vc-id>
            vc-id
          </vc-id>
          <connection-bandwidth>....</connection-bandwidth>
        </layer2-connection>
      </mpls-lsp-path>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```


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Description Layer 2 connection using the LSP path

<layer2-tspec>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <layer2-tspec>
      <switching-granularity>
        switching-granularity
      </switching-granularity>
      <mtu>
        mtu
      </mtu>
      <atm-vp-bundle-size>
        atm-vp-bundle-size
      </atm-vp-bundle-size>
      <atm-cell-bundle-size>
        atm-cell-bundle-size
      </atm-cell-bundle-size>
    </layer2-tspec>
  </rsvp-session>
</rsvp-session-data>
```

Description Layer 2 TSpec

<layer2-tspec>

Usage

```
<rsvp-session>
  <layer2-tspec>
    <switching-granularity>
      switching-granularity
    </switching-granularity>
    <mtu>
      mtu
    </mtu>
    <atm-vp-bundle-size>
      atm-vp-bundle-size
    </atm-vp-bundle-size>
    <atm-cell-bundle-size>
      atm-cell-bundle-size
    </atm-cell-bundle-size>
  </layer2-tspec>
</rsvp-session>
```

Description Layer 2 TSpec

<layer2-tspec>

Usage

```
<rsvp-session-information>
```

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```
<rsvp-session-data>
  <rsvp-session>
    <layer2-tspec>
      <switching-granularity>
        switching-granularity
      </switching-granularity>
      <mtu>
        mtu
      </mtu>
      <atm-vp-bundle-size>
        atm-vp-bundle-size
      </atm-vp-bundle-size>
      <atm-cell-bundle-size>
        atm-cell-bundle-size
      </atm-cell-bundle-size>
    </layer2-tspec>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description Layer 2 TSpec

<layer2-tspec>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
   <rsvp-session>
     <layer2-tspec>
       <switching-granularity>
         switching-granularity
       </switching-granularity>
       <mtu>
         mtu
       </mtu>
       <atm-vp-bundle-size>
         atm-vp-bundle-size
       </atm-vp-bundle-size>
       <atm-cell-bundle-size>
         atm-cell-bundle-size
       </atm-cell-bundle-size>
     </layer2-tspec>
   </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description Layer 2 TSpec

<ldp-binding>

Usage

```
<ldp-database>
```


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```
<ldp-binding>
  <ldp-label>
    ldp-label
  </ldp-label>
  <ldp-prefix>
    ldp-prefix
  </ldp-prefix>
  <ldp-binding-filtered>
    ldp-binding-filtered
  </ldp-binding-filtered>
  <ldp-binding-stale>
    ldp-binding-stale
  </ldp-binding-stale>
  <ldp-binding-mtu>
    ldp-binding-mtu
  </ldp-binding-mtu>
  <ldp-binding-cell-bundle-size>
    ldp-binding-cell-bundle-size
  </ldp-binding-cell-bundle-size>
  <ldp-binding-requested-vlan-id>
    ldp-binding-requested-vlan-id
  </ldp-binding-requested-vlan-id>
  <ldp-binding-bitrate>
    ldp-binding-bitrate
  </ldp-binding-bitrate>
  <ldp-binding-payload-size>
    ldp-binding-payload-size
  </ldp-binding-payload-size>
  <ldp-binding-pw-status-code>
    ldp-binding-pw-status-code
  </ldp-binding-pw-status-code>
  <ldp-binding-state>
    ldp-binding-state
  </ldp-binding-state>
  <ldp-binding-age>
    ldp-binding-age
  </ldp-binding-age>
  <ldp-binding-delete-scheduled>
    ldp-binding-delete-scheduled
  </ldp-binding-delete-scheduled>
  <ldp-binding-queued>
    ldp-binding-queued
  </ldp-binding-queued>
  <ldp-binding-not-yet-sent>
    ldp-binding-not-yet-sent
  </ldp-binding-not-yet-sent>
  <ldp-binding-l2protec-context-id>
    ldp-binding-l2protec-context-id
  </ldp-binding-l2protec-context-id>
  <ldp-binding-l2protec-ctrl-word>
    ldp-binding-l2protec-ctrl-word
  </ldp-binding-l2protec-ctrl-word>
  <ldp-binding-standby>....</ldp-binding-standby>
  <ldp-l2circuit-vccv-cc-type>....</ldp-l2circuit-vccv-cc-type>
  <ldp-l2circuit-vccv-cv-type>....</ldp-l2circuit-vccv-cv-type>
</ldp-binding>
```

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```
</ldp-database>
```

Description

<ldp-binding>

Usage

```
<ldp-database-information>
 <ldp-database>
  <ldp-binding>
   <ldp-label>
    ldp-label
   </ldp-label>
   <ldp-prefix>
    ldp-prefix
   </ldp-prefix>
   <ldp-binding-filtered>
    ldp-binding-filtered
   </ldp-binding-filtered>
   <ldp-binding-stale>
    ldp-binding-stale
   </ldp-binding-stale>
   <ldp-binding-mtu>
    ldp-binding-mtu
   </ldp-binding-mtu>
   <ldp-binding-cell-bundle-size>
    ldp-binding-cell-bundle-size
   </ldp-binding-cell-bundle-size>
   <ldp-binding-requested-vlan-id>
    ldp-binding-requested-vlan-id
   </ldp-binding-requested-vlan-id>
   <ldp-binding-bitrate>
    ldp-binding-bitrate
   </ldp-binding-bitrate>
   <ldp-binding-payload-size>
    ldp-binding-payload-size
   </ldp-binding-payload-size>
   <ldp-binding-pw-status-code>
    ldp-binding-pw-status-code
   </ldp-binding-pw-status-code>
   <ldp-binding-state>
    ldp-binding-state
   </ldp-binding-state>
   <ldp-binding-age>
    ldp-binding-age
   </ldp-binding-age>
   <ldp-binding-delete-scheduled>
    ldp-binding-delete-scheduled
   </ldp-binding-delete-scheduled>
   <ldp-binding-queued>
    ldp-binding-queued
   </ldp-binding-queued>
   <ldp-binding-not-yet-sent>
    ldp-binding-not-yet-sent
   </ldp-binding-not-yet-sent>
```


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```
        <ldp-binding-l2protec-context-id>
          ldp-binding-l2protec-context-id
        </ldp-binding-l2protec-context-id>
        <ldp-binding-l2protec-ctrl-word>
          ldp-binding-l2protec-ctrl-word
        </ldp-binding-l2protec-ctrl-word>
        <ldp-binding-standby>....</ldp-binding-standby>
        <ldp-l2circuit-vccv-cc-type>....</ldp-l2circuit-vccv-cc-type>
        <ldp-l2circuit-vccv-cv-type>....</ldp-l2circuit-vccv-cv-type>
      </ldp-binding>
    </ldp-database>
  </ldp-database-information>
```

Description

<ldp-binding-standby>

Usage

```
<ldp-database>
  <ldp-binding>
    <ldp-binding-standby>
      <ldp-binding-standby-map-count>
        ldp-binding-standby-map-count
      </ldp-binding-standby-map-count>
      <ldp-binding-standby-rel-count>
        ldp-binding-standby-rel-count
      </ldp-binding-standby-rel-count>
    </ldp-binding-standby>
  </ldp-binding>
</ldp-database>
```

Description Standby binding information

<ldp-binding-standby>

Usage

```
<ldp-database-information>
  <ldp-database>
    <ldp-binding>
      <ldp-binding-standby>
        <ldp-binding-standby-map-count>
          ldp-binding-standby-map-count
        </ldp-binding-standby-map-count>
        <ldp-binding-standby-rel-count>
          ldp-binding-standby-rel-count
        </ldp-binding-standby-rel-count>
      </ldp-binding-standby>
    </ldp-binding>
  </ldp-database>
</ldp-database-information>
```

Description Standby binding information

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<ldp-database>

Usage

```
<ldp-database>
  <ldp-database-type>
    ldp-database-type
  </ldp-database-type>
  <ldp-session-id>
    ldp-session-id
  </ldp-session-id>
  <ldp-binding>....</ldp-binding>
</ldp-database>
```

Description

<ldp-database>

Usage

```
<ldp-database-information>
  <ldp-database>
    <ldp-database-type>
      ldp-database-type
    </ldp-database-type>
    <ldp-session-id>
      ldp-session-id
    </ldp-session-id>
    <ldp-binding>....</ldp-binding>
  </ldp-database>
</ldp-database-information>
```

Description

<ldp-database-information>

Usage

```
<ldp-database-information>
  <ldp-database>....</ldp-database>
</ldp-database-information>
```

Description

<ldp-egress-nh>

Usage

```
<ldp-p2mp-path>
  <ldp-egress-nh>
    <ldp-egress-nh-type>
      ldp-egress-nh-type
    </ldp-egress-nh-type>
    <interface-name>
      interface-name
    </interface-name>
```


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```
  </ldp-egress-nh>
</ldp-p2mp-path>
```

Description

<ldp-egress-nh>

Usage

```
<ldp-p2mp-path-information>
  <ldp-p2mp-path>
    <ldp-egress-nh>
      <ldp-egress-nh-type>
        ldp-egress-nh-type
      </ldp-egress-nh-type>
      <interface-name>
        interface-name
      </interface-name>
    </ldp-egress-nh>
  </ldp-p2mp-path>
</ldp-p2mp-path-information>
```

Description

<ldp-event-statistics>

Usage

```
<ldp-statistics>
  <ldp-event-statistics>
    <ldp-event-type>
      ldp-event-type
    </ldp-event-type>
    <ldp-event-count>
      ldp-event-count
    </ldp-event-count>
    <ldp-event-count-5seconds>
      ldp-event-count-5seconds
    </ldp-event-count-5seconds>
  </ldp-event-statistics>
</ldp-statistics>
```

Description

<ldp-event-statistics>

Usage

```
<ldp-statistics-information>
  <ldp-statistics>
    <ldp-event-statistics>
      <ldp-event-type>
        ldp-event-type
      </ldp-event-type>
      <ldp-event-count>
        ldp-event-count
```

```
      </ldp-event-count>
      <ldp-event-count-5seconds>
        ldp-event-count-5seconds
      </ldp-event-count-5seconds>
    </ldp-event-statistics>
  </ldp-statistics>
</ldp-statistics-information>
```

Description

<ldp-fec-filter>

Usage

```
<ldp-fec-filter>
  <ldp-prefix>
    ldp-prefix
  </ldp-prefix>
  <ldp-ingress-filter>
    ldp-ingress-filter
  </ldp-ingress-filter>
  <ldp-ingress-filterid>
    ldp-ingress-filterid
  </ldp-ingress-filterid>
  <ldp-transit-filter>
    ldp-transit-filter
  </ldp-transit-filter>
  <ldp-transit-filterid>
    ldp-transit-filterid
  </ldp-transit-filterid>
</ldp-fec-filter>
```

Description

<ldp-fec-filter>

Usage

```
<ldp-fec-filters-information>
  <ldp-fec-filter>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-ingress-filter>
      ldp-ingress-filter
    </ldp-ingress-filter>
    <ldp-ingress-filterid>
      ldp-ingress-filterid
    </ldp-ingress-filterid>
    <ldp-transit-filter>
      ldp-transit-filter
    </ldp-transit-filter>
    <ldp-transit-filterid>
      ldp-transit-filterid
    </ldp-transit-filterid>
  </ldp-fec-filter>
```


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```
</ldp-fec-filters-information>
```

Description

<ldp-fec-filters-information>

Usage

```
<ldp-fec-filters-information>
  <ldp-fec-filter>....</ldp-fec-filter>
</ldp-fec-filters-information>
```

Description

<ldp-gr-overview>

Usage

```
<ldp-overview>
  <ldp-gr-overview>
    <ldp-gr-restart>
      ldp-gr-restart
    </ldp-gr-restart>
    <ldp-gr-helper>
      ldp-gr-helper
    </ldp-gr-helper>
    <ldp-gr-restarting>
      ldp-gr-restarting
    </ldp-gr-restarting>
    <ldp-gr-reconnect-time>
      ldp-gr-reconnect-time
    </ldp-gr-reconnect-time>
    <ldp-gr-max-neighbor-reconnect-time>
      ldp-gr-max-neighbor-reconnect-time
    </ldp-gr-max-neighbor-reconnect-time>
    <ldp-gr-recovery-time>
      ldp-gr-recovery-time
    </ldp-gr-recovery-time>
    <ldp-gr-max-neighbor-recovery-time>
      ldp-gr-max-neighbor-recovery-time
    </ldp-gr-max-neighbor-recovery-time>
  </ldp-gr-overview>
</ldp-overview>
```

Description LDP GR overview

<ldp-gr-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-gr-overview>
      <ldp-gr-restart>
        ldp-gr-restart
```

```
      </ldp-gr-restart>
      <ldp-gr-helper>
        ldp-gr-helper
      </ldp-gr-helper>
      <ldp-gr-restarting>
        ldp-gr-restarting
      </ldp-gr-restarting>
      <ldp-gr-reconnect-time>
        ldp-gr-reconnect-time
      </ldp-gr-reconnect-time>
      <ldp-gr-max-neighbor-reconnect-time>
        ldp-gr-max-neighbor-reconnect-time
      </ldp-gr-max-neighbor-reconnect-time>
      <ldp-gr-recovery-time>
        ldp-gr-recovery-time
      </ldp-gr-recovery-time>
      <ldp-gr-max-neighbor-recovery-time>
        ldp-gr-max-neighbor-recovery-time
      </ldp-gr-max-neighbor-recovery-time>
    </ldp-gr-overview>
  </ldp-overview>
</ldp-overview-information>
```

Description LDP GR overview

<ldp-igp-overview>

Usage

```
<ldp-overview>
  <ldp-igp-overview>
    <ldp-tracking-igp-metric>
      ldp-tracking-igp-metric
    </ldp-tracking-igp-metric>
    <ldp-igp-sync-session-up-delay>
      ldp-igp-sync-session-up-delay
    </ldp-igp-sync-session-up-delay>
  </ldp-igp-overview>
</ldp-overview>
```

Description LDP igp overview

<ldp-igp-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-igp-overview>
      <ldp-tracking-igp-metric>
        ldp-tracking-igp-metric
      </ldp-tracking-igp-metric>
      <ldp-igp-sync-session-up-delay>
        ldp-igp-sync-session-up-delay
```


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```
      </ldp-igp-sync-session-up-delay>
    </ldp-igp-overview>
  </ldp-overview>
</ldp-overview-information>
```

Description LDP igp overview

<ldp-instance-capability>

Usage

```
<ldp-overview>
  <ldp-instance-capability>
    <ldp-capability>
      ldp-capability
    </ldp-capability>
  </ldp-instance-capability>
</ldp-overview>
```

Description LDP capability

<ldp-instance-capability>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-instance-capability>
      <ldp-capability>
        ldp-capability
      </ldp-capability>
    </ldp-instance-capability>
  </ldp-overview>
</ldp-overview-information>
```

Description LDP capability

<ldp-interface>

Usage

```
<ldp-interface>
  <interface-name>
    interface-name
  </interface-name>
  <ldp-label-space-id>
    ldp-label-space-id
  </ldp-label-space-id>
  <ldp-neighbor-count>
    ldp-neighbor-count
  </ldp-neighbor-count>
  <ldp-next-hello>
    ldp-next-hello
  </ldp-next-hello>
```

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```
<ldp-hello-interval>
  ldp-hello-interval
</ldp-hello-interval>
<ldp-local-hello-interval>
  ldp-local-hello-interval
</ldp-local-hello-interval>
<ldp-holdtime>
  ldp-holdtime
</ldp-holdtime>
<ldp-transport-address>
  ldp-transport-address
</ldp-transport-address>
<ldp-interface-index>
  ldp-interface-index
</ldp-interface-index>
<ldp-block-time>
  ldp-block-time
</ldp-block-time>
<ldp-hello-sent>
  ldp-hello-sent
</ldp-hello-sent>
<ldp-hello-received>
  ldp-hello-received
</ldp-hello-received>
</ldp-interface>
```

Description

<ldp-interface>

Usage

```
<ldp-interface-information>
  <ldp-interface>
    <interface-name>
      interface-name
    </interface-name>
    <ldp-label-space-id>
      ldp-label-space-id
    </ldp-label-space-id>
    <ldp-neighbor-count>
      ldp-neighbor-count
    </ldp-neighbor-count>
    <ldp-next-hello>
      ldp-next-hello
    </ldp-next-hello>
    <ldp-hello-interval>
      ldp-hello-interval
    </ldp-hello-interval>
    <ldp-local-hello-interval>
      ldp-local-hello-interval
    </ldp-local-hello-interval>
    <ldp-holdtime>
      ldp-holdtime
    </ldp-holdtime>
    <ldp-transport-address>
```


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```
        ldp-transport-address
      </ldp-transport-address>
      <ldp-interface-index>
        ldp-interface-index
      </ldp-interface-index>
      <ldp-block-time>
        ldp-block-time
      </ldp-block-time>
      <ldp-hello-sent>
        ldp-hello-sent
      </ldp-hello-sent>
      <ldp-hello-received>
        ldp-hello-received
      </ldp-hello-received>
    </ldp-interface>
  </ldp-interface-information>
```

Description

<ldp-interface-address>

Usage

```
<ldp-overview>
  <ldp-interface-address>
    <interface-address>
      interface-address
    </interface-address>
  </ldp-interface-address>
</ldp-overview>
```

Description LDP interface addresses advertised

<ldp-interface-address>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-interface-address>
      <interface-address>
        interface-address
      </interface-address>
    </ldp-interface-address>
  </ldp-overview>
</ldp-overview-information>
```

Description LDP interface addresses advertised

<ldp-interface-information>

Usage

```
<ldp-interface-information>
```

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```
  <ldp-interface>....</ldp-interface>
</ldp-interface-information>
```

Description

<ldp-l2circuit-vccv-cc-type>

Usage

```
<ldp-database>
  <ldp-binding>
    <ldp-l2circuit-vccv-cc-type>
      <mpls-type-control-word>
        mpls-type-control-word
      </mpls-type-control-word>
      <mpls-type-router-alert>
        mpls-type-router-alert
      </mpls-type-router-alert>
      <mpls-type-pw-label>
        mpls-type-pw-label
      </mpls-type-pw-label>
    </ldp-l2circuit-vccv-cc-type>
  </ldp-binding>
</ldp-database>
```

Description VCCV connectivity channel types supported by peer

<ldp-l2circuit-vccv-cc-type>

Usage

```
<ldp-database-information>
  <ldp-database>
    <ldp-binding>
      <ldp-l2circuit-vccv-cc-type>
        <mpls-type-control-word>
          mpls-type-control-word
        </mpls-type-control-word>
        <mpls-type-router-alert>
          mpls-type-router-alert
        </mpls-type-router-alert>
        <mpls-type-pw-label>
          mpls-type-pw-label
        </mpls-type-pw-label>
      </ldp-l2circuit-vccv-cc-type>
    </ldp-binding>
  </ldp-database>
</ldp-database-information>
```

Description VCCV connectivity channel types supported by peer

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<ldp-l2circuit-vccv-cv-type>

Usage

```
<ldp-database>
  <ldp-binding>
    <ldp-l2circuit-vccv-cv-type>
      <mpls-type-icmp-ping>
        mpls-type-icmp-ping
      </mpls-type-icmp-ping>
      <mpls-type-lsp-ping>
        mpls-type-lsp-ping
      </mpls-type-lsp-ping>
      <mpls-type-bfd-pw-ach-fd>
        mpls-type-bfd-pw-ach-fd
      </mpls-type-bfd-pw-ach-fd>
      <mpls-type-bfd-pw-ach-fd-fss>
        mpls-type-bfd-pw-ach-fd-fss
      </mpls-type-bfd-pw-ach-fd-fss>
      <mpls-type-bfd-ip-udp-fd>
        mpls-type-bfd-ip-udp-fd
      </mpls-type-bfd-ip-udp-fd>
      <mpls-type-bfd-ip-udp-fd-fss>
        mpls-type-bfd-ip-udp-fd-fss
      </mpls-type-bfd-ip-udp-fd-fss>
    </ldp-l2circuit-vccv-cv-type>
  </ldp-binding>
</ldp-database>
```

Description VCCV connectivity verification types supported by peer

<ldp-l2circuit-vccv-cv-type>

Usage

```
<ldp-database-information>
  <ldp-database>
    <ldp-binding>
      <ldp-l2circuit-vccv-cv-type>
        <mpls-type-icmp-ping>
          mpls-type-icmp-ping
        </mpls-type-icmp-ping>
        <mpls-type-lsp-ping>
          mpls-type-lsp-ping
        </mpls-type-lsp-ping>
        <mpls-type-bfd-pw-ach-fd>
          mpls-type-bfd-pw-ach-fd
        </mpls-type-bfd-pw-ach-fd>
        <mpls-type-bfd-pw-ach-fd-fss>
          mpls-type-bfd-pw-ach-fd-fss
        </mpls-type-bfd-pw-ach-fd-fss>
        <mpls-type-bfd-ip-udp-fd>
          mpls-type-bfd-ip-udp-fd
        </mpls-type-bfd-ip-udp-fd>
        <mpls-type-bfd-ip-udp-fd-fss>
```

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```
                mpls-type-bfd-ip-udp-fd-fss
              </mpls-type-bfd-ip-udp-fd-fss>
            </ldp-l2circuit-vccv-cv-type>
          </ldp-binding>
        </ldp-database>
      </ldp-database-information>
```

Description VCCV connectivity verification types supported by peer

<ldp-message-statistics>

Usage

```
<ldp-statistics>
  <ldp-message-statistics>
    <ldp-message-type>
      ldp-message-type
    </ldp-message-type>
    <ldp-messages-sent>
      ldp-messages-sent
    </ldp-messages-sent>
    <ldp-messages-received>
      ldp-messages-received
    </ldp-messages-received>
    <ldp-messages-sent-5seconds>
      ldp-messages-sent-5seconds
    </ldp-messages-sent-5seconds>
    <ldp-messages-received-5seconds>
      ldp-messages-received-5seconds
    </ldp-messages-received-5seconds>
  </ldp-message-statistics>
</ldp-statistics>
```

Description

<ldp-message-statistics>

Usage

```
<ldp-statistics-information>
  <ldp-statistics>
    <ldp-message-statistics>
      <ldp-message-type>
        ldp-message-type
      </ldp-message-type>
      <ldp-messages-sent>
        ldp-messages-sent
      </ldp-messages-sent>
      <ldp-messages-received>
        ldp-messages-received
      </ldp-messages-received>
      <ldp-messages-sent-5seconds>
        ldp-messages-sent-5seconds
      </ldp-messages-sent-5seconds>
      <ldp-messages-received-5seconds>
```


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```
            ldp-messages-received-5seconds
           </ldp-messages-received-5seconds>
          </ldp-message-statistics>
         </ldp-statistics>
        </ldp-statistics-information>
```

Description

<ldp-neighbor>

Usage

```
<ldp-neighbor>
 <ldp-neighbor-address>
  ldp-neighbor-address
 </ldp-neighbor-address>
 <interface-name>
  interface-name
 </interface-name>
 <ldp-label-space-id>
  ldp-label-space-id
 </ldp-label-space-id>
 <ldp-remaining-time>
  ldp-remaining-time
 </ldp-remaining-time>
 <ldp-transport-address>
  ldp-transport-address
 </ldp-transport-address>
 <ldp-config-sequence>
  ldp-config-sequence
 </ldp-config-sequence>
 <ldp-up-time>
  ldp-up-time
 </ldp-up-time>
 <ldp-reference-count>
  ldp-reference-count
 </ldp-reference-count>
 <ldp-auto-discovered-reference-count>
  ldp-auto-discovered-reference-count
 </ldp-auto-discovered-reference-count>
 <ldp-holdtime>
  ldp-holdtime
 </ldp-holdtime>
 <ldp-proposed-local-holdtime>
  ldp-proposed-local-holdtime
 </ldp-proposed-local-holdtime>
 <ldp-proposed-peer-holdtime>
  ldp-proposed-peer-holdtime
 </ldp-proposed-peer-holdtime>
 <ldp-hello-interval>
  ldp-hello-interval
 </ldp-hello-interval>
 <ldp-neighbor-hello-flags>....</ldp-neighbor-hello-flags>
 <ldp-neighbor-types>....</ldp-neighbor-types>
</ldp-neighbor>
```

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Description

<ldp-neighbor>

Usage

```
<ldp-neighbor-information>
  <ldp-neighbor>
    <ldp-neighbor-address>
      ldp-neighbor-address
    </ldp-neighbor-address>
    <interface-name>
      interface-name
    </interface-name>
    <ldp-label-space-id>
      ldp-label-space-id
    </ldp-label-space-id>
    <ldp-remaining-time>
      ldp-remaining-time
    </ldp-remaining-time>
    <ldp-transport-address>
      ldp-transport-address
    </ldp-transport-address>
    <ldp-config-sequence>
      ldp-config-sequence
    </ldp-config-sequence>
    <ldp-up-time>
      ldp-up-time
    </ldp-up-time>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
    <ldp-auto-discovered-reference-count>
      ldp-auto-discovered-reference-count
    </ldp-auto-discovered-reference-count>
    <ldp-holdtime>
      ldp-holdtime
    </ldp-holdtime>
    <ldp-proposed-local-holdtime>
      ldp-proposed-local-holdtime
    </ldp-proposed-local-holdtime>
    <ldp-proposed-peer-holdtime>
      ldp-proposed-peer-holdtime
    </ldp-proposed-peer-holdtime>
    <ldp-hello-interval>
      ldp-hello-interval
    </ldp-hello-interval>
    <ldp-neighbor-hello-flags>....</ldp-neighbor-hello-flags>
    <ldp-neighbor-types>....</ldp-neighbor-types>
  </ldp-neighbor>
</ldp-neighbor-information>
```

Description

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<ldp-neighbor-hello-flags>

Usage

```
<ldp-neighbor-hello-flags>
  <ldp-neighbor-hello-flag>
    ldp-neighbor-hello-flag
  </ldp-neighbor-hello-flag>
</ldp-neighbor-hello-flags>
```

Description LDP neighbor hello flags

<ldp-neighbor-hello-flags>

Usage

```
<ldp-neighbor>
  <ldp-neighbor-hello-flags>
    <ldp-neighbor-hello-flag>
      ldp-neighbor-hello-flag
    </ldp-neighbor-hello-flag>
  </ldp-neighbor-hello-flags>
</ldp-neighbor>
```

Description LDP neighbor hello flags

<ldp-neighbor-hello-flags>

Usage

```
<ldp-neighbor-information>
  <ldp-neighbor>
    <ldp-neighbor-hello-flags>
      <ldp-neighbor-hello-flag>
        ldp-neighbor-hello-flag
      </ldp-neighbor-hello-flag>
    </ldp-neighbor-hello-flags>
  </ldp-neighbor>
</ldp-neighbor-information>
```

Description LDP neighbor hello flags

<ldp-neighbor-information>

Usage

```
<ldp-neighbor-information>
  <ldp-neighbor>....</ldp-neighbor>
</ldp-neighbor-information>
```

Description

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<ldp-neighbor-replication>

Usage

```
<ldp-neighbor-replication>
  <ldp-instance-id>
    ldp-instance-id
  </ldp-instance-id>
  <ldp-neighbor-address>
    ldp-neighbor-address
  </ldp-neighbor-address>
  <interface-name>
    interface-name
  </interface-name>
  <ldp-neighbor-replication-state>
    ldp-neighbor-replication-state
  </ldp-neighbor-replication-state>
  <ldp-interface-index>
    ldp-interface-index
  </ldp-interface-index>
  <ldp-neighbor-replication-age>
    ldp-neighbor-replication-age
  </ldp-neighbor-replication-age>
  <ldp-reference-count>
    ldp-reference-count
  </ldp-reference-count>
</ldp-neighbor-replication>
```

Description Neighbor replication entry

<ldp-neighbor-replication>

Usage

```
<ldp-neighbor-replication-information>
  <ldp-neighbor-replication>
    <ldp-instance-id>
      ldp-instance-id
    </ldp-instance-id>
    <ldp-neighbor-address>
      ldp-neighbor-address
    </ldp-neighbor-address>
    <interface-name>
      interface-name
    </interface-name>
    <ldp-neighbor-replication-state>
      ldp-neighbor-replication-state
    </ldp-neighbor-replication-state>
    <ldp-interface-index>
      ldp-interface-index
    </ldp-interface-index>
    <ldp-neighbor-replication-age>
      ldp-neighbor-replication-age
    </ldp-neighbor-replication-age>
    <ldp-reference-count>
```


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```
    ldp-reference-count
   </ldp-reference-count>
  </ldp-neighbor-replication>
</ldp-neighbor-replication-information>
```

Description Neighbor replication entry

<ldp-neighbor-replication-information>

Usage

```
<ldp-neighbor-replication-information>
  <ldp-neighbor-replication>....</ldp-neighbor-replication>
</ldp-neighbor-replication-information>
```

Description

<ldp-neighbor-types>

Usage

```
<ldp-neighbor-types>
  <ldp-neighbor-type>
    ldp-neighbor-type
  </ldp-neighbor-type>
</ldp-neighbor-types>
```

Description LDP neighbor types

<ldp-neighbor-types>

Usage

```
<ldp-neighbor>
  <ldp-neighbor-types>
    <ldp-neighbor-type>
      ldp-neighbor-type
    </ldp-neighbor-type>
  </ldp-neighbor-types>
</ldp-neighbor>
```

Description LDP neighbor types

<ldp-neighbor-types>

Usage

```
<ldp-neighbor-information>
  <ldp-neighbor>
    <ldp-neighbor-types>
      <ldp-neighbor-type>
        ldp-neighbor-type
      </ldp-neighbor-type>
    </ldp-neighbor-types>
```

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```
  </ldp-neighbor>
</ldp-neighbor-information>
```

Description LDP neighbor types

<ldp-neighbor-types>

Usage

```
<ldp-session>
  <ldp-neighbor-types>
    <ldp-neighbor-type>
      ldp-neighbor-type
    </ldp-neighbor-type>
  </ldp-neighbor-types>
</ldp-session>
```

Description LDP neighbor types

<ldp-neighbor-types>

Usage

```
<ldp-session-information>
  <ldp-session>
    <ldp-neighbor-types>
      <ldp-neighbor-type>
        ldp-neighbor-type
      </ldp-neighbor-type>
    </ldp-neighbor-types>
  </ldp-session>
</ldp-session-information>
```

Description LDP neighbor types

<ldp-nexthop>

Usage

```
<ldp-route>
  <ldp-nexthop>
    <interface-name>
      interface-name
    </interface-name>
    <lsp-name>
      lsp-name
    </lsp-name>
    <lsp-no-ldp-tunneling>
      lsp-no-ldp-tunneling
    </lsp-no-ldp-tunneling>
    <interface-address>
      interface-address
    </interface-address>
    <ldp-session-id>
```


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```
      ldp-session-id
    </ldp-session-id>
  </ldp-nexthop>
</ldp-route>
```

Description

<ldp-nexthop>

Usage

```
<ldp-route-information>
  <ldp-route>
    <ldp-nexthop>
      <interface-name>
        interface-name
      </interface-name>
      <lsp-name>
        lsp-name
      </lsp-name>
      <lsp-no-ldp-tunneling>
        lsp-no-ldp-tunneling
      </lsp-no-ldp-tunneling>
      <interface-address>
        interface-address
      </interface-address>
      <ldp-session-id>
        ldp-session-id
      </ldp-session-id>
    </ldp-nexthop>
  </ldp-route>
</ldp-route-information>
```

Description

<ldp-oam-bfd-session>

Usage

```
<ldp-oam-bfd-session>
  <ldp-oam-destination-address>
    ldp-oam-destination-address
  </ldp-oam-destination-address>
  <ldp-oam-bfd-session-state>
    ldp-oam-bfd-session-state
  </ldp-oam-bfd-session-state>
  <ldp-oam-lsp-ping-state>
    ldp-oam-lsp-ping-state
  </ldp-oam-lsp-ping-state>
  <ldp-oam-nexthop-address>
    ldp-oam-nexthop-address
  </ldp-oam-nexthop-address>
  <ldp-oam-interface-name>
    ldp-oam-interface-name
  </ldp-oam-interface-name>
  <ldp-oam-nexthop-lsp>
```

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```
      ldp-oam-nexthop-lsp
     </ldp-oam-nexthop-lsp>
    </ldp-oam-bfd-session>
```

Description LDP OAM state information

<ldp-oam-bfd-session>

Usage

```
<ldp-route>
 <ldp-oam-bfd-session>
  <ldp-oam-destination-address>
   ldp-oam-destination-address
  </ldp-oam-destination-address>
  <ldp-oam-bfd-session-state>
   ldp-oam-bfd-session-state
  </ldp-oam-bfd-session-state>
  <ldp-oam-lsp-ping-state>
   ldp-oam-lsp-ping-state
  </ldp-oam-lsp-ping-state>
  <ldp-oam-nexthop-address>
   ldp-oam-nexthop-address
  </ldp-oam-nexthop-address>
  <ldp-oam-interface-name>
   ldp-oam-interface-name
  </ldp-oam-interface-name>
  <ldp-oam-nexthop-lsp>
   ldp-oam-nexthop-lsp
  </ldp-oam-nexthop-lsp>
 </ldp-oam-bfd-session>
</ldp-route>
```

Description LDP OAM state information

<ldp-oam-bfd-session>

Usage

```
<ldp-route-information>
 <ldp-route>
  <ldp-oam-bfd-session>
   <ldp-oam-destination-address>
    ldp-oam-destination-address
   </ldp-oam-destination-address>
   <ldp-oam-bfd-session-state>
    ldp-oam-bfd-session-state
   </ldp-oam-bfd-session-state>
   <ldp-oam-lsp-ping-state>
    ldp-oam-lsp-ping-state
   </ldp-oam-lsp-ping-state>
   <ldp-oam-nexthop-address>
    ldp-oam-nexthop-address
   </ldp-oam-nexthop-address>
```


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```
      <ldp-oam-interface-name>
       ldp-oam-interface-name
      </ldp-oam-interface-name>
      <ldp-oam-nexthop-lsp>
       ldp-oam-nexthop-lsp
      </ldp-oam-nexthop-lsp>
     </ldp-oam-bfd-session>
    </ldp-route>
   </ldp-route-information>
```

Description LDP OAM state information

<ldp-oam-information>

Usage

```
<ldp-oam-information>
 <ldp-oam-status>....</ldp-oam-status>
</ldp-oam-information>
```

Description

<ldp-oam-path>

Usage

```
<ldp-oam-status>
 <ldp-oam-path>
  <ldp-oam-destination-address>
   ldp-oam-destination-address
  </ldp-oam-destination-address>
  <ldp-oam-nexthop-address>
   ldp-oam-nexthop-address
  </ldp-oam-nexthop-address>
  <ldp-oam-interface-name>
   ldp-oam-interface-name
  </ldp-oam-interface-name>
  <ldp-oam-nexthop-lsp>
   ldp-oam-nexthop-lsp
  </ldp-oam-nexthop-lsp>
  <ldp-oam-bfd-session-state>
   ldp-oam-bfd-session-state
  </ldp-oam-bfd-session-state>
  <ldp-oam-lsp-ping-state>
   ldp-oam-lsp-ping-state
  </ldp-oam-lsp-ping-state>
  <ldp-oam-path-address>
   ldp-oam-path-address
  </ldp-oam-path-address>
 </ldp-oam-path>
</ldp-oam-status>
```

Description

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<ldp-oam-path>

Usage

```
<ldp-oam-information>
  <ldp-oam-status>
    <ldp-oam-path>
      <ldp-oam-destination-address>
        ldp-oam-destination-address
      </ldp-oam-destination-address>
      <ldp-oam-nexthop-address>
        ldp-oam-nexthop-address
      </ldp-oam-nexthop-address>
      <ldp-oam-interface-name>
        ldp-oam-interface-name
      </ldp-oam-interface-name>
      <ldp-oam-nexthop-lsp>
        ldp-oam-nexthop-lsp
      </ldp-oam-nexthop-lsp>
      <ldp-oam-bfd-session-state>
        ldp-oam-bfd-session-state
      </ldp-oam-bfd-session-state>
      <ldp-oam-lsp-ping-state>
        ldp-oam-lsp-ping-state
      </ldp-oam-lsp-ping-state>
      <ldp-oam-path-address>
        ldp-oam-path-address
      </ldp-oam-path-address>
    </ldp-oam-path>
  </ldp-oam-status>
</ldp-oam-information>
```

Description

<ldp-oam-status>

Usage

```
<ldp-oam-status>
  <ldp-oam-prefix>
    ldp-oam-prefix
  </ldp-oam-prefix>
  <ldp-oam-time>
    ldp-oam-time
  </ldp-oam-time>
  <ldp-oam-path>....</ldp-oam-path>
</ldp-oam-status>
```

Description

<ldp-oam-status>

Usage

```
<ldp-oam-information>
  <ldp-oam-status>
```


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```
    <ldp-oam-prefix>
      ldp-oam-prefix
    </ldp-oam-prefix>
    <ldp-oam-time>
      ldp-oam-time
    </ldp-oam-time>
    <ldp-oam-path>....</ldp-oam-path>
  </ldp-oam-status>
</ldp-oam-information>
```

Description

<ldp-overview>

Usage

```
<ldp-overview>
  <ldp-instance-name>
    ldp-instance-name
  </ldp-instance-name>
  <ldp-router-id>
    ldp-router-id
  </ldp-router-id>
  <ldp-message-id>
    ldp-message-id
  </ldp-message-id>
  <ldp-configuration-sequence>
    ldp-configuration-sequence
  </ldp-configuration-sequence>
  <ldp-deaggregate>
    ldp-deaggregate
  </ldp-deaggregate>
  <ldp-explicit-null>
    ldp-explicit-null
  </ldp-explicit-null>
  <ldp-ipv6-tunneling>
    ldp-ipv6-tunneling
  </ldp-ipv6-tunneling>
  <ldp-strict-targeted-hellos>
    ldp-strict-targeted-hellos
  </ldp-strict-targeted-hellos>
  <ldp-upstream-label-assignment>
    ldp-upstream-label-assignment
  </ldp-upstream-label-assignment>
  <ldp-loopback-if-added>
    ldp-loopback-if-added
  </ldp-loopback-if-added>
  <ldp-route-preference>
    ldp-route-preference
  </ldp-route-preference>
  <ldp-p2mp-max-branches>
    ldp-p2mp-max-branches
  </ldp-p2mp-max-branches>
  <ldp-instance-capability>....</ldp-instance-capability>
  <ldp-protocol-modes>....</ldp-protocol-modes>
  <ldp-session-count>....</ldp-session-count>
```

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```
  <ldp-timer-overview>....</ldp-timer-overview>
  <ldp-gr-overview>....</ldp-gr-overview>
  <ldp-te-overview>....</ldp-te-overview>
  <ldp-igp-overview>....</ldp-igp-overview>
  <ldp-session-protect-overview>....</ldp-session-protect-overview>
  <ldp-interface-address>....</ldp-interface-address>
</ldp-overview>
```

Description

<ldp-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-instance-name>
      ldp-instance-name
    </ldp-instance-name>
    <ldp-router-id>
      ldp-router-id
    </ldp-router-id>
    <ldp-message-id>
      ldp-message-id
    </ldp-message-id>
    <ldp-configuration-sequence>
      ldp-configuration-sequence
    </ldp-configuration-sequence>
    <ldp-deaggregate>
      ldp-deaggregate
    </ldp-deaggregate>
    <ldp-explicit-null>
      ldp-explicit-null
    </ldp-explicit-null>
    <ldp-ipv6-tunneling>
      ldp-ipv6-tunneling
    </ldp-ipv6-tunneling>
    <ldp-strict-targeted-hellos>
      ldp-strict-targeted-hellos
    </ldp-strict-targeted-hellos>
    <ldp-upstream-label-assignment>
      ldp-upstream-label-assignment
    </ldp-upstream-label-assignment>
    <ldp-loopback-if-added>
      ldp-loopback-if-added
    </ldp-loopback-if-added>
    <ldp-route-preference>
      ldp-route-preference
    </ldp-route-preference>
    <ldp-p2mp-max-branches>
      ldp-p2mp-max-branches
    </ldp-p2mp-max-branches>
    <ldp-instance-capability>....</ldp-instance-capability>
    <ldp-protocol-modes>....</ldp-protocol-modes>
    <ldp-session-count>....</ldp-session-count>
    <ldp-timer-overview>....</ldp-timer-overview>
```


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```
    <ldp-gr-overview>....</ldp-gr-overview>
    <ldp-te-overview>....</ldp-te-overview>
    <ldp-igp-overview>....</ldp-igp-overview>
    <ldp-session-protect-overview>....</ldp-session-protect-overview>
    <ldp-interface-address>....</ldp-interface-address>
   </ldp-overview>
</ldp-overview-information>
```

Description

<ldp-overview-information>

Usage

```
<ldp-overview-information>
  <ldp-overview>....</ldp-overview>
</ldp-overview-information>
```

Description LDP overview information

<ldp-p2mp-inlib-label>

Usage

```
<ldp-p2mp-path>
  <ldp-p2mp-inlib-label>
    <ldp-label-session>
      ldp-label-session
    </ldp-label-session>
    <ldp-label>
      ldp-label
    </ldp-label>
  </ldp-p2mp-inlib-label>
</ldp-p2mp-path>
```

Description

<ldp-p2mp-inlib-label>

Usage

```
<ldp-p2mp-path-information>
  <ldp-p2mp-path>
    <ldp-p2mp-inlib-label>
      <ldp-label-session>
        ldp-label-session
      </ldp-label-session>
      <ldp-label>
        ldp-label
      </ldp-label>
    </ldp-p2mp-inlib-label>
  </ldp-p2mp-path>
</ldp-p2mp-path-information>
```

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Description

<ldp-p2mp-path>

Usage

```
<ldp-p2mp-path>
  <ldp-p2mp-path-type>
    ldp-p2mp-path-type
  </ldp-p2mp-path-type>
  <ldp-p2mp-outlib-session>
    ldp-p2mp-outlib-session
  </ldp-p2mp-outlib-session>
  <ldp-p2mp-outlib-label>
    ldp-p2mp-outlib-label
  </ldp-p2mp-outlib-label>
  <ldp-p2mp-egress-label>
    ldp-p2mp-egress-label
  </ldp-p2mp-egress-label>
  <ldp-p2mp-inlib-label>....</ldp-p2mp-inlib-label>
  <ldp-egress-nh>....</ldp-egress-nh>
  <ldp-p2mp-path-fec>....</ldp-p2mp-path-fec>
  <ldp-p2mp-path-transit-route>
    ldp-p2mp-path-transit-route
  </ldp-p2mp-path-transit-route>
  <ldp-p2mp-path-address>
    ldp-p2mp-path-address
  </ldp-p2mp-path-address>
  <ldp-reference-count>
    ldp-reference-count
  </ldp-reference-count>
</ldp-p2mp-path>
```

Description

<ldp-p2mp-path>

Usage

```
<ldp-p2mp-path-information>
  <ldp-p2mp-path>
    <ldp-p2mp-path-type>
      ldp-p2mp-path-type
    </ldp-p2mp-path-type>
    <ldp-p2mp-outlib-session>
      ldp-p2mp-outlib-session
    </ldp-p2mp-outlib-session>
    <ldp-p2mp-outlib-label>
      ldp-p2mp-outlib-label
    </ldp-p2mp-outlib-label>
    <ldp-p2mp-egress-label>
      ldp-p2mp-egress-label
    </ldp-p2mp-egress-label>
    <ldp-p2mp-inlib-label>....</ldp-p2mp-inlib-label>
    <ldp-egress-nh>....</ldp-egress-nh>
    <ldp-p2mp-path-fec>....</ldp-p2mp-path-fec>
    <ldp-p2mp-path-transit-route>
```


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```
      ldp-p2mp-path-transit-route
    </ldp-p2mp-path-transit-route>
    <ldp-p2mp-path-address>
      ldp-p2mp-path-address
    </ldp-p2mp-path-address>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
  </ldp-p2mp-path>
</ldp-p2mp-path-information>
```

Description

<ldp-p2mp-path-fec>

Usage

```
<ldp-p2mp-path>
  <ldp-p2mp-path-fec>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-prefix-active>
      ldp-prefix-active
    </ldp-prefix-active>
  </ldp-p2mp-path-fec>
</ldp-p2mp-path>
```

Description

<ldp-p2mp-path-fec>

Usage

```
<ldp-p2mp-path-information>
  <ldp-p2mp-path>
    <ldp-p2mp-path-fec>
      <ldp-prefix>
        ldp-prefix
      </ldp-prefix>
      <ldp-prefix-active>
        ldp-prefix-active
      </ldp-prefix-active>
    </ldp-p2mp-path-fec>
  </ldp-p2mp-path>
</ldp-p2mp-path-information>
```

Description

<ldp-p2mp-path-information>

Usage

```
<ldp-p2mp-path-information>
  <ldp-p2mp-path>....</ldp-p2mp-path>
```

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```
</ldp-p2mp-path-information>
```

Description

<ldp-p2mp-traffic-statistics>

Usage

```
<ldp-p2mp-traffic-statistics>
  <ldp-prefix>
    ldp-prefix
  </ldp-prefix>
  <ldp-traffic-branch-nexthop-addr>
    ldp-traffic-branch-nexthop-addr
  </ldp-traffic-branch-nexthop-addr>
  <ldp-traffic-branch-nexthop-interface>
    ldp-traffic-branch-nexthop-interface
  </ldp-traffic-branch-nexthop-interface>
  <ldp-traffic-error>
    ldp-traffic-error
  </ldp-traffic-error>
  <ldp-traffic-statistics-packet-count>
    ldp-traffic-statistics-packet-count
  </ldp-traffic-statistics-packet-count>
  <ldp-traffic-statistics-byte-count>
    ldp-traffic-statistics-byte-count
  </ldp-traffic-statistics-byte-count>
  <ldp-traffic-multiple-fec>
    ldp-traffic-multiple-fec
  </ldp-traffic-multiple-fec>
</ldp-p2mp-traffic-statistics>
```

Description

<ldp-p2mp-traffic-statistics>

Usage

```
<ldp-traffic-statistics-information>
  <ldp-p2mp-traffic-statistics>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-traffic-branch-nexthop-addr>
      ldp-traffic-branch-nexthop-addr
    </ldp-traffic-branch-nexthop-addr>
    <ldp-traffic-branch-nexthop-interface>
      ldp-traffic-branch-nexthop-interface
    </ldp-traffic-branch-nexthop-interface>
    <ldp-traffic-error>
      ldp-traffic-error
    </ldp-traffic-error>
    <ldp-traffic-statistics-packet-count>
      ldp-traffic-statistics-packet-count
    </ldp-traffic-statistics-packet-count>
    <ldp-traffic-statistics-byte-count>
```


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```
      ldp-traffic-statistics-byte-count
    </ldp-traffic-statistics-byte-count>
    <ldp-traffic-multiple-fec>
      ldp-traffic-multiple-fec
    </ldp-traffic-multiple-fec>
  </ldp-p2mp-traffic-statistics>
</ldp-traffic-statistics-information>
```

Description

<ldp-path>

Usage

```
<ldp-path>
  <ldp-outlib-session>
    ldp-outlib-session
  </ldp-outlib-session>
  <ldp-outlib-label>
    ldp-outlib-label
  </ldp-outlib-label>
  <ldp-ingress-label>
    ldp-ingress-label
  </ldp-ingress-label>
  <ldp-inlib-session>
    ldp-inlib-session
  </ldp-inlib-session>
  <ldp-inlib-label>
    ldp-inlib-label
  </ldp-inlib-label>
  <ldp-egress-label>
    ldp-egress-label
  </ldp-egress-label>
  <ldp-path-route>....</ldp-path-route>
  <ldp-reference-count>
    ldp-reference-count
  </ldp-reference-count>
  <ldp-route-transit>
    ldp-route-transit
  </ldp-route-transit>
  <ldp-global-label>
    ldp-global-label
  </ldp-global-label>
  <ldp-merged-next-hop>
    ldp-merged-next-hop
  </ldp-merged-next-hop>
</ldp-path>
```

Description

<ldp-path>

Usage

```
<ldp-path-information>
  <ldp-path>
```

```
    <ldp-outlib-session>
      ldp-outlib-session
    </ldp-outlib-session>
    <ldp-outlib-label>
      ldp-outlib-label
    </ldp-outlib-label>
    <ldp-ingress-label>
      ldp-ingress-label
    </ldp-ingress-label>
    <ldp-inlib-session>
      ldp-inlib-session
    </ldp-inlib-session>
    <ldp-inlib-label>
      ldp-inlib-label
    </ldp-inlib-label>
    <ldp-egress-label>
      ldp-egress-label
    </ldp-egress-label>
    <ldp-path-route>....</ldp-path-route>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
    <ldp-route-transit>
      ldp-route-transit
    </ldp-route-transit>
    <ldp-global-label>
      ldp-global-label
    </ldp-global-label>
    <ldp-merged-next-hop>
      ldp-merged-next-hop
    </ldp-merged-next-hop>
  </ldp-path>
</ldp-path-information>
```

Description

<ldp-path-information>

Usage

```
<ldp-path-information>
  <ldp-path>....</ldp-path>
</ldp-path-information>
```

Description

<ldp-path-replication>

Usage

```
<ldp-path-replication>
  <ldp-instance-id>
    ldp-instance-id
  </ldp-instance-id>
  <ldp-label>
    ldp-label
```


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```
  </ldp-label>
  <ldp-path-replication-ingress-selfid>
   ldp-path-replication-ingress-selfid
  </ldp-path-replication-ingress-selfid>
  <ldp-path-replication-transit-selfid>
   ldp-path-replication-transit-selfid
  </ldp-path-replication-transit-selfid>
  <ldp-path-replication-state>
   ldp-path-replication-state
  </ldp-path-replication-state>
  <ldp-reference-count>
   ldp-reference-count
  </ldp-reference-count>
</ldp-path-replication>
```

Description Path replication entry

<ldp-path-replication>

Usage

```
<ldp-path-replication-information>
  <ldp-path-replication>
    <ldp-instance-id>
     ldp-instance-id
    </ldp-instance-id>
    <ldp-label>
     ldp-label
    </ldp-label>
    <ldp-path-replication-ingress-selfid>
     ldp-path-replication-ingress-selfid
    </ldp-path-replication-ingress-selfid>
    <ldp-path-replication-transit-selfid>
     ldp-path-replication-transit-selfid
    </ldp-path-replication-transit-selfid>
    <ldp-path-replication-state>
     ldp-path-replication-state
    </ldp-path-replication-state>
    <ldp-reference-count>
     ldp-reference-count
    </ldp-reference-count>
  </ldp-path-replication>
</ldp-path-replication-information>
```

Description Path replication entry

<ldp-path-replication-information>

Usage

```
<ldp-path-replication-information>
  <ldp-path-replication>....</ldp-path-replication>
</ldp-path-replication-information>
```

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Description

<ldp-path-route>

Usage

```
<ldp-path>
  <ldp-path-route>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-route-ingress>
      ldp-route-ingress
    </ldp-route-ingress>
  </ldp-path-route>
</ldp-path>
```

Description

<ldp-path-route>

Usage

```
<ldp-path-information>
  <ldp-path>
    <ldp-path-route>
      <ldp-prefix>
        ldp-prefix
      </ldp-prefix>
      <ldp-route-ingress>
        ldp-route-ingress
      </ldp-route-ingress>
    </ldp-path-route>
  </ldp-path>
</ldp-path-information>
```

Description

<ldp-protocol-modes>

Usage

```
<ldp-overview>
  <ldp-protocol-modes>
    <ldp-distribution-mode>
      ldp-distribution-mode
    </ldp-distribution-mode>
    <ldp-retention-mode>
      ldp-retention-mode
    </ldp-retention-mode>
    <ldp-control-mode>
      ldp-control-mode
    </ldp-control-mode>
  </ldp-protocol-modes>
</ldp-overview>
```


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Description LDP protocol modes

<ldp-protocol-modes>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-protocol-modes>
      <ldp-distribution-mode>
        ldp-distribution-mode
      </ldp-distribution-mode>
      <ldp-retention-mode>
        ldp-retention-mode
      </ldp-retention-mode>
      <ldp-control-mode>
        ldp-control-mode
      </ldp-control-mode>
    </ldp-protocol-modes>
  </ldp-overview>
</ldp-overview-information>
```

Description LDP protocol modes

<ldp-route>

Usage

```
<ldp-route>
  <ldp-prefix>
    ldp-prefix
  </ldp-prefix>
  <ldp-nexthop>....</ldp-nexthop>
  <ldp-route-flags>....</ldp-route-flags>
  <ldp-label>
    ldp-label
  </ldp-label>
  <ldp-no-label>
    ldp-no-label
  </ldp-no-label>
  <ldp-topology-entry>
    ldp-topology-entry
  </ldp-topology-entry>
  <ldp-ingress-route-status>
    ldp-ingress-route-status
  </ldp-ingress-route-status>
  <ldp-ingress-route-last-modified-time>
    ldp-ingress-route-last-modified-time
  </ldp-ingress-route-last-modified-time>
  <ldp-merged-next-hop>
    ldp-merged-next-hop
  </ldp-merged-next-hop>
  <ldp-oam-bfd-session>....</ldp-oam-bfd-session>
</ldp-route>
```

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Description

<ldp-route>

Usage

```
<ldp-route-information>
  <ldp-route>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-nexthop>....</ldp-nexthop>
    <ldp-route-flags>....</ldp-route-flags>
    <ldp-label>
      ldp-label
    </ldp-label>
    <ldp-no-label>
      ldp-no-label
    </ldp-no-label>
    <ldp-topology-entry>
      ldp-topology-entry
    </ldp-topology-entry>
    <ldp-ingress-route-status>
      ldp-ingress-route-status
    </ldp-ingress-route-status>
    <ldp-ingress-route-last-modified-time>
      ldp-ingress-route-last-modified-time
    </ldp-ingress-route-last-modified-time>
    <ldp-merged-next-hop>
      ldp-merged-next-hop
    </ldp-merged-next-hop>
    <ldp-oam-bfd-session>....</ldp-oam-bfd-session>
  </ldp-route>
</ldp-route-information>
```

Description

<ldp-route-flags>

Usage

```
<ldp-route-flags>
  <ldp-route-flag>
    ldp-route-flag
  </ldp-route-flag>
</ldp-route-flags>
```

Description LDP Route flags

<ldp-route-flags>

Usage

```
<ldp-route>
  <ldp-route-flags>
    <ldp-route-flag>
```


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```
        ldp-route-flag
      </ldp-route-flag>
    </ldp-route-flags>
  </ldp-route>
```

Description LDP Route flags

<ldp-route-flags>

Usage

```
<ldp-route-information>
  <ldp-route>
    <ldp-route-flags>
      <ldp-route-flag>
        ldp-route-flag
      </ldp-route-flag>
    </ldp-route-flags>
  </ldp-route>
</ldp-route-information>
```

Description LDP Route flags

<ldp-route-information>

Usage

```
<ldp-route-information>
  <ldp-route>....</ldp-route>
</ldp-route-information>
```

Description

<ldp-session>

Usage

```
<ldp-session>
  <ldp-neighbor-address>
    ldp-neighbor-address
  </ldp-neighbor-address>
  <ldp-session-state>
    ldp-session-state
  </ldp-session-state>
  <ldp-connection-state>
    ldp-connection-state
  </ldp-connection-state>
  <ldp-remaining-time>
    ldp-remaining-time
  </ldp-remaining-time>
  <ldp-session-id>
    ldp-session-id
  </ldp-session-id>
  <ldp-retry-time>
```

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```
  ldp-retry-time
</ldp-retry-time>
<ldp-keepalive-time>
  ldp-keepalive-time
</ldp-keepalive-time>
<ldp-session-role>
  ldp-session-role
</ldp-session-role>
<ldp-session-max-pdu>
  ldp-session-max-pdu
</ldp-session-max-pdu>
<ldp-holdtime>
  ldp-holdtime
</ldp-holdtime>
<ldp-neighbor-count>
  ldp-neighbor-count
</ldp-neighbor-count>
<ldp-neighbor-types>....</ldp-neighbor-types>
<ldp-keepalive-interval>
  ldp-keepalive-interval
</ldp-keepalive-interval>
<ldp-retry-interval>
  ldp-retry-interval
</ldp-retry-interval>
<ldp-local-address>
  ldp-local-address
</ldp-local-address>
<ldp-remote-address>
  ldp-remote-address
</ldp-remote-address>
<ldp-graceful-restart-state>
  ldp-graceful-restart-state
</ldp-graceful-restart-state>
<ldp-local-reconnect-time>
  ldp-local-reconnect-time
</ldp-local-reconnect-time>
<ldp-remote-reconnect-time>
  ldp-remote-reconnect-time
</ldp-remote-reconnect-time>
<ldp-restart-complete-time>
  ldp-restart-complete-time
</ldp-restart-complete-time>
<ldp-helper-mode-state>
  ldp-helper-mode-state
</ldp-helper-mode-state>
<ldp-helper-mode-time>
  ldp-helper-mode-time
</ldp-helper-mode-time>
<ldp-local-helper-mode>
  ldp-local-helper-mode
</ldp-local-helper-mode>
<ldp-remote-helper-mode>
  ldp-remote-helper-mode
</ldp-remote-helper-mode>
<ldp-graceful-restart-local>
  ldp-graceful-restart-local
```


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```
</ldp-graceful-restart-local>
<ldp-graceful-restart-remote>
  ldp-graceful-restart-remote
</ldp-graceful-restart-remote>
<ldp-local-maximum-reconnect>
  ldp-local-maximum-reconnect
</ldp-local-maximum-reconnect>
<ldp-local-maximum-recovery>
  ldp-local-maximum-recovery
</ldp-local-maximum-recovery>
<ldp-up-time>
  ldp-up-time
</ldp-up-time>
<ldp-last-down-time>
  ldp-last-down-time
</ldp-last-down-time>
<ldp-down-reason>
  ldp-down-reason
</ldp-down-reason>
<ldp-session-flap-count>
  ldp-session-flap-count
</ldp-session-flap-count>
<ldp-session-capabilities-advertised>....</ldp-session-capabilities-advertised>
<ldp-session-capabilities-received>....</ldp-session-capabilities-received>
<ldp-session-protection>....</ldp-session-protection>
<ldp-session-nsr-state>
  ldp-session-nsr-state
</ldp-session-nsr-state>
<ldp-session-address>....</ldp-session-address>
<ldp-session-deleted>
  ldp-session-deleted
</ldp-session-deleted>
<ldp-session-close-pending>
  ldp-session-close-pending
</ldp-session-close-pending>
<ldp-session-queue-depth>
  ldp-session-queue-depth
</ldp-session-queue-depth>
<ldp-session-read-pending>
  ldp-session-read-pending
</ldp-session-read-pending>
<ldp-session-write-pending>
  ldp-session-write-pending
</ldp-session-write-pending>
<ldp-session-receive-buffer-bytes>
  ldp-session-receive-buffer-bytes
</ldp-session-receive-buffer-bytes>
<ldp-session-transmit-buffer-bytes>
  ldp-session-transmit-buffer-bytes
</ldp-session-transmit-buffer-bytes>
<ldp-session-no-connection>
  ldp-session-no-connection
</ldp-session-no-connection>
<ldp-session-authentication>
  ldp-session-authentication
</ldp-session-authentication>
```

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```
  <ldp-session-statistics>....</ldp-session-statistics>
</ldp-session>
```

Description

<ldp-session>

Usage

```
<ldp-session-information>
 <ldp-session>
  <ldp-neighbor-address>
   ldp-neighbor-address
  </ldp-neighbor-address>
  <ldp-session-state>
   ldp-session-state
  </ldp-session-state>
  <ldp-connection-state>
   ldp-connection-state
  </ldp-connection-state>
  <ldp-remaining-time>
   ldp-remaining-time
  </ldp-remaining-time>
  <ldp-session-id>
   ldp-session-id
  </ldp-session-id>
  <ldp-retry-time>
   ldp-retry-time
  </ldp-retry-time>
  <ldp-keepalive-time>
   ldp-keepalive-time
  </ldp-keepalive-time>
  <ldp-session-role>
   ldp-session-role
  </ldp-session-role>
  <ldp-session-max-pdu>
   ldp-session-max-pdu
  </ldp-session-max-pdu>
  <ldp-holdtime>
   ldp-holdtime
  </ldp-holdtime>
  <ldp-neighbor-count>
   ldp-neighbor-count
  </ldp-neighbor-count>
  <ldp-neighbor-types>....</ldp-neighbor-types>
  <ldp-keepalive-interval>
   ldp-keepalive-interval
  </ldp-keepalive-interval>
  <ldp-retry-interval>
   ldp-retry-interval
  </ldp-retry-interval>
  <ldp-local-address>
   ldp-local-address
  </ldp-local-address>
  <ldp-remote-address>
   ldp-remote-address
```


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```
</ldp-remote-address>
<ldp-graceful-restart-state>
  ldp-graceful-restart-state
</ldp-graceful-restart-state>
<ldp-local-reconnect-time>
  ldp-local-reconnect-time
</ldp-local-reconnect-time>
<ldp-remote-reconnect-time>
  ldp-remote-reconnect-time
</ldp-remote-reconnect-time>
<ldp-restart-complete-time>
  ldp-restart-complete-time
</ldp-restart-complete-time>
<ldp-helper-mode-state>
  ldp-helper-mode-state
</ldp-helper-mode-state>
<ldp-helper-mode-time>
  ldp-helper-mode-time
</ldp-helper-mode-time>
<ldp-local-helper-mode>
  ldp-local-helper-mode
</ldp-local-helper-mode>
<ldp-remote-helper-mode>
  ldp-remote-helper-mode
</ldp-remote-helper-mode>
<ldp-graceful-restart-local>
  ldp-graceful-restart-local
</ldp-graceful-restart-local>
<ldp-graceful-restart-remote>
  ldp-graceful-restart-remote
</ldp-graceful-restart-remote>
<ldp-local-maximum-reconnect>
  ldp-local-maximum-reconnect
</ldp-local-maximum-reconnect>
<ldp-local-maximum-recovery>
  ldp-local-maximum-recovery
</ldp-local-maximum-recovery>
<ldp-up-time>
  ldp-up-time
</ldp-up-time>
<ldp-last-down-time>
  ldp-last-down-time
</ldp-last-down-time>
<ldp-down-reason>
  ldp-down-reason
</ldp-down-reason>
<ldp-session-flap-count>
  ldp-session-flap-count
</ldp-session-flap-count>
<ldp-session-capabilities-advertised>....</ldp-session-capabilities-advertised>

<ldp-session-capabilities-received>....</ldp-session-capabilities-received>
<ldp-session-protection>....</ldp-session-protection>
<ldp-session-nsr-state>
  ldp-session-nsr-state
</ldp-session-nsr-state>
```

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```
    <ldp-session-address>....</ldp-session-address>
    <ldp-session-deleted>
      ldp-session-deleted
    </ldp-session-deleted>
    <ldp-session-close-pending>
      ldp-session-close-pending
    </ldp-session-close-pending>
    <ldp-session-queue-depth>
      ldp-session-queue-depth
    </ldp-session-queue-depth>
    <ldp-session-read-pending>
      ldp-session-read-pending
    </ldp-session-read-pending>
    <ldp-session-write-pending>
      ldp-session-write-pending
    </ldp-session-write-pending>
    <ldp-session-receive-buffer-bytes>
      ldp-session-receive-buffer-bytes
    </ldp-session-receive-buffer-bytes>
    <ldp-session-transmit-buffer-bytes>
      ldp-session-transmit-buffer-bytes
    </ldp-session-transmit-buffer-bytes>
    <ldp-session-no-connection>
      ldp-session-no-connection
    </ldp-session-no-connection>
    <ldp-session-authentication>
      ldp-session-authentication
    </ldp-session-authentication>
    <ldp-session-statistics>....</ldp-session-statistics>
  </ldp-session>
</ldp-session-information>
```

Description

<ldp-session-address>

Usage

```
<ldp-session>
  <ldp-session-address>
    <interface-address>
      interface-address
    </interface-address>
    <interface-name>
      interface-name
    </interface-name>
    <ldp-session-address-stale>
      ldp-session-address-stale
    </ldp-session-address-stale>
  </ldp-session-address>
</ldp-session>
```

Description

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<ldp-session-address>

Usage

```
<ldp-session-information>
  <ldp-session>
    <ldp-session-address>
      <interface-address>
        interface-address
      </interface-address>
      <interface-name>
        interface-name
      </interface-name>
      <ldp-session-address-stale>
        ldp-session-address-stale
      </ldp-session-address-stale>
    </ldp-session-address>
  </ldp-session>
</ldp-session-information>
```

Description

<ldp-session-capabilities-advertised>

Usage

```
<ldp-session-capabilities-advertised>
  <ldp-capability>
    ldp-capability
  </ldp-capability>
</ldp-session-capabilities-advertised>
```

Description Capabilities advertised to peer

<ldp-session-capabilities-advertised>

Usage

```
<ldp-session>
  <ldp-session-capabilities-advertised>
    <ldp-capability>
      ldp-capability
    </ldp-capability>
  </ldp-session-capabilities-advertised>
</ldp-session>
```

Description Capabilities advertised to peer

<ldp-session-capabilities-advertised>

Usage

```
<ldp-session-information>
  <ldp-session>
    <ldp-session-capabilities-advertised>
```

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```
        <ldp-capability>
          ldp-capability
        </ldp-capability>
      </ldp-session-capabilities-advertised>
    </ldp-session>
  </ldp-session-information>
```

Description Capabilities advertised to peer

<ldp-session-capabilities-received>

Usage

```
<ldp-session-capabilities-received>
  <ldp-capability>
    ldp-capability
  </ldp-capability>
</ldp-session-capabilities-received>
```

Description Capabilities received from peer

<ldp-session-capabilities-received>

Usage

```
<ldp-session>
  <ldp-session-capabilities-received>
    <ldp-capability>
      ldp-capability
    </ldp-capability>
  </ldp-session-capabilities-received>
</ldp-session>
```

Description Capabilities received from peer

<ldp-session-capabilities-received>

Usage

```
<ldp-session-information>
  <ldp-session>
    <ldp-session-capabilities-received>
      <ldp-capability>
        ldp-capability
      </ldp-capability>
    </ldp-session-capabilities-received>
  </ldp-session>
</ldp-session-information>
```

Description Capabilities received from peer

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<ldp-session-count>

Usage

```
<ldp-overview>
  <ldp-session-count>
    <ldp-session-operational>
      ldp-session-operational
    </ldp-session-operational>
    <ldp-session-nonexistent>
      ldp-session-nonexistent
    </ldp-session-nonexistent>
    <ldp-session-connecting>
      ldp-session-connecting
    </ldp-session-connecting>
    <ldp-session-initialized>
      ldp-session-initialized
    </ldp-session-initialized>
    <ldp-session-openrec>
      ldp-session-openrec
    </ldp-session-openrec>
    <ldp-session-opensent>
      ldp-session-opensent
    </ldp-session-opensent>
    <ldp-session-closing>
      ldp-session-closing
    </ldp-session-closing>
  </ldp-session-count>
</ldp-overview>
```

Description LDP sessions

<ldp-session-count>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-session-count>
      <ldp-session-operational>
        ldp-session-operational
      </ldp-session-operational>
      <ldp-session-nonexistent>
        ldp-session-nonexistent
      </ldp-session-nonexistent>
      <ldp-session-connecting>
        ldp-session-connecting
      </ldp-session-connecting>
      <ldp-session-initialized>
        ldp-session-initialized
      </ldp-session-initialized>
      <ldp-session-openrec>
        ldp-session-openrec
      </ldp-session-openrec>
      <ldp-session-opensent>
```

```
                ldp-session-opensent
              </ldp-session-opensent>
              <ldp-session-closing>
                ldp-session-closing
              </ldp-session-closing>
            </ldp-session-count>
          </ldp-overview>
        </ldp-overview-information>
```

Description LDP sessions

<ldp-session-information>

Usage

```
<ldp-session-information>
  <ldp-session>....</ldp-session>
</ldp-session-information>
```

Description

<ldp-session-protect-overview>

Usage

```
<ldp-overview>
  <ldp-session-protect-overview>
    <ldp-session-protect>
      ldp-session-protect
    </ldp-session-protect>
    <ldp-session-protect-timeout>
      ldp-session-protect-timeout
    </ldp-session-protect-timeout>
  </ldp-session-protect-overview>
</ldp-overview>
```

Description LDP session protect overview

<ldp-session-protect-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-session-protect-overview>
      <ldp-session-protect>
        ldp-session-protect
      </ldp-session-protect>
      <ldp-session-protect-timeout>
        ldp-session-protect-timeout
      </ldp-session-protect-timeout>
    </ldp-session-protect-overview>
  </ldp-overview>
```


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```
</ldp-overview-information>
```

Description LDP session protect overview

<ldp-session-protection>

Usage

```
<ldp-session>
  <ldp-session-protection>
    <ldp-session-protection-state>
      ldp-session-protection-state
    </ldp-session-protection-state>
    <ldp-session-protection-remaining-time>
      ldp-session-protection-remaining-time
    </ldp-session-protection-remaining-time>
  </ldp-session-protection>
</ldp-session>
```

Description LDP session protection information

<ldp-session-protection>

Usage

```
<ldp-session-information>
  <ldp-session>
    <ldp-session-protection>
      <ldp-session-protection-state>
        ldp-session-protection-state
      </ldp-session-protection-state>
      <ldp-session-protection-remaining-time>
        ldp-session-protection-remaining-time
      </ldp-session-protection-remaining-time>
    </ldp-session-protection>
  </ldp-session>
</ldp-session-information>
```

Description LDP session protection information

<ldp-session-replication>

Usage

```
<ldp-session-replication>
  <ldp-instance-id>
    ldp-instance-id
  </ldp-instance-id>
  <ldp-neighbor-address>
    ldp-neighbor-address
  </ldp-neighbor-address>
  <ldp-session-replication-state>
    ldp-session-replication-state
  </ldp-session-replication-state>
```

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```
<ldp-reference-count>
  ldp-reference-count
</ldp-reference-count>
<ldp-session-replication-age>
  ldp-session-replication-age
</ldp-session-replication-age>
</ldp-session-replication>
```

Description Session replication entry

<ldp-session-replication>

Usage

```
<ldp-session-replication-information>
  <ldp-session-replication>
    <ldp-instance-id>
      ldp-instance-id
    </ldp-instance-id>
    <ldp-neighbor-address>
      ldp-neighbor-address
    </ldp-neighbor-address>
    <ldp-session-replication-state>
      ldp-session-replication-state
    </ldp-session-replication-state>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
    <ldp-session-replication-age>
      ldp-session-replication-age
    </ldp-session-replication-age>
  </ldp-session-replication>
</ldp-session-replication-information>
```

Description Session replication entry

<ldp-session-replication-information>

Usage

```
<ldp-session-replication-information>
  <ldp-session-replication>....</ldp-session-replication>
</ldp-session-replication-information>
```

Description

<ldp-session-statistics>

Usage

```
<ldp-session>
  <ldp-session-statistics>
    <ldp-message-type>
      ldp-message-type
```


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```
    </ldp-message-type>
    <ldp-messages-sent>
     ldp-messages-sent
    </ldp-messages-sent>
    <ldp-messages-received>
     ldp-messages-received
    </ldp-messages-received>
    <ldp-messages-sent-5seconds>
     ldp-messages-sent-5seconds
    </ldp-messages-sent-5seconds>
    <ldp-messages-received-5seconds>
     ldp-messages-received-5seconds
    </ldp-messages-received-5seconds>
   </ldp-session-statistics>
  </ldp-session>
```

Description

<ldp-session-statistics>

Usage

```
<ldp-session-information>
 <ldp-session>
  <ldp-session-statistics>
   <ldp-message-type>
    ldp-message-type
   </ldp-message-type>
   <ldp-messages-sent>
    ldp-messages-sent
   </ldp-messages-sent>
   <ldp-messages-received>
    ldp-messages-received
   </ldp-messages-received>
   <ldp-messages-sent-5seconds>
    ldp-messages-sent-5seconds
   </ldp-messages-sent-5seconds>
   <ldp-messages-received-5seconds>
    ldp-messages-received-5seconds
   </ldp-messages-received-5seconds>
  </ldp-session-statistics>
 </ldp-session>
</ldp-session-information>
```

Description

<ldp-standby-path>

Usage

```
<ldp-standby-path>
 <ldp-reference-count>
  ldp-reference-count
 </ldp-reference-count>
 <ldp-label>
  ldp-label
```

```
  </ldp-label>
  <ldp-standby-path-prefix>....</ldp-standby-path-prefix>
</ldp-standby-path>
```

Description LDP standby path entry

<ldp-standby-path>

Usage

```
<ldp-standby-path-information>
  <ldp-standby-path>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
    <ldp-label>
      ldp-label
    </ldp-label>
    <ldp-standby-path-prefix>....</ldp-standby-path-prefix>
  </ldp-standby-path>
</ldp-standby-path-information>
```

Description LDP standby path entry

<ldp-standby-path-information>

Usage

```
<ldp-standby-path-information>
  <ldp-standby-path>....</ldp-standby-path>
</ldp-standby-path-information>
```

Description

<ldp-standby-path-prefix>

Usage

```
<ldp-standby-path>
  <ldp-standby-path-prefix>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
  </ldp-standby-path-prefix>
</ldp-standby-path>
```

Description

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<ldp-standby-path-prefix>

Usage

```
<ldp-standby-path-information>
  <ldp-standby-path>
    <ldp-standby-path-prefix>
      <ldp-prefix>
        ldp-prefix
      </ldp-prefix>
      <ldp-reference-count>
        ldp-reference-count
      </ldp-reference-count>
    </ldp-standby-path-prefix>
  </ldp-standby-path>
</ldp-standby-path-information>
```

Description

<ldp-standby-path-reference>

Usage

```
<ldp-standby-route>
  <ldp-standby-path-reference>
    <ldp-reference-count>
      ldp-reference-count
    </ldp-reference-count>
    <ldp-label>
      ldp-label
    </ldp-label>
  </ldp-standby-path-reference>
</ldp-standby-route>
```

Description Route to label association entry

<ldp-standby-path-reference>

Usage

```
<ldp-standby-route-information>
  <ldp-standby-route>
    <ldp-standby-path-reference>
      <ldp-reference-count>
        ldp-reference-count
      </ldp-reference-count>
      <ldp-label>
        ldp-label
      </ldp-label>
    </ldp-standby-path-reference>
  </ldp-standby-route>
</ldp-standby-route-information>
```

Description Route to label association entry

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<ldp-standby-route>

Usage

```
<ldp-standby-route>
  <ldp-prefix>
    ldp-prefix
  </ldp-prefix>
  <ldp-standby-route-route>
    ldp-standby-route-route
  </ldp-standby-route-route>
  <ldp-standby-path-reference>....</ldp-standby-path-reference>
</ldp-standby-route>
```

Description LDP standby route entry

<ldp-standby-route>

Usage

```
<ldp-standby-route-information>
  <ldp-standby-route>
    <ldp-prefix>
      ldp-prefix
    </ldp-prefix>
    <ldp-standby-route-route>
      ldp-standby-route-route
    </ldp-standby-route-route>
    <ldp-standby-path-reference>....</ldp-standby-path-reference>
  </ldp-standby-route>
</ldp-standby-route-information>
```

Description LDP standby route entry

<ldp-standby-route-information>

Usage

```
<ldp-standby-route-information>
  <ldp-standby-route>....</ldp-standby-route>
</ldp-standby-route-information>
```

Description

<ldp-statistics>

Usage

```
<ldp-statistics>
  <ldp-message-statistics>....</ldp-message-statistics>
  <ldp-event-statistics>....</ldp-event-statistics>
</ldp-statistics>
```

Description

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<ldp-statistics>

Usage

```
<ldp-statistics-information>
  <ldp-statistics>
    <ldp-message-statistics>....</ldp-message-statistics>
    <ldp-event-statistics>....</ldp-event-statistics>
  </ldp-statistics>
</ldp-statistics-information>
```

Description

<ldp-statistics-information>

Usage

```
<ldp-statistics-information>
  <ldp-statistics>....</ldp-statistics>
</ldp-statistics-information>
```

Description

<ldp-te-overview>

Usage

```
<ldp-overview>
  <ldp-te-overview>
    <ldp-te-bgp-igp>
      ldp-te-bgp-igp
    </ldp-te-bgp-igp>
    <ldp-te-both-ribs>
      ldp-te-both-ribs
    </ldp-te-both-ribs>
    <ldp-te-mpls-forwarding>
      ldp-te-mpls-forwarding
    </ldp-te-mpls-forwarding>
  </ldp-te-overview>
</ldp-overview>
```

Description LDP TE overview

<ldp-te-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-te-overview>
      <ldp-te-bgp-igp>
        ldp-te-bgp-igp
      </ldp-te-bgp-igp>
      <ldp-te-both-ribs>
        ldp-te-both-ribs
      </ldp-te-both-ribs>
```

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```
        <ldp-te-mpls-forwarding>
          ldp-te-mpls-forwarding
        </ldp-te-mpls-forwarding>
      </ldp-te-overview>
    </ldp-overview>
  </ldp-overview-information>
```

Description LDP TE overview

<ldp-timer-overview>

Usage

```
<ldp-overview>
  <ldp-timer-overview>
    <ldp-instance-keepalive-interval>
      ldp-instance-keepalive-interval
    </ldp-instance-keepalive-interval>
    <ldp-instance-keepalive-timeout>
      ldp-instance-keepalive-timeout
    </ldp-instance-keepalive-timeout>
    <ldp-instance-link-hello-interval>
      ldp-instance-link-hello-interval
    </ldp-instance-link-hello-interval>
    <ldp-instance-link-hello-hold-time>
      ldp-instance-link-hello-hold-time
    </ldp-instance-link-hello-hold-time>
    <ldp-instance-targeted-hello-interval>
      ldp-instance-targeted-hello-interval
    </ldp-instance-targeted-hello-interval>
    <ldp-instance-targeted-hello-hold-time>
      ldp-instance-targeted-hello-hold-time
    </ldp-instance-targeted-hello-hold-time>
    <ldp-instance-label-withdraw-delay>
      ldp-instance-label-withdraw-delay
    </ldp-instance-label-withdraw-delay>
  </ldp-timer-overview>
</ldp-overview>
```

Description LDP timer overview

<ldp-timer-overview>

Usage

```
<ldp-overview-information>
  <ldp-overview>
    <ldp-timer-overview>
      <ldp-instance-keepalive-interval>
        ldp-instance-keepalive-interval
      </ldp-instance-keepalive-interval>
      <ldp-instance-keepalive-timeout>
        ldp-instance-keepalive-timeout
      </ldp-instance-keepalive-timeout>
```


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```
      <ldp-instance-link-hello-interval>
       ldp-instance-link-hello-interval
      </ldp-instance-link-hello-interval>
      <ldp-instance-link-hello-hold-time>
       ldp-instance-link-hello-hold-time
      </ldp-instance-link-hello-hold-time>
      <ldp-instance-targeted-hello-interval>
       ldp-instance-targeted-hello-interval
      </ldp-instance-targeted-hello-interval>
      <ldp-instance-targeted-hello-hold-time>
       ldp-instance-targeted-hello-hold-time
      </ldp-instance-targeted-hello-hold-time>
      <ldp-instance-label-withdraw-delay>
       ldp-instance-label-withdraw-delay
      </ldp-instance-label-withdraw-delay>
     </ldp-timer-overview>
    </ldp-overview>
   </ldp-overview-information>
```

Description LDP timer overview

<ldp-traffic-statistics>

Usage

```
<ldp-traffic-statistics>
 <ldp-prefix>
  ldp-prefix
 </ldp-prefix>
 <ldp-traffic-type>
  ldp-traffic-type
 </ldp-traffic-type>
 <ldp-traffic-error>
  ldp-traffic-error
 </ldp-traffic-error>
 <ldp-traffic-statistics-packet-count>
  ldp-traffic-statistics-packet-count
 </ldp-traffic-statistics-packet-count>
 <ldp-traffic-statistics-byte-count>
  ldp-traffic-statistics-byte-count
 </ldp-traffic-statistics-byte-count>
 <ldp-traffic-multiple-fec>
  ldp-traffic-multiple-fec
 </ldp-traffic-multiple-fec>
</ldp-traffic-statistics>
```

Description

<ldp-traffic-statistics>

Usage

```
<ldp-traffic-statistics-information>
 <ldp-traffic-statistics>
  <ldp-prefix>
```

```
    ldp-prefix
   </ldp-prefix>
   <ldp-traffic-type>
    ldp-traffic-type
   </ldp-traffic-type>
   <ldp-traffic-error>
    ldp-traffic-error
   </ldp-traffic-error>
   <ldp-traffic-statistics-packet-count>
    ldp-traffic-statistics-packet-count
   </ldp-traffic-statistics-packet-count>
   <ldp-traffic-statistics-byte-count>
    ldp-traffic-statistics-byte-count
   </ldp-traffic-statistics-byte-count>
   <ldp-traffic-multiple-fec>
    ldp-traffic-multiple-fec
   </ldp-traffic-multiple-fec>
  </ldp-traffic-statistics>
</ldp-traffic-statistics-information>
```

Description

<ldp-traffic-statistics-error>

Usage

```
<ldp-traffic-statistics-error>
  <ldp-traffic-error>
    ldp-traffic-error
  </ldp-traffic-error>
</ldp-traffic-statistics-error>
```

Description

<ldp-traffic-statistics-error>

Usage

```
<ldp-traffic-statistics-information>
  <ldp-traffic-statistics-error>
    <ldp-traffic-error>
      ldp-traffic-error
    </ldp-traffic-error>
  </ldp-traffic-statistics-error>
</ldp-traffic-statistics-information>
```

Description

<ldp-traffic-statistics-information>

Usage

```
<ldp-traffic-statistics-information>
  <ldp-traffic-statistics>....</ldp-traffic-statistics>
  <ldp-p2mp-traffic-statistics>....</ldp-p2mp-traffic-statistics>
  <ldp-traffic-statistics-error>....</ldp-traffic-statistics-error>
```


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```
</ldp-traffic-statistics-information>
```

Description

<ldp-vpls-reference-site>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <vpls-signaling-protocol-identifier>
      vpls-signaling-protocol-identifier
    </vpls-signaling-protocol-identifier>
    <local-site-id>
      local-site-id
    </local-site-id>
    <remote-site-id>
      remote-site-id
    </remote-site-id>
    <vpls-id>
      vpls-id
    </vpls-id>
    <l2vpn-id>
      l2vpn-id
    </l2vpn-id>
    <local-id>
      local-id
    </local-id>
    <num-local-interfaces>
      num-local-interfaces
    </num-local-interfaces>
    <num-local-interfaces-up>
      num-local-interfaces-up
    </num-local-interfaces-up>
    <irb-present>
      irb-present
    </irb-present>
    <mesh-group-count>
      mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
      mesh-group-up-count
    </mesh-group-up-count>
    <mesh-group-interfaces>....</mesh-group-interfaces>
    <interface>
      interface
    </interface>
    <connection>....</connection>
    <mesh-group-connection>....</mesh-group-connection>
    <connections-summary>....</connections-summary>
  </ldp-vpls-reference-site>
</instance>
```

Description Information about LDP-VPLS

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<ldp-vpls-reference-site>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <connections-summary>....</connections-summary>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about LDP-VPLS

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<ldp-vpls-reference-site>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <connections-summary>....</connections-summary>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description Information about LDP-VPLS

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<ldp-vpls-reference-site>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <connections-summary>....</connections-summary>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description Information about LDP-VPLS

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<ldp-vpls-reference-site>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <connections-summary>....</connections-summary>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about LDP-VPLS

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<ldp-vpls-reference-site>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <vpls-signaling-protocol-identifier>
          vpls-signaling-protocol-identifier
        </vpls-signaling-protocol-identifier>
        <local-site-id>
          local-site-id
        </local-site-id>
        <remote-site-id>
          remote-site-id
        </remote-site-id>
        <vpls-id>
          vpls-id
        </vpls-id>
        <l2vpn-id>
          l2vpn-id
        </l2vpn-id>
        <local-id>
          local-id
        </local-id>
        <num-local-interfaces>
          num-local-interfaces
        </num-local-interfaces>
        <num-local-interfaces-up>
          num-local-interfaces-up
        </num-local-interfaces-up>
        <irb-present>
          irb-present
        </irb-present>
        <mesh-group-count>
          mesh-group-count
        </mesh-group-count>
        <mesh-group-up-count>
          mesh-group-up-count
        </mesh-group-up-count>
        <mesh-group-interfaces>....</mesh-group-interfaces>
        <interface>
          interface
        </interface>
        <connection>....</connection>
        <mesh-group-connection>....</mesh-group-connection>
        <connections-summary>....</connections-summary>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about LDP-VPLS

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<lm-control-channel-info>

Usage

```
<lm-peer-control-channels>
  <lm-control-channel-info>
    <lm-control-channel>
      lm-control-channel
    </lm-control-channel>
    <lm-control-channel-state>
      lm-control-channel-state
    </lm-control-channel-state>
  </lm-control-channel-info>
</lm-peer-control-channels>
```

Description Link management control channel information

<lm-control-channel-info>

Usage

```
<lm-peer-information>
  <lm-peer-control-channels>
    <lm-control-channel-info>
      <lm-control-channel>
        lm-control-channel
      </lm-control-channel>
      <lm-control-channel-state>
        lm-control-channel-state
      </lm-control-channel-state>
    </lm-control-channel-info>
  </lm-peer-control-channels>
</lm-peer-information>
```

Description Link management control channel information

<lm-control-channel-info>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-control-channels>
      <lm-control-channel-info>
        <lm-control-channel>
          lm-control-channel
        </lm-control-channel>
        <lm-control-channel-state>
          lm-control-channel-state
        </lm-control-channel-state>
      </lm-control-channel-info>
    </lm-peer-control-channels>
  </lm-peer-information>
</lm-peer-root-information>
```

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Description Link management control channel information

<lm-control-channel-info>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-control-channels>
        <lm-control-channel-info>
          <lm-control-channel>
            lm-control-channel
          </lm-control-channel>
          <lm-control-channel-state>
            lm-control-channel-state
          </lm-control-channel-state>
        </lm-control-channel-info>
      </lm-peer-control-channels>
    </lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description Link management control channel information

<lm-information>

Usage

```
<lm-information>
  <lm-peer-root-information>....</lm-peer-root-information>
  <lm-te-link-root-information>....</lm-te-link-root-information>
  <lm-resource-root-information>....</lm-resource-root-information>
</lm-information>
```

Description

<lm-input-statistics>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-input-statistics>
      <lm-received-packets>....</lm-received-packets>
      <lm-received-bad-packets>....</lm-received-bad-packets>
      <lm-received-misordered-packets>....</lm-received-misordered-packets>
      <lm-small-packets>
        lm-small-packets
      </lm-small-packets>
      <lm-bad-version>
        lm-bad-version
      </lm-bad-version>
      <lm-no-peer>
        lm-no-peer
      </lm-no-peer>
```


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```
        <lm-no-cc>
          lm-no-cc
        </lm-no-cc>
        <lm-wrong-state>
          lm-wrong-state
        </lm-wrong-state>
        <lm-stale-ack>
          lm-stale-ack
        </lm-stale-ack>
        <lm-stale-nack>
          lm-stale-nack
        </lm-stale-nack>
      </lm-input-statistics>
    </lm-peer-statistics>
  </lm-statistics-information>
```

Description Input statistics

<lm-lmp-control-channel-flags>

Usage

```
<lm-peer-lmp-control-channels>
  <lm-peer-lmp-control-channel-information>
    <lm-lmp-control-channel-flags>
      <cc-restarting>
        cc-restarting
      </cc-restarting>
    </lm-lmp-control-channel-flags>
  </lm-peer-lmp-control-channel-information>
</lm-peer-lmp-control-channels>
```

Description Peer control channel flags

<lm-lmp-control-channel-flags>

Usage

```
<lm-peer-information>
  <lm-peer-lmp-control-channels>
    <lm-peer-lmp-control-channel-information>
      <lm-lmp-control-channel-flags>
        <cc-restarting>
          cc-restarting
        </cc-restarting>
      </lm-lmp-control-channel-flags>
    </lm-peer-lmp-control-channel-information>
  </lm-peer-lmp-control-channels>
</lm-peer-information>
```

Description Peer control channel flags

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<lm-lmp-control-channel-flags>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-lmp-control-channels>
      <lm-peer-lmp-control-channel-information>
        <lm-lmp-control-channel-flags>
          <cc-restarting>
            cc-restarting
          </cc-restarting>
        </lm-lmp-control-channel-flags>
      </lm-peer-lmp-control-channel-information>
    </lm-peer-lmp-control-channels>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Peer control channel flags

<lm-lmp-control-channel-flags>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-lmp-control-channels>
        <lm-peer-lmp-control-channel-information>
          <lm-lmp-control-channel-flags>
            <cc-restarting>
              cc-restarting
            </cc-restarting>
          </lm-lmp-control-channel-flags>
        </lm-peer-lmp-control-channel-information>
      </lm-peer-lmp-control-channels>
    </lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description Peer control channel flags

<lm-output-statistics>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-output-statistics>
      <lm-sent-packets>....</lm-sent-packets>
      <lm-retransmit-packets>....</lm-retransmit-packets>
      <lm-tossed-packets>....</lm-tossed-packets>
    </lm-output-statistics>
  </lm-peer-statistics>
```


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```
</lm-statistics-information>
```

Description Output statistics

<lm-peer-control-channels>

Usage

```
<lm-peer-control-channels>
  <lm-control-channel-info>....</lm-control-channel-info>
</lm-peer-control-channels>
```

Description Link management control channels

<lm-peer-control-channels>

Usage

```
<lm-peer-information>
  <lm-peer-control-channels>
    <lm-control-channel-info>....</lm-control-channel-info>
  </lm-peer-control-channels>
</lm-peer-information>
```

Description Link management control channels

<lm-peer-control-channels>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-control-channels>
      <lm-control-channel-info>....</lm-control-channel-info>
    </lm-peer-control-channels>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Link management control channels

<lm-peer-control-channels>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-control-channels>
        <lm-control-channel-info>....</lm-control-channel-info>
      </lm-peer-control-channels>
    </lm-peer-information>
  </lm-peer-root-information>
```

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```
</lm-information>
```

Description Link management control channels

<lm-peer-information>

Usage

```
<lm-peer-information>
  <lm-source>
    lm-source
  </lm-source>
  <lm-sys-id>
    lm-sys-id
  </lm-sys-id>
  <lm-peer-name>
    lm-peer-name
  </lm-peer-name>
  <lm-state>
    lm-state
  </lm-state>
  <lm-peer-control-address>
    lm-peer-control-address
  </lm-peer-control-address>
  <lm-peer-hello-interval>
    lm-peer-hello-interval
  </lm-peer-hello-interval>
  <lm-peer-hello-dead-interval>
    lm-peer-hello-dead-interval
  </lm-peer-hello-dead-interval>
  <lm-peer-received-message-id>
    lm-peer-received-message-id
  </lm-peer-received-message-id>
  <lm-peer-sent-message-id>
    lm-peer-sent-message-id
  </lm-peer-sent-message-id>
  <lm-peer-control-channels>....</lm-peer-control-channels>
  <lm-peer-lmp-control-channels>....</lm-peer-lmp-control-channels>
  <lm-peer-te-links>....</lm-peer-te-links>
</lm-peer-information>
```

Description

<lm-peer-information>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-source>
      lm-source
    </lm-source>
    <lm-sys-id>
      lm-sys-id
    </lm-sys-id>
```


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```
    <lm-peer-name>
      lm-peer-name
    </lm-peer-name>
    <lm-state>
      lm-state
    </lm-state>
    <lm-peer-control-address>
      lm-peer-control-address
    </lm-peer-control-address>
    <lm-peer-hello-interval>
      lm-peer-hello-interval
    </lm-peer-hello-interval>
    <lm-peer-hello-dead-interval>
      lm-peer-hello-dead-interval
    </lm-peer-hello-dead-interval>
    <lm-peer-received-message-id>
      lm-peer-received-message-id
    </lm-peer-received-message-id>
    <lm-peer-sent-message-id>
      lm-peer-sent-message-id
    </lm-peer-sent-message-id>
    <lm-peer-control-channels>....</lm-peer-control-channels>
    <lm-peer-lmp-control-channels>....</lm-peer-lmp-control-channels>
    <lm-peer-te-links>....</lm-peer-te-links>
  </lm-peer-information>
</lm-peer-root-information>
```

Description

<lm-peer-information>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-source>
        lm-source
      </lm-source>
      <lm-sys-id>
        lm-sys-id
      </lm-sys-id>
      <lm-peer-name>
        lm-peer-name
      </lm-peer-name>
      <lm-state>
        lm-state
      </lm-state>
      <lm-peer-control-address>
        lm-peer-control-address
      </lm-peer-control-address>
      <lm-peer-hello-interval>
        lm-peer-hello-interval
      </lm-peer-hello-interval>
      <lm-peer-hello-dead-interval>
        lm-peer-hello-dead-interval
```

```
    </lm-peer-hello-dead-interval>
    <lm-peer-received-message-id>
     lm-peer-received-message-id
    </lm-peer-received-message-id>
    <lm-peer-sent-message-id>
     lm-peer-sent-message-id
    </lm-peer-sent-message-id>
    <lm-peer-control-channels>....</lm-peer-control-channels>
    <lm-peer-lmp-control-channels>....</lm-peer-lmp-control-channels>
    <lm-peer-te-links>....</lm-peer-te-links>
   </lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description

<lm-peer-lmp-control-channel-information>

Usage

```
<lm-peer-lmp-control-channels>
 <lm-peer-lmp-control-channel-information>
  <lm-lmp-control-channel-local-id>
   lm-lmp-control-channel-local-id
  </lm-lmp-control-channel-local-id>
  <lm-lmp-control-channel-remote-id>
   lm-lmp-control-channel-remote-id
  </lm-lmp-control-channel-remote-id>
  <lm-lmp-control-channel-state>
   lm-lmp-control-channel-state
  </lm-lmp-control-channel-state>
  <lm-lmp-control-channel-flags>....</lm-lmp-control-channel-flags>
  <lm-lmp-control-channel-received-message-id>
   lm-lmp-control-channel-received-message-id
  </lm-lmp-control-channel-received-message-id>
  <lm-lmp-control-channel-sent-message-id>
   lm-lmp-control-channel-sent-message-id
  </lm-lmp-control-channel-sent-message-id>
  <lm-lmp-control-channel-rcv-seq-num>
   lm-lmp-control-channel-rcv-seq-num
  </lm-lmp-control-channel-rcv-seq-num>
  <lm-lmp-control-channel-tx-seq-num>
   lm-lmp-control-channel-tx-seq-num
  </lm-lmp-control-channel-tx-seq-num>
 </lm-peer-lmp-control-channel-information>
</lm-peer-lmp-control-channels>
```

Description Link management control channel information

<lm-peer-lmp-control-channel-information>

Usage

```
<lm-peer-information>
 <lm-peer-lmp-control-channels>
```


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```
<lm-peer-lmp-control-channel-information>
 <lm-lmp-control-channel-local-id>
  lm-lmp-control-channel-local-id
 </lm-lmp-control-channel-local-id>
 <lm-lmp-control-channel-remote-id>
  lm-lmp-control-channel-remote-id
 </lm-lmp-control-channel-remote-id>
 <lm-lmp-control-channel-state>
  lm-lmp-control-channel-state
 </lm-lmp-control-channel-state>
 <lm-lmp-control-channel-flags>....</lm-lmp-control-channel-flags>
 <lm-lmp-control-channel-received-message-id>
  lm-lmp-control-channel-received-message-id
 </lm-lmp-control-channel-received-message-id>
 <lm-lmp-control-channel-sent-message-id>
  lm-lmp-control-channel-sent-message-id
 </lm-lmp-control-channel-sent-message-id>
 <lm-lmp-control-channel-rcv-seq-num>
  lm-lmp-control-channel-rcv-seq-num
 </lm-lmp-control-channel-rcv-seq-num>
 <lm-lmp-control-channel-tx-seq-num>
  lm-lmp-control-channel-tx-seq-num
 </lm-lmp-control-channel-tx-seq-num>
</lm-peer-lmp-control-channel-information>
</lm-peer-lmp-control-channels>
</lm-peer-information>
```

Description Link management control channel information

<lm-peer-lmp-control-channel-information>

Usage

```
<lm-peer-root-information>
 <lm-peer-information>
  <lm-peer-lmp-control-channels>
   <lm-peer-lmp-control-channel-information>
    <lm-lmp-control-channel-local-id>
     lm-lmp-control-channel-local-id
    </lm-lmp-control-channel-local-id>
    <lm-lmp-control-channel-remote-id>
     lm-lmp-control-channel-remote-id
    </lm-lmp-control-channel-remote-id>
    <lm-lmp-control-channel-state>
     lm-lmp-control-channel-state
    </lm-lmp-control-channel-state>
    <lm-lmp-control-channel-flags>....</lm-lmp-control-channel-flags>
    <lm-lmp-control-channel-received-message-id>
     lm-lmp-control-channel-received-message-id
    </lm-lmp-control-channel-received-message-id>
    <lm-lmp-control-channel-sent-message-id>
     lm-lmp-control-channel-sent-message-id
    </lm-lmp-control-channel-sent-message-id>
    <lm-lmp-control-channel-rcv-seq-num>
     lm-lmp-control-channel-rcv-seq-num
```

```
        </lm-lmp-control-channel-rcv-seq-num>
        <lm-lmp-control-channel-tx-seq-num>
          lm-lmp-control-channel-tx-seq-num
        </lm-lmp-control-channel-tx-seq-num>
      </lm-peer-lmp-control-channel-information>
    </lm-peer-lmp-control-channels>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Link management control channel information

<lm-peer-lmp-control-channel-information>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-lmp-control-channels>
        <lm-peer-lmp-control-channel-information>
          <lm-lmp-control-channel-local-id>
            lm-lmp-control-channel-local-id
          </lm-lmp-control-channel-local-id>
          <lm-lmp-control-channel-remote-id>
            lm-lmp-control-channel-remote-id
          </lm-lmp-control-channel-remote-id>
          <lm-lmp-control-channel-state>
            lm-lmp-control-channel-state
          </lm-lmp-control-channel-state>
          <lm-lmp-control-channel-flags>....</lm-lmp-control-channel-flags>
          <lm-lmp-control-channel-received-message-id>
            lm-lmp-control-channel-received-message-id
          </lm-lmp-control-channel-received-message-id>
          <lm-lmp-control-channel-sent-message-id>
            lm-lmp-control-channel-sent-message-id
          </lm-lmp-control-channel-sent-message-id>
          <lm-lmp-control-channel-rcv-seq-num>
            lm-lmp-control-channel-rcv-seq-num
          </lm-lmp-control-channel-rcv-seq-num>
          <lm-lmp-control-channel-tx-seq-num>
            lm-lmp-control-channel-tx-seq-num
          </lm-lmp-control-channel-tx-seq-num>
        </lm-peer-lmp-control-channel-information>
      </lm-peer-lmp-control-channels>
    </lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description Link management control channel information

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<lm-peer-lmp-control-channels>

Usage

```
<lm-peer-lmp-control-channels>

<lm-peer-lmp-control-channel-information>....</lm-peer-lmp-control-channel-information>

</lm-peer-lmp-control-channels>
```

Description Link management control channels

<lm-peer-lmp-control-channels>

Usage

```
<lm-peer-information>
  <lm-peer-lmp-control-channels>

<lm-peer-lmp-control-channel-information>....</lm-peer-lmp-control-channel-information>

  </lm-peer-lmp-control-channels>
</lm-peer-information>
```

Description Link management control channels

<lm-peer-lmp-control-channels>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-lmp-control-channels>

<lm-peer-lmp-control-channel-information>....</lm-peer-lmp-control-channel-information>

    </lm-peer-lmp-control-channels>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Link management control channels

<lm-peer-lmp-control-channels>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-lmp-control-channels>

<lm-peer-lmp-control-channel-information>....</lm-peer-lmp-control-channel-information>

      </lm-peer-lmp-control-channels>
```

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```
    </lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description Link management control channels

<lm-peer-root-information>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>....</lm-peer-information>
</lm-peer-root-information>
```

Description

<lm-peer-root-information>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>....</lm-peer-information>
  </lm-peer-root-information>
</lm-information>
```

Description

<lm-peer-statistics>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-peer-name>
      lm-peer-name
    </lm-peer-name>
    <lm-input-statistics>....</lm-input-statistics>
    <lm-output-statistics>....</lm-output-statistics>
  </lm-peer-statistics>
</lm-statistics-information>
```

Description

<lm-peer-te-link-information>

Usage

```
<lm-peer-te-links>
  <lm-peer-te-link-information>
    <lm-peer-te-link>
      lm-peer-te-link
    </lm-peer-te-link>
  </lm-peer-te-link-information>
```


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```
</lm-peer-te-links>
```

Description Link management peer TE link information

<lm-peer-te-link-information>

Usage

```
<lm-peer-information>
  <lm-peer-te-links>
    <lm-peer-te-link-information>
      <lm-peer-te-link>
        lm-peer-te-link
      </lm-peer-te-link>
    </lm-peer-te-link-information>
  </lm-peer-te-links>
</lm-peer-information>
```

Description Link management peer TE link information

<lm-peer-te-link-information>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-te-links>
      <lm-peer-te-link-information>
        <lm-peer-te-link>
          lm-peer-te-link
        </lm-peer-te-link>
      </lm-peer-te-link-information>
    </lm-peer-te-links>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Link management peer TE link information

<lm-peer-te-link-information>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-te-links>
        <lm-peer-te-link-information>
          <lm-peer-te-link>
            lm-peer-te-link
          </lm-peer-te-link>
        </lm-peer-te-link-information>
      </lm-peer-te-links>
    </lm-peer-information>
  </lm-peer-root-information>
```

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```
</lm-information>
```

Description Link management peer TE link information

<lm-peer-te-links>

Usage

```
<lm-peer-te-links>
  <lm-peer-te-link-information>....</lm-peer-te-link-information>
</lm-peer-te-links>
```

Description Link management peer TE links

<lm-peer-te-links>

Usage

```
<lm-peer-information>
  <lm-peer-te-links>
    <lm-peer-te-link-information>....</lm-peer-te-link-information>
  </lm-peer-te-links>
</lm-peer-information>
```

Description Link management peer TE links

<lm-peer-te-links>

Usage

```
<lm-peer-root-information>
  <lm-peer-information>
    <lm-peer-te-links>
      <lm-peer-te-link-information>....</lm-peer-te-link-information>
    </lm-peer-te-links>
  </lm-peer-information>
</lm-peer-root-information>
```

Description Link management peer TE links

<lm-peer-te-links>

Usage

```
<lm-information>
  <lm-peer-root-information>
    <lm-peer-information>
      <lm-peer-te-links>
        <lm-peer-te-link-information>....</lm-peer-te-link-information>
      </lm-peer-te-links>
    </lm-peer-information>
  </lm-peer-root-information>
```


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```
</lm-information>
```

Description Link management peer TE links

<lm-received-bad-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-input-statistics>
      <lm-received-bad-packets>
        <lm-packet-type>
          lm-packet-type
        </lm-packet-type>
        <lm-packet-count>
          lm-packet-count
        </lm-packet-count>
      </lm-received-bad-packets>
    </lm-input-statistics>
  </lm-peer-statistics>
</lm-statistics-information>
```

Description Number of bad packets received

<lm-received-misordered-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-input-statistics>
      <lm-received-misordered-packets>
        <lm-packet-type>
          lm-packet-type
        </lm-packet-type>
        <lm-packet-count>
          lm-packet-count
        </lm-packet-count>
      </lm-received-misordered-packets>
    </lm-input-statistics>
  </lm-peer-statistics>
</lm-statistics-information>
```

Description Number of out-of-order packets received

<lm-received-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-input-statistics>
      <lm-received-packets>
```

```
            <lm-packet-type>
              lm-packet-type
            </lm-packet-type>
            <lm-packet-count>
              lm-packet-count
            </lm-packet-count>
          </lm-received-packets>
        </lm-input-statistics>
      </lm-peer-statistics>
    </lm-statistics-information>
```

Description Number of packets received

<lm-resource>

Usage

```
<lm-resource-root-information>
  <lm-resource>
    <lm-resource-name>
      lm-resource-name
    </lm-resource-name>
    <lm-resource-type>
      lm-resource-type
    </lm-resource-type>
    <lm-resource-state>
      lm-resource-state
    </lm-resource-state>
    <lm-sys-id>
      lm-sys-id
    </lm-sys-id>
    <lm-resource-max-allocations>
      lm-resource-max-allocations
    </lm-resource-max-allocations>
    <lm-resource-bandwidth>
      lm-resource-bandwidth
    </lm-resource-bandwidth>
    <lm-resource-traffic-params>
      lm-resource-traffic-params
    </lm-resource-traffic-params>
  </lm-resource>
</lm-resource-root-information>
```

Description

<lm-resource>

Usage

```
<lm-information>
  <lm-resource-root-information>
    <lm-resource>
      <lm-resource-name>
        lm-resource-name
      </lm-resource-name>
```


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```
      <lm-resource-type>
       lm-resource-type
      </lm-resource-type>
      <lm-resource-state>
       lm-resource-state
      </lm-resource-state>
      <lm-sys-id>
       lm-sys-id
      </lm-sys-id>
      <lm-resource-max-allocations>
       lm-resource-max-allocations
      </lm-resource-max-allocations>
      <lm-resource-bandwidth>
       lm-resource-bandwidth
      </lm-resource-bandwidth>
      <lm-resource-traffic-params>
       lm-resource-traffic-params
      </lm-resource-traffic-params>
     </lm-resource>
    </lm-resource-root-information>
</lm-information>
```

Description

<lm-resource-allocation-context>

Usage

```
<lm-resource-allocation-context>
 <lm-allocated-bandwidth>
  lm-allocated-bandwidth
 </lm-allocated-bandwidth>
 <lm-allocated-lsp-name>
  lm-allocated-lsp-name
 </lm-allocated-lsp-name>
 <lm-local-label>
  lm-local-label
 </lm-local-label>
 <lm-remote-label>
  lm-remote-label
 </lm-remote-label>
</lm-resource-allocation-context>
```

Description

<lm-resource-allocation-context>

Usage

```
<lm-te-link-resource>
 <lm-resource-allocation-context>
  <lm-allocated-bandwidth>
   lm-allocated-bandwidth
  </lm-allocated-bandwidth>
  <lm-allocated-lsp-name>
   lm-allocated-lsp-name
```

```
    </lm-allocated-lsp-name>
    <lm-local-label>
     lm-local-label
    </lm-local-label>
    <lm-remote-label>
     lm-remote-label
    </lm-remote-label>
   </lm-resource-allocation-context>
  </lm-te-link-resource>
```

Description

<lm-resource-allocation-context>

Usage

```
<lm-te-link-information>
 <lm-te-link-resources>
  <lm-te-link-resource>
   <lm-resource-allocation-context>
    <lm-allocated-bandwidth>
     lm-allocated-bandwidth
    </lm-allocated-bandwidth>
    <lm-allocated-lsp-name>
     lm-allocated-lsp-name
    </lm-allocated-lsp-name>
    <lm-local-label>
     lm-local-label
    </lm-local-label>
    <lm-remote-label>
     lm-remote-label
    </lm-remote-label>
   </lm-resource-allocation-context>
  </lm-te-link-resource>
 </lm-te-link-resources>
</lm-te-link-information>
```

Description

<lm-resource-allocation-context>

Usage

```
<lm-te-link-root-information>
 <lm-te-link-information>
  <lm-te-link-resources>
   <lm-te-link-resource>
    <lm-resource-allocation-context>
     <lm-allocated-bandwidth>
      lm-allocated-bandwidth
     </lm-allocated-bandwidth>
     <lm-allocated-lsp-name>
      lm-allocated-lsp-name
     </lm-allocated-lsp-name>
     <lm-local-label>
      lm-local-label
```


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```
        </lm-local-label>
        <lm-remote-label>
          lm-remote-label
        </lm-remote-label>
      </lm-resource-allocation-context>
    </lm-te-link-resource>
  </lm-te-link-resources>
 </lm-te-link-information>
</lm-te-link-root-information>
```

Description

<lm-resource-allocation-context>

Usage

```
<lm-information>
 <lm-te-link-root-information>
  <lm-te-link-information>
   <lm-te-link-resources>
    <lm-te-link-resource>
     <lm-resource-allocation-context>
      <lm-allocated-bandwidth>
       lm-allocated-bandwidth
      </lm-allocated-bandwidth>
      <lm-allocated-lsp-name>
       lm-allocated-lsp-name
      </lm-allocated-lsp-name>
      <lm-local-label>
       lm-local-label
      </lm-local-label>
      <lm-remote-label>
       lm-remote-label
      </lm-remote-label>
     </lm-resource-allocation-context>
    </lm-te-link-resource>
   </lm-te-link-resources>
  </lm-te-link-information>
 </lm-te-link-root-information>
</lm-information>
```

Description

<lm-resource-root-information>

Usage

```
<lm-resource-root-information>
 <lm-source>
  lm-source
 </lm-source>
 <lm-resource>....</lm-resource>
</lm-resource-root-information>
```

Description

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<lm-resource-root-information>

Usage

```
<lm-information>
  <lm-resource-root-information>
    <lm-source>
      lm-source
    </lm-source>
    <lm-resource>....</lm-resource>
  </lm-resource-root-information>
</lm-information>
```

Description

<lm-retransmit-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-output-statistics>
      <lm-retransmit-packets>
        <lm-packet-type>
          lm-packet-type
        </lm-packet-type>
        <lm-packet-count>
          lm-packet-count
        </lm-packet-count>
      </lm-retransmit-packets>
    </lm-output-statistics>
  </lm-peer-statistics>
</lm-statistics-information>
```

Description Number of packets retransmitted

<lm-sent-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-output-statistics>
      <lm-sent-packets>
        <lm-packet-type>
          lm-packet-type
        </lm-packet-type>
        <lm-packet-count>
          lm-packet-count
        </lm-packet-count>
      </lm-sent-packets>
    </lm-output-statistics>
  </lm-peer-statistics>
</lm-statistics-information>
```


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Description Number of packets sent

<lm-statistics-information>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>....</lm-peer-statistics>
</lm-statistics-information>
```

Description

<lm-te-link-information>

Usage

```
<lm-te-link-information>
  <lm-te-link-name>
    lm-te-link-name
  </lm-te-link-name>
  <lm-local-id>
    lm-local-id
  </lm-local-id>
  <lm-remote-id>
    lm-remote-id
  </lm-remote-id>
  <lm-state>
    lm-state
  </lm-state>
  <lm-te-link-flags>
    lm-te-link-flags
  </lm-te-link-flags>
  <lm-te-link-local-flags>....</lm-te-link-local-flags>
  <lm-local-address>
    lm-local-address
  </lm-local-address>
  <lm-remote-address>
    lm-remote-address
  </lm-remote-address>
  <lm-encoding>
    lm-encoding
  </lm-encoding>
  <lm-switching>
    lm-switching
  </lm-switching>
  <lm-min-bandwidth>
    lm-min-bandwidth
  </lm-min-bandwidth>
  <lm-max-bandwidth>
    lm-max-bandwidth
  </lm-max-bandwidth>
  <lm-total-bandwidth>
    lm-total-bandwidth
  </lm-total-bandwidth>
  <lm-avail-bandwidth>
    lm-avail-bandwidth
```

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```
  </lm-avail-bandwidth>
  <lm-te-link-resources>....</lm-te-link-resources>
</lm-te-link-information>
```

Description

<lm-te-link-information>

Usage

```
<lm-te-link-root-information>
  <lm-te-link-information>
    <lm-te-link-name>
      lm-te-link-name
    </lm-te-link-name>
    <lm-local-id>
      lm-local-id
    </lm-local-id>
    <lm-remote-id>
      lm-remote-id
    </lm-remote-id>
    <lm-state>
      lm-state
    </lm-state>
    <lm-te-link-flags>
      lm-te-link-flags
    </lm-te-link-flags>
    <lm-te-link-local-flags>....</lm-te-link-local-flags>
    <lm-local-address>
      lm-local-address
    </lm-local-address>
    <lm-remote-address>
      lm-remote-address
    </lm-remote-address>
    <lm-encoding>
      lm-encoding
    </lm-encoding>
    <lm-switching>
      lm-switching
    </lm-switching>
    <lm-min-bandwidth>
      lm-min-bandwidth
    </lm-min-bandwidth>
    <lm-max-bandwidth>
      lm-max-bandwidth
    </lm-max-bandwidth>
    <lm-total-bandwidth>
      lm-total-bandwidth
    </lm-total-bandwidth>
    <lm-avail-bandwidth>
      lm-avail-bandwidth
    </lm-avail-bandwidth>
    <lm-te-link-resources>....</lm-te-link-resources>
  </lm-te-link-information>
</lm-te-link-root-information>
```


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Description

<lm-te-link-information>

Usage

```
<lm-information>
  <lm-te-link-root-information>
    <lm-te-link-information>
      <lm-te-link-name>
        lm-te-link-name
      </lm-te-link-name>
      <lm-local-id>
        lm-local-id
      </lm-local-id>
      <lm-remote-id>
        lm-remote-id
      </lm-remote-id>
      <lm-state>
        lm-state
      </lm-state>
      <lm-te-link-flags>
        lm-te-link-flags
      </lm-te-link-flags>
      <lm-te-link-local-flags>....</lm-te-link-local-flags>
      <lm-local-address>
        lm-local-address
      </lm-local-address>
      <lm-remote-address>
        lm-remote-address
      </lm-remote-address>
      <lm-encoding>
        lm-encoding
      </lm-encoding>
      <lm-switching>
        lm-switching
      </lm-switching>
      <lm-min-bandwidth>
        lm-min-bandwidth
      </lm-min-bandwidth>
      <lm-max-bandwidth>
        lm-max-bandwidth
      </lm-max-bandwidth>
      <lm-total-bandwidth>
        lm-total-bandwidth
      </lm-total-bandwidth>
      <lm-avail-bandwidth>
        lm-avail-bandwidth
      </lm-avail-bandwidth>
      <lm-te-link-resources>....</lm-te-link-resources>
    </lm-te-link-information>
  </lm-te-link-root-information>
</lm-information>
```

Description

<lm-te-link-local-flags>

Usage

```
<lm-te-link-local-flags>
  <lm-te-link-nack-sent-flag>
    lm-te-link-nack-sent-flag
  </lm-te-link-nack-sent-flag>
</lm-te-link-local-flags>
```

Description

<lm-te-link-local-flags>

Usage

```
<lm-te-link-information>
  <lm-te-link-local-flags>
    <lm-te-link-nack-sent-flag>
      lm-te-link-nack-sent-flag
    </lm-te-link-nack-sent-flag>
  </lm-te-link-local-flags>
</lm-te-link-information>
```

Description

<lm-te-link-local-flags>

Usage

```
<lm-te-link-root-information>
  <lm-te-link-information>
    <lm-te-link-local-flags>
      <lm-te-link-nack-sent-flag>
        lm-te-link-nack-sent-flag
      </lm-te-link-nack-sent-flag>
    </lm-te-link-local-flags>
  </lm-te-link-information>
</lm-te-link-root-information>
```

Description

<lm-te-link-local-flags>

Usage

```
<lm-information>
  <lm-te-link-root-information>
    <lm-te-link-information>
      <lm-te-link-local-flags>
        <lm-te-link-nack-sent-flag>
          lm-te-link-nack-sent-flag
        </lm-te-link-nack-sent-flag>
      </lm-te-link-local-flags>
    </lm-te-link-information>
  </lm-te-link-root-information>
```


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```
</lm-information>
```

Description

<lm-te-link-resource>

Usage

```
<lm-te-link-resource>
  <lm-resource-name>
    lm-resource-name
  </lm-resource-name>
  <lm-resource-type>
    lm-resource-type
  </lm-resource-type>
  <lm-sys-id>
    lm-sys-id
  </lm-sys-id>
  <lm-resource-state>
    lm-resource-state
  </lm-resource-state>
  <lm-resource-flags>
    lm-resource-flags
  </lm-resource-flags>
  <lm-resource-local-id>
    lm-resource-local-id
  </lm-resource-local-id>
  <lm-resource-remote-id>
    lm-resource-remote-id
  </lm-resource-remote-id>
  <lm-resource-local-addr>
    lm-resource-local-addr
  </lm-resource-local-addr>
  <lm-resource-remote-addr>
    lm-resource-remote-addr
  </lm-resource-remote-addr>
  <lm-resource-bandwidth>
    lm-resource-bandwidth
  </lm-resource-bandwidth>
  <lm-resource-avail-bandwidth>
    lm-resource-avail-bandwidth
  </lm-resource-avail-bandwidth>
  <lm-resource-traffic-params>
    lm-resource-traffic-params
  </lm-resource-traffic-params>
  <lm-resource-max-allocations>
    lm-resource-max-allocations
  </lm-resource-max-allocations>
  <lm-resource-num-allocations>
    lm-resource-num-allocations
  </lm-resource-num-allocations>
  <lm-resource-in-use>
    lm-resource-in-use
  </lm-resource-in-use>
  <lm-resource-lsp-name>
    lm-resource-lsp-name
```

```
  </lm-resource-lsp-name>
  <lm-resource-allocation-context>....</lm-resource-allocation-context>
</lm-te-link-resource>
```

Description

<lm-te-link-resource>

Usage

```
<lm-te-link-information>
  <lm-te-link-resources>
    <lm-te-link-resource>
      <lm-resource-name>
        lm-resource-name
      </lm-resource-name>
      <lm-resource-type>
        lm-resource-type
      </lm-resource-type>
      <lm-sys-id>
        lm-sys-id
      </lm-sys-id>
      <lm-resource-state>
        lm-resource-state
      </lm-resource-state>
      <lm-resource-flags>
        lm-resource-flags
      </lm-resource-flags>
      <lm-resource-local-id>
        lm-resource-local-id
      </lm-resource-local-id>
      <lm-resource-remote-id>
        lm-resource-remote-id
      </lm-resource-remote-id>
      <lm-resource-local-addr>
        lm-resource-local-addr
      </lm-resource-local-addr>
      <lm-resource-remote-addr>
        lm-resource-remote-addr
      </lm-resource-remote-addr>
      <lm-resource-bandwidth>
        lm-resource-bandwidth
      </lm-resource-bandwidth>
      <lm-resource-avail-bandwidth>
        lm-resource-avail-bandwidth
      </lm-resource-avail-bandwidth>
      <lm-resource-traffic-params>
        lm-resource-traffic-params
      </lm-resource-traffic-params>
      <lm-resource-max-allocations>
        lm-resource-max-allocations
      </lm-resource-max-allocations>
      <lm-resource-num-allocations>
        lm-resource-num-allocations
      </lm-resource-num-allocations>
      <lm-resource-in-use>
```


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```
        lm-resource-in-use
       </lm-resource-in-use>
       <lm-resource-lsp-name>
        lm-resource-lsp-name
       </lm-resource-lsp-name>
       <lm-resource-allocation-context>....</lm-resource-allocation-context>
      </lm-te-link-resource>
     </lm-te-link-resources>
    </lm-te-link-information>
```

Description

<lm-te-link-resource>

Usage

```
<lm-te-link-root-information>
 <lm-te-link-information>
  <lm-te-link-resources>
   <lm-te-link-resource>
    <lm-resource-name>
     lm-resource-name
    </lm-resource-name>
    <lm-resource-type>
     lm-resource-type
    </lm-resource-type>
    <lm-sys-id>
     lm-sys-id
    </lm-sys-id>
    <lm-resource-state>
     lm-resource-state
    </lm-resource-state>
    <lm-resource-flags>
     lm-resource-flags
    </lm-resource-flags>
    <lm-resource-local-id>
     lm-resource-local-id
    </lm-resource-local-id>
    <lm-resource-remote-id>
     lm-resource-remote-id
    </lm-resource-remote-id>
    <lm-resource-local-addr>
     lm-resource-local-addr
    </lm-resource-local-addr>
    <lm-resource-remote-addr>
     lm-resource-remote-addr
    </lm-resource-remote-addr>
    <lm-resource-bandwidth>
     lm-resource-bandwidth
    </lm-resource-bandwidth>
    <lm-resource-avail-bandwidth>
     lm-resource-avail-bandwidth
    </lm-resource-avail-bandwidth>
    <lm-resource-traffic-params>
     lm-resource-traffic-params
    </lm-resource-traffic-params>
```

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```
        <lm-resource-max-allocations>
          lm-resource-max-allocations
        </lm-resource-max-allocations>
        <lm-resource-num-allocations>
          lm-resource-num-allocations
        </lm-resource-num-allocations>
        <lm-resource-in-use>
          lm-resource-in-use
        </lm-resource-in-use>
        <lm-resource-lsp-name>
          lm-resource-lsp-name
        </lm-resource-lsp-name>
        <lm-resource-allocation-context>....</lm-resource-allocation-context>
      </lm-te-link-resource>
    </lm-te-link-resources>
  </lm-te-link-information>
</lm-te-link-root-information>
```

Description

<lm-te-link-resource>

Usage

```
<lm-information>
  <lm-te-link-root-information>
    <lm-te-link-information>
      <lm-te-link-resources>
        <lm-te-link-resource>
          <lm-resource-name>
            lm-resource-name
          </lm-resource-name>
          <lm-resource-type>
            lm-resource-type
          </lm-resource-type>
          <lm-sys-id>
            lm-sys-id
          </lm-sys-id>
          <lm-resource-state>
            lm-resource-state
          </lm-resource-state>
          <lm-resource-flags>
            lm-resource-flags
          </lm-resource-flags>
          <lm-resource-local-id>
            lm-resource-local-id
          </lm-resource-local-id>
          <lm-resource-remote-id>
            lm-resource-remote-id
          </lm-resource-remote-id>
          <lm-resource-local-addr>
            lm-resource-local-addr
          </lm-resource-local-addr>
          <lm-resource-remote-addr>
            lm-resource-remote-addr
          </lm-resource-remote-addr>
```


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```
        <lm-resource-bandwidth>
          lm-resource-bandwidth
        </lm-resource-bandwidth>
        <lm-resource-avail-bandwidth>
          lm-resource-avail-bandwidth
        </lm-resource-avail-bandwidth>
        <lm-resource-traffic-params>
          lm-resource-traffic-params
        </lm-resource-traffic-params>
        <lm-resource-max-allocations>
          lm-resource-max-allocations
        </lm-resource-max-allocations>
        <lm-resource-num-allocations>
          lm-resource-num-allocations
        </lm-resource-num-allocations>
        <lm-resource-in-use>
          lm-resource-in-use
        </lm-resource-in-use>
        <lm-resource-lsp-name>
          lm-resource-lsp-name
        </lm-resource-lsp-name>
        <lm-resource-allocation-context>....</lm-resource-allocation-context>
      </lm-te-link-resource>
    </lm-te-link-resources>
  </lm-te-link-information>
 </lm-te-link-root-information>
</lm-information>
```

Description

<lm-te-link-resources>

Usage

```
<lm-te-link-information>
 <lm-te-link-resources>
  <lm-te-link-resource>....</lm-te-link-resource>
 </lm-te-link-resources>
</lm-te-link-information>
```

Description

<lm-te-link-resources>

Usage

```
<lm-te-link-root-information>
 <lm-te-link-information>
  <lm-te-link-resources>
   <lm-te-link-resource>....</lm-te-link-resource>
  </lm-te-link-resources>
 </lm-te-link-information>
</lm-te-link-root-information>
```

Description

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<lm-te-link-resources>

Usage

```
<lm-information>
  <lm-te-link-root-information>
    <lm-te-link-information>
      <lm-te-link-resources>
        <lm-te-link-resource>....</lm-te-link-resource>
      </lm-te-link-resources>
    </lm-te-link-information>
  </lm-te-link-root-information>
</lm-information>
```

Description

<lm-te-link-root-information>

Usage

```
<lm-te-link-root-information>
  <lm-te-link-information>....</lm-te-link-information>
</lm-te-link-root-information>
```

Description

<lm-te-link-root-information>

Usage

```
<lm-information>
  <lm-te-link-root-information>
    <lm-te-link-information>....</lm-te-link-information>
  </lm-te-link-root-information>
</lm-information>
```

Description

<lm-tossed-packets>

Usage

```
<lm-statistics-information>
  <lm-peer-statistics>
    <lm-output-statistics>
      <lm-tossed-packets>
        <lm-packet-type>
          lm-packet-type
        </lm-packet-type>
        <lm-packet-count>
          lm-packet-count
        </lm-packet-count>
      </lm-tossed-packets>
    </lm-output-statistics>
  </lm-peer-statistics>
```


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```
</lm-statistics-information>
```

Description Number of messages which failed retransmission

<local-asn>

Usage

```
<aspath-domain>
  <local-asn>
    <asn>
      asn
    </asn>
    <as-loops>
      as-loops
    </as-loops>
  </local-asn>
</aspath-domain>
```

Description

<local-asn>

Usage

```
<juniper-routing-aspath>
  <aspath-domain>
    <local-asn>
      <asn>
        asn
      </asn>
      <as-loops>
        as-loops
      </as-loops>
    </local-asn>
  </aspath-domain>
</juniper-routing-aspath>
```

Description

<local-interface>

Usage

```
<connection>
  <local-interface>
    <interface-name>
      interface-name
    </interface-name>
    <interface-status>
      interface-status
    </interface-status>
    <interface-encapsulation>
      interface-encapsulation
    </interface-encapsulation>
```

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```
    <working-status>
      working-status
    </working-status>
    <profile-name>
      profile-name
    </profile-name>
    <profile-varset-name>
      profile-varset-name
    </profile-varset-name>
    <interface-description>
      interface-description
    </interface-description>
  </local-interface>
</connection>
```

Description

<local-interface>

Usage

```
<mesh-group-connection>
  <connection>
    <local-interface>
      <interface-name>
        interface-name
      </interface-name>
      <interface-status>
        interface-status
      </interface-status>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <working-status>
        working-status
      </working-status>
      <profile-name>
        profile-name
      </profile-name>
      <profile-varset-name>
        profile-varset-name
      </profile-varset-name>
      <interface-description>
        interface-description
      </interface-description>
    </local-interface>
  </connection>
</mesh-group-connection>
```

Description

<local-interface>

Usage

```
<instance>
```


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```
  <reference-site>
    <connection>
      <local-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-status>
          interface-status
        </interface-status>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
        <working-status>
          working-status
        </working-status>
        <profile-name>
          profile-name
        </profile-name>
        <profile-varset-name>
          profile-varset-name
        </profile-varset-name>
        <interface-description>
          interface-description
        </interface-description>
      </local-interface>
    </connection>
  </reference-site>
</instance>
```

Description

<local-interface>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
```

```
                profile-varset-name
               </profile-varset-name>
               <interface-description>
                interface-description
               </interface-description>
              </local-interface>
             </connection>
            </mesh-group-connection>
           </reference-site>
          </instance>
```

Description

<local-interface>

Usage

```
<instance>
 <ldp-vpls-reference-site>
  <connection>
   <local-interface>
    <interface-name>
     interface-name
    </interface-name>
    <interface-status>
     interface-status
    </interface-status>
    <interface-encapsulation>
     interface-encapsulation
    </interface-encapsulation>
    <working-status>
     working-status
    </working-status>
    <profile-name>
     profile-name
    </profile-name>
    <profile-varset-name>
     profile-varset-name
    </profile-varset-name>
    <interface-description>
     interface-description
    </interface-description>
   </local-interface>
  </connection>
 </ldp-vpls-reference-site>
</instance>
```

Description

<local-interface>

Usage

```
<instance>
 <ldp-vpls-reference-site>
  <mesh-group-connection>
```


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```
      <connection>
       <local-interface>
        <interface-name>
         interface-name
        </interface-name>
        <interface-status>
         interface-status
        </interface-status>
        <interface-encapsulation>
         interface-encapsulation
        </interface-encapsulation>
        <working-status>
         working-status
        </working-status>
        <profile-name>
         profile-name
        </profile-name>
        <profile-varset-name>
         profile-varset-name
        </profile-varset-name>
        <interface-description>
         interface-description
        </interface-description>
       </local-interface>
      </connection>
     </mesh-group-connection>
    </ldp-vpls-reference-site>
   </instance>
```

Description

<local-interface>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-connection>
   <connection>
    <local-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <working-status>
      working-status
     </working-status>
     <profile-name>
      profile-name
     </profile-name>
     <profile-varset-name>
```

```
                profile-varset-name
               </profile-varset-name>
               <interface-description>
                interface-description
               </interface-description>
              </local-interface>
             </connection>
            </mesh-group-connection>
           </vpls-protocol-state>
          </instance>
```

Description

<local-interface>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <connection>
    <local-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <working-status>
      working-status
     </working-status>
     <profile-name>
      profile-name
     </profile-name>
     <profile-varset-name>
      profile-varset-name
     </profile-varset-name>
     <interface-description>
      interface-description
     </interface-description>
    </local-interface>
   </connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
```

Description

<local-interface>

Usage

```
<instance>
```


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```
<vpls-protocol-state>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </mesh-group-connection>
  </reference-site>
</vpls-protocol-state>
</instance>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
```

```
        <profile-name>
          profile-name
        </profile-name>
        <profile-varset-name>
          profile-varset-name
        </profile-varset-name>
        <interface-description>
          interface-description
        </interface-description>
      </local-interface>
    </connection>
  </reference-site>
 </instance>
</l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <local-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
      <working-status>
       working-status
      </working-status>
      <profile-name>
       profile-name
      </profile-name>
      <profile-varset-name>
       profile-varset-name
      </profile-varset-name>
      <interface-description>
       interface-description
      </interface-description>
     </local-interface>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</l2vpn-connection-information>
```


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Description

<local-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
```

```
            interface-encapsulation
           </interface-encapsulation>
           <working-status>
            working-status
           </working-status>
           <profile-name>
            profile-name
           </profile-name>
           <profile-varset-name>
            profile-varset-name
           </profile-varset-name>
           <interface-description>
            interface-description
           </interface-description>
          </local-interface>
         </connection>
        </mesh-group-connection>
       </ldp-vpls-reference-site>
      </instance>
</l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <local-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
      <working-status>
       working-status
      </working-status>
      <profile-name>
       profile-name
      </profile-name>
      <profile-varset-name>
       profile-varset-name
      </profile-varset-name>
      <interface-description>
       interface-description
      </interface-description>
     </local-interface>
    </connection>
```


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```
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
```

```
                <connection>
                  <local-interface>
                    <interface-name>
                      interface-name
                    </interface-name>
                    <interface-status>
                      interface-status
                    </interface-status>
                    <interface-encapsulation>
                      interface-encapsulation
                    </interface-encapsulation>
                    <working-status>
                      working-status
                    </working-status>
                    <profile-name>
                      profile-name
                    </profile-name>
                    <profile-varset-name>
                      profile-varset-name
                    </profile-varset-name>
                    <interface-description>
                      interface-description
                    </interface-description>
                  </local-interface>
                </connection>
              </mesh-group-connection>
            </reference-site>
          </vpls-protocol-state>
        </instance>
      </l2vpn-connection-information>
```

Description

<local-interface>

Usage

```
      <vpls-connection-information>
        <instance>
          <reference-site>
            <connection>
              <local-interface>
                <interface-name>
                  interface-name
                </interface-name>
                <interface-status>
                  interface-status
                </interface-status>
                <interface-encapsulation>
                  interface-encapsulation
                </interface-encapsulation>
                <working-status>
                  working-status
                </working-status>
                <profile-name>
                  profile-name
```


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```
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </instance>
  </vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

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<local-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
```


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```
        </interface-encapsulation>
        <working-status>
          working-status
        </working-status>
        <profile-name>
          profile-name
        </profile-name>
        <profile-varset-name>
          profile-varset-name
        </profile-varset-name>
        <interface-description>
          interface-description
        </interface-description>
      </local-interface>
    </connection>
  </mesh-group-connection>
 </ldp-vpls-reference-site>
</instance>
</vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <local-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
      <working-status>
       working-status
      </working-status>
      <profile-name>
       profile-name
      </profile-name>
      <profile-varset-name>
       profile-varset-name
      </profile-varset-name>
      <interface-description>
       interface-description
      </interface-description>
     </local-interface>
    </connection>
   </mesh-group-connection>
```

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```
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
```


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```
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </mesh-group-connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
</vpls-connection-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connection>
    <local-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
     <working-status>
      working-status
     </working-status>
     <profile-name>
      profile-name
     </profile-name>
```

```
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-statistics-information>
```

Description

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<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
```

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```
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
```


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```
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
```

```
            <local-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
              <working-status>
                working-status
              </working-status>
              <profile-name>
                profile-name
              </profile-name>
              <profile-varset-name>
                profile-varset-name
              </profile-varset-name>
              <interface-description>
                interface-description
              </interface-description>
            </local-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
```


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```
        <profile-varset-name>
          profile-varset-name
        </profile-varset-name>
        <interface-description>
          interface-description
        </interface-description>
      </local-interface>
    </connection>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <local-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
      <working-status>
       working-status
      </working-status>
      <profile-name>
       profile-name
      </profile-name>
      <profile-varset-name>
       profile-varset-name
      </profile-varset-name>
      <interface-description>
       interface-description
      </interface-description>
     </local-interface>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

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<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <local-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
          <working-status>
            working-status
          </working-status>
          <profile-name>
            profile-name
          </profile-name>
          <profile-varset-name>
            profile-varset-name
          </profile-varset-name>
          <interface-description>
            interface-description
          </interface-description>
        </local-interface>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
```


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```
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
```

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```
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
```


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```
            <local-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
              <working-status>
                working-status
              </working-status>
              <profile-name>
                profile-name
              </profile-name>
              <profile-varset-name>
                profile-varset-name
              </profile-varset-name>
              <interface-description>
                interface-description
              </interface-description>
            </local-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
```

```
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <local-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
              <working-status>
                working-status
              </working-status>
              <profile-name>
                profile-name
              </profile-name>
              <profile-varset-name>
                profile-varset-name
              </profile-varset-name>
              <interface-description>
                interface-description
              </interface-description>
            </local-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```


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Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connection>
          <local-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
            <working-status>
              working-status
            </working-status>
            <profile-name>
              profile-name
            </profile-name>
            <profile-varset-name>
              profile-varset-name
            </profile-varset-name>
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <mesh-group-connection>
          <connection>
            <local-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
```

```
                    interface-status
                  </interface-status>
                  <interface-encapsulation>
                    interface-encapsulation
                  </interface-encapsulation>
                  <working-status>
                    working-status
                  </working-status>
                  <profile-name>
                    profile-name
                  </profile-name>
                  <profile-varset-name>
                    profile-varset-name
                  </profile-varset-name>
                  <interface-description>
                    interface-description
                  </interface-description>
                </local-interface>
              </connection>
            </mesh-group-connection>
          </ldp-vpls-reference-site>
        </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <mesh-group-connection>
          <connection>
            <local-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
              <working-status>
                working-status
              </working-status>
              <profile-name>
                profile-name
              </profile-name>
              <profile-varset-name>
                profile-varset-name
              </profile-varset-name>
```


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```
            <interface-description>
              interface-description
            </interface-description>
          </local-interface>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <connection>
      <local-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
       </interface-status>
       <interface-encapsulation>
        interface-encapsulation
       </interface-encapsulation>
       <working-status>
        working-status
       </working-status>
       <profile-name>
        profile-name
       </profile-name>
       <profile-varset-name>
        profile-varset-name
       </profile-varset-name>
       <interface-description>
        interface-description
       </interface-description>
      </local-interface>
     </connection>
    </reference-site>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

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<local-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
              <local-interface>
                <interface-name>
                  interface-name
                </interface-name>
                <interface-status>
                  interface-status
                </interface-status>
                <interface-encapsulation>
                  interface-encapsulation
                </interface-encapsulation>
                <working-status>
                  working-status
                </working-status>
                <profile-name>
                  profile-name
                </profile-name>
                <profile-varset-name>
                  profile-varset-name
                </profile-varset-name>
                <interface-description>
                  interface-description
                </interface-description>
              </local-interface>
            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<local-interface>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <local-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-status>
```


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```
        interface-status
      </interface-status>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
      <working-status>
        working-status
      </working-status>
      <profile-name>
        profile-name
      </profile-name>
      <profile-varset-name>
        profile-varset-name
      </profile-varset-name>
      <interface-description>
        interface-description
      </interface-description>
    </local-interface>
  </connection>
 </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<log-element>

Usage

```
<log-element>
 <timestamp>
  timestamp
 </timestamp>
 <ospf-log-type>
  ospf-log-type
 </ospf-log-type>
 <elapsed-time>
  elapsed-time
 </elapsed-time>
</log-element>
```

Description

<log-element>

Usage

```
<ospf-log-instance>
 <log-element>
  <timestamp>
   timestamp
  </timestamp>
  <ospf-log-type>
   ospf-log-type
  </ospf-log-type>
  <elapsed-time>
   elapsed-time
```

```
    </elapsed-time>
  </log-element>
</ospf-log-instance>
```

Description

<log-element>

Usage

```
<ospf-log-maximum-length>
  <log-element>
    <timestamp>
      timestamp
    </timestamp>
    <ospf-log-type>
      ospf-log-type
    </ospf-log-type>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
  </log-element>
</ospf-log-maximum-length>
```

Description

<log-element>

Usage

```
<ospf-log-events>
  <log-element>
    <timestamp>
      timestamp
    </timestamp>
    <ospf-log-type>
      ospf-log-type
    </ospf-log-type>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
  </log-element>
</ospf-log-events>
```

Description

<log-element>

Usage

```
<ospf-topology-log>
  <ospf-log-instance>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
```


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```
        <ospf-log-type>
          ospf-log-type
        </ospf-log-type>
        <elapsed-time>
          elapsed-time
        </elapsed-time>
      </log-element>
    </ospf-log-instance>
  </ospf-topology-log>
```

Description

<log-element>

Usage

```
<ospf-topology-log>
  <ospf-log-maximum-length>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
      <ospf-log-type>
        ospf-log-type
      </ospf-log-type>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
    </log-element>
  </ospf-log-maximum-length>
</ospf-topology-log>
```

Description

<log-element>

Usage

```
<ospf-topology-log>
  <ospf-log-events>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
      <ospf-log-type>
        ospf-log-type
      </ospf-log-type>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
    </log-element>
  </ospf-log-events>
</ospf-topology-log>
```

Description

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<log-element>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-instance>
      <log-element>
        <timestamp>
          timestamp
        </timestamp>
        <ospf-log-type>
          ospf-log-type
        </ospf-log-type>
        <elapsed-time>
          elapsed-time
        </elapsed-time>
      </log-element>
    </ospf-log-instance>
  </ospf-topology-log>
</ospf-log-information>
```

Description

<log-element>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-maximum-length>
      <log-element>
        <timestamp>
          timestamp
        </timestamp>
        <ospf-log-type>
          ospf-log-type
        </ospf-log-type>
        <elapsed-time>
          elapsed-time
        </elapsed-time>
      </log-element>
    </ospf-log-maximum-length>
  </ospf-topology-log>
</ospf-log-information>
```

Description

<log-element>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-events>
      <log-element>
```


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```
        <timestamp>
          timestamp
        </timestamp>
        <ospf-log-type>
          ospf-log-type
        </ospf-log-type>
        <elapsed-time>
          elapsed-time
        </elapsed-time>
      </log-element>
    </ospf-log-events>
  </ospf-topology-log>
</ospf-log-information>
```

Description

<log-element>

Usage

```
<ospf3-log-information>
  <ospf-log-instance>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
      <ospf-log-type>
        ospf-log-type
      </ospf-log-type>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
    </log-element>
  </ospf-log-instance>
</ospf3-log-information>
```

Description

<log-element>

Usage

```
<ospf3-log-information>
  <ospf-log-maximum-length>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
      <ospf-log-type>
        ospf-log-type
      </ospf-log-type>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
    </log-element>
  </ospf-log-maximum-length>
```

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```
</ospf3-log-information>
```

Description

<log-element>

Usage

```
<ospf3-log-information>
  <ospf-log-events>
    <log-element>
      <timestamp>
        timestamp
      </timestamp>
      <ospf-log-type>
        ospf-log-type
      </ospf-log-type>
      <elapsed-time>
        elapsed-time
      </elapsed-time>
    </log-element>
  </ospf-log-events>
</ospf3-log-information>
```

Description

<lp-history>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <lp-history>
      <sequence-number>
        sequence-number
      </sequence-number>
      <time>
        time
      </time>
      <log>
        log
      </log>
      <route>
        route
      </route>
    </lp-history>
  </rsvp-session>
</rsvp-session-data>
```

Description Log of LSP path-related events

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<lp-history>

Usage

```
<lp-history>
  <sequence-number>
    sequence-number
  </sequence-number>
  <time>
    time
  </time>
  <log>
    log
  </log>
  <route>
    route
  </route>
</lp-history>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
<rsvp-session>
  <lp-history>
    <sequence-number>
      sequence-number
    </sequence-number>
    <time>
      time
    </time>
    <log>
      log
    </log>
    <route>
      route
    </route>
  </lp-history>
</rsvp-session>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <lp-history>
        <sequence-number>
          sequence-number
        </sequence-number>
```

```
            <time>
              time
            </time>
            <log>
              log
            </log>
            <route>
              route
            </route>
          </lp-history>
        </rsvp-session>
      </rsvp-session-data>
    </rsvp-session-information>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
    <rsvp-interface>
      <bypass-info>
        <lp-history>
          <sequence-number>
            sequence-number
          </sequence-number>
          <time>
            time
          </time>
          <log>
            log
          </log>
          <route>
            route
          </route>
        </lp-history>
      </bypass-info>
    </rsvp-interface>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
    <bypass-info>
      <lp-history>
        <sequence-number>
          sequence-number
        </sequence-number>
        <time>
          time
        </time>
        <log>
```


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```
        log
      </log>
      <route>
        route
      </route>
    </lp-history>
  </bypass-info>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <bypass-info>
      <lp-history>
        <sequence-number>
          sequence-number
        </sequence-number>
        <time>
          time
        </time>
        <log>
          log
        </log>
        <route>
          route
        </route>
      </lp-history>
    </bypass-info>
  </rsvp-interface>
</rsvp-interface-information>
```

Description Log of LSP path-related events

<lp-history>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <lp-history>
        <sequence-number>
          sequence-number
        </sequence-number>
        <time>
          time
        </time>
        <log>
          log
        </log>
```

```
            <route>
              route
            </route>
          </lp-history>
        </rsvp-session>
      </rsvp-session-data>
    </mpls-lsp-information>
```

Description Log of LSP path-related events

<lsp-attribute-flags>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <lsp-attribute-flags>
      <non-php>
        non-php
      </non-php>
      <oob>
        oob
      </oob>
    </lsp-attribute-flags>
  </rsvp-session>
</rsvp-session-data>
```

Description LSP attribute flags

<lsp-attribute-flags>

Usage

```
<lsp-attribute-flags>
  <non-php>
    non-php
  </non-php>
  <oob>
    oob
  </oob>
</lsp-attribute-flags>
```

Description LSP attribute flags

<lsp-attribute-flags>

Usage

```
<rsvp-session>
  <lsp-attribute-flags>
    <non-php>
      non-php
    </non-php>
    <oob>
```


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```
      oob
     </oob>
    </lsp-attribute-flags>
   </rsvp-session>
```

Description LSP attribute flags

<lsp-attribute-flags>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <lsp-attribute-flags>
    <non-php>
     non-php
    </non-php>
    <oob>
     oob
    </oob>
   </lsp-attribute-flags>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description LSP attribute flags

<lsp-attribute-flags>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <lsp-attribute-flags>
    <non-php>
     non-php
    </non-php>
    <oob>
     oob
    </oob>
   </lsp-attribute-flags>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description LSP attribute flags

<mc-stats-interface>

Usage

```
<multicast-statistics-information>
```

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```
<multicast-statistics>
  <mc-stats-interface>
    <interface-name>
      interface-name
    </interface-name>
    <protocol-name>
      protocol-name
    </protocol-name>
    <mc-mismatch-errors>
      mc-mismatch-errors
    </mc-mismatch-errors>
    <mc-mismatches>
      mc-mismatches
    </mc-mismatches>
    <mc-mismatches-no-route>
      mc-mismatches-no-route
    </mc-mismatches-no-route>
    <mc-resolves>
      mc-resolves
    </mc-resolves>
    <mc-routing-notifies>
      mc-routing-notifies
    </mc-routing-notifies>
    <mc-resolves-no-route>
      mc-resolves-no-route
    </mc-resolves-no-route>
    <mc-resolve-errors>
      mc-resolve-errors
    </mc-resolve-errors>
    <mc-resolves-filtered>
      mc-resolves-filtered
    </mc-resolves-filtered>
    <mc-routing-notifies-filtered>
      mc-routing-notifies-filtered
    </mc-routing-notifies-filtered>
    <mc-input-kbytes>
      mc-input-kbytes
    </mc-input-kbytes>
    <mc-input-packets>
      mc-input-packets
    </mc-input-packets>
    <mc-output-kbytes>
      mc-output-kbytes
    </mc-output-kbytes>
    <mc-output-packets>
      mc-output-packets
    </mc-output-packets>
  </mc-stats-interface>
</multicast-statistics>
</multicast-statistics-information>
```

Description

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<mdt-active-tunnel>

Usage

```
<pim-mdt-information>
  <mdt-active-tunnel>
    <mdt-customer-source-address>
      mdt-customer-source-address
    </mdt-customer-source-address>
    <mdt-customer-group-address>
      mdt-customer-group-address
    </mdt-customer-group-address>
    <mdt-provider-group-address>
      mdt-provider-group-address
    </mdt-provider-group-address>
    <mdt-tunnel-interface-name>
      mdt-tunnel-interface-name
    </mdt-tunnel-interface-name>
    <mdt-forwarding-rate-kilobits>
      mdt-forwarding-rate-kilobits
    </mdt-forwarding-rate-kilobits>
    <mdt-forwarding-rate-kilobytes>
      mdt-forwarding-rate-kilobytes
    </mdt-forwarding-rate-kilobytes>
    <mdt-configured-threshold-rate>
      mdt-configured-threshold-rate
    </mdt-configured-threshold-rate>
    <mdt-tunnel-uptime>
      mdt-tunnel-uptime
    </mdt-tunnel-uptime>
    <mdt-default-tunnel-information>....</mdt-default-tunnel-information>
  </mdt-active-tunnel>
</pim-mdt-information>
```

Description

<mdt-default-tunnel-information>

Usage

```
<pim-mdt-information>
  <mdt-default-tunnel-information>
</mdt-default-tunnel-information>
</pim-mdt-information>
```

Description

<mdt-default-tunnel-information>

Usage

```
<pim-mdt-information>
  <mdt-active-tunnel>
    <mdt-default-tunnel-information>
 </mdt-default-tunnel-information>
  </mdt-active-tunnel>
```

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```
</pim-mdt-information>
```

Description

<mesh-group-connection>

Usage

```
<mesh-group-connection>
  <mesh-group-name>
    mesh-group-name
  </mesh-group-name>
  <connection>....</connection>
  <connections-summary>....</connections-summary>
</mesh-group-connection>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <connection>....</connection>
      <connections-summary>....</connections-summary>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <mesh-group-name>
        mesh-group-name
      </mesh-group-name>
      <connection>....</connection>
      <connections-summary>....</connections-summary>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description Information about all vc-connections of a specific mesh-group

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<mesh-group-connection>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-connection>
   <mesh-group-name>
    mesh-group-name
   </mesh-group-name>
   <connection>....</connection>
   <connections-summary>....</connections-summary>
  </mesh-group-connection>
 </vpls-protocol-state>
</instance>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<l2vpn-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </reference-site>
 </instance>
```

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```
</l2vpn-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <mesh-group-name>
```


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```
            mesh-group-name
           </mesh-group-name>
           <connection>....</connection>
           <connections-summary>....</connections-summary>
          </mesh-group-connection>
         </reference-site>
        </vpls-protocol-state>
       </instance>
      </l2vpn-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

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<mesh-group-connection>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <mesh-group-name>
      mesh-group-name
     </mesh-group-name>
     <connection>....</connection>
     <connections-summary>....</connections-summary>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
```


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```
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-statistics-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
```

```
      <reference-site>
        <mesh-group-connection>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <connection>....</connection>
          <connections-summary>....</connections-summary>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <connection>....</connection>
        <connections-summary>....</connections-summary>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```


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Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <connection>....</connection>
    <connections-summary>....</connections-summary>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <mesh-group-name>
      mesh-group-name
     </mesh-group-name>
     <connection>....</connection>
     <connections-summary>....</connections-summary>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <mesh-group-connection>
     <mesh-group-name>
      mesh-group-name
```

```
            </mesh-group-name>
            <connection>....</connection>
            <connections-summary>....</connections-summary>
          </mesh-group-connection>
        </reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <mesh-group-connection>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <connection>....</connection>
          <connections-summary>....</connections-summary>
        </mesh-group-connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <mesh-group-connection>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <connection>....</connection>
          <connections-summary>....</connections-summary>
        </mesh-group-connection>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```


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Description Information about all vc-connections of a specific mesh-group

<mesh-group-connection>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <mesh-group-name>
              mesh-group-name
            </mesh-group-name>
            <connection>....</connection>
            <connections-summary>....</connections-summary>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all vc-connections of a specific mesh-group

<mesh-group-interfaces>

Usage

```
<mesh-group-interfaces>
  <mesh-group-name>
    mesh-group-name
  </mesh-group-name>
  <mesh-group-id>
    mesh-group-id
  </mesh-group-id>
  <mesh-group-state>
    mesh-group-state
  </mesh-group-state>
  <interface>
    interface
  </interface>
</mesh-group-interfaces>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<instance>
  <reference-site>
    <mesh-group-interfaces>
      <mesh-group-name>
```

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```
        mesh-group-name
       </mesh-group-name>
       <mesh-group-id>
        mesh-group-id
       </mesh-group-id>
       <mesh-group-state>
        mesh-group-state
       </mesh-group-state>
       <interface>
        interface
       </interface>
      </mesh-group-interfaces>
     </reference-site>
    </instance>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<instance>
 <ldp-vpls-reference-site>
  <mesh-group-interfaces>
   <mesh-group-name>
    mesh-group-name
   </mesh-group-name>
   <mesh-group-id>
    mesh-group-id
   </mesh-group-id>
   <mesh-group-state>
    mesh-group-state
   </mesh-group-state>
   <interface>
    interface
   </interface>
  </mesh-group-interfaces>
 </ldp-vpls-reference-site>
</instance>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-interfaces>
   <mesh-group-name>
    mesh-group-name
   </mesh-group-name>
   <mesh-group-id>
    mesh-group-id
```

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```
      </mesh-group-id>
      <mesh-group-state>
        mesh-group-state
      </mesh-group-state>
      <interface>
        interface
      </interface>
    </mesh-group-interfaces>
  </vpls-protocol-state>
</instance>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
```

```
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
```


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```
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-interfaces>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <mesh-group-id>
            mesh-group-id
          </mesh-group-id>
          <mesh-group-state>
            mesh-group-state
          </mesh-group-state>
          <interface>
            interface
          </interface>
        </mesh-group-interfaces>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
```

```
            mesh-group-id
           </mesh-group-id>
           <mesh-group-state>
            mesh-group-state
           </mesh-group-state>
           <interface>
            interface
           </interface>
          </mesh-group-interfaces>
         </reference-site>
        </instance>
       </vpls-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-connection-information>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-interfaces>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <mesh-group-id>
     mesh-group-id
    </mesh-group-id>
    <mesh-group-state>
     mesh-group-state
    </mesh-group-state>
    <interface>
     interface
    </interface>
   </mesh-group-interfaces>
  </ldp-vpls-reference-site>
 </instance>
</vpls-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-interfaces>
    <mesh-group-name>
     mesh-group-name
    </mesh-group-name>
    <mesh-group-id>
```


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```
        mesh-group-id
       </mesh-group-id>
       <mesh-group-state>
        mesh-group-state
       </mesh-group-state>
       <interface>
        interface
       </interface>
      </mesh-group-interfaces>
     </vpls-protocol-state>
    </instance>
</vpls-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-interfaces>
     <mesh-group-name>
      mesh-group-name
     </mesh-group-name>
     <mesh-group-id>
      mesh-group-id
     </mesh-group-id>
     <mesh-group-state>
      mesh-group-state
     </mesh-group-state>
     <interface>
      interface
     </interface>
    </mesh-group-interfaces>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-interfaces>
    <mesh-group-name>
     mesh-group-name
```

```
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </reference-site>
  </instance>
</vpls-statistics-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
```


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```
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-interfaces>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <mesh-group-id>
            mesh-group-id
          </mesh-group-id>
          <mesh-group-state>
            mesh-group-state
          </mesh-group-state>
          <interface>
            interface
          </interface>
        </mesh-group-interfaces>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <mesh-group-interfaces>
```

```
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-interfaces>
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-interfaces>
```


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```
        <mesh-group-name>
          mesh-group-name
        </mesh-group-name>
        <mesh-group-id>
          mesh-group-id
        </mesh-group-id>
        <mesh-group-state>
          mesh-group-state
        </mesh-group-state>
        <interface>
          interface
        </interface>
      </mesh-group-interfaces>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-interfaces>
          <mesh-group-name>
            mesh-group-name
          </mesh-group-name>
          <mesh-group-id>
            mesh-group-id
          </mesh-group-id>
          <mesh-group-state>
            mesh-group-state
          </mesh-group-state>
          <interface>
            interface
          </interface>
        </mesh-group-interfaces>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
```

```
<instance>
 <reference-site>
  <mesh-group-interfaces>
   <mesh-group-name>
    mesh-group-name
   </mesh-group-name>
   <mesh-group-id>
    mesh-group-id
   </mesh-group-id>
   <mesh-group-state>
    mesh-group-state
   </mesh-group-state>
   <interface>
    interface
   </interface>
  </mesh-group-interfaces>
 </reference-site>
</instance>
</vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <mesh-group-interfaces>
     <mesh-group-name>
      mesh-group-name
     </mesh-group-name>
     <mesh-group-id>
      mesh-group-id
     </mesh-group-id>
     <mesh-group-state>
      mesh-group-state
     </mesh-group-state>
     <interface>
      interface
     </interface>
    </mesh-group-interfaces>
   </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all interfaces associated with a mesh-group

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<mesh-group-interfaces>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-interfaces>
     <mesh-group-name>
      mesh-group-name
     </mesh-group-name>
     <mesh-group-id>
      mesh-group-id
     </mesh-group-id>
     <mesh-group-state>
      mesh-group-state
     </mesh-group-state>
     <interface>
      interface
     </interface>
    </mesh-group-interfaces>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all interfaces associated with a mesh-group

<mesh-group-interfaces>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <mesh-group-interfaces>
      <mesh-group-name>
       mesh-group-name
      </mesh-group-name>
      <mesh-group-id>
       mesh-group-id
      </mesh-group-id>
      <mesh-group-state>
       mesh-group-state
      </mesh-group-state>
      <interface>
       interface
      </interface>
     </mesh-group-interfaces>
    </reference-site>
   </vpls-protocol-state>
  </instance>
```

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```
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about all interfaces associated with a mesh-group

<message-statistics>

Usage

```
<message-statistics>
  <rsvp-message>
    rsvp-message
  </rsvp-message>
  <messages-sent>
    messages-sent
  </messages-sent>
  <messages-received>
    messages-received
  </messages-received>
  <messages-sent-5seconds>
    messages-sent-5seconds
  </messages-sent-5seconds>
  <messages-received-5seconds>
    messages-received-5seconds
  </messages-received-5seconds>
</message-statistics>
```

Description Statistics per RSVP message type

<message-statistics>

Usage

```
<rsvp-statistics-information>
  <message-statistics>
    <rsvp-message>
      rsvp-message
    </rsvp-message>
    <messages-sent>
      messages-sent
    </messages-sent>
    <messages-received>
      messages-received
    </messages-received>
    <messages-sent-5seconds>
      messages-sent-5seconds
    </messages-sent-5seconds>
    <messages-received-5seconds>
      messages-received-5seconds
    </messages-received-5seconds>
  </message-statistics>
</rsvp-statistics-information>
```


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Description Statistics per RSVP message type

<message-statistics>

Usage

```
<rsvp-interface>
  <message-statistics>
    <rsvp-message>
      rsvp-message
    </rsvp-message>
    <messages-sent>
      messages-sent
    </messages-sent>
    <messages-received>
      messages-received
    </messages-received>
    <messages-sent-5seconds>
      messages-sent-5seconds
    </messages-sent-5seconds>
    <messages-received-5seconds>
      messages-received-5seconds
    </messages-received-5seconds>
  </message-statistics>
</rsvp-interface>
```

Description Statistics per RSVP message type

<message-statistics>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <message-statistics>
      <rsvp-message>
        rsvp-message
      </rsvp-message>
      <messages-sent>
        messages-sent
      </messages-sent>
      <messages-received>
        messages-received
      </messages-received>
      <messages-sent-5seconds>
        messages-sent-5seconds
      </messages-sent-5seconds>
      <messages-received-5seconds>
        messages-received-5seconds
      </messages-received-5seconds>
    </message-statistics>
  </rsvp-interface>
</rsvp-interface-information>
```

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Description Statistics per RSVP message type

<mgm-amt-configured-parameters>

Usage

```
<mgm-amt-configured-parameters>
  <query-interval>
    query-interval
  </query-interval>
  <query-response-interval>
    query-response-interval
  </query-response-interval>
  <last-member-query-interval>
    last-member-query-interval
  </last-member-query-interval>
  <robustness-count>
    robustness-count
  </robustness-count>
</mgm-amt-configured-parameters>
```

Description

<mgm-amt-configured-parameters>

Usage

```
<igmp-interface-information>
  <mgm-amt-configured-parameters>
    <query-interval>
      query-interval
    </query-interval>
    <query-response-interval>
      query-response-interval
    </query-response-interval>
    <last-member-query-interval>
      last-member-query-interval
    </last-member-query-interval>
    <robustness-count>
      robustness-count
    </robustness-count>
  </mgm-amt-configured-parameters>
</igmp-interface-information>
```

Description

<mgm-amt-derived-parameters>

Usage

```
<mgm-amt-derived-parameters>
  <membership-timeout>
    membership-timeout
  </membership-timeout>
  <query-other-timeout>
    query-other-timeout
```


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```
  </query-other-timeout>
</mgm-amt-derived-parameters>
```

Description

<mgm-amt-derived-parameters>

Usage

```
<igmp-interface-information>
  <mgm-amt-derived-parameters>
    <membership-timeout>
      membership-timeout
    </membership-timeout>
    <query-other-timeout>
      query-other-timeout
    </query-other-timeout>
  </mgm-amt-derived-parameters>
</igmp-interface-information>
```

Description

<mgm-configured-parameters>

Usage

```
<mgm-configured-parameters>
  <query-interval>
    query-interval
  </query-interval>
  <query-response-interval>
    query-response-interval
  </query-response-interval>
  <last-member-query-interval>
    last-member-query-interval
  </last-member-query-interval>
  <robustness-count>
    robustness-count
  </robustness-count>
</mgm-configured-parameters>
```

Description

<mgm-configured-parameters>

Usage

```
<igmp-interface-information>
  <mgm-configured-parameters>
    <query-interval>
      query-interval
    </query-interval>
    <query-response-interval>
      query-response-interval
    </query-response-interval>
    <last-member-query-interval>
```

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```
        last-member-query-interval
      </last-member-query-interval>
      <robustness-count>
        robustness-count
      </robustness-count>
    </mgm-configured-parameters>
  </igmp-interface-information>
```

Description

<mgm-configured-parameters>

Usage

```
  <mld-interface-information>
    <mgm-configured-parameters>
      <query-interval>
        query-interval
      </query-interval>
      <query-response-interval>
        query-response-interval
      </query-response-interval>
      <last-member-query-interval>
        last-member-query-interval
      </last-member-query-interval>
      <robustness-count>
        robustness-count
      </robustness-count>
    </mgm-configured-parameters>
  </mld-interface-information>
```

Description

<mgm-derived-parameters>

Usage

```
  <mgm-derived-parameters>
    <membership-timeout>
      membership-timeout
    </membership-timeout>
    <query-other-timeout>
      query-other-timeout
    </query-other-timeout>
  </mgm-derived-parameters>
```

Description

<mgm-derived-parameters>

Usage

```
  <igmp-interface-information>
    <mgm-derived-parameters>
      <membership-timeout>
        membership-timeout
```


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```
    </membership-timeout>
    <query-other-timeout>
     query-other-timeout
    </query-other-timeout>
   </mgm-derived-parameters>
</igmp-interface-information>
```

Description

<mgm-derived-parameters>

Usage

```
<mld-interface-information>
  <mgm-derived-parameters>
    <membership-timeout>
     membership-timeout
    </membership-timeout>
    <query-other-timeout>
     query-other-timeout
    </query-other-timeout>
  </mgm-derived-parameters>
</mld-interface-information>
```

Description

<mgm-group>

Usage

```
<mgm-interface-groups>
  <mgm-group>
    <multicast-group-address>
     multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
     multicast-source-address
    </multicast-source-address>
    <mgm-source-timeout>
     mgm-source-timeout
    </mgm-source-timeout>
    <last-address>
     last-address
    </last-address>
    <mgm-timeout>
     mgm-timeout
    </mgm-timeout>
    <mgm-type>
     mgm-type
    </mgm-type>
    <mgm-group-mode-type>
     mgm-group-mode-type
    </mgm-group-mode-type>
    <host-record>....</host-record>
    <reverse-oif>....</reverse-oif>
    <mgm-group-output-interface>
```

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```
            mgm-group-output-interface
          </mgm-group-output-interface>
          <mgm-output-interface-status>
            mgm-output-interface-status
          </mgm-output-interface-status>
        </mgm-group>
      </mgm-interface-groups>
```

Description

<mgm-group>

Usage

```
<igmp-group-information>
  <mgm-interface-groups>
    <mgm-group>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <mgm-source-timeout>
        mgm-source-timeout
      </mgm-source-timeout>
      <last-address>
        last-address
      </last-address>
      <mgm-timeout>
        mgm-timeout
      </mgm-timeout>
      <mgm-type>
        mgm-type
      </mgm-type>
      <mgm-group-mode-type>
        mgm-group-mode-type
      </mgm-group-mode-type>
      <host-record>....</host-record>
      <reverse-oif>....</reverse-oif>
      <mgm-group-output-interface>
        mgm-group-output-interface
      </mgm-group-output-interface>
      <mgm-output-interface-status>
        mgm-output-interface-status
      </mgm-output-interface-status>
    </mgm-group>
  </mgm-interface-groups>
</igmp-group-information>
```

Description

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<mgm-group>

Usage

```
<mld-group-information>
  <mgm-interface-groups>
    <mgm-group>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <mgm-source-timeout>
        mgm-source-timeout
      </mgm-source-timeout>
      <last-address>
        last-address
      </last-address>
      <mgm-timeout>
        mgm-timeout
      </mgm-timeout>
      <mgm-type>
        mgm-type
      </mgm-type>
      <mgm-group-mode-type>
        mgm-group-mode-type
      </mgm-group-mode-type>
      <host-record>....</host-record>
      <reverse-oif>....</reverse-oif>
      <mgm-group-output-interface>
        mgm-group-output-interface
      </mgm-group-output-interface>
      <mgm-output-interface-status>
        mgm-output-interface-status
      </mgm-output-interface-status>
    </mgm-group>
  </mgm-interface-groups>
</mld-group-information>
```

Description

<mgm-group>

Usage

```
<amt-tunnel>
  <mgm-group>
    <multicast-group-address>
      multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
      multicast-source-address
    </multicast-source-address>
    <mgm-source-timeout>
      mgm-source-timeout
```

```
    </mgm-source-timeout>
    <last-address>
     last-address
    </last-address>
    <mgm-timeout>
     mgm-timeout
    </mgm-timeout>
    <mgm-type>
     mgm-type
    </mgm-type>
    <mgm-group-mode-type>
     mgm-group-mode-type
    </mgm-group-mode-type>
    <host-record>....</host-record>
    <reverse-oif>....</reverse-oif>
    <mgm-group-output-interface>
     mgm-group-output-interface
    </mgm-group-output-interface>
    <mgm-output-interface-status>
     mgm-output-interface-status
    </mgm-output-interface-status>
   </mgm-group>
</amt-tunnel>
```

Description

<mgm-group>

Usage

```
<amt-tunnel-information>
 <amt-tunnel>
  <mgm-group>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-source-address>
    multicast-source-address
   </multicast-source-address>
   <mgm-source-timeout>
    mgm-source-timeout
   </mgm-source-timeout>
   <last-address>
    last-address
   </last-address>
   <mgm-timeout>
    mgm-timeout
   </mgm-timeout>
   <mgm-type>
    mgm-type
   </mgm-type>
   <mgm-group-mode-type>
    mgm-group-mode-type
   </mgm-group-mode-type>
   <host-record>....</host-record>
   <reverse-oif>....</reverse-oif>
```


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```
      <mgm-group-output-interface>
        mgm-group-output-interface
      </mgm-group-output-interface>
      <mgm-output-interface-status>
        mgm-output-interface-status
      </mgm-output-interface-status>
    </mgm-group>
  </amt-tunnel>
</amt-tunnel-information>
```

Description

<mgm-host>

Usage

```
<mgm-interface>
  <mgm-host>
    <mgm-host-address>
      mgm-host-address
    </mgm-host-address>
    <mgm-host-record-count>
      mgm-host-record-count
    </mgm-host-record-count>
  </mgm-host>
</mgm-interface>
```

Description

<mgm-host>

Usage

```
<igmp-interface-information>
  <mgm-interface>
    <mgm-host>
      <mgm-host-address>
        mgm-host-address
      </mgm-host-address>
      <mgm-host-record-count>
        mgm-host-record-count
      </mgm-host-record-count>
    </mgm-host>
  </mgm-interface>
</igmp-interface-information>
```

Description

<mgm-host>

Usage

```
<mld-interface-information>
  <mgm-interface>
    <mgm-host>
      <mgm-host-address>
```

```
            mgm-host-address
           </mgm-host-address>
           <mgm-host-record-count>
            mgm-host-record-count
           </mgm-host-record-count>
          </mgm-host>
         </mgm-interface>
        </mld-interface-information>
```

Description

<mgm-host>

Usage

```
<igmp-hosts-information>
 <mgm-interface>
  <mgm-host>
   <mgm-host-address>
    mgm-host-address
   </mgm-host-address>
   <mgm-host-record-count>
    mgm-host-record-count
   </mgm-host-record-count>
  </mgm-host>
 </mgm-interface>
</igmp-hosts-information>
```

Description

<mgm-host>

Usage

```
<mld-hosts-information>
 <mgm-interface>
  <mgm-host>
   <mgm-host-address>
    mgm-host-address
   </mgm-host-address>
   <mgm-host-record-count>
    mgm-host-record-count
   </mgm-host-record-count>
  </mgm-host>
 </mgm-interface>
</mld-hosts-information>
```

Description

<mgm-interface>

Usage

```
<mgm-interface>
 <interface-name>
  interface-name
```


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```
  </interface-name>
  <querier-address>
    querier-address
  </querier-address>
  <mgm-interface-state>
    mgm-interface-state
  </mgm-interface-state>
  <querier-timeout>
    querier-timeout
  </querier-timeout>
  <mgm-interface-version>
    mgm-interface-version
  </mgm-interface-version>
  <mgm-group-count>
    mgm-group-count
  </mgm-group-count>
  <mgm-ssm-map>
    mgm-ssm-map
  </mgm-ssm-map>
  <mgm-ssm-map-policy>
    mgm-ssm-map-policy
  </mgm-ssm-map-policy>
  <mgm-mc-lag-state>
    mgm-mc-lag-state
  </mgm-mc-lag-state>
  <mgm-immediate-leave>
    mgm-immediate-leave
  </mgm-immediate-leave>
  <mgm-promiscuous-mode>
    mgm-promiscuous-mode
  </mgm-promiscuous-mode>
  <mgm-passive>
    mgm-passive
  </mgm-passive>
  <mgm-passive-allow-receive>
    mgm-passive-allow-receive
  </mgm-passive-allow-receive>
  <mgm-passive-send-general-query>
    mgm-passive-send-general-query
  </mgm-passive-send-general-query>
  <mgm-passive-send-group-query>
    mgm-passive-send-group-query
  </mgm-passive-send-group-query>
  <mgm-group-limit>
    mgm-group-limit
  </mgm-group-limit>
  <mgm-group-policy>
    mgm-group-policy
  </mgm-group-policy>
  <mgm-oif-map>
    mgm-oif-map
  </mgm-oif-map>
  <mgm-host>....</mgm-host>
</mgm-interface>
```

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Description

<mgm-interface>

Usage

```
<igmp-interface-information>
  <mgm-interface>
    <interface-name>
      interface-name
    </interface-name>
    <querier-address>
      querier-address
    </querier-address>
    <mgm-interface-state>
      mgm-interface-state
    </mgm-interface-state>
    <querier-timeout>
      querier-timeout
    </querier-timeout>
    <mgm-interface-version>
      mgm-interface-version
    </mgm-interface-version>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-ssm-map>
      mgm-ssm-map
    </mgm-ssm-map>
    <mgm-ssm-map-policy>
      mgm-ssm-map-policy
    </mgm-ssm-map-policy>
    <mgm-mc-lag-state>
      mgm-mc-lag-state
    </mgm-mc-lag-state>
    <mgm-immediate-leave>
      mgm-immediate-leave
    </mgm-immediate-leave>
    <mgm-promiscuous-mode>
      mgm-promiscuous-mode
    </mgm-promiscuous-mode>
    <mgm-passive>
      mgm-passive
    </mgm-passive>
    <mgm-passive-allow-receive>
      mgm-passive-allow-receive
    </mgm-passive-allow-receive>
    <mgm-passive-send-general-query>
      mgm-passive-send-general-query
    </mgm-passive-send-general-query>
    <mgm-passive-send-group-query>
      mgm-passive-send-group-query
    </mgm-passive-send-group-query>
    <mgm-group-limit>
      mgm-group-limit
    </mgm-group-limit>
    <mgm-group-policy>
```


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```
      mgm-group-policy
    </mgm-group-policy>
    <mgm-oif-map>
      mgm-oif-map
    </mgm-oif-map>
    <mgm-host>....</mgm-host>
  </mgm-interface>
</igmp-interface-information>
```

Description

<mgm-interface>

Usage

```
<mld-interface-information>
  <mgm-interface>
    <interface-name>
      interface-name
    </interface-name>
    <querier-address>
      querier-address
    </querier-address>
    <mgm-interface-state>
      mgm-interface-state
    </mgm-interface-state>
    <querier-timeout>
      querier-timeout
    </querier-timeout>
    <mgm-interface-version>
      mgm-interface-version
    </mgm-interface-version>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-ssm-map>
      mgm-ssm-map
    </mgm-ssm-map>
    <mgm-ssm-map-policy>
      mgm-ssm-map-policy
    </mgm-ssm-map-policy>
    <mgm-mc-lag-state>
      mgm-mc-lag-state
    </mgm-mc-lag-state>
    <mgm-immediate-leave>
      mgm-immediate-leave
    </mgm-immediate-leave>
    <mgm-promiscuous-mode>
      mgm-promiscuous-mode
    </mgm-promiscuous-mode>
    <mgm-passive>
      mgm-passive
    </mgm-passive>
    <mgm-passive-allow-receive>
      mgm-passive-allow-receive
    </mgm-passive-allow-receive>
```

```
    <mgm-passive-send-general-query>
      mgm-passive-send-general-query
    </mgm-passive-send-general-query>
    <mgm-passive-send-group-query>
      mgm-passive-send-group-query
    </mgm-passive-send-group-query>
    <mgm-group-limit>
      mgm-group-limit
    </mgm-group-limit>
    <mgm-group-policy>
      mgm-group-policy
    </mgm-group-policy>
    <mgm-oif-map>
      mgm-oif-map
    </mgm-oif-map>
    <mgm-host>....</mgm-host>
  </mgm-interface>
</mld-interface-information>
```

Description

<mgm-interface>

Usage

```
<igmp-hosts-information>
  <mgm-interface>
    <interface-name>
      interface-name
    </interface-name>
    <querier-address>
      querier-address
    </querier-address>
    <mgm-interface-state>
      mgm-interface-state
    </mgm-interface-state>
    <querier-timeout>
      querier-timeout
    </querier-timeout>
    <mgm-interface-version>
      mgm-interface-version
    </mgm-interface-version>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-ssm-map>
      mgm-ssm-map
    </mgm-ssm-map>
    <mgm-ssm-map-policy>
      mgm-ssm-map-policy
    </mgm-ssm-map-policy>
    <mgm-mc-lag-state>
      mgm-mc-lag-state
    </mgm-mc-lag-state>
    <mgm-immediate-leave>
      mgm-immediate-leave
```


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```
    </mgm-immediate-leave>
    <mgm-promiscuous-mode>
      mgm-promiscuous-mode
    </mgm-promiscuous-mode>
    <mgm-passive>
      mgm-passive
    </mgm-passive>
    <mgm-passive-allow-receive>
      mgm-passive-allow-receive
    </mgm-passive-allow-receive>
    <mgm-passive-send-general-query>
      mgm-passive-send-general-query
    </mgm-passive-send-general-query>
    <mgm-passive-send-group-query>
      mgm-passive-send-group-query
    </mgm-passive-send-group-query>
    <mgm-group-limit>
      mgm-group-limit
    </mgm-group-limit>
    <mgm-group-policy>
      mgm-group-policy
    </mgm-group-policy>
    <mgm-oif-map>
      mgm-oif-map
    </mgm-oif-map>
    <mgm-host>....</mgm-host>
  </mgm-interface>
</igmp-hosts-information>
```

Description

<mgm-interface>

Usage

```
<mld-hosts-information>
  <mgm-interface>
    <interface-name>
      interface-name
    </interface-name>
    <querier-address>
      querier-address
    </querier-address>
    <mgm-interface-state>
      mgm-interface-state
    </mgm-interface-state>
    <querier-timeout>
      querier-timeout
    </querier-timeout>
    <mgm-interface-version>
      mgm-interface-version
    </mgm-interface-version>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-ssm-map>
```

```
      mgm-ssm-map
    </mgm-ssm-map>
    <mgm-ssm-map-policy>
      mgm-ssm-map-policy
    </mgm-ssm-map-policy>
    <mgm-mc-lag-state>
      mgm-mc-lag-state
    </mgm-mc-lag-state>
    <mgm-immediate-leave>
      mgm-immediate-leave
    </mgm-immediate-leave>
    <mgm-promiscuous-mode>
      mgm-promiscuous-mode
    </mgm-promiscuous-mode>
    <mgm-passive>
      mgm-passive
    </mgm-passive>
    <mgm-passive-allow-receive>
      mgm-passive-allow-receive
    </mgm-passive-allow-receive>
    <mgm-passive-send-general-query>
      mgm-passive-send-general-query
    </mgm-passive-send-general-query>
    <mgm-passive-send-group-query>
      mgm-passive-send-group-query
    </mgm-passive-send-group-query>
    <mgm-group-limit>
      mgm-group-limit
    </mgm-group-limit>
    <mgm-group-policy>
      mgm-group-policy
    </mgm-group-policy>
    <mgm-oif-map>
      mgm-oif-map
    </mgm-oif-map>
    <mgm-host>....</mgm-host>
  </mgm-interface>
</mld-hosts-information>
```

Description

<mgm-interface-groups>

Usage

```
<mgm-interface-groups>
  <interface-name>
    interface-name
  </interface-name>
  <mgm-group-count>
    mgm-group-count
  </mgm-group-count>
  <mgm-group>....</mgm-group>
</mgm-interface-groups>
```


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Description

<mgm-interface-groups>

Usage

```
<igmp-group-information>
  <mgm-interface-groups>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-group>....</mgm-group>
  </mgm-interface-groups>
</igmp-group-information>
```

Description

<mgm-interface-groups>

Usage

```
<mld-group-information>
  <mgm-interface-groups>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-group-count>
      mgm-group-count
    </mgm-group-count>
    <mgm-group>....</mgm-group>
  </mgm-interface-groups>
</mld-group-information>
```

Description

<mgm-interface-output-groups>

Usage

```
<mgm-interface-output-groups>
  <interface-name>
    interface-name
  </interface-name>
  <mgm-output-interface-status>
    mgm-output-interface-status
  </mgm-output-interface-status>
  <mgm-output-group>....</mgm-output-group>
</mgm-interface-output-groups>
```

Description

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<mgm-interface-output-groups>

Usage

```
<igmp-output-group-information>
  <mgm-interface-output-groups>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-output-interface-status>
      mgm-output-interface-status
    </mgm-output-interface-status>
    <mgm-output-group>....</mgm-output-group>
  </mgm-interface-output-groups>
</igmp-output-group-information>
```

Description

<mgm-interface-output-groups>

Usage

```
<mld-output-group-information>
  <mgm-interface-output-groups>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-output-interface-status>
      mgm-output-interface-status
    </mgm-output-interface-status>
    <mgm-output-group>....</mgm-output-group>
  </mgm-interface-output-groups>
</mld-output-group-information>
```

Description

<mgm-other-statistic>

Usage

```
<mgm-statistics-interface>
  <mgm-statistics-other>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-other>
</mgm-statistics-interface>
```

Description

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<mgm-other-statistic>

Usage

```
<mgm-statistics-interface>
  <mgm-statistics-global>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-global>
</mgm-statistics-interface>
```

Description

<mgm-other-statistic>

Usage

```
<mgm-statistics-interface>
  <mgm-other-statistic>
    <statistic-name>
      statistic-name
    </statistic-name>
    <statistic-count>
      statistic-count
    </statistic-count>
  </mgm-other-statistic>
</mgm-statistics-interface>
```

Description

<mgm-other-statistic>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-other>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-other>
</mgm-statistics-all>
```

Description

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<mgm-other-statistic>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-global>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-global>
</mgm-statistics-all>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-other>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-global>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-global>
```


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```
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-other>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-other>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-global>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
```

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```
    </mgm-other-statistic>
  </mgm-statistics-global>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-other>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-global>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-other>
      <mgm-other-statistic>
```


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```
            <statistic-name>
              statistic-name
            </statistic-name>
            <statistic-count>
              statistic-count
            </statistic-count>
          </mgm-other-statistic>
        </mgm-statistics-other>
      </mgm-statistics-interface>
    </mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-global>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-other>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-other>
</mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-global>
    <mgm-other-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <statistic-count>
        statistic-count
      </statistic-count>
    </mgm-other-statistic>
  </mgm-statistics-global>
</mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-other>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-all>
```


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```
</mld-statistics-information>
```

Description

<mgm-other-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-global>
      <mgm-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-all>
</mld-statistics-information>
```

Description

<mgm-output-group>

Usage

```
<mgm-interface-output-groups>
  <mgm-output-group>
    <multicast-group-address>
      multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
      multicast-source-address
    </multicast-source-address>
    <mgm-type>
      mgm-type
    </mgm-type>
    <mgm-group-mode-type>
      mgm-group-mode-type
    </mgm-group-mode-type>
    <mgm-group-input-interface>
      mgm-group-input-interface
    </mgm-group-input-interface>
  </mgm-output-group>
</mgm-interface-output-groups>
```

Description

<mgm-output-group>

Usage

```
<igmp-output-group-information>
```

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```
<mgm-interface-output-groups>
  <mgm-output-group>
    <multicast-group-address>
      multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
      multicast-source-address
    </multicast-source-address>
    <mgm-type>
      mgm-type
    </mgm-type>
    <mgm-group-mode-type>
      mgm-group-mode-type
    </mgm-group-mode-type>
    <mgm-group-input-interface>
      mgm-group-input-interface
    </mgm-group-input-interface>
  </mgm-output-group>
 </mgm-interface-output-groups>
</igmp-output-group-information>
```

Description

<mgm-output-group>

Usage

```
<mld-output-group-information>
 <mgm-interface-output-groups>
  <mgm-output-group>
    <multicast-group-address>
      multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
      multicast-source-address
    </multicast-source-address>
    <mgm-type>
      mgm-type
    </mgm-type>
    <mgm-group-mode-type>
      mgm-group-mode-type
    </mgm-group-mode-type>
    <mgm-group-input-interface>
      mgm-group-input-interface
    </mgm-group-input-interface>
  </mgm-output-group>
 </mgm-interface-output-groups>
</mld-output-group-information>
```

Description

<mgm-statistic>

Usage

```
<mgm-statistics-interface>
```


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```
  <mgm-statistics-group>
    <mgm-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <received-count>
        received-count
      </received-count>
      <sent-count>
        sent-count
      </sent-count>
      <error-count>
        error-count
      </error-count>
    </mgm-statistic>
  </mgm-statistics-group>
</mgm-statistics-interface>
```

Description

<mgm-statistic>

Usage

```
<mgm-statistics-interface>
  <mgm-statistic>
    <statistic-name>
      statistic-name
    </statistic-name>
    <received-count>
      received-count
    </received-count>
    <sent-count>
      sent-count
    </sent-count>
    <error-count>
      error-count
    </error-count>
  </mgm-statistic>
</mgm-statistics-interface>
```

Description

<mgm-statistic>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-group>
    <mgm-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <received-count>
        received-count
      </received-count>
```

```
        <sent-count>
          sent-count
        </sent-count>
        <error-count>
          error-count
        </error-count>
      </mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-all>
```

Description

<mgm-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-group>
      <mgm-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <received-count>
          received-count
        </received-count>
        <sent-count>
          sent-count
        </sent-count>
        <error-count>
          error-count
        </error-count>
      </mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-statistic>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <received-count>
        received-count
      </received-count>
      <sent-count>
        sent-count
      </sent-count>
      <error-count>
```


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```
            error-count
           </error-count>
          </mgm-statistic>
         </mgm-statistics-interface>
        </igmp-statistics-information>
```

Description

<mgm-statistic>

Usage

```
<igmp-statistics-information>
 <mgm-statistics-all>
  <mgm-statistics-group>
   <mgm-statistic>
    <statistic-name>
     statistic-name
    </statistic-name>
    <received-count>
     received-count
    </received-count>
    <sent-count>
     sent-count
    </sent-count>
    <error-count>
     error-count
    </error-count>
   </mgm-statistic>
  </mgm-statistics-group>
 </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-statistic>

Usage

```
<mld-statistics-information>
 <mgm-statistics-interface>
  <mgm-statistics-group>
   <mgm-statistic>
    <statistic-name>
     statistic-name
    </statistic-name>
    <received-count>
     received-count
    </received-count>
    <sent-count>
     sent-count
    </sent-count>
    <error-count>
     error-count
    </error-count>
   </mgm-statistic>
```

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```
    </mgm-statistics-group>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistic>
      <statistic-name>
        statistic-name
      </statistic-name>
      <received-count>
        received-count
      </received-count>
      <sent-count>
        sent-count
      </sent-count>
      <error-count>
        error-count
      </error-count>
    </mgm-statistic>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistic>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-group>
      <mgm-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <received-count>
          received-count
        </received-count>
        <sent-count>
          sent-count
        </sent-count>
        <error-count>
          error-count
        </error-count>
      </mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-all>
</mld-statistics-information>
```


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Description

<mgm-statistics-all>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-group>....</mgm-statistics-group>
  <mgm-statistics-other>....</mgm-statistics-other>
  <mgm-statistics-global>....</mgm-statistics-global>
</mgm-statistics-all>
```

Description

<mgm-statistics-all>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-group>....</mgm-statistics-group>
    <mgm-statistics-other>....</mgm-statistics-other>
    <mgm-statistics-global>....</mgm-statistics-global>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-statistics-all>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-group>....</mgm-statistics-group>
    <mgm-statistics-other>....</mgm-statistics-other>
    <mgm-statistics-global>....</mgm-statistics-global>
  </mgm-statistics-all>
</mld-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<mgm-statistics-interface>
  <mgm-statistics-global>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-global>
</mgm-statistics-interface>
```

Description

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<mgm-statistics-global>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-global>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-global>
</mgm-statistics-all>
```

Description

<mgm-statistics-global>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-global>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-global>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-global>
</igmp-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-global>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<mld-statistics-information>
```


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```
<mgm-statistics-interface>
  <mgm-statistics-global>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-global>
</mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<mld-statistics-information>
  <mgm-statistics-global>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-global>
</mld-statistics-information>
```

Description

<mgm-statistics-global>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-global>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-global>
  </mgm-statistics-all>
</mld-statistics-information>
```

Description

<mgm-statistics-group>

Usage

```
<mgm-statistics-interface>
  <mgm-statistics-group>
    <mgm-statistic>....</mgm-statistic>
  </mgm-statistics-group>
</mgm-statistics-interface>
```

Description

<mgm-statistics-group>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-group>
    <mgm-statistic>....</mgm-statistic>
  </mgm-statistics-group>
```

```
</mgm-statistics-all>
```

Description

<mgm-statistics-group>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-group>
      <mgm-statistic>....</mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-statistics-group>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-group>
      <mgm-statistic>....</mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-statistics-group>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-group>
      <mgm-statistic>....</mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistics-group>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-group>
      <mgm-statistic>....</mgm-statistic>
    </mgm-statistics-group>
  </mgm-statistics-all>
```


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```
</mld-statistics-information>
```

Description

<mgm-statistics-interface>

Usage

```
<mgm-statistics-interface>
  <interface-name>
    interface-name
  </interface-name>
  <mgm-disabled-interface-name>
    mgm-disabled-interface-name
  </mgm-disabled-interface-name>
  <mgm-interface-all>
    mgm-interface-all
  </mgm-interface-all>
  <mgm-statistics-group>....</mgm-statistics-group>
  <mgm-statistics-other>....</mgm-statistics-other>
  <mgm-statistics-global>....</mgm-statistics-global>
  <mgm-statistic>....</mgm-statistic>
  <mgm-other-statistic>....</mgm-other-statistic>
</mgm-statistics-interface>
```

Description

<mgm-statistics-interface>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-disabled-interface-name>
      mgm-disabled-interface-name
    </mgm-disabled-interface-name>
    <mgm-interface-all>
      mgm-interface-all
    </mgm-interface-all>
    <mgm-statistics-group>....</mgm-statistics-group>
    <mgm-statistics-other>....</mgm-statistics-other>
    <mgm-statistics-global>....</mgm-statistics-global>
    <mgm-statistic>....</mgm-statistic>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

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<mgm-statistics-interface>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <interface-name>
      interface-name
    </interface-name>
    <mgm-disabled-interface-name>
      mgm-disabled-interface-name
    </mgm-disabled-interface-name>
    <mgm-interface-all>
      mgm-interface-all
    </mgm-interface-all>
    <mgm-statistics-group>....</mgm-statistics-group>
    <mgm-statistics-other>....</mgm-statistics-other>
    <mgm-statistics-global>....</mgm-statistics-global>
    <mgm-statistic>....</mgm-statistic>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<mgm-statistics-interface>
  <mgm-statistics-other>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-other>
</mgm-statistics-interface>
```

Description

<mgm-statistics-other>

Usage

```
<mgm-statistics-all>
  <mgm-statistics-other>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-other>
</mgm-statistics-all>
```

Description

<mgm-statistics-other>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-other>
```


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```
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-interface>
</igmp-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-other>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-other>
</igmp-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<igmp-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-other>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-all>
</igmp-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>
    <mgm-statistics-other>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-interface>
</mld-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<mld-statistics-information>
  <mgm-statistics-other>
    <mgm-other-statistic>....</mgm-other-statistic>
  </mgm-statistics-other>
```

```
</mld-statistics-information>
```

Description

<mgm-statistics-other>

Usage

```
<mld-statistics-information>
  <mgm-statistics-all>
    <mgm-statistics-other>
      <mgm-other-statistic>....</mgm-other-statistic>
    </mgm-statistics-other>
  </mgm-statistics-all>
</mld-statistics-information>
```

Description

<mld-group-information>

Usage

```
<mld-group-information>
  <mgm-interface-groups>....</mgm-interface-groups>
</mld-group-information>
```

Description

<mld-hosts-information>

Usage

```
<mld-hosts-information>
  <mgm-disabled-interface-name>
    mgm-disabled-interface-name
  </mgm-disabled-interface-name>
  <mgm-interface>....</mgm-interface>
</mld-hosts-information>
```

Description

<mld-interface-information>

Usage

```
<mld-interface-information>
  <mgm-interface>....</mgm-interface>
  <mgm-configured-parameters>....</mgm-configured-parameters>
  <mgm-derived-parameters>....</mgm-derived-parameters>
</mld-interface-information>
```

Description

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<mld-output-group-information>

Usage

```
<mld-output-group-information>
  <mgm-interface-output-groups>....</mgm-interface-output-groups>
</mld-output-group-information>
```

Description

<mld-statistics-information>

Usage

```
<mld-statistics-information>
  <mgm-statistics-interface>....</mgm-statistics-interface>
  <mgm-statistics-other>....</mgm-statistics-other>
  <mgm-statistics-global>....</mgm-statistics-global>
  <mgm-statistics-all>....</mgm-statistics-all>
</mld-statistics-information>
```

Description

<mpls-admin-group>

Usage

```
<mpls-admin-group>
  <admin-group-name>
    admin-group-name
  </admin-group-name>
  <index>
    index
  </index>
</mpls-admin-group>
```

Description

<mpls-admin-group>

Usage

```
<mpls-admin-group-information>
  <mpls-admin-group>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <index>
      index
    </index>
  </mpls-admin-group>
</mpls-admin-group-information>
```

Description

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<mpls-admin-group-extended>

Usage

```
<mpls-admin-group-extended>
  <range>
    range
  </range>
  <admin-group-name>
    admin-group-name
  </admin-group-name>
  <admin-group-index>
    admin-group-index
  </admin-group-index>
</mpls-admin-group-extended>
```

Description

<mpls-admin-group-extended>

Usage

```
<mpls-admin-group-extended-information>
  <mpls-admin-group-extended>
    <range>
      range
    </range>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-index>
      admin-group-index
    </admin-group-index>
  </mpls-admin-group-extended>
</mpls-admin-group-extended-information>
```

Description

<mpls-admin-group-extended-information>

Usage

```
<mpls-admin-group-extended-information>
  <mpls-admin-group-extended>....</mpls-admin-group-extended>
</mpls-admin-group-extended-information>
```

Description

<mpls-admin-group-information>

Usage

```
<mpls-admin-group-information>
  <mpls-admin-group>....</mpls-admin-group>
</mpls-admin-group-information>
```


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Description

<mpls-call-admission-control>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>....</mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<mpls-call-admission-control-information>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>....</mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<mpls-context-identifier>

Usage

```
<mpls-context-identifier>
  <context-identifier>
    context-identifier
  </context-identifier>
  <context-type>
    context-type
  </context-type>
  <metric>
    metric
  </metric>
  <context-table>
    context-table
  </context-table>
  <context-lsps>
    context-lsps
  </context-lsps>
  <context-lsp-ingress-router>
    context-lsp-ingress-router
  </context-lsp-ingress-router>
  <context-lsp-name>
    context-lsp-name
  </context-lsp-name>
  <context-lsp-is-detour>
    context-lsp-is-detour
  </context-lsp-is-detour>
  <context-total-count>
    context-total-count
  </context-total-count>
  <primary-context-count>
```

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```
    primary-context-count
   </primary-context-count>
   <protector-context-count>
    protector-context-count
   </protector-context-count>
  </mpls-context-identifier>
```

Description Egress protection context identifier

<mpls-context-identifier>

Usage

```
<mpls-context-identifier-information>
 <mpls-context-identifier>
  <context-identifier>
   context-identifier
  </context-identifier>
  <context-type>
   context-type
  </context-type>
  <metric>
   metric
  </metric>
  <context-table>
   context-table
  </context-table>
  <context-lsps>
   context-lsps
  </context-lsps>
  <context-lsp-ingress-router>
   context-lsp-ingress-router
  </context-lsp-ingress-router>
  <context-lsp-name>
   context-lsp-name
  </context-lsp-name>
  <context-lsp-is-detour>
   context-lsp-is-detour
  </context-lsp-is-detour>
  <context-total-count>
   context-total-count
  </context-total-count>
  <primary-context-count>
   primary-context-count
  </primary-context-count>
  <protector-context-count>
   protector-context-count
  </protector-context-count>
 </mpls-context-identifier>
</mpls-context-identifier-information>
```

Description Egress protection context identifier

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<mpls-context-identifier-information>

Usage

```
<mpls-context-identifier-information>
  <mpls-context-identifier>....</mpls-context-identifier>
</mpls-context-identifier-information>
```

Description Information of context identifiers

<mpls-cspf>

Usage

```
<mpls-cspf>
  <cspf-queue>....</cspf-queue>
  <cspf-paths>....</cspf-paths>
  <cspf-timing>....</cspf-timing>
</mpls-cspf>
```

Description

<mpls-cspf>

Usage

```
<mpls-cspf-information>
  <mpls-cspf>
    <cspf-queue>....</cspf-queue>
    <cspf-paths>....</cspf-paths>
    <cspf-timing>....</cspf-timing>
  </mpls-cspf>
</mpls-cspf-information>
```

Description

<mpls-cspf-information>

Usage

```
<mpls-cspf-information>
  <mpls-cspf>....</mpls-cspf>
</mpls-cspf-information>
```

Description

<mpls-diffserv-te-information>

Usage

```
<mpls-diffserv-te-information>
  <bandwidth-model>
    bandwidth-model
  </bandwidth-model>
  <te-class-map>....</te-class-map>
```

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```
</mpls-diffserv-te-information>
```

Description

<mpls-error>

Usage

```
<mpls-error>
  <mpls-error-msg>
    mpls-error-msg
  </mpls-error-msg>
</mpls-error>
```

Description

<mpls-interface>

Usage

```
<mpls-interface-information>
  <mpls-interface>
    <interface-name>
      interface-name
    </interface-name>
    <mpls-interface-state>
      mpls-interface-state
    </mpls-interface-state>
    <no-group-flag>
      no-group-flag
    </no-group-flag>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
  </mpls-interface>
</mpls-interface-information>
```

Description

<mpls-interface-detail>

Usage

```
<mpls-interface-information>
  <mpls-interface-detail>
    <interface-name>
      interface-name
    </interface-name>
    <mpls-interface-state>
      mpls-interface-state
    </mpls-interface-state>
    <static-revert-time>
      static-revert-time
```


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```
    </static-revert-time>
    <always-mark-connection-protection-tlv>
      always-mark-connection-protection-tlv
    </always-mark-connection-protection-tlv>
    <mpls-interface-switch-away-lsps>
      mpls-interface-switch-away-lsps
    </mpls-interface-switch-away-lsps>
    <no-group-flag>
      no-group-flag
    </no-group-flag>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
    <admin-group-number>
      admin-group-number
    </admin-group-number>
    <admin-group-extended-name>
      admin-group-extended-name
    </admin-group-extended-name>
    <admin-group-extended-number>
      admin-group-extended-number
    </admin-group-extended-number>
    <srlg-name>
      srlg-name
    </srlg-name>
  </mpls-interface-detail>
</mpls-interface-information>
```

Description

<mpls-interface-information>

Usage

```
<mpls-interface-information>
  <mpls-interface>....</mpls-interface>
  <mpls-interface-detail>....</mpls-interface-detail>
</mpls-interface-information>
```

Description

<mpls-lsp>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <destination-address>
        destination-address
      </destination-address>
      <source-address>
        source-address
      </source-address>
      <lsp-state>
        lsp-state
```

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```
</lsp-state>
<route-count>
  route-count
</route-count>
<active-path>
  active-path
</active-path>
<is-primary>
  is-primary
</is-primary>
<name>
  name
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
```


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```
          metric
        </metric>
        <revert-timer>
          revert-timer
        </revert-timer>
        <revert-timer-remain>
          revert-timer-remain
        </revert-timer-remain>
        <optimize-protection-timer>
          optimize-protection-timer
        </optimize-protection-timer>
        <admin-groups>....</admin-groups>
        <admin-groups-extended>....</admin-groups-extended>
        <mpls-srlg>....</mpls-srlg>
        <lsp-creation-time>
          lsp-creation-time
        </lsp-creation-time>
        <lsp-soft-preemption-counter>
          lsp-soft-preemption-counter
        </lsp-soft-preemption-counter>
        <lsp-soft-preemption-time>
          lsp-soft-preemption-time
        </lsp-soft-preemption-time>
        <retry-timer>
          retry-timer
        </retry-timer>
        <retry-limit>
          retry-limit
        </retry-limit>
        <mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
        <mpls-lsp-path>....</mpls-lsp-path>
        <mpls-lsp-attributes>....</mpls-lsp-attributes>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
```

Description MPLS label-switched path information

<mpls-lsp>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <destination-address>
      destination-address
    </destination-address>
    <source-address>
      source-address
    </source-address>
    <lsp-state>
      lsp-state
    </lsp-state>
    <route-count>
      route-count
```

```
</route-count>
<active-path>
  active-path
</active-path>
<is-primary>
  is-primary
</is-primary>
<name>
  name
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
  metric
</metric>
<revert-timer>
```


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```
      revert-timer
    </revert-timer>
    <revert-timer-remain>
      revert-timer-remain
    </revert-timer-remain>
    <optimize-protection-timer>
      optimize-protection-timer
    </optimize-protection-timer>
    <admin-groups>....</admin-groups>
    <admin-groups-extended>....</admin-groups-extended>
    <mpls-srlg>....</mpls-srlg>
    <lsp-creation-time>
      lsp-creation-time
    </lsp-creation-time>
    <lsp-soft-preemption-counter>
      lsp-soft-preemption-counter
    </lsp-soft-preemption-counter>
    <lsp-soft-preemption-time>
      lsp-soft-preemption-time
    </lsp-soft-preemption-time>
    <retry-timer>
      retry-timer
    </retry-timer>
    <retry-limit>
      retry-limit
    </retry-limit>
    <mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
    <mpls-lsp-path>....</mpls-lsp-path>
    <mpls-lsp-attributes>....</mpls-lsp-attributes>
  </mpls-lsp>
</rsvp-session>
```

Description MPLS label-switched path information

<mpls-lsp>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <destination-address>
          destination-address
        </destination-address>
        <source-address>
          source-address
        </source-address>
        <lsp-state>
          lsp-state
        </lsp-state>
        <route-count>
          route-count
        </route-count>
        <active-path>
```

```
  active-path
</active-path>
<is-primary>
  is-primary
</is-primary>
<name>
  name
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
  metric
</metric>
<revert-timer>
  revert-timer
</revert-timer>
```


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```
        <revert-timer-remain>
          revert-timer-remain
        </revert-timer-remain>
        <optimize-protection-timer>
          optimize-protection-timer
        </optimize-protection-timer>
        <admin-groups>....</admin-groups>
        <admin-groups-extended>....</admin-groups-extended>
        <mpls-srlg>....</mpls-srlg>
        <lsp-creation-time>
          lsp-creation-time
        </lsp-creation-time>
        <lsp-soft-preemption-counter>
          lsp-soft-preemption-counter
        </lsp-soft-preemption-counter>
        <lsp-soft-preemption-time>
          lsp-soft-preemption-time
        </lsp-soft-preemption-time>
        <retry-timer>
          retry-timer
        </retry-timer>
        <retry-limit>
          retry-limit
        </retry-limit>
        <mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
        <mpls-lsp-path>....</mpls-lsp-path>
        <mpls-lsp-attributes>....</mpls-lsp-attributes>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description MPLS label-switched path information

<mpls-lsp>

Usage

```
<mpls-lsp>
  <destination-address>
    destination-address
  </destination-address>
  <source-address>
    source-address
  </source-address>
  <lsp-state>
    lsp-state
  </lsp-state>
  <route-count>
    route-count
  </route-count>
  <active-path>
    active-path
  </active-path>
  <is-primary>
```

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```
  is-primary
</is-primary>
<name>
  name
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
  metric
</metric>
<revert-timer>
  revert-timer
</revert-timer>
<revert-timer-remain>
  revert-timer-remain
</revert-timer-remain>
```


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```
<optimize-protection-timer>
  optimize-protection-timer
</optimize-protection-timer>
<admin-groups>....</admin-groups>
<admin-groups-extended>....</admin-groups-extended>
<mpls-srlg>....</mpls-srlg>
<lsp-creation-time>
  lsp-creation-time
</lsp-creation-time>
<lsp-soft-preemption-counter>
  lsp-soft-preemption-counter
</lsp-soft-preemption-counter>
<lsp-soft-preemption-time>
  lsp-soft-preemption-time
</lsp-soft-preemption-time>
<retry-timer>
  retry-timer
</retry-timer>
<retry-limit>
  retry-limit
</retry-limit>
<mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
<mpls-lsp-path>....</mpls-lsp-path>
<mpls-lsp-attributes>....</mpls-lsp-attributes>
</mpls-lsp>
```

Description MPLS label-switched path information

<mpls-lsp>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <destination-address>
          destination-address
        </destination-address>
        <source-address>
          source-address
        </source-address>
        <lsp-state>
          lsp-state
        </lsp-state>
        <route-count>
          route-count
        </route-count>
        <active-path>
          active-path
        </active-path>
        <is-primary>
          is-primary
        </is-primary>
        <name>
```

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```
  name
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
  metric
</metric>
<revert-timer>
  revert-timer
</revert-timer>
<revert-timer-remain>
  revert-timer-remain
</revert-timer-remain>
<optimize-protection-timer>
  optimize-protection-timer
</optimize-protection-timer>
```


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```
        <admin-groups>....</admin-groups>
        <admin-groups-extended>....</admin-groups-extended>
        <mpls-srlg>....</mpls-srlg>
        <lsp-creation-time>
          lsp-creation-time
        </lsp-creation-time>
        <lsp-soft-preemption-counter>
          lsp-soft-preemption-counter
        </lsp-soft-preemption-counter>
        <lsp-soft-preemption-time>
          lsp-soft-preemption-time
        </lsp-soft-preemption-time>
        <retry-timer>
          retry-timer
        </retry-timer>
        <retry-limit>
          retry-limit
        </retry-limit>
        <mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
        <mpls-lsp-path>....</mpls-lsp-path>
        <mpls-lsp-attributes>....</mpls-lsp-attributes>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description MPLS label-switched path information

<mpls-lsp>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <destination-address>
        destination-address
      </destination-address>
      <source-address>
        source-address
      </source-address>
      <lsp-state>
        lsp-state
      </lsp-state>
      <route-count>
        route-count
      </route-count>
      <active-path>
        active-path
      </active-path>
      <is-primary>
        is-primary
      </is-primary>
      <name>
        name
```

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```
</name>
<bidirectional>
  bidirectional
</bidirectional>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
</lsp-packets>
<lsp-bytes>
  lsp-bytes
</lsp-bytes>
<no-statistics>
  no-statistics
</no-statistics>
<mpls-p2mp-name>
  mpls-p2mp-name
</mpls-p2mp-name>
<lsp-type>
  lsp-type
</lsp-type>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-inter-domain-path>
  is-inter-domain-path
</is-inter-domain-path>
<load-balance>
  load-balance
</load-balance>
<lsp-diffserv-te-info>
  lsp-diffserv-te-info
</lsp-diffserv-te-info>
<metric>
  metric
</metric>
<revert-timer>
  revert-timer
</revert-timer>
<revert-timer-remain>
  revert-timer-remain
</revert-timer-remain>
<optimize-protection-timer>
  optimize-protection-timer
</optimize-protection-timer>
<admin-groups>....</admin-groups>
```


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```
      <admin-groups-extended>....</admin-groups-extended>
      <mpls-srlg>....</mpls-srlg>
      <lsp-creation-time>
        lsp-creation-time
      </lsp-creation-time>
      <lsp-soft-preemption-counter>
        lsp-soft-preemption-counter
      </lsp-soft-preemption-counter>
      <lsp-soft-preemption-time>
        lsp-soft-preemption-time
      </lsp-soft-preemption-time>
      <retry-timer>
        retry-timer
      </retry-timer>
      <retry-limit>
        retry-limit
      </retry-limit>
      <mpls-lsp-autobandwidth>....</mpls-lsp-autobandwidth>
      <mpls-lsp-path>....</mpls-lsp-path>
      <mpls-lsp-attributes>....</mpls-lsp-attributes>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description MPLS label-switched path information

<mpls-lsp-attributes>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-attributes>
        <signal-type>
          signal-type
        </signal-type>
        <encoding-type>
          encoding-type
        </encoding-type>
        <switching-type>
          switching-type
        </switching-type>
        <gpid>
          gpid
        </gpid>
        <protection-type>
          protection-type
        </protection-type>
      </mpls-lsp-attributes>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

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Description

<mpls-lsp-attributes>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-attributes>
      <signal-type>
        signal-type
      </signal-type>
      <encoding-type>
        encoding-type
      </encoding-type>
      <switching-type>
        switching-type
      </switching-type>
      <gpid>
        gpid
      </gpid>
      <protection-type>
        protection-type
      </protection-type>
    </mpls-lsp-attributes>
  </mpls-lsp>
</rsvp-session>
```

Description

<mpls-lsp-attributes>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-attributes>
          <signal-type>
            signal-type
          </signal-type>
          <encoding-type>
            encoding-type
          </encoding-type>
          <switching-type>
            switching-type
          </switching-type>
          <gpid>
            gpid
          </gpid>
          <protection-type>
            protection-type
          </protection-type>
        </mpls-lsp-attributes>
      </mpls-lsp>
    </rsvp-session>
```


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```
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-lsp-attributes>
  <signal-type>
    signal-type
  </signal-type>
  <encoding-type>
    encoding-type
  </encoding-type>
  <switching-type>
    switching-type
  </switching-type>
  <gpid>
    gpid
  </gpid>
  <protection-type>
    protection-type
  </protection-type>
</mpls-lsp-attributes>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-lsp>
  <mpls-lsp-attributes>
    <signal-type>
      signal-type
    </signal-type>
    <encoding-type>
      encoding-type
    </encoding-type>
    <switching-type>
      switching-type
    </switching-type>
    <gpid>
      gpid
    </gpid>
    <protection-type>
      protection-type
    </protection-type>
  </mpls-lsp-attributes>
</mpls-lsp>
```

Description

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<mpls-lsp-attributes>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-attributes>
          <signal-type>
            signal-type
          </signal-type>
          <encoding-type>
            encoding-type
          </encoding-type>
          <switching-type>
            switching-type
          </switching-type>
          <gpid>
            gpid
          </gpid>
          <protection-type>
            protection-type
          </protection-type>
        </mpls-lsp-attributes>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-restart-lsp>
  <mpls-lsp-attributes>
    <signal-type>
      signal-type
    </signal-type>
    <encoding-type>
      encoding-type
    </encoding-type>
    <switching-type>
      switching-type
    </switching-type>
    <gpid>
      gpid
    </gpid>
    <protection-type>
      protection-type
    </protection-type>
  </mpls-lsp-attributes>
</mpls-restart-lsp>
```


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Description

<mpls-lsp-attributes>

Usage

```
<mpls-restart-database-information>
 <mpls-restart-database>
  <mpls-restart-lsp>
   <mpls-lsp-attributes>
    <signal-type>
     signal-type
    </signal-type>
    <encoding-type>
     encoding-type
    </encoding-type>
    <switching-type>
     switching-type
    </switching-type>
    <gpid>
     gpid
    </gpid>
    <protection-type>
     protection-type
    </protection-type>
   </mpls-lsp-attributes>
  </mpls-restart-lsp>
 </mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-p2mp-restart-lsp>
 <mpls-restart-lsp>
  <mpls-lsp-attributes>
   <signal-type>
    signal-type
   </signal-type>
   <encoding-type>
    encoding-type
   </encoding-type>
   <switching-type>
    switching-type
   </switching-type>
   <gpid>
    gpid
   </gpid>
   <protection-type>
    protection-type
   </protection-type>
  </mpls-lsp-attributes>
 </mpls-restart-lsp>
```

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```
</mpls-p2mp-restart-lsp>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-p2mp-restart-database-information>
 <mpls-p2mp-restart-database>
  <mpls-p2mp-restart-lsp>
   <mpls-restart-lsp>
    <mpls-lsp-attributes>
     <signal-type>
      signal-type
     </signal-type>
     <encoding-type>
      encoding-type
     </encoding-type>
     <switching-type>
      switching-type
     </switching-type>
     <gpid>
      gpid
     </gpid>
     <protection-type>
      protection-type
     </protection-type>
    </mpls-lsp-attributes>
   </mpls-restart-lsp>
  </mpls-p2mp-restart-lsp>
 </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description

<mpls-lsp-attributes>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-attributes>
    <signal-type>
     signal-type
    </signal-type>
    <encoding-type>
     encoding-type
    </encoding-type>
    <switching-type>
     switching-type
    </switching-type>
    <gpid>
     gpid
    </gpid>
```


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```
        <protection-type>
          protection-type
        </protection-type>
      </mpls-lsp-attributes>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-autobandwidth>
        <monitor-lsp-bandwidth>
          monitor-lsp-bandwidth
        </monitor-lsp-bandwidth>
        <minimum-bandwidth>
          minimum-bandwidth
        </minimum-bandwidth>
        <maximum-bandwidth>
          maximum-bandwidth
        </maximum-bandwidth>
        <adjust-timer>
          adjust-timer
        </adjust-timer>
        <bandwidth>
          bandwidth
        </bandwidth>
        <time-to-adjust>
          time-to-adjust
        </time-to-adjust>
        <adjust-threshold>
          adjust-threshold
        </adjust-threshold>
        <overflow-limit>
          overflow-limit
        </overflow-limit>
        <overflow-sample-count>
          overflow-sample-count
        </overflow-sample-count>
        <underflow-limit>
          underflow-limit
        </underflow-limit>
        <underflow-sample-count>
          underflow-sample-count
        </underflow-sample-count>
      </mpls-lsp-autobandwidth>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

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Description

<mpls-lsp-autobandwidth>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-autobandwidth>
      <monitor-lsp-bandwidth>
        monitor-lsp-bandwidth
      </monitor-lsp-bandwidth>
      <minimum-bandwidth>
        minimum-bandwidth
      </minimum-bandwidth>
      <maximum-bandwidth>
        maximum-bandwidth
      </maximum-bandwidth>
      <adjust-timer>
        adjust-timer
      </adjust-timer>
      <bandwidth>
        bandwidth
      </bandwidth>
      <time-to-adjust>
        time-to-adjust
      </time-to-adjust>
      <adjust-threshold>
        adjust-threshold
      </adjust-threshold>
      <overflow-limit>
        overflow-limit
      </overflow-limit>
      <overflow-sample-count>
        overflow-sample-count
      </overflow-sample-count>
      <underflow-limit>
        underflow-limit
      </underflow-limit>
      <underflow-sample-count>
        underflow-sample-count
      </underflow-sample-count>
    </mpls-lsp-autobandwidth>
  </mpls-lsp>
</rsvp-session>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-autobandwidth>
```


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```
                <monitor-lsp-bandwidth>
                  monitor-lsp-bandwidth
                </monitor-lsp-bandwidth>
                <minimum-bandwidth>
                  minimum-bandwidth
                </minimum-bandwidth>
                <maximum-bandwidth>
                  maximum-bandwidth
                </maximum-bandwidth>
                <adjust-timer>
                  adjust-timer
                </adjust-timer>
                <bandwidth>
                  bandwidth
                </bandwidth>
                <time-to-adjust>
                  time-to-adjust
                </time-to-adjust>
                <adjust-threshold>
                  adjust-threshold
                </adjust-threshold>
                <overflow-limit>
                  overflow-limit
                </overflow-limit>
                <overflow-sample-count>
                  overflow-sample-count
                </overflow-sample-count>
                <underflow-limit>
                  underflow-limit
                </underflow-limit>
                <underflow-sample-count>
                  underflow-sample-count
                </underflow-sample-count>
              </mpls-lsp-autobandwidth>
            </mpls-lsp>
          </rsvp-session>
        </rsvp-session-data>
      </rsvp-session-information>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<mpls-lsp-autobandwidth>
  <monitor-lsp-bandwidth>
    monitor-lsp-bandwidth
  </monitor-lsp-bandwidth>
  <minimum-bandwidth>
    minimum-bandwidth
  </minimum-bandwidth>
  <maximum-bandwidth>
    maximum-bandwidth
  </maximum-bandwidth>
  <adjust-timer>
```

```
    adjust-timer
  </adjust-timer>
  <bandwidth>
    bandwidth
  </bandwidth>
  <time-to-adjust>
    time-to-adjust
  </time-to-adjust>
  <adjust-threshold>
    adjust-threshold
  </adjust-threshold>
  <overflow-limit>
    overflow-limit
  </overflow-limit>
  <overflow-sample-count>
    overflow-sample-count
  </overflow-sample-count>
  <underflow-limit>
    underflow-limit
  </underflow-limit>
  <underflow-sample-count>
    underflow-sample-count
  </underflow-sample-count>
</mpls-lsp-autobandwidth>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<mpls-lsp>
  <mpls-lsp-autobandwidth>
    <monitor-lsp-bandwidth>
      monitor-lsp-bandwidth
    </monitor-lsp-bandwidth>
    <minimum-bandwidth>
      minimum-bandwidth
    </minimum-bandwidth>
    <maximum-bandwidth>
      maximum-bandwidth
    </maximum-bandwidth>
    <adjust-timer>
      adjust-timer
    </adjust-timer>
    <bandwidth>
      bandwidth
    </bandwidth>
    <time-to-adjust>
      time-to-adjust
    </time-to-adjust>
    <adjust-threshold>
      adjust-threshold
    </adjust-threshold>
    <overflow-limit>
      overflow-limit
```


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```
    </overflow-limit>
    <overflow-sample-count>
     overflow-sample-count
    </overflow-sample-count>
    <underflow-limit>
     underflow-limit
    </underflow-limit>
    <underflow-sample-count>
     underflow-sample-count
    </underflow-sample-count>
   </mpls-lsp-autobandwidth>
  </mpls-lsp>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-autobandwidth>
     <monitor-lsp-bandwidth>
      monitor-lsp-bandwidth
     </monitor-lsp-bandwidth>
     <minimum-bandwidth>
      minimum-bandwidth
     </minimum-bandwidth>
     <maximum-bandwidth>
      maximum-bandwidth
     </maximum-bandwidth>
     <adjust-timer>
      adjust-timer
     </adjust-timer>
     <bandwidth>
      bandwidth
     </bandwidth>
     <time-to-adjust>
      time-to-adjust
     </time-to-adjust>
     <adjust-threshold>
      adjust-threshold
     </adjust-threshold>
     <overflow-limit>
      overflow-limit
     </overflow-limit>
     <overflow-sample-count>
      overflow-sample-count
     </overflow-sample-count>
     <underflow-limit>
      underflow-limit
     </underflow-limit>
     <underflow-sample-count>
      underflow-sample-count
```

```
            </underflow-sample-count>
           </mpls-lsp-autobandwidth>
          </mpls-lsp>
         </rsvp-session>
        </rsvp-session-data>
       </mpls-lsp-information>
```

Description

<mpls-lsp-autobandwidth>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-autobandwidth>
    <monitor-lsp-bandwidth>
     monitor-lsp-bandwidth
    </monitor-lsp-bandwidth>
    <minimum-bandwidth>
     minimum-bandwidth
    </minimum-bandwidth>
    <maximum-bandwidth>
     maximum-bandwidth
    </maximum-bandwidth>
    <adjust-timer>
     adjust-timer
    </adjust-timer>
    <bandwidth>
     bandwidth
    </bandwidth>
    <time-to-adjust>
     time-to-adjust
    </time-to-adjust>
    <adjust-threshold>
     adjust-threshold
    </adjust-threshold>
    <overflow-limit>
     overflow-limit
    </overflow-limit>
    <overflow-sample-count>
     overflow-sample-count
    </overflow-sample-count>
    <underflow-limit>
     underflow-limit
    </underflow-limit>
    <underflow-sample-count>
     underflow-sample-count
    </underflow-sample-count>
   </mpls-lsp-autobandwidth>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```


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Description

<mpls-lsp-autobandwidth-information>

Usage

```
<mpls-lsp-autobandwidth-information>
 <lsp-name>
  lsp-name
 </lsp-name>
 <autobw-minimum-bandwidth>
  autobw-minimum-bandwidth
 </autobw-minimum-bandwidth>
 <autobw-maximum-bandwidth>
  autobw-maximum-bandwidth
 </autobw-maximum-bandwidth>
 <autobw-max-average-bandwidth>
  autobw-max-average-bandwidth
 </autobw-max-average-bandwidth>
 <autobw-adjust-timer>
  autobw-adjust-timer
 </autobw-adjust-timer>
 <autobw-time-to-adjust>
  autobw-time-to-adjust
 </autobw-time-to-adjust>
 <autobw-time-last-adjust>
  autobw-time-last-adjust
 </autobw-time-last-adjust>
 <autobw-adjust-threshold>
  autobw-adjust-threshold
 </autobw-adjust-threshold>
 <overflow-limit>
  overflow-limit
 </overflow-limit>
 <overflow-sample-count>
  overflow-sample-count
 </overflow-sample-count>
 <underflow-limit>
  underflow-limit
 </underflow-limit>
 <underflow-sample-count>
  underflow-sample-count
 </underflow-sample-count>
 <autobw-last-bw>
  autobw-last-bw
 </autobw-last-bw>
 <autobw-requested-bw>
  autobw-requested-bw
 </autobw-requested-bw>
 <autobw-signaled-bw>
  autobw-signaled-bw
 </autobw-signaled-bw>
 <autobw-high-watermark-bw>
  autobw-high-watermark-bw
 </autobw-high-watermark-bw>
 <autobw-total-adjustments>
  autobw-total-adjustments
```

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```
  </autobw-total-adjustments>
  <autobw-total-successful-adjustments>
    autobw-total-successful-adjustments
  </autobw-total-successful-adjustments>
  <autobw-total-unsuccessful-adjustments>
    autobw-total-unsuccessful-adjustments
  </autobw-total-unsuccessful-adjustments>
  <autobw-monitor-lsp-bandwidth>
    autobw-monitor-lsp-bandwidth
  </autobw-monitor-lsp-bandwidth>
  <destination-address>
    destination-address
  </destination-address>
  <source-address>
    source-address
  </source-address>
  <lsp-state>
    lsp-state
  </lsp-state>
</mpls-lsp-autobandwidth-information>
```

Description

<mpls-lsp-defaults>

Usage

```
<mpls-lsp-defaults>
  <lsp-setup-priority>
    lsp-setup-priority
  </lsp-setup-priority>
  <lsp-hold-priority>
    lsp-hold-priority
  </lsp-hold-priority>
  <lsp-retry-timer>
    lsp-retry-timer
  </lsp-retry-timer>
  <lsp-hoplimit>
    lsp-hoplimit
  </lsp-hoplimit>
  <lsp-bandwidth>
    lsp-bandwidth
  </lsp-bandwidth>
</mpls-lsp-defaults>
```

Description

<mpls-lsp-defaults>

Usage

```
<mpls-lsp-defaults-information>
  <mpls-lsp-defaults>
    <lsp-setup-priority>
      lsp-setup-priority
    </lsp-setup-priority>
```


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```
    <lsp-hold-priority>
      lsp-hold-priority
    </lsp-hold-priority>
    <lsp-retry-timer>
      lsp-retry-timer
    </lsp-retry-timer>
    <lsp-hoplimit>
      lsp-hoplimit
    </lsp-hoplimit>
    <lsp-bandwidth>
      lsp-bandwidth
    </lsp-bandwidth>
  </mpls-lsp-defaults>
</mpls-lsp-defaults-information>
```

Description

<mpls-lsp-defaults-information>

Usage

```
<mpls-lsp-defaults-information>
  <mpls-lsp-defaults>....</mpls-lsp-defaults>
</mpls-lsp-defaults-information>
```

Description

<mpls-lsp-information>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>....</rsvp-session-data>
</mpls-lsp-information>
```

Description

<mpls-lsp-path>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <path-active>
          path-active
        </path-active>
        <title>
          title
        </title>
        <name>
          name
        </name>
        <path-state>
          path-state
```

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```
</path-state>
<cos>
  cos
</cos>
<no-decrement-ttl>
  no-decrement-ttl
</no-decrement-ttl>
<preference>
  preference
</preference>
<path-soft-preemption-pending>
  path-soft-preemption-pending
</path-soft-preemption-pending>
<setup-priority>
  setup-priority
</setup-priority>
<hold-priority>
  hold-priority
</hold-priority>
<bandwidth>
  bandwidth
</bandwidth>
<actual-bandwidth>
  actual-bandwidth
</actual-bandwidth>
<per-class-bandwidth-heading>
  per-class-bandwidth-heading
</per-class-bandwidth-heading>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
</smart-optimize-timer>
<admin-groups>....</admin-groups>
```


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```
        <admin-groups-extended>....</admin-groups-extended>
        <srlg>....</srlg>
        <retry-timer>
          retry-timer
        </retry-timer>
        <retry-limit>
          retry-limit
        </retry-limit>
        <cspf-status>
          cspf-status
        </cspf-status>
        <explicit-route>....</explicit-route>
        <received-rro>
          received-rro
        </received-rro>
        <oam-state>....</oam-state>
        <path-history>....</path-history>
        <path-available-bandwidth>....</path-available-bandwidth>
        <layer2-connection>....</layer2-connection>
        <mpls-srlg>....</mpls-srlg>
      </mpls-lsp-path>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <path-active>
        path-active
      </path-active>
      <title>
        title
      </title>
      <name>
        name
      </name>
      <path-state>
        path-state
      </path-state>
      <cos>
        cos
      </cos>
      <no-decrement-ttl>
        no-decrement-ttl
      </no-decrement-ttl>
      <preference>
        preference
      </preference>
```

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```
<path-soft-preemption-pending>
  path-soft-preemption-pending
</path-soft-preemption-pending>
<setup-priority>
  setup-priority
</setup-priority>
<hold-priority>
  hold-priority
</hold-priority>
<bandwidth>
  bandwidth
</bandwidth>
<actual-bandwidth>
  actual-bandwidth
</actual-bandwidth>
<per-class-bandwidth-heading>
  per-class-bandwidth-heading
</per-class-bandwidth-heading>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
</smart-optimize-timer>
<admin-groups>....</admin-groups>
<admin-groups-extended>....</admin-groups-extended>
<srlg>....</srlg>
<retry-timer>
  retry-timer
</retry-timer>
<retry-limit>
  retry-limit
</retry-limit>
<cspf-status>
  cspf-status
```


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```
    </cspf-status>
    <explicit-route>....</explicit-route>
    <received-rro>
      received-rro
    </received-rro>
    <oam-state>....</oam-state>
    <path-history>....</path-history>
    <path-available-bandwidth>....</path-available-bandwidth>
    <layer2-connection>....</layer2-connection>
    <mpls-srlg>....</mpls-srlg>
  </mpls-lsp-path>
 </mpls-lsp>
</rsvp-session>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <path-active>
      path-active
     </path-active>
     <title>
      title
     </title>
     <name>
      name
     </name>
     <path-state>
      path-state
     </path-state>
     <cos>
      cos
     </cos>
     <no-decrement-ttl>
      no-decrement-ttl
     </no-decrement-ttl>
     <preference>
      preference
     </preference>
     <path-soft-preemption-pending>
      path-soft-preemption-pending
     </path-soft-preemption-pending>
     <setup-priority>
      setup-priority
     </setup-priority>
     <hold-priority>
      hold-priority
     </hold-priority>
```

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```
<bandwidth>
  bandwidth
</bandwidth>
<actual-bandwidth>
  actual-bandwidth
</actual-bandwidth>
<per-class-bandwidth-heading>
  per-class-bandwidth-heading
</per-class-bandwidth-heading>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
</smart-optimize-timer>
<admin-groups>....</admin-groups>
<admin-groups-extended>....</admin-groups-extended>
<srlg>....</srlg>
<retry-timer>
  retry-timer
</retry-timer>
<retry-limit>
  retry-limit
</retry-limit>
<cspf-status>
  cspf-status
</cspf-status>
<explicit-route>....</explicit-route>
<received-rro>
  received-rro
</received-rro>
<oam-state>....</oam-state>
<path-history>....</path-history>
<path-available-bandwidth>....</path-available-bandwidth>
<layer2-connection>....</layer2-connection>
```


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```
            <mpls-srlg>....</mpls-srlg>
          </mpls-lsp-path>
        </mpls-lsp>
      </rsvp-session>
    </rsvp-session-data>
  </rsvp-session-information>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<mpls-lsp-path>
  <path-active>
    path-active
  </path-active>
  <title>
    title
  </title>
  <name>
    name
  </name>
  <path-state>
    path-state
  </path-state>
  <cos>
    cos
  </cos>
  <no-decrement-ttl>
    no-decrement-ttl
  </no-decrement-ttl>
  <preference>
    preference
  </preference>
  <path-soft-preemption-pending>
    path-soft-preemption-pending
  </path-soft-preemption-pending>
  <setup-priority>
    setup-priority
  </setup-priority>
  <hold-priority>
    hold-priority
  </hold-priority>
  <bandwidth>
    bandwidth
  </bandwidth>
  <actual-bandwidth>
    actual-bandwidth
  </actual-bandwidth>
  <per-class-bandwidth-heading>
    per-class-bandwidth-heading
  </per-class-bandwidth-heading>
  <bandwidth_ct0>
    bandwidth_ct0
```

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```
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
</smart-optimize-timer>
<admin-groups>....</admin-groups>
<admin-groups-extended>....</admin-groups-extended>
<srlg>....</srlg>
<retry-timer>
  retry-timer
</retry-timer>
<retry-limit>
  retry-limit
</retry-limit>
<cspf-status>
  cspf-status
</cspf-status>
<explicit-route>....</explicit-route>
<received-rro>
  received-rro
</received-rro>
<oam-state>....</oam-state>
<path-history>....</path-history>
<path-available-bandwidth>....</path-available-bandwidth>
<layer2-connection>....</layer2-connection>
<mpls-srlg>....</mpls-srlg>
</mpls-lsp-path>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<mpls-lsp>
```


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```
<mpls-lsp-path>
  <path-active>
    path-active
  </path-active>
  <title>
    title
  </title>
  <name>
    name
  </name>
  <path-state>
    path-state
  </path-state>
  <cos>
    cos
  </cos>
  <no-decrement-ttl>
    no-decrement-ttl
  </no-decrement-ttl>
  <preference>
    preference
  </preference>
  <path-soft-preemption-pending>
    path-soft-preemption-pending
  </path-soft-preemption-pending>
  <setup-priority>
    setup-priority
  </setup-priority>
  <hold-priority>
    hold-priority
  </hold-priority>
  <bandwidth>
    bandwidth
  </bandwidth>
  <actual-bandwidth>
    actual-bandwidth
  </actual-bandwidth>
  <per-class-bandwidth-heading>
    per-class-bandwidth-heading
  </per-class-bandwidth-heading>
  <bandwidth_ct0>
    bandwidth_ct0
  </bandwidth_ct0>
  <bandwidth_ct1>
    bandwidth_ct1
  </bandwidth_ct1>
  <bandwidth_ct2>
    bandwidth_ct2
  </bandwidth_ct2>
  <bandwidth_ct3>
    bandwidth_ct3
  </bandwidth_ct3>
  <path-adaptive>
    path-adaptive
  </path-adaptive>
  <path-no-recordroute>
```

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```
        path-no-recordroute
      </path-no-recordroute>
      <hoplimit>
        hoplimit
      </hoplimit>
      <optimize-timer>
        optimize-timer
      </optimize-timer>
      <smart-optimize-timer>
        smart-optimize-timer
      </smart-optimize-timer>
      <admin-groups>....</admin-groups>
      <admin-groups-extended>....</admin-groups-extended>
      <srlg>....</srlg>
      <retry-timer>
        retry-timer
      </retry-timer>
      <retry-limit>
        retry-limit
      </retry-limit>
      <cspf-status>
        cspf-status
      </cspf-status>
      <explicit-route>....</explicit-route>
      <received-rro>
        received-rro
      </received-rro>
      <oam-state>....</oam-state>
      <path-history>....</path-history>
      <path-available-bandwidth>....</path-available-bandwidth>
      <layer2-connection>....</layer2-connection>
      <mpls-srlg>....</mpls-srlg>
    </mpls-lsp-path>
  </mpls-lsp>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <path-active>
            path-active
          </path-active>
          <title>
            title
          </title>
          <name>
            name
          </name>
```


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```
<path-state>
  path-state
</path-state>
<cos>
  cos
</cos>
<no-decrement-ttl>
  no-decrement-ttl
</no-decrement-ttl>
<preference>
  preference
</preference>
<path-soft-preemption-pending>
  path-soft-preemption-pending
</path-soft-preemption-pending>
<setup-priority>
  setup-priority
</setup-priority>
<hold-priority>
  hold-priority
</hold-priority>
<bandwidth>
  bandwidth
</bandwidth>
<actual-bandwidth>
  actual-bandwidth
</actual-bandwidth>
<per-class-bandwidth-heading>
  per-class-bandwidth-heading
</per-class-bandwidth-heading>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
```

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```
            </smart-optimize-timer>
            <admin-groups>....</admin-groups>
            <admin-groups-extended>....</admin-groups-extended>
            <srlg>....</srlg>
            <retry-timer>
              retry-timer
            </retry-timer>
            <retry-limit>
              retry-limit
            </retry-limit>
            <cspf-status>
              cspf-status
            </cspf-status>
            <explicit-route>....</explicit-route>
            <received-rro>
              received-rro
            </received-rro>
            <oam-state>....</oam-state>
            <path-history>....</path-history>
            <path-available-bandwidth>....</path-available-bandwidth>
            <layer2-connection>....</layer2-connection>
            <mpls-srlg>....</mpls-srlg>
          </mpls-lsp-path>
        </mpls-lsp>
      </rsvp-session>
    </rsvp-session-data>
  </mpls-lsp-information>
```

Description Primary or secondary LSP path

<mpls-lsp-path>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-lsp-path>
        <path-active>
          path-active
        </path-active>
        <title>
          title
        </title>
        <name>
          name
        </name>
        <path-state>
          path-state
        </path-state>
        <cos>
          cos
        </cos>
        <no-decrement-ttl>
          no-decrement-ttl
```


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```
</no-decrement-ttl>
<preference>
  preference
</preference>
<path-soft-preemption-pending>
  path-soft-preemption-pending
</path-soft-preemption-pending>
<setup-priority>
  setup-priority
</setup-priority>
<hold-priority>
  hold-priority
</hold-priority>
<bandwidth>
  bandwidth
</bandwidth>
<actual-bandwidth>
  actual-bandwidth
</actual-bandwidth>
<per-class-bandwidth-heading>
  per-class-bandwidth-heading
</per-class-bandwidth-heading>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<bandwidth_ct1>
  bandwidth_ct1
</bandwidth_ct1>
<bandwidth_ct2>
  bandwidth_ct2
</bandwidth_ct2>
<bandwidth_ct3>
  bandwidth_ct3
</bandwidth_ct3>
<path-adaptive>
  path-adaptive
</path-adaptive>
<path-no-recordroute>
  path-no-recordroute
</path-no-recordroute>
<hoplimit>
  hoplimit
</hoplimit>
<optimize-timer>
  optimize-timer
</optimize-timer>
<smart-optimize-timer>
  smart-optimize-timer
</smart-optimize-timer>
<admin-groups>....</admin-groups>
<admin-groups-extended>....</admin-groups-extended>
<srlg>....</srlg>
<retry-timer>
  retry-timer
</retry-timer>
<retry-limit>
```

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```
            retry-limit
           </retry-limit>
           <cspf-status>
            cspf-status
           </cspf-status>
           <explicit-route>....</explicit-route>
           <received-rro>
            received-rro
           </received-rro>
           <oam-state>....</oam-state>
           <path-history>....</path-history>
           <path-available-bandwidth>....</path-available-bandwidth>
           <layer2-connection>....</layer2-connection>
           <mpls-srlg>....</mpls-srlg>
          </mpls-lsp-path>
         </mpls-lsp>
        </mpls-call-admission-control>
       </mpls-call-admission-control-information>
```

Description Primary or secondary LSP path

<mpls-lsp-replication>

Usage

```
<mpls-lsp-replication>
 <mpls-pvc-name>
  mpls-pvc-name
 </mpls-pvc-name>
 <mpls-pvc-state>
  mpls-pvc-state
 </mpls-pvc-state>
 <mpls-pvc-resolved>
  mpls-pvc-resolved
 </mpls-pvc-resolved>
 <mpls-path-resolved>
  mpls-path-resolved
 </mpls-path-resolved>
 <mpls-pvc-replication>....</mpls-pvc-replication>
 <mpls-path-replication>....</mpls-path-replication>
</mpls-lsp-replication>
```

Description MPLS LSP replication entry

<mpls-lsp-replication>

Usage

```
<mpls-lsp-replication-information>
 <mpls-lsp-replication>
  <mpls-pvc-name>
   mpls-pvc-name
  </mpls-pvc-name>
  <mpls-pvc-state>
```


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```
    mpls-pvc-state
   </mpls-pvc-state>
   <mpls-pvc-resolved>
    mpls-pvc-resolved
   </mpls-pvc-resolved>
   <mpls-path-resolved>
    mpls-path-resolved
   </mpls-path-resolved>
   <mpls-pvc-replication>....</mpls-pvc-replication>
   <mpls-path-replication>....</mpls-path-replication>
  </mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description MPLS LSP replication entry

<mpls-lsp-replication-information>

Usage

```
<mpls-lsp-replication-information>
  <mpls-lsp-replication>....</mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description Information about one or more MPLS replication lsps

<mpls-oam-ldp-replication>

Usage

```
<mpls-oam-ldp-replication>
  <mpls-oam-instance-id>
   mpls-oam-instance-id
  </mpls-oam-instance-id>
  <mpls-oam-type>
   mpls-oam-type
  </mpls-oam-type>
  <mpls-oam-ldp-fec>
   mpls-oam-ldp-fec
  </mpls-oam-ldp-fec>
  <mpls-oam-ldp-fec-len>
   mpls-oam-ldp-fec-len
  </mpls-oam-ldp-fec-len>
  <mpls-oam-bfd-dest-addr>
   mpls-oam-bfd-dest-addr
  </mpls-oam-bfd-dest-addr>
  <mpls-mirror-oam-local-bfd-disc>
   mpls-mirror-oam-local-bfd-disc
  </mpls-mirror-oam-local-bfd-disc>
  <mpls-oam-ldp-source>
   mpls-oam-ldp-source
  </mpls-oam-ldp-source>
  <mpls-mirror-oam-remote-bfd-disc>
   mpls-mirror-oam-remote-bfd-disc
  </mpls-mirror-oam-remote-bfd-disc>
```

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```
<mpls-mirror-oam-refcount>
  mpls-mirror-oam-refcount
</mpls-mirror-oam-refcount>
<mpls-mirror-oam-address>
  mpls-mirror-oam-address
</mpls-mirror-oam-address>
<mpls-mirror-oam-mpls-oam-address>
  mpls-mirror-oam-mpls-oam-address
</mpls-mirror-oam-mpls-oam-address>
<mpls-mirror-ldp-oam-stale-entry>
  mpls-mirror-ldp-oam-stale-entry
</mpls-mirror-ldp-oam-stale-entry>
</mpls-oam-ldp-replication>
```

Description MPLS OAM LDP replication entry

<mpls-oam-ldp-replication>

Usage

```
<mpls-oam-ldp-replication-information>
  <mpls-oam-ldp-replication>
    <mpls-oam-instance-id>
      mpls-oam-instance-id
    </mpls-oam-instance-id>
    <mpls-oam-type>
      mpls-oam-type
    </mpls-oam-type>
    <mpls-oam-ldp-fec>
      mpls-oam-ldp-fec
    </mpls-oam-ldp-fec>
    <mpls-oam-ldp-fec-len>
      mpls-oam-ldp-fec-len
    </mpls-oam-ldp-fec-len>
    <mpls-oam-bfd-dest-addr>
      mpls-oam-bfd-dest-addr
    </mpls-oam-bfd-dest-addr>
    <mpls-mirror-oam-local-bfd-disc>
      mpls-mirror-oam-local-bfd-disc
    </mpls-mirror-oam-local-bfd-disc>
    <mpls-oam-ldp-source>
      mpls-oam-ldp-source
    </mpls-oam-ldp-source>
    <mpls-mirror-oam-remote-bfd-disc>
      mpls-mirror-oam-remote-bfd-disc
    </mpls-mirror-oam-remote-bfd-disc>
    <mpls-mirror-oam-refcount>
      mpls-mirror-oam-refcount
    </mpls-mirror-oam-refcount>
    <mpls-mirror-oam-address>
      mpls-mirror-oam-address
    </mpls-mirror-oam-address>
    <mpls-mirror-oam-mpls-oam-address>
      mpls-mirror-oam-mpls-oam-address
    </mpls-mirror-oam-mpls-oam-address>
```


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```
    <mpls-mirror-ldp-oam-stale-entry>
      mpls-mirror-ldp-oam-stale-entry
    </mpls-mirror-ldp-oam-stale-entry>
  </mpls-oam-ldp-replication>
</mpls-oam-ldp-replication-information>
```

Description MPLS OAM LDP replication entry

<mpls-oam-ldp-replication-information>

Usage

```
<mpls-oam-ldp-replication-information>
  <mpls-oam-ldp-replication>....</mpls-oam-ldp-replication>
</mpls-oam-ldp-replication-information>
```

Description

<mpls-oam-rsvp-replication>

Usage

```
<mpls-oam-rsvp-replication>
  <mpls-rsvp-oam-type>
    mpls-rsvp-oam-type
  </mpls-rsvp-oam-type>
  <mpls-mirror-oam-lsp-name>
    mpls-mirror-oam-lsp-name
  </mpls-mirror-oam-lsp-name>
  <mpls-mirror-oam-path-name>
    mpls-mirror-oam-path-name
  </mpls-mirror-oam-path-name>
  <mpls-mirror-oam-path-type>
    mpls-mirror-oam-path-type
  </mpls-mirror-oam-path-type>
  <mpls-mirror-oam-lsp-id>
    mpls-mirror-oam-lsp-id
  </mpls-mirror-oam-lsp-id>
  <mpls-mirror-oam-tunnel-id>
    mpls-mirror-oam-tunnel-id
  </mpls-mirror-oam-tunnel-id>
  <mpls-mirror-oam-ext-tunnel-id>
    mpls-mirror-oam-ext-tunnel-id
  </mpls-mirror-oam-ext-tunnel-id>
  <mpls-mirror-oam-tunnel-endpoint-addr>
    mpls-mirror-oam-tunnel-endpoint-addr
  </mpls-mirror-oam-tunnel-endpoint-addr>
  <mpls-mirror-oam-tunnel-send-addr>
    mpls-mirror-oam-tunnel-send-addr
  </mpls-mirror-oam-tunnel-send-addr>
  <mpls-rsvp-oam-bfd-dest-addr>
    mpls-rsvp-oam-bfd-dest-addr
  </mpls-rsvp-oam-bfd-dest-addr>
  <mpls-mirror-rsvp-oam-local-bfd-disc>
    mpls-mirror-rsvp-oam-local-bfd-disc
```

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```
</mpls-mirror-rsvp-oam-local-bfd-disc>
<mpls-oam-rsvp-source>
  mpls-oam-rsvp-source
</mpls-oam-rsvp-source>
<mpls-mirror-rsvp-oam-remote-bfd-disc>
  mpls-mirror-rsvp-oam-remote-bfd-disc
</mpls-mirror-rsvp-oam-remote-bfd-disc>
<mpls-mirror-rsvp-oam-refcount>
  mpls-mirror-rsvp-oam-refcount
</mpls-mirror-rsvp-oam-refcount>
<mpls-mirror-rsvp-oam-address>
  mpls-mirror-rsvp-oam-address
</mpls-mirror-rsvp-oam-address>
<mpls-mirror-rsvp-oam-mpls-oam-address>
  mpls-mirror-rsvp-oam-mpls-oam-address
</mpls-mirror-rsvp-oam-mpls-oam-address>
<mpls-mirror-rsvp-oam-stale-entry>
  mpls-mirror-rsvp-oam-stale-entry
</mpls-mirror-rsvp-oam-stale-entry>
</mpls-oam-rsvp-replication>
```

Description MPLS OAM RSVP replication entry

<mpls-oam-rsvp-replication>

Usage

```
<mpls-oam-rsvp-replication-information>
  <mpls-oam-rsvp-replication>
    <mpls-rsvp-oam-type>
      mpls-rsvp-oam-type
    </mpls-rsvp-oam-type>
    <mpls-mirror-oam-lsp-name>
      mpls-mirror-oam-lsp-name
    </mpls-mirror-oam-lsp-name>
    <mpls-mirror-oam-path-name>
      mpls-mirror-oam-path-name
    </mpls-mirror-oam-path-name>
    <mpls-mirror-oam-path-type>
      mpls-mirror-oam-path-type
    </mpls-mirror-oam-path-type>
    <mpls-mirror-oam-lsp-id>
      mpls-mirror-oam-lsp-id
    </mpls-mirror-oam-lsp-id>
    <mpls-mirror-oam-tunnel-id>
      mpls-mirror-oam-tunnel-id
    </mpls-mirror-oam-tunnel-id>
    <mpls-mirror-oam-ext-tunnel-id>
      mpls-mirror-oam-ext-tunnel-id
    </mpls-mirror-oam-ext-tunnel-id>
    <mpls-mirror-oam-tunnel-endpoint-addr>
      mpls-mirror-oam-tunnel-endpoint-addr
    </mpls-mirror-oam-tunnel-endpoint-addr>
    <mpls-mirror-oam-tunnel-send-addr>
      mpls-mirror-oam-tunnel-send-addr
```


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```
    </mpls-mirror-oam-tunnel-send-addr>
    <mpls-rsvp-oam-bfd-dest-addr>
     mpls-rsvp-oam-bfd-dest-addr
    </mpls-rsvp-oam-bfd-dest-addr>
    <mpls-mirror-rsvp-oam-local-bfd-disc>
     mpls-mirror-rsvp-oam-local-bfd-disc
    </mpls-mirror-rsvp-oam-local-bfd-disc>
    <mpls-oam-rsvp-source>
     mpls-oam-rsvp-source
    </mpls-oam-rsvp-source>
    <mpls-mirror-rsvp-oam-remote-bfd-disc>
     mpls-mirror-rsvp-oam-remote-bfd-disc
    </mpls-mirror-rsvp-oam-remote-bfd-disc>
    <mpls-mirror-rsvp-oam-refcount>
     mpls-mirror-rsvp-oam-refcount
    </mpls-mirror-rsvp-oam-refcount>
    <mpls-mirror-rsvp-oam-address>
     mpls-mirror-rsvp-oam-address
    </mpls-mirror-rsvp-oam-address>
    <mpls-mirror-rsvp-oam-mpls-oam-address>
     mpls-mirror-rsvp-oam-mpls-oam-address
    </mpls-mirror-rsvp-oam-mpls-oam-address>
    <mpls-mirror-rsvp-oam-stale-entry>
     mpls-mirror-rsvp-oam-stale-entry
    </mpls-mirror-rsvp-oam-stale-entry>
   </mpls-oam-rsvp-replication>
</mpls-oam-rsvp-replication-information>
```

Description MPLS OAM RSVP replication entry

<mpls-oam-rsvp-replication-information>

Usage

```
<mpls-oam-rsvp-replication-information>
  <mpls-oam-rsvp-replication>....</mpls-oam-rsvp-replication>
</mpls-oam-rsvp-replication-information>
```

Description

<mpls-p2mp-lsp>

Usage

```
<rsvp-session-data>
  <mpls-p2mp-lsp>
    <mpls-p2mp-name>
     mpls-p2mp-name
    </mpls-p2mp-name>
    <mpls-p2mp-branch-count>
     mpls-p2mp-branch-count
    </mpls-p2mp-branch-count>
  </mpls-p2mp-lsp>
</rsvp-session-data>
```

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Description

<mpls-p2mp-lsp>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <mpls-p2mp-lsp>
      <mpls-p2mp-name>
        mpls-p2mp-name
      </mpls-p2mp-name>
      <mpls-p2mp-branch-count>
        mpls-p2mp-branch-count
      </mpls-p2mp-branch-count>
    </mpls-p2mp-lsp>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<mpls-p2mp-lsp>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <mpls-p2mp-lsp>
      <mpls-p2mp-name>
        mpls-p2mp-name
      </mpls-p2mp-name>
      <mpls-p2mp-branch-count>
        mpls-p2mp-branch-count
      </mpls-p2mp-branch-count>
    </mpls-p2mp-lsp>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<mpls-p2mp-restart-database>

Usage

```
<mpls-p2mp-restart-database-information>
  <mpls-p2mp-restart-database>
    <mpls-p2mp-restart-lsp>....</mpls-p2mp-restart-lsp>
  </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description

<mpls-p2mp-restart-database-information>

Usage

```
<mpls-p2mp-restart-database-information>
```


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```
  <mpls-p2mp-restart-database>....</mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description

<mpls-p2mp-restart-lsp>

Usage

```
<mpls-p2mp-restart-lsp>
  <name>
    name
  </name>
  <tunnel-id>
    tunnel-id
  </tunnel-id>
  <lsp-id>
    lsp-id
  </lsp-id>
  <lsp-flags>
    lsp-flags
  </lsp-flags>
  <subgroup-id>
    subgroup-id
  </subgroup-id>
  <application-owner>
    application-owner
  </application-owner>
  <branch-lsp-count>
    branch-lsp-count
  </branch-lsp-count>
  <mpls-restart-lsp>....</mpls-restart-lsp>
</mpls-p2mp-restart-lsp>
```

Description

<mpls-p2mp-restart-lsp>

Usage

```
<mpls-p2mp-restart-database-information>
  <mpls-p2mp-restart-database>
    <mpls-p2mp-restart-lsp>
      <name>
        name
      </name>
      <tunnel-id>
        tunnel-id
      </tunnel-id>
      <lsp-id>
        lsp-id
      </lsp-id>
      <lsp-flags>
        lsp-flags
      </lsp-flags>
      <subgroup-id>
```

```
      subgroup-id
     </subgroup-id>
     <application-owner>
      application-owner
     </application-owner>
     <branch-lsp-count>
      branch-lsp-count
     </branch-lsp-count>
     <mpls-restart-lsp>....</mpls-restart-lsp>
    </mpls-p2mp-restart-lsp>
   </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description

<mpls-path>

Usage

```
<mpls-path>
 <name>
  name
 </name>
 <address>
  address
 </address>
 <path-type>
  path-type
 </path-type>
 <telink-id>
  telink-id
 </telink-id>
</mpls-path>
```

Description

<mpls-path>

Usage

```
<mpls-path-information>
 <mpls-path>
  <name>
   name
  </name>
  <address>
   address
  </address>
  <path-type>
   path-type
  </path-type>
  <telink-id>
   telink-id
  </telink-id>
 </mpls-path>
```


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```
</mpls-path-information>
```

Description

<mpls-path-information>

Usage

```
<mpls-path-information>
  <mpls-path>....</mpls-path>
</mpls-path-information>
```

Description

<mpls-path-inst-repl>

Usage

```
<mpls-path-inst-repl>
  <psb-id>
    psb-id
  </psb-id>
  <explicit-route>....</explicit-route>
  <mpls-path-inst-state>
    mpls-path-inst-state
  </mpls-path-inst-state>
  <mpls-path-inst-metric>
    mpls-path-inst-metric
  </mpls-path-inst-metric>
  <mpls-path-inst-src-port>
    mpls-path-inst-src-port
  </mpls-path-inst-src-port>
</mpls-path-inst-repl>
```

Description

<mpls-path-inst-repl>

Usage

```
<mpls-path-replication>
  <mpls-path-inst-repl>
    <psb-id>
      psb-id
    </psb-id>
    <explicit-route>....</explicit-route>
    <mpls-path-inst-state>
      mpls-path-inst-state
    </mpls-path-inst-state>
    <mpls-path-inst-metric>
      mpls-path-inst-metric
    </mpls-path-inst-metric>
    <mpls-path-inst-src-port>
      mpls-path-inst-src-port
    </mpls-path-inst-src-port>
  </mpls-path-inst-repl>
```

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```
</mpls-path-replication>
```

Description

<mpls-path-inst-repl>

Usage

```
<mpls-path-replication-information>
 <mpls-path-replication>
  <mpls-path-inst-repl>
   <psb-id>
    psb-id
   </psb-id>
   <explicit-route>....</explicit-route>
   <mpls-path-inst-state>
    mpls-path-inst-state
   </mpls-path-inst-state>
   <mpls-path-inst-metric>
    mpls-path-inst-metric
   </mpls-path-inst-metric>
   <mpls-path-inst-src-port>
    mpls-path-inst-src-port
   </mpls-path-inst-src-port>
  </mpls-path-inst-repl>
 </mpls-path-replication>
</mpls-path-replication-information>
```

Description

<mpls-path-inst-repl>

Usage

```
<mpls-lsp-replication>
 <mpls-path-replication>
  <mpls-path-inst-repl>
   <psb-id>
    psb-id
   </psb-id>
   <explicit-route>....</explicit-route>
   <mpls-path-inst-state>
    mpls-path-inst-state
   </mpls-path-inst-state>
   <mpls-path-inst-metric>
    mpls-path-inst-metric
   </mpls-path-inst-metric>
   <mpls-path-inst-src-port>
    mpls-path-inst-src-port
   </mpls-path-inst-src-port>
  </mpls-path-inst-repl>
 </mpls-path-replication>
</mpls-lsp-replication>
```

Description

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<mpls-path-inst-repl>

Usage

```
<mpls-lsp-replication-information>
  <mpls-lsp-replication>
    <mpls-path-replication>
      <mpls-path-inst-repl>
        <psb-id>
          psb-id
        </psb-id>
        <explicit-route>....</explicit-route>
        <mpls-path-inst-state>
          mpls-path-inst-state
        </mpls-path-inst-state>
        <mpls-path-inst-metric>
          mpls-path-inst-metric
        </mpls-path-inst-metric>
        <mpls-path-inst-src-port>
          mpls-path-inst-src-port
        </mpls-path-inst-src-port>
      </mpls-path-inst-repl>
    </mpls-path-replication>
  </mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description

<mpls-path-replication>

Usage

```
<mpls-path-replication>
  <mpls-path-type>
    mpls-path-type
  </mpls-path-type>
  <mpls-path-name>
    mpls-path-name
  </mpls-path-name>
  <mpls-path-pvc-name>
    mpls-path-pvc-name
  </mpls-path-pvc-name>
  <mpls-path-resolved>
    mpls-path-resolved
  </mpls-path-resolved>
  <mpls-path-replication-type>
    mpls-path-replication-type
  </mpls-path-replication-type>
  <mpls-path-active-bw>
    mpls-path-active-bw
  </mpls-path-active-bw>
  <mpls-path-dst-port>
    mpls-path-dst-port
  </mpls-path-dst-port>
  <mpls-path-refcount>
    mpls-path-refcount
```

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```
  </mpls-path-refcount>
  <mpls-path-inst-repl>....</mpls-path-inst-repl>
</mpls-path-replication>
```

Description MPLS PATH replication entry

<mpls-path-replication>

Usage

```
<mpls-path-replication-information>
  <mpls-path-replication>
    <mpls-path-type>
      mpls-path-type
    </mpls-path-type>
    <mpls-path-name>
      mpls-path-name
    </mpls-path-name>
    <mpls-path-pvc-name>
      mpls-path-pvc-name
    </mpls-path-pvc-name>
    <mpls-path-resolved>
      mpls-path-resolved
    </mpls-path-resolved>
    <mpls-path-replication-type>
      mpls-path-replication-type
    </mpls-path-replication-type>
    <mpls-path-active-bw>
      mpls-path-active-bw
    </mpls-path-active-bw>
    <mpls-path-dst-port>
      mpls-path-dst-port
    </mpls-path-dst-port>
    <mpls-path-refcount>
      mpls-path-refcount
    </mpls-path-refcount>
    <mpls-path-inst-repl>....</mpls-path-inst-repl>
  </mpls-path-replication>
</mpls-path-replication-information>
```

Description MPLS PATH replication entry

<mpls-path-replication>

Usage

```
<mpls-lsp-replication>
  <mpls-path-replication>
    <mpls-path-type>
      mpls-path-type
    </mpls-path-type>
    <mpls-path-name>
      mpls-path-name
    </mpls-path-name>
```


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```
    <mpls-path-pvc-name>
      mpls-path-pvc-name
    </mpls-path-pvc-name>
    <mpls-path-resolved>
      mpls-path-resolved
    </mpls-path-resolved>
    <mpls-path-replication-type>
      mpls-path-replication-type
    </mpls-path-replication-type>
    <mpls-path-active-bw>
      mpls-path-active-bw
    </mpls-path-active-bw>
    <mpls-path-dst-port>
      mpls-path-dst-port
    </mpls-path-dst-port>
    <mpls-path-refcount>
      mpls-path-refcount
    </mpls-path-refcount>
    <mpls-path-inst-repl>....</mpls-path-inst-repl>
  </mpls-path-replication>
</mpls-lsp-replication>
```

Description MPLS PATH replication entry

<mpls-path-replication>

Usage

```
<mpls-lsp-replication-information>
  <mpls-lsp-replication>
    <mpls-path-replication>
      <mpls-path-type>
        mpls-path-type
      </mpls-path-type>
      <mpls-path-name>
        mpls-path-name
      </mpls-path-name>
      <mpls-path-pvc-name>
        mpls-path-pvc-name
      </mpls-path-pvc-name>
      <mpls-path-resolved>
        mpls-path-resolved
      </mpls-path-resolved>
      <mpls-path-replication-type>
        mpls-path-replication-type
      </mpls-path-replication-type>
      <mpls-path-active-bw>
        mpls-path-active-bw
      </mpls-path-active-bw>
      <mpls-path-dst-port>
        mpls-path-dst-port
      </mpls-path-dst-port>
      <mpls-path-refcount>
        mpls-path-refcount
      </mpls-path-refcount>
```

```
      <mpls-path-inst-repl>....</mpls-path-inst-repl>
    </mpls-path-replication>
  </mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description MPLS PATH replication entry

<mpls-path-replication-information>

Usage

```
<mpls-path-replication-information>
  <mpls-path-replication>....</mpls-path-replication>
</mpls-path-replication-information>
```

Description Information about one or more MPLS replication paths

<mpls-pvc-replication>

Usage

```
<mpls-pvc-replication>
  <mpls-pvc-name>
    mpls-pvc-name
  </mpls-pvc-name>
  <mpls-pvc-id>
    mpls-pvc-id
  </mpls-pvc-id>
  <mpls-pvc-dst-port>
    mpls-pvc-dst-port
  </mpls-pvc-dst-port>
  <mpls-pvc-active-path-type>
    mpls-pvc-active-path-type
  </mpls-pvc-active-path-type>
  <mpls-pvc-active-path-name>
    mpls-pvc-active-path-name
  </mpls-pvc-active-path-name>
  <mpls-pvc-autobw-max-avg>
    mpls-pvc-autobw-max-avg
  </mpls-pvc-autobw-max-avg>
  <mpls-pvc-refcount>
    mpls-pvc-refcount
  </mpls-pvc-refcount>
  <mpls-pvc-resolved>
    mpls-pvc-resolved
  </mpls-pvc-resolved>
</mpls-pvc-replication>
```

Description MPLS PVC replication entry

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<mpls-pvc-replication>

Usage

```
<mpls-pvc-replication-information>
  <mpls-pvc-replication>
    <mpls-pvc-name>
      mpls-pvc-name
    </mpls-pvc-name>
    <mpls-pvc-id>
      mpls-pvc-id
    </mpls-pvc-id>
    <mpls-pvc-dst-port>
      mpls-pvc-dst-port
    </mpls-pvc-dst-port>
    <mpls-pvc-active-path-type>
      mpls-pvc-active-path-type
    </mpls-pvc-active-path-type>
    <mpls-pvc-active-path-name>
      mpls-pvc-active-path-name
    </mpls-pvc-active-path-name>
    <mpls-pvc-autobw-max-avg>
      mpls-pvc-autobw-max-avg
    </mpls-pvc-autobw-max-avg>
    <mpls-pvc-refcount>
      mpls-pvc-refcount
    </mpls-pvc-refcount>
    <mpls-pvc-resolved>
      mpls-pvc-resolved
    </mpls-pvc-resolved>
  </mpls-pvc-replication>
</mpls-pvc-replication-information>
```

Description MPLS PVC replication entry

<mpls-pvc-replication>

Usage

```
<mpls-lsp-replication>
  <mpls-pvc-replication>
    <mpls-pvc-name>
      mpls-pvc-name
    </mpls-pvc-name>
    <mpls-pvc-id>
      mpls-pvc-id
    </mpls-pvc-id>
    <mpls-pvc-dst-port>
      mpls-pvc-dst-port
    </mpls-pvc-dst-port>
    <mpls-pvc-active-path-type>
      mpls-pvc-active-path-type
    </mpls-pvc-active-path-type>
    <mpls-pvc-active-path-name>
      mpls-pvc-active-path-name
```

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```
    </mpls-pvc-active-path-name>
    <mpls-pvc-autobw-max-avg>
      mpls-pvc-autobw-max-avg
    </mpls-pvc-autobw-max-avg>
    <mpls-pvc-refcount>
      mpls-pvc-refcount
    </mpls-pvc-refcount>
    <mpls-pvc-resolved>
      mpls-pvc-resolved
    </mpls-pvc-resolved>
  </mpls-pvc-replication>
</mpls-lsp-replication>
```

Description MPLS PVC replication entry

<mpls-pvc-replication>

Usage

```
<mpls-lsp-replication-information>
  <mpls-lsp-replication>
    <mpls-pvc-replication>
      <mpls-pvc-name>
        mpls-pvc-name
      </mpls-pvc-name>
      <mpls-pvc-id>
        mpls-pvc-id
      </mpls-pvc-id>
      <mpls-pvc-dst-port>
        mpls-pvc-dst-port
      </mpls-pvc-dst-port>
      <mpls-pvc-active-path-type>
        mpls-pvc-active-path-type
      </mpls-pvc-active-path-type>
      <mpls-pvc-active-path-name>
        mpls-pvc-active-path-name
      </mpls-pvc-active-path-name>
      <mpls-pvc-autobw-max-avg>
        mpls-pvc-autobw-max-avg
      </mpls-pvc-autobw-max-avg>
      <mpls-pvc-refcount>
        mpls-pvc-refcount
      </mpls-pvc-refcount>
      <mpls-pvc-resolved>
        mpls-pvc-resolved
      </mpls-pvc-resolved>
    </mpls-pvc-replication>
  </mpls-lsp-replication>
</mpls-lsp-replication-information>
```

Description MPLS PVC replication entry

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<mpls-pvc-replication-information>

Usage

```
<mpls-pvc-replication-information>
  <mpls-pvc-replication>....</mpls-pvc-replication>
</mpls-pvc-replication-information>
```

Description Information replicated for one or more MPLS PVCs

<mpls-restart-database>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>
    <mpls-restart-lsp>....</mpls-restart-lsp>
  </mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-restart-database-information>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>....</mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-restart-lsp>

Usage

```
<mpls-restart-lsp>
  <name>
    name
  </name>
  <destination-address>
    destination-address
  </destination-address>
  <source-address>
    source-address
  </source-address>
  <lsp-state>
    lsp-state
  </lsp-state>
  <lsp-flags>
    lsp-flags
  </lsp-flags>
  <shared-port>
    shared-port
  </shared-port>
  <shared-port-count>
```

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```
    shared-port-count
  </shared-port-count>
  <lsp-path-count>
    lsp-path-count
  </lsp-path-count>
  <mpls-lsp-attributes>....</mpls-lsp-attributes>
  <mpls-restart-path>....</mpls-restart-path>
</mpls-restart-lsp>
```

Description

<mpls-restart-lsp>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>
    <mpls-restart-lsp>
      <name>
        name
      </name>
      <destination-address>
        destination-address
      </destination-address>
      <source-address>
        source-address
      </source-address>
      <lsp-state>
        lsp-state
      </lsp-state>
      <lsp-flags>
        lsp-flags
      </lsp-flags>
      <shared-port>
        shared-port
      </shared-port>
      <shared-port-count>
        shared-port-count
      </shared-port-count>
      <lsp-path-count>
        lsp-path-count
      </lsp-path-count>
      <mpls-lsp-attributes>....</mpls-lsp-attributes>
      <mpls-restart-path>....</mpls-restart-path>
    </mpls-restart-lsp>
  </mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-restart-lsp>

Usage

```
<mpls-p2mp-restart-lsp>
  <mpls-restart-lsp>
```


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```
    <name>
     name
    </name>
    <destination-address>
     destination-address
    </destination-address>
    <source-address>
     source-address
    </source-address>
    <lsp-state>
     lsp-state
    </lsp-state>
    <lsp-flags>
     lsp-flags
    </lsp-flags>
    <shared-port>
     shared-port
    </shared-port>
    <shared-port-count>
     shared-port-count
    </shared-port-count>
    <lsp-path-count>
     lsp-path-count
    </lsp-path-count>
    <mpls-lsp-attributes>....</mpls-lsp-attributes>
    <mpls-restart-path>....</mpls-restart-path>
   </mpls-restart-lsp>
</mpls-p2mp-restart-lsp>
```

Description

<mpls-restart-lsp>

Usage

```
<mpls-p2mp-restart-database-information>
 <mpls-p2mp-restart-database>
  <mpls-p2mp-restart-lsp>
   <mpls-restart-lsp>
    <name>
     name
    </name>
    <destination-address>
     destination-address
    </destination-address>
    <source-address>
     source-address
    </source-address>
    <lsp-state>
     lsp-state
    </lsp-state>
    <lsp-flags>
     lsp-flags
    </lsp-flags>
    <shared-port>
     shared-port
```

```
        </shared-port>
        <shared-port-count>
          shared-port-count
        </shared-port-count>
        <lsp-path-count>
          lsp-path-count
        </lsp-path-count>
        <mpls-lsp-attributes>....</mpls-lsp-attributes>
        <mpls-restart-path>....</mpls-restart-path>
      </mpls-restart-lsp>
    </mpls-p2mp-restart-lsp>
  </mpls-p2mp-restart-database>
</mpls-p2mp-restart-database-information>
```

Description

<mpls-restart-path>

Usage

```
<mpls-restart-path>
  <lsp-path-type>
    lsp-path-type
  </lsp-path-type>
  <name>
    name
  </name>
  <path-standby>
    path-standby
  </path-standby>
  <path-active>
    path-active
  </path-active>
  <path-state>
    path-state
  </path-state>
  <lsp-id>
    lsp-id
  </lsp-id>
  <tunnel-id>
    tunnel-id
  </tunnel-id>
  <subgroup-id>
    subgroup-id
  </subgroup-id>
  <path-flags>
    path-flags
  </path-flags>
  <bandwidth>
    bandwidth
  </bandwidth>
  <per-class-bandwidth-heading>
    per-class-bandwidth-heading
  </per-class-bandwidth-heading>
  <bandwidth_ct0>
    bandwidth_ct0
```


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```
  </bandwidth_ct0>
  <bandwidth_ct1>
    bandwidth_ct1
  </bandwidth_ct1>
  <bandwidth_ct2>
    bandwidth_ct2
  </bandwidth_ct2>
  <bandwidth_ct3>
    bandwidth_ct3
  </bandwidth_ct3>
  <explicit-route>....</explicit-route>
  <mpls-restart-rsvp>....</mpls-restart-rsvp>
</mpls-restart-path>
```

Description

<mpls-restart-path>

Usage

```
<mpls-restart-lsp>
  <mpls-restart-path>
    <lsp-path-type>
      lsp-path-type
    </lsp-path-type>
    <name>
      name
    </name>
    <path-standby>
      path-standby
    </path-standby>
    <path-active>
      path-active
    </path-active>
    <path-state>
      path-state
    </path-state>
    <lsp-id>
      lsp-id
    </lsp-id>
    <tunnel-id>
      tunnel-id
    </tunnel-id>
    <subgroup-id>
      subgroup-id
    </subgroup-id>
    <path-flags>
      path-flags
    </path-flags>
    <bandwidth>
      bandwidth
    </bandwidth>
    <per-class-bandwidth-heading>
      per-class-bandwidth-heading
    </per-class-bandwidth-heading>
    <bandwidth_ct0>
```

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```
      bandwidth_ct0
    </bandwidth_ct0>
    <bandwidth_ct1>
      bandwidth_ct1
    </bandwidth_ct1>
    <bandwidth_ct2>
      bandwidth_ct2
    </bandwidth_ct2>
    <bandwidth_ct3>
      bandwidth_ct3
    </bandwidth_ct3>
    <explicit-route>....</explicit-route>
    <mpls-restart-rsvp>....</mpls-restart-rsvp>
  </mpls-restart-path>
</mpls-restart-lsp>
```

Description

<mpls-restart-path>

Usage

```
<mpls-restart-database-information>
  <mpls-restart-database>
    <mpls-restart-lsp>
      <mpls-restart-path>
        <lsp-path-type>
          lsp-path-type
        </lsp-path-type>
        <name>
          name
        </name>
        <path-standby>
          path-standby
        </path-standby>
        <path-active>
          path-active
        </path-active>
        <path-state>
          path-state
        </path-state>
        <lsp-id>
          lsp-id
        </lsp-id>
        <tunnel-id>
          tunnel-id
        </tunnel-id>
        <subgroup-id>
          subgroup-id
        </subgroup-id>
        <path-flags>
          path-flags
        </path-flags>
        <bandwidth>
          bandwidth
        </bandwidth>
```


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```
        <per-class-bandwidth-heading>
          per-class-bandwidth-heading
        </per-class-bandwidth-heading>
        <bandwidth_ct0>
          bandwidth_ct0
        </bandwidth_ct0>
        <bandwidth_ct1>
          bandwidth_ct1
        </bandwidth_ct1>
        <bandwidth_ct2>
          bandwidth_ct2
        </bandwidth_ct2>
        <bandwidth_ct3>
          bandwidth_ct3
        </bandwidth_ct3>
        <explicit-route>....</explicit-route>
        <mpls-restart-rsvp>....</mpls-restart-rsvp>
      </mpls-restart-path>
    </mpls-restart-lsp>
  </mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-restart-path>

Usage

```
<mpls-p2mp-restart-lsp>
  <mpls-restart-lsp>
    <mpls-restart-path>
      <lsp-path-type>
        lsp-path-type
      </lsp-path-type>
      <name>
        name
      </name>
      <path-standby>
        path-standby
      </path-standby>
      <path-active>
        path-active
      </path-active>
      <path-state>
        path-state
      </path-state>
      <lsp-id>
        lsp-id
      </lsp-id>
      <tunnel-id>
        tunnel-id
      </tunnel-id>
      <subgroup-id>
        subgroup-id
      </subgroup-id>
      <path-flags>
```

```
      path-flags
    </path-flags>
    <bandwidth>
      bandwidth
    </bandwidth>
    <per-class-bandwidth-heading>
      per-class-bandwidth-heading
    </per-class-bandwidth-heading>
    <bandwidth_ct0>
      bandwidth_ct0
    </bandwidth_ct0>
    <bandwidth_ct1>
      bandwidth_ct1
    </bandwidth_ct1>
    <bandwidth_ct2>
      bandwidth_ct2
    </bandwidth_ct2>
    <bandwidth_ct3>
      bandwidth_ct3
    </bandwidth_ct3>
    <explicit-route>....</explicit-route>
    <mpls-restart-rsvp>....</mpls-restart-rsvp>
   </mpls-restart-path>
  </mpls-restart-lsp>
</mpls-p2mp-restart-lsp>
```

Description

<mpls-restart-path>

Usage

```
<mpls-p2mp-restart-database-information>
 <mpls-p2mp-restart-database>
  <mpls-p2mp-restart-lsp>
   <mpls-restart-lsp>
    <mpls-restart-path>
     <lsp-path-type>
      lsp-path-type
     </lsp-path-type>
     <name>
      name
     </name>
     <path-standby>
      path-standby
     </path-standby>
     <path-active>
      path-active
     </path-active>
     <path-state>
      path-state
     </path-state>
     <lsp-id>
      lsp-id
     </lsp-id>
     <tunnel-id>
```


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```
                tunnel-id
               </tunnel-id>
               <subgroup-id>
                subgroup-id
               </subgroup-id>
               <path-flags>
                path-flags
               </path-flags>
               <bandwidth>
                bandwidth
               </bandwidth>
               <per-class-bandwidth-heading>
                per-class-bandwidth-heading
               </per-class-bandwidth-heading>
               <bandwidth_ct0>
                bandwidth_ct0
               </bandwidth_ct0>
               <bandwidth_ct1>
                bandwidth_ct1
               </bandwidth_ct1>
               <bandwidth_ct2>
                bandwidth_ct2
               </bandwidth_ct2>
               <bandwidth_ct3>
                bandwidth_ct3
               </bandwidth_ct3>
               <explicit-route>....</explicit-route>
               <mpls-restart-rsvp>....</mpls-restart-rsvp>
              </mpls-restart-path>
             </mpls-restart-lsp>
            </mpls-p2mp-restart-lsp>
           </mpls-p2mp-restart-database>
          </mpls-p2mp-restart-database-information>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-restart-rsvp>
 <next-hop>
  next-hop
 </next-hop>
 <interface-name>
  interface-name
 </interface-name>
 <telink-name>
  telink-name
 </telink-name>
 <upstream-label-in>
  upstream-label-in
 </upstream-label-in>
 <label-out>
  label-out
 </label-out>
```

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```
  <self-id>
   self-id
  </self-id>
  <explicit-route>....</explicit-route>
</mpls-restart-rsvp>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-restart-path>
  <mpls-restart-rsvp>
    <next-hop>
     next-hop
    </next-hop>
    <interface-name>
     interface-name
    </interface-name>
    <telink-name>
     telink-name
    </telink-name>
    <upstream-label-in>
     upstream-label-in
    </upstream-label-in>
    <label-out>
     label-out
    </label-out>
    <self-id>
     self-id
    </self-id>
    <explicit-route>....</explicit-route>
  </mpls-restart-rsvp>
</mpls-restart-path>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-restart-lsp>
  <mpls-restart-path>
    <mpls-restart-rsvp>
      <next-hop>
       next-hop
      </next-hop>
      <interface-name>
       interface-name
      </interface-name>
      <telink-name>
       telink-name
      </telink-name>
      <upstream-label-in>
       upstream-label-in
```


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```
      </upstream-label-in>
      <label-out>
       label-out
      </label-out>
      <self-id>
       self-id
      </self-id>
      <explicit-route>....</explicit-route>
     </mpls-restart-rsvp>
    </mpls-restart-path>
</mpls-restart-lsp>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-restart-database-information>
 <mpls-restart-database>
  <mpls-restart-lsp>
   <mpls-restart-path>
    <mpls-restart-rsvp>
     <next-hop>
      next-hop
     </next-hop>
     <interface-name>
      interface-name
     </interface-name>
     <telink-name>
      telink-name
     </telink-name>
     <upstream-label-in>
      upstream-label-in
     </upstream-label-in>
     <label-out>
      label-out
     </label-out>
     <self-id>
      self-id
     </self-id>
     <explicit-route>....</explicit-route>
    </mpls-restart-rsvp>
   </mpls-restart-path>
  </mpls-restart-lsp>
 </mpls-restart-database>
</mpls-restart-database-information>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-p2mp-restart-lsp>
 <mpls-restart-lsp>
```

```
    <mpls-restart-path>
     <mpls-restart-rsvp>
      <next-hop>
       next-hop
      </next-hop>
      <interface-name>
       interface-name
      </interface-name>
      <telink-name>
       telink-name
      </telink-name>
      <upstream-label-in>
       upstream-label-in
      </upstream-label-in>
      <label-out>
       label-out
      </label-out>
      <self-id>
       self-id
      </self-id>
      <explicit-route>....</explicit-route>
     </mpls-restart-rsvp>
    </mpls-restart-path>
   </mpls-restart-lsp>
</mpls-p2mp-restart-lsp>
```

Description

<mpls-restart-rsvp>

Usage

```
<mpls-p2mp-restart-database-information>
 <mpls-p2mp-restart-database>
  <mpls-p2mp-restart-lsp>
   <mpls-restart-lsp>
    <mpls-restart-path>
     <mpls-restart-rsvp>
      <next-hop>
       next-hop
      </next-hop>
      <interface-name>
       interface-name
      </interface-name>
      <telink-name>
       telink-name
      </telink-name>
      <upstream-label-in>
       upstream-label-in
      </upstream-label-in>
      <label-out>
       label-out
      </label-out>
      <self-id>
       self-id
      </self-id>
```


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```
            <explicit-route>....</explicit-route>
           </mpls-restart-rsvp>
          </mpls-restart-path>
         </mpls-restart-lsp>
        </mpls-p2mp-restart-lsp>
       </mpls-p2mp-restart-database>
      </mpls-p2mp-restart-database-information>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <mpls-lsp>
   <mpls-srlg>
    <srlg-name>
     srlg-name
    </srlg-name>
    <srlg-value>
     srlg-value
    </srlg-value>
    <srlg-cost>
     srlg-cost
    </srlg-cost>
   </mpls-srlg>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <mpls-lsp>
   <mpls-lsp-path>
    <mpls-srlg>
     <srlg-name>
      srlg-name
     </srlg-name>
     <srlg-value>
      srlg-value
     </srlg-value>
     <srlg-cost>
      srlg-cost
     </srlg-cost>
    </mpls-srlg>
   </mpls-lsp-path>
  </mpls-lsp>
 </rsvp-session>
```

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```
</rsvp-session-data>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-srlg>
      <srlg-name>
        srlg-name
      </srlg-name>
      <srlg-value>
        srlg-value
      </srlg-value>
      <srlg-cost>
        srlg-cost
      </srlg-cost>
    </mpls-srlg>
  </mpls-lsp>
</rsvp-session>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <mpls-srlg>
        <srlg-name>
          srlg-name
        </srlg-name>
        <srlg-value>
          srlg-value
        </srlg-value>
        <srlg-cost>
          srlg-cost
        </srlg-cost>
      </mpls-srlg>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
```


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```
    <rsvp-session>
     <mpls-lsp>
      <mpls-srlg>
       <srlg-name>
        srlg-name
       </srlg-name>
       <srlg-value>
        srlg-value
       </srlg-value>
       <srlg-cost>
        srlg-cost
       </srlg-cost>
      </mpls-srlg>
     </mpls-lsp>
    </rsvp-session>
   </rsvp-session-data>
</rsvp-session-information>
```

Description

<mpls-srlg>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <mpls-srlg>
      <srlg-name>
       srlg-name
      </srlg-name>
      <srlg-value>
       srlg-value
      </srlg-value>
      <srlg-cost>
       srlg-cost
      </srlg-cost>
     </mpls-srlg>
    </mpls-lsp-path>
   </mpls-lsp>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description

<mpls-srlg>

Usage

```
<mpls-srlg>
 <srlg-name>
  srlg-name
 </srlg-name>
```

```
  <srlg-value>
   srlg-value
  </srlg-value>
  <srlg-cost>
   srlg-cost
  </srlg-cost>
</mpls-srlg>
```

Description

<mpls-srlg>

Usage

```
<mpls-srlg-information>
  <mpls-srlg>
    <srlg-name>
     srlg-name
    </srlg-name>
    <srlg-value>
     srlg-value
    </srlg-value>
    <srlg-cost>
     srlg-cost
    </srlg-cost>
  </mpls-srlg>
</mpls-srlg-information>
```

Description

<mpls-srlg>

Usage

```
<mpls-lsp-path>
  <mpls-srlg>
    <srlg-name>
     srlg-name
    </srlg-name>
    <srlg-value>
     srlg-value
    </srlg-value>
    <srlg-cost>
     srlg-cost
    </srlg-cost>
  </mpls-srlg>
</mpls-lsp-path>
```

Description

<mpls-srlg>

Usage

```
<mpls-lsp>
  <mpls-srlg>
```


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```
    <srlg-name>
     srlg-name
    </srlg-name>
    <srlg-value>
     srlg-value
    </srlg-value>
    <srlg-cost>
     srlg-cost
    </srlg-cost>
   </mpls-srlg>
</mpls-lsp>
```

Description

<mpls-srlg>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <mpls-srlg>
   <srlg-name>
    srlg-name
   </srlg-name>
   <srlg-value>
    srlg-value
   </srlg-value>
   <srlg-cost>
    srlg-cost
   </srlg-cost>
  </mpls-srlg>
 </mpls-lsp-path>
</mpls-lsp>
```

Description

<mpls-srlg>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-srlg>
     <srlg-name>
      srlg-name
     </srlg-name>
     <srlg-value>
      srlg-value
     </srlg-value>
     <srlg-cost>
      srlg-cost
     </srlg-cost>
    </mpls-srlg>
   </mpls-lsp>
```

```
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<mpls-srlg>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <mpls-srlg>
            <srlg-name>
              srlg-name
            </srlg-name>
            <srlg-value>
              srlg-value
            </srlg-value>
            <srlg-cost>
              srlg-cost
            </srlg-cost>
          </mpls-srlg>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<mpls-srlg>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-srlg>
        <srlg-name>
          srlg-name
        </srlg-name>
        <srlg-value>
          srlg-value
        </srlg-value>
        <srlg-cost>
          srlg-cost
        </srlg-cost>
      </mpls-srlg>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```


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Description

<mpls-srlg>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <mpls-srlg>
     <srlg-name>
      srlg-name
     </srlg-name>
     <srlg-value>
      srlg-value
     </srlg-value>
     <srlg-cost>
      srlg-cost
     </srlg-cost>
    </mpls-srlg>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description

<mpls-srlg-information>

Usage

```
<mpls-srlg-information>
 <mpls-srlg>....</mpls-srlg>
</mpls-srlg-information>
```

Description

<mpls-static-ingress-lsp-brief>

Usage

```
<mpls-static-lsp-information>
 <mpls-static-ingress-lsp-brief>
  <lsp-name>
   lsp-name
  </lsp-name>
  <destination-address>
   destination-address
  </destination-address>
  <lsp-state>
   lsp-state
  </lsp-state>
 </mpls-static-ingress-lsp-brief>
</mpls-static-lsp-information>
```

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Description

<mpls-static-ingress-lsp-descriptions>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-ingress-lsp-descriptions>
    <lsp-name>
      lsp-name
    </lsp-name>
    <destination-address>
      destination-address
    </destination-address>
    <lsp-description>
      lsp-description
    </lsp-description>
  </mpls-static-ingress-lsp-descriptions>
</mpls-static-lsp-information>
```

Description

<mpls-static-ingress-lsp-statistics>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-ingress-lsp-statistics>
    <lsp-name>
      lsp-name
    </lsp-name>
    <destination-address>
      destination-address
    </destination-address>
    <lsp-state>
      lsp-state
    </lsp-state>
    <lsp-pktbytes>
      lsp-pktbytes
    </lsp-pktbytes>
    <lsp-packets>
      lsp-packets
    </lsp-packets>
    <lsp-bytes>
      lsp-bytes
    </lsp-bytes>
  </mpls-static-ingress-lsp-statistics>
</mpls-static-lsp-information>
```

Description

<mpls-static-lsp-detail>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-lsp-detail>
```


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```
<lsp-name>
  lsp-name
</lsp-name>
<destination-address>
  destination-address
</destination-address>
<label-in>
  label-in
</label-in>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-state>
  lsp-state
</lsp-state>
<lsp-sub-state>
  lsp-sub-state
</lsp-sub-state>
<next-hop>
  next-hop
</next-hop>
<interface-name>
  interface-name
</interface-name>
<label-operation>
  label-operation
</label-operation>
<label-out>
  label-out
</label-out>
<creation-time>
  creation-time
</creation-time>
<lp-bypass-name>
  lp-bypass-name
</lp-bypass-name>
<np-bypass-name>
  np-bypass-name
</np-bypass-name>
<next-next-label>
  next-next-label
</next-next-label>
<bandwidth_ct0>
  bandwidth_ct0
</bandwidth_ct0>
<spvc-id>
  spvc-id
</spvc-id>
<self-id>
  self-id
</self-id>
<lsp-pktbytes>
  lsp-pktbytes
</lsp-pktbytes>
<lsp-packets>
  lsp-packets
```

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```
    </lsp-packets>
    <lsp-bytes>
      lsp-bytes
    </lsp-bytes>
  </mpls-static-lsp-detail>
</mpls-static-lsp-information>
```

Description

<mpls-static-lsp-information>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-lsp-summary>....</mpls-static-lsp-summary>
  <mpls-static-ingress-lsp-brief>....</mpls-static-ingress-lsp-brief>
  <mpls-static-transit-lsp-brief>....</mpls-static-transit-lsp-brief>
 <mpls-static-ingress-lsp-descriptions>....</mpls-static-ingress-lsp-descriptions>

  <mpls-static-transit-lsp-descriptions>....</mpls-static-transit-lsp-descriptions>
  <mpls-static-ingress-lsp-statistics>....</mpls-static-ingress-lsp-statistics>
  <mpls-static-transit-lsp-statistics>....</mpls-static-transit-lsp-statistics>
  <mpls-static-lsp-detail>....</mpls-static-lsp-detail>
</mpls-static-lsp-information>
```

Description

<mpls-static-lsp-summary>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-lsp-summary>
    <session-type>
      session-type
    </session-type>
    <count>
      count
    </count>
    <display-count>
      display-count
    </display-count>
    <up-count>
      up-count
    </up-count>
    <down-count>
      down-count
    </down-count>
  </mpls-static-lsp-summary>
</mpls-static-lsp-information>
```

Description

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<mpls-static-restart-database>

Usage

```
<mpls-static-restart-database-information>
  <mpls-static-restart-database>
    <mpls-static-restart-lsp>....</mpls-static-restart-lsp>
  </mpls-static-restart-database>
</mpls-static-restart-database-information>
```

Description

<mpls-static-restart-database-information>

Usage

```
<mpls-static-restart-database-information>
  <mpls-static-restart-database>....</mpls-static-restart-database>
</mpls-static-restart-database-information>
```

Description

<mpls-static-restart-lsp>

Usage

```
<mpls-static-restart-database-information>
  <mpls-static-restart-database>
    <mpls-static-restart-lsp>
      <name>
        name
      </name>
      <spvc-type>
        spvc-type
      </spvc-type>
      <spvc-id>
        spvc-id
      </spvc-id>
      <self-id>
        self-id
      </self-id>
    </mpls-static-restart-lsp>
  </mpls-static-restart-database>
</mpls-static-restart-database-information>
```

Description

<mpls-static-transit-lsp-brief>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-transit-lsp-brief>
    <lsp-name>
      lsp-name
    </lsp-name>
```

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```
    <label-in>
      label-in
    </label-in>
    <lsp-state>
      lsp-state
    </lsp-state>
  </mpls-static-transit-lsp-brief>
</mpls-static-lsp-information>
```

Description

<mpls-static-transit-lsp-descriptions>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-transit-lsp-descriptions>
    <lsp-name>
      lsp-name
    </lsp-name>
    <label-in>
      label-in
    </label-in>
    <lsp-description>
      lsp-description
    </lsp-description>
  </mpls-static-transit-lsp-descriptions>
</mpls-static-lsp-information>
```

Description

<mpls-static-transit-lsp-statistics>

Usage

```
<mpls-static-lsp-information>
  <mpls-static-transit-lsp-statistics>
    <lsp-name>
      lsp-name
    </lsp-name>
    <label-in>
      label-in
    </label-in>
    <lsp-state>
      lsp-state
    </lsp-state>
    <lsp-pktbytes>
      lsp-pktbytes
    </lsp-pktbytes>
    <lsp-packets>
      lsp-packets
    </lsp-packets>
    <lsp-bytes>
      lsp-bytes
    </lsp-bytes>
  </mpls-static-transit-lsp-statistics>
```


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```
</mpls-static-lsp-information>
```

Description

<msdp-instance>

Usage

```
<msdp-source-active-information>
 <msdp-instance>
  <instance-name>
   instance-name
  </instance-name>
  <msdp-no-routes>
   msdp-no-routes
  </msdp-no-routes>
  <msdp-route>....</msdp-route>
  <msdp-no-source>
   msdp-no-source
  </msdp-no-source>
  <msdp-source>....</msdp-source>
  <msdp-global-active-source-limit-exceeded>
   msdp-global-active-source-limit-exceeded
  </msdp-global-active-source-limit-exceeded>
  <msdp-peer-statistics>....</msdp-peer-statistics>
 </msdp-instance>
</msdp-source-active-information>
```

Description

<msdp-instance>

Usage

```
<msdp-source-information>
 <msdp-instance>
  <instance-name>
   instance-name
  </instance-name>
  <msdp-no-routes>
   msdp-no-routes
  </msdp-no-routes>
  <msdp-route>....</msdp-route>
  <msdp-no-source>
   msdp-no-source
  </msdp-no-source>
  <msdp-source>....</msdp-source>
  <msdp-global-active-source-limit-exceeded>
   msdp-global-active-source-limit-exceeded
  </msdp-global-active-source-limit-exceeded>
  <msdp-peer-statistics>....</msdp-peer-statistics>
 </msdp-instance>
</msdp-source-information>
```

Description

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<msdp-instance>

Usage

```
<msdp-statistics-information>
  <msdp-instance>
    <instance-name>
      instance-name
    </instance-name>
    <msdp-no-routes>
      msdp-no-routes
    </msdp-no-routes>
    <msdp-route>....</msdp-route>
    <msdp-no-source>
      msdp-no-source
    </msdp-no-source>
    <msdp-source>....</msdp-source>
    <msdp-global-active-source-limit-exceeded>
      msdp-global-active-source-limit-exceeded
    </msdp-global-active-source-limit-exceeded>
    <msdp-peer-statistics>....</msdp-peer-statistics>
  </msdp-instance>
</msdp-statistics-information>
```

Description

<msdp-peer>

Usage

```
<msdp-peer-information>
  <msdp-peer>
    <msdp-peer-address>
      msdp-peer-address
    </msdp-peer-address>
    <msdp-local-address>
      msdp-local-address
    </msdp-local-address>
    <msdp-state>
      msdp-state
    </msdp-state>
    <msdp-state-change>
      msdp-state-change
    </msdp-state-change>
    <msdp-group-name>
      msdp-group-name
    </msdp-group-name>
    <msdp-connect-retries>
      msdp-connect-retries
    </msdp-connect-retries>
    <msdp-state-timeout>
      msdp-state-timeout
    </msdp-state-timeout>
    <msdp-peer-timeout>
      msdp-peer-timeout
    </msdp-peer-timeout>
```


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```
    <msdp-sa-accepted>
      msdp-sa-accepted
    </msdp-sa-accepted>
    <msdp-sa-received>
      msdp-sa-received
    </msdp-sa-received>
  </msdp-peer>
</msdp-peer-information>
```

Description

<msdp-peer-information>

Usage

```
<msdp-peer-information>
  <msdp-no-peers>
    msdp-no-peers
  </msdp-no-peers>
  <msdp-peer>....</msdp-peer>
</msdp-peer-information>
```

Description

<msdp-peer-statistics>

Usage

```
<msdp-source-active-information>
  <msdp-instance>
    <msdp-peer-statistics>
      <msdp-peer-address>
        msdp-peer-address
      </msdp-peer-address>
      <msdp-state-change-absolute>
        msdp-state-change-absolute
      </msdp-state-change-absolute>
      <msdp-state-change>
        msdp-state-change
      </msdp-state-change>
      <msdp-message-received-absolute>
        msdp-message-received-absolute
      </msdp-message-received-absolute>
      <msdp-message-received>
        msdp-message-received
      </msdp-message-received>
      <msdp-rpf-failures>
        msdp-rpf-failures
      </msdp-rpf-failures>
      <msdp-remote-closes>
        msdp-remote-closes
      </msdp-remote-closes>
      <msdp-peer-timeouts>
        msdp-peer-timeouts
      </msdp-peer-timeouts>
      <msdp-sa-messages-sent>
```

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```
                msdp-sa-messages-sent
               </msdp-sa-messages-sent>
               <msdp-sa-messages-received>
                msdp-sa-messages-received
               </msdp-sa-messages-received>
               <msdp-sa-requests-sent>
                msdp-sa-requests-sent
               </msdp-sa-requests-sent>
               <msdp-sa-requests-received>
                msdp-sa-requests-received
               </msdp-sa-requests-received>
               <msdp-sa-responses-sent>
                msdp-sa-responses-sent
               </msdp-sa-responses-sent>
               <msdp-sa-responses-received>
                msdp-sa-responses-received
               </msdp-sa-responses-received>
               <msdp-active-source-limit-exceeded>
                msdp-active-source-limit-exceeded
               </msdp-active-source-limit-exceeded>
               <msdp-keepalives-sent>
                msdp-keepalives-sent
               </msdp-keepalives-sent>
               <msdp-keepalives-received>
                msdp-keepalives-received
               </msdp-keepalives-received>
               <msdp-unknowns-received>
                msdp-unknowns-received
               </msdp-unknowns-received>
               <msdp-errors-received>
                msdp-errors-received
               </msdp-errors-received>
              </msdp-peer-statistics>
             </msdp-instance>
            </msdp-source-active-information>
```

Description

<msdp-peer-statistics>

Usage

```
<msdp-source-information>
 <msdp-instance>
  <msdp-peer-statistics>
   <msdp-peer-address>
    msdp-peer-address
   </msdp-peer-address>
   <msdp-state-change-absolute>
    msdp-state-change-absolute
   </msdp-state-change-absolute>
   <msdp-state-change>
    msdp-state-change
   </msdp-state-change>
   <msdp-message-received-absolute>
    msdp-message-received-absolute
```


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```
        </msdp-message-received-absolute>
        <msdp-message-received>
          msdp-message-received
        </msdp-message-received>
        <msdp-rpf-failures>
          msdp-rpf-failures
        </msdp-rpf-failures>
        <msdp-remote-closes>
          msdp-remote-closes
        </msdp-remote-closes>
        <msdp-peer-timeouts>
          msdp-peer-timeouts
        </msdp-peer-timeouts>
        <msdp-sa-messages-sent>
          msdp-sa-messages-sent
        </msdp-sa-messages-sent>
        <msdp-sa-messages-received>
          msdp-sa-messages-received
        </msdp-sa-messages-received>
        <msdp-sa-requests-sent>
          msdp-sa-requests-sent
        </msdp-sa-requests-sent>
        <msdp-sa-requests-received>
          msdp-sa-requests-received
        </msdp-sa-requests-received>
        <msdp-sa-responses-sent>
          msdp-sa-responses-sent
        </msdp-sa-responses-sent>
        <msdp-sa-responses-received>
          msdp-sa-responses-received
        </msdp-sa-responses-received>
        <msdp-active-source-limit-exceeded>
          msdp-active-source-limit-exceeded
        </msdp-active-source-limit-exceeded>
        <msdp-keepalives-sent>
          msdp-keepalives-sent
        </msdp-keepalives-sent>
        <msdp-keepalives-received>
          msdp-keepalives-received
        </msdp-keepalives-received>
        <msdp-unknowns-received>
          msdp-unknowns-received
        </msdp-unknowns-received>
        <msdp-errors-received>
          msdp-errors-received
        </msdp-errors-received>
      </msdp-peer-statistics>
    </msdp-instance>
  </msdp-source-information>
```

Description

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<msdp-peer-statistics>

Usage

```
<msdp-statistics-information>
 <msdp-instance>
  <msdp-peer-statistics>
   <msdp-peer-address>
    msdp-peer-address
   </msdp-peer-address>
   <msdp-state-change-absolute>
    msdp-state-change-absolute
   </msdp-state-change-absolute>
   <msdp-state-change>
    msdp-state-change
   </msdp-state-change>
   <msdp-message-received-absolute>
    msdp-message-received-absolute
   </msdp-message-received-absolute>
   <msdp-message-received>
    msdp-message-received
   </msdp-message-received>
   <msdp-rpf-failures>
    msdp-rpf-failures
   </msdp-rpf-failures>
   <msdp-remote-closes>
    msdp-remote-closes
   </msdp-remote-closes>
   <msdp-peer-timeouts>
    msdp-peer-timeouts
   </msdp-peer-timeouts>
   <msdp-sa-messages-sent>
    msdp-sa-messages-sent
   </msdp-sa-messages-sent>
   <msdp-sa-messages-received>
    msdp-sa-messages-received
   </msdp-sa-messages-received>
   <msdp-sa-requests-sent>
    msdp-sa-requests-sent
   </msdp-sa-requests-sent>
   <msdp-sa-requests-received>
    msdp-sa-requests-received
   </msdp-sa-requests-received>
   <msdp-sa-responses-sent>
    msdp-sa-responses-sent
   </msdp-sa-responses-sent>
   <msdp-sa-responses-received>
    msdp-sa-responses-received
   </msdp-sa-responses-received>
   <msdp-active-source-limit-exceeded>
    msdp-active-source-limit-exceeded
   </msdp-active-source-limit-exceeded>
   <msdp-keepalives-sent>
    msdp-keepalives-sent
   </msdp-keepalives-sent>
   <msdp-keepalives-received>
```


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```
        msdp-keepalives-received
       </msdp-keepalives-received>
       <msdp-unknowns-received>
        msdp-unknowns-received
       </msdp-unknowns-received>
       <msdp-errors-received>
        msdp-errors-received
       </msdp-errors-received>
      </msdp-peer-statistics>
     </msdp-instance>
    </msdp-statistics-information>
```

Description

<msdp-route>

Usage

```
<msdp-source-active-information>
 <msdp-instance>
  <msdp-route>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-source-address>
    multicast-source-address
   </multicast-source-address>
   <msdp-route-peer>....</msdp-route-peer>
  </msdp-route>
 </msdp-instance>
</msdp-source-active-information>
```

Description

<msdp-route>

Usage

```
<msdp-source-information>
 <msdp-instance>
  <msdp-route>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-source-address>
    multicast-source-address
   </multicast-source-address>
   <msdp-route-peer>....</msdp-route-peer>
  </msdp-route>
 </msdp-instance>
</msdp-source-information>
```

Description

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<msdp-route>

Usage

```
<msdp-statistics-information>
  <msdp-instance>
    <msdp-route>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <msdp-route-peer>....</msdp-route-peer>
    </msdp-route>
  </msdp-instance>
</msdp-statistics-information>
```

Description

<msdp-route-peer>

Usage

```
<msdp-source-active-information>
  <msdp-instance>
    <msdp-route>
      <msdp-route-peer>
        <msdp-peer-address>
          msdp-peer-address
        </msdp-peer-address>
        <msdp-originator>
          msdp-originator
        </msdp-originator>
        <msdp-route-peer-flags>....</msdp-route-peer-flags>
      </msdp-route-peer>
    </msdp-route>
  </msdp-instance>
</msdp-source-active-information>
```

Description

<msdp-route-peer>

Usage

```
<msdp-source-information>
  <msdp-instance>
    <msdp-route>
      <msdp-route-peer>
        <msdp-peer-address>
          msdp-peer-address
        </msdp-peer-address>
        <msdp-originator>
          msdp-originator
        </msdp-originator>
```


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```
      <msdp-route-peer-flags>....</msdp-route-peer-flags>
     </msdp-route-peer>
    </msdp-route>
   </msdp-instance>
</msdp-source-information>
```

Description

<msdp-route-peer>

Usage

```
<msdp-statistics-information>
 <msdp-instance>
  <msdp-route>
   <msdp-route-peer>
    <msdp-peer-address>
     msdp-peer-address
    </msdp-peer-address>
    <msdp-originator>
     msdp-originator
    </msdp-originator>
    <msdp-route-peer-flags>....</msdp-route-peer-flags>
   </msdp-route-peer>
  </msdp-route>
 </msdp-instance>
</msdp-statistics-information>
```

Description

<msdp-route-peer-flags>

Usage

```
<msdp-source-active-information>
 <msdp-instance>
  <msdp-route>
   <msdp-route-peer>
    <msdp-route-peer-flags>
     <msdp-accept>
      msdp-accept
     </msdp-accept>
     <msdp-reject>
      msdp-reject
     </msdp-reject>
     <msdp-filtered>
      msdp-filtered
     </msdp-filtered>
    </msdp-route-peer-flags>
   </msdp-route-peer>
  </msdp-route>
 </msdp-instance>
</msdp-source-active-information>
```

Description

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<msdp-route-peer-flags>

Usage

```
<msdp-source-information>
  <msdp-instance>
    <msdp-route>
      <msdp-route-peer>
        <msdp-route-peer-flags>
          <msdp-accept>
            msdp-accept
          </msdp-accept>
          <msdp-reject>
            msdp-reject
          </msdp-reject>
          <msdp-filtered>
            msdp-filtered
          </msdp-filtered>
        </msdp-route-peer-flags>
      </msdp-route-peer>
    </msdp-route>
  </msdp-instance>
</msdp-source-information>
```

Description

<msdp-route-peer-flags>

Usage

```
<msdp-statistics-information>
  <msdp-instance>
    <msdp-route>
      <msdp-route-peer>
        <msdp-route-peer-flags>
          <msdp-accept>
            msdp-accept
          </msdp-accept>
          <msdp-reject>
            msdp-reject
          </msdp-reject>
          <msdp-filtered>
            msdp-filtered
          </msdp-filtered>
        </msdp-route-peer-flags>
      </msdp-route-peer>
    </msdp-route>
  </msdp-instance>
</msdp-statistics-information>
```

Description

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<msdp-source>

Usage

```
<msdp-source-active-information>
  <msdp-instance>
    <msdp-source>
      <msdp-source-prefix>
        msdp-source-prefix
      </msdp-source-prefix>
      <msdp-source-prefix-length>
        msdp-source-prefix-length
      </msdp-source-prefix-length>
      <msdp-source-type>
        msdp-source-type
      </msdp-source-type>
      <msdp-source-limit-maximum>
        msdp-source-limit-maximum
      </msdp-source-limit-maximum>
      <msdp-source-limit-threshold>
        msdp-source-limit-threshold
      </msdp-source-limit-threshold>
      <msdp-source-limit-exceeded>
        msdp-source-limit-exceeded
      </msdp-source-limit-exceeded>
    </msdp-source>
  </msdp-instance>
</msdp-source-active-information>
```

Description

<msdp-source>

Usage

```
<msdp-source-information>
  <msdp-instance>
    <msdp-source>
      <msdp-source-prefix>
        msdp-source-prefix
      </msdp-source-prefix>
      <msdp-source-prefix-length>
        msdp-source-prefix-length
      </msdp-source-prefix-length>
      <msdp-source-type>
        msdp-source-type
      </msdp-source-type>
      <msdp-source-limit-maximum>
        msdp-source-limit-maximum
      </msdp-source-limit-maximum>
      <msdp-source-limit-threshold>
        msdp-source-limit-threshold
      </msdp-source-limit-threshold>
      <msdp-source-limit-exceeded>
        msdp-source-limit-exceeded
      </msdp-source-limit-exceeded>
```

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```
    </msdp-source>
  </msdp-instance>
</msdp-source-information>
```

Description

<msdp-source>

Usage

```
<msdp-statistics-information>
  <msdp-instance>
    <msdp-source>
      <msdp-source-prefix>
        msdp-source-prefix
      </msdp-source-prefix>
      <msdp-source-prefix-length>
        msdp-source-prefix-length
      </msdp-source-prefix-length>
      <msdp-source-type>
        msdp-source-type
      </msdp-source-type>
      <msdp-source-limit-maximum>
        msdp-source-limit-maximum
      </msdp-source-limit-maximum>
      <msdp-source-limit-threshold>
        msdp-source-limit-threshold
      </msdp-source-limit-threshold>
      <msdp-source-limit-exceeded>
        msdp-source-limit-exceeded
      </msdp-source-limit-exceeded>
    </msdp-source>
  </msdp-instance>
</msdp-statistics-information>
```

Description

<msdp-source-active-information>

Usage

```
<msdp-source-active-information>
  <msdp-instance>....</msdp-instance>
</msdp-source-active-information>
```

Description

<msdp-source-information>

Usage

```
<msdp-source-information>
  <msdp-instance>....</msdp-instance>
</msdp-source-information>
```


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Description

<msdp-statistics-information>

Usage

```
<msdp-statistics-information>
  <msdp-no-peer>
    msdp-no-peer
  </msdp-no-peer>
  <msdp-instance>....</msdp-instance>
</msdp-statistics-information>
```

Description

<mt-tlv>

Usage

```
<isis-tlv>
  <mt-tlv>
    <mtid>
      mtid
    </mtid>
  </mt-tlv>
</isis-tlv>
```

Description

<mt-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <mt-tlv>
      <mtid>
        mtid
      </mtid>
    </mt-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<mt-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <mt-tlv>
        <mtid>
          mtid
        </mtid>
      </mt-tlv>
```

```
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<mt-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <mt-tlv>
          <mtid>
            mtid
          </mtid>
        </mt-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<multicast-aux-oif>

Usage

```
<multicast-aux-oif>
  <multicast-aux-interface>
    multicast-aux-interface
  </multicast-aux-interface>
  <multicast-ref-count>
    multicast-ref-count
  </multicast-ref-count>
  <multicast-aux-nh-index>
    multicast-aux-nh-index
  </multicast-aux-nh-index>
</multicast-aux-oif>
```

Description

<multicast-aux-oif-agg-req>

Usage

```
<multicast-aux-oif-agg-req>
  <multicast-sg-address>
    multicast-sg-address
  </multicast-sg-address>
</multicast-aux-oif-agg-req>
```

Description

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<multicast-aux-oif-agg-req>

Usage

```
<multicast-aux-oif-data>
  <multicast-aux-oif-agg-req>
    <multicast-sg-address>
      multicast-sg-address
    </multicast-sg-address>
  </multicast-aux-oif-agg-req>
</multicast-aux-oif-data>
```

Description

<multicast-aux-oif-agg-req-join>

Usage

```
<multicast-aux-oif-agg-req-join>
  <multicast-host-address>
    multicast-host-address
  </multicast-host-address>
  <multicast-group-address>
    multicast-group-address
  </multicast-group-address>
  <multicast-source-address>
    multicast-source-address
  </multicast-source-address>
  <multicast-rcvd-interface>
    multicast-rcvd-interface
  </multicast-rcvd-interface>
  <multicast-output-interface>
    multicast-output-interface
  </multicast-output-interface>
  <multicast-aux-interface>
    multicast-aux-interface
  </multicast-aux-interface>
  <multicast-aux-nh-index>
    multicast-aux-nh-index
  </multicast-aux-nh-index>
  <multicast-synthetic>
    multicast-synthetic
  </multicast-synthetic>
  <multicast-unresolved>
    multicast-unresolved
  </multicast-unresolved>
  <multicast-blocked>
    multicast-blocked
  </multicast-blocked>
  <multicast-aux-interface-ignored>
    multicast-aux-interface-ignored
  </multicast-aux-interface-ignored>
  <multicast-aux-nh-index-ignored>
    multicast-aux-nh-index-ignored
  </multicast-aux-nh-index-ignored>
```

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```
</multicast-aux-oif-agg-req-join>
```

Description

<multicast-aux-oif-data>

Usage

```
<multicast-aux-oif-data>
  <multicast-aux-oif-agg-req>....</multicast-aux-oif-agg-req>
  <multicast-aux-oif-hosts>....</multicast-aux-oif-hosts>
</multicast-aux-oif-data>
```

Description

<multicast-aux-oif-host>

Usage

```
<multicast-aux-oif-hosts>
  <multicast-aux-oif-host>
    <multicast-host-address>
      multicast-host-address
    </multicast-host-address>
    <multicast-synthetic>
      multicast-synthetic
    </multicast-synthetic>
    <host-interface>
      host-interface
    </host-interface>
  </multicast-aux-oif-host>
</multicast-aux-oif-hosts>
```

Description

<multicast-aux-oif-host>

Usage

```
<multicast-aux-oif-data>
  <multicast-aux-oif-hosts>
    <multicast-aux-oif-host>
      <multicast-host-address>
        multicast-host-address
      </multicast-host-address>
      <multicast-synthetic>
        multicast-synthetic
      </multicast-synthetic>
      <host-interface>
        host-interface
      </host-interface>
    </multicast-aux-oif-host>
  </multicast-aux-oif-hosts>
</multicast-aux-oif-data>
```


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Description

<multicast-aux-oif-hosts>

Usage

```
<multicast-aux-oif-hosts>
  <multicast-aux-oif-host>....</multicast-aux-oif-host>
</multicast-aux-oif-hosts>
```

Description

<multicast-aux-oif-hosts>

Usage

```
<multicast-aux-oif-data>
  <multicast-aux-oif-hosts>
    <multicast-aux-oif-host>....</multicast-aux-oif-host>
  </multicast-aux-oif-hosts>
</multicast-aux-oif-data>
```

Description

<multicast-aux-oif-join>

Usage

```
<multicast-aux-oif-join>
  <multicast-source-address>
    multicast-source-address
  </multicast-source-address>
  <multicast-group-address>
    multicast-group-address
  </multicast-group-address>
  <multicast-rcvd-interface>
    multicast-rcvd-interface
  </multicast-rcvd-interface>
  <multicast-output-interface>
    multicast-output-interface
  </multicast-output-interface>
  <multicast-aux-interface>
    multicast-aux-interface
  </multicast-aux-interface>
  <multicast-unresolved>
    multicast-unresolved
  </multicast-unresolved>
  <multicast-synthetic>
    multicast-synthetic
  </multicast-synthetic>
  <multicast-blocked>
    multicast-blocked
  </multicast-blocked>
  <multicast-aux-nh-index>
    multicast-aux-nh-index
  </multicast-aux-nh-index>
  <multicast-aux-interface-ignored>
```

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```
    multicast-aux-interface-ignored
  </multicast-aux-interface-ignored>
  <multicast-aux-nh-index-ignored>
    multicast-aux-nh-index-ignored
  </multicast-aux-nh-index-ignored>
</multicast-aux-oif-join>
```

Description

<multicast-aux-oif-request>

Usage

```
<multicast-aux-oif-request>
  <multicast-source-address>
    multicast-source-address
  </multicast-source-address>
  <multicast-group-address>
    multicast-group-address
  </multicast-group-address>
  <multicast-unresolved>
    multicast-unresolved
  </multicast-unresolved>
  <multicast-aux-interface>
    multicast-aux-interface
  </multicast-aux-interface>
  <multicast-aux-nh-index>
    multicast-aux-nh-index
  </multicast-aux-nh-index>
  <multicast-aux-interface-ignored>
    multicast-aux-interface-ignored
  </multicast-aux-interface-ignored>
  <multicast-aux-nh-index-ignored>
    multicast-aux-nh-index-ignored
  </multicast-aux-nh-index-ignored>
</multicast-aux-oif-request>
```

Description

<multicast-backup-pe-address-information>

Usage

```
<multicast-backup-pe-address-information>
  <multicast-backup-pe-address>
    multicast-backup-pe-address
  </multicast-backup-pe-address>
  <multicast-backup-pe-group-list>....</multicast-backup-pe-group-list>
  <pe-address-local>
    pe-address-local
  </pe-address-local>
  <lsp-to-pe-up>
    lsp-to-pe-up
  </lsp-to-pe-up>
</multicast-backup-pe-address-information>
```


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Description Information about multicast backup PE

<multicast-backup-pe-group>

Usage

```
<multicast-backup-pe-groups-information>
  <multicast-backup-pe-groups>
    <multicast-backup-pe-group>
      <multicast-backup-pe-group-name>
        multicast-backup-pe-group-name
      </multicast-backup-pe-group-name>
      <designated-pe>
        designated-pe
      </designated-pe>
      <transitions>
        transitions
      </transitions>
      <last-transition>
        last-transition
      </last-transition>
      <local-pe-address>
        local-pe-address
      </local-pe-address>
      <backup-pes>....</backup-pes>
    </multicast-backup-pe-group>
  </multicast-backup-pe-groups>
</multicast-backup-pe-groups-information>
```

Description Information about a multicast backup PE group

<multicast-backup-pe-group-list>

Usage

```
<multicast-backup-pe-address-information>
  <multicast-backup-pe-group-list>
 <multicast-backup-pe-group-member>....</multicast-backup-pe-group-member>

  </multicast-backup-pe-group-list>
</multicast-backup-pe-address-information>
```

Description Information about multicast backup PE groups associatd with PE

<multicast-backup-pe-group-member>

Usage

```
<multicast-backup-pe-address-information>
  <multicast-backup-pe-group-list>
    <multicast-backup-pe-group-member>
      <multicast-backup-pe-group-name>
        multicast-backup-pe-group-name
      </multicast-backup-pe-group-name>
    </multicast-backup-pe-group-member>
```

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```
  </multicast-backup-pe-group-list>
</multicast-backup-pe-address-information>
```

Description Information about a multicast backup PE group

<multicast-backup-pe-groups>

Usage

```
<multicast-backup-pe-groups-information>
  <multicast-backup-pe-groups>
    <instance-name>
      instance-name
    </instance-name>
    <multicast-backup-pe-group>....</multicast-backup-pe-group>
  </multicast-backup-pe-groups>
</multicast-backup-pe-groups-information>
```

Description Information about multicast backup PE groups for one routing instance

<multicast-backup-pe-groups-information>

Usage

```
<multicast-backup-pe-groups-information>
  <multicast-backup-pe-groups>....</multicast-backup-pe-groups>
</multicast-backup-pe-groups-information>
```

Description Information about multicast backup PE groups for one or more routing instances

<multicast-flow-map>

Usage

```
<multicast-flow-maps-information>
  <multicast-flow-maps>
    <multicast-flow-map>
      <flow-map-name>
        flow-map-name
      </flow-map-name>
      <policy-name>
        policy-name
      </policy-name>
      <cache-timeout>
        cache-timeout
      </cache-timeout>
      <flow-bandwidth>
        flow-bandwidth
      </flow-bandwidth>
      <bandwidth-type>
        bandwidth-type
      </bandwidth-type>
      <redundant-sources>....</redundant-sources>
    </multicast-flow-map>
```


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```
  </multicast-flow-maps>
</multicast-flow-maps-information>
```

Description Information about a multicast flow map

<multicast-flow-maps>

Usage

```
<multicast-flow-maps-information>
  <multicast-flow-maps>
    <instance-name>
      instance-name
    </instance-name>
    <multicast-flow-map>....</multicast-flow-map>
  </multicast-flow-maps>
</multicast-flow-maps-information>
```

Description Information about multicast flow maps for one routing instance

<multicast-flow-maps-information>

Usage

```
<multicast-flow-maps-information>
  <multicast-flow-maps>....</multicast-flow-maps>
</multicast-flow-maps-information>
```

Description Information about multicast flow maps for one or more routing instances

<multicast-group>

Usage

```
<multicast-usage-information>
  <multicast-group>
    <multicast-group-address>
      multicast-group-address
    </multicast-group-address>
    <multicast-source-count>
      multicast-source-count
    </multicast-source-count>
    <multicast-packet-count>
      multicast-packet-count
    </multicast-packet-count>
    <multicast-packet-count-not-available>
      multicast-packet-count-not-available
    </multicast-packet-count-not-available>
    <multicast-byte-count>
      multicast-byte-count
    </multicast-byte-count>
    <multicast-byte-count-not-available>
      multicast-byte-count-not-available
    </multicast-byte-count-not-available>
```

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```
    <multicast-group-source>....</multicast-group-source>
  </multicast-group>
</multicast-usage-information>
```

Description

<multicast-group-source>

Usage

```
<multicast-usage-information>
  <multicast-group>
    <multicast-group-source>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <multicast-source-prefix-length>
        multicast-source-prefix-length
      </multicast-source-prefix-length>
      <multicast-packet-count>
        multicast-packet-count
      </multicast-packet-count>
      <multicast-packet-count-not-available>
        multicast-packet-count-not-available
      </multicast-packet-count-not-available>
      <multicast-byte-count>
        multicast-byte-count
      </multicast-byte-count>
      <multicast-byte-count-not-available>
        multicast-byte-count-not-available
      </multicast-byte-count-not-available>
    </multicast-group-source>
  </multicast-group>
</multicast-usage-information>
```

Description

<multicast-interface>

Usage

```
<multicast-interface-information>
  <multicast-interface>
    <interface-name>
      interface-name
    </interface-name>
    <interface-max-bandwidth>
      interface-max-bandwidth
    </interface-max-bandwidth>
    <interface-remaining-bandwidth>
      interface-remaining-bandwidth
    </interface-remaining-bandwidth>
    <interface-local-bandwidth-deduction>
      interface-local-bandwidth-deduction
    </interface-local-bandwidth-deduction>
    <interface-mapped-bandwidth-deduction>
```


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```
    interface-mapped-bandwidth-deduction
   </interface-mapped-bandwidth-deduction>
   <interface-reverse-oif-mapping>
    interface-reverse-oif-mapping
   </interface-reverse-oif-mapping>
   <interface-reverse-oif-mapping-no-qos-adjust>
    interface-reverse-oif-mapping-no-qos-adjust
   </interface-reverse-oif-mapping-no-qos-adjust>
   <interface-subscriber-leave-timer>
    interface-subscriber-leave-timer
   </interface-subscriber-leave-timer>
   <interface-no-qos-adjust>
    interface-no-qos-adjust
   </interface-no-qos-adjust>
  </multicast-interface>
</multicast-interface-information>
```

Description Information about a multicast interface

<multicast-interface-information>

Usage

```
<multicast-interface-information>
  <multicast-interface>....</multicast-interface>
</multicast-interface-information>
```

Description Information about one or more multicast interfaces

<multicast-next-hops-information>

Usage

```
<multicast-next-hops-information>
  <next-hops-family>....</next-hops-family>
</multicast-next-hops-information>
```

Description

<multicast-pim-to-igmp-proxy>

Usage

```
<multicast-pim-to-igmp-proxy-information>
  <multicast-pim-to-igmp-proxy>
    <instance-name>
     instance-name
    </instance-name>
    <proxy-state>
     proxy-state
    </proxy-state>
    <proxy-upstream-interface>....</proxy-upstream-interface>
  </multicast-pim-to-igmp-proxy>
```

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```
</multicast-pim-to-igmp-proxy-information>
```

Description Pim-to-igmp-proxy state

<multicast-pim-to-igmp-proxy-information>

Usage

```
<multicast-pim-to-igmp-proxy-information>
  <multicast-pim-to-igmp-proxy>....</multicast-pim-to-igmp-proxy>
</multicast-pim-to-igmp-proxy-information>
```

Description

<multicast-pim-to-mld-proxy>

Usage

```
<multicast-pim-to-mld-proxy-information>
  <multicast-pim-to-mld-proxy>
    <instance-name>
      instance-name
    </instance-name>
    <proxy-state>
      proxy-state
    </proxy-state>
    <proxy-upstream-interface>....</proxy-upstream-interface>
  </multicast-pim-to-mld-proxy>
</multicast-pim-to-mld-proxy-information>
```

Description Pim-to-mld-proxy state

<multicast-pim-to-mld-proxy-information>

Usage

```
<multicast-pim-to-mld-proxy-information>
  <multicast-pim-to-mld-proxy>....</multicast-pim-to-mld-proxy>
</multicast-pim-to-mld-proxy-information>
```

Description

<multicast-route>

Usage

```
<multicast-route-information>
  <route-family>
    <multicast-route>
      <multicast-group-address>
        multicast-group-address
      </multicast-group-address>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
```


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```
<multicast-route-vlan-id>
  multicast-route-vlan-id
</multicast-route-vlan-id>
<multicast-route-bridge-domain>
  multicast-route-bridge-domain
</multicast-route-bridge-domain>
<multicast-route-mesh-group>
  multicast-route-mesh-group
</multicast-route-mesh-group>
<multicast-source-prefix-length>
  multicast-source-prefix-length
</multicast-source-prefix-length>
<multicast-route-source>....</multicast-route-source>
<session-name>
  session-name
</session-name>
<forwarding-rate-kilobytes>
  forwarding-rate-kilobytes
</forwarding-rate-kilobytes>
<forwarding-rate-packets>
  forwarding-rate-packets
</forwarding-rate-packets>
<forwarded-packet-count>
  forwarded-packet-count
</forwarded-packet-count>
<multicast-statistics-timed-out>
  multicast-statistics-timed-out
</multicast-statistics-timed-out>
<bandwidth-for-admission-control>
  bandwidth-for-admission-control
</bandwidth-for-admission-control>
<upstream-interface-name>
  upstream-interface-name
</upstream-interface-name>
<rpf-check-disabled>
  rpf-check-disabled
</rpf-check-disabled>
<downstream-interface-names>....</downstream-interface-names>
<rejected-downstream-interface-names>
  rejected-downstream-interface-names
</rejected-downstream-interface-names>
<next-hop-id>
  next-hop-id
</next-hop-id>
<upstream-protocol>
  upstream-protocol
</upstream-protocol>
<multicast-route-forwarding-state>
  multicast-route-forwarding-state
</multicast-route-forwarding-state>
<multicast-route-state>
  multicast-route-state
</multicast-route-state>
<multicast-route-uptime>
  multicast-route-uptime
</multicast-route-uptime>
```

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```
      <multicast-route-timeout>
        multicast-route-timeout
      </multicast-route-timeout>
      <interface-mismatch-count>
        interface-mismatch-count
      </interface-mismatch-count>
      <multicast-route-summary>....</multicast-route-summary>
    </multicast-route>
  </route-family>
</multicast-route-information>
```

Description

<multicast-route-information>

Usage

```
<multicast-route-information>
  <multicast-route-no-group-prefix>
    multicast-route-no-group-prefix
  </multicast-route-no-group-prefix>
  <multicast-route-no-family>
    multicast-route-no-family
  </multicast-route-no-family>
  <route-family>....</route-family>
</multicast-route-information>
```

Description

<multicast-route-source>

Usage

```
<multicast-route-information>
  <route-family>
    <multicast-route>
      <multicast-route-source>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
      </multicast-route-source>
    </multicast-route>
  </route-family>
</multicast-route-information>
```

Description

<multicast-route-summary>

Usage

```
<multicast-route-information>
  <route-family>
    <multicast-route-summary>
      <multicast-route-type>
        multicast-route-type
```


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```
    </multicast-route-type>
    <multicast-route-state-type>
      multicast-route-state-type
    </multicast-route-state-type>
    <multicast-route-count>
      multicast-route-count
    </multicast-route-count>
  </multicast-route-summary>
 </route-family>
</multicast-route-information>
```

Description

<multicast-route-summary>

Usage

```
<multicast-route-information>
 <route-family>
  <multicast-route>
   <multicast-route-summary>
    <multicast-route-type>
     multicast-route-type
    </multicast-route-type>
    <multicast-route-state-type>
     multicast-route-state-type
    </multicast-route-state-type>
    <multicast-route-count>
     multicast-route-count
    </multicast-route-count>
   </multicast-route-summary>
  </multicast-route>
 </route-family>
</multicast-route-information>
```

Description

<multicast-rpf-information>

Usage

```
<multicast-rpf-information>
 <rpf-family>....</rpf-family>
</multicast-rpf-information>
```

Description

<multicast-scope>

Usage

```
<multicast-scope-information>
 <multicast-scope>
  <scope-name>
   scope-name
  </scope-name>
```

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```
    <address-prefix>
      address-prefix
    </address-prefix>
    <interface-name>
      interface-name
    </interface-name>
    <scope-rejects>
      scope-rejects
    </scope-rejects>
    <scope-state>
      scope-state
    </scope-state>
  </multicast-scope>
</multicast-scope-information>
```

Description

<multicast-scope-information>

Usage

```
<multicast-scope-information>
  <multicast-scope-policy>
    multicast-scope-policy
  </multicast-scope-policy>
  <multicast-scope-policy-interfaces>....</multicast-scope-policy-interfaces>
  <multicast-scope>....</multicast-scope>
</multicast-scope-information>
```

Description

<multicast-scope-policy-interface>

Usage

```
<multicast-scope-information>
  <multicast-scope-policy-interfaces>
    <multicast-scope-policy-interface>
      <interface-name>
        interface-name
      </interface-name>
      <scope-rejects>
        scope-rejects
      </scope-rejects>
    </multicast-scope-policy-interface>
  </multicast-scope-policy-interfaces>
</multicast-scope-information>
```

Description

<multicast-scope-policy-interfaces>

Usage

```
<multicast-scope-information>
  <multicast-scope-policy-interfaces>
```


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```
    <instance-name>
      instance-name
    </instance-name>
    <address-family>
      address-family
    </address-family>
    <multicast-scope-policy-interface>....</multicast-scope-policy-interface>
  </multicast-scope-policy-interfaces>
</multicast-scope-information>
```

Description

<multicast-session>

Usage

```
<multicast-sessions-information>
  <multicast-session>
    <session-announcement>
      session-announcement
    </session-announcement>
    <session-name>
      session-name
    </session-name>
    <session-version>
      session-version
    </session-version>
    <session-origin>....</session-origin>
    <upstream-protocol>
      upstream-protocol
    </upstream-protocol>
    <session-description>
      session-description
    </session-description>
    <session-uri>
      session-uri
    </session-uri>
    <session-email>
      session-email
    </session-email>
    <session-phone>
      session-phone
    </session-phone>
    <session-connection-data>....</session-connection-data>
    <session-bandwidth>
      session-bandwidth
    </session-bandwidth>
    <session-start-time>
      session-start-time
    </session-start-time>
    <session-stop-time>
      session-stop-time
    </session-stop-time>
    <session-encryption-key>
      session-encryption-key
    </session-encryption-key>
```

```
    <session-attribute>
      session-attribute
    </session-attribute>
    <session-media>
      session-media
    </session-media>
  </multicast-session>
</multicast-sessions-information>
```

Description

<multicast-sessions-information>

Usage

```
<multicast-sessions-information>
  <multicast-session>....</multicast-session>
  <multicast-session-count>
    multicast-session-count
  </multicast-session-count>
  <multicast-sessions-type>
    multicast-sessions-type
  </multicast-sessions-type>
</multicast-sessions-information>
```

Description

<multicast-source>

Usage

```
<multicast-usage-information>
  <multicast-source>
    <multicast-source-address>
      multicast-source-address
    </multicast-source-address>
    <multicast-source-prefix-length>
      multicast-source-prefix-length
    </multicast-source-prefix-length>
    <multicast-group-count>
      multicast-group-count
    </multicast-group-count>
    <multicast-packet-count>
      multicast-packet-count
    </multicast-packet-count>
    <multicast-packet-count-not-available>
      multicast-packet-count-not-available
    </multicast-packet-count-not-available>
    <multicast-byte-count>
      multicast-byte-count
    </multicast-byte-count>
    <multicast-byte-count-not-available>
      multicast-byte-count-not-available
    </multicast-byte-count-not-available>
    <multicast-source-group>....</multicast-source-group>
  </multicast-source>
```


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```
</multicast-usage-information>
```

Description

<multicast-source-group>

Usage

```
<multicast-usage-information>
 <multicast-source>
  <multicast-source-group>
   <multicast-group-address>
    multicast-group-address
   </multicast-group-address>
   <multicast-packet-count>
    multicast-packet-count
   </multicast-packet-count>
   <multicast-packet-count-not-available>
    multicast-packet-count-not-available
   </multicast-packet-count-not-available>
   <multicast-byte-count>
    multicast-byte-count
   </multicast-byte-count>
   <multicast-byte-count-not-available>
    multicast-byte-count-not-available
   </multicast-byte-count-not-available>
  </multicast-source-group>
 </multicast-source>
</multicast-usage-information>
```

Description

<multicast-statistics>

Usage

```
<multicast-statistics-information>
 <multicast-statistics>
  <instance-name>
   instance-name
  </instance-name>
  <address-family>
   address-family
  </address-family>
  <mc-stats-interface>....</mc-stats-interface>
  <mc-resolves-no-mc-interface>
   mc-resolves-no-mc-interface
  </mc-resolves-no-mc-interface>
  <mc-global-resolves-no-route>
   mc-global-resolves-no-route
  </mc-global-resolves-no-route>
  <mc-notifies-no-mc-interface>
   mc-notifies-no-mc-interface
  </mc-notifies-no-mc-interface>
  <mc-notifies-no-route>
   mc-notifies-no-route
```

```
    </mc-notifies-no-route>
    <mc-mismatches-no-mc-interface>
      mc-mismatches-no-mc-interface
    </mc-mismatches-no-mc-interface>
    <mc-groups-no-mc-interface>
      mc-groups-no-mc-interface
    </mc-groups-no-mc-interface>
  </multicast-statistics>
</multicast-statistics-information>
```

Description

<multicast-statistics-information>

Usage

```
<multicast-statistics-information>
  <multicast-statistics>....</multicast-statistics>
</multicast-statistics-information>
```

Description

<multicast-tunnel>

Usage

```
<multicast-tunnels-information>
  <multicast-tunnel>
    <interface-name>
      interface-name
    </interface-name>
    <tunnel-local-address>
      tunnel-local-address
    </tunnel-local-address>
    <tunnel-remote-address>
      tunnel-remote-address
    </tunnel-remote-address>
    <tunnel-ttl>
      tunnel-ttl
    </tunnel-ttl>
  </multicast-tunnel>
</multicast-tunnels-information>
```

Description

<multicast-tunnels-information>

Usage

```
<multicast-tunnels-information>
  <multicast-tunnel>....</multicast-tunnel>
</multicast-tunnels-information>
```

Description

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<multicast-usage-information>

Usage

```
<multicast-usage-information>
  <multicast-usage-no-group-prefix>
    multicast-usage-no-group-prefix
  </multicast-usage-no-group-prefix>
  <multicast-usage-strange-family>
    multicast-usage-strange-family
  </multicast-usage-strange-family>
  <multicast-usage-timed-out>
    multicast-usage-timed-out
  </multicast-usage-timed-out>
  <multicast-group>....</multicast-group>
  <multicast-source>....</multicast-source>
</multicast-usage-information>
```

Description

<mvpn-instance>

Usage

```
<mvpn-instance>
  <instance-family>....</instance-family>
</mvpn-instance>
```

Description

<mvpn-instance>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>....</instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<mvpn-instance-information>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>....</mvpn-instance>
  <instance-family>....</instance-family>
</mvpn-instance-information>
```

Description

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<neighbor>

Usage

```
<neighbor>
  <neighbor-entry>....</neighbor-entry>
</neighbor>
```

Description

<neighbor>

Usage

```
<instance-entry>
  <neighbor>
    <neighbor-entry>....</neighbor-entry>
  </neighbor>
</instance-entry>
```

Description

<neighbor>

Usage

```
<instance-family>
  <instance-entry>
    <neighbor>
      <neighbor-entry>....</neighbor-entry>
    </neighbor>
  </instance-entry>
</instance-family>
```

Description

<neighbor>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <neighbor>
        <neighbor-entry>....</neighbor-entry>
      </neighbor>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```

Description

<neighbor>

Usage

```
<mvpn-instance-information>
```


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```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <neighbor>
        <neighbor-entry>....</neighbor-entry>
      </neighbor>
    </instance-entry>
  </instance-family>
</mvpn-instance>
</mvpn-instance-information>
```

Description

<neighbor>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <neighbor>
        <neighbor-entry>....</neighbor-entry>
      </neighbor>
    </instance-entry>
  </instance-family>
</mvpn-instance-information>
```

Description

<neighbor-entry>

Usage

```
<neighbor-entry>
  <neighbor-identifier>
    neighbor-identifier
  </neighbor-identifier>
  <provider-tunnel-id>
    provider-tunnel-id
  </provider-tunnel-id>
</neighbor-entry>
```

Description

<neighbor-entry>

Usage

```
<neighbor>
  <neighbor-entry>
    <neighbor-identifier>
      neighbor-identifier
    </neighbor-identifier>
    <provider-tunnel-id>
      provider-tunnel-id
    </provider-tunnel-id>
```

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```
  </neighbor-entry>
</neighbor>
```

Description

<neighbor-entry>

Usage

```
<instance-entry>
  <neighbor>
    <neighbor-entry>
      <neighbor-identifier>
        neighbor-identifier
      </neighbor-identifier>
      <provider-tunnel-id>
        provider-tunnel-id
      </provider-tunnel-id>
    </neighbor-entry>
  </neighbor>
</instance-entry>
```

Description

<neighbor-entry>

Usage

```
<instance-family>
  <instance-entry>
    <neighbor>
      <neighbor-entry>
        <neighbor-identifier>
          neighbor-identifier
        </neighbor-identifier>
        <provider-tunnel-id>
          provider-tunnel-id
        </provider-tunnel-id>
      </neighbor-entry>
    </neighbor>
  </instance-entry>
</instance-family>
```

Description

<neighbor-entry>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <neighbor>
        <neighbor-entry>
          <neighbor-identifier>
            neighbor-identifier
```


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```
        </neighbor-identifier>
        <provider-tunnel-id>
          provider-tunnel-id
        </provider-tunnel-id>
      </neighbor-entry>
    </neighbor>
  </instance-entry>
 </instance-family>
</mvpn-instance>
```

Description

<neighbor-entry>

Usage

```
<mvpn-instance-information>
 <mvpn-instance>
  <instance-family>
   <instance-entry>
    <neighbor>
     <neighbor-entry>
      <neighbor-identifier>
       neighbor-identifier
      </neighbor-identifier>
      <provider-tunnel-id>
       provider-tunnel-id
      </provider-tunnel-id>
     </neighbor-entry>
    </neighbor>
   </instance-entry>
  </instance-family>
 </mvpn-instance>
</mvpn-instance-information>
```

Description

<neighbor-entry>

Usage

```
<mvpn-instance-information>
 <instance-family>
  <instance-entry>
   <neighbor>
    <neighbor-entry>
     <neighbor-identifier>
      neighbor-identifier
     </neighbor-identifier>
     <provider-tunnel-id>
      provider-tunnel-id
     </provider-tunnel-id>
    </neighbor-entry>
   </neighbor>
  </instance-entry>
 </instance-family>
```

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```
</mvpn-instance-information>
```

Description

<neighbor-summary>

Usage

```
<neighbor-summary>
  <neighbor-summary-count>
    neighbor-summary-count
  </neighbor-summary-count>
</neighbor-summary>
```

Description

<neighbor-summary>

Usage

```
<instance-entry-summary>
  <neighbor-summary>
    <neighbor-summary-count>
      neighbor-summary-count
    </neighbor-summary-count>
  </neighbor-summary>
</instance-entry-summary>
```

Description

<neighbor-summary>

Usage

```
<instance-family>
  <instance-entry-summary>
    <neighbor-summary>
      <neighbor-summary-count>
        neighbor-summary-count
      </neighbor-summary-count>
    </neighbor-summary>
  </instance-entry-summary>
</instance-family>
```

Description

<neighbor-summary>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry-summary>
      <neighbor-summary>
        <neighbor-summary-count>
          neighbor-summary-count
```


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```
        </neighbor-summary-count>
       </neighbor-summary>
      </instance-entry-summary>
     </instance-family>
    </mvpn-instance>
```

Description

<neighbor-summary>

Usage

```
<mvpn-instance-information>
 <mvpn-instance>
  <instance-family>
   <instance-entry-summary>
    <neighbor-summary>
     <neighbor-summary-count>
      neighbor-summary-count
     </neighbor-summary-count>
    </neighbor-summary>
   </instance-entry-summary>
  </instance-family>
 </mvpn-instance>
</mvpn-instance-information>
```

Description

<neighor-summary>

Usage

```
<mvpn-instance-information>
 <instance-family>
  <instance-entry-summary>
   <neighbor-summary>
    <neighbor-summary-count>
     neighbor-summary-count
    </neighbor-summary-count>
   </neighbor-summary>
  </instance-entry-summary>
 </instance-family>
</mvpn-instance-information>
```

Description

<next-hop-address>

Usage

```
<ospf-next-hop>
 <next-hop-address>
  <interface-address>
   interface-address
  </interface-address>
  <lsp-name>
```

```
      lsp-name
    </lsp-name>
  </next-hop-address>
</ospf-next-hop>
```

Description

<next-hop-address>

Usage

```
<ospf-route>
  <ospf-route-entry>
    <ospf-next-hop>
      <next-hop-address>
        <interface-address>
          interface-address
        </interface-address>
        <lsp-name>
          lsp-name
        </lsp-name>
      </next-hop-address>
    </ospf-next-hop>
  </ospf-route-entry>
</ospf-route>
```

Description

<next-hop-address>

Usage

```
<ospf-topology-route-table>
  <ospf-route>
    <ospf-route-entry>
      <ospf-next-hop>
        <next-hop-address>
          <interface-address>
            interface-address
          </interface-address>
          <lsp-name>
            lsp-name
          </lsp-name>
        </next-hop-address>
      </ospf-next-hop>
    </ospf-route-entry>
  </ospf-route>
</ospf-topology-route-table>
```

Description

<next-hop-address>

Usage

```
<ospf-route-information>
```


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```
<ospf-topology-route-table>
 <ospf-route>
  <ospf-route-entry>
   <ospf-next-hop>
    <next-hop-address>
     <interface-address>
      interface-address
     </interface-address>
     <lsp-name>
      lsp-name
     </lsp-name>
    </next-hop-address>
   </ospf-next-hop>
  </ospf-route-entry>
 </ospf-route>
</ospf-topology-route-table>
</ospf-route-information>
```

Description

<next-hop-address>

Usage

```
<ospf-backup-spf-node>
 <ospf-next-hop>
  <next-hop-address>
   <interface-address>
    interface-address
   </interface-address>
   <lsp-name>
    lsp-name
   </lsp-name>
  </next-hop-address>
 </ospf-next-hop>
</ospf-backup-spf-node>
```

Description

<next-hop-address>

Usage

```
<ospf-topology-area-backup-spf>
 <ospf-backup-spf-node>
  <ospf-next-hop>
   <next-hop-address>
    <interface-address>
     interface-address
    </interface-address>
    <lsp-name>
     lsp-name
    </lsp-name>
   </next-hop-address>
  </ospf-next-hop>
 </ospf-backup-spf-node>
```

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```
</ospf-topology-area-backup-spf>
```

Description

<next-hop-address>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
    <ospf-backup-spf-node>
      <ospf-next-hop>
        <next-hop-address>
          <interface-address>
            interface-address
          </interface-address>
          <lsp-name>
            lsp-name
          </lsp-name>
        </next-hop-address>
      </ospf-next-hop>
    </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description

<next-hop-address>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-area-backup-spf>
      <ospf-backup-spf-node>
        <ospf-next-hop>
          <next-hop-address>
            <interface-address>
              interface-address
            </interface-address>
            <lsp-name>
              lsp-name
            </lsp-name>
          </next-hop-address>
        </ospf-next-hop>
      </ospf-backup-spf-node>
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description

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<next-hop-address>

Usage

```
<ospf3-route>
  <ospf3-route-entry>
    <ospf-next-hop>
      <next-hop-address>
        <interface-address>
          interface-address
        </interface-address>
        <lsp-name>
          lsp-name
        </lsp-name>
      </next-hop-address>
    </ospf-next-hop>
  </ospf3-route-entry>
</ospf3-route>
```

Description

<next-hop-address>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>
      <ospf-next-hop>
        <next-hop-address>
          <interface-address>
            interface-address
          </interface-address>
          <lsp-name>
            lsp-name
          </lsp-name>
        </next-hop-address>
      </ospf-next-hop>
    </ospf3-route-entry>
  </ospf3-route>
</ospf3-route-information>
```

Description

<next-hop-address>

Usage

```
<ospf3-backup-spf-node>
  <ospf-next-hop>
    <next-hop-address>
      <interface-address>
        interface-address
      </interface-address>
      <lsp-name>
        lsp-name
```

```
      </lsp-name>
    </next-hop-address>
  </ospf-next-hop>
</ospf3-backup-spf-node>
```

Description

<next-hop-address>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf-next-hop>
      <next-hop-address>
        <interface-address>
          interface-address
        </interface-address>
        <lsp-name>
          lsp-name
        </lsp-name>
      </next-hop-address>
    </ospf-next-hop>
  </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description

<next-hop-address>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
      <ospf-next-hop>
        <next-hop-address>
          <interface-address>
            interface-address
          </interface-address>
          <lsp-name>
            lsp-name
          </lsp-name>
        </next-hop-address>
      </ospf-next-hop>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description

<next-hop-address>

Usage

```
<ospf3-backup-spf-information>
```


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```
<ospf3-topology-backup-spf>
 <ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
   <ospf-next-hop>
    <next-hop-address>
     <interface-address>
      interface-address
     </interface-address>
     <lsp-name>
      lsp-name
     </lsp-name>
    </next-hop-address>
   </ospf-next-hop>
  </ospf3-backup-spf-node>
 </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description

<next-hop-downstream-interface>

Usage

```
<multicast-next-hops-information>
 <next-hops-family>
  <iflist-next-hop>
   <next-hop-downstream-interface>
    <interface-name>
     interface-name
    </interface-name>
    <interface-index>
     interface-index
    </interface-index>
    <interface-nh-index>
     interface-nh-index
    </interface-nh-index>
   </next-hop-downstream-interface>
  </iflist-next-hop>
 </next-hops-family>
</multicast-next-hops-information>
```

Description

<next-hop-element>

Usage

```
<next-hop-element>
 <interface-name>
  interface-name
 </interface-name>
 <isis-next-hop-type>
  isis-next-hop-type
 </isis-next-hop-type>
 <isis-next-hop>
```

```
    isis-next-hop
   </isis-next-hop>
   <snpa>
    snpa
   </snpa>
  </next-hop-element>
```

Description

<next-hop-element>

Usage

```
<isis-overview>
 <isis-spf-information>
  <isis-spf>
   <isis-spf-result>
    <next-hop-element>
     <interface-name>
      interface-name
     </interface-name>
     <isis-next-hop-type>
      isis-next-hop-type
     </isis-next-hop-type>
     <isis-next-hop>
      isis-next-hop
     </isis-next-hop>
     <snpa>
      snpa
     </snpa>
    </next-hop-element>
   </isis-spf-result>
  </isis-spf>
 </isis-spf-information>
</isis-overview>
```

Description

<next-hop-element>

Usage

```
<isis-overview>
 <isis-spf-information>
  <isis-spf>
   <isis-backup-spf-result>
    <next-hop-element>
     <interface-name>
      interface-name
     </interface-name>
     <isis-next-hop-type>
      isis-next-hop-type
     </isis-next-hop-type>
     <isis-next-hop>
      isis-next-hop
     </isis-next-hop>
```


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```
            <snpa>
              snpa
            </snpa>
          </next-hop-element>
        </isis-backup-spf-result>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<next-hop-element>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-spf-result>
          <next-hop-element>
            <interface-name>
              interface-name
            </interface-name>
            <isis-next-hop-type>
              isis-next-hop-type
            </isis-next-hop-type>
            <isis-next-hop>
              isis-next-hop
            </isis-next-hop>
            <snpa>
              snpa
            </snpa>
          </next-hop-element>
        </isis-spf-result>
      </isis-spf>
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<next-hop-element>

Usage

```
<isis-overview-information>
  <isis-overview>
    <isis-spf-information>
      <isis-spf>
        <isis-backup-spf-result>
          <next-hop-element>
            <interface-name>
              interface-name
            </interface-name>
            <isis-next-hop-type>
```

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```
                isis-next-hop-type
               </isis-next-hop-type>
               <isis-next-hop>
                isis-next-hop
               </isis-next-hop>
               <snpa>
                snpa
               </snpa>
              </next-hop-element>
             </isis-backup-spf-result>
            </isis-spf>
           </isis-spf-information>
          </isis-overview>
         </isis-overview-information>
```

Description

<next-hop-element>

Usage

```
<isis-spf-result>
 <next-hop-element>
  <interface-name>
   interface-name
  </interface-name>
  <isis-next-hop-type>
   isis-next-hop-type
  </isis-next-hop-type>
  <isis-next-hop>
   isis-next-hop
  </isis-next-hop>
  <snpa>
   snpa
  </snpa>
 </next-hop-element>
</isis-spf-result>
```

Description

<next-hop-element>

Usage

```
<isis-backup-spf-result>
 <next-hop-element>
  <interface-name>
   interface-name
  </interface-name>
  <isis-next-hop-type>
   isis-next-hop-type
  </isis-next-hop-type>
  <isis-next-hop>
   isis-next-hop
  </isis-next-hop>
  <snpa>
```


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```
      snpa
    </snpa>
  </next-hop-element>
</isis-backup-spf-result>
```

Description

<next-hop-element>

Usage

```
<isis-spf>
  <isis-spf-result>
    <next-hop-element>
      <interface-name>
        interface-name
      </interface-name>
      <isis-next-hop-type>
        isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
        isis-next-hop
      </isis-next-hop>
      <snpa>
        snpa
      </snpa>
    </next-hop-element>
  </isis-spf-result>
</isis-spf>
```

Description

<next-hop-element>

Usage

```
<isis-spf>
  <isis-backup-spf-result>
    <next-hop-element>
      <interface-name>
        interface-name
      </interface-name>
      <isis-next-hop-type>
        isis-next-hop-type
      </isis-next-hop-type>
      <isis-next-hop>
        isis-next-hop
      </isis-next-hop>
      <snpa>
        snpa
      </snpa>
    </next-hop-element>
  </isis-backup-spf-result>
</isis-spf>
```

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Description

<next-hop-element>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-result>
      <next-hop-element>
        <interface-name>
          interface-name
        </interface-name>
        <isis-next-hop-type>
          isis-next-hop-type
        </isis-next-hop-type>
        <isis-next-hop>
          isis-next-hop
        </isis-next-hop>
        <snpa>
          snpa
        </snpa>
      </next-hop-element>
    </isis-spf-result>
  </isis-spf>
</isis-spf-information>
```

Description

<next-hop-element>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-backup-spf-result>
      <next-hop-element>
        <interface-name>
          interface-name
        </interface-name>
        <isis-next-hop-type>
          isis-next-hop-type
        </isis-next-hop-type>
        <isis-next-hop>
          isis-next-hop
        </isis-next-hop>
        <snpa>
          snpa
        </snpa>
      </next-hop-element>
    </isis-backup-spf-result>
  </isis-spf>
</isis-spf-information>
```

Description

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<next-hop-name>

Usage

```
<ospf-next-hop>
  <next-hop-name>
    <interface-name>
      interface-name
    </interface-name>
    <interface-link-name>
      interface-link-name
    </interface-link-name>
  </next-hop-name>
</ospf-next-hop>
```

Description

<next-hop-name>

Usage

```
<ospf-route>
  <ospf-route-entry>
    <ospf-next-hop>
      <next-hop-name>
        <interface-name>
          interface-name
        </interface-name>
        <interface-link-name>
          interface-link-name
        </interface-link-name>
      </next-hop-name>
    </ospf-next-hop>
  </ospf-route-entry>
</ospf-route>
```

Description

<next-hop-name>

Usage

```
<ospf-topology-route-table>
  <ospf-route>
    <ospf-route-entry>
      <ospf-next-hop>
        <next-hop-name>
          <interface-name>
            interface-name
          </interface-name>
          <interface-link-name>
            interface-link-name
          </interface-link-name>
        </next-hop-name>
      </ospf-next-hop>
    </ospf-route-entry>
```

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```
  </ospf-route>
</ospf-topology-route-table>
```

Description

<next-hop-name>

Usage

```
<ospf-route-information>
  <ospf-topology-route-table>
    <ospf-route>
      <ospf-route-entry>
        <ospf-next-hop>
          <next-hop-name>
            <interface-name>
              interface-name
            </interface-name>
            <interface-link-name>
              interface-link-name
            </interface-link-name>
          </next-hop-name>
        </ospf-next-hop>
      </ospf-route-entry>
    </ospf-route>
  </ospf-topology-route-table>
</ospf-route-information>
```

Description

<next-hop-name>

Usage

```
<ospf-backup-spf-node>
  <ospf-next-hop>
    <next-hop-name>
      <interface-name>
        interface-name
      </interface-name>
      <interface-link-name>
        interface-link-name
      </interface-link-name>
    </next-hop-name>
  </ospf-next-hop>
</ospf-backup-spf-node>
```

Description

<next-hop-name>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
    <ospf-next-hop>
```


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```
      <next-hop-name>
       <interface-name>
        interface-name
       </interface-name>
       <interface-link-name>
        interface-link-name
       </interface-link-name>
      </next-hop-name>
     </ospf-next-hop>
    </ospf-backup-spf-node>
   </ospf-topology-area-backup-spf>
```

Description

<next-hop-name>

Usage

```
<ospf-topology-backup-spf>
 <ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
   <ospf-next-hop>
    <next-hop-name>
     <interface-name>
      interface-name
     </interface-name>
     <interface-link-name>
      interface-link-name
     </interface-link-name>
    </next-hop-name>
   </ospf-next-hop>
  </ospf-backup-spf-node>
 </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description

<next-hop-name>

Usage

```
<ospf-backup-spf-information>
 <ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
   <ospf-backup-spf-node>
    <ospf-next-hop>
     <next-hop-name>
      <interface-name>
       interface-name
      </interface-name>
      <interface-link-name>
       interface-link-name
      </interface-link-name>
     </next-hop-name>
    </ospf-next-hop>
   </ospf-backup-spf-node>
```

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```
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description

<next-hop-name>

Usage

```
<ospf3-route>
  <ospf3-route-entry>
    <ospf-next-hop>
      <next-hop-name>
        <interface-name>
          interface-name
        </interface-name>
        <interface-link-name>
          interface-link-name
        </interface-link-name>
      </next-hop-name>
    </ospf-next-hop>
  </ospf3-route-entry>
</ospf3-route>
```

Description

<next-hop-name>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>
      <ospf-next-hop>
        <next-hop-name>
          <interface-name>
            interface-name
          </interface-name>
          <interface-link-name>
            interface-link-name
          </interface-link-name>
        </next-hop-name>
      </ospf-next-hop>
    </ospf3-route-entry>
  </ospf3-route>
</ospf3-route-information>
```

Description

<next-hop-name>

Usage

```
<ospf3-backup-spf-node>
  <ospf-next-hop>
```


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```
    <next-hop-name>
     <interface-name>
      interface-name
     </interface-name>
     <interface-link-name>
      interface-link-name
     </interface-link-name>
    </next-hop-name>
   </ospf-next-hop>
</ospf3-backup-spf-node>
```

Description

<next-hop-name>

Usage

```
<ospf3-topology-area-backup-spf>
 <ospf3-backup-spf-node>
  <ospf-next-hop>
   <next-hop-name>
    <interface-name>
     interface-name
    </interface-name>
    <interface-link-name>
     interface-link-name
    </interface-link-name>
   </next-hop-name>
  </ospf-next-hop>
 </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description

<next-hop-name>

Usage

```
<ospf3-topology-backup-spf>
 <ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
   <ospf-next-hop>
    <next-hop-name>
     <interface-name>
      interface-name
     </interface-name>
     <interface-link-name>
      interface-link-name
     </interface-link-name>
    </next-hop-name>
   </ospf-next-hop>
  </ospf3-backup-spf-node>
 </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

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Description

<next-hop-name>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf-next-hop>
          <next-hop-name>
            <interface-name>
              interface-name
            </interface-name>
            <interface-link-name>
              interface-link-name
            </interface-link-name>
          </next-hop-name>
        </ospf-next-hop>
      </ospf3-backup-spf-node>
    </ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description

<next-hops-family>

Usage

```
<multicast-next-hops-information>
  <next-hops-family>
    <address-family>
      address-family
    </address-family>
    <iflist-next-hop>....</iflist-next-hop>
  </next-hops-family>
</multicast-next-hops-information>
```

Description

<nh>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <nh>
          <nh-string>
            nh-string
          </nh-string>
          <elnh-address>
            elnh-address
          </elnh-address>
```


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```
<selected-next-hop>
  selected-next-hop
</selected-next-hop>
<ext-int-type>
  ext-int-type
</ext-int-type>
<weight>
  weight
</weight>
<balance>
  balance
</balance>
<uflags>
  uflags
</uflags>
<filter>
  filter
</filter>
<via>
  via
</via>
<nh-local-interface>
  nh-local-interface
</nh-local-interface>
<nh-table-receive>
  nh-table-receive
</nh-table-receive>
<nh-table>
  nh-table
</nh-table>
<to>
  to
</to>
<lsp-name>
  lsp-name
</lsp-name>
<mpls-label>
  mpls-label
</mpls-label>
<label-ttl-action>
  label-ttl-action
</label-ttl-action>
<nh-service>
  nh-service
</nh-service>
<nh-service-pkt-dist>
  nh-service-pkt-dist
</nh-service-pkt-dist>
<nh-service-app-data>
  nh-service-app-data
</nh-service-app-data>
<nh-address>
  nh-address
</nh-address>
<nh-index>
  nh-index
```

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```
            </nh-index>
           </nh>
          </rt-entry>
         </rt>
        </route-table>
       </route-information>
```

Description Next-hop gateway information

<nh>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <protocol-nh>
     <nh>
      <nh-string>
       nh-string
      </nh-string>
      <elnh-address>
       elnh-address
      </elnh-address>
      <selected-next-hop>
       selected-next-hop
      </selected-next-hop>
      <ext-int-type>
       ext-int-type
      </ext-int-type>
      <weight>
       weight
      </weight>
      <balance>
       balance
      </balance>
      <uflags>
       uflags
      </uflags>
      <filter>
       filter
      </filter>
      <via>
       via
      </via>
      <nh-local-interface>
       nh-local-interface
      </nh-local-interface>
      <nh-table-receive>
       nh-table-receive
      </nh-table-receive>
      <nh-table>
       nh-table
      </nh-table>
```


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```
                <to>
                  to
                </to>
                <lsp-name>
                  lsp-name
                </lsp-name>
                <mpls-label>
                  mpls-label
                </mpls-label>
                <label-ttl-action>
                  label-ttl-action
                </label-ttl-action>
                <nh-service>
                  nh-service
                </nh-service>
                <nh-service-pkt-dist>
                  nh-service-pkt-dist
                </nh-service-pkt-dist>
                <nh-service-app-data>
                  nh-service-app-data
                </nh-service-app-data>
                <nh-address>
                  nh-address
                </nh-address>
                <nh-index>
                  nh-index
                </nh-index>
              </nh>
            </protocol-nh>
          </rt-entry>
        </rt>
      </route-table>
    </route-information>
```

Description Next-hop gateway information

<nh>

Usage

```
<route-resolution-information>
  <route-resolution-tree>
    <node>
      <protocol-nh>
        <nh>
          <nh-string>
            nh-string
          </nh-string>
          <elnh-address>
            elnh-address
          </elnh-address>
          <selected-next-hop>
            selected-next-hop
          </selected-next-hop>
          <ext-int-type>
```

```
          ext-int-type
        </ext-int-type>
        <weight>
          weight
        </weight>
        <balance>
          balance
        </balance>
        <uflags>
          uflags
        </uflags>
        <filter>
          filter
        </filter>
        <via>
          via
        </via>
        <nh-local-interface>
          nh-local-interface
        </nh-local-interface>
        <nh-table-receive>
          nh-table-receive
        </nh-table-receive>
        <nh-table>
          nh-table
        </nh-table>
        <to>
          to
        </to>
        <lsp-name>
          lsp-name
        </lsp-name>
        <mpls-label>
          mpls-label
        </mpls-label>
        <label-ttl-action>
          label-ttl-action
        </label-ttl-action>
        <nh-service>
          nh-service
        </nh-service>
        <nh-service-pkt-dist>
          nh-service-pkt-dist
        </nh-service-pkt-dist>
        <nh-service-app-data>
          nh-service-app-data
        </nh-service-app-data>
        <nh-address>
          nh-address
        </nh-address>
        <nh-index>
          nh-index
        </nh-index>
      </nh>
    </protocol-nh>
  </node>
```


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```
  </route-resolution-tree>
</route-resolution-information>
```

Description Next-hop gateway information

<nh>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <nh>
          <nh-string>
            nh-string
          </nh-string>
          <elnh-address>
            elnh-address
          </elnh-address>
          <selected-next-hop>
            selected-next-hop
          </selected-next-hop>
          <ext-int-type>
            ext-int-type
          </ext-int-type>
          <weight>
            weight
          </weight>
          <balance>
            balance
          </balance>
          <uflags>
            uflags
          </uflags>
          <filter>
            filter
          </filter>
          <via>
            via
          </via>
          <nh-local-interface>
            nh-local-interface
          </nh-local-interface>
          <nh-table-receive>
            nh-table-receive
          </nh-table-receive>
          <nh-table>
            nh-table
          </nh-table>
          <to>
            to
          </to>
          <lsp-name>
            lsp-name
```

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```
        </lsp-name>
        <mpls-label>
          mpls-label
        </mpls-label>
        <label-ttl-action>
          label-ttl-action
        </label-ttl-action>
        <nh-service>
          nh-service
        </nh-service>
        <nh-service-pkt-dist>
          nh-service-pkt-dist
        </nh-service-pkt-dist>
        <nh-service-app-data>
          nh-service-app-data
        </nh-service-app-data>
        <nh-address>
          nh-address
        </nh-address>
        <nh-index>
          nh-index
        </nh-index>
      </nh>
    </rt-entry>
  </rt>
 </route-table>
</route-summary-information>
```

Description Next-hop gateway information

<nh>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <protocol-nh>
     <nh>
      <nh-string>
       nh-string
      </nh-string>
      <elnh-address>
       elnh-address
      </elnh-address>
      <selected-next-hop>
       selected-next-hop
      </selected-next-hop>
      <ext-int-type>
       ext-int-type
      </ext-int-type>
      <weight>
       weight
      </weight>
```


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```
            <balance>
              balance
            </balance>
            <uflags>
              uflags
            </uflags>
            <filter>
              filter
            </filter>
            <via>
              via
            </via>
            <nh-local-interface>
              nh-local-interface
            </nh-local-interface>
            <nh-table-receive>
              nh-table-receive
            </nh-table-receive>
            <nh-table>
              nh-table
            </nh-table>
            <to>
              to
            </to>
            <lsp-name>
              lsp-name
            </lsp-name>
            <mpls-label>
              mpls-label
            </mpls-label>
            <label-ttl-action>
              label-ttl-action
            </label-ttl-action>
            <nh-service>
              nh-service
            </nh-service>
            <nh-service-pkt-dist>
              nh-service-pkt-dist
            </nh-service-pkt-dist>
            <nh-service-app-data>
              nh-service-app-data
            </nh-service-app-data>
            <nh-address>
              nh-address
            </nh-address>
            <nh-index>
              nh-index
            </nh-index>
          </nh>
        </protocol-nh>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

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Description Next-hop gateway information

<nhh>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <nhh>
     <nh-type>
      nh-type
     </nh-type>
     <nh-index>
      nh-index
     </nh-index>
     <nh-address>
      nh-address
     </nh-address>
     <nh-reference-count>
      nh-reference-count
     </nh-reference-count>
     <ext-int-intf-index>
      ext-int-intf-index
     </ext-int-intf-index>
     <nh-flood-overflow>
      nh-flood-overflow
     </nh-flood-overflow>
    </nhh>
   </rt-entry>
  </rt>
 </route-table>
</route-information>
```

Description

<nhh>

Usage

```
<route-summary-information>
 <route-table>
  <rt>
   <rt-entry>
    <nhh>
     <nh-type>
      nh-type
     </nh-type>
     <nh-index>
      nh-index
     </nh-index>
     <nh-address>
      nh-address
     </nh-address>
     <nh-reference-count>
```


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```
            nh-reference-count
           </nh-reference-count>
           <ext-int-intf-index>
            ext-int-intf-index
           </ext-int-intf-index>
           <nh-flood-overflow>
            nh-flood-overflow
           </nh-flood-overflow>
          </nhh>
         </rt-entry>
        </rt>
       </route-table>
      </route-summary-information>
```

Description

<nlri-flags>

Usage

```
<bgp-option-information>
 <nlri-information>
  <nlri-flags>
   <bgp-nlri-flag-explicit-null-for-all-routes>
    bgp-nlri-flag-explicit-null-for-all-routes
   </bgp-nlri-flag-explicit-null-for-all-routes>
   <bgp-nlri-flag-explicit-null-for-connected-routes>
    bgp-nlri-flag-explicit-null-for-connected-routes
   </bgp-nlri-flag-explicit-null-for-connected-routes>
   <bgp-nlri-flag-aggregate-label>
    bgp-nlri-flag-aggregate-label
   </bgp-nlri-flag-aggregate-label>
   <bgp-nlri-flag-per-prefix-label>
    bgp-nlri-flag-per-prefix-label
   </bgp-nlri-flag-per-prefix-label>
   <bgp-nlri-flag-per-group-label>
    bgp-nlri-flag-per-group-label
   </bgp-nlri-flag-per-group-label>
   <bgp-nlri-flag-traffic-stats>
    bgp-nlri-flag-traffic-stats
   </bgp-nlri-flag-traffic-stats>
   <bgp-nlri-flag-l2vpn-status-vector>
    bgp-nlri-flag-l2vpn-status-vector
   </bgp-nlri-flag-l2vpn-status-vector>
   <bgp-nlri-flag-no-l2vpn-status-vector>
    bgp-nlri-flag-no-l2vpn-status-vector
   </bgp-nlri-flag-no-l2vpn-status-vector>
  </nlri-flags>
 </nlri-information>
</bgp-option-information>
```

Description

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<nlri-flags>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <nlri-information>
      <nlri-flags>
        <bgp-nlri-flag-explicit-null-for-all-routes>
          bgp-nlri-flag-explicit-null-for-all-routes
        </bgp-nlri-flag-explicit-null-for-all-routes>
        <bgp-nlri-flag-explicit-null-for-connected-routes>
          bgp-nlri-flag-explicit-null-for-connected-routes
        </bgp-nlri-flag-explicit-null-for-connected-routes>
        <bgp-nlri-flag-aggregate-label>
          bgp-nlri-flag-aggregate-label
        </bgp-nlri-flag-aggregate-label>
        <bgp-nlri-flag-per-prefix-label>
          bgp-nlri-flag-per-prefix-label
        </bgp-nlri-flag-per-prefix-label>
        <bgp-nlri-flag-per-group-label>
          bgp-nlri-flag-per-group-label
        </bgp-nlri-flag-per-group-label>
        <bgp-nlri-flag-traffic-stats>
          bgp-nlri-flag-traffic-stats
        </bgp-nlri-flag-traffic-stats>
        <bgp-nlri-flag-l2vpn-status-vector>
          bgp-nlri-flag-l2vpn-status-vector
        </bgp-nlri-flag-l2vpn-status-vector>
        <bgp-nlri-flag-no-l2vpn-status-vector>
          bgp-nlri-flag-no-l2vpn-status-vector
        </bgp-nlri-flag-no-l2vpn-status-vector>
      </nlri-flags>
    </nlri-information>
  </bgp-option-information>
</bgp-peer>
```

Description

<nlri-flags>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-flags>
          <bgp-nlri-flag-explicit-null-for-all-routes>
            bgp-nlri-flag-explicit-null-for-all-routes
          </bgp-nlri-flag-explicit-null-for-all-routes>
          <bgp-nlri-flag-explicit-null-for-connected-routes>
            bgp-nlri-flag-explicit-null-for-connected-routes
          </bgp-nlri-flag-explicit-null-for-connected-routes>
          <bgp-nlri-flag-aggregate-label>
            bgp-nlri-flag-aggregate-label
```


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```
        </bgp-nlri-flag-aggregate-label>
        <bgp-nlri-flag-per-prefix-label>
          bgp-nlri-flag-per-prefix-label
        </bgp-nlri-flag-per-prefix-label>
        <bgp-nlri-flag-per-group-label>
          bgp-nlri-flag-per-group-label
        </bgp-nlri-flag-per-group-label>
        <bgp-nlri-flag-traffic-stats>
          bgp-nlri-flag-traffic-stats
        </bgp-nlri-flag-traffic-stats>
        <bgp-nlri-flag-l2vpn-status-vector>
          bgp-nlri-flag-l2vpn-status-vector
        </bgp-nlri-flag-l2vpn-status-vector>
        <bgp-nlri-flag-no-l2vpn-status-vector>
          bgp-nlri-flag-no-l2vpn-status-vector
        </bgp-nlri-flag-no-l2vpn-status-vector>
      </nlri-flags>
    </nlri-information>
  </bgp-option-information>
 </bgp-peer>
</bgp-group>
```

Description

<nlri-flags>

Usage

```
<bgp-group>
 <bgp-option-information>
  <nlri-information>
   <nlri-flags>
    <bgp-nlri-flag-explicit-null-for-all-routes>
     bgp-nlri-flag-explicit-null-for-all-routes
    </bgp-nlri-flag-explicit-null-for-all-routes>
    <bgp-nlri-flag-explicit-null-for-connected-routes>
     bgp-nlri-flag-explicit-null-for-connected-routes
    </bgp-nlri-flag-explicit-null-for-connected-routes>
    <bgp-nlri-flag-aggregate-label>
     bgp-nlri-flag-aggregate-label
    </bgp-nlri-flag-aggregate-label>
    <bgp-nlri-flag-per-prefix-label>
     bgp-nlri-flag-per-prefix-label
    </bgp-nlri-flag-per-prefix-label>
    <bgp-nlri-flag-per-group-label>
     bgp-nlri-flag-per-group-label
    </bgp-nlri-flag-per-group-label>
    <bgp-nlri-flag-traffic-stats>
     bgp-nlri-flag-traffic-stats
    </bgp-nlri-flag-traffic-stats>
    <bgp-nlri-flag-l2vpn-status-vector>
     bgp-nlri-flag-l2vpn-status-vector
    </bgp-nlri-flag-l2vpn-status-vector>
    <bgp-nlri-flag-no-l2vpn-status-vector>
     bgp-nlri-flag-no-l2vpn-status-vector
    </bgp-nlri-flag-no-l2vpn-status-vector>
```

```
      </nlri-flags>
    </nlri-information>
  </bgp-option-information>
</bgp-group>
```

Description

<nlri-flags>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-flags>
          <bgp-nlri-flag-explicit-null-for-all-routes>
            bgp-nlri-flag-explicit-null-for-all-routes
          </bgp-nlri-flag-explicit-null-for-all-routes>
          <bgp-nlri-flag-explicit-null-for-connected-routes>
            bgp-nlri-flag-explicit-null-for-connected-routes
          </bgp-nlri-flag-explicit-null-for-connected-routes>
          <bgp-nlri-flag-aggregate-label>
            bgp-nlri-flag-aggregate-label
          </bgp-nlri-flag-aggregate-label>
          <bgp-nlri-flag-per-prefix-label>
            bgp-nlri-flag-per-prefix-label
          </bgp-nlri-flag-per-prefix-label>
          <bgp-nlri-flag-per-group-label>
            bgp-nlri-flag-per-group-label
          </bgp-nlri-flag-per-group-label>
          <bgp-nlri-flag-traffic-stats>
            bgp-nlri-flag-traffic-stats
          </bgp-nlri-flag-traffic-stats>
          <bgp-nlri-flag-l2vpn-status-vector>
            bgp-nlri-flag-l2vpn-status-vector
          </bgp-nlri-flag-l2vpn-status-vector>
          <bgp-nlri-flag-no-l2vpn-status-vector>
            bgp-nlri-flag-no-l2vpn-status-vector
          </bgp-nlri-flag-no-l2vpn-status-vector>
        </nlri-flags>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```

Description

<nlri-flags>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
```


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```
        <nlri-information>
          <nlri-flags>
            <bgp-nlri-flag-explicit-null-for-all-routes>
              bgp-nlri-flag-explicit-null-for-all-routes
            </bgp-nlri-flag-explicit-null-for-all-routes>
            <bgp-nlri-flag-explicit-null-for-connected-routes>
              bgp-nlri-flag-explicit-null-for-connected-routes
            </bgp-nlri-flag-explicit-null-for-connected-routes>
            <bgp-nlri-flag-aggregate-label>
              bgp-nlri-flag-aggregate-label
            </bgp-nlri-flag-aggregate-label>
            <bgp-nlri-flag-per-prefix-label>
              bgp-nlri-flag-per-prefix-label
            </bgp-nlri-flag-per-prefix-label>
            <bgp-nlri-flag-per-group-label>
              bgp-nlri-flag-per-group-label
            </bgp-nlri-flag-per-group-label>
            <bgp-nlri-flag-traffic-stats>
              bgp-nlri-flag-traffic-stats
            </bgp-nlri-flag-traffic-stats>
            <bgp-nlri-flag-l2vpn-status-vector>
              bgp-nlri-flag-l2vpn-status-vector
            </bgp-nlri-flag-l2vpn-status-vector>
            <bgp-nlri-flag-no-l2vpn-status-vector>
              bgp-nlri-flag-no-l2vpn-status-vector
            </bgp-nlri-flag-no-l2vpn-status-vector>
          </nlri-flags>
        </nlri-information>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<nlri-flags>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-option-information>
      <nlri-information>
        <nlri-flags>
          <bgp-nlri-flag-explicit-null-for-all-routes>
            bgp-nlri-flag-explicit-null-for-all-routes
          </bgp-nlri-flag-explicit-null-for-all-routes>
          <bgp-nlri-flag-explicit-null-for-connected-routes>
            bgp-nlri-flag-explicit-null-for-connected-routes
          </bgp-nlri-flag-explicit-null-for-connected-routes>
          <bgp-nlri-flag-aggregate-label>
            bgp-nlri-flag-aggregate-label
          </bgp-nlri-flag-aggregate-label>
          <bgp-nlri-flag-per-prefix-label>
            bgp-nlri-flag-per-prefix-label
          </bgp-nlri-flag-per-prefix-label>
```

```
            <bgp-nlri-flag-per-group-label>
              bgp-nlri-flag-per-group-label
            </bgp-nlri-flag-per-group-label>
            <bgp-nlri-flag-traffic-stats>
              bgp-nlri-flag-traffic-stats
            </bgp-nlri-flag-traffic-stats>
            <bgp-nlri-flag-l2vpn-status-vector>
              bgp-nlri-flag-l2vpn-status-vector
            </bgp-nlri-flag-l2vpn-status-vector>
            <bgp-nlri-flag-no-l2vpn-status-vector>
              bgp-nlri-flag-no-l2vpn-status-vector
            </bgp-nlri-flag-no-l2vpn-status-vector>
          </nlri-flags>
        </nlri-information>
      </bgp-option-information>
    </bgp-group>
  </bgp-group-information>
```

Description

<nlri-flags>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <bgp-option-information>
        <nlri-information>
          <nlri-flags>
            <bgp-nlri-flag-explicit-null-for-all-routes>
              bgp-nlri-flag-explicit-null-for-all-routes
            </bgp-nlri-flag-explicit-null-for-all-routes>
            <bgp-nlri-flag-explicit-null-for-connected-routes>
              bgp-nlri-flag-explicit-null-for-connected-routes
            </bgp-nlri-flag-explicit-null-for-connected-routes>
            <bgp-nlri-flag-aggregate-label>
              bgp-nlri-flag-aggregate-label
            </bgp-nlri-flag-aggregate-label>
            <bgp-nlri-flag-per-prefix-label>
              bgp-nlri-flag-per-prefix-label
            </bgp-nlri-flag-per-prefix-label>
            <bgp-nlri-flag-per-group-label>
              bgp-nlri-flag-per-group-label
            </bgp-nlri-flag-per-group-label>
            <bgp-nlri-flag-traffic-stats>
              bgp-nlri-flag-traffic-stats
            </bgp-nlri-flag-traffic-stats>
            <bgp-nlri-flag-l2vpn-status-vector>
              bgp-nlri-flag-l2vpn-status-vector
            </bgp-nlri-flag-l2vpn-status-vector>
            <bgp-nlri-flag-no-l2vpn-status-vector>
              bgp-nlri-flag-no-l2vpn-status-vector
            </bgp-nlri-flag-no-l2vpn-status-vector>
          </nlri-flags>
        </nlri-information>
```


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```
      </bgp-option-information>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<nlri-information>

Usage

```
<bgp-option-information>
  <nlri-information>
    <nlri-type>
      nlri-type
    </nlri-type>
    <nlri-flags>....</nlri-flags>
    <nlri-traffic-stats>....</nlri-traffic-stats>
    <nlri-flow-novalidate>
      nlri-flow-novalidate
    </nlri-flow-novalidate>
  </nlri-information>
</bgp-option-information>
```

Description

<nlri-information>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <nlri-information>
      <nlri-type>
        nlri-type
      </nlri-type>
      <nlri-flags>....</nlri-flags>
      <nlri-traffic-stats>....</nlri-traffic-stats>
      <nlri-flow-novalidate>
        nlri-flow-novalidate
      </nlri-flow-novalidate>
    </nlri-information>
  </bgp-option-information>
</bgp-peer>
```

Description

<nlri-information>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-type>
```

```
        nlri-type
       </nlri-type>
       <nlri-flags>....</nlri-flags>
       <nlri-traffic-stats>....</nlri-traffic-stats>
       <nlri-flow-novalidate>
        nlri-flow-novalidate
       </nlri-flow-novalidate>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-group>
```

Description

<nlri-information>

Usage

```
<bgp-group>
  <bgp-option-information>
    <nlri-information>
      <nlri-type>
       nlri-type
      </nlri-type>
      <nlri-flags>....</nlri-flags>
      <nlri-traffic-stats>....</nlri-traffic-stats>
      <nlri-flow-novalidate>
       nlri-flow-novalidate
      </nlri-flow-novalidate>
    </nlri-information>
  </bgp-option-information>
</bgp-group>
```

Description

<nlri-information>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-type>
         nlri-type
        </nlri-type>
        <nlri-flags>....</nlri-flags>
        <nlri-traffic-stats>....</nlri-traffic-stats>
        <nlri-flow-novalidate>
         nlri-flow-novalidate
        </nlri-flow-novalidate>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```


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Description

<nlri-information>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <bgp-option-information>
    <nlri-information>
     <nlri-type>
      nlri-type
     </nlri-type>
     <nlri-flags>....</nlri-flags>
     <nlri-traffic-stats>....</nlri-traffic-stats>
     <nlri-flow-novalidate>
      nlri-flow-novalidate
     </nlri-flow-novalidate>
    </nlri-information>
   </bgp-option-information>
  </bgp-peer>
 </bgp-group>
</bgp-group-information>
```

Description

<nlri-information>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-option-information>
   <nlri-information>
    <nlri-type>
     nlri-type
    </nlri-type>
    <nlri-flags>....</nlri-flags>
    <nlri-traffic-stats>....</nlri-traffic-stats>
    <nlri-flow-novalidate>
     nlri-flow-novalidate
    </nlri-flow-novalidate>
   </nlri-information>
  </bgp-option-information>
 </bgp-group>
</bgp-group-information>
```

Description

<nlri-information>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
```

```
      <bgp-option-information>
        <nlri-information>
          <nlri-type>
            nlri-type
          </nlri-type>
          <nlri-flags>....</nlri-flags>
          <nlri-traffic-stats>....</nlri-traffic-stats>
          <nlri-flow-novalidate>
            nlri-flow-novalidate
          </nlri-flow-novalidate>
        </nlri-information>
      </bgp-option-information>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-option-information>
  <nlri-information>
    <nlri-traffic-stats>
      <tracing-information>....</tracing-information>
      <traffic-stats-interval>
        traffic-stats-interval
      </traffic-stats-interval>
    </nlri-traffic-stats>
  </nlri-information>
</bgp-option-information>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <nlri-information>
      <nlri-traffic-stats>
        <tracing-information>....</tracing-information>
        <traffic-stats-interval>
          traffic-stats-interval
        </traffic-stats-interval>
      </nlri-traffic-stats>
    </nlri-information>
  </bgp-option-information>
</bgp-peer>
```

Description

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<nlri-traffic-stats>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-traffic-stats>
          <tracing-information>....</tracing-information>
          <traffic-stats-interval>
            traffic-stats-interval
          </traffic-stats-interval>
        </nlri-traffic-stats>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-group>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-group>
  <bgp-option-information>
    <nlri-information>
      <nlri-traffic-stats>
        <tracing-information>....</tracing-information>
        <traffic-stats-interval>
          traffic-stats-interval
        </traffic-stats-interval>
      </nlri-traffic-stats>
    </nlri-information>
  </bgp-option-information>
</bgp-group>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-traffic-stats>
          <tracing-information>....</tracing-information>
          <traffic-stats-interval>
            traffic-stats-interval
          </traffic-stats-interval>
        </nlri-traffic-stats>
      </nlri-information>
    </bgp-option-information>
```

```
  </bgp-peer>
</bgp-information>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <nlri-information>
          <nlri-traffic-stats>
            <tracing-information>....</tracing-information>
            <traffic-stats-interval>
              traffic-stats-interval
            </traffic-stats-interval>
          </nlri-traffic-stats>
        </nlri-information>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-option-information>
      <nlri-information>
        <nlri-traffic-stats>
          <tracing-information>....</tracing-information>
          <traffic-stats-interval>
            traffic-stats-interval
          </traffic-stats-interval>
        </nlri-traffic-stats>
      </nlri-information>
    </bgp-option-information>
  </bgp-group>
</bgp-group-information>
```

Description

<nlri-traffic-stats>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
```


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```
<bgp-option-information>
 <nlri-information>
  <nlri-traffic-stats>
   <tracing-information>....</tracing-information>
   <traffic-stats-interval>
    traffic-stats-interval
   </traffic-stats-interval>
  </nlri-traffic-stats>
 </nlri-information>
</bgp-option-information>
</bgp-peer>
</bgp-information>
</bgp-group-information>
```

Description

<node>

Usage

```
<route-resolution-information>
 <route-resolution-tree>
  <node>
   <node-prefix>
    node-prefix
   </node-prefix>
   <node-prefix-length>
    node-prefix-length
   </node-prefix-length>
   <originating-rib>
    originating-rib
   </originating-rib>
   <metric>
    metric
   </metric>
   <node-path-count>
    node-path-count
   </node-path-count>
   <forwarding-nh-count>
    forwarding-nh-count
   </forwarding-nh-count>
   <indirect-nh-count>
    indirect-nh-count
   </indirect-nh-count>
   <composite-nh-count>
    composite-nh-count
   </composite-nh-count>
   <protocol-nh>....</protocol-nh>
  </node>
 </route-resolution-tree>
</route-resolution-information>
```

Description

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<oam-state>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <oam-state>
          <oam-bfd-session-state>
            oam-bfd-session-state
          </oam-bfd-session-state>
          <oam-lsp-ping-state>
            oam-lsp-ping-state
          </oam-lsp-ping-state>
        </oam-state>
      </mpls-lsp-path>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

Description OAM state information

<oam-state>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <oam-state>
        <oam-bfd-session-state>
          oam-bfd-session-state
        </oam-bfd-session-state>
        <oam-lsp-ping-state>
          oam-lsp-ping-state
        </oam-lsp-ping-state>
      </oam-state>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description OAM state information

<oam-state>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <oam-state>
            <oam-bfd-session-state>
```


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```
                oam-bfd-session-state
               </oam-bfd-session-state>
               <oam-lsp-ping-state>
                oam-lsp-ping-state
               </oam-lsp-ping-state>
              </oam-state>
             </mpls-lsp-path>
            </mpls-lsp>
           </rsvp-session>
          </rsvp-session-data>
         </rsvp-session-information>
```

Description OAM state information

<oam-state>

Usage

```
<mpls-lsp-path>
 <oam-state>
  <oam-bfd-session-state>
   oam-bfd-session-state
  </oam-bfd-session-state>
  <oam-lsp-ping-state>
   oam-lsp-ping-state
  </oam-lsp-ping-state>
 </oam-state>
</mpls-lsp-path>
```

Description OAM state information

<oam-state>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <oam-state>
   <oam-bfd-session-state>
    oam-bfd-session-state
   </oam-bfd-session-state>
   <oam-lsp-ping-state>
    oam-lsp-ping-state
   </oam-lsp-ping-state>
  </oam-state>
 </mpls-lsp-path>
</mpls-lsp>
```

Description OAM state information

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<oam-state>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <oam-state>
            <oam-bfd-session-state>
              oam-bfd-session-state
            </oam-bfd-session-state>
            <oam-lsp-ping-state>
              oam-lsp-ping-state
            </oam-lsp-ping-state>
          </oam-state>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description OAM state information

<oam-state>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-lsp-path>
        <oam-state>
          <oam-bfd-session-state>
            oam-bfd-session-state
          </oam-bfd-session-state>
          <oam-lsp-ping-state>
            oam-lsp-ping-state
          </oam-lsp-ping-state>
        </oam-state>
      </mpls-lsp-path>
    </mpls-lsp>
  </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description OAM state information

<operational-routing-instance-information>

Usage

```
<operational-routing-instance-information>
  <instance-name>
    instance-name
```


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```
  </instance-name>
</operational-routing-instance-information>
```

Description Operational routing instances that can be passed to netapp commands

<ospf-area-header>

Usage

```
<ospf-area-header>
  <ospf-area>
    ospf-area
  </ospf-area>
</ospf-area-header>
```

Description

<ospf-area-header>

Usage

```
<ospf-database-information>
  <ospf-area-header>
    <ospf-area>
      ospf-area
    </ospf-area>
  </ospf-area-header>
</ospf-database-information>
```

Description

<ospf-area-overview>

Usage

```
<ospf-overview>
  <ospf-area-overview>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-stub-type>
      ospf-stub-type
    </ospf-stub-type>
    <ospf-stub-cost>
      ospf-stub-cost
    </ospf-stub-cost>
    <ospf-virtual-transit>
      ospf-virtual-transit
    </ospf-virtual-transit>
    <authentication-type>
      authentication-type
    </authentication-type>
    <ospf-abr-count>
      ospf-abr-count
    </ospf-abr-count>
```

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```
    <ospf-asbr-count>
     ospf-asbr-count
    </ospf-asbr-count>
    <ospf-nbr-overview>....</ospf-nbr-overview>
    <ospf-dna-uncapable>
     ospf-dna-uncapable
    </ospf-dna-uncapable>
    <ospf-area-dc-bit-clear-count>
     ospf-area-dc-bit-clear-count
    </ospf-area-dc-bit-clear-count>
    <ospf-area-indications-count>
     ospf-area-indications-count
    </ospf-area-indications-count>
    <ospf-area-self-indicating>
     ospf-area-self-indicating
    </ospf-area-self-indicating>
    <ospf-link-dc-bit-clear-count>
     ospf-link-dc-bit-clear-count
    </ospf-link-dc-bit-clear-count>
   </ospf-area-overview>
  </ospf-overview>
```

Description Overview information for an OSPF area

<ospf-area-overview>

Usage

```
<ospf-overview-information>
 <ospf-overview>
  <ospf-area-overview>
   <ospf-area>
    ospf-area
   </ospf-area>
   <ospf-stub-type>
    ospf-stub-type
   </ospf-stub-type>
   <ospf-stub-cost>
    ospf-stub-cost
   </ospf-stub-cost>
   <ospf-virtual-transit>
    ospf-virtual-transit
   </ospf-virtual-transit>
   <authentication-type>
    authentication-type
   </authentication-type>
   <ospf-abr-count>
    ospf-abr-count
   </ospf-abr-count>
   <ospf-asbr-count>
    ospf-asbr-count
   </ospf-asbr-count>
   <ospf-nbr-overview>....</ospf-nbr-overview>
   <ospf-dna-uncapable>
    ospf-dna-uncapable
```


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```
        </ospf-dna-uncapable>
        <ospf-area-dc-bit-clear-count>
          ospf-area-dc-bit-clear-count
        </ospf-area-dc-bit-clear-count>
        <ospf-area-indications-count>
          ospf-area-indications-count
        </ospf-area-indications-count>
        <ospf-area-self-indicating>
          ospf-area-self-indicating
        </ospf-area-self-indicating>
        <ospf-link-dc-bit-clear-count>
          ospf-link-dc-bit-clear-count
        </ospf-link-dc-bit-clear-count>
      </ospf-area-overview>
    </ospf-overview>
  </ospf-overview-information>
```

Description Overview information for an OSPF area

<ospf-area-overview>

Usage

```
<ospf3-overview-information>
  <ospf-overview>
    <ospf-area-overview>
      <ospf-area>
        ospf-area
      </ospf-area>
      <ospf-stub-type>
        ospf-stub-type
      </ospf-stub-type>
      <ospf-stub-cost>
        ospf-stub-cost
      </ospf-stub-cost>
      <ospf-virtual-transit>
        ospf-virtual-transit
      </ospf-virtual-transit>
      <authentication-type>
        authentication-type
      </authentication-type>
      <ospf-abr-count>
        ospf-abr-count
      </ospf-abr-count>
      <ospf-asbr-count>
        ospf-asbr-count
      </ospf-asbr-count>
      <ospf-nbr-overview>....</ospf-nbr-overview>
      <ospf-dna-uncapable>
        ospf-dna-uncapable
      </ospf-dna-uncapable>
      <ospf-area-dc-bit-clear-count>
        ospf-area-dc-bit-clear-count
      </ospf-area-dc-bit-clear-count>
      <ospf-area-indications-count>
```

```
            ospf-area-indications-count
           </ospf-area-indications-count>
           <ospf-area-self-indicating>
            ospf-area-self-indicating
           </ospf-area-self-indicating>
           <ospf-link-dc-bit-clear-count>
            ospf-link-dc-bit-clear-count
           </ospf-link-dc-bit-clear-count>
          </ospf-area-overview>
         </ospf-overview>
        </ospf3-overview-information>
```

Description Overview information for an OSPF area

<ospf-backup-coverage-information>

Usage

```
<ospf-backup-coverage-information>
  <ospf-topology-backup-coverage>....</ospf-topology-backup-coverage>
</ospf-backup-coverage-information>
```

Description OSPF backup coverage information

<ospf-backup-mplsp>

Usage

```
<ospf-backup-mplsp>
  <lsp-name>
   lsp-name
  </lsp-name>
  <lsp-addr>
   lsp-addr
  </lsp-addr>
  <lsp-status>
   lsp-status
  </lsp-status>
  <metric>
   metric
  </metric>
  <te-metric>
   te-metric
  </te-metric>
  <lsp-last-change>
   lsp-last-change
  </lsp-last-change>
</ospf-backup-mplsp>
```

Description

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<ospf-backup-mplsp>

Usage

```
<ospf-backup-mplsp-information>
  <ospf-backup-mplsp>
    <lsp-name>
      lsp-name
    </lsp-name>
    <lsp-addr>
      lsp-addr
    </lsp-addr>
    <lsp-status>
      lsp-status
    </lsp-status>
    <metric>
      metric
    </metric>
    <te-metric>
      te-metric
    </te-metric>
    <lsp-last-change>
      lsp-last-change
    </lsp-last-change>
  </ospf-backup-mplsp>
</ospf-backup-mplsp-information>
```

Description

<ospf-backup-mplsp-information>

Usage

```
<ospf-backup-mplsp-information>
  <ospf-backup-mplsp>....</ospf-backup-mplsp>
</ospf-backup-mplsp-information>
```

Description OSPF backup MPLSP information

<ospf-backup-neighbor-information>

Usage

```
<ospf-backup-neighbor-information>
  <ospf-topology-backup-neighbor>....</ospf-topology-backup-neighbor>
</ospf-backup-neighbor-information>
```

Description OSPF backup neighbor information

<ospf-backup-neighbor-node>

Usage

```
<ospf-backup-neighbor-node>
  <ospf-backup-neighbor>
```

```
    ospf-backup-neighbor
  </ospf-backup-neighbor>
  <ospf-backup-neighbor-is-lsp-endpoint>
    ospf-backup-neighbor-is-lsp-endpoint
  </ospf-backup-neighbor-is-lsp-endpoint>
  <ospf-backup-neighbor-from-metric>
    ospf-backup-neighbor-from-metric
  </ospf-backup-neighbor-from-metric>
  <ospf-backup-neighbor-to-metric>
    ospf-backup-neighbor-to-metric
  </ospf-backup-neighbor-to-metric>
  <ospf-backup-next-hop>....</ospf-backup-next-hop>
</ospf-backup-neighbor-node>
```

Description OSPF backup neighbor node

<ospf-backup-neighbor-node>

Usage

```
<ospf-topology-area-backup-neighbor>
  <ospf-backup-neighbor-node>
    <ospf-backup-neighbor>
      ospf-backup-neighbor
    </ospf-backup-neighbor>
    <ospf-backup-neighbor-is-lsp-endpoint>
      ospf-backup-neighbor-is-lsp-endpoint
    </ospf-backup-neighbor-is-lsp-endpoint>
    <ospf-backup-neighbor-from-metric>
      ospf-backup-neighbor-from-metric
    </ospf-backup-neighbor-from-metric>
    <ospf-backup-neighbor-to-metric>
      ospf-backup-neighbor-to-metric
    </ospf-backup-neighbor-to-metric>
    <ospf-backup-next-hop>....</ospf-backup-next-hop>
  </ospf-backup-neighbor-node>
</ospf-topology-area-backup-neighbor>
```

Description OSPF backup neighbor node

<ospf-backup-neighbor-node>

Usage

```
<ospf-topology-backup-neighbor>
  <ospf-topology-area-backup-neighbor>
    <ospf-backup-neighbor-node>
      <ospf-backup-neighbor>
        ospf-backup-neighbor
      </ospf-backup-neighbor>
      <ospf-backup-neighbor-is-lsp-endpoint>
        ospf-backup-neighbor-is-lsp-endpoint
      </ospf-backup-neighbor-is-lsp-endpoint>
      <ospf-backup-neighbor-from-metric>
```


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```
        ospf-backup-neighbor-from-metric
       </ospf-backup-neighbor-from-metric>
       <ospf-backup-neighbor-to-metric>
        ospf-backup-neighbor-to-metric
       </ospf-backup-neighbor-to-metric>
       <ospf-backup-next-hop>....</ospf-backup-next-hop>
      </ospf-backup-neighbor-node>
     </ospf-topology-area-backup-neighbor>
    </ospf-topology-backup-neighbor>
```

Description OSPF backup neighbor node

<ospf-backup-neighbor-node>

Usage

```
<ospf-backup-neighbor-information>
 <ospf-topology-backup-neighbor>
  <ospf-topology-area-backup-neighbor>
   <ospf-backup-neighbor-node>
    <ospf-backup-neighbor>
     ospf-backup-neighbor
    </ospf-backup-neighbor>
    <ospf-backup-neighbor-is-lsp-endpoint>
     ospf-backup-neighbor-is-lsp-endpoint
    </ospf-backup-neighbor-is-lsp-endpoint>
    <ospf-backup-neighbor-from-metric>
     ospf-backup-neighbor-from-metric
    </ospf-backup-neighbor-from-metric>
    <ospf-backup-neighbor-to-metric>
     ospf-backup-neighbor-to-metric
    </ospf-backup-neighbor-to-metric>
    <ospf-backup-next-hop>....</ospf-backup-next-hop>
   </ospf-backup-neighbor-node>
  </ospf-topology-area-backup-neighbor>
 </ospf-topology-backup-neighbor>
</ospf-backup-neighbor-information>
```

Description OSPF backup neighbor node

<ospf-backup-next-hop>

Usage

```
<ospf-backup-next-hop>
 <ospf-backup-next-hop-type>
  ospf-backup-next-hop-type
 </ospf-backup-next-hop-type>
 <ospf-backup-next-hop-interface>
  ospf-backup-next-hop-interface
 </ospf-backup-next-hop-interface>
 <ospf-backup-next-hop-address>
  ospf-backup-next-hop-address
 </ospf-backup-next-hop-address>
```

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```
  <ospf-backup-next-hop-lsp>
   ospf-backup-next-hop-lsp
  </ospf-backup-next-hop-lsp>
</ospf-backup-next-hop>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-route>
 <ospf-route-entry>
  <ospf-backup-next-hop>
   <ospf-backup-next-hop-type>
    ospf-backup-next-hop-type
   </ospf-backup-next-hop-type>
   <ospf-backup-next-hop-interface>
    ospf-backup-next-hop-interface
   </ospf-backup-next-hop-interface>
   <ospf-backup-next-hop-address>
    ospf-backup-next-hop-address
   </ospf-backup-next-hop-address>
   <ospf-backup-next-hop-lsp>
    ospf-backup-next-hop-lsp
   </ospf-backup-next-hop-lsp>
  </ospf-backup-next-hop>
 </ospf-route-entry>
</ospf-route>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-topology-route-table>
 <ospf-route>
  <ospf-route-entry>
   <ospf-backup-next-hop>
    <ospf-backup-next-hop-type>
     ospf-backup-next-hop-type
    </ospf-backup-next-hop-type>
    <ospf-backup-next-hop-interface>
     ospf-backup-next-hop-interface
    </ospf-backup-next-hop-interface>
    <ospf-backup-next-hop-address>
     ospf-backup-next-hop-address
    </ospf-backup-next-hop-address>
    <ospf-backup-next-hop-lsp>
     ospf-backup-next-hop-lsp
    </ospf-backup-next-hop-lsp>
   </ospf-backup-next-hop>
  </ospf-route-entry>
 </ospf-route>
```


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```
</ospf-topology-route-table>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-route-information>
 <ospf-topology-route-table>
  <ospf-route>
   <ospf-route-entry>
    <ospf-backup-next-hop>
     <ospf-backup-next-hop-type>
      ospf-backup-next-hop-type
     </ospf-backup-next-hop-type>
     <ospf-backup-next-hop-interface>
      ospf-backup-next-hop-interface
     </ospf-backup-next-hop-interface>
     <ospf-backup-next-hop-address>
      ospf-backup-next-hop-address
     </ospf-backup-next-hop-address>
     <ospf-backup-next-hop-lsp>
      ospf-backup-next-hop-lsp
     </ospf-backup-next-hop-lsp>
    </ospf-backup-next-hop>
   </ospf-route-entry>
  </ospf-route>
 </ospf-topology-route-table>
</ospf-route-information>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-backup-spf-node>
 <ospf-backup-next-hop>
  <ospf-backup-next-hop-type>
   ospf-backup-next-hop-type
  </ospf-backup-next-hop-type>
  <ospf-backup-next-hop-interface>
   ospf-backup-next-hop-interface
  </ospf-backup-next-hop-interface>
  <ospf-backup-next-hop-address>
   ospf-backup-next-hop-address
  </ospf-backup-next-hop-address>
  <ospf-backup-next-hop-lsp>
   ospf-backup-next-hop-lsp
  </ospf-backup-next-hop-lsp>
 </ospf-backup-next-hop>
</ospf-backup-spf-node>
```

Description

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<ospf-backup-next-hop>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
    <ospf-backup-next-hop>
      <ospf-backup-next-hop-type>
        ospf-backup-next-hop-type
      </ospf-backup-next-hop-type>
      <ospf-backup-next-hop-interface>
        ospf-backup-next-hop-interface
      </ospf-backup-next-hop-interface>
      <ospf-backup-next-hop-address>
        ospf-backup-next-hop-address
      </ospf-backup-next-hop-address>
      <ospf-backup-next-hop-lsp>
        ospf-backup-next-hop-lsp
      </ospf-backup-next-hop-lsp>
    </ospf-backup-next-hop>
  </ospf-backup-spf-node>
</ospf-topology-area-backup-spf>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
    <ospf-backup-spf-node>
      <ospf-backup-next-hop>
        <ospf-backup-next-hop-type>
          ospf-backup-next-hop-type
        </ospf-backup-next-hop-type>
        <ospf-backup-next-hop-interface>
          ospf-backup-next-hop-interface
        </ospf-backup-next-hop-interface>
        <ospf-backup-next-hop-address>
          ospf-backup-next-hop-address
        </ospf-backup-next-hop-address>
        <ospf-backup-next-hop-lsp>
          ospf-backup-next-hop-lsp
        </ospf-backup-next-hop-lsp>
      </ospf-backup-next-hop>
    </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description

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<ospf-backup-next-hop>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-area-backup-spf>
      <ospf-backup-spf-node>
        <ospf-backup-next-hop>
          <ospf-backup-next-hop-type>
            ospf-backup-next-hop-type
          </ospf-backup-next-hop-type>
          <ospf-backup-next-hop-interface>
            ospf-backup-next-hop-interface
          </ospf-backup-next-hop-interface>
          <ospf-backup-next-hop-address>
            ospf-backup-next-hop-address
          </ospf-backup-next-hop-address>
          <ospf-backup-next-hop-lsp>
            ospf-backup-next-hop-lsp
          </ospf-backup-next-hop-lsp>
        </ospf-backup-next-hop>
      </ospf-backup-spf-node>
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-backup-neighbor-node>
  <ospf-backup-next-hop>
    <ospf-backup-next-hop-type>
      ospf-backup-next-hop-type
    </ospf-backup-next-hop-type>
    <ospf-backup-next-hop-interface>
      ospf-backup-next-hop-interface
    </ospf-backup-next-hop-interface>
    <ospf-backup-next-hop-address>
      ospf-backup-next-hop-address
    </ospf-backup-next-hop-address>
    <ospf-backup-next-hop-lsp>
      ospf-backup-next-hop-lsp
    </ospf-backup-next-hop-lsp>
  </ospf-backup-next-hop>
</ospf-backup-neighbor-node>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-topology-area-backup-neighbor>
  <ospf-backup-neighbor-node>
    <ospf-backup-next-hop>
      <ospf-backup-next-hop-type>
        ospf-backup-next-hop-type
      </ospf-backup-next-hop-type>
      <ospf-backup-next-hop-interface>
        ospf-backup-next-hop-interface
      </ospf-backup-next-hop-interface>
      <ospf-backup-next-hop-address>
        ospf-backup-next-hop-address
      </ospf-backup-next-hop-address>
      <ospf-backup-next-hop-lsp>
        ospf-backup-next-hop-lsp
      </ospf-backup-next-hop-lsp>
    </ospf-backup-next-hop>
  </ospf-backup-neighbor-node>
</ospf-topology-area-backup-neighbor>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf-topology-backup-neighbor>
  <ospf-topology-area-backup-neighbor>
    <ospf-backup-neighbor-node>
      <ospf-backup-next-hop>
        <ospf-backup-next-hop-type>
          ospf-backup-next-hop-type
        </ospf-backup-next-hop-type>
        <ospf-backup-next-hop-interface>
          ospf-backup-next-hop-interface
        </ospf-backup-next-hop-interface>
        <ospf-backup-next-hop-address>
          ospf-backup-next-hop-address
        </ospf-backup-next-hop-address>
        <ospf-backup-next-hop-lsp>
          ospf-backup-next-hop-lsp
        </ospf-backup-next-hop-lsp>
      </ospf-backup-next-hop>
    </ospf-backup-neighbor-node>
  </ospf-topology-area-backup-neighbor>
</ospf-topology-backup-neighbor>
```

Description

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<ospf-backup-next-hop>

Usage

```
<ospf-backup-neighbor-information>
  <ospf-topology-backup-neighbor>
    <ospf-topology-area-backup-neighbor>
      <ospf-backup-neighbor-node>
        <ospf-backup-next-hop>
          <ospf-backup-next-hop-type>
            ospf-backup-next-hop-type
          </ospf-backup-next-hop-type>
          <ospf-backup-next-hop-interface>
            ospf-backup-next-hop-interface
          </ospf-backup-next-hop-interface>
          <ospf-backup-next-hop-address>
            ospf-backup-next-hop-address
          </ospf-backup-next-hop-address>
          <ospf-backup-next-hop-lsp>
            ospf-backup-next-hop-lsp
          </ospf-backup-next-hop-lsp>
        </ospf-backup-next-hop>
      </ospf-backup-neighbor-node>
    </ospf-topology-area-backup-neighbor>
  </ospf-topology-backup-neighbor>
</ospf-backup-neighbor-information>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-route>
  <ospf3-route-entry>
    <ospf-backup-next-hop>
      <ospf-backup-next-hop-type>
        ospf-backup-next-hop-type
      </ospf-backup-next-hop-type>
      <ospf-backup-next-hop-interface>
        ospf-backup-next-hop-interface
      </ospf-backup-next-hop-interface>
      <ospf-backup-next-hop-address>
        ospf-backup-next-hop-address
      </ospf-backup-next-hop-address>
      <ospf-backup-next-hop-lsp>
        ospf-backup-next-hop-lsp
      </ospf-backup-next-hop-lsp>
    </ospf-backup-next-hop>
  </ospf3-route-entry>
</ospf3-route>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>
      <ospf-backup-next-hop>
        <ospf-backup-next-hop-type>
          ospf-backup-next-hop-type
        </ospf-backup-next-hop-type>
        <ospf-backup-next-hop-interface>
          ospf-backup-next-hop-interface
        </ospf-backup-next-hop-interface>
        <ospf-backup-next-hop-address>
          ospf-backup-next-hop-address
        </ospf-backup-next-hop-address>
        <ospf-backup-next-hop-lsp>
          ospf-backup-next-hop-lsp
        </ospf-backup-next-hop-lsp>
      </ospf-backup-next-hop>
    </ospf3-route-entry>
  </ospf3-route>
</ospf3-route-information>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-backup-spf-node>
  <ospf-backup-next-hop>
    <ospf-backup-next-hop-type>
      ospf-backup-next-hop-type
    </ospf-backup-next-hop-type>
    <ospf-backup-next-hop-interface>
      ospf-backup-next-hop-interface
    </ospf-backup-next-hop-interface>
    <ospf-backup-next-hop-address>
      ospf-backup-next-hop-address
    </ospf-backup-next-hop-address>
    <ospf-backup-next-hop-lsp>
      ospf-backup-next-hop-lsp
    </ospf-backup-next-hop-lsp>
  </ospf-backup-next-hop>
</ospf3-backup-spf-node>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
```


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```
    <ospf-backup-next-hop>
     <ospf-backup-next-hop-type>
      ospf-backup-next-hop-type
     </ospf-backup-next-hop-type>
     <ospf-backup-next-hop-interface>
      ospf-backup-next-hop-interface
     </ospf-backup-next-hop-interface>
     <ospf-backup-next-hop-address>
      ospf-backup-next-hop-address
     </ospf-backup-next-hop-address>
     <ospf-backup-next-hop-lsp>
      ospf-backup-next-hop-lsp
     </ospf-backup-next-hop-lsp>
    </ospf-backup-next-hop>
   </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-topology-backup-spf>
 <ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
   <ospf-backup-next-hop>
    <ospf-backup-next-hop-type>
     ospf-backup-next-hop-type
    </ospf-backup-next-hop-type>
    <ospf-backup-next-hop-interface>
     ospf-backup-next-hop-interface
    </ospf-backup-next-hop-interface>
    <ospf-backup-next-hop-address>
     ospf-backup-next-hop-address
    </ospf-backup-next-hop-address>
    <ospf-backup-next-hop-lsp>
     ospf-backup-next-hop-lsp
    </ospf-backup-next-hop-lsp>
   </ospf-backup-next-hop>
  </ospf3-backup-spf-node>
 </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-backup-spf-information>
 <ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
   <ospf3-backup-spf-node>
    <ospf-backup-next-hop>
     <ospf-backup-next-hop-type>
```

```
                ospf-backup-next-hop-type
               </ospf-backup-next-hop-type>
               <ospf-backup-next-hop-interface>
                ospf-backup-next-hop-interface
               </ospf-backup-next-hop-interface>
               <ospf-backup-next-hop-address>
                ospf-backup-next-hop-address
               </ospf-backup-next-hop-address>
               <ospf-backup-next-hop-lsp>
                ospf-backup-next-hop-lsp
               </ospf-backup-next-hop-lsp>
              </ospf-backup-next-hop>
             </ospf3-backup-spf-node>
            </ospf3-topology-area-backup-spf>
           </ospf3-topology-backup-spf>
          </ospf3-backup-spf-information>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-backup-neighbor-node>
 <ospf-backup-next-hop>
  <ospf-backup-next-hop-type>
   ospf-backup-next-hop-type
  </ospf-backup-next-hop-type>
  <ospf-backup-next-hop-interface>
   ospf-backup-next-hop-interface
  </ospf-backup-next-hop-interface>
  <ospf-backup-next-hop-address>
   ospf-backup-next-hop-address
  </ospf-backup-next-hop-address>
  <ospf-backup-next-hop-lsp>
   ospf-backup-next-hop-lsp
  </ospf-backup-next-hop-lsp>
 </ospf-backup-next-hop>
</ospf3-backup-neighbor-node>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-topology-area-backup-neighbor>
 <ospf3-backup-neighbor-node>
  <ospf-backup-next-hop>
   <ospf-backup-next-hop-type>
    ospf-backup-next-hop-type
   </ospf-backup-next-hop-type>
   <ospf-backup-next-hop-interface>
    ospf-backup-next-hop-interface
   </ospf-backup-next-hop-interface>
   <ospf-backup-next-hop-address>
```


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```
        ospf-backup-next-hop-address
       </ospf-backup-next-hop-address>
       <ospf-backup-next-hop-lsp>
        ospf-backup-next-hop-lsp
       </ospf-backup-next-hop-lsp>
      </ospf-backup-next-hop>
     </ospf3-backup-neighbor-node>
    </ospf3-topology-area-backup-neighbor>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-topology-backup-neighbor>
 <ospf3-topology-area-backup-neighbor>
  <ospf3-backup-neighbor-node>
   <ospf-backup-next-hop>
    <ospf-backup-next-hop-type>
     ospf-backup-next-hop-type
    </ospf-backup-next-hop-type>
    <ospf-backup-next-hop-interface>
     ospf-backup-next-hop-interface
    </ospf-backup-next-hop-interface>
    <ospf-backup-next-hop-address>
     ospf-backup-next-hop-address
    </ospf-backup-next-hop-address>
    <ospf-backup-next-hop-lsp>
     ospf-backup-next-hop-lsp
    </ospf-backup-next-hop-lsp>
   </ospf-backup-next-hop>
  </ospf3-backup-neighbor-node>
 </ospf3-topology-area-backup-neighbor>
</ospf3-topology-backup-neighbor>
```

Description

<ospf-backup-next-hop>

Usage

```
<ospf3-backup-neighbor-information>
 <ospf3-topology-backup-neighbor>
  <ospf3-topology-area-backup-neighbor>
   <ospf3-backup-neighbor-node>
    <ospf-backup-next-hop>
     <ospf-backup-next-hop-type>
      ospf-backup-next-hop-type
     </ospf-backup-next-hop-type>
     <ospf-backup-next-hop-interface>
      ospf-backup-next-hop-interface
     </ospf-backup-next-hop-interface>
     <ospf-backup-next-hop-address>
      ospf-backup-next-hop-address
     </ospf-backup-next-hop-address>
```

```
            <ospf-backup-next-hop-lsp>
              ospf-backup-next-hop-lsp
            </ospf-backup-next-hop-lsp>
          </ospf-backup-next-hop>
        </ospf3-backup-neighbor-node>
      </ospf3-topology-area-backup-neighbor>
    </ospf3-topology-backup-neighbor>
  </ospf3-backup-neighbor-information>
```

Description

<ospf-backup-node-coverage>

Usage

```
<ospf-backup-node-coverage>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-covered-nodes>
    ospf-covered-nodes
  </ospf-covered-nodes>
  <ospf-total-nodes>
    ospf-total-nodes
  </ospf-total-nodes>
  <ospf-node-coverage>
    ospf-node-coverage
  </ospf-node-coverage>
</ospf-backup-node-coverage>
```

Description

<ospf-backup-node-coverage>

Usage

```
<ospf-topology-backup-coverage>
  <ospf-backup-node-coverage>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-covered-nodes>
      ospf-covered-nodes
    </ospf-covered-nodes>
    <ospf-total-nodes>
      ospf-total-nodes
    </ospf-total-nodes>
    <ospf-node-coverage>
      ospf-node-coverage
    </ospf-node-coverage>
  </ospf-backup-node-coverage>
</ospf-topology-backup-coverage>
```

Description

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<ospf-backup-node-coverage>

Usage

```
<ospf-backup-coverage-information>
  <ospf-topology-backup-coverage>
    <ospf-backup-node-coverage>
      <ospf-area>
        ospf-area
      </ospf-area>
      <ospf-covered-nodes>
        ospf-covered-nodes
      </ospf-covered-nodes>
      <ospf-total-nodes>
        ospf-total-nodes
      </ospf-total-nodes>
      <ospf-node-coverage>
        ospf-node-coverage
      </ospf-node-coverage>
    </ospf-backup-node-coverage>
  </ospf-topology-backup-coverage>
</ospf-backup-coverage-information>
```

Description

<ospf-backup-route-coverage>

Usage

```
<ospf-backup-route-coverage>
  <ospf-path-type>
    ospf-path-type
  </ospf-path-type>
  <ospf-covered-routes>
    ospf-covered-routes
  </ospf-covered-routes>
  <ospf-total-routes>
    ospf-total-routes
  </ospf-total-routes>
  <ospf-route-coverage>
    ospf-route-coverage
  </ospf-route-coverage>
</ospf-backup-route-coverage>
```

Description

<ospf-backup-route-coverage>

Usage

```
<ospf-topology-backup-coverage>
  <ospf-backup-route-coverage>
    <ospf-path-type>
      ospf-path-type
    </ospf-path-type>
    <ospf-covered-routes>
```

```
      ospf-covered-routes
    </ospf-covered-routes>
    <ospf-total-routes>
      ospf-total-routes
    </ospf-total-routes>
    <ospf-route-coverage>
      ospf-route-coverage
    </ospf-route-coverage>
  </ospf-backup-route-coverage>
</ospf-topology-backup-coverage>
```

Description

<ospf-backup-route-coverage>

Usage

```
<ospf-backup-coverage-information>
  <ospf-topology-backup-coverage>
    <ospf-backup-route-coverage>
      <ospf-path-type>
        ospf-path-type
      </ospf-path-type>
      <ospf-covered-routes>
        ospf-covered-routes
      </ospf-covered-routes>
      <ospf-total-routes>
        ospf-total-routes
      </ospf-total-routes>
      <ospf-route-coverage>
        ospf-route-coverage
      </ospf-route-coverage>
    </ospf-backup-route-coverage>
  </ospf-topology-backup-coverage>
</ospf-backup-coverage-information>
```

Description

<ospf-backup-spf-information>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>....</ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description OSPF backup SPF information

<ospf-backup-spf-node>

Usage

```
<ospf-backup-spf-node>
  <ospf-node-id>....</ospf-node-id>
  <ospf-node-metric>
```


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```
  ospf-node-metric
 </ospf-node-metric>
 <ospf-parent-node-id>....</ospf-parent-node-id>
 <ospf-next-hop>....</ospf-next-hop>
 <ospf-backup-next-hop>....</ospf-backup-next-hop>
 <ospf-backup-spf-result>....</ospf-backup-spf-result>
</ospf-backup-spf-node>
```

Description OSPF node specific backup SPF information

<ospf-backup-spf-node>

Usage

```
<ospf-topology-area-backup-spf>
 <ospf-backup-spf-node>
  <ospf-node-id>....</ospf-node-id>
  <ospf-node-metric>
   ospf-node-metric
  </ospf-node-metric>
  <ospf-parent-node-id>....</ospf-parent-node-id>
  <ospf-next-hop>....</ospf-next-hop>
  <ospf-backup-next-hop>....</ospf-backup-next-hop>
  <ospf-backup-spf-result>....</ospf-backup-spf-result>
 </ospf-backup-spf-node>
</ospf-topology-area-backup-spf>
```

Description OSPF node specific backup SPF information

<ospf-backup-spf-node>

Usage

```
<ospf-topology-backup-spf>
 <ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
   <ospf-node-id>....</ospf-node-id>
   <ospf-node-metric>
    ospf-node-metric
   </ospf-node-metric>
   <ospf-parent-node-id>....</ospf-parent-node-id>
   <ospf-next-hop>....</ospf-next-hop>
   <ospf-backup-next-hop>....</ospf-backup-next-hop>
   <ospf-backup-spf-result>....</ospf-backup-spf-result>
  </ospf-backup-spf-node>
 </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF node specific backup SPF information

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<ospf-backup-spf-node>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-area-backup-spf>
      <ospf-backup-spf-node>
        <ospf-node-id>....</ospf-node-id>
        <ospf-node-metric>
          ospf-node-metric
        </ospf-node-metric>
        <ospf-parent-node-id>....</ospf-parent-node-id>
        <ospf-next-hop>....</ospf-next-hop>
        <ospf-backup-next-hop>....</ospf-backup-next-hop>
        <ospf-backup-spf-result>....</ospf-backup-spf-result>
      </ospf-backup-spf-node>
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description OSPF node specific backup SPF information

<ospf-backup-spf-result>

Usage

```
<ospf-backup-spf-result>
  <ospf-backup-neighbor>
    ospf-backup-neighbor
  </ospf-backup-neighbor>
  <ospf-backup-preference>
    ospf-backup-preference
  </ospf-backup-preference>
  <ospf-backup-neighbor-is-lsp-endpoint>
    ospf-backup-neighbor-is-lsp-endpoint
  </ospf-backup-neighbor-is-lsp-endpoint>
  <ospf-backup-metric>
    ospf-backup-metric
  </ospf-backup-metric>
  <ospf-backup-neighbor-from-metric>
    ospf-backup-neighbor-from-metric
  </ospf-backup-neighbor-from-metric>
  <ospf-backup-neighbor-to-metric>
    ospf-backup-neighbor-to-metric
  </ospf-backup-neighbor-to-metric>
  <ospf-track-item>
    ospf-track-item
  </ospf-track-item>
  <ospf-backup-result-status>
    ospf-backup-result-status
  </ospf-backup-result-status>
  <ospf-backup-result-no-coverage-reason>
    ospf-backup-result-no-coverage-reason
  </ospf-backup-result-no-coverage-reason>
```


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```
</ospf-backup-spf-result>
```

Description OSPF backup SPF result

<ospf-backup-spf-result>

Usage

```
<ospf-backup-spf-node>
  <ospf-backup-spf-result>
    <ospf-backup-neighbor>
      ospf-backup-neighbor
    </ospf-backup-neighbor>
    <ospf-backup-preference>
      ospf-backup-preference
    </ospf-backup-preference>
    <ospf-backup-neighbor-is-lsp-endpoint>
      ospf-backup-neighbor-is-lsp-endpoint
    </ospf-backup-neighbor-is-lsp-endpoint>
    <ospf-backup-metric>
      ospf-backup-metric
    </ospf-backup-metric>
    <ospf-backup-neighbor-from-metric>
      ospf-backup-neighbor-from-metric
    </ospf-backup-neighbor-from-metric>
    <ospf-backup-neighbor-to-metric>
      ospf-backup-neighbor-to-metric
    </ospf-backup-neighbor-to-metric>
    <ospf-track-item>
      ospf-track-item
    </ospf-track-item>
    <ospf-backup-result-status>
      ospf-backup-result-status
    </ospf-backup-result-status>
    <ospf-backup-result-no-coverage-reason>
      ospf-backup-result-no-coverage-reason
    </ospf-backup-result-no-coverage-reason>
  </ospf-backup-spf-result>
</ospf-backup-spf-node>
```

Description OSPF backup SPF result

<ospf-backup-spf-result>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
    <ospf-backup-spf-result>
      <ospf-backup-neighbor>
        ospf-backup-neighbor
      </ospf-backup-neighbor>
      <ospf-backup-preference>
        ospf-backup-preference
```

```
        </ospf-backup-preference>
        <ospf-backup-neighbor-is-lsp-endpoint>
          ospf-backup-neighbor-is-lsp-endpoint
        </ospf-backup-neighbor-is-lsp-endpoint>
        <ospf-backup-metric>
          ospf-backup-metric
        </ospf-backup-metric>
        <ospf-backup-neighbor-from-metric>
          ospf-backup-neighbor-from-metric
        </ospf-backup-neighbor-from-metric>
        <ospf-backup-neighbor-to-metric>
          ospf-backup-neighbor-to-metric
        </ospf-backup-neighbor-to-metric>
        <ospf-track-item>
          ospf-track-item
        </ospf-track-item>
        <ospf-backup-result-status>
          ospf-backup-result-status
        </ospf-backup-result-status>
        <ospf-backup-result-no-coverage-reason>
          ospf-backup-result-no-coverage-reason
        </ospf-backup-result-no-coverage-reason>
      </ospf-backup-spf-result>
    </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
```

Description OSPF backup SPF result

<ospf-backup-spf-result>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
    <ospf-backup-spf-node>
      <ospf-backup-spf-result>
        <ospf-backup-neighbor>
          ospf-backup-neighbor
        </ospf-backup-neighbor>
        <ospf-backup-preference>
          ospf-backup-preference
        </ospf-backup-preference>
        <ospf-backup-neighbor-is-lsp-endpoint>
          ospf-backup-neighbor-is-lsp-endpoint
        </ospf-backup-neighbor-is-lsp-endpoint>
        <ospf-backup-metric>
          ospf-backup-metric
        </ospf-backup-metric>
        <ospf-backup-neighbor-from-metric>
          ospf-backup-neighbor-from-metric
        </ospf-backup-neighbor-from-metric>
        <ospf-backup-neighbor-to-metric>
          ospf-backup-neighbor-to-metric
        </ospf-backup-neighbor-to-metric>
        <ospf-track-item>
```


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```
        ospf-track-item
      </ospf-track-item>
      <ospf-backup-result-status>
        ospf-backup-result-status
      </ospf-backup-result-status>
      <ospf-backup-result-no-coverage-reason>
        ospf-backup-result-no-coverage-reason
      </ospf-backup-result-no-coverage-reason>
    </ospf-backup-spf-result>
  </ospf-backup-spf-node>
 </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF backup SPF result

<ospf-backup-spf-result>

Usage

```
<ospf-backup-spf-information>
 <ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
   <ospf-backup-spf-node>
    <ospf-backup-spf-result>
     <ospf-backup-neighbor>
      ospf-backup-neighbor
     </ospf-backup-neighbor>
     <ospf-backup-preference>
      ospf-backup-preference
     </ospf-backup-preference>
     <ospf-backup-neighbor-is-lsp-endpoint>
      ospf-backup-neighbor-is-lsp-endpoint
     </ospf-backup-neighbor-is-lsp-endpoint>
     <ospf-backup-metric>
      ospf-backup-metric
     </ospf-backup-metric>
     <ospf-backup-neighbor-from-metric>
      ospf-backup-neighbor-from-metric
     </ospf-backup-neighbor-from-metric>
     <ospf-backup-neighbor-to-metric>
      ospf-backup-neighbor-to-metric
     </ospf-backup-neighbor-to-metric>
     <ospf-track-item>
      ospf-track-item
     </ospf-track-item>
     <ospf-backup-result-status>
      ospf-backup-result-status
     </ospf-backup-result-status>
     <ospf-backup-result-no-coverage-reason>
      ospf-backup-result-no-coverage-reason
     </ospf-backup-result-no-coverage-reason>
    </ospf-backup-spf-result>
   </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
 </ospf-topology-backup-spf>
```

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```
</ospf-backup-spf-information>
```

Description OSPF backup SPF result

<ospf-context-id>

Usage

```
<ospf-context-id>
  <ospf-ctx-id>
    ospf-ctx-id
  </ospf-ctx-id>
  <ospf-context-id-area>
    ospf-context-id-area
  </ospf-context-id-area>
  <ospf-context-id-type>
    ospf-context-id-type
  </ospf-context-id-type>
  <ospf-context-id-metric>
    ospf-context-id-metric
  </ospf-context-id-metric>
  <ospf-context-id-adv-metric>
    ospf-context-id-adv-metric
  </ospf-context-id-adv-metric>
  <ospf-context-id-pe-role>
    ospf-context-id-pe-role
  </ospf-context-id-pe-role>
  <ospf-context-id-status>
    ospf-context-id-status
  </ospf-context-id-status>
  <ospf-context-id-advertising-router>
    ospf-context-id-advertising-router
  </ospf-context-id-advertising-router>
</ospf-context-id>
```

Description

<ospf-context-id>

Usage

```
<ospf-context-id-information>
  <ospf-context-id>
    <ospf-ctx-id>
      ospf-ctx-id
    </ospf-ctx-id>
    <ospf-context-id-area>
      ospf-context-id-area
    </ospf-context-id-area>
    <ospf-context-id-type>
      ospf-context-id-type
    </ospf-context-id-type>
    <ospf-context-id-metric>
      ospf-context-id-metric
    </ospf-context-id-metric>
```


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```
    <ospf-context-id-adv-metric>
      ospf-context-id-adv-metric
    </ospf-context-id-adv-metric>
    <ospf-context-id-pe-role>
      ospf-context-id-pe-role
    </ospf-context-id-pe-role>
    <ospf-context-id-status>
      ospf-context-id-status
    </ospf-context-id-status>
    <ospf-context-id-advertising-router>
      ospf-context-id-advertising-router
    </ospf-context-id-advertising-router>
  </ospf-context-id>
</ospf-context-id-information>
```

Description

<ospf-context-id-information>

Usage

```
<ospf-context-id-information>
  <ospf-context-id>....</ospf-context-id>
</ospf-context-id-information>
```

Description Information about OSPF neighbors in a routing instance

<ospf-database>

Usage

```
<ospf-database>
  <lsa-type>
    lsa-type
  </lsa-type>
  <our-entry>
    our-entry
  </our-entry>
  <lsa-id>
    lsa-id
  </lsa-id>
  <advertising-router>
    advertising-router
  </advertising-router>
  <sequence-number>
    sequence-number
  </sequence-number>
  <age>
    age
  </age>
  <ospf-do-not-age>
    ospf-do-not-age
  </ospf-do-not-age>
  <options>
    options
```

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```
  </options>
  <checksum>
    checksum
  </checksum>
  <lsa-length>
    lsa-length
  </lsa-length>
  <ospf-router-lsa>....</ospf-router-lsa>
  <ospf-network-lsa>....</ospf-network-lsa>
  <ospf-opaque-area-lsa>....</ospf-opaque-area-lsa>
  <ospf-opaque-link-local-lsa>....</ospf-opaque-link-local-lsa>
  <ospf-summary-lsa>....</ospf-summary-lsa>
  <ospf-external-lsa>....</ospf-external-lsa>
  <ospf-database-extensive>....</ospf-database-extensive>
</ospf-database>
```

Description

<ospf-database>

Usage

```
<ospf-database-information>
  <ospf-database>
    <lsa-type>
      lsa-type
    </lsa-type>
    <our-entry>
      our-entry
    </our-entry>
    <lsa-id>
      lsa-id
    </lsa-id>
    <advertising-router>
      advertising-router
    </advertising-router>
    <sequence-number>
      sequence-number
    </sequence-number>
    <age>
      age
    </age>
    <ospf-do-not-age>
      ospf-do-not-age
    </ospf-do-not-age>
    <options>
      options
    </options>
    <checksum>
      checksum
    </checksum>
    <lsa-length>
      lsa-length
    </lsa-length>
    <ospf-router-lsa>....</ospf-router-lsa>
    <ospf-network-lsa>....</ospf-network-lsa>
```


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```
    <ospf-opaque-area-lsa>....</ospf-opaque-area-lsa>
    <ospf-opaque-link-local-lsa>....</ospf-opaque-link-local-lsa>
    <ospf-summary-lsa>....</ospf-summary-lsa>
    <ospf-external-lsa>....</ospf-external-lsa>
    <ospf-database-extensive>....</ospf-database-extensive>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-database-extensive>

Usage

```
<ospf-database-extensive>
  <generation-timer>
    generation-timer
  </generation-timer>
  <aging-timer>
    aging-timer
  </aging-timer>
  <installation-time>
    installation-time
  </installation-time>
  <expiration-time>
    expiration-time
  </expiration-time>
  <send-time>
    send-time
  </send-time>
  <lsa-changed-time>
    lsa-changed-time
  </lsa-changed-time>
  <lsa-change-count>
    lsa-change-count
  </lsa-change-count>
  <indication-lsa>
    indication-lsa
  </indication-lsa>
  <database-entry-state>
    database-entry-state
  </database-entry-state>
  <database-telink-id>
    database-telink-id
  </database-telink-id>
  <standby-flood-status>
    standby-flood-status
  </standby-flood-status>
</ospf-database-extensive>
```

Description

<ospf-database-extensive>

Usage

```
<ospf-database>
  <ospf-database-extensive>
    <generation-timer>
      generation-timer
    </generation-timer>
    <aging-timer>
      aging-timer
    </aging-timer>
    <installation-time>
      installation-time
    </installation-time>
    <expiration-time>
      expiration-time
    </expiration-time>
    <send-time>
      send-time
    </send-time>
    <lsa-changed-time>
      lsa-changed-time
    </lsa-changed-time>
    <lsa-change-count>
      lsa-change-count
    </lsa-change-count>
    <indication-lsa>
      indication-lsa
    </indication-lsa>
    <database-entry-state>
      database-entry-state
    </database-entry-state>
    <database-telink-id>
      database-telink-id
    </database-telink-id>
    <standby-flood-status>
      standby-flood-status
    </standby-flood-status>
  </ospf-database-extensive>
</ospf-database>
```

Description

<ospf-database-extensive>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-database-extensive>
      <generation-timer>
        generation-timer
      </generation-timer>
      <aging-timer>
        aging-timer
```


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```
      </aging-timer>
      <installation-time>
        installation-time
      </installation-time>
      <expiration-time>
        expiration-time
      </expiration-time>
      <send-time>
        send-time
      </send-time>
      <lsa-changed-time>
        lsa-changed-time
      </lsa-changed-time>
      <lsa-change-count>
        lsa-change-count
      </lsa-change-count>
      <indication-lsa>
        indication-lsa
      </indication-lsa>
      <database-entry-state>
        database-entry-state
      </database-entry-state>
      <database-telink-id>
        database-telink-id
      </database-telink-id>
      <standby-flood-status>
        standby-flood-status
      </standby-flood-status>
    </ospf-database-extensive>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-database-extensive>

Usage

```
<ospf3-database>
  <ospf-database-extensive>
    <generation-timer>
      generation-timer
    </generation-timer>
    <aging-timer>
      aging-timer
    </aging-timer>
    <installation-time>
      installation-time
    </installation-time>
    <expiration-time>
      expiration-time
    </expiration-time>
    <send-time>
      send-time
    </send-time>
    <lsa-changed-time>
```

```
        lsa-changed-time
      </lsa-changed-time>
      <lsa-change-count>
        lsa-change-count
      </lsa-change-count>
      <indication-lsa>
        indication-lsa
      </indication-lsa>
      <database-entry-state>
        database-entry-state
      </database-entry-state>
      <database-telink-id>
        database-telink-id
      </database-telink-id>
      <standby-flood-status>
        standby-flood-status
      </standby-flood-status>
    </ospf-database-extensive>
  </ospf3-database>
```

Description

<ospf-database-extensive>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf-database-extensive>
      <generation-timer>
        generation-timer
      </generation-timer>
      <aging-timer>
        aging-timer
      </aging-timer>
      <installation-time>
        installation-time
      </installation-time>
      <expiration-time>
        expiration-time
      </expiration-time>
      <send-time>
        send-time
      </send-time>
      <lsa-changed-time>
        lsa-changed-time
      </lsa-changed-time>
      <lsa-change-count>
        lsa-change-count
      </lsa-change-count>
      <indication-lsa>
        indication-lsa
      </indication-lsa>
      <database-entry-state>
        database-entry-state
      </database-entry-state>
```


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```
      <database-telink-id>
        database-telink-id
      </database-telink-id>
      <standby-flood-status>
        standby-flood-status
      </standby-flood-status>
    </ospf-database-extensive>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf-database-information>

Usage

```
<ospf-database-information>
  <ospf-area-header>....</ospf-area-header>
  <ospf-intf-header>....</ospf-intf-header>
  <ospf-database>....</ospf-database>
  <ospf-database-summary>....</ospf-database-summary>
</ospf-database-information>
```

Description

<ospf-database-replication>

Usage

```
<ospf-database-replication>
  <lsa-type>
    lsa-type
  </lsa-type>
  <lsa-id>
    lsa-id
  </lsa-id>
  <advertising-router>
    advertising-router
  </advertising-router>
  <sequence-number>
    sequence-number
  </sequence-number>
  <age>
    age
  </age>
  <ospf-do-not-age>
    ospf-do-not-age
  </ospf-do-not-age>
  <ospf-synchronization-state>
    ospf-synchronization-state
  </ospf-synchronization-state>
  <ospf-route-table-index>
    ospf-route-table-index
  </ospf-route-table-index>
  <ospf-area>
    ospf-area
```

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```
</ospf-area>
<ospf-router-id>
  ospf-router-id
</ospf-router-id>
<ospf-ifl-index>
  ospf-ifl-index
</ospf-ifl-index>
<interface-address>
  interface-address
</interface-address>
<installation-time>
  installation-time
</installation-time>
<ospf-unsync-reason>
  ospf-unsync-reason
</ospf-unsync-reason>
</ospf-database-replication>
```

Description OSPF LSA replication information

<ospf-database-replication>

Usage

```
<ospf-database-replication-information>
  <ospf-database-replication>
    <lsa-type>
      lsa-type
    </lsa-type>
    <lsa-id>
      lsa-id
    </lsa-id>
    <advertising-router>
      advertising-router
    </advertising-router>
    <sequence-number>
      sequence-number
    </sequence-number>
    <age>
      age
    </age>
    <ospf-do-not-age>
      ospf-do-not-age
    </ospf-do-not-age>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-router-id>
      ospf-router-id
```


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```
    </ospf-router-id>
    <ospf-ifl-index>
      ospf-ifl-index
    </ospf-ifl-index>
    <interface-address>
      interface-address
    </interface-address>
    <installation-time>
      installation-time
    </installation-time>
    <ospf-unsync-reason>
      ospf-unsync-reason
    </ospf-unsync-reason>
  </ospf-database-replication>
</ospf-database-replication-information>
```

Description OSPF LSA replication information

<ospf-database-replication>

Usage

```
<ospf3-database-replication-information>
  <ospf-database-replication>
    <lsa-type>
      lsa-type
    </lsa-type>
    <lsa-id>
      lsa-id
    </lsa-id>
    <advertising-router>
      advertising-router
    </advertising-router>
    <sequence-number>
      sequence-number
    </sequence-number>
    <age>
      age
    </age>
    <ospf-do-not-age>
      ospf-do-not-age
    </ospf-do-not-age>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-router-id>
      ospf-router-id
    </ospf-router-id>
    <ospf-ifl-index>
```

```
      ospf-ifl-index
    </ospf-ifl-index>
    <interface-address>
      interface-address
    </interface-address>
    <installation-time>
      installation-time
    </installation-time>
    <ospf-unsync-reason>
      ospf-unsync-reason
    </ospf-unsync-reason>
  </ospf-database-replication>
</ospf3-database-replication-information>
```

Description OSPF LSA replication information

<ospf-database-replication-information>

Usage

```
<ospf-database-replication-information>
  <ospf-database-replication>....</ospf-database-replication>
</ospf-database-replication-information>
```

Description OSPFv2 LSA replication information

<ospf-database-summary>

Usage

```
<ospf-database-summary>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-intf>
    ospf-intf
  </ospf-intf>
  <ospf-lsa-count>
    ospf-lsa-count
  </ospf-lsa-count>
  <ospf-lsa-type>
    ospf-lsa-type
  </ospf-lsa-type>
</ospf-database-summary>
```

Description

<ospf-database-summary>

Usage

```
<ospf-database-information>
  <ospf-database-summary>
    <ospf-area>
```


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```
    ospf-area
   </ospf-area>
   <ospf-intf>
    ospf-intf
   </ospf-intf>
   <ospf-lsa-count>
    ospf-lsa-count
   </ospf-lsa-count>
   <ospf-lsa-type>
    ospf-lsa-type
   </ospf-lsa-type>
  </ospf-database-summary>
</ospf-database-information>
```

Description

<ospf-db-protection-overview>

Usage

```
<ospf-db-protection-overview>
  <ospf-db-protection-state>
   ospf-db-protection-state
  </ospf-db-protection-state>
  <ospf-db-protection-remaining-time>
   ospf-db-protection-remaining-time
  </ospf-db-protection-remaining-time>
  <ospf-db-protection-warning-only>
   ospf-db-protection-warning-only
  </ospf-db-protection-warning-only>
  <ospf-db-protection-warning-threshold>
   ospf-db-protection-warning-threshold
  </ospf-db-protection-warning-threshold>
  <ospf-db-protection-lsa-current>
   ospf-db-protection-lsa-current
  </ospf-db-protection-lsa-current>
  <ospf-db-protection-lsa-warning>
   ospf-db-protection-lsa-warning
  </ospf-db-protection-lsa-warning>
  <ospf-db-protection-lsa-maximum>
   ospf-db-protection-lsa-maximum
  </ospf-db-protection-lsa-maximum>
  <ospf-db-protection-ignore-time>
   ospf-db-protection-ignore-time
  </ospf-db-protection-ignore-time>
  <ospf-db-protection-reset-time>
   ospf-db-protection-reset-time
  </ospf-db-protection-reset-time>
  <ospf-db-protection-ignore-current>
   ospf-db-protection-ignore-current
  </ospf-db-protection-ignore-current>
  <ospf-db-protection-ignore-maximum>
   ospf-db-protection-ignore-maximum
  </ospf-db-protection-ignore-maximum>
</ospf-db-protection-overview>
```

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Description OSPF database protection overview information

<ospf-db-protection-overview>

Usage

```
<ospf-overview>
  <ospf-db-protection-overview>
    <ospf-db-protection-state>
      ospf-db-protection-state
    </ospf-db-protection-state>
    <ospf-db-protection-remaining-time>
      ospf-db-protection-remaining-time
    </ospf-db-protection-remaining-time>
    <ospf-db-protection-warning-only>
      ospf-db-protection-warning-only
    </ospf-db-protection-warning-only>
    <ospf-db-protection-warning-threshold>
      ospf-db-protection-warning-threshold
    </ospf-db-protection-warning-threshold>
    <ospf-db-protection-lsa-current>
      ospf-db-protection-lsa-current
    </ospf-db-protection-lsa-current>
    <ospf-db-protection-lsa-warning>
      ospf-db-protection-lsa-warning
    </ospf-db-protection-lsa-warning>
    <ospf-db-protection-lsa-maximum>
      ospf-db-protection-lsa-maximum
    </ospf-db-protection-lsa-maximum>
    <ospf-db-protection-ignore-time>
      ospf-db-protection-ignore-time
    </ospf-db-protection-ignore-time>
    <ospf-db-protection-reset-time>
      ospf-db-protection-reset-time
    </ospf-db-protection-reset-time>
    <ospf-db-protection-ignore-current>
      ospf-db-protection-ignore-current
    </ospf-db-protection-ignore-current>
    <ospf-db-protection-ignore-maximum>
      ospf-db-protection-ignore-maximum
    </ospf-db-protection-ignore-maximum>
  </ospf-db-protection-overview>
</ospf-overview>
```

Description OSPF database protection overview information

<ospf-db-protection-overview>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <ospf-db-protection-overview>
      <ospf-db-protection-state>
        ospf-db-protection-state
```


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```
        </ospf-db-protection-state>
        <ospf-db-protection-remaining-time>
          ospf-db-protection-remaining-time
        </ospf-db-protection-remaining-time>
        <ospf-db-protection-warning-only>
          ospf-db-protection-warning-only
        </ospf-db-protection-warning-only>
        <ospf-db-protection-warning-threshold>
          ospf-db-protection-warning-threshold
        </ospf-db-protection-warning-threshold>
        <ospf-db-protection-lsa-current>
          ospf-db-protection-lsa-current
        </ospf-db-protection-lsa-current>
        <ospf-db-protection-lsa-warning>
          ospf-db-protection-lsa-warning
        </ospf-db-protection-lsa-warning>
        <ospf-db-protection-lsa-maximum>
          ospf-db-protection-lsa-maximum
        </ospf-db-protection-lsa-maximum>
        <ospf-db-protection-ignore-time>
          ospf-db-protection-ignore-time
        </ospf-db-protection-ignore-time>
        <ospf-db-protection-reset-time>
          ospf-db-protection-reset-time
        </ospf-db-protection-reset-time>
        <ospf-db-protection-ignore-current>
          ospf-db-protection-ignore-current
        </ospf-db-protection-ignore-current>
        <ospf-db-protection-ignore-maximum>
          ospf-db-protection-ignore-maximum
        </ospf-db-protection-ignore-maximum>
      </ospf-db-protection-overview>
    </ospf-overview>
  </ospf-overview-information>
```

Description OSPF database protection overview information

<ospf-db-protection-overview>

Usage

```
<ospf3-overview-information>
  <ospf-overview>
    <ospf-db-protection-overview>
      <ospf-db-protection-state>
        ospf-db-protection-state
      </ospf-db-protection-state>
      <ospf-db-protection-remaining-time>
        ospf-db-protection-remaining-time
      </ospf-db-protection-remaining-time>
      <ospf-db-protection-warning-only>
        ospf-db-protection-warning-only
      </ospf-db-protection-warning-only>
      <ospf-db-protection-warning-threshold>
        ospf-db-protection-warning-threshold
```

```
        </ospf-db-protection-warning-threshold>
        <ospf-db-protection-lsa-current>
          ospf-db-protection-lsa-current
        </ospf-db-protection-lsa-current>
        <ospf-db-protection-lsa-warning>
          ospf-db-protection-lsa-warning
        </ospf-db-protection-lsa-warning>
        <ospf-db-protection-lsa-maximum>
          ospf-db-protection-lsa-maximum
        </ospf-db-protection-lsa-maximum>
        <ospf-db-protection-ignore-time>
          ospf-db-protection-ignore-time
        </ospf-db-protection-ignore-time>
        <ospf-db-protection-reset-time>
          ospf-db-protection-reset-time
        </ospf-db-protection-reset-time>
        <ospf-db-protection-ignore-current>
          ospf-db-protection-ignore-current
        </ospf-db-protection-ignore-current>
        <ospf-db-protection-ignore-maximum>
          ospf-db-protection-ignore-maximum
        </ospf-db-protection-ignore-maximum>
      </ospf-db-protection-overview>
    </ospf-overview>
  </ospf3-overview-information>
```

Description OSPF database protection overview information

<ospf-errors>

Usage

```
<ospf-errors>
  <runt-header-error>
    runt-header-error
  </runt-header-error>
  <short-packets-error>
    short-packets-error
  </short-packets-error>
  <bad-version-error>
    bad-version-error
  </bad-version-error>
  <truncated-packets-error>
    truncated-packets-error
  </truncated-packets-error>
  <checksum-error>
    checksum-error
  </checksum-error>
  <subnet-mismatch-error>
    subnet-mismatch-error
  </subnet-mismatch-error>
  <virtual-link-error>
    virtual-link-error
  </virtual-link-error>
  <area-mismatch-error>
```


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```
  area-mismatch-error
 </area-mismatch-error>
 <authentication-mismatch-error>
  authentication-mismatch-error
 </authentication-mismatch-error>
 <authentication-failure-error>
  authentication-failure-error
 </authentication-failure-error>
 <bad-packettype-error>
  bad-packettype-error
 </bad-packettype-error>
 <netmask-mismatch-error>
  netmask-mismatch-error
 </netmask-mismatch-error>
 <hello-interval-mismatch-error>
  hello-interval-mismatch-error
 </hello-interval-mismatch-error>
 <dead-interval-mismatch-error>
  dead-interval-mismatch-error
 </dead-interval-mismatch-error>
 <stub-area-mismatch-error>
  stub-area-mismatch-error
 </stub-area-mismatch-error>
 <nssa-mismatch-error>
  nssa-mismatch-error
 </nssa-mismatch-error>
 <default-exclusion-mismatch-error>
  default-exclusion-mismatch-error
 </default-exclusion-mismatch-error>
 <mtu-mismatch-error>
  mtu-mismatch-error
 </mtu-mismatch-error>
 <hello-received-error>
  hello-received-error
 </hello-received-error>
 <no-interface-error>
  no-interface-error
 </no-interface-error>
 <no-router-id-error>
  no-router-id-error
 </no-router-id-error>
 <instance-id-mismatch-error>
  instance-id-mismatch-error
 </instance-id-mismatch-error>
 <lanp2p-cfgmismatch-error>
  lanp2p-cfgmismatch-error
 </lanp2p-cfgmismatch-error>
 <no-error>
  no-error
 </no-error>
</ospf-errors>
```

Description

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<ospf-errors>

Usage

```
<ospf-io-statistics>
  <ospf-errors>
    <runt-header-error>
      runt-header-error
    </runt-header-error>
    <short-packets-error>
      short-packets-error
    </short-packets-error>
    <bad-version-error>
      bad-version-error
    </bad-version-error>
    <truncated-packets-error>
      truncated-packets-error
    </truncated-packets-error>
    <checksum-error>
      checksum-error
    </checksum-error>
    <subnet-mismatch-error>
      subnet-mismatch-error
    </subnet-mismatch-error>
    <virtual-link-error>
      virtual-link-error
    </virtual-link-error>
    <area-mismatch-error>
      area-mismatch-error
    </area-mismatch-error>
    <authentication-mismatch-error>
      authentication-mismatch-error
    </authentication-mismatch-error>
    <authentication-failure-error>
      authentication-failure-error
    </authentication-failure-error>
    <bad-packettype-error>
      bad-packettype-error
    </bad-packettype-error>
    <netmask-mismatch-error>
      netmask-mismatch-error
    </netmask-mismatch-error>
    <hello-interval-mismatch-error>
      hello-interval-mismatch-error
    </hello-interval-mismatch-error>
    <dead-interval-mismatch-error>
      dead-interval-mismatch-error
    </dead-interval-mismatch-error>
    <stub-area-mismatch-error>
      stub-area-mismatch-error
    </stub-area-mismatch-error>
    <nssa-mismatch-error>
      nssa-mismatch-error
    </nssa-mismatch-error>
    <default-exclusion-mismatch-error>
      default-exclusion-mismatch-error
```


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```
    </default-exclusion-mismatch-error>
    <mtu-mismatch-error>
      mtu-mismatch-error
    </mtu-mismatch-error>
    <hello-received-error>
      hello-received-error
    </hello-received-error>
    <no-interface-error>
      no-interface-error
    </no-interface-error>
    <no-router-id-error>
      no-router-id-error
    </no-router-id-error>
    <instance-id-mismatch-error>
      instance-id-mismatch-error
    </instance-id-mismatch-error>
    <lanp2p-cfgmismatch-error>
      lanp2p-cfgmismatch-error
    </lanp2p-cfgmismatch-error>
    <no-error>
      no-error
    </no-error>
  </ospf-errors>
</ospf-io-statistics>
```

Description

<ospf-errors>

Usage

```
<ospf-io-statistics-information>
  <ospf-io-statistics>
    <ospf-errors>
      <runt-header-error>
        runt-header-error
      </runt-header-error>
      <short-packets-error>
        short-packets-error
      </short-packets-error>
      <bad-version-error>
        bad-version-error
      </bad-version-error>
      <truncated-packets-error>
        truncated-packets-error
      </truncated-packets-error>
      <checksum-error>
        checksum-error
      </checksum-error>
      <subnet-mismatch-error>
        subnet-mismatch-error
      </subnet-mismatch-error>
      <virtual-link-error>
        virtual-link-error
      </virtual-link-error>
      <area-mismatch-error>
```

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```
        area-mismatch-error
      </area-mismatch-error>
      <authentication-mismatch-error>
        authentication-mismatch-error
      </authentication-mismatch-error>
      <authentication-failure-error>
        authentication-failure-error
      </authentication-failure-error>
      <bad-packettype-error>
        bad-packettype-error
      </bad-packettype-error>
      <netmask-mismatch-error>
        netmask-mismatch-error
      </netmask-mismatch-error>
      <hello-interval-mismatch-error>
        hello-interval-mismatch-error
      </hello-interval-mismatch-error>
      <dead-interval-mismatch-error>
        dead-interval-mismatch-error
      </dead-interval-mismatch-error>
      <stub-area-mismatch-error>
        stub-area-mismatch-error
      </stub-area-mismatch-error>
      <nssa-mismatch-error>
        nssa-mismatch-error
      </nssa-mismatch-error>
      <default-exclusion-mismatch-error>
        default-exclusion-mismatch-error
      </default-exclusion-mismatch-error>
      <mtu-mismatch-error>
        mtu-mismatch-error
      </mtu-mismatch-error>
      <hello-received-error>
        hello-received-error
      </hello-received-error>
      <no-interface-error>
        no-interface-error
      </no-interface-error>
      <no-router-id-error>
        no-router-id-error
      </no-router-id-error>
      <instance-id-mismatch-error>
        instance-id-mismatch-error
      </instance-id-mismatch-error>
      <lanp2p-cfgmismatch-error>
        lanp2p-cfgmismatch-error
      </lanp2p-cfgmismatch-error>
      <no-error>
        no-error
      </no-error>
    </ospf-errors>
  </ospf-io-statistics>
</ospf-io-statistics-information>
```


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Description

<ospf-errors>

Usage

```
<ospf-statistics>
  <ospf-errors>
    <runt-header-error>
      runt-header-error
    </runt-header-error>
    <short-packets-error>
      short-packets-error
    </short-packets-error>
    <bad-version-error>
      bad-version-error
    </bad-version-error>
    <truncated-packets-error>
      truncated-packets-error
    </truncated-packets-error>
    <checksum-error>
      checksum-error
    </checksum-error>
    <subnet-mismatch-error>
      subnet-mismatch-error
    </subnet-mismatch-error>
    <virtual-link-error>
      virtual-link-error
    </virtual-link-error>
    <area-mismatch-error>
      area-mismatch-error
    </area-mismatch-error>
    <authentication-mismatch-error>
      authentication-mismatch-error
    </authentication-mismatch-error>
    <authentication-failure-error>
      authentication-failure-error
    </authentication-failure-error>
    <bad-packettype-error>
      bad-packettype-error
    </bad-packettype-error>
    <netmask-mismatch-error>
      netmask-mismatch-error
    </netmask-mismatch-error>
    <hello-interval-mismatch-error>
      hello-interval-mismatch-error
    </hello-interval-mismatch-error>
    <dead-interval-mismatch-error>
      dead-interval-mismatch-error
    </dead-interval-mismatch-error>
    <stub-area-mismatch-error>
      stub-area-mismatch-error
    </stub-area-mismatch-error>
    <nssa-mismatch-error>
      nssa-mismatch-error
    </nssa-mismatch-error>
    <default-exclusion-mismatch-error>
```

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```
      default-exclusion-mismatch-error
    </default-exclusion-mismatch-error>
    <mtu-mismatch-error>
      mtu-mismatch-error
    </mtu-mismatch-error>
    <hello-received-error>
      hello-received-error
    </hello-received-error>
    <no-interface-error>
      no-interface-error
    </no-interface-error>
    <no-router-id-error>
      no-router-id-error
    </no-router-id-error>
    <instance-id-mismatch-error>
      instance-id-mismatch-error
    </instance-id-mismatch-error>
    <lanp2p-cfgmismatch-error>
      lanp2p-cfgmismatch-error
    </lanp2p-cfgmismatch-error>
    <no-error>
      no-error
    </no-error>
  </ospf-errors>
</ospf-statistics>
```

Description

<ospf-errors>

Usage

```
<ospf-statistics-information>
  <ospf-statistics>
    <ospf-errors>
      <runt-header-error>
        runt-header-error
      </runt-header-error>
      <short-packets-error>
        short-packets-error
      </short-packets-error>
      <bad-version-error>
        bad-version-error
      </bad-version-error>
      <truncated-packets-error>
        truncated-packets-error
      </truncated-packets-error>
      <checksum-error>
        checksum-error
      </checksum-error>
      <subnet-mismatch-error>
        subnet-mismatch-error
      </subnet-mismatch-error>
      <virtual-link-error>
        virtual-link-error
      </virtual-link-error>
```


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```
        <area-mismatch-error>
          area-mismatch-error
        </area-mismatch-error>
        <authentication-mismatch-error>
          authentication-mismatch-error
        </authentication-mismatch-error>
        <authentication-failure-error>
          authentication-failure-error
        </authentication-failure-error>
        <bad-packettype-error>
          bad-packettype-error
        </bad-packettype-error>
        <netmask-mismatch-error>
          netmask-mismatch-error
        </netmask-mismatch-error>
        <hello-interval-mismatch-error>
          hello-interval-mismatch-error
        </hello-interval-mismatch-error>
        <dead-interval-mismatch-error>
          dead-interval-mismatch-error
        </dead-interval-mismatch-error>
        <stub-area-mismatch-error>
          stub-area-mismatch-error
        </stub-area-mismatch-error>
        <nssa-mismatch-error>
          nssa-mismatch-error
        </nssa-mismatch-error>
        <default-exclusion-mismatch-error>
          default-exclusion-mismatch-error
        </default-exclusion-mismatch-error>
        <mtu-mismatch-error>
          mtu-mismatch-error
        </mtu-mismatch-error>
        <hello-received-error>
          hello-received-error
        </hello-received-error>
        <no-interface-error>
          no-interface-error
        </no-interface-error>
        <no-router-id-error>
          no-router-id-error
        </no-router-id-error>
        <instance-id-mismatch-error>
          instance-id-mismatch-error
        </instance-id-mismatch-error>
        <lanp2p-cfgmismatch-error>
          lanp2p-cfgmismatch-error
        </lanp2p-cfgmismatch-error>
        <no-error>
          no-error
        </no-error>
      </ospf-errors>
    </ospf-statistics>
  </ospf-statistics-information>
```

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Description

<ospf-errors>

Usage

```
<ospf3-io-statistics-information>
  <ospf-io-statistics>
    <ospf-errors>
      <runt-header-error>
        runt-header-error
      </runt-header-error>
      <short-packets-error>
        short-packets-error
      </short-packets-error>
      <bad-version-error>
        bad-version-error
      </bad-version-error>
      <truncated-packets-error>
        truncated-packets-error
      </truncated-packets-error>
      <checksum-error>
        checksum-error
      </checksum-error>
      <subnet-mismatch-error>
        subnet-mismatch-error
      </subnet-mismatch-error>
      <virtual-link-error>
        virtual-link-error
      </virtual-link-error>
      <area-mismatch-error>
        area-mismatch-error
      </area-mismatch-error>
      <authentication-mismatch-error>
        authentication-mismatch-error
      </authentication-mismatch-error>
      <authentication-failure-error>
        authentication-failure-error
      </authentication-failure-error>
      <bad-packettype-error>
        bad-packettype-error
      </bad-packettype-error>
      <netmask-mismatch-error>
        netmask-mismatch-error
      </netmask-mismatch-error>
      <hello-interval-mismatch-error>
        hello-interval-mismatch-error
      </hello-interval-mismatch-error>
      <dead-interval-mismatch-error>
        dead-interval-mismatch-error
      </dead-interval-mismatch-error>
      <stub-area-mismatch-error>
        stub-area-mismatch-error
      </stub-area-mismatch-error>
      <nssa-mismatch-error>
        nssa-mismatch-error
      </nssa-mismatch-error>
```


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```
        <default-exclusion-mismatch-error>
          default-exclusion-mismatch-error
        </default-exclusion-mismatch-error>
        <mtu-mismatch-error>
          mtu-mismatch-error
        </mtu-mismatch-error>
        <hello-received-error>
          hello-received-error
        </hello-received-error>
        <no-interface-error>
          no-interface-error
        </no-interface-error>
        <no-router-id-error>
          no-router-id-error
        </no-router-id-error>
        <instance-id-mismatch-error>
          instance-id-mismatch-error
        </instance-id-mismatch-error>
        <lanp2p-cfgmismatch-error>
          lanp2p-cfgmismatch-error
        </lanp2p-cfgmismatch-error>
        <no-error>
          no-error
        </no-error>
      </ospf-errors>
    </ospf-io-statistics>
  </ospf3-io-statistics-information>
```

Description

<ospf-errors>

Usage

```
  <ospf3-statistics-information>
    <ospf-statistics>
      <ospf-errors>
        <runt-header-error>
          runt-header-error
        </runt-header-error>
        <short-packets-error>
          short-packets-error
        </short-packets-error>
        <bad-version-error>
          bad-version-error
        </bad-version-error>
        <truncated-packets-error>
          truncated-packets-error
        </truncated-packets-error>
        <checksum-error>
          checksum-error
        </checksum-error>
        <subnet-mismatch-error>
          subnet-mismatch-error
        </subnet-mismatch-error>
        <virtual-link-error>
```

```
      virtual-link-error
    </virtual-link-error>
    <area-mismatch-error>
      area-mismatch-error
    </area-mismatch-error>
    <authentication-mismatch-error>
      authentication-mismatch-error
    </authentication-mismatch-error>
    <authentication-failure-error>
      authentication-failure-error
    </authentication-failure-error>
    <bad-packettype-error>
      bad-packettype-error
    </bad-packettype-error>
    <netmask-mismatch-error>
      netmask-mismatch-error
    </netmask-mismatch-error>
    <hello-interval-mismatch-error>
      hello-interval-mismatch-error
    </hello-interval-mismatch-error>
    <dead-interval-mismatch-error>
      dead-interval-mismatch-error
    </dead-interval-mismatch-error>
    <stub-area-mismatch-error>
      stub-area-mismatch-error
    </stub-area-mismatch-error>
    <nssa-mismatch-error>
      nssa-mismatch-error
    </nssa-mismatch-error>
    <default-exclusion-mismatch-error>
      default-exclusion-mismatch-error
    </default-exclusion-mismatch-error>
    <mtu-mismatch-error>
      mtu-mismatch-error
    </mtu-mismatch-error>
    <hello-received-error>
      hello-received-error
    </hello-received-error>
    <no-interface-error>
      no-interface-error
    </no-interface-error>
    <no-router-id-error>
      no-router-id-error
    </no-router-id-error>
    <instance-id-mismatch-error>
      instance-id-mismatch-error
    </instance-id-mismatch-error>
    <lanp2p-cfgmismatch-error>
      lanp2p-cfgmismatch-error
    </lanp2p-cfgmismatch-error>
    <no-error>
      no-error
    </no-error>
  </ospf-errors>
</ospf-statistics>
```


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```
</ospf3-statistics-information>
```

Description

<ospf-external-lsa>

Usage

```
<ospf-external-lsa>
  <address-mask>
    address-mask
  </address-mask>
  <ospf-external-lsa-topology>....</ospf-external-lsa-topology>
</ospf-external-lsa>
```

Description

<ospf-external-lsa>

Usage

```
<ospf-database>
  <ospf-external-lsa>
    <address-mask>
      address-mask
    </address-mask>
    <ospf-external-lsa-topology>....</ospf-external-lsa-topology>
  </ospf-external-lsa>
</ospf-database>
```

Description

<ospf-external-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-external-lsa>
      <address-mask>
        address-mask
      </address-mask>
      <ospf-external-lsa-topology>....</ospf-external-lsa-topology>
    </ospf-external-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-external-lsa-topology>

Usage

```
<ospf-external-lsa-topology>
  <ospf-topology-name>
    ospf-topology-name
```

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```
</ospf-topology-name>
<ospf-topology-id>
  ospf-topology-id
</ospf-topology-id>
<type-value>
  type-value
</type-value>
<ospf-topology-metric>
  ospf-topology-metric
</ospf-topology-metric>
<forward-address>
  forward-address
</forward-address>
<tag>
  tag
</tag>
</ospf-external-lsa-topology>
```

Description OSPF topology specific information for an external LSA

<ospf-external-lsa-topology>

Usage

```
<ospf-external-lsa>
  <ospf-external-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <type-value>
      type-value
    </type-value>
    <ospf-topology-metric>
      ospf-topology-metric
    </ospf-topology-metric>
    <forward-address>
      forward-address
    </forward-address>
    <tag>
      tag
    </tag>
  </ospf-external-lsa-topology>
</ospf-external-lsa>
```

Description OSPF topology specific information for an external LSA

<ospf-external-lsa-topology>

Usage

```
<ospf-database>
```


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```
<ospf-external-lsa>
  <ospf-external-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <type-value>
      type-value
    </type-value>
    <ospf-topology-metric>
      ospf-topology-metric
    </ospf-topology-metric>
    <forward-address>
      forward-address
    </forward-address>
    <tag>
      tag
    </tag>
  </ospf-external-lsa-topology>
 </ospf-external-lsa>
</ospf-database>
```

Description OSPF topology specific information for an external LSA

<ospf-external-lsa-topology>

Usage

```
<ospf-database-information>
 <ospf-database>
  <ospf-external-lsa>
   <ospf-external-lsa-topology>
    <ospf-topology-name>
     ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
     ospf-topology-id
    </ospf-topology-id>
    <type-value>
     type-value
    </type-value>
    <ospf-topology-metric>
     ospf-topology-metric
    </ospf-topology-metric>
    <forward-address>
     forward-address
    </forward-address>
    <tag>
     tag
    </tag>
   </ospf-external-lsa-topology>
  </ospf-external-lsa>
 </ospf-database>
```

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```
</ospf-database-information>
```

Description OSPF topology specific information for an external LSA

<ospf-instance-neighbor>

Usage

```
<ospf-neighbor-information-all>
  <ospf-instance-neighbor>
    <ospf-instance-name>
      ospf-instance-name
    </ospf-instance-name>
    <ospf-neighbor>....</ospf-neighbor>
  </ospf-instance-neighbor>
</ospf-neighbor-information-all>
```

Description Information about OSPF neighbors within this routing instance

<ospf-interface>

Usage

```
<ospf-interface>
  <interface-name>
    interface-name
  </interface-name>
  <ospf-interface-state>
    ospf-interface-state
  </ospf-interface-state>
  <ospf-area>
    ospf-area
  </ospf-area>
  <dr-id>
    dr-id
  </dr-id>
  <bdr-id>
    bdr-id
  </bdr-id>
  <neighbor-count>
    neighbor-count
  </neighbor-count>
  <interface-type>
    interface-type
  </interface-type>
  <interface-address>
    interface-address
  </interface-address>
  <address-mask>
    address-mask
  </address-mask>
  <mtu>
    mtu
  </mtu>
```

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```
<interface-cost>
  interface-cost
</interface-cost>
<virtual-link-transit-area>
  virtual-link-transit-area
</virtual-link-transit-area>
<virtual-link-destination>
  virtual-link-destination
</virtual-link-destination>
<sham-link-local>
  sham-link-local
</sham-link-local>
<sham-link-remote>
  sham-link-remote
</sham-link-remote>
<dr-address>
  dr-address
</dr-address>
<bdr-address>
  bdr-address
</bdr-address>
<router-priority>
  router-priority
</router-priority>
<adj-count>
  adj-count
</adj-count>
<interface-secondary>
  interface-secondary
</interface-secondary>
<interface-flood-reduction>
  interface-flood-reduction
</interface-flood-reduction>
<passive>
  passive
</passive>
<hello-interval>
  hello-interval
</hello-interval>
<poll-interval>
  poll-interval
</poll-interval>
<dead-interval>
  dead-interval
</dead-interval>
<retransmit-interval>
  retransmit-interval
</retransmit-interval>
<ospf-stub-type>
  ospf-stub-type
</ospf-stub-type>
<ipsec-sa>
  ipsec-sa
</ipsec-sa>
<authentication-type>
  authentication-type
```

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```
</authentication-type>
<ospf-interface-topology>....</ospf-interface-topology>
<active-key-id>
  active-key-id
</active-key-id>
<active-key-start-time>
  active-key-start-time
</active-key-start-time>
<ospf-interface-protection-type>
  ospf-interface-protection-type
</ospf-interface-protection-type>
<ospf-interface-no-eligible-backup>
  ospf-interface-no-eligible-backup
</ospf-interface-no-eligible-backup>
<igp-ldp-sync-holdtime>
  igp-ldp-sync-holdtime
</igp-ldp-sync-holdtime>
<igp-ldp-sync-state>
  igp-ldp-sync-state
</igp-ldp-sync-state>
<igp-ldp-sync-last-change>
  igp-ldp-sync-last-change
</igp-ldp-sync-last-change>
<igp-ldp-sync-reason>
  igp-ldp-sync-reason
</igp-ldp-sync-reason>
<igp-ldp-sync-timeleft>
  igp-ldp-sync-timeleft
</igp-ldp-sync-timeleft>
<interface-flood-list-count>
  interface-flood-list-count
</interface-flood-list-count>
<flood-list-count>
  flood-list-count
</flood-list-count>
<lsa-list>
  lsa-list
</lsa-list>
<interface-description-list>
  interface-description-list
</interface-description-list>
</ospf-interface>
```

Description

<ospf-interface>

Usage

```
<ospf-interface-information>
  <ospf-interface>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-interface-state>
      ospf-interface-state
```


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```
</ospf-interface-state>
<ospf-area>
  ospf-area
</ospf-area>
<dr-id>
  dr-id
</dr-id>
<bdr-id>
  bdr-id
</bdr-id>
<neighbor-count>
  neighbor-count
</neighbor-count>
<interface-type>
  interface-type
</interface-type>
<interface-address>
  interface-address
</interface-address>
<address-mask>
  address-mask
</address-mask>
<mtu>
  mtu
</mtu>
<interface-cost>
  interface-cost
</interface-cost>
<virtual-link-transit-area>
  virtual-link-transit-area
</virtual-link-transit-area>
<virtual-link-destination>
  virtual-link-destination
</virtual-link-destination>
<sham-link-local>
  sham-link-local
</sham-link-local>
<sham-link-remote>
  sham-link-remote
</sham-link-remote>
<dr-address>
  dr-address
</dr-address>
<bdr-address>
  bdr-address
</bdr-address>
<router-priority>
  router-priority
</router-priority>
<adj-count>
  adj-count
</adj-count>
<interface-secondary>
  interface-secondary
</interface-secondary>
<interface-flood-reduction>
```

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```
  interface-flood-reduction
</interface-flood-reduction>
<passive>
  passive
</passive>
<hello-interval>
  hello-interval
</hello-interval>
<poll-interval>
  poll-interval
</poll-interval>
<dead-interval>
  dead-interval
</dead-interval>
<retransmit-interval>
  retransmit-interval
</retransmit-interval>
<ospf-stub-type>
  ospf-stub-type
</ospf-stub-type>
<ipsec-sa>
  ipsec-sa
</ipsec-sa>
<authentication-type>
  authentication-type
</authentication-type>
<ospf-interface-topology>....</ospf-interface-topology>
<active-key-id>
  active-key-id
</active-key-id>
<active-key-start-time>
  active-key-start-time
</active-key-start-time>
<ospf-interface-protection-type>
  ospf-interface-protection-type
</ospf-interface-protection-type>
<ospf-interface-no-eligible-backup>
  ospf-interface-no-eligible-backup
</ospf-interface-no-eligible-backup>
<igp-ldp-sync-holdtime>
  igp-ldp-sync-holdtime
</igp-ldp-sync-holdtime>
<igp-ldp-sync-state>
  igp-ldp-sync-state
</igp-ldp-sync-state>
<igp-ldp-sync-last-change>
  igp-ldp-sync-last-change
</igp-ldp-sync-last-change>
<igp-ldp-sync-reason>
  igp-ldp-sync-reason
</igp-ldp-sync-reason>
<igp-ldp-sync-timeleft>
  igp-ldp-sync-timeleft
</igp-ldp-sync-timeleft>
<interface-flood-list-count>
  interface-flood-list-count
```


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```
    </interface-flood-list-count>
    <flood-list-count>
      flood-list-count
    </flood-list-count>
    <lsa-list>
      lsa-list
    </lsa-list>
    <interface-description-list>
      interface-description-list
    </interface-description-list>
  </ospf-interface>
</ospf-interface-information>
```

Description

<ospf-interface-information>

Usage

```
<ospf-interface-information>
  <ospf-interface>....</ospf-interface>
</ospf-interface-information>
```

Description

<ospf-interface-replication>

Usage

```
<ospf-interface-replication>
  <interface-name>
    interface-name
  </interface-name>
  <interface-address>
    interface-address
  </interface-address>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-synchronization-state>
    ospf-synchronization-state
  </ospf-synchronization-state>
  <ospf-ifl-index>
    ospf-ifl-index
  </ospf-ifl-index>
  <ospf-router-id>
    ospf-router-id
  </ospf-router-id>
  <ospf-route-table-index>
    ospf-route-table-index
  </ospf-route-table-index>
  <ospf-internal-index>
    ospf-internal-index
  </ospf-internal-index>
  <ospf-sync-dr-id>
    ospf-sync-dr-id
```

```
</ospf-sync-dr-id>
<ospf-sync-bdr-id>
  ospf-sync-bdr-id
</ospf-sync-bdr-id>
<dr-address>
  dr-address
</dr-address>
<bdr-address>
  bdr-address
</bdr-address>
<ospf-sync-dr-status>
  ospf-sync-dr-status
</ospf-sync-dr-status>
<ospf-sync-bdr-status>
  ospf-sync-bdr-status
</ospf-sync-bdr-status>
<ospf-unsync-reason>
  ospf-unsync-reason
</ospf-unsync-reason>
</ospf-interface-replication>
```

Description OSPF interface replication information

<ospf-interface-replication>

Usage

```
<ospf-interface-replication-information>
  <ospf-interface-replication>
    <interface-name>
      interface-name
    </interface-name>
    <interface-address>
      interface-address
    </interface-address>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-ifl-index>
      ospf-ifl-index
    </ospf-ifl-index>
    <ospf-router-id>
      ospf-router-id
    </ospf-router-id>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-internal-index>
      ospf-internal-index
    </ospf-internal-index>
    <ospf-sync-dr-id>
      ospf-sync-dr-id
```


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```
        </ospf-sync-dr-id>
        <ospf-sync-bdr-id>
          ospf-sync-bdr-id
        </ospf-sync-bdr-id>
        <dr-address>
          dr-address
        </dr-address>
        <bdr-address>
          bdr-address
        </bdr-address>
        <ospf-sync-dr-status>
          ospf-sync-dr-status
        </ospf-sync-dr-status>
        <ospf-sync-bdr-status>
          ospf-sync-bdr-status
        </ospf-sync-bdr-status>
        <ospf-unsync-reason>
          ospf-unsync-reason
        </ospf-unsync-reason>
      </ospf-interface-replication>
    </ospf-interface-replication-information>
```

Description OSPF interface replication information

<ospf-interface-replication>

Usage

```
<ospf3-interface-replication-information>
  <ospf-interface-replication>
    <interface-name>
      interface-name
    </interface-name>
    <interface-address>
      interface-address
    </interface-address>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-ifl-index>
      ospf-ifl-index
    </ospf-ifl-index>
    <ospf-router-id>
      ospf-router-id
    </ospf-router-id>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-internal-index>
      ospf-internal-index
    </ospf-internal-index>
    <ospf-sync-dr-id>
```

```
      ospf-sync-dr-id
    </ospf-sync-dr-id>
    <ospf-sync-bdr-id>
      ospf-sync-bdr-id
    </ospf-sync-bdr-id>
    <dr-address>
      dr-address
    </dr-address>
    <bdr-address>
      bdr-address
    </bdr-address>
    <ospf-sync-dr-status>
      ospf-sync-dr-status
    </ospf-sync-dr-status>
    <ospf-sync-bdr-status>
      ospf-sync-bdr-status
    </ospf-sync-bdr-status>
    <ospf-unsync-reason>
      ospf-unsync-reason
    </ospf-unsync-reason>
  </ospf-interface-replication>
</ospf3-interface-replication-information>
```

Description OSPF interface replication information

<ospf-interface-replication-information>

Usage

```
<ospf-interface-replication-information>
  <ospf-interface-replication>....</ospf-interface-replication>
</ospf-interface-replication-information>
```

Description OSPFv2 interface replication information

<ospf-interface-topology>

Usage

```
<ospf-interface-topology>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-topology-passive>
    ospf-topology-passive
  </ospf-topology-passive>
  <ospf-topology-disabled>
    ospf-topology-disabled
  </ospf-topology-disabled>
  <ospf-topology-down>
    ospf-topology-down
```


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```
  </ospf-topology-down>
  <ospf-topology-metric>
   ospf-topology-metric
  </ospf-topology-metric>
</ospf-interface-topology>
```

Description OSPF topology specific information for an interface

<ospf-interface-topology>

Usage

```
<ospf-interface>
  <ospf-interface-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-topology-passive>
      ospf-topology-passive
    </ospf-topology-passive>
    <ospf-topology-disabled>
      ospf-topology-disabled
    </ospf-topology-disabled>
    <ospf-topology-down>
      ospf-topology-down
    </ospf-topology-down>
    <ospf-topology-metric>
      ospf-topology-metric
    </ospf-topology-metric>
  </ospf-interface-topology>
</ospf-interface>
```

Description OSPF topology specific information for an interface

<ospf-interface-topology>

Usage

```
<ospf-interface-information>
  <ospf-interface>
    <ospf-interface-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-topology-passive>
        ospf-topology-passive
      </ospf-topology-passive>
      <ospf-topology-disabled>
```

```
            ospf-topology-disabled
           </ospf-topology-disabled>
           <ospf-topology-down>
            ospf-topology-down
           </ospf-topology-down>
           <ospf-topology-metric>
            ospf-topology-metric
           </ospf-topology-metric>
          </ospf-interface-topology>
         </ospf-interface>
        </ospf-interface-information>
```

Description OSPF topology specific information for an interface

<ospf-intf-header>

Usage

```
<ospf-intf-header>
 <ospf-intf>
  ospf-intf
 </ospf-intf>
 <ospf-area>
  ospf-area
 </ospf-area>
</ospf-intf-header>
```

Description

<ospf-intf-header>

Usage

```
<ospf-database-information>
 <ospf-intf-header>
  <ospf-intf>
   ospf-intf
  </ospf-intf>
  <ospf-area>
   ospf-area
  </ospf-area>
 </ospf-intf-header>
</ospf-database-information>
```

Description

<ospf-io-statistics>

Usage

```
<ospf-io-statistics>
 <packets-read>
  packets-read
 </packets-read>
 <average-per-run>
```


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```
    average-per-run
  </average-per-run>
  <max-run>
    max-run
  </max-run>
  <ospf-errors>....</ospf-errors>
</ospf-io-statistics>
```

Description

<ospf-io-statistics>

Usage

```
<ospf-io-statistics-information>
  <ospf-io-statistics>
    <packets-read>
      packets-read
    </packets-read>
    <average-per-run>
      average-per-run
    </average-per-run>
    <max-run>
      max-run
    </max-run>
    <ospf-errors>....</ospf-errors>
  </ospf-io-statistics>
</ospf-io-statistics-information>
```

Description

<ospf-io-statistics>

Usage

```
<ospf3-io-statistics-information>
  <ospf-io-statistics>
    <packets-read>
      packets-read
    </packets-read>
    <average-per-run>
      average-per-run
    </average-per-run>
    <max-run>
      max-run
    </max-run>
    <ospf-errors>....</ospf-errors>
  </ospf-io-statistics>
</ospf3-io-statistics-information>
```

Description

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<ospf-io-statistics-information>

Usage

```
<ospf-io-statistics-information>
  <ospf-io-statistics>....</ospf-io-statistics>
</ospf-io-statistics-information>
```

Description

<ospf-link>

Usage

```
<ospf-router-lsa>
  <ospf-link>
    <link-id>
      link-id
    </link-id>
    <link-data>
      link-data
    </link-data>
    <link-type-name>
      link-type-name
    </link-type-name>
    <link-type-value>
      link-type-value
    </link-type-value>
    <ospf-topology-count>
      ospf-topology-count
    </ospf-topology-count>
    <metric>
      metric
    </metric>
    <ospf-router-link-topology>....</ospf-router-link-topology>
  </ospf-link>
</ospf-router-lsa>
```

Description

<ospf-link>

Usage

```
<ospf-database>
  <ospf-router-lsa>
    <ospf-link>
      <link-id>
        link-id
      </link-id>
      <link-data>
        link-data
      </link-data>
      <link-type-name>
        link-type-name
      </link-type-name>
```


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```
      <link-type-value>
       link-type-value
      </link-type-value>
      <ospf-topology-count>
       ospf-topology-count
      </ospf-topology-count>
      <metric>
       metric
      </metric>
      <ospf-router-link-topology>....</ospf-router-link-topology>
     </ospf-link>
    </ospf-router-lsa>
   </ospf-database>
```

Description

<ospf-link>

Usage

```
<ospf-database-information>
 <ospf-database>
  <ospf-router-lsa>
   <ospf-link>
    <link-id>
     link-id
    </link-id>
    <link-data>
     link-data
    </link-data>
    <link-type-name>
     link-type-name
    </link-type-name>
    <link-type-value>
     link-type-value
    </link-type-value>
    <ospf-topology-count>
     ospf-topology-count
    </ospf-topology-count>
    <metric>
     metric
    </metric>
    <ospf-router-link-topology>....</ospf-router-link-topology>
   </ospf-link>
  </ospf-router-lsa>
 </ospf-database>
</ospf-database-information>
```

Description

<ospf-link-local-grace-lsa>

Usage

```
<ospf-opaque-link-local-lsa>
 <ospf-link-local-grace-lsa>
```

```
    <tlv-grace-type-name>
      tlv-grace-type-name
    </tlv-grace-type-name>
    <tlv-grace-value>
      tlv-grace-value
    </tlv-grace-value>
  </ospf-link-local-grace-lsa>
</ospf-opaque-link-local-lsa>
```

Description

<ospf-link-local-grace-lsa>

Usage

```
<ospf-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-grace-lsa>
      <tlv-grace-type-name>
        tlv-grace-type-name
      </tlv-grace-type-name>
      <tlv-grace-value>
        tlv-grace-value
      </tlv-grace-value>
    </ospf-link-local-grace-lsa>
  </ospf-opaque-link-local-lsa>
</ospf-database>
```

Description

<ospf-link-local-grace-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-grace-lsa>
        <tlv-grace-type-name>
          tlv-grace-type-name
        </tlv-grace-type-name>
        <tlv-grace-value>
          tlv-grace-value
        </tlv-grace-value>
      </ospf-link-local-grace-lsa>
    </ospf-opaque-link-local-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-link-local-grace-lsa>

Usage

```
<ospf3-database>
```


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```
<ospf-opaque-link-local-lsa>
 <ospf-link-local-grace-lsa>
  <tlv-grace-type-name>
   tlv-grace-type-name
  </tlv-grace-type-name>
  <tlv-grace-value>
   tlv-grace-value
  </tlv-grace-value>
 </ospf-link-local-grace-lsa>
</ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf-link-local-grace-lsa>

Usage

```
<ospf3-database-information>
 <ospf3-database>
  <ospf-opaque-link-local-lsa>
   <ospf-link-local-grace-lsa>
    <tlv-grace-type-name>
     tlv-grace-type-name
    </tlv-grace-type-name>
    <tlv-grace-value>
     tlv-grace-value
    </tlv-grace-value>
   </ospf-link-local-grace-lsa>
  </ospf-opaque-link-local-lsa>
 </ospf3-database>
</ospf3-database-information>
```

Description

<ospf-link-local-te-lsa>

Usage

```
<ospf-opaque-link-local-lsa>
 <ospf-link-local-te-lsa>
  <ospf-link-local-te-tlv>....</ospf-link-local-te-tlv>
  <ospf-link-local-te-subtlv>....</ospf-link-local-te-subtlv>
 </ospf-link-local-te-lsa>
</ospf-opaque-link-local-lsa>
```

Description

<ospf-link-local-te-lsa>

Usage

```
<ospf-database>
 <ospf-opaque-link-local-lsa>
  <ospf-link-local-te-lsa>
   <ospf-link-local-te-tlv>....</ospf-link-local-te-tlv>
```

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```
      <ospf-link-local-te-subtlv>....</ospf-link-local-te-subtlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf-database>
```

Description

<ospf-link-local-te-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-tlv>....</ospf-link-local-te-tlv>
        <ospf-link-local-te-subtlv>....</ospf-link-local-te-subtlv>
      </ospf-link-local-te-lsa>
    </ospf-opaque-link-local-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-link-local-te-lsa>

Usage

```
<ospf3-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-te-lsa>
      <ospf-link-local-te-tlv>....</ospf-link-local-te-tlv>
      <ospf-link-local-te-subtlv>....</ospf-link-local-te-subtlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf-link-local-te-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-tlv>....</ospf-link-local-te-tlv>
        <ospf-link-local-te-subtlv>....</ospf-link-local-te-subtlv>
      </ospf-link-local-te-lsa>
    </ospf-opaque-link-local-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

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<ospf-link-local-te-subtlv>

Usage

```
<ospf-link-local-te-subtlv>
  <link-local-te-tlv-type-name>
    link-local-te-tlv-type-name
  </link-local-te-tlv-type-name>
  <tlv-type-value>
    tlv-type-value
  </tlv-type-value>
  <tlv-length>
    tlv-length
  </tlv-length>
  <bytes-left>
    bytes-left
  </bytes-left>
  <formatted-tlv-data>
    formatted-tlv-data
  </formatted-tlv-data>
</ospf-link-local-te-subtlv>
```

Description

<ospf-link-local-te-subtlv>

Usage

```
<ospf-opaque-link-local-lsa>
  <ospf-link-local-te-lsa>
    <ospf-link-local-te-subtlv>
      <link-local-te-tlv-type-name>
        link-local-te-tlv-type-name
      </link-local-te-tlv-type-name>
      <tlv-type-value>
        tlv-type-value
      </tlv-type-value>
      <tlv-length>
        tlv-length
      </tlv-length>
      <bytes-left>
        bytes-left
      </bytes-left>
      <formatted-tlv-data>
        formatted-tlv-data
      </formatted-tlv-data>
    </ospf-link-local-te-subtlv>
  </ospf-link-local-te-lsa>
</ospf-opaque-link-local-lsa>
```

Description

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<ospf-link-local-te-subtlv>

Usage

```
<ospf-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-te-lsa>
      <ospf-link-local-te-subtlv>
        <link-local-te-tlv-type-name>
          link-local-te-tlv-type-name
        </link-local-te-tlv-type-name>
        <tlv-type-value>
          tlv-type-value
        </tlv-type-value>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </ospf-link-local-te-subtlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf-database>
```

Description

<ospf-link-local-te-subtlv>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-subtlv>
          <link-local-te-tlv-type-name>
            link-local-te-tlv-type-name
          </link-local-te-tlv-type-name>
          <tlv-type-value>
            tlv-type-value
          </tlv-type-value>
          <tlv-length>
            tlv-length
          </tlv-length>
          <bytes-left>
            bytes-left
          </bytes-left>
          <formatted-tlv-data>
            formatted-tlv-data
          </formatted-tlv-data>
        </ospf-link-local-te-subtlv>
      </ospf-link-local-te-lsa>
```


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```
    </ospf-opaque-link-local-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-link-local-te-subtlv>

Usage

```
<ospf3-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-te-lsa>
      <ospf-link-local-te-subtlv>
        <link-local-te-tlv-type-name>
          link-local-te-tlv-type-name
        </link-local-te-tlv-type-name>
        <tlv-type-value>
          tlv-type-value
        </tlv-type-value>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </ospf-link-local-te-subtlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf-link-local-te-subtlv>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-subtlv>
          <link-local-te-tlv-type-name>
            link-local-te-tlv-type-name
          </link-local-te-tlv-type-name>
          <tlv-type-value>
            tlv-type-value
          </tlv-type-value>
          <tlv-length>
            tlv-length
          </tlv-length>
          <bytes-left>
            bytes-left
```

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```
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </ospf-link-local-te-subtlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
 </ospf3-database>
</ospf3-database-information>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf-link-local-te-tlv>
 <link-local-te-tlv-type-name>
  link-local-te-tlv-type-name
 </link-local-te-tlv-type-name>
 <tlv-type-value>
  tlv-type-value
 </tlv-type-value>
 <tlv-length>
  tlv-length
 </tlv-length>
 <bytes-left>
  bytes-left
 </bytes-left>
 <formatted-tlv-data>
  formatted-tlv-data
 </formatted-tlv-data>
</ospf-link-local-te-tlv>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf-opaque-link-local-lsa>
 <ospf-link-local-te-lsa>
  <ospf-link-local-te-tlv>
   <link-local-te-tlv-type-name>
    link-local-te-tlv-type-name
   </link-local-te-tlv-type-name>
   <tlv-type-value>
    tlv-type-value
   </tlv-type-value>
   <tlv-length>
    tlv-length
   </tlv-length>
   <bytes-left>
    bytes-left
   </bytes-left>
   <formatted-tlv-data>
```


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```
                formatted-tlv-data
              </formatted-tlv-data>
            </ospf-link-local-te-tlv>
          </ospf-link-local-te-lsa>
        </ospf-opaque-link-local-lsa>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-te-lsa>
      <ospf-link-local-te-tlv>
        <link-local-te-tlv-type-name>
          link-local-te-tlv-type-name
        </link-local-te-tlv-type-name>
        <tlv-type-value>
          tlv-type-value
        </tlv-type-value>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </ospf-link-local-te-tlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf-database>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-tlv>
          <link-local-te-tlv-type-name>
            link-local-te-tlv-type-name
          </link-local-te-tlv-type-name>
          <tlv-type-value>
            tlv-type-value
          </tlv-type-value>
          <tlv-length>
            tlv-length
          </tlv-length>
```

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```
            <bytes-left>
              bytes-left
            </bytes-left>
            <formatted-tlv-data>
              formatted-tlv-data
            </formatted-tlv-data>
          </ospf-link-local-te-tlv>
        </ospf-link-local-te-lsa>
      </ospf-opaque-link-local-lsa>
    </ospf-database>
  </ospf-database-information>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf3-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-te-lsa>
      <ospf-link-local-te-tlv>
        <link-local-te-tlv-type-name>
          link-local-te-tlv-type-name
        </link-local-te-tlv-type-name>
        <tlv-type-value>
          tlv-type-value
        </tlv-type-value>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </ospf-link-local-te-tlv>
    </ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf-link-local-te-tlv>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-te-lsa>
        <ospf-link-local-te-tlv>
          <link-local-te-tlv-type-name>
            link-local-te-tlv-type-name
          </link-local-te-tlv-type-name>
```


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```
            <tlv-type-value>
              tlv-type-value
            </tlv-type-value>
            <tlv-length>
              tlv-length
            </tlv-length>
            <bytes-left>
              bytes-left
            </bytes-left>
            <formatted-tlv-data>
              formatted-tlv-data
            </formatted-tlv-data>
          </ospf-link-local-te-tlv>
        </ospf-link-local-te-lsa>
      </ospf-opaque-link-local-lsa>
    </ospf3-database>
  </ospf3-database-information>
```

Description

<ospf-log-events>

Usage

```
<ospf-log-events>
  <log-element>....</log-element>
  <number-events>
    number-events
  </number-events>
</ospf-log-events>
```

Description

<ospf-log-events>

Usage

```
<ospf-topology-log>
  <ospf-log-events>
    <log-element>....</log-element>
    <number-events>
      number-events
    </number-events>
  </ospf-log-events>
</ospf-topology-log>
```

Description

<ospf-log-events>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-events>
      <log-element>....</log-element>
```

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```
      <number-events>
        number-events
      </number-events>
    </ospf-log-events>
  </ospf-topology-log>
</ospf-log-information>
```

Description

<ospf-log-events>

Usage

```
<ospf3-log-information>
  <ospf-log-events>
    <log-element>....</log-element>
    <number-events>
      number-events
    </number-events>
  </ospf-log-events>
</ospf3-log-information>
```

Description

<ospf-log-information>

Usage

```
<ospf-log-information>
  <ospf-topology-log>....</ospf-topology-log>
</ospf-log-information>
```

Description

<ospf-log-instance>

Usage

```
<ospf-log-instance>
  <log-element>....</log-element>
</ospf-log-instance>
```

Description

<ospf-log-instance>

Usage

```
<ospf-topology-log>
  <ospf-log-instance>
    <log-element>....</log-element>
  </ospf-log-instance>
</ospf-topology-log>
```

Description

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<ospf-log-instance>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-instance>
      <log-element>....</log-element>
    </ospf-log-instance>
  </ospf-topology-log>
</ospf-log-information>
```

Description

<ospf-log-instance>

Usage

```
<ospf3-log-information>
  <ospf-log-instance>
    <log-element>....</log-element>
  </ospf-log-instance>
</ospf3-log-information>
```

Description

<ospf-log-maximum-length>

Usage

```
<ospf-log-maximum-length>
  <log-element>....</log-element>
</ospf-log-maximum-length>
```

Description

<ospf-log-maximum-length>

Usage

```
<ospf-topology-log>
  <ospf-log-maximum-length>
    <log-element>....</log-element>
  </ospf-log-maximum-length>
</ospf-topology-log>
```

Description

<ospf-log-maximum-length>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-log-maximum-length>
      <log-element>....</log-element>
    </ospf-log-maximum-length>
```

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```
  </ospf-topology-log>
</ospf-log-information>
```

Description

<ospf-log-maximum-length>

Usage

```
<ospf3-log-information>
  <ospf-log-maximum-length>
    <log-element>....</log-element>
  </ospf-log-maximum-length>
</ospf3-log-information>
```

Description

<ospf-lsa-topology>

Usage

```
<ospf-lsa-topology>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
</ospf-lsa-topology>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology>

Usage

```
<ospf-router-lsa>
  <ospf-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
  </ospf-lsa-topology>
</ospf-router-lsa>
```

Description OSPF topology information for a LSA

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<ospf-lsa-topology>

Usage

```
<ospf-network-lsa>
  <ospf-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
  </ospf-lsa-topology>
</ospf-network-lsa>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology>

Usage

```
<ospf-database>
  <ospf-router-lsa>
    <ospf-lsa-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
    </ospf-lsa-topology>
  </ospf-router-lsa>
</ospf-database>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology>

Usage

```
<ospf-database>
  <ospf-network-lsa>
    <ospf-lsa-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
    </ospf-lsa-topology>
  </ospf-network-lsa>
```

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```
</ospf-database>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-router-lsa>
      <ospf-lsa-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
      </ospf-lsa-topology>
    </ospf-router-lsa>
  </ospf-database>
</ospf-database-information>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-network-lsa>
      <ospf-lsa-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
      </ospf-lsa-topology>
    </ospf-network-lsa>
  </ospf-database>
</ospf-database-information>
```

Description OSPF topology information for a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-lsa-topology-link>
  <link-type-name>
```


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```
  link-type-name
 </link-type-name>
 <ospf-lsa-topology-link-node-id>
  ospf-lsa-topology-link-node-id
 </ospf-lsa-topology-link-node-id>
 <ospf-lsa-topology-link-metric>
  ospf-lsa-topology-link-metric
 </ospf-lsa-topology-link-metric>
 <ospf-lsa-topology-link-state>
  ospf-lsa-topology-link-state
 </ospf-lsa-topology-link-state>
</ospf-lsa-topology-link>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-lsa-topology>
 <ospf-lsa-topology-link>
  <link-type-name>
   link-type-name
  </link-type-name>
  <ospf-lsa-topology-link-node-id>
   ospf-lsa-topology-link-node-id
  </ospf-lsa-topology-link-node-id>
  <ospf-lsa-topology-link-metric>
   ospf-lsa-topology-link-metric
  </ospf-lsa-topology-link-metric>
  <ospf-lsa-topology-link-state>
   ospf-lsa-topology-link-state
  </ospf-lsa-topology-link-state>
 </ospf-lsa-topology-link>
</ospf-lsa-topology>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-router-lsa>
 <ospf-lsa-topology>
  <ospf-lsa-topology-link>
   <link-type-name>
    link-type-name
   </link-type-name>
   <ospf-lsa-topology-link-node-id>
    ospf-lsa-topology-link-node-id
   </ospf-lsa-topology-link-node-id>
   <ospf-lsa-topology-link-metric>
    ospf-lsa-topology-link-metric
   </ospf-lsa-topology-link-metric>
```

```
        <ospf-lsa-topology-link-state>
          ospf-lsa-topology-link-state
        </ospf-lsa-topology-link-state>
      </ospf-lsa-topology-link>
    </ospf-lsa-topology>
  </ospf-router-lsa>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-network-lsa>
  <ospf-lsa-topology>
    <ospf-lsa-topology-link>
      <link-type-name>
        link-type-name
      </link-type-name>
      <ospf-lsa-topology-link-node-id>
        ospf-lsa-topology-link-node-id
      </ospf-lsa-topology-link-node-id>
      <ospf-lsa-topology-link-metric>
        ospf-lsa-topology-link-metric
      </ospf-lsa-topology-link-metric>
      <ospf-lsa-topology-link-state>
        ospf-lsa-topology-link-state
      </ospf-lsa-topology-link-state>
    </ospf-lsa-topology-link>
  </ospf-lsa-topology>
</ospf-network-lsa>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-database>
  <ospf-router-lsa>
    <ospf-lsa-topology>
      <ospf-lsa-topology-link>
        <link-type-name>
          link-type-name
        </link-type-name>
        <ospf-lsa-topology-link-node-id>
          ospf-lsa-topology-link-node-id
        </ospf-lsa-topology-link-node-id>
        <ospf-lsa-topology-link-metric>
          ospf-lsa-topology-link-metric
        </ospf-lsa-topology-link-metric>
        <ospf-lsa-topology-link-state>
          ospf-lsa-topology-link-state
        </ospf-lsa-topology-link-state>
```

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```
      </ospf-lsa-topology-link>
    </ospf-lsa-topology>
  </ospf-router-lsa>
</ospf-database>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-database>
  <ospf-network-lsa>
    <ospf-lsa-topology>
      <ospf-lsa-topology-link>
        <link-type-name>
          link-type-name
        </link-type-name>
        <ospf-lsa-topology-link-node-id>
          ospf-lsa-topology-link-node-id
        </ospf-lsa-topology-link-node-id>
        <ospf-lsa-topology-link-metric>
          ospf-lsa-topology-link-metric
        </ospf-lsa-topology-link-metric>
        <ospf-lsa-topology-link-state>
          ospf-lsa-topology-link-state
        </ospf-lsa-topology-link-state>
      </ospf-lsa-topology-link>
    </ospf-lsa-topology>
  </ospf-network-lsa>
</ospf-database>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-router-lsa>
      <ospf-lsa-topology>
        <ospf-lsa-topology-link>
          <link-type-name>
            link-type-name
          </link-type-name>
          <ospf-lsa-topology-link-node-id>
            ospf-lsa-topology-link-node-id
          </ospf-lsa-topology-link-node-id>
          <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
          </ospf-lsa-topology-link-metric>
          <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
```

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```
            </ospf-lsa-topology-link-state>
          </ospf-lsa-topology-link>
        </ospf-lsa-topology>
      </ospf-router-lsa>
    </ospf-database>
  </ospf-database-information>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-network-lsa>
      <ospf-lsa-topology>
        <ospf-lsa-topology-link>
          <link-type-name>
            link-type-name
          </link-type-name>
          <ospf-lsa-topology-link-node-id>
            ospf-lsa-topology-link-node-id
          </ospf-lsa-topology-link-node-id>
          <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
          </ospf-lsa-topology-link-metric>
          <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
          </ospf-lsa-topology-link-state>
        </ospf-lsa-topology-link>
      </ospf-lsa-topology>
    </ospf-network-lsa>
  </ospf-database>
</ospf-database-information>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-lsa-topology>
  <ospf-lsa-topology-link>
    <link-type-name>
      link-type-name
    </link-type-name>
    <ospf-lsa-topology-link-node-id>
      ospf-lsa-topology-link-node-id
    </ospf-lsa-topology-link-node-id>
    <ospf-lsa-topology-link-metric>
      ospf-lsa-topology-link-metric
    </ospf-lsa-topology-link-metric>
    <ospf-lsa-topology-link-state>
```


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```
      ospf-lsa-topology-link-state
    </ospf-lsa-topology-link-state>
  </ospf-lsa-topology-link>
</ospf3-lsa-topology>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-router-lsa>
  <ospf3-lsa-topology>
    <ospf-lsa-topology-link>
      <link-type-name>
        link-type-name
      </link-type-name>
      <ospf-lsa-topology-link-node-id>
        ospf-lsa-topology-link-node-id
      </ospf-lsa-topology-link-node-id>
      <ospf-lsa-topology-link-metric>
        ospf-lsa-topology-link-metric
      </ospf-lsa-topology-link-metric>
      <ospf-lsa-topology-link-state>
        ospf-lsa-topology-link-state
      </ospf-lsa-topology-link-state>
    </ospf-lsa-topology-link>
  </ospf3-lsa-topology>
</ospf3-router-lsa>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-network-lsa>
  <ospf3-lsa-topology>
    <ospf-lsa-topology-link>
      <link-type-name>
        link-type-name
      </link-type-name>
      <ospf-lsa-topology-link-node-id>
        ospf-lsa-topology-link-node-id
      </ospf-lsa-topology-link-node-id>
      <ospf-lsa-topology-link-metric>
        ospf-lsa-topology-link-metric
      </ospf-lsa-topology-link-metric>
      <ospf-lsa-topology-link-state>
        ospf-lsa-topology-link-state
      </ospf-lsa-topology-link-state>
    </ospf-lsa-topology-link>
  </ospf3-lsa-topology>
```

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```
</ospf3-network-lsa>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-database>
  <ospf3-router-lsa>
    <ospf3-lsa-topology>
      <ospf-lsa-topology-link>
        <link-type-name>
          link-type-name
        </link-type-name>
        <ospf-lsa-topology-link-node-id>
          ospf-lsa-topology-link-node-id
        </ospf-lsa-topology-link-node-id>
        <ospf-lsa-topology-link-metric>
          ospf-lsa-topology-link-metric
        </ospf-lsa-topology-link-metric>
        <ospf-lsa-topology-link-state>
          ospf-lsa-topology-link-state
        </ospf-lsa-topology-link-state>
      </ospf-lsa-topology-link>
    </ospf3-lsa-topology>
  </ospf3-router-lsa>
</ospf3-database>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-database>
  <ospf3-network-lsa>
    <ospf3-lsa-topology>
      <ospf-lsa-topology-link>
        <link-type-name>
          link-type-name
        </link-type-name>
        <ospf-lsa-topology-link-node-id>
          ospf-lsa-topology-link-node-id
        </ospf-lsa-topology-link-node-id>
        <ospf-lsa-topology-link-metric>
          ospf-lsa-topology-link-metric
        </ospf-lsa-topology-link-metric>
        <ospf-lsa-topology-link-state>
          ospf-lsa-topology-link-state
        </ospf-lsa-topology-link-state>
      </ospf-lsa-topology-link>
    </ospf3-lsa-topology>
  </ospf3-network-lsa>
```


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```
</ospf3-database>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-router-lsa>
      <ospf3-lsa-topology>
        <ospf-lsa-topology-link>
          <link-type-name>
            link-type-name
          </link-type-name>
          <ospf-lsa-topology-link-node-id>
            ospf-lsa-topology-link-node-id
          </ospf-lsa-topology-link-node-id>
          <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
          </ospf-lsa-topology-link-metric>
          <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
          </ospf-lsa-topology-link-state>
        </ospf-lsa-topology-link>
      </ospf3-lsa-topology>
    </ospf3-router-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description OSPF topology information for a set of links to a LSA

<ospf-lsa-topology-link>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-network-lsa>
      <ospf3-lsa-topology>
        <ospf-lsa-topology-link>
          <link-type-name>
            link-type-name
          </link-type-name>
          <ospf-lsa-topology-link-node-id>
            ospf-lsa-topology-link-node-id
          </ospf-lsa-topology-link-node-id>
          <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
          </ospf-lsa-topology-link-metric>
          <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
          </ospf-lsa-topology-link-state>
```

```
            </ospf-lsa-topology-link>
          </ospf3-lsa-topology>
        </ospf3-network-lsa>
      </ospf3-database>
    </ospf3-database-information>
```

Description OSPF topology information for a set of links to a LSA

<ospf-nbr-overview>

Usage

```
<ospf-overview>
  <ospf-area-overview>
    <ospf-nbr-overview>
      <ospf-nbr-up-count>
        ospf-nbr-up-count
      </ospf-nbr-up-count>
    </ospf-nbr-overview>
  </ospf-area-overview>
</ospf-overview>
```

Description

<ospf-nbr-overview>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <ospf-area-overview>
      <ospf-nbr-overview>
        <ospf-nbr-up-count>
          ospf-nbr-up-count
        </ospf-nbr-up-count>
      </ospf-nbr-overview>
    </ospf-area-overview>
  </ospf-overview>
</ospf-overview-information>
```

Description

<ospf-nbr-overview>

Usage

```
<ospf3-overview-information>
  <ospf-overview>
    <ospf-area-overview>
      <ospf-nbr-overview>
        <ospf-nbr-up-count>
          ospf-nbr-up-count
        </ospf-nbr-up-count>
      </ospf-nbr-overview>
    </ospf-area-overview>
```


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```
  </ospf-overview>
</ospf3-overview-information>
```

Description

<ospf-neighbor>

Usage

```
<ospf-neighbor>
  <neighbor-address>
    neighbor-address
  </neighbor-address>
  <interface-name>
    interface-name
  </interface-name>
  <ospf-neighbor-state>
    ospf-neighbor-state
  </ospf-neighbor-state>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <neighbor-priority>
    neighbor-priority
  </neighbor-priority>
  <activity-timer>
    activity-timer
  </activity-timer>
  <ospf-area>
    ospf-area
  </ospf-area>
  <options>
    options
  </options>
  <neighbor-secondary>
    neighbor-secondary
  </neighbor-secondary>
  <neighbor-cost>
    neighbor-cost
  </neighbor-cost>
  <dr-address>
    dr-address
  </dr-address>
  <bdr-address>
    bdr-address
  </bdr-address>
  <neighbor-up-time>
    neighbor-up-time
  </neighbor-up-time>
  <neighbor-adjacency-time>
    neighbor-adjacency-time
  </neighbor-adjacency-time>
  <neighbor-last-out-of-band-resync-time>
    neighbor-last-out-of-band-resync-time
  </neighbor-last-out-of-band-resync-time>
  <neighbor-suppress-hello>
```

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```
    neighbor-suppress-hello
  </neighbor-suppress-hello>
  <master-slave>
    master-slave
  </master-slave>
  <sequence-number>
    sequence-number
  </sequence-number>
  <dbd-retransmit-time>
    dbd-retransmit-time
  </dbd-retransmit-time>
  <lsreq-retransmit-time>
    lsreq-retransmit-time
  </lsreq-retransmit-time>
  <lsreq-enqueued>
    lsreq-enqueued
  </lsreq-enqueued>
  <lsreq-active>
    lsreq-active
  </lsreq-active>
  <lsa-list>
    lsa-list
  </lsa-list>
  <ospf-neighbor-topology>....</ospf-neighbor-topology>
</ospf-neighbor>
```

Description

<ospf-neighbor>

Usage

```
<ospf-neighbor-information>
  <ospf-neighbor>
    <neighbor-address>
      neighbor-address
    </neighbor-address>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-neighbor-state>
      ospf-neighbor-state
    </ospf-neighbor-state>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <neighbor-priority>
      neighbor-priority
    </neighbor-priority>
    <activity-timer>
      activity-timer
    </activity-timer>
    <ospf-area>
      ospf-area
    </ospf-area>
    <options>
```


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```
      options
    </options>
    <neighbor-secondary>
      neighbor-secondary
    </neighbor-secondary>
    <neighbor-cost>
      neighbor-cost
    </neighbor-cost>
    <dr-address>
      dr-address
    </dr-address>
    <bdr-address>
      bdr-address
    </bdr-address>
    <neighbor-up-time>
      neighbor-up-time
    </neighbor-up-time>
    <neighbor-adjacency-time>
      neighbor-adjacency-time
    </neighbor-adjacency-time>
    <neighbor-last-out-of-band-resync-time>
      neighbor-last-out-of-band-resync-time
    </neighbor-last-out-of-band-resync-time>
    <neighbor-suppress-hello>
      neighbor-suppress-hello
    </neighbor-suppress-hello>
    <master-slave>
      master-slave
    </master-slave>
    <sequence-number>
      sequence-number
    </sequence-number>
    <dbd-retransmit-time>
      dbd-retransmit-time
    </dbd-retransmit-time>
    <lsreq-retransmit-time>
      lsreq-retransmit-time
    </lsreq-retransmit-time>
    <lsreq-enqueued>
      lsreq-enqueued
    </lsreq-enqueued>
    <lsreq-active>
      lsreq-active
    </lsreq-active>
    <lsa-list>
      lsa-list
    </lsa-list>
    <ospf-neighbor-topology>....</ospf-neighbor-topology>
  </ospf-neighbor>
</ospf-neighbor-information>
```

Description

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<ospf-neighbor>

Usage

```
<ospf-neighbor-information-all>
  <ospf-instance-neighbor>
    <ospf-neighbor>
      <neighbor-address>
        neighbor-address
      </neighbor-address>
      <interface-name>
        interface-name
      </interface-name>
      <ospf-neighbor-state>
        ospf-neighbor-state
      </ospf-neighbor-state>
      <neighbor-id>
        neighbor-id
      </neighbor-id>
      <neighbor-priority>
        neighbor-priority
      </neighbor-priority>
      <activity-timer>
        activity-timer
      </activity-timer>
      <ospf-area>
        ospf-area
      </ospf-area>
      <options>
        options
      </options>
      <neighbor-secondary>
        neighbor-secondary
      </neighbor-secondary>
      <neighbor-cost>
        neighbor-cost
      </neighbor-cost>
      <dr-address>
        dr-address
      </dr-address>
      <bdr-address>
        bdr-address
      </bdr-address>
      <neighbor-up-time>
        neighbor-up-time
      </neighbor-up-time>
      <neighbor-adjacency-time>
        neighbor-adjacency-time
      </neighbor-adjacency-time>
      <neighbor-last-out-of-band-resync-time>
        neighbor-last-out-of-band-resync-time
      </neighbor-last-out-of-band-resync-time>
      <neighbor-suppress-hello>
        neighbor-suppress-hello
      </neighbor-suppress-hello>
      <master-slave>
```


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```
      master-slave
    </master-slave>
    <sequence-number>
      sequence-number
    </sequence-number>
    <dbd-retransmit-time>
      dbd-retransmit-time
    </dbd-retransmit-time>
    <lsreq-retransmit-time>
      lsreq-retransmit-time
    </lsreq-retransmit-time>
    <lsreq-enqueued>
      lsreq-enqueued
    </lsreq-enqueued>
    <lsreq-active>
      lsreq-active
    </lsreq-active>
    <lsa-list>
      lsa-list
    </lsa-list>
    <ospf-neighbor-topology>....</ospf-neighbor-topology>
   </ospf-neighbor>
  </ospf-instance-neighbor>
</ospf-neighbor-information-all>
```

Description

<ospf-neighbor-information>

Usage

```
<ospf-neighbor-information>
  <ospf-neighbor>....</ospf-neighbor>
</ospf-neighbor-information>
```

Description Information about OSPF neighbors in a routing instance

<ospf-neighbor-information-all>

Usage

```
<ospf-neighbor-information-all>
  <ospf-instance-neighbor>....</ospf-instance-neighbor>
</ospf-neighbor-information-all>
```

Description Information about OSPF neighbors in all routing instances

<ospf-neighbor-replication>

Usage

```
<ospf-neighbor-replication>
  <interface-name>
    interface-name
```

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```
</interface-name>
<ospf-area>
  ospf-area
</ospf-area>
<neighbor-id>
  neighbor-id
</neighbor-id>
<ospf-synchronization-state>
  ospf-synchronization-state
</ospf-synchronization-state>
<ospf-neighbor-state>
  ospf-neighbor-state
</ospf-neighbor-state>
<ospf-ifl-index>
  ospf-ifl-index
</ospf-ifl-index>
<ospf-route-table-index>
  ospf-route-table-index
</ospf-route-table-index>
<ospf-unsync-reason>
  ospf-unsync-reason
</ospf-unsync-reason>
</ospf-neighbor-replication>
```

Description OSPF neighbor replication information

<ospf-neighbor-replication>

Usage

```
<ospf-neighbor-replication-information>
  <ospf-neighbor-replication>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-area>
      ospf-area
    </ospf-area>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-neighbor-state>
      ospf-neighbor-state
    </ospf-neighbor-state>
    <ospf-ifl-index>
      ospf-ifl-index
    </ospf-ifl-index>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-unsync-reason>
      ospf-unsync-reason
```


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```
    </ospf-unsync-reason>
  </ospf-neighbor-replication>
</ospf-neighbor-replication-information>
```

Description OSPF neighbor replication information

<ospf-neighbor-replication>

Usage

```
<ospf3-neighbor-replication-information>
  <ospf-neighbor-replication>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-area>
      ospf-area
    </ospf-area>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <ospf-synchronization-state>
      ospf-synchronization-state
    </ospf-synchronization-state>
    <ospf-neighbor-state>
      ospf-neighbor-state
    </ospf-neighbor-state>
    <ospf-ifl-index>
      ospf-ifl-index
    </ospf-ifl-index>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-unsync-reason>
      ospf-unsync-reason
    </ospf-unsync-reason>
  </ospf-neighbor-replication>
</ospf3-neighbor-replication-information>
```

Description OSPF neighbor replication information

<ospf-neighbor-replication-information>

Usage

```
<ospf-neighbor-replication-information>
  <ospf-neighbor-replication>....</ospf-neighbor-replication>
</ospf-neighbor-replication-information>
```

Description OSPFv2 neighbor replication information

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<ospf-neighbor-topology>

Usage

```
<ospf-neighbor-topology>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-neighbor-topology-state>
    ospf-neighbor-topology-state
  </ospf-neighbor-topology-state>
</ospf-neighbor-topology>
```

Description OSPF topology specific neighbor information

<ospf-neighbor-topology>

Usage

```
<ospf-neighbor>
  <ospf-neighbor-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-neighbor-topology-state>
      ospf-neighbor-topology-state
    </ospf-neighbor-topology-state>
  </ospf-neighbor-topology>
</ospf-neighbor>
```

Description OSPF topology specific neighbor information

<ospf-neighbor-topology>

Usage

```
<ospf-neighbor-information>
  <ospf-neighbor>
    <ospf-neighbor-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-neighbor-topology-state>
        ospf-neighbor-topology-state
      </ospf-neighbor-topology-state>
    </ospf-neighbor-topology>
```


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```
  </ospf-neighbor>
</ospf-neighbor-information>
```

Description OSPF topology specific neighbor information

<ospf-neighbor-topology>

Usage

```
<ospf-neighbor-information-all>
  <ospf-instance-neighbor>
    <ospf-neighbor>
      <ospf-neighbor-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-neighbor-topology-state>
          ospf-neighbor-topology-state
        </ospf-neighbor-topology-state>
      </ospf-neighbor-topology>
    </ospf-neighbor>
  </ospf-instance-neighbor>
</ospf-neighbor-information-all>
```

Description OSPF topology specific neighbor information

<ospf-network-lsa>

Usage

```
<ospf-network-lsa>
  <address-mask>
    address-mask
  </address-mask>
  <attached-router>
    attached-router
  </attached-router>
  <ospf-lsa-topology>....</ospf-lsa-topology>
</ospf-network-lsa>
```

Description

<ospf-network-lsa>

Usage

```
<ospf-database>
  <ospf-network-lsa>
    <address-mask>
      address-mask
    </address-mask>
```

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```
    <attached-router>
     attached-router
    </attached-router>
    <ospf-lsa-topology>....</ospf-lsa-topology>
   </ospf-network-lsa>
</ospf-database>
```

Description

<ospf-network-lsa>

Usage

```
<ospf-database-information>
 <ospf-database>
  <ospf-network-lsa>
   <address-mask>
    address-mask
   </address-mask>
   <attached-router>
    attached-router
   </attached-router>
   <ospf-lsa-topology>....</ospf-lsa-topology>
  </ospf-network-lsa>
 </ospf-database>
</ospf-database-information>
```

Description

<ospf-next-hop>

Usage

```
<ospf-next-hop>
 <next-hop-name>....</next-hop-name>
 <next-hop-address>....</next-hop-address>
</ospf-next-hop>
```

Description

<ospf-next-hop>

Usage

```
<ospf-route>
 <ospf-route-entry>
  <ospf-next-hop>
   <next-hop-name>....</next-hop-name>
   <next-hop-address>....</next-hop-address>
  </ospf-next-hop>
 </ospf-route-entry>
</ospf-route>
```

Description

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<ospf-next-hop>

Usage

```
<ospf-topology-route-table>
  <ospf-route>
    <ospf-route-entry>
      <ospf-next-hop>
        <next-hop-name>....</next-hop-name>
        <next-hop-address>....</next-hop-address>
      </ospf-next-hop>
    </ospf-route-entry>
  </ospf-route>
</ospf-topology-route-table>
```

Description

<ospf-next-hop>

Usage

```
<ospf-route-information>
  <ospf-topology-route-table>
    <ospf-route>
      <ospf-route-entry>
        <ospf-next-hop>
          <next-hop-name>....</next-hop-name>
          <next-hop-address>....</next-hop-address>
        </ospf-next-hop>
      </ospf-route-entry>
    </ospf-route>
  </ospf-topology-route-table>
</ospf-route-information>
```

Description

<ospf-next-hop>

Usage

```
<ospf-backup-spf-node>
  <ospf-next-hop>
    <next-hop-name>....</next-hop-name>
    <next-hop-address>....</next-hop-address>
  </ospf-next-hop>
</ospf-backup-spf-node>
```

Description

<ospf-next-hop>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
    <ospf-next-hop>
```

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```
      <next-hop-name>....</next-hop-name>
      <next-hop-address>....</next-hop-address>
    </ospf-next-hop>
  </ospf-backup-spf-node>
</ospf-topology-area-backup-spf>
```

Description

<ospf-next-hop>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
    <ospf-backup-spf-node>
      <ospf-next-hop>
        <next-hop-name>....</next-hop-name>
        <next-hop-address>....</next-hop-address>
      </ospf-next-hop>
    </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description

<ospf-next-hop>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-area-backup-spf>
      <ospf-backup-spf-node>
        <ospf-next-hop>
          <next-hop-name>....</next-hop-name>
          <next-hop-address>....</next-hop-address>
        </ospf-next-hop>
      </ospf-backup-spf-node>
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-route>
  <ospf3-route-entry>
    <ospf-next-hop>
      <next-hop-name>....</next-hop-name>
      <next-hop-address>....</next-hop-address>
    </ospf-next-hop>
  </ospf3-route-entry>
```


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```
</ospf3-route>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>
      <ospf-next-hop>
        <next-hop-name>....</next-hop-name>
        <next-hop-address>....</next-hop-address>
      </ospf-next-hop>
    </ospf3-route-entry>
  </ospf3-route>
</ospf3-route-information>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-backup-spf-node>
  <ospf-next-hop>
    <next-hop-name>....</next-hop-name>
    <next-hop-address>....</next-hop-address>
  </ospf-next-hop>
</ospf3-backup-spf-node>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf-next-hop>
      <next-hop-name>....</next-hop-name>
      <next-hop-address>....</next-hop-address>
    </ospf-next-hop>
  </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
```

```
      <ospf-next-hop>
        <next-hop-name>....</next-hop-name>
        <next-hop-address>....</next-hop-address>
      </ospf-next-hop>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description

<ospf-next-hop>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf-next-hop>
          <next-hop-name>....</next-hop-name>
          <next-hop-address>....</next-hop-address>
        </ospf-next-hop>
      </ospf3-backup-spf-node>
    </ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description

<ospf-node-id>

Usage

```
<ospf-node-id>
  <advertising-router>
    advertising-router
  </advertising-router>
  <lsa-id>
    lsa-id
  </lsa-id>
</ospf-node-id>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf-backup-spf-node>
  <ospf-node-id>
    <advertising-router>
      advertising-router
    </advertising-router>
    <lsa-id>
      lsa-id
```


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```
    </lsa-id>
   </ospf-node-id>
  </ospf-backup-spf-node>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf-topology-area-backup-spf>
 <ospf-backup-spf-node>
  <ospf-node-id>
   <advertising-router>
    advertising-router
   </advertising-router>
   <lsa-id>
    lsa-id
   </lsa-id>
  </ospf-node-id>
 </ospf-backup-spf-node>
</ospf-topology-area-backup-spf>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf-topology-backup-spf>
 <ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
   <ospf-node-id>
    <advertising-router>
     advertising-router
    </advertising-router>
    <lsa-id>
     lsa-id
    </lsa-id>
   </ospf-node-id>
  </ospf-backup-spf-node>
 </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf-backup-spf-information>
 <ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
   <ospf-backup-spf-node>
```

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```
            <ospf-node-id>
              <advertising-router>
                advertising-router
              </advertising-router>
              <lsa-id>
                lsa-id
              </lsa-id>
            </ospf-node-id>
          </ospf-backup-spf-node>
        </ospf-topology-area-backup-spf>
      </ospf-topology-backup-spf>
    </ospf-backup-spf-information>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf3-backup-spf-node>
  <ospf-node-id>
    <advertising-router>
      advertising-router
    </advertising-router>
    <lsa-id>
      lsa-id
    </lsa-id>
  </ospf-node-id>
</ospf3-backup-spf-node>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf-node-id>
      <advertising-router>
        advertising-router
      </advertising-router>
      <lsa-id>
        lsa-id
      </lsa-id>
    </ospf-node-id>
  </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description OSPF node ID

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<ospf-node-id>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
      <ospf-node-id>
        <advertising-router>
          advertising-router
        </advertising-router>
        <lsa-id>
          lsa-id
        </lsa-id>
      </ospf-node-id>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description OSPF node ID

<ospf-node-id>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf-node-id>
          <advertising-router>
            advertising-router
          </advertising-router>
          <lsa-id>
            lsa-id
          </lsa-id>
        </ospf-node-id>
      </ospf3-backup-spf-node>
    </ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description OSPF node ID

<ospf-opaque-area-lsa>

Usage

```
<ospf-opaque-area-lsa>
  <tlv-block>....</tlv-block>
  <te-subtlv>....</te-subtlv>
</ospf-opaque-area-lsa>
```

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Description

<ospf-opaque-area-lsa>

Usage

```
<ospf-database>
  <ospf-opaque-area-lsa>
    <tlv-block>....</tlv-block>
    <te-subtlv>....</te-subtlv>
  </ospf-opaque-area-lsa>
</ospf-database>
```

Description

<ospf-opaque-area-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-area-lsa>
      <tlv-block>....</tlv-block>
      <te-subtlv>....</te-subtlv>
    </ospf-opaque-area-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-opaque-link-local-lsa>

Usage

```
<ospf-opaque-link-local-lsa>
  <ospf-link-local-grace-lsa>....</ospf-link-local-grace-lsa>
  <ospf-link-local-te-lsa>....</ospf-link-local-te-lsa>
</ospf-opaque-link-local-lsa>
```

Description

<ospf-opaque-link-local-lsa>

Usage

```
<ospf-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-grace-lsa>....</ospf-link-local-grace-lsa>
    <ospf-link-local-te-lsa>....</ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf-database>
```

Description

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<ospf-opaque-link-local-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-grace-lsa>....</ospf-link-local-grace-lsa>
      <ospf-link-local-te-lsa>....</ospf-link-local-te-lsa>
    </ospf-opaque-link-local-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-opaque-link-local-lsa>

Usage

```
<ospf3-database>
  <ospf-opaque-link-local-lsa>
    <ospf-link-local-grace-lsa>....</ospf-link-local-grace-lsa>
    <ospf-link-local-te-lsa>....</ospf-link-local-te-lsa>
  </ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf-opaque-link-local-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf-opaque-link-local-lsa>
      <ospf-link-local-grace-lsa>....</ospf-link-local-grace-lsa>
      <ospf-link-local-te-lsa>....</ospf-link-local-te-lsa>
    </ospf-opaque-link-local-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf-overview>

Usage

```
<ospf-overview>
  <instance-name>
    instance-name
  </instance-name>
  <ospf-router-id>
    ospf-router-id
  </ospf-router-id>
  <ospf-route-table-index>
    ospf-route-table-index
```

```
</ospf-route-table-index>
<ospf-configured-overload>
  ospf-configured-overload
</ospf-configured-overload>
<ospf-configured-overload-remaining-time>
  ospf-configured-overload-remaining-time
</ospf-configured-overload-remaining-time>
<ospf-abr>
  ospf-abr
</ospf-abr>
<ospf-asbr>
  ospf-asbr
</ospf-asbr>
<ospf-nssa-router>
  ospf-nssa-router
</ospf-nssa-router>
<ospf-lsa-refresh-time>
  ospf-lsa-refresh-time
</ospf-lsa-refresh-time>
<ospf-traffic-engineering>
  ospf-traffic-engineering
</ospf-traffic-engineering>
<ospf-restart>....</ospf-restart>
<ospf-restart-enabled>
  ospf-restart-enabled
</ospf-restart-enabled>
<ospf-restart-duration>
  ospf-restart-duration
</ospf-restart-duration>
<ospf-restart-grace-period>
  ospf-restart-grace-period
</ospf-restart-grace-period>
<ospf-standard-graceful-restart-helper-mode>
  ospf-standard-graceful-restart-helper-mode
</ospf-standard-graceful-restart-helper-mode>
<ospf-restart-signaling-helper-mode>
  ospf-restart-signaling-helper-mode
</ospf-restart-signaling-helper-mode>
<no-rfc-1583>
  no-rfc-1583
</no-rfc-1583>
<ospf-dna-uncapable>
  ospf-dna-uncapable
</ospf-dna-uncapable>
<ospf-as-dc-bit-clear-count>
  ospf-as-dc-bit-clear-count
</ospf-as-dc-bit-clear-count>
<ospf-area-dc-bit-clear-count>
  ospf-area-dc-bit-clear-count
</ospf-area-dc-bit-clear-count>
<ospf-area-indications-count>
  ospf-area-indications-count
</ospf-area-indications-count>
<ospf-link-dc-bit-clear-count>
  ospf-link-dc-bit-clear-count
</ospf-link-dc-bit-clear-count>
```


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```
  <tracing-information>....</tracing-information>
  <ospf-db-protection-overview>....</ospf-db-protection-overview>
  <ospf-area-overview>....</ospf-area-overview>
  <ospf-topology-overview>....</ospf-topology-overview>
</ospf-overview>
```

Description Overview information for an OSPF instance

<ospf-overview>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <instance-name>
      instance-name
    </instance-name>
    <ospf-router-id>
      ospf-router-id
    </ospf-router-id>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-configured-overload>
      ospf-configured-overload
    </ospf-configured-overload>
    <ospf-configured-overload-remaining-time>
      ospf-configured-overload-remaining-time
    </ospf-configured-overload-remaining-time>
    <ospf-abr>
      ospf-abr
    </ospf-abr>
    <ospf-asbr>
      ospf-asbr
    </ospf-asbr>
    <ospf-nssa-router>
      ospf-nssa-router
    </ospf-nssa-router>
    <ospf-lsa-refresh-time>
      ospf-lsa-refresh-time
    </ospf-lsa-refresh-time>
    <ospf-traffic-engineering>
      ospf-traffic-engineering
    </ospf-traffic-engineering>
    <ospf-restart>....</ospf-restart>
    <ospf-restart-enabled>
      ospf-restart-enabled
    </ospf-restart-enabled>
    <ospf-restart-duration>
      ospf-restart-duration
    </ospf-restart-duration>
    <ospf-restart-grace-period>
      ospf-restart-grace-period
    </ospf-restart-grace-period>
    <ospf-standard-graceful-restart-helper-mode>
```

```
      ospf-standard-graceful-restart-helper-mode
    </ospf-standard-graceful-restart-helper-mode>
    <ospf-restart-signaling-helper-mode>
      ospf-restart-signaling-helper-mode
    </ospf-restart-signaling-helper-mode>
    <no-rfc-1583>
      no-rfc-1583
    </no-rfc-1583>
    <ospf-dna-uncapable>
      ospf-dna-uncapable
    </ospf-dna-uncapable>
    <ospf-as-dc-bit-clear-count>
      ospf-as-dc-bit-clear-count
    </ospf-as-dc-bit-clear-count>
    <ospf-area-dc-bit-clear-count>
      ospf-area-dc-bit-clear-count
    </ospf-area-dc-bit-clear-count>
    <ospf-area-indications-count>
      ospf-area-indications-count
    </ospf-area-indications-count>
    <ospf-link-dc-bit-clear-count>
      ospf-link-dc-bit-clear-count
    </ospf-link-dc-bit-clear-count>
    <tracing-information>....</tracing-information>
    <ospf-db-protection-overview>....</ospf-db-protection-overview>
    <ospf-area-overview>....</ospf-area-overview>
    <ospf-topology-overview>....</ospf-topology-overview>
  </ospf-overview>
</ospf-overview-information>
```

Description Overview information for an OSPF instance

<ospf-overview>

Usage

```
<ospf3-overview-information>
  <ospf-overview>
    <instance-name>
      instance-name
    </instance-name>
    <ospf-router-id>
      ospf-router-id
    </ospf-router-id>
    <ospf-route-table-index>
      ospf-route-table-index
    </ospf-route-table-index>
    <ospf-configured-overload>
      ospf-configured-overload
    </ospf-configured-overload>
    <ospf-configured-overload-remaining-time>
      ospf-configured-overload-remaining-time
    </ospf-configured-overload-remaining-time>
    <ospf-abr>
      ospf-abr
```


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```
    </ospf-abr>
    <ospf-asbr>
      ospf-asbr
    </ospf-asbr>
    <ospf-nssa-router>
      ospf-nssa-router
    </ospf-nssa-router>
    <ospf-lsa-refresh-time>
      ospf-lsa-refresh-time
    </ospf-lsa-refresh-time>
    <ospf-traffic-engineering>
      ospf-traffic-engineering
    </ospf-traffic-engineering>
    <ospf-restart>....</ospf-restart>
    <ospf-restart-enabled>
      ospf-restart-enabled
    </ospf-restart-enabled>
    <ospf-restart-duration>
      ospf-restart-duration
    </ospf-restart-duration>
    <ospf-restart-grace-period>
      ospf-restart-grace-period
    </ospf-restart-grace-period>
    <ospf-standard-graceful-restart-helper-mode>
      ospf-standard-graceful-restart-helper-mode
    </ospf-standard-graceful-restart-helper-mode>
    <ospf-restart-signaling-helper-mode>
      ospf-restart-signaling-helper-mode
    </ospf-restart-signaling-helper-mode>
    <no-rfc-1583>
      no-rfc-1583
    </no-rfc-1583>
    <ospf-dna-uncapable>
      ospf-dna-uncapable
    </ospf-dna-uncapable>
    <ospf-as-dc-bit-clear-count>
      ospf-as-dc-bit-clear-count
    </ospf-as-dc-bit-clear-count>
    <ospf-area-dc-bit-clear-count>
      ospf-area-dc-bit-clear-count
    </ospf-area-dc-bit-clear-count>
    <ospf-area-indications-count>
      ospf-area-indications-count
    </ospf-area-indications-count>
    <ospf-link-dc-bit-clear-count>
      ospf-link-dc-bit-clear-count
    </ospf-link-dc-bit-clear-count>
    <tracing-information>....</tracing-information>
    <ospf-db-protection-overview>....</ospf-db-protection-overview>
    <ospf-area-overview>....</ospf-area-overview>
    <ospf-topology-overview>....</ospf-topology-overview>
  </ospf-overview>
</ospf3-overview-information>
```

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Description Overview information for an OSPF instance

<ospf-overview-information>

Usage

```
<ospf-overview-information>
  <ospf-overview>....</ospf-overview>
</ospf-overview-information>
```

Description

<ospf-parent-node-id>

Usage

```
<ospf-parent-node-id>
  <ospf-parent-advertising-router>
    ospf-parent-advertising-router
  </ospf-parent-advertising-router>
  <ospf-parent-lsa-id>
    ospf-parent-lsa-id
  </ospf-parent-lsa-id>
</ospf-parent-node-id>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf-backup-spf-node>
  <ospf-parent-node-id>
    <ospf-parent-advertising-router>
      ospf-parent-advertising-router
    </ospf-parent-advertising-router>
    <ospf-parent-lsa-id>
      ospf-parent-lsa-id
    </ospf-parent-lsa-id>
  </ospf-parent-node-id>
</ospf-backup-spf-node>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
    <ospf-parent-node-id>
      <ospf-parent-advertising-router>
        ospf-parent-advertising-router
      </ospf-parent-advertising-router>
      <ospf-parent-lsa-id>
```


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```
            ospf-parent-lsa-id
           </ospf-parent-lsa-id>
          </ospf-parent-node-id>
         </ospf-backup-spf-node>
        </ospf-topology-area-backup-spf>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf-topology-backup-spf>
 <ospf-topology-area-backup-spf>
  <ospf-backup-spf-node>
   <ospf-parent-node-id>
    <ospf-parent-advertising-router>
     ospf-parent-advertising-router
    </ospf-parent-advertising-router>
    <ospf-parent-lsa-id>
     ospf-parent-lsa-id
    </ospf-parent-lsa-id>
   </ospf-parent-node-id>
  </ospf-backup-spf-node>
 </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf-backup-spf-information>
 <ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
   <ospf-backup-spf-node>
    <ospf-parent-node-id>
     <ospf-parent-advertising-router>
      ospf-parent-advertising-router
     </ospf-parent-advertising-router>
     <ospf-parent-lsa-id>
      ospf-parent-lsa-id
     </ospf-parent-lsa-id>
    </ospf-parent-node-id>
   </ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
 </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description OSPF parent node ID

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<ospf-parent-node-id>

Usage

```
<ospf3-backup-spf-node>
  <ospf-parent-node-id>
    <ospf-parent-advertising-router>
      ospf-parent-advertising-router
    </ospf-parent-advertising-router>
    <ospf-parent-lsa-id>
      ospf-parent-lsa-id
    </ospf-parent-lsa-id>
  </ospf-parent-node-id>
</ospf3-backup-spf-node>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf-parent-node-id>
      <ospf-parent-advertising-router>
        ospf-parent-advertising-router
      </ospf-parent-advertising-router>
      <ospf-parent-lsa-id>
        ospf-parent-lsa-id
      </ospf-parent-lsa-id>
    </ospf-parent-node-id>
  </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
      <ospf-parent-node-id>
        <ospf-parent-advertising-router>
          ospf-parent-advertising-router
        </ospf-parent-advertising-router>
        <ospf-parent-lsa-id>
          ospf-parent-lsa-id
        </ospf-parent-lsa-id>
      </ospf-parent-node-id>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```


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Description OSPF parent node ID

<ospf-parent-node-id>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf-parent-node-id>
          <ospf-parent-advertising-router>
            ospf-parent-advertising-router
          </ospf-parent-advertising-router>
          <ospf-parent-lsa-id>
            ospf-parent-lsa-id
          </ospf-parent-lsa-id>
        </ospf-parent-node-id>
      </ospf3-backup-spf-node>
    </ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description OSPF parent node ID

<ospf-restart>

Usage

```
<ospf-overview>
  <ospf-restart>
</ospf-restart>
</ospf-overview>
```

Description OSPF restart parameters

<ospf-restart>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <ospf-restart>
 </ospf-restart>
  </ospf-overview>
</ospf-overview-information>
```

Description OSPF restart parameters

<ospf-restart>

Usage

```
<ospf3-overview-information>
```

```
  <ospf-overview>
    <ospf-restart>
 </ospf-restart>
  </ospf-overview>
</ospf3-overview-information>
```

Description OSPF restart parameters

<ospf-route>

Usage

```
<ospf-route>
  <ospf-route-entry>....</ospf-route-entry>
</ospf-route>
```

Description

<ospf-route>

Usage

```
<ospf-topology-route-table>
  <ospf-route>
    <ospf-route-entry>....</ospf-route-entry>
  </ospf-route>
</ospf-topology-route-table>
```

Description

<ospf-route>

Usage

```
<ospf-route-information>
  <ospf-topology-route-table>
    <ospf-route>
      <ospf-route-entry>....</ospf-route-entry>
    </ospf-route>
  </ospf-topology-route-table>
</ospf-route-information>
```

Description

<ospf-route-entry>

Usage

```
<ospf-route>
  <ospf-route-entry>
    <address-prefix>
      address-prefix
    </address-prefix>
    <route-path-type>
      route-path-type
```


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```
    </route-path-type>
    <route-type>
      route-type
    </route-type>
    <next-hop-type>
      next-hop-type
    </next-hop-type>
    <interface-cost>
      interface-cost
    </interface-cost>
    <ospf-next-hop>....</ospf-next-hop>
    <ospf-backup-next-hop>....</ospf-backup-next-hop>
    <ospf-area>
      ospf-area
    </ospf-area>
    <optional-capability>
      optional-capability
    </optional-capability>
    <route-origin>
      route-origin
    </route-origin>
    <route-priority>
      route-priority
    </route-priority>
    <type7>
      type7
    </type7>
    <pbit>
      pbit
    </pbit>
    <forward-nz>
      forward-nz
    </forward-nz>
  </ospf-route-entry>
</ospf-route>
```

Description

<ospf-route-entry>

Usage

```
<ospf-topology-route-table>
  <ospf-route>
    <ospf-route-entry>
      <address-prefix>
        address-prefix
      </address-prefix>
      <route-path-type>
        route-path-type
      </route-path-type>
      <route-type>
        route-type
      </route-type>
      <next-hop-type>
        next-hop-type
```

```
      </next-hop-type>
      <interface-cost>
        interface-cost
      </interface-cost>
      <ospf-next-hop>....</ospf-next-hop>
      <ospf-backup-next-hop>....</ospf-backup-next-hop>
      <ospf-area>
        ospf-area
      </ospf-area>
      <optional-capability>
        optional-capability
      </optional-capability>
      <route-origin>
        route-origin
      </route-origin>
      <route-priority>
        route-priority
      </route-priority>
      <type7>
        type7
      </type7>
      <pbit>
        pbit
      </pbit>
      <forward-nz>
        forward-nz
      </forward-nz>
    </ospf-route-entry>
  </ospf-route>
</ospf-topology-route-table>
```

Description

<ospf-route-entry>

Usage

```
<ospf-route-information>
  <ospf-topology-route-table>
    <ospf-route>
      <ospf-route-entry>
        <address-prefix>
          address-prefix
        </address-prefix>
        <route-path-type>
          route-path-type
        </route-path-type>
        <route-type>
          route-type
        </route-type>
        <next-hop-type>
          next-hop-type
        </next-hop-type>
        <interface-cost>
          interface-cost
        </interface-cost>
```


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```
        <ospf-next-hop>....</ospf-next-hop>
        <ospf-backup-next-hop>....</ospf-backup-next-hop>
        <ospf-area>
          ospf-area
        </ospf-area>
        <optional-capability>
          optional-capability
        </optional-capability>
        <route-origin>
          route-origin
        </route-origin>
        <route-priority>
          route-priority
        </route-priority>
        <type7>
          type7
        </type7>
        <pbit>
          pbit
        </pbit>
        <forward-nz>
          forward-nz
        </forward-nz>
      </ospf-route-entry>
    </ospf-route>
  </ospf-topology-route-table>
</ospf-route-information>
```

Description

<ospf-route-information>

Usage

```
<ospf-route-information>
  <ospf-topology-route-table>....</ospf-topology-route-table>
</ospf-route-information>
```

Description

<ospf-router-link-topology>

Usage

```
<ospf-router-link-topology>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-topology-metric>
    ospf-topology-metric
  </ospf-topology-metric>
</ospf-router-link-topology>
```

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Description OSPF topology specific information for a router link

<ospf-router-link-topology>

Usage

```
<ospf-router-lsa>
  <ospf-link>
    <ospf-router-link-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-topology-metric>
        ospf-topology-metric
      </ospf-topology-metric>
    </ospf-router-link-topology>
  </ospf-link>
</ospf-router-lsa>
```

Description OSPF topology specific information for a router link

<ospf-router-link-topology>

Usage

```
<ospf-database>
  <ospf-router-lsa>
    <ospf-link>
      <ospf-router-link-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-topology-metric>
          ospf-topology-metric
        </ospf-topology-metric>
      </ospf-router-link-topology>
    </ospf-link>
  </ospf-router-lsa>
</ospf-database>
```

Description OSPF topology specific information for a router link

<ospf-router-link-topology>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-router-lsa>
```


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```
      <ospf-link>
        <ospf-router-link-topology>
          <ospf-topology-name>
            ospf-topology-name
          </ospf-topology-name>
          <ospf-topology-id>
            ospf-topology-id
          </ospf-topology-id>
          <ospf-topology-metric>
            ospf-topology-metric
          </ospf-topology-metric>
        </ospf-router-link-topology>
      </ospf-link>
    </ospf-router-lsa>
  </ospf-database>
</ospf-database-information>
```

Description OSPF topology specific information for a router link

<ospf-router-lsa>

Usage

```
<ospf-router-lsa>
  <bits>
    bits
  </bits>
  <link-count>
    link-count
  </link-count>
  <ospf-link>....</ospf-link>
  <ospf-lsa-topology>....</ospf-lsa-topology>
</ospf-router-lsa>
```

Description

<ospf-router-lsa>

Usage

```
<ospf-database>
  <ospf-router-lsa>
    <bits>
      bits
    </bits>
    <link-count>
      link-count
    </link-count>
    <ospf-link>....</ospf-link>
    <ospf-lsa-topology>....</ospf-lsa-topology>
  </ospf-router-lsa>
</ospf-database>
```

Description

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<ospf-router-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-router-lsa>
      <bits>
        bits
      </bits>
      <link-count>
        link-count
      </link-count>
      <ospf-link>....</ospf-link>
      <ospf-lsa-topology>....</ospf-lsa-topology>
    </ospf-router-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<ospf-statistics>

Usage

```
<ospf-statistics>
  <packet-statistics>....</packet-statistics>
  <dbds-retransmit>
    dbds-retransmit
  </dbds-retransmit>
  <dbds-retransmit-5seconds>
    dbds-retransmit-5seconds
  </dbds-retransmit-5seconds>
  <lsas-flooded>
    lsas-flooded
  </lsas-flooded>
  <lsas-flooded-5seconds>
    lsas-flooded-5seconds
  </lsas-flooded-5seconds>
  <lsas-high-prio-flooded>
    lsas-high-prio-flooded
  </lsas-high-prio-flooded>
  <lsas-high-prio-flooded-5seconds>
    lsas-high-prio-flooded-5seconds
  </lsas-high-prio-flooded-5seconds>
  <lsas-retransmit>
    lsas-retransmit
  </lsas-retransmit>
  <lsas-retransmit-5seconds>
    lsas-retransmit-5seconds
  </lsas-retransmit-5seconds>
  <lsas-nbr-transmit>
    lsas-nbr-transmit
  </lsas-nbr-transmit>
  <lsas-nbr-transmit-5seconds>
    lsas-nbr-transmit-5seconds
```


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```
  </lsas-nbr-transmit-5seconds>
  <lsas-requested>
    lsas-requested
  </lsas-requested>
  <lsas-requested-5seconds>
    lsas-requested-5seconds
  </lsas-requested-5seconds>
  <lsas-acknowledged>
    lsas-acknowledged
  </lsas-acknowledged>
  <lsas-acknowledged-5seconds>
    lsas-acknowledged-5seconds
  </lsas-acknowledged-5seconds>
  <flood-queue-depth>
    flood-queue-depth
  </flood-queue-depth>
  <total-retransmits>
    total-retransmits
  </total-retransmits>
  <total-database-summaries>
    total-database-summaries
  </total-database-summaries>
  <total-linkstate-request>
    total-linkstate-request
  </total-linkstate-request>
  <ospf-errors>....</ospf-errors>
</ospf-statistics>
```

Description

<ospf-statistics>

Usage

```
<ospf-statistics-information>
  <ospf-statistics>
    <packet-statistics>....</packet-statistics>
    <dbds-retransmit>
      dbds-retransmit
    </dbds-retransmit>
    <dbds-retransmit-5seconds>
      dbds-retransmit-5seconds
    </dbds-retransmit-5seconds>
    <lsas-flooded>
      lsas-flooded
    </lsas-flooded>
    <lsas-flooded-5seconds>
      lsas-flooded-5seconds
    </lsas-flooded-5seconds>
    <lsas-high-prio-flooded>
      lsas-high-prio-flooded
    </lsas-high-prio-flooded>
    <lsas-high-prio-flooded-5seconds>
      lsas-high-prio-flooded-5seconds
    </lsas-high-prio-flooded-5seconds>
    <lsas-retransmit>
```

```
            lsas-retransmit
          </lsas-retransmit>
          <lsas-retransmit-5seconds>
            lsas-retransmit-5seconds
          </lsas-retransmit-5seconds>
          <lsas-nbr-transmit>
            lsas-nbr-transmit
          </lsas-nbr-transmit>
          <lsas-nbr-transmit-5seconds>
            lsas-nbr-transmit-5seconds
          </lsas-nbr-transmit-5seconds>
          <lsas-requested>
            lsas-requested
          </lsas-requested>
          <lsas-requested-5seconds>
            lsas-requested-5seconds
          </lsas-requested-5seconds>
          <lsas-acknowledged>
            lsas-acknowledged
          </lsas-acknowledged>
          <lsas-acknowledged-5seconds>
            lsas-acknowledged-5seconds
          </lsas-acknowledged-5seconds>
          <flood-queue-depth>
            flood-queue-depth
          </flood-queue-depth>
          <total-retransmits>
            total-retransmits
          </total-retransmits>
          <total-database-summaries>
            total-database-summaries
          </total-database-summaries>
          <total-linkstate-request>
            total-linkstate-request
          </total-linkstate-request>
          <ospf-errors>....</ospf-errors>
        </ospf-statistics>
      </ospf-statistics-information>
```

Description

<ospf-statistics>

Usage

```
      <ospf3-statistics-information>
        <ospf-statistics>
          <packet-statistics>....</packet-statistics>
          <dbds-retransmit>
            dbds-retransmit
          </dbds-retransmit>
          <dbds-retransmit-5seconds>
            dbds-retransmit-5seconds
          </dbds-retransmit-5seconds>
          <lsas-flooded>
            lsas-flooded
```


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```
        </lsas-flooded>
        <lsas-flooded-5seconds>
          lsas-flooded-5seconds
        </lsas-flooded-5seconds>
        <lsas-high-prio-flooded>
          lsas-high-prio-flooded
        </lsas-high-prio-flooded>
        <lsas-high-prio-flooded-5seconds>
          lsas-high-prio-flooded-5seconds
        </lsas-high-prio-flooded-5seconds>
        <lsas-retransmit>
          lsas-retransmit
        </lsas-retransmit>
        <lsas-retransmit-5seconds>
          lsas-retransmit-5seconds
        </lsas-retransmit-5seconds>
        <lsas-nbr-transmit>
          lsas-nbr-transmit
        </lsas-nbr-transmit>
        <lsas-nbr-transmit-5seconds>
          lsas-nbr-transmit-5seconds
        </lsas-nbr-transmit-5seconds>
        <lsas-requested>
          lsas-requested
        </lsas-requested>
        <lsas-requested-5seconds>
          lsas-requested-5seconds
        </lsas-requested-5seconds>
        <lsas-acknowledged>
          lsas-acknowledged
        </lsas-acknowledged>
        <lsas-acknowledged-5seconds>
          lsas-acknowledged-5seconds
        </lsas-acknowledged-5seconds>
        <flood-queue-depth>
          flood-queue-depth
        </flood-queue-depth>
        <total-retransmits>
          total-retransmits
        </total-retransmits>
        <total-database-summaries>
          total-database-summaries
        </total-database-summaries>
        <total-linkstate-request>
          total-linkstate-request
        </total-linkstate-request>
        <ospf-errors>....</ospf-errors>
      </ospf-statistics>
    </ospf3-statistics-information>
```

Description

<ospf-statistics-information>

Usage

```
<ospf-statistics-information>
  <ospf-statistics>....</ospf-statistics>
</ospf-statistics-information>
```

Description

<ospf-summary-lsa>

Usage

```
<ospf-summary-lsa>
  <address-mask>
    address-mask
  </address-mask>
  <ospf-summary-lsa-topology>....</ospf-summary-lsa-topology>
</ospf-summary-lsa>
```

Description

<ospf-summary-lsa>

Usage

```
<ospf-database>
  <ospf-summary-lsa>
    <address-mask>
      address-mask
    </address-mask>
    <ospf-summary-lsa-topology>....</ospf-summary-lsa-topology>
  </ospf-summary-lsa>
</ospf-database>
```

Description

<ospf-summary-lsa>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-summary-lsa>
      <address-mask>
        address-mask
      </address-mask>
      <ospf-summary-lsa-topology>....</ospf-summary-lsa-topology>
    </ospf-summary-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

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<ospf-summary-lsa-topology>

Usage

```
<ospf-summary-lsa-topology>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-topology-metric>
    ospf-topology-metric
  </ospf-topology-metric>
</ospf-summary-lsa-topology>
```

Description OSPF topology specific information for a summary LSA

<ospf-summary-lsa-topology>

Usage

```
<ospf-summary-lsa>
  <ospf-summary-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-topology-metric>
      ospf-topology-metric
    </ospf-topology-metric>
  </ospf-summary-lsa-topology>
</ospf-summary-lsa>
```

Description OSPF topology specific information for a summary LSA

<ospf-summary-lsa-topology>

Usage

```
<ospf-database>
  <ospf-summary-lsa>
    <ospf-summary-lsa-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-topology-metric>
        ospf-topology-metric
      </ospf-topology-metric>
    </ospf-summary-lsa-topology>
```

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```
  </ospf-summary-lsa>
</ospf-database>
```

Description OSPF topology specific information for a summary LSA

<ospf-summary-lsa-topology>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-summary-lsa>
      <ospf-summary-lsa-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-topology-metric>
          ospf-topology-metric
        </ospf-topology-metric>
      </ospf-summary-lsa-topology>
    </ospf-summary-lsa>
  </ospf-database>
</ospf-database-information>
```

Description OSPF topology specific information for a summary LSA

<ospf-topology-area-backup-neighbor>

Usage

```
<ospf-topology-area-backup-neighbor>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-backup-neighbor-node>....</ospf-backup-neighbor-node>
</ospf-topology-area-backup-neighbor>
```

Description OSPF topology area specific backup neighbors

<ospf-topology-area-backup-neighbor>

Usage

```
<ospf-topology-backup-neighbor>
  <ospf-topology-area-backup-neighbor>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-backup-neighbor-node>....</ospf-backup-neighbor-node>
  </ospf-topology-area-backup-neighbor>
```


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```
</ospf-topology-backup-neighbor>
```

Description OSPF topology area specific backup neighbors

<ospf-topology-area-backup-neighbor>

Usage

```
<ospf-backup-neighbor-information>
  <ospf-topology-backup-neighbor>
    <ospf-topology-area-backup-neighbor>
      <ospf-area>
        ospf-area
      </ospf-area>
      <ospf-backup-neighbor-node>....</ospf-backup-neighbor-node>
    </ospf-topology-area-backup-neighbor>
  </ospf-topology-backup-neighbor>
</ospf-backup-neighbor-information>
```

Description OSPF topology area specific backup neighbors

<ospf-topology-area-backup-spf>

Usage

```
<ospf-topology-area-backup-spf>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-backup-spf-node>....</ospf-backup-spf-node>
</ospf-topology-area-backup-spf>
```

Description OSPF topology area specific backup SPF results

<ospf-topology-area-backup-spf>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-area-backup-spf>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-backup-spf-node>....</ospf-backup-spf-node>
  </ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF topology area specific backup SPF results

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<ospf-topology-area-backup-spf>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-area-backup-spf>
      <ospf-area>
        ospf-area
      </ospf-area>
      <ospf-backup-spf-node>....</ospf-backup-spf-node>
    </ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description OSPF topology area specific backup SPF results

<ospf-topology-backup-coverage>

Usage

```
<ospf-topology-backup-coverage>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-backup-node-coverage>....</ospf-backup-node-coverage>
  <ospf-backup-route-coverage>....</ospf-backup-route-coverage>
</ospf-topology-backup-coverage>
```

Description

<ospf-topology-backup-coverage>

Usage

```
<ospf-backup-coverage-information>
  <ospf-topology-backup-coverage>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-backup-node-coverage>....</ospf-backup-node-coverage>
    <ospf-backup-route-coverage>....</ospf-backup-route-coverage>
  </ospf-topology-backup-coverage>
</ospf-backup-coverage-information>
```

Description

<ospf-topology-backup-neighbor>

Usage

```
<ospf-topology-backup-neighbor>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
<ospf-topology-area-backup-neighbor>....</ospf-topology-area-backup-neighbor>
```


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```
</ospf-topology-backup-neighbor>
```

Description OSPF topology specific backup neighbors

<ospf-topology-backup-neighbor>

Usage

```
<ospf-backup-neighbor-information>
  <ospf-topology-backup-neighbor>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>

<ospf-topology-area-backup-neighbor>....</ospf-topology-area-backup-neighbor>
  </ospf-topology-backup-neighbor>
</ospf-backup-neighbor-information>
```

Description OSPF topology specific backup neighbors

<ospf-topology-backup-spf>

Usage

```
<ospf-topology-backup-spf>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-area-backup-spf>....</ospf-topology-area-backup-spf>
</ospf-topology-backup-spf>
```

Description OSPF topology specific backup SPF results

<ospf-topology-backup-spf>

Usage

```
<ospf-backup-spf-information>
  <ospf-topology-backup-spf>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-area-backup-spf>....</ospf-topology-area-backup-spf>
  </ospf-topology-backup-spf>
</ospf-backup-spf-information>
```

Description OSPF topology specific backup SPF results

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<ospf-topology-log>

Usage

```
<ospf-topology-log>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-log-instance>....</ospf-log-instance>
  <ospf-log-maximum-length>....</ospf-log-maximum-length>
  <ospf-log-events>....</ospf-log-events>
</ospf-topology-log>
```

Description OSPF topology specific SPF log information

<ospf-topology-log>

Usage

```
<ospf-log-information>
  <ospf-topology-log>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-log-instance>....</ospf-log-instance>
    <ospf-log-maximum-length>....</ospf-log-maximum-length>
    <ospf-log-events>....</ospf-log-events>
  </ospf-topology-log>
</ospf-log-information>
```

Description OSPF topology specific SPF log information

<ospf-topology-overview>

Usage

```
<ospf-topology-overview>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
    ospf-topology-id
  </ospf-topology-id>
  <ospf-topology-configured-overload>
    ospf-topology-configured-overload
  </ospf-topology-configured-overload>
  <ospf-topology-dynamic-overload>
    ospf-topology-dynamic-overload
  </ospf-topology-dynamic-overload>
  <ospf-prefix-export-count>
    ospf-prefix-export-count
  </ospf-prefix-export-count>
  <ospf-prefix-export-limit>
    ospf-prefix-export-limit
  </ospf-prefix-export-limit>
```


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```
<ospf-full-spf-count>
  ospf-full-spf-count
</ospf-full-spf-count>
<ospf-spf-delay>
  ospf-spf-delay
</ospf-spf-delay>
<ospf-spf-holddown>
  ospf-spf-holddown
</ospf-spf-holddown>
<ospf-spf-rapid-runs>
  ospf-spf-rapid-runs
</ospf-spf-rapid-runs>
<ospf-backup-spf-status>
  ospf-backup-spf-status
</ospf-backup-spf-status>
<ospf-backup-spf-downstream-only>
  ospf-backup-spf-downstream-only
</ospf-backup-spf-downstream-only>
<ospf-te-shortcuts>
  ospf-te-shortcuts
</ospf-te-shortcuts>
</ospf-topology-overview>
```

Description OSPF topology specific overview information

<ospf-topology-overview>

Usage

```
<ospf-overview>
  <ospf-topology-overview>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-topology-configured-overload>
      ospf-topology-configured-overload
    </ospf-topology-configured-overload>
    <ospf-topology-dynamic-overload>
      ospf-topology-dynamic-overload
    </ospf-topology-dynamic-overload>
    <ospf-prefix-export-count>
      ospf-prefix-export-count
    </ospf-prefix-export-count>
    <ospf-prefix-export-limit>
      ospf-prefix-export-limit
    </ospf-prefix-export-limit>
    <ospf-full-spf-count>
      ospf-full-spf-count
    </ospf-full-spf-count>
    <ospf-spf-delay>
      ospf-spf-delay
    </ospf-spf-delay>
```

```
    <ospf-spf-holddown>
      ospf-spf-holddown
    </ospf-spf-holddown>
    <ospf-spf-rapid-runs>
      ospf-spf-rapid-runs
    </ospf-spf-rapid-runs>
    <ospf-backup-spf-status>
      ospf-backup-spf-status
    </ospf-backup-spf-status>
    <ospf-backup-spf-downstream-only>
      ospf-backup-spf-downstream-only
    </ospf-backup-spf-downstream-only>
    <ospf-te-shortcuts>
      ospf-te-shortcuts
    </ospf-te-shortcuts>
  </ospf-topology-overview>
</ospf-overview>
```

Description OSPF topology specific overview information

<ospf-topology-overview>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <ospf-topology-overview>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-topology-configured-overload>
        ospf-topology-configured-overload
      </ospf-topology-configured-overload>
      <ospf-topology-dynamic-overload>
        ospf-topology-dynamic-overload
      </ospf-topology-dynamic-overload>
      <ospf-prefix-export-count>
        ospf-prefix-export-count
      </ospf-prefix-export-count>
      <ospf-prefix-export-limit>
        ospf-prefix-export-limit
      </ospf-prefix-export-limit>
      <ospf-full-spf-count>
        ospf-full-spf-count
      </ospf-full-spf-count>
      <ospf-spf-delay>
        ospf-spf-delay
      </ospf-spf-delay>
      <ospf-spf-holddown>
        ospf-spf-holddown
      </ospf-spf-holddown>
      <ospf-spf-rapid-runs>
```


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```
            ospf-spf-rapid-runs
           </ospf-spf-rapid-runs>
           <ospf-backup-spf-status>
            ospf-backup-spf-status
           </ospf-backup-spf-status>
           <ospf-backup-spf-downstream-only>
            ospf-backup-spf-downstream-only
           </ospf-backup-spf-downstream-only>
           <ospf-te-shortcuts>
            ospf-te-shortcuts
           </ospf-te-shortcuts>
          </ospf-topology-overview>
         </ospf-overview>
        </ospf-overview-information>
```

Description OSPF topology specific overview information

<ospf-topology-overview>

Usage

```
        <ospf3-overview-information>
         <ospf-overview>
          <ospf-topology-overview>
           <ospf-topology-name>
            ospf-topology-name
           </ospf-topology-name>
           <ospf-topology-id>
            ospf-topology-id
           </ospf-topology-id>
           <ospf-topology-configured-overload>
            ospf-topology-configured-overload
           </ospf-topology-configured-overload>
           <ospf-topology-dynamic-overload>
            ospf-topology-dynamic-overload
           </ospf-topology-dynamic-overload>
           <ospf-prefix-export-count>
            ospf-prefix-export-count
           </ospf-prefix-export-count>
           <ospf-prefix-export-limit>
            ospf-prefix-export-limit
           </ospf-prefix-export-limit>
           <ospf-full-spf-count>
            ospf-full-spf-count
           </ospf-full-spf-count>
           <ospf-spf-delay>
            ospf-spf-delay
           </ospf-spf-delay>
           <ospf-spf-holddown>
            ospf-spf-holddown
           </ospf-spf-holddown>
           <ospf-spf-rapid-runs>
            ospf-spf-rapid-runs
           </ospf-spf-rapid-runs>
           <ospf-backup-spf-status>
```

```
            ospf-backup-spf-status
           </ospf-backup-spf-status>
           <ospf-backup-spf-downstream-only>
            ospf-backup-spf-downstream-only
           </ospf-backup-spf-downstream-only>
           <ospf-te-shortcuts>
            ospf-te-shortcuts
           </ospf-te-shortcuts>
          </ospf-topology-overview>
         </ospf-overview>
        </ospf3-overview-information>
```

Description OSPF topology specific overview information

<ospf-topology-route-table>

Usage

```
<ospf-topology-route-table>
 <ospf-topology-name>
  ospf-topology-name
 </ospf-topology-name>
 <ospf-route>....</ospf-route>
</ospf-topology-route-table>
```

Description OSPF topology specific routing table

<ospf-topology-route-table>

Usage

```
<ospf-route-information>
 <ospf-topology-route-table>
  <ospf-topology-name>
   ospf-topology-name
  </ospf-topology-name>
  <ospf-route>....</ospf-route>
 </ospf-topology-route-table>
</ospf-route-information>
```

Description OSPF topology specific routing table

<ospf3-area-header>

Usage

```
<ospf3-area-header>
 <ospf-area>
  ospf-area
 </ospf-area>
</ospf3-area-header>
```


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Description

<ospf3-area-header>

Usage

```
<ospf3-database-information>
  <ospf3-area-header>
    <ospf-area>
      ospf-area
    </ospf-area>
  </ospf3-area-header>
</ospf3-database-information>
```

Description

<ospf3-backup-coverage-information>

Usage

```
<ospf3-backup-coverage-information>
  <ospf3-topology-backup-coverage>....</ospf3-topology-backup-coverage>
</ospf3-backup-coverage-information>
```

Description OSPFv3 backup coverage information

<ospf3-backup-mplsp>

Usage

```
<ospf3-backup-mplsp>
  <lsp-name>
    lsp-name
  </lsp-name>
  <lsp-addr>
    lsp-addr
  </lsp-addr>
  <lsp-status>
    lsp-status
  </lsp-status>
  <metric>
    metric
  </metric>
  <te-metric>
    te-metric
  </te-metric>
  <lsp-last-change>
    lsp-last-change
  </lsp-last-change>
</ospf3-backup-mplsp>
```

Description

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<ospf3-backup-mplsp>

Usage

```
<ospf3-backup-mplsp-information>
  <ospf3-backup-mplsp>
    <lsp-name>
      lsp-name
    </lsp-name>
    <lsp-addr>
      lsp-addr
    </lsp-addr>
    <lsp-status>
      lsp-status
    </lsp-status>
    <metric>
      metric
    </metric>
    <te-metric>
      te-metric
    </te-metric>
    <lsp-last-change>
      lsp-last-change
    </lsp-last-change>
  </ospf3-backup-mplsp>
</ospf3-backup-mplsp-information>
```

Description

<ospf3-backup-mplsp-information>

Usage

```
<ospf3-backup-mplsp-information>
  <ospf3-backup-mplsp>....</ospf3-backup-mplsp>
</ospf3-backup-mplsp-information>
```

Description OSPFv3 backup MPLSP information

<ospf3-backup-neighbor-information>

Usage

```
<ospf3-backup-neighbor-information>
  <ospf3-topology-backup-neighbor>....</ospf3-topology-backup-neighbor>
</ospf3-backup-neighbor-information>
```

Description OSPFv3 backup neighbor information

<ospf3-backup-neighbor-node>

Usage

```
<ospf3-backup-neighbor-node>
  <ospf-backup-neighbor>
```


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```
  ospf-backup-neighbor
 </ospf-backup-neighbor>
 <ospf-backup-neighbor-is-lsp-endpoint>
  ospf-backup-neighbor-is-lsp-endpoint
 </ospf-backup-neighbor-is-lsp-endpoint>
 <ospf-backup-neighbor-from-metric>
  ospf-backup-neighbor-from-metric
 </ospf-backup-neighbor-from-metric>
 <ospf-backup-neighbor-to-metric>
  ospf-backup-neighbor-to-metric
 </ospf-backup-neighbor-to-metric>
 <ospf-backup-next-hop>....</ospf-backup-next-hop>
</ospf3-backup-neighbor-node>
```

Description OSPFv3 backup neighbor node

<ospf3-backup-neighbor-node>

Usage

```
<ospf3-topology-area-backup-neighbor>
 <ospf3-backup-neighbor-node>
  <ospf-backup-neighbor>
   ospf-backup-neighbor
  </ospf-backup-neighbor>
  <ospf-backup-neighbor-is-lsp-endpoint>
   ospf-backup-neighbor-is-lsp-endpoint
  </ospf-backup-neighbor-is-lsp-endpoint>
  <ospf-backup-neighbor-from-metric>
   ospf-backup-neighbor-from-metric
  </ospf-backup-neighbor-from-metric>
  <ospf-backup-neighbor-to-metric>
   ospf-backup-neighbor-to-metric
  </ospf-backup-neighbor-to-metric>
  <ospf-backup-next-hop>....</ospf-backup-next-hop>
 </ospf3-backup-neighbor-node>
</ospf3-topology-area-backup-neighbor>
```

Description OSPFv3 backup neighbor node

<ospf3-backup-neighbor-node>

Usage

```
<ospf3-topology-backup-neighbor>
 <ospf3-topology-area-backup-neighbor>
  <ospf3-backup-neighbor-node>
   <ospf-backup-neighbor>
    ospf-backup-neighbor
   </ospf-backup-neighbor>
   <ospf-backup-neighbor-is-lsp-endpoint>
    ospf-backup-neighbor-is-lsp-endpoint
   </ospf-backup-neighbor-is-lsp-endpoint>
   <ospf-backup-neighbor-from-metric>
```

```
                ospf-backup-neighbor-from-metric
              </ospf-backup-neighbor-from-metric>
              <ospf-backup-neighbor-to-metric>
                ospf-backup-neighbor-to-metric
              </ospf-backup-neighbor-to-metric>
              <ospf-backup-next-hop>....</ospf-backup-next-hop>
            </ospf3-backup-neighbor-node>
          </ospf3-topology-area-backup-neighbor>
        </ospf3-topology-backup-neighbor>
```

Description OSPFv3 backup neighbor node

<ospf3-backup-neighbor-node>

Usage

```
<ospf3-backup-neighbor-information>
  <ospf3-topology-backup-neighbor>
    <ospf3-topology-area-backup-neighbor>
      <ospf3-backup-neighbor-node>
        <ospf-backup-neighbor>
          ospf-backup-neighbor
        </ospf-backup-neighbor>
        <ospf-backup-neighbor-is-lsp-endpoint>
          ospf-backup-neighbor-is-lsp-endpoint
        </ospf-backup-neighbor-is-lsp-endpoint>
        <ospf-backup-neighbor-from-metric>
          ospf-backup-neighbor-from-metric
        </ospf-backup-neighbor-from-metric>
        <ospf-backup-neighbor-to-metric>
          ospf-backup-neighbor-to-metric
        </ospf-backup-neighbor-to-metric>
        <ospf-backup-next-hop>....</ospf-backup-next-hop>
      </ospf3-backup-neighbor-node>
    </ospf3-topology-area-backup-neighbor>
  </ospf3-topology-backup-neighbor>
</ospf3-backup-neighbor-information>
```

Description OSPFv3 backup neighbor node

<ospf3-backup-node-coverage>

Usage

```
<ospf3-backup-node-coverage>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-covered-nodes>
    ospf-covered-nodes
  </ospf-covered-nodes>
  <ospf-total-nodes>
    ospf-total-nodes
  </ospf-total-nodes>
```


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```
  <ospf-node-coverage>
   ospf-node-coverage
  </ospf-node-coverage>
</ospf3-backup-node-coverage>
```

Description

<ospf3-backup-node-coverage>

Usage

```
<ospf3-topology-backup-coverage>
  <ospf3-backup-node-coverage>
    <ospf-area>
     ospf-area
    </ospf-area>
    <ospf-covered-nodes>
     ospf-covered-nodes
    </ospf-covered-nodes>
    <ospf-total-nodes>
     ospf-total-nodes
    </ospf-total-nodes>
    <ospf-node-coverage>
     ospf-node-coverage
    </ospf-node-coverage>
  </ospf3-backup-node-coverage>
</ospf3-topology-backup-coverage>
```

Description

<ospf3-backup-node-coverage>

Usage

```
<ospf3-backup-coverage-information>
  <ospf3-topology-backup-coverage>
    <ospf3-backup-node-coverage>
      <ospf-area>
       ospf-area
      </ospf-area>
      <ospf-covered-nodes>
       ospf-covered-nodes
      </ospf-covered-nodes>
      <ospf-total-nodes>
       ospf-total-nodes
      </ospf-total-nodes>
      <ospf-node-coverage>
       ospf-node-coverage
      </ospf-node-coverage>
    </ospf3-backup-node-coverage>
  </ospf3-topology-backup-coverage>
</ospf3-backup-coverage-information>
```

Description

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<ospf3-backup-route-coverage>

Usage

```
<ospf3-backup-route-coverage>
  <ospf-path-type>
    ospf-path-type
  </ospf-path-type>
  <ospf-covered-routes>
    ospf-covered-routes
  </ospf-covered-routes>
  <ospf-total-routes>
    ospf-total-routes
  </ospf-total-routes>
  <ospf-route-coverage>
    ospf-route-coverage
  </ospf-route-coverage>
</ospf3-backup-route-coverage>
```

Description

<ospf3-backup-route-coverage>

Usage

```
<ospf3-topology-backup-coverage>
  <ospf3-backup-route-coverage>
    <ospf-path-type>
      ospf-path-type
    </ospf-path-type>
    <ospf-covered-routes>
      ospf-covered-routes
    </ospf-covered-routes>
    <ospf-total-routes>
      ospf-total-routes
    </ospf-total-routes>
    <ospf-route-coverage>
      ospf-route-coverage
    </ospf-route-coverage>
  </ospf3-backup-route-coverage>
</ospf3-topology-backup-coverage>
```

Description

<ospf3-backup-route-coverage>

Usage

```
<ospf3-backup-coverage-information>
  <ospf3-topology-backup-coverage>
    <ospf3-backup-route-coverage>
      <ospf-path-type>
        ospf-path-type
      </ospf-path-type>
      <ospf-covered-routes>
        ospf-covered-routes
```


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```
    </ospf-covered-routes>
    <ospf-total-routes>
      ospf-total-routes
    </ospf-total-routes>
    <ospf-route-coverage>
      ospf-route-coverage
    </ospf-route-coverage>
  </ospf3-backup-route-coverage>
 </ospf3-topology-backup-coverage>
</ospf3-backup-coverage-information>
```

Description

<ospf3-backup-spf-information>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>....</ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description OSPFv3 backup SPF information

<ospf3-backup-spf-node>

Usage

```
<ospf3-backup-spf-node>
  <ospf-node-id>....</ospf-node-id>
  <lsa-id>
    lsa-id
  </lsa-id>
  <ospf-node-metric>
    ospf-node-metric
  </ospf-node-metric>
  <ospf-parent-node-id>....</ospf-parent-node-id>
  <ospf-next-hop>....</ospf-next-hop>
  <ospf-backup-next-hop>....</ospf-backup-next-hop>
  <ospf3-backup-spf-result>....</ospf3-backup-spf-result>
</ospf3-backup-spf-node>
```

Description OSPFv3 node specific backup SPF information

<ospf3-backup-spf-node>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf-node-id>....</ospf-node-id>
    <lsa-id>
      lsa-id
    </lsa-id>
    <ospf-node-metric>
```

```
      ospf-node-metric
    </ospf-node-metric>
    <ospf-parent-node-id>....</ospf-parent-node-id>
    <ospf-next-hop>....</ospf-next-hop>
    <ospf-backup-next-hop>....</ospf-backup-next-hop>
    <ospf3-backup-spf-result>....</ospf3-backup-spf-result>
  </ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description OSPFv3 node specific backup SPF information

<ospf3-backup-spf-node>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
      <ospf-node-id>....</ospf-node-id>
      <lsa-id>
        lsa-id
      </lsa-id>
      <ospf-node-metric>
        ospf-node-metric
      </ospf-node-metric>
      <ospf-parent-node-id>....</ospf-parent-node-id>
      <ospf-next-hop>....</ospf-next-hop>
      <ospf-backup-next-hop>....</ospf-backup-next-hop>
      <ospf3-backup-spf-result>....</ospf3-backup-spf-result>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description OSPFv3 node specific backup SPF information

<ospf3-backup-spf-node>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf-node-id>....</ospf-node-id>
        <lsa-id>
          lsa-id
        </lsa-id>
        <ospf-node-metric>
          ospf-node-metric
        </ospf-node-metric>
        <ospf-parent-node-id>....</ospf-parent-node-id>
        <ospf-next-hop>....</ospf-next-hop>
        <ospf-backup-next-hop>....</ospf-backup-next-hop>
        <ospf3-backup-spf-result>....</ospf3-backup-spf-result>
```


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```
      </ospf3-backup-spf-node>
    </ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description OSPFv3 node specific backup SPF information

<ospf3-backup-spf-result>

Usage

```
<ospf3-backup-spf-result>
  <ospf-backup-neighbor>
    ospf-backup-neighbor
  </ospf-backup-neighbor>
  <ospf-backup-neighbor-is-lsp-endpoint>
    ospf-backup-neighbor-is-lsp-endpoint
  </ospf-backup-neighbor-is-lsp-endpoint>
  <ospf-backup-metric>
    ospf-backup-metric
  </ospf-backup-metric>
  <ospf-backup-neighbor-from-metric>
    ospf-backup-neighbor-from-metric
  </ospf-backup-neighbor-from-metric>
  <ospf-backup-neighbor-to-metric>
    ospf-backup-neighbor-to-metric
  </ospf-backup-neighbor-to-metric>
  <ospf-track-item>
    ospf-track-item
  </ospf-track-item>
  <ospf-backup-result-status>
    ospf-backup-result-status
  </ospf-backup-result-status>
  <ospf-backup-result-no-coverage-reason>
    ospf-backup-result-no-coverage-reason
  </ospf-backup-result-no-coverage-reason>
</ospf3-backup-spf-result>
```

Description OSPFv3 backup SPF result

<ospf3-backup-spf-result>

Usage

```
<ospf3-backup-spf-node>
  <ospf3-backup-spf-result>
    <ospf-backup-neighbor>
      ospf-backup-neighbor
    </ospf-backup-neighbor>
    <ospf-backup-neighbor-is-lsp-endpoint>
      ospf-backup-neighbor-is-lsp-endpoint
    </ospf-backup-neighbor-is-lsp-endpoint>
    <ospf-backup-metric>
      ospf-backup-metric
```

```
    </ospf-backup-metric>
    <ospf-backup-neighbor-from-metric>
      ospf-backup-neighbor-from-metric
    </ospf-backup-neighbor-from-metric>
    <ospf-backup-neighbor-to-metric>
      ospf-backup-neighbor-to-metric
    </ospf-backup-neighbor-to-metric>
    <ospf-track-item>
      ospf-track-item
    </ospf-track-item>
    <ospf-backup-result-status>
      ospf-backup-result-status
    </ospf-backup-result-status>
    <ospf-backup-result-no-coverage-reason>
      ospf-backup-result-no-coverage-reason
    </ospf-backup-result-no-coverage-reason>
  </ospf3-backup-spf-result>
</ospf3-backup-spf-node>
```

Description OSPFv3 backup SPF result

<ospf3-backup-spf-result>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf3-backup-spf-node>
    <ospf3-backup-spf-result>
      <ospf-backup-neighbor>
        ospf-backup-neighbor
      </ospf-backup-neighbor>
      <ospf-backup-neighbor-is-lsp-endpoint>
        ospf-backup-neighbor-is-lsp-endpoint
      </ospf-backup-neighbor-is-lsp-endpoint>
      <ospf-backup-metric>
        ospf-backup-metric
      </ospf-backup-metric>
      <ospf-backup-neighbor-from-metric>
        ospf-backup-neighbor-from-metric
      </ospf-backup-neighbor-from-metric>
      <ospf-backup-neighbor-to-metric>
        ospf-backup-neighbor-to-metric
      </ospf-backup-neighbor-to-metric>
      <ospf-track-item>
        ospf-track-item
      </ospf-track-item>
      <ospf-backup-result-status>
        ospf-backup-result-status
      </ospf-backup-result-status>
      <ospf-backup-result-no-coverage-reason>
        ospf-backup-result-no-coverage-reason
      </ospf-backup-result-no-coverage-reason>
    </ospf3-backup-spf-result>
  </ospf3-backup-spf-node>
```


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```
</ospf3-topology-area-backup-spf>
```

Description OSPFv3 backup SPF result

<ospf3-backup-spf-result>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf3-backup-spf-node>
      <ospf3-backup-spf-result>
        <ospf-backup-neighbor>
          ospf-backup-neighbor
        </ospf-backup-neighbor>
        <ospf-backup-neighbor-is-lsp-endpoint>
          ospf-backup-neighbor-is-lsp-endpoint
        </ospf-backup-neighbor-is-lsp-endpoint>
        <ospf-backup-metric>
          ospf-backup-metric
        </ospf-backup-metric>
        <ospf-backup-neighbor-from-metric>
          ospf-backup-neighbor-from-metric
        </ospf-backup-neighbor-from-metric>
        <ospf-backup-neighbor-to-metric>
          ospf-backup-neighbor-to-metric
        </ospf-backup-neighbor-to-metric>
        <ospf-track-item>
          ospf-track-item
        </ospf-track-item>
        <ospf-backup-result-status>
          ospf-backup-result-status
        </ospf-backup-result-status>
        <ospf-backup-result-no-coverage-reason>
          ospf-backup-result-no-coverage-reason
        </ospf-backup-result-no-coverage-reason>
      </ospf3-backup-spf-result>
    </ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description OSPFv3 backup SPF result

<ospf3-backup-spf-result>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf3-backup-spf-node>
        <ospf3-backup-spf-result>
          <ospf-backup-neighbor>
            ospf-backup-neighbor
```

```
            </ospf-backup-neighbor>
            <ospf-backup-neighbor-is-lsp-endpoint>
              ospf-backup-neighbor-is-lsp-endpoint
            </ospf-backup-neighbor-is-lsp-endpoint>
            <ospf-backup-metric>
              ospf-backup-metric
            </ospf-backup-metric>
            <ospf-backup-neighbor-from-metric>
              ospf-backup-neighbor-from-metric
            </ospf-backup-neighbor-from-metric>
            <ospf-backup-neighbor-to-metric>
              ospf-backup-neighbor-to-metric
            </ospf-backup-neighbor-to-metric>
            <ospf-track-item>
              ospf-track-item
            </ospf-track-item>
            <ospf-backup-result-status>
              ospf-backup-result-status
            </ospf-backup-result-status>
            <ospf-backup-result-no-coverage-reason>
              ospf-backup-result-no-coverage-reason
            </ospf-backup-result-no-coverage-reason>
          </ospf3-backup-spf-result>
        </ospf3-backup-spf-node>
      </ospf3-topology-area-backup-spf>
    </ospf3-topology-backup-spf>
  </ospf3-backup-spf-information>
```

Description OSPFv3 backup SPF result

<ospf3-database>

Usage

```
<ospf3-database>
  <lsa-type>
    lsa-type
  </lsa-type>
  <our-entry>
    our-entry
  </our-entry>
  <lsa-id>
    lsa-id
  </lsa-id>
  <advertising-router>
    advertising-router
  </advertising-router>
  <sequence-number>
    sequence-number
  </sequence-number>
  <age>
    age
  </age>
  <ospf-do-not-age>
    ospf-do-not-age
```


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```
  </ospf-do-not-age>
  <checksum>
   checksum
  </checksum>
  <lsa-length>
   lsa-length
  </lsa-length>
  <ospf3-router-lsa>....</ospf3-router-lsa>
  <ospf3-network-lsa>....</ospf3-network-lsa>
  <ospf3-inter-area-prefix-lsa>....</ospf3-inter-area-prefix-lsa>
  <ospf3-inter-area-router-lsa>....</ospf3-inter-area-router-lsa>
  <ospf3-external-lsa>....</ospf3-external-lsa>
  <ospf3-link-lsa>....</ospf3-link-lsa>
  <ospf3-intra-area-prefix-lsa>....</ospf3-intra-area-prefix-lsa>
  <ospf-database-extensive>....</ospf-database-extensive>
  <ospf-opaque-link-local-lsa>....</ospf-opaque-link-local-lsa>
</ospf3-database>
```

Description

<ospf3-database>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <lsa-type>
     lsa-type
    </lsa-type>
    <our-entry>
     our-entry
    </our-entry>
    <lsa-id>
     lsa-id
    </lsa-id>
    <advertising-router>
     advertising-router
    </advertising-router>
    <sequence-number>
     sequence-number
    </sequence-number>
    <age>
     age
    </age>
    <ospf-do-not-age>
     ospf-do-not-age
    </ospf-do-not-age>
    <checksum>
     checksum
    </checksum>
    <lsa-length>
     lsa-length
    </lsa-length>
    <ospf3-router-lsa>....</ospf3-router-lsa>
    <ospf3-network-lsa>....</ospf3-network-lsa>
    <ospf3-inter-area-prefix-lsa>....</ospf3-inter-area-prefix-lsa>
```

```
    <ospf3-inter-area-router-lsa>....</ospf3-inter-area-router-lsa>
    <ospf3-external-lsa>....</ospf3-external-lsa>
    <ospf3-link-lsa>....</ospf3-link-lsa>
    <ospf3-intra-area-prefix-lsa>....</ospf3-intra-area-prefix-lsa>
    <ospf-database-extensive>....</ospf-database-extensive>
    <ospf-opaque-link-local-lsa>....</ospf-opaque-link-local-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-database-information>

Usage

```
<ospf3-database-information>
  <ospf3-area-header>....</ospf3-area-header>
  <ospf3-intf-header>....</ospf3-intf-header>
  <ospf3-database>....</ospf3-database>
  <ospf3-database-summary>....</ospf3-database-summary>
</ospf3-database-information>
```

Description

<ospf3-database-replication-information>

Usage

```
<ospf3-database-replication-information>
  <ospf-database-replication>....</ospf-database-replication>
</ospf3-database-replication-information>
```

Description OSPFv3 LSA replication information

<ospf3-database-summary>

Usage

```
<ospf3-database-summary>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf-intf>
    ospf-intf
  </ospf-intf>
  <ospf-lsa-count>
    ospf-lsa-count
  </ospf-lsa-count>
  <ospf-lsa-type>
    ospf-lsa-type
  </ospf-lsa-type>
</ospf3-database-summary>
```

Description

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<ospf3-database-summary>

Usage

```
<ospf3-database-information>
  <ospf3-database-summary>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf-intf>
      ospf-intf
    </ospf-intf>
    <ospf-lsa-count>
      ospf-lsa-count
    </ospf-lsa-count>
    <ospf-lsa-type>
      ospf-lsa-type
    </ospf-lsa-type>
  </ospf3-database-summary>
</ospf3-database-information>
```

Description

<ospf3-external-lsa>

Usage

```
<ospf3-external-lsa>
  <ospf3-prefix>
    ospf3-prefix
  </ospf3-prefix>
  <ospf3-prefix-options>
    ospf3-prefix-options
  </ospf3-prefix-options>
  <type-value>
    type-value
  </type-value>
  <metric>
    metric
  </metric>
  <forward-address>
    forward-address
  </forward-address>
  <tag>
    tag
  </tag>
</ospf3-external-lsa>
```

Description

<ospf3-external-lsa>

Usage

```
<ospf3-database>
  <ospf3-external-lsa>
```

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```
    <ospf3-prefix>
      ospf3-prefix
    </ospf3-prefix>
    <ospf3-prefix-options>
      ospf3-prefix-options
    </ospf3-prefix-options>
    <type-value>
      type-value
    </type-value>
    <metric>
      metric
    </metric>
    <forward-address>
      forward-address
    </forward-address>
    <tag>
      tag
    </tag>
  </ospf3-external-lsa>
</ospf3-database>
```

Description

<ospf3-external-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-external-lsa>
      <ospf3-prefix>
        ospf3-prefix
      </ospf3-prefix>
      <ospf3-prefix-options>
        ospf3-prefix-options
      </ospf3-prefix-options>
      <type-value>
        type-value
      </type-value>
      <metric>
        metric
      </metric>
      <forward-address>
        forward-address
      </forward-address>
      <tag>
        tag
      </tag>
    </ospf3-external-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

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<ospf3-instance-neighbor>

Usage

```
<ospf3-neighbor-information-all>
  <ospf3-instance-neighbor>
    <ospf-instance-name>
      ospf-instance-name
    </ospf-instance-name>
    <ospf3-realm-neighbor>....</ospf3-realm-neighbor>
  </ospf3-instance-neighbor>
</ospf3-neighbor-information-all>
```

Description Information about OSPFv3 neighbors within this routing instance

<ospf3-inter-area-prefix-lsa>

Usage

```
<ospf3-inter-area-prefix-lsa>
  <ospf3-prefix>
    ospf3-prefix
  </ospf3-prefix>
  <ospf3-prefix-options>
    ospf3-prefix-options
  </ospf3-prefix-options>
  <metric>
    metric
  </metric>
</ospf3-inter-area-prefix-lsa>
```

Description

<ospf3-inter-area-prefix-lsa>

Usage

```
<ospf3-database>
  <ospf3-inter-area-prefix-lsa>
    <ospf3-prefix>
      ospf3-prefix
    </ospf3-prefix>
    <ospf3-prefix-options>
      ospf3-prefix-options
    </ospf3-prefix-options>
    <metric>
      metric
    </metric>
  </ospf3-inter-area-prefix-lsa>
</ospf3-database>
```

Description

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<ospf3-inter-area-prefix-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-inter-area-prefix-lsa>
      <ospf3-prefix>
        ospf3-prefix
      </ospf3-prefix>
      <ospf3-prefix-options>
        ospf3-prefix-options
      </ospf3-prefix-options>
      <metric>
        metric
      </metric>
    </ospf3-inter-area-prefix-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-inter-area-router-lsa>

Usage

```
<ospf3-inter-area-router-lsa>
  <destination-router-id>
    destination-router-id
  </destination-router-id>
  <ospf3-options>
    ospf3-options
  </ospf3-options>
  <metric>
    metric
  </metric>
</ospf3-inter-area-router-lsa>
```

Description

<ospf3-inter-area-router-lsa>

Usage

```
<ospf3-database>
  <ospf3-inter-area-router-lsa>
    <destination-router-id>
      destination-router-id
    </destination-router-id>
    <ospf3-options>
      ospf3-options
    </ospf3-options>
    <metric>
      metric
    </metric>
  </ospf3-inter-area-router-lsa>
```


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```
</ospf3-database>
```

Description

<ospf3-inter-area-router-lsa>

Usage

```
<ospf3-database-information>
 <ospf3-database>
  <ospf3-inter-area-router-lsa>
   <destination-router-id>
    destination-router-id
   </destination-router-id>
   <ospf3-options>
    ospf3-options
   </ospf3-options>
   <metric>
    metric
   </metric>
  </ospf3-inter-area-router-lsa>
 </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-interface>

Usage

```
<ospf3-interface>
 <interface-name>
  interface-name
 </interface-name>
 <ospf-interface-state>
  ospf-interface-state
 </ospf-interface-state>
 <ospf-area>
  ospf-area
 </ospf-area>
 <dr-id>
  dr-id
 </dr-id>
 <bdr-id>
  bdr-id
 </bdr-id>
 <neighbor-count>
  neighbor-count
 </neighbor-count>
 <interface-address>
  interface-address
 </interface-address>
 <prefix-length>
  prefix-length
 </prefix-length>
 <ospf3-interface-index>
```

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```
  ospf3-interface-index
</ospf3-interface-index>
<interface-type>
  interface-type
</interface-type>
<mtu>
  mtu
</mtu>
<interface-cost>
  interface-cost
</interface-cost>
<virtual-link-transit-area>
  virtual-link-transit-area
</virtual-link-transit-area>
<virtual-link-destination>
  virtual-link-destination
</virtual-link-destination>
<dr-address>
  dr-address
</dr-address>
<bdr-address>
  bdr-address
</bdr-address>
<router-priority>
  router-priority
</router-priority>
<adj-count>
  adj-count
</adj-count>
<interface-secondary>
  interface-secondary
</interface-secondary>
<interface-flood-reduction>
  interface-flood-reduction
</interface-flood-reduction>
<passive>
  passive
</passive>
<hello-interval>
  hello-interval
</hello-interval>
<poll-interval>
  poll-interval
</poll-interval>
<dead-interval>
  dead-interval
</dead-interval>
<retransmit-interval>
  retransmit-interval
</retransmit-interval>
<ospf-stub-type>
  ospf-stub-type
</ospf-stub-type>
<ipsec-sa>
  ipsec-sa
</ipsec-sa>
```


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```
<ospf-interface-protection-type>
  ospf-interface-protection-type
</ospf-interface-protection-type>
<ospf-interface-no-eligible-backup>
  ospf-interface-no-eligible-backup
</ospf-interface-no-eligible-backup>
<igp-ldp-sync-holdtime>
  igp-ldp-sync-holdtime
</igp-ldp-sync-holdtime>
<igp-ldp-sync-state>
  igp-ldp-sync-state
</igp-ldp-sync-state>
<igp-ldp-sync-last-change>
  igp-ldp-sync-last-change
</igp-ldp-sync-last-change>
<igp-ldp-sync-reason>
  igp-ldp-sync-reason
</igp-ldp-sync-reason>
<igp-ldp-sync-timeleft>
  igp-ldp-sync-timeleft
</igp-ldp-sync-timeleft>
<ospf3-router-lsa-id>
  ospf3-router-lsa-id
</ospf3-router-lsa-id>
<interface-flood-list-count>
  interface-flood-list-count
</interface-flood-list-count>
<flood-list-count>
  flood-list-count
</flood-list-count>
<lsa-list>
  lsa-list
</lsa-list>
<interface-description-list>
  interface-description-list
</interface-description-list>
</ospf3-interface>
```

Description

<ospf3-interface>

Usage

```
<ospf3-interface-information>
  <ospf3-interface>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-interface-state>
      ospf-interface-state
    </ospf-interface-state>
    <ospf-area>
      ospf-area
    </ospf-area>
    <dr-id>
```

```
  dr-id
</dr-id>
<bdr-id>
  bdr-id
</bdr-id>
<neighbor-count>
  neighbor-count
</neighbor-count>
<interface-address>
  interface-address
</interface-address>
<prefix-length>
  prefix-length
</prefix-length>
<ospf3-interface-index>
  ospf3-interface-index
</ospf3-interface-index>
<interface-type>
  interface-type
</interface-type>
<mtu>
  mtu
</mtu>
<interface-cost>
  interface-cost
</interface-cost>
<virtual-link-transit-area>
  virtual-link-transit-area
</virtual-link-transit-area>
<virtual-link-destination>
  virtual-link-destination
</virtual-link-destination>
<dr-address>
  dr-address
</dr-address>
<bdr-address>
  bdr-address
</bdr-address>
<router-priority>
  router-priority
</router-priority>
<adj-count>
  adj-count
</adj-count>
<interface-secondary>
  interface-secondary
</interface-secondary>
<interface-flood-reduction>
  interface-flood-reduction
</interface-flood-reduction>
<passive>
  passive
</passive>
<hello-interval>
  hello-interval
</hello-interval>
```


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```
      <poll-interval>
        poll-interval
      </poll-interval>
      <dead-interval>
        dead-interval
      </dead-interval>
      <retransmit-interval>
        retransmit-interval
      </retransmit-interval>
      <ospf-stub-type>
        ospf-stub-type
      </ospf-stub-type>
      <ipsec-sa>
        ipsec-sa
      </ipsec-sa>
      <ospf-interface-protection-type>
        ospf-interface-protection-type
      </ospf-interface-protection-type>
      <ospf-interface-no-eligible-backup>
        ospf-interface-no-eligible-backup
      </ospf-interface-no-eligible-backup>
      <igp-ldp-sync-holdtime>
        igp-ldp-sync-holdtime
      </igp-ldp-sync-holdtime>
      <igp-ldp-sync-state>
        igp-ldp-sync-state
      </igp-ldp-sync-state>
      <igp-ldp-sync-last-change>
        igp-ldp-sync-last-change
      </igp-ldp-sync-last-change>
      <igp-ldp-sync-reason>
        igp-ldp-sync-reason
      </igp-ldp-sync-reason>
      <igp-ldp-sync-timeleft>
        igp-ldp-sync-timeleft
      </igp-ldp-sync-timeleft>
      <ospf3-router-lsa-id>
        ospf3-router-lsa-id
      </ospf3-router-lsa-id>
      <interface-flood-list-count>
        interface-flood-list-count
      </interface-flood-list-count>
      <flood-list-count>
        flood-list-count
      </flood-list-count>
      <lsa-list>
        lsa-list
      </lsa-list>
      <interface-description-list>
        interface-description-list
      </interface-description-list>
    </ospf3-interface>
  </ospf3-interface-information>
```

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Description

<ospf3-interface-information>

Usage

```
<ospf3-interface-information>
  <ospf3-interface>....</ospf3-interface>
</ospf3-interface-information>
```

Description

<ospf3-interface-replication-information>

Usage

```
<ospf3-interface-replication-information>
  <ospf-interface-replication>....</ospf-interface-replication>
</ospf3-interface-replication-information>
```

Description OSPFv3 interface replication information

<ospf3-intf-header>

Usage

```
<ospf3-intf-header>
  <ospf-intf>
    ospf-intf
  </ospf-intf>
  <ospf-area>
    ospf-area
  </ospf-area>
</ospf3-intf-header>
```

Description

<ospf3-intf-header>

Usage

```
<ospf3-database-information>
  <ospf3-intf-header>
    <ospf-intf>
      ospf-intf
    </ospf-intf>
    <ospf-area>
      ospf-area
    </ospf-area>
  </ospf3-intf-header>
</ospf3-database-information>
```

Description

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<ospf3-intra-area-prefix-lsa>

Usage

```
<ospf3-intra-area-prefix-lsa>
  <reference-lsa-type>
    reference-lsa-type
  </reference-lsa-type>
  <reference-lsa-id>
    reference-lsa-id
  </reference-lsa-id>
  <reference-lsa-router-id>
    reference-lsa-router-id
  </reference-lsa-router-id>
  <prefix-count>
    prefix-count
  </prefix-count>
  <ospf3-prefix>
    ospf3-prefix
  </ospf3-prefix>
  <ospf3-prefix-options>
    ospf3-prefix-options
  </ospf3-prefix-options>
  <ospf3-prefix-metric>
    ospf3-prefix-metric
  </ospf3-prefix-metric>
</ospf3-intra-area-prefix-lsa>
```

Description

<ospf3-intra-area-prefix-lsa>

Usage

```
<ospf3-database>
  <ospf3-intra-area-prefix-lsa>
    <reference-lsa-type>
      reference-lsa-type
    </reference-lsa-type>
    <reference-lsa-id>
      reference-lsa-id
    </reference-lsa-id>
    <reference-lsa-router-id>
      reference-lsa-router-id
    </reference-lsa-router-id>
    <prefix-count>
      prefix-count
    </prefix-count>
    <ospf3-prefix>
      ospf3-prefix
    </ospf3-prefix>
    <ospf3-prefix-options>
      ospf3-prefix-options
    </ospf3-prefix-options>
    <ospf3-prefix-metric>
      ospf3-prefix-metric
```

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```
    </ospf3-prefix-metric>
  </ospf3-intra-area-prefix-lsa>
</ospf3-database>
```

Description

<ospf3-intra-area-prefix-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-intra-area-prefix-lsa>
      <reference-lsa-type>
        reference-lsa-type
      </reference-lsa-type>
      <reference-lsa-id>
        reference-lsa-id
      </reference-lsa-id>
      <reference-lsa-router-id>
        reference-lsa-router-id
      </reference-lsa-router-id>
      <prefix-count>
        prefix-count
      </prefix-count>
      <ospf3-prefix>
        ospf3-prefix
      </ospf3-prefix>
      <ospf3-prefix-options>
        ospf3-prefix-options
      </ospf3-prefix-options>
      <ospf3-prefix-metric>
        ospf3-prefix-metric
      </ospf3-prefix-metric>
    </ospf3-intra-area-prefix-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-io-statistics-information>

Usage

```
<ospf3-io-statistics-information>
  <ospf-io-statistics>....</ospf-io-statistics>
</ospf3-io-statistics-information>
```

Description

<ospf3-link>

Usage

```
<ospf3-router-lsa>
  <ospf3-link>
```


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```
    <link-type-name>
      link-type-name
    </link-type-name>
    <link-type-value>
      link-type-value
    </link-type-value>
    <link-intf-id>
      link-intf-id
    </link-intf-id>
    <nbr-intf-id>
      nbr-intf-id
    </nbr-intf-id>
    <nbr-rtr-id>
      nbr-rtr-id
    </nbr-rtr-id>
    <link-metric>
      link-metric
    </link-metric>
  </ospf3-link>
</ospf3-router-lsa>
```

Description

<ospf3-link>

Usage

```
<ospf3-database>
  <ospf3-router-lsa>
    <ospf3-link>
      <link-type-name>
        link-type-name
      </link-type-name>
      <link-type-value>
        link-type-value
      </link-type-value>
      <link-intf-id>
        link-intf-id
      </link-intf-id>
      <nbr-intf-id>
        nbr-intf-id
      </nbr-intf-id>
      <nbr-rtr-id>
        nbr-rtr-id
      </nbr-rtr-id>
      <link-metric>
        link-metric
      </link-metric>
    </ospf3-link>
  </ospf3-router-lsa>
</ospf3-database>
```

Description

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<ospf3-link>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-router-lsa>
      <ospf3-link>
        <link-type-name>
          link-type-name
        </link-type-name>
        <link-type-value>
          link-type-value
        </link-type-value>
        <link-intf-id>
          link-intf-id
        </link-intf-id>
        <nbr-intf-id>
          nbr-intf-id
        </nbr-intf-id>
        <nbr-rtr-id>
          nbr-rtr-id
        </nbr-rtr-id>
        <link-metric>
          link-metric
        </link-metric>
      </ospf3-link>
    </ospf3-router-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-link-lsa>

Usage

```
<ospf3-link-lsa>
  <linklocal-address>
    linklocal-address
  </linklocal-address>
  <ospf3-options>
    ospf3-options
  </ospf3-options>
  <router-priority>
    router-priority
  </router-priority>
  <prefix-count>
    prefix-count
  </prefix-count>
  <ospf3-prefix>
    ospf3-prefix
  </ospf3-prefix>
  <ospf3-prefix-options>
    ospf3-prefix-options
  </ospf3-prefix-options>
```


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```
</ospf3-link-lsa>
```

Description

<ospf3-link-lsa>

Usage

```
<ospf3-database>
  <ospf3-link-lsa>
    <linklocal-address>
      linklocal-address
    </linklocal-address>
    <ospf3-options>
      ospf3-options
    </ospf3-options>
    <router-priority>
      router-priority
    </router-priority>
    <prefix-count>
      prefix-count
    </prefix-count>
    <ospf3-prefix>
      ospf3-prefix
    </ospf3-prefix>
    <ospf3-prefix-options>
      ospf3-prefix-options
    </ospf3-prefix-options>
  </ospf3-link-lsa>
</ospf3-database>
```

Description

<ospf3-link-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-link-lsa>
      <linklocal-address>
        linklocal-address
      </linklocal-address>
      <ospf3-options>
        ospf3-options
      </ospf3-options>
      <router-priority>
        router-priority
      </router-priority>
      <prefix-count>
        prefix-count
      </prefix-count>
      <ospf3-prefix>
        ospf3-prefix
      </ospf3-prefix>
      <ospf3-prefix-options>
```

```
            ospf3-prefix-options
           </ospf3-prefix-options>
          </ospf3-link-lsa>
         </ospf3-database>
        </ospf3-database-information>
```

Description

<ospf3-log-information>

Usage

```
<ospf3-log-information>
 <ospf-log-instance>....</ospf-log-instance>
 <ospf-log-maximum-length>....</ospf-log-maximum-length>
 <ospf-log-events>....</ospf-log-events>
</ospf3-log-information>
```

Description

<ospf3-lsa-topology>

Usage

```
<ospf3-lsa-topology>
 <ospf-topology-name>
  ospf-topology-name
 </ospf-topology-name>
 <ospf-topology-id>
  ospf-topology-id
 </ospf-topology-id>
 <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
 <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
</ospf3-lsa-topology>
```

Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-router-lsa>
 <ospf3-lsa-topology>
  <ospf-topology-name>
   ospf-topology-name
  </ospf-topology-name>
  <ospf-topology-id>
   ospf-topology-id
  </ospf-topology-id>
  <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
  <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
 </ospf3-lsa-topology>
</ospf3-router-lsa>
```


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Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-network-lsa>
  <ospf3-lsa-topology>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf-topology-id>
      ospf-topology-id
    </ospf-topology-id>
    <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
    <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
  </ospf3-lsa-topology>
</ospf3-network-lsa>
```

Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-database>
  <ospf3-router-lsa>
    <ospf3-lsa-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
      <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
      <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
    </ospf3-lsa-topology>
  </ospf3-router-lsa>
</ospf3-database>
```

Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-database>
  <ospf3-network-lsa>
    <ospf3-lsa-topology>
      <ospf-topology-name>
        ospf-topology-name
      </ospf-topology-name>
      <ospf-topology-id>
        ospf-topology-id
      </ospf-topology-id>
```

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```
        <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
        <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
      </ospf3-lsa-topology>
    </ospf3-network-lsa>
  </ospf3-database>
```

Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-router-lsa>
      <ospf3-lsa-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
        <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
      </ospf3-lsa-topology>
    </ospf3-router-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description OSPFv3 topology information for a LSA

<ospf3-lsa-topology>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-network-lsa>
      <ospf3-lsa-topology>
        <ospf-topology-name>
          ospf-topology-name
        </ospf-topology-name>
        <ospf-topology-id>
          ospf-topology-id
        </ospf-topology-id>
        <ospf-lsa-topology-link>....</ospf-lsa-topology-link>
        <ospf3-lsa-topology-link>....</ospf3-lsa-topology-link>
      </ospf3-lsa-topology>
    </ospf3-network-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description OSPFv3 topology information for a LSA

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<ospf3-lsa-topology-link>

Usage

```
<ospf3-lsa-topology-link>
  <link-type-name>
    link-type-name
  </link-type-name>
  <ospf-lsa-topology-link-node-id>
    ospf-lsa-topology-link-node-id
  </ospf-lsa-topology-link-node-id>
  <ospf-lsa-topology-link-metric>
    ospf-lsa-topology-link-metric
  </ospf-lsa-topology-link-metric>
  <ospf-lsa-topology-link-state>
    ospf-lsa-topology-link-state
  </ospf-lsa-topology-link-state>
</ospf3-lsa-topology-link>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-lsa-topology>
  <ospf3-lsa-topology-link>
    <link-type-name>
      link-type-name
    </link-type-name>
    <ospf-lsa-topology-link-node-id>
      ospf-lsa-topology-link-node-id
    </ospf-lsa-topology-link-node-id>
    <ospf-lsa-topology-link-metric>
      ospf-lsa-topology-link-metric
    </ospf-lsa-topology-link-metric>
    <ospf-lsa-topology-link-state>
      ospf-lsa-topology-link-state
    </ospf-lsa-topology-link-state>
  </ospf3-lsa-topology-link>
</ospf3-lsa-topology>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-router-lsa>
  <ospf3-lsa-topology>
    <ospf3-lsa-topology-link>
      <link-type-name>
        link-type-name
      </link-type-name>
      <ospf-lsa-topology-link-node-id>
```

```
            ospf-lsa-topology-link-node-id
           </ospf-lsa-topology-link-node-id>
           <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
           </ospf-lsa-topology-link-metric>
           <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
           </ospf-lsa-topology-link-state>
          </ospf3-lsa-topology-link>
         </ospf3-lsa-topology>
        </ospf3-router-lsa>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-network-lsa>
 <ospf3-lsa-topology>
  <ospf3-lsa-topology-link>
   <link-type-name>
    link-type-name
   </link-type-name>
   <ospf-lsa-topology-link-node-id>
    ospf-lsa-topology-link-node-id
   </ospf-lsa-topology-link-node-id>
   <ospf-lsa-topology-link-metric>
    ospf-lsa-topology-link-metric
   </ospf-lsa-topology-link-metric>
   <ospf-lsa-topology-link-state>
    ospf-lsa-topology-link-state
   </ospf-lsa-topology-link-state>
  </ospf3-lsa-topology-link>
 </ospf3-lsa-topology>
</ospf3-network-lsa>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-database>
 <ospf3-router-lsa>
  <ospf3-lsa-topology>
   <ospf3-lsa-topology-link>
    <link-type-name>
     link-type-name
    </link-type-name>
    <ospf-lsa-topology-link-node-id>
     ospf-lsa-topology-link-node-id
    </ospf-lsa-topology-link-node-id>
    <ospf-lsa-topology-link-metric>
```


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```
            ospf-lsa-topology-link-metric
           </ospf-lsa-topology-link-metric>
           <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
           </ospf-lsa-topology-link-state>
          </ospf3-lsa-topology-link>
         </ospf3-lsa-topology>
        </ospf3-router-lsa>
       </ospf3-database>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-database>
 <ospf3-network-lsa>
  <ospf3-lsa-topology>
   <ospf3-lsa-topology-link>
    <link-type-name>
     link-type-name
    </link-type-name>
    <ospf-lsa-topology-link-node-id>
     ospf-lsa-topology-link-node-id
    </ospf-lsa-topology-link-node-id>
    <ospf-lsa-topology-link-metric>
     ospf-lsa-topology-link-metric
    </ospf-lsa-topology-link-metric>
    <ospf-lsa-topology-link-state>
     ospf-lsa-topology-link-state
    </ospf-lsa-topology-link-state>
   </ospf3-lsa-topology-link>
  </ospf3-lsa-topology>
 </ospf3-network-lsa>
</ospf3-database>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-database-information>
 <ospf3-database>
  <ospf3-router-lsa>
   <ospf3-lsa-topology>
    <ospf3-lsa-topology-link>
     <link-type-name>
      link-type-name
     </link-type-name>
     <ospf-lsa-topology-link-node-id>
      ospf-lsa-topology-link-node-id
     </ospf-lsa-topology-link-node-id>
```

```
            <ospf-lsa-topology-link-metric>
              ospf-lsa-topology-link-metric
            </ospf-lsa-topology-link-metric>
            <ospf-lsa-topology-link-state>
              ospf-lsa-topology-link-state
            </ospf-lsa-topology-link-state>
          </ospf3-lsa-topology-link>
        </ospf3-lsa-topology>
      </ospf3-router-lsa>
    </ospf3-database>
  </ospf3-database-information>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-lsa-topology-link>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-network-lsa>
      <ospf3-lsa-topology>
        <ospf3-lsa-topology-link>
          <link-type-name>
            link-type-name
          </link-type-name>
          <ospf-lsa-topology-link-node-id>
            ospf-lsa-topology-link-node-id
          </ospf-lsa-topology-link-node-id>
          <ospf-lsa-topology-link-metric>
            ospf-lsa-topology-link-metric
          </ospf-lsa-topology-link-metric>
          <ospf-lsa-topology-link-state>
            ospf-lsa-topology-link-state
          </ospf-lsa-topology-link-state>
        </ospf3-lsa-topology-link>
      </ospf3-lsa-topology>
    </ospf3-network-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description OSPFv3 topology information for a set of links to a LSA

<ospf3-neighbor>

Usage

```
<ospf3-neighbor>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <interface-name>
    interface-name
  </interface-name>
```


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```
<ospf-neighbor-state>
  ospf-neighbor-state
</ospf-neighbor-state>
<neighbor-priority>
  neighbor-priority
</neighbor-priority>
<activity-timer>
  activity-timer
</activity-timer>
<neighbor-address>
  neighbor-address
</neighbor-address>
<ospf-area>
  ospf-area
</ospf-area>
<options>
  options
</options>
<neighbor-secondary>
  neighbor-secondary
</neighbor-secondary>
<ospf3-interface-index>
  ospf3-interface-index
</ospf3-interface-index>
<neighbor-cost>
  neighbor-cost
</neighbor-cost>
<dr-id>
  dr-id
</dr-id>
<bdr-id>
  bdr-id
</bdr-id>
<neighbor-up-time>
  neighbor-up-time
</neighbor-up-time>
<neighbor-adjacency-time>
  neighbor-adjacency-time
</neighbor-adjacency-time>
<neighbor-suppress-hello>
  neighbor-suppress-hello
</neighbor-suppress-hello>
<master-slave>
  master-slave
</master-slave>
<sequence-number>
  sequence-number
</sequence-number>
<dbd-retransmit-time>
  dbd-retransmit-time
</dbd-retransmit-time>
<lsreq-retransmit-time>
  lsreq-retransmit-time
</lsreq-retransmit-time>
<lsreq-enqueued>
  lsreq-enqueued
```

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```
  </lsreq-enqueued>
  <lsreq-active>
   lsreq-active
  </lsreq-active>
  <lsa-list>
   lsa-list
  </lsa-list>
</ospf3-neighbor>
```

Description

<ospf3-neighbor>

Usage

```
<ospf3-neighbor-information>
  <ospf3-neighbor>
    <neighbor-id>
     neighbor-id
    </neighbor-id>
    <interface-name>
     interface-name
    </interface-name>
    <ospf-neighbor-state>
     ospf-neighbor-state
    </ospf-neighbor-state>
    <neighbor-priority>
     neighbor-priority
    </neighbor-priority>
    <activity-timer>
     activity-timer
    </activity-timer>
    <neighbor-address>
     neighbor-address
    </neighbor-address>
    <ospf-area>
     ospf-area
    </ospf-area>
    <options>
     options
    </options>
    <neighbor-secondary>
     neighbor-secondary
    </neighbor-secondary>
    <ospf3-interface-index>
     ospf3-interface-index
    </ospf3-interface-index>
    <neighbor-cost>
     neighbor-cost
    </neighbor-cost>
    <dr-id>
     dr-id
    </dr-id>
    <bdr-id>
     bdr-id
    </bdr-id>
```


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```
    <neighbor-up-time>
      neighbor-up-time
    </neighbor-up-time>
    <neighbor-adjacency-time>
      neighbor-adjacency-time
    </neighbor-adjacency-time>
    <neighbor-suppress-hello>
      neighbor-suppress-hello
    </neighbor-suppress-hello>
    <master-slave>
      master-slave
    </master-slave>
    <sequence-number>
      sequence-number
    </sequence-number>
    <dbd-retransmit-time>
      dbd-retransmit-time
    </dbd-retransmit-time>
    <lsreq-retransmit-time>
      lsreq-retransmit-time
    </lsreq-retransmit-time>
    <lsreq-enqueued>
      lsreq-enqueued
    </lsreq-enqueued>
    <lsreq-active>
      lsreq-active
    </lsreq-active>
    <lsa-list>
      lsa-list
    </lsa-list>
  </ospf3-neighbor>
</ospf3-neighbor-information>
```

Description

<ospf3-neighbor>

Usage

```
<ospf3-realm-neighbor>
  <ospf3-neighbor>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <interface-name>
      interface-name
    </interface-name>
    <ospf-neighbor-state>
      ospf-neighbor-state
    </ospf-neighbor-state>
    <neighbor-priority>
      neighbor-priority
    </neighbor-priority>
    <activity-timer>
      activity-timer
    </activity-timer>
```

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```
<neighbor-address>
  neighbor-address
</neighbor-address>
<ospf-area>
  ospf-area
</ospf-area>
<options>
  options
</options>
<neighbor-secondary>
  neighbor-secondary
</neighbor-secondary>
<ospf3-interface-index>
  ospf3-interface-index
</ospf3-interface-index>
<neighbor-cost>
  neighbor-cost
</neighbor-cost>
<dr-id>
  dr-id
</dr-id>
<bdr-id>
  bdr-id
</bdr-id>
<neighbor-up-time>
  neighbor-up-time
</neighbor-up-time>
<neighbor-adjacency-time>
  neighbor-adjacency-time
</neighbor-adjacency-time>
<neighbor-suppress-hello>
  neighbor-suppress-hello
</neighbor-suppress-hello>
<master-slave>
  master-slave
</master-slave>
<sequence-number>
  sequence-number
</sequence-number>
<dbd-retransmit-time>
  dbd-retransmit-time
</dbd-retransmit-time>
<lsreq-retransmit-time>
  lsreq-retransmit-time
</lsreq-retransmit-time>
<lsreq-enqueued>
  lsreq-enqueued
</lsreq-enqueued>
<lsreq-active>
  lsreq-active
</lsreq-active>
<lsa-list>
  lsa-list
</lsa-list>
</ospf3-neighbor>
```


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```
</ospf3-realm-neighbor>
```

Description

<ospf3-neighbor>

Usage

```
<ospf3-neighbor-information-all>
 <ospf3-instance-neighbor>
  <ospf3-realm-neighbor>
   <ospf3-neighbor>
    <neighbor-id>
     neighbor-id
    </neighbor-id>
    <interface-name>
     interface-name
    </interface-name>
    <ospf-neighbor-state>
     ospf-neighbor-state
    </ospf-neighbor-state>
    <neighbor-priority>
     neighbor-priority
    </neighbor-priority>
    <activity-timer>
     activity-timer
    </activity-timer>
    <neighbor-address>
     neighbor-address
    </neighbor-address>
    <ospf-area>
     ospf-area
    </ospf-area>
    <options>
     options
    </options>
    <neighbor-secondary>
     neighbor-secondary
    </neighbor-secondary>
    <ospf3-interface-index>
     ospf3-interface-index
    </ospf3-interface-index>
    <neighbor-cost>
     neighbor-cost
    </neighbor-cost>
    <dr-id>
     dr-id
    </dr-id>
    <bdr-id>
     bdr-id
    </bdr-id>
    <neighbor-up-time>
     neighbor-up-time
    </neighbor-up-time>
    <neighbor-adjacency-time>
     neighbor-adjacency-time
```

```
</neighbor-adjacency-time>
<neighbor-suppress-hello>
  neighbor-suppress-hello
</neighbor-suppress-hello>
<master-slave>
  master-slave
</master-slave>
<sequence-number>
  sequence-number
</sequence-number>
<dbd-retransmit-time>
  dbd-retransmit-time
</dbd-retransmit-time>
<lsreq-retransmit-time>
  lsreq-retransmit-time
</lsreq-retransmit-time>
<lsreq-enqueued>
  lsreq-enqueued
</lsreq-enqueued>
<lsreq-active>
  lsreq-active
</lsreq-active>
<lsa-list>
  lsa-list
</lsa-list>
</ospf3-neighbor>
</ospf3-realm-neighbor>
</ospf3-instance-neighbor>
</ospf3-neighbor-information-all>
```

Description

<ospf3-neighbor-information>

Usage

```
<ospf3-neighbor-information>
  <ospf3-neighbor>....</ospf3-neighbor>
</ospf3-neighbor-information>
```

Description

<ospf3-neighbor-information-all>

Usage

```
<ospf3-neighbor-information-all>
  <ospf3-instance-neighbor>....</ospf3-instance-neighbor>
</ospf3-neighbor-information-all>
```

Description Information about OSPFv3 neighbors in all routing instances

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<ospf3-neighbor-replication-information>

Usage

```
<ospf3-neighbor-replication-information>
  <ospf-neighbor-replication>....</ospf-neighbor-replication>
</ospf3-neighbor-replication-information>
```

Description OSPFv3 neighbor replication information

<ospf3-network-lsa>

Usage

```
<ospf3-network-lsa>
  <ospf3-options>
    ospf3-options
  </ospf3-options>
  <attached-router>
    attached-router
  </attached-router>
  <ospf3-lsa-topology>....</ospf3-lsa-topology>
</ospf3-network-lsa>
```

Description

<ospf3-network-lsa>

Usage

```
<ospf3-database>
  <ospf3-network-lsa>
    <ospf3-options>
      ospf3-options
    </ospf3-options>
    <attached-router>
      attached-router
    </attached-router>
    <ospf3-lsa-topology>....</ospf3-lsa-topology>
  </ospf3-network-lsa>
</ospf3-database>
```

Description

<ospf3-network-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
    <ospf3-network-lsa>
      <ospf3-options>
        ospf3-options
      </ospf3-options>
      <attached-router>
        attached-router
```

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```
      </attached-router>
      <ospf3-lsa-topology>....</ospf3-lsa-topology>
    </ospf3-network-lsa>
  </ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-overview-information>

Usage

```
<ospf3-overview-information>
  <ospf-overview>....</ospf-overview>
</ospf3-overview-information>
```

Description Overview information for an OSPFv3 instance

<ospf3-realm-neighbor>

Usage

```
<ospf3-realm-neighbor>
  <ospf3-realm-name>
    ospf3-realm-name
  </ospf3-realm-name>
  <ospf3-neighbor>....</ospf3-neighbor>
</ospf3-realm-neighbor>
```

Description Information about OSPFv3 neighbors within this realm

<ospf3-realm-neighbor>

Usage

```
<ospf3-neighbor-information-all>
  <ospf3-instance-neighbor>
    <ospf3-realm-neighbor>
      <ospf3-realm-name>
        ospf3-realm-name
      </ospf3-realm-name>
      <ospf3-neighbor>....</ospf3-neighbor>
    </ospf3-realm-neighbor>
  </ospf3-instance-neighbor>
</ospf3-neighbor-information-all>
```

Description Information about OSPFv3 neighbors within this realm

<ospf3-route>

Usage

```
<ospf3-route>
  <ospf3-route-entry>....</ospf3-route-entry>
```


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```
</ospf3-route>
```

Description

<ospf3-route>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>....</ospf3-route-entry>
  </ospf3-route>
</ospf3-route-information>
```

Description

<ospf3-route-entry>

Usage

```
<ospf3-route>
  <ospf3-route-entry>
    <address-prefix>
      address-prefix
    </address-prefix>
    <route-path-type>
      route-path-type
    </route-path-type>
    <route-type>
      route-type
    </route-type>
    <next-hop-type>
      next-hop-type
    </next-hop-type>
    <interface-cost>
      interface-cost
    </interface-cost>
    <ospf-next-hop>....</ospf-next-hop>
    <ospf-backup-next-hop>....</ospf-backup-next-hop>
    <ospf-area>
      ospf-area
    </ospf-area>
    <optional-capability>
      optional-capability
    </optional-capability>
    <route-origin>
      route-origin
    </route-origin>
    <route-priority>
      route-priority
    </route-priority>
    <type7>
      type7
    </type7>
    <pbit>
      pbit
```

```
    </pbit>
    <forward-nz>
      forward-nz
    </forward-nz>
  </ospf3-route-entry>
</ospf3-route>
```

Description

<ospf3-route-entry>

Usage

```
<ospf3-route-information>
  <ospf3-route>
    <ospf3-route-entry>
      <address-prefix>
        address-prefix
      </address-prefix>
      <route-path-type>
        route-path-type
      </route-path-type>
      <route-type>
        route-type
      </route-type>
      <next-hop-type>
        next-hop-type
      </next-hop-type>
      <interface-cost>
        interface-cost
      </interface-cost>
      <ospf-next-hop>....</ospf-next-hop>
      <ospf-backup-next-hop>....</ospf-backup-next-hop>
      <ospf-area>
        ospf-area
      </ospf-area>
      <optional-capability>
        optional-capability
      </optional-capability>
      <route-origin>
        route-origin
      </route-origin>
      <route-priority>
        route-priority
      </route-priority>
      <type7>
        type7
      </type7>
      <pbit>
        pbit
      </pbit>
      <forward-nz>
        forward-nz
      </forward-nz>
    </ospf3-route-entry>
  </ospf3-route>
```


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```
</ospf3-route-information>
```

Description

<ospf3-route-information>

Usage

```
<ospf3-route-information>
  <ospf3-route>....</ospf3-route>
</ospf3-route-information>
```

Description

<ospf3-router-lsa>

Usage

```
<ospf3-router-lsa>
  <bits>
    bits
  </bits>
  <ospf3-options>
    ospf3-options
  </ospf3-options>
  <ospf3-link>....</ospf3-link>
  <ospf3-lsa-topology>....</ospf3-lsa-topology>
</ospf3-router-lsa>
```

Description

<ospf3-router-lsa>

Usage

```
<ospf3-database>
  <ospf3-router-lsa>
    <bits>
      bits
    </bits>
    <ospf3-options>
      ospf3-options
    </ospf3-options>
    <ospf3-link>....</ospf3-link>
    <ospf3-lsa-topology>....</ospf3-lsa-topology>
  </ospf3-router-lsa>
</ospf3-database>
```

Description

<ospf3-router-lsa>

Usage

```
<ospf3-database-information>
  <ospf3-database>
```

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```
<ospf3-router-lsa>
  <bits>
    bits
  </bits>
  <ospf3-options>
    ospf3-options
  </ospf3-options>
  <ospf3-link>....</ospf3-link>
  <ospf3-lsa-topology>....</ospf3-lsa-topology>
</ospf3-router-lsa>
</ospf3-database>
</ospf3-database-information>
```

Description

<ospf3-statistics-information>

Usage

```
<ospf3-statistics-information>
  <ospf-statistics>....</ospf-statistics>
</ospf3-statistics-information>
```

Description

<ospf3-topology-area-backup-neighbor>

Usage

```
<ospf3-topology-area-backup-neighbor>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf3-backup-neighbor-node>....</ospf3-backup-neighbor-node>
</ospf3-topology-area-backup-neighbor>
```

Description OSPFv3 topology area specific backup neighbors

<ospf3-topology-area-backup-neighbor>

Usage

```
<ospf3-topology-backup-neighbor>
  <ospf3-topology-area-backup-neighbor>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf3-backup-neighbor-node>....</ospf3-backup-neighbor-node>
  </ospf3-topology-area-backup-neighbor>
</ospf3-topology-backup-neighbor>
```

Description OSPFv3 topology area specific backup neighbors

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<ospf3-topology-area-backup-neighbor>

Usage

```
<ospf3-backup-neighbor-information>
  <ospf3-topology-backup-neighbor>
    <ospf3-topology-area-backup-neighbor>
      <ospf-area>
        ospf-area
      </ospf-area>
      <ospf3-backup-neighbor-node>....</ospf3-backup-neighbor-node>
    </ospf3-topology-area-backup-neighbor>
  </ospf3-topology-backup-neighbor>
</ospf3-backup-neighbor-information>
```

Description OSPFv3 topology area specific backup neighbors

<ospf3-topology-area-backup-spf>

Usage

```
<ospf3-topology-area-backup-spf>
  <ospf-area>
    ospf-area
  </ospf-area>
  <ospf3-backup-spf-node>....</ospf3-backup-spf-node>
</ospf3-topology-area-backup-spf>
```

Description OSPFv3 topology area specific backup SPF results

<ospf3-topology-area-backup-spf>

Usage

```
<ospf3-topology-backup-spf>
  <ospf3-topology-area-backup-spf>
    <ospf-area>
      ospf-area
    </ospf-area>
    <ospf3-backup-spf-node>....</ospf3-backup-spf-node>
  </ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description OSPFv3 topology area specific backup SPF results

<ospf3-topology-area-backup-spf>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf3-topology-area-backup-spf>
      <ospf-area>
        ospf-area
```

```
        </ospf-area>
        <ospf3-backup-spf-node>....</ospf3-backup-spf-node>
      </ospf3-topology-area-backup-spf>
    </ospf3-topology-backup-spf>
  </ospf3-backup-spf-information>
```

Description OSPFv3 topology area specific backup SPF results

<ospf3-topology-backup-coverage>

Usage

```
<ospf3-topology-backup-coverage>
  <ospf3-backup-node-coverage>....</ospf3-backup-node-coverage>
  <ospf3-backup-route-coverage>....</ospf3-backup-route-coverage>
</ospf3-topology-backup-coverage>
```

Description

<ospf3-topology-backup-coverage>

Usage

```
<ospf3-backup-coverage-information>
  <ospf3-topology-backup-coverage>
    <ospf3-backup-node-coverage>....</ospf3-backup-node-coverage>
    <ospf3-backup-route-coverage>....</ospf3-backup-route-coverage>
  </ospf3-topology-backup-coverage>
</ospf3-backup-coverage-information>
```

Description

<ospf3-topology-backup-neighbor>

Usage

```
<ospf3-topology-backup-neighbor>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>

<ospf3-topology-area-backup-neighbor>....</ospf3-topology-area-backup-neighbor>
  </ospf3-topology-backup-neighbor>
```

Description OSPFv3 topology specific backup neighbors

<ospf3-topology-backup-neighbor>

Usage

```
<ospf3-backup-neighbor-information>
  <ospf3-topology-backup-neighbor>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
```


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```
<ospf3-topology-area-backup-neighbor>....</ospf3-topology-area-backup-neighbor>
  </ospf3-topology-backup-neighbor>
</ospf3-backup-neighbor-information>
```

Description OSPFv3 topology specific backup neighbors

<ospf3-topology-backup-spf>

Usage

```
<ospf3-topology-backup-spf>
  <ospf-topology-name>
    ospf-topology-name
  </ospf-topology-name>
  <ospf3-topology-area-backup-spf>....</ospf3-topology-area-backup-spf>
</ospf3-topology-backup-spf>
```

Description OSPFv3 topology specific backup SPF results

<ospf3-topology-backup-spf>

Usage

```
<ospf3-backup-spf-information>
  <ospf3-topology-backup-spf>
    <ospf-topology-name>
      ospf-topology-name
    </ospf-topology-name>
    <ospf3-topology-area-backup-spf>....</ospf3-topology-area-backup-spf>
  </ospf3-topology-backup-spf>
</ospf3-backup-spf-information>
```

Description OSPFv3 topology specific backup SPF results

<overbooked-bandwidth>

Usage

```
<rsvp-telink>
  <overbooked-bandwidth>
    <bandwidth-priority>
      bandwidth-priority
    </bandwidth-priority>
    <total-reserved-bandwidth>
      total-reserved-bandwidth
    </total-reserved-bandwidth>
  </overbooked-bandwidth>
</rsvp-telink>
```

Description Bandwidth overbooked at different priority levels

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<overbooked-bandwidth>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <rsvp-telink>
      <overbooked-bandwidth>
        <bandwidth-priority>
          bandwidth-priority
        </bandwidth-priority>
        <total-reserved-bandwidth>
          total-reserved-bandwidth
        </total-reserved-bandwidth>
      </overbooked-bandwidth>
    </rsvp-telink>
  </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth overbooked at different priority levels

<overbooked-bandwidth>

Usage

```
<rsvp-session>
  <rsvp-telink>
    <overbooked-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
    </overbooked-bandwidth>
  </rsvp-telink>
</rsvp-session>
```

Description Bandwidth overbooked at different priority levels

<overbooked-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <overbooked-bandwidth>
          <bandwidth-priority>
            bandwidth-priority
          </bandwidth-priority>
          <total-reserved-bandwidth>
            total-reserved-bandwidth
          </total-reserved-bandwidth>
```


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```
        </overbooked-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Bandwidth overbooked at different priority levels

<overbooked-bandwidth>

Usage

```
<rsvp-interface>
  <rsvp-telink>
    <overbooked-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
    </overbooked-bandwidth>
  </rsvp-telink>
</rsvp-interface>
```

Description Bandwidth overbooked at different priority levels

<overbooked-bandwidth>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <rsvp-telink>
      <overbooked-bandwidth>
        <bandwidth-priority>
          bandwidth-priority
        </bandwidth-priority>
        <total-reserved-bandwidth>
          total-reserved-bandwidth
        </total-reserved-bandwidth>
      </overbooked-bandwidth>
    </rsvp-telink>
  </rsvp-interface>
</rsvp-interface-information>
```

Description Bandwidth overbooked at different priority levels

<overbooked-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
```

```
<rsvp-session>
  <rsvp-telink>
    <overbooked-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
    </overbooked-bandwidth>
  </rsvp-telink>
</rsvp-session>
</rsvp-session-data>
</mpls-lsp-information>
```

Description Bandwidth overbooked at different priority levels

<overbooked-ct-bandwidth>

Usage

```
<rsvp-telink>
  <overbooked-ct-bandwidth>
    <ct-class>
      ct-class
    </ct-class>
    <ct-bw0>
      ct-bw0
    </ct-bw0>
    <ct-bw1>
      ct-bw1
    </ct-bw1>
    <ct-bw2>
      ct-bw2
    </ct-bw2>
    <ct-bw3>
      ct-bw3
    </ct-bw3>
    <ct-bw4>
      ct-bw4
    </ct-bw4>
    <ct-bw5>
      ct-bw5
    </ct-bw5>
    <ct-bw6>
      ct-bw6
    </ct-bw6>
    <ct-bw7>
      ct-bw7
    </ct-bw7>
  </overbooked-ct-bandwidth>
</rsvp-telink>
```

Description Bandwidth overbooked at different class/priority levels

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<overbooked-ct-bandwidth>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <rsvp-telink>
      <overbooked-ct-bandwidth>
        <ct-class>
          ct-class
        </ct-class>
        <ct-bw0>
          ct-bw0
        </ct-bw0>
        <ct-bw1>
          ct-bw1
        </ct-bw1>
        <ct-bw2>
          ct-bw2
        </ct-bw2>
        <ct-bw3>
          ct-bw3
        </ct-bw3>
        <ct-bw4>
          ct-bw4
        </ct-bw4>
        <ct-bw5>
          ct-bw5
        </ct-bw5>
        <ct-bw6>
          ct-bw6
        </ct-bw6>
        <ct-bw7>
          ct-bw7
        </ct-bw7>
      </overbooked-ct-bandwidth>
    </rsvp-telink>
  </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth overbooked at different class/priority levels

<overbooked-ct-bandwidth>

Usage

```
<rsvp-session>
  <rsvp-telink>
    <overbooked-ct-bandwidth>
      <ct-class>
        ct-class
      </ct-class>
      <ct-bw0>
        ct-bw0
      </ct-bw0>
```

```
        <ct-bw1>
          ct-bw1
        </ct-bw1>
        <ct-bw2>
          ct-bw2
        </ct-bw2>
        <ct-bw3>
          ct-bw3
        </ct-bw3>
        <ct-bw4>
          ct-bw4
        </ct-bw4>
        <ct-bw5>
          ct-bw5
        </ct-bw5>
        <ct-bw6>
          ct-bw6
        </ct-bw6>
        <ct-bw7>
          ct-bw7
        </ct-bw7>
      </overbooked-ct-bandwidth>
    </rsvp-telink>
  </rsvp-session>
```

Description Bandwidth overbooked at different class/priority levels

<overbooked-ct-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <overbooked-ct-bandwidth>
          <ct-class>
            ct-class
          </ct-class>
          <ct-bw0>
            ct-bw0
          </ct-bw0>
          <ct-bw1>
            ct-bw1
          </ct-bw1>
          <ct-bw2>
            ct-bw2
          </ct-bw2>
          <ct-bw3>
            ct-bw3
          </ct-bw3>
          <ct-bw4>
            ct-bw4
          </ct-bw4>
          <ct-bw5>
```

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```
        ct-bw5
       </ct-bw5>
       <ct-bw6>
        ct-bw6
       </ct-bw6>
       <ct-bw7>
        ct-bw7
       </ct-bw7>
      </overbooked-ct-bandwidth>
     </rsvp-telink>
    </rsvp-session>
   </rsvp-session-data>
</rsvp-session-information>
```

Description Bandwidth overbooked at different class/priority levels

<overbooked-ct-bandwidth>

Usage

```
<rsvp-interface>
 <rsvp-telink>
  <overbooked-ct-bandwidth>
   <ct-class>
    ct-class
   </ct-class>
   <ct-bw0>
    ct-bw0
   </ct-bw0>
   <ct-bw1>
    ct-bw1
   </ct-bw1>
   <ct-bw2>
    ct-bw2
   </ct-bw2>
   <ct-bw3>
    ct-bw3
   </ct-bw3>
   <ct-bw4>
    ct-bw4
   </ct-bw4>
   <ct-bw5>
    ct-bw5
   </ct-bw5>
   <ct-bw6>
    ct-bw6
   </ct-bw6>
   <ct-bw7>
    ct-bw7
   </ct-bw7>
  </overbooked-ct-bandwidth>
 </rsvp-telink>
</rsvp-interface>
```

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Description Bandwidth overbooked at different class/priority levels

<overbooked-ct-bandwidth>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <rsvp-telink>
      <overbooked-ct-bandwidth>
        <ct-class>
          ct-class
        </ct-class>
        <ct-bw0>
          ct-bw0
        </ct-bw0>
        <ct-bw1>
          ct-bw1
        </ct-bw1>
        <ct-bw2>
          ct-bw2
        </ct-bw2>
        <ct-bw3>
          ct-bw3
        </ct-bw3>
        <ct-bw4>
          ct-bw4
        </ct-bw4>
        <ct-bw5>
          ct-bw5
        </ct-bw5>
        <ct-bw6>
          ct-bw6
        </ct-bw6>
        <ct-bw7>
          ct-bw7
        </ct-bw7>
      </overbooked-ct-bandwidth>
    </rsvp-telink>
  </rsvp-interface>
</rsvp-interface-information>
```

Description Bandwidth overbooked at different class/priority levels

<overbooked-ct-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <overbooked-ct-bandwidth>
          <ct-class>
            ct-class
```


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```
            </ct-class>
            <ct-bw0>
              ct-bw0
            </ct-bw0>
            <ct-bw1>
              ct-bw1
            </ct-bw1>
            <ct-bw2>
              ct-bw2
            </ct-bw2>
            <ct-bw3>
              ct-bw3
            </ct-bw3>
            <ct-bw4>
              ct-bw4
            </ct-bw4>
            <ct-bw5>
              ct-bw5
            </ct-bw5>
            <ct-bw6>
              ct-bw6
            </ct-bw6>
            <ct-bw7>
              ct-bw7
            </ct-bw7>
          </overbooked-ct-bandwidth>
        </rsvp-telink>
      </rsvp-session>
    </rsvp-session-data>
  </mpls-lsp-information>
```

Description Bandwidth overbooked at different class/priority levels

<packet-information>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <packet-information>
      <previous-hop>
        previous-hop
      </previous-hop>
      <next-hop>
        next-hop
      </next-hop>
      <interface-name>
        interface-name
      </interface-name>
      <count>
        count
      </count>
    </packet-information>
  </rsvp-session>
```

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```
</rsvp-session-data>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour>
      <packet-information>
        <previous-hop>
          previous-hop
        </previous-hop>
        <next-hop>
          next-hop
        </next-hop>
        <interface-name>
          interface-name
        </interface-name>
        <count>
          count
        </count>
      </packet-information>
    </detour>
  </rsvp-session>
</rsvp-session-data>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour-branch>
      <packet-information>
        <previous-hop>
          previous-hop
        </previous-hop>
        <next-hop>
          next-hop
        </next-hop>
        <interface-name>
          interface-name
        </interface-name>
        <count>
          count
        </count>
      </packet-information>
    </detour-branch>
  </rsvp-session>
```


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```
</rsvp-session-data>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session>
  <packet-information>
    <previous-hop>
      previous-hop
    </previous-hop>
    <next-hop>
      next-hop
    </next-hop>
    <interface-name>
      interface-name
    </interface-name>
    <count>
      count
    </count>
  </packet-information>
</rsvp-session>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session>
  <detour>
    <packet-information>
      <previous-hop>
        previous-hop
      </previous-hop>
      <next-hop>
        next-hop
      </next-hop>
      <interface-name>
        interface-name
      </interface-name>
      <count>
        count
      </count>
    </packet-information>
  </detour>
</rsvp-session>
```

Description RSVP packets sent or received per session

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<packet-information>

Usage

```
<rsvp-session>
  <detour-branch>
    <packet-information>
      <previous-hop>
        previous-hop
      </previous-hop>
      <next-hop>
        next-hop
      </next-hop>
      <interface-name>
        interface-name
      </interface-name>
      <count>
        count
      </count>
    </packet-information>
  </detour-branch>
</rsvp-session>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<detour>
  <packet-information>
    <previous-hop>
      previous-hop
    </previous-hop>
    <next-hop>
      next-hop
    </next-hop>
    <interface-name>
      interface-name
    </interface-name>
    <count>
      count
    </count>
  </packet-information>
</detour>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<detour-branch>
  <packet-information>
    <previous-hop>
```


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```
      previous-hop
    </previous-hop>
    <next-hop>
      next-hop
    </next-hop>
    <interface-name>
      interface-name
    </interface-name>
    <count>
      count
    </count>
  </packet-information>
</detour-branch>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <packet-information>
        <previous-hop>
          previous-hop
        </previous-hop>
        <next-hop>
          next-hop
        </next-hop>
        <interface-name>
          interface-name
        </interface-name>
        <count>
          count
        </count>
      </packet-information>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <packet-information>
          <previous-hop>
            previous-hop
```

```
        </previous-hop>
        <next-hop>
          next-hop
        </next-hop>
        <interface-name>
          interface-name
        </interface-name>
        <count>
          count
        </count>
      </packet-information>
    </detour>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <detour-branch>
    <packet-information>
     <previous-hop>
      previous-hop
     </previous-hop>
     <next-hop>
      next-hop
     </next-hop>
     <interface-name>
      interface-name
     </interface-name>
     <count>
      count
     </count>
    </packet-information>
   </detour-branch>
  </rsvp-session>
 </rsvp-session-data>
</rsvp-session-information>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
```


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```
<packet-information>
  <previous-hop>
    previous-hop
  </previous-hop>
  <next-hop>
    next-hop
  </next-hop>
  <interface-name>
    interface-name
  </interface-name>
  <count>
    count
  </count>
</packet-information>
</rsvp-session>
</rsvp-session-data>
</mpls-lsp-information>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <packet-information>
          <previous-hop>
            previous-hop
          </previous-hop>
          <next-hop>
            next-hop
          </next-hop>
          <interface-name>
            interface-name
          </interface-name>
          <count>
            count
          </count>
        </packet-information>
      </detour>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description RSVP packets sent or received per session

<packet-information>

Usage

```
<mpls-lsp-information>
```

```
<rsvp-session-data>
  <rsvp-session>
    <detour-branch>
      <packet-information>
        <previous-hop>
          previous-hop
        </previous-hop>
        <next-hop>
          next-hop
        </next-hop>
        <interface-name>
          interface-name
        </interface-name>
        <count>
          count
        </count>
      </packet-information>
    </detour-branch>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description RSVP packets sent or received per session

<packet-statistics>

Usage

```
<ospf-statistics>
  <packet-statistics>
    <ospf-packet-type>
      ospf-packet-type
    </ospf-packet-type>
    <packets-sent>
      packets-sent
    </packets-sent>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent-5seconds>
      packets-sent-5seconds
    </packets-sent-5seconds>
    <packets-received-5seconds>
      packets-received-5seconds
    </packets-received-5seconds>
  </packet-statistics>
</ospf-statistics>
```

Description

<packet-statistics>

Usage

```
<ospf-statistics-information>
```


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```
<ospf-statistics>
  <packet-statistics>
    <ospf-packet-type>
      ospf-packet-type
    </ospf-packet-type>
    <packets-sent>
      packets-sent
    </packets-sent>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent-5seconds>
      packets-sent-5seconds
    </packets-sent-5seconds>
    <packets-received-5seconds>
      packets-received-5seconds
    </packets-received-5seconds>
  </packet-statistics>
 </ospf-statistics>
</ospf-statistics-information>
```

Description

<packet-statistics>

Usage

```
<ospf3-statistics-information>
 <ospf-statistics>
  <packet-statistics>
    <ospf-packet-type>
      ospf-packet-type
    </ospf-packet-type>
    <packets-sent>
      packets-sent
    </packets-sent>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent-5seconds>
      packets-sent-5seconds
    </packets-sent-5seconds>
    <packets-received-5seconds>
      packets-received-5seconds
    </packets-received-5seconds>
  </packet-statistics>
 </ospf-statistics>
</ospf3-statistics-information>
```

Description

<path-available-bandwidth>

Usage

```
<rsvp-session-data>
```

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <path-available-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
      </path-available-bandwidth>
    </mpls-lsp-path>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <path-available-bandwidth>
        <bandwidth>
          bandwidth
        </bandwidth>
        <class-type>
          class-type
        </class-type>
        <class-bandwidth>
          class-bandwidth
        </class-bandwidth>
      </path-available-bandwidth>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
```


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```
                <path-available-bandwidth>
                  <bandwidth>
                    bandwidth
                  </bandwidth>
                  <class-type>
                    class-type
                  </class-type>
                  <class-bandwidth>
                    class-bandwidth
                  </class-bandwidth>
                </path-available-bandwidth>
              </mpls-lsp-path>
            </mpls-lsp>
          </rsvp-session>
        </rsvp-session-data>
      </rsvp-session-information>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<mpls-lsp-path>
  <path-available-bandwidth>
    <bandwidth>
      bandwidth
    </bandwidth>
    <class-type>
      class-type
    </class-type>
    <class-bandwidth>
      class-bandwidth
    </class-bandwidth>
  </path-available-bandwidth>
</mpls-lsp-path>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<mpls-lsp>
  <mpls-lsp-path>
    <path-available-bandwidth>
      <bandwidth>
        bandwidth
      </bandwidth>
      <class-type>
        class-type
      </class-type>
      <class-bandwidth>
        class-bandwidth
```

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```
      </class-bandwidth>
    </path-available-bandwidth>
  </mpls-lsp-path>
</mpls-lsp>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <path-available-bandwidth>
            <bandwidth>
              bandwidth
            </bandwidth>
            <class-type>
              class-type
            </class-type>
            <class-bandwidth>
              class-bandwidth
            </class-bandwidth>
          </path-available-bandwidth>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Available bandwidth on an LSP path

<path-available-bandwidth>

Usage

```
<mpls-call-admission-control-information>
  <mpls-call-admission-control>
    <mpls-lsp>
      <mpls-lsp-path>
        <path-available-bandwidth>
          <bandwidth>
            bandwidth
          </bandwidth>
          <class-type>
            class-type
          </class-type>
          <class-bandwidth>
            class-bandwidth
          </class-bandwidth>
        </path-available-bandwidth>
```


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```
        </mpls-lsp-path>
      </mpls-lsp>
    </mpls-call-admission-control>
  </mpls-call-admission-control-information>
```

Description Available bandwidth on an LSP path

<path-history>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <mpls-lsp>
      <mpls-lsp-path>
        <path-history>
          <sequence-number>
            sequence-number
          </sequence-number>
          <time>
            time
          </time>
          <log>
            log
          </log>
          <route>
            route
          </route>
        </path-history>
      </mpls-lsp-path>
    </mpls-lsp>
  </rsvp-session>
</rsvp-session-data>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <path-history>
        <sequence-number>
          sequence-number
        </sequence-number>
        <time>
          time
        </time>
        <log>
          log
        </log>
        <route>
```

```
            route
          </route>
        </path-history>
      </mpls-lsp-path>
    </mpls-lsp>
  </rsvp-session>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <path-history>
            <sequence-number>
              sequence-number
            </sequence-number>
            <time>
              time
            </time>
            <log>
              log
            </log>
            <route>
              route
            </route>
          </path-history>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<mpls-lsp-path>
  <path-history>
    <sequence-number>
      sequence-number
    </sequence-number>
    <time>
      time
    </time>
    <log>
      log
```


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```
    </log>
    <route>
     route
    </route>
   </path-history>
</mpls-lsp-path>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <path-history>
   <sequence-number>
    sequence-number
   </sequence-number>
   <time>
    time
   </time>
   <log>
    log
   </log>
   <route>
    route
   </route>
  </path-history>
 </mpls-lsp-path>
</mpls-lsp>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <path-history>
      <sequence-number>
       sequence-number
      </sequence-number>
      <time>
       time
      </time>
      <log>
       log
      </log>
      <route>
```

```
                route
               </route>
              </path-history>
             </mpls-lsp-path>
            </mpls-lsp>
           </rsvp-session>
          </rsvp-session-data>
         </mpls-lsp-information>
```

Description Log over time of LSP path-related events

<path-history>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <path-history>
     <sequence-number>
      sequence-number
     </sequence-number>
     <time>
      time
     </time>
     <log>
      log
     </log>
     <route>
      route
     </route>
    </path-history>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

Description Log over time of LSP path-related events

<pim-bootstrap-information>

Usage

```
<pim-bootstrap-information>
 <pim-instance>
  pim-instance
 </pim-instance>
 <bootstrap-family>....</bootstrap-family>
</pim-bootstrap-information>
```

Description

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<pim-data-mdt-join-information>

Usage

```
<pim-data-mdt-join-information>
  <pim-data-mdt-csource-address>
    pim-data-mdt-csource-address
  </pim-data-mdt-csource-address>
  <pim-data-mdt-cgroup-address>
    pim-data-mdt-cgroup-address
  </pim-data-mdt-cgroup-address>
  <pim-data-mdt-psource-address>
    pim-data-mdt-psource-address
  </pim-data-mdt-psource-address>
  <pim-data-mdt-pgroup-address>
    pim-data-mdt-pgroup-address
  </pim-data-mdt-pgroup-address>
  <pim-data-mdt-timeout>
    pim-data-mdt-timeout
  </pim-data-mdt-timeout>
</pim-data-mdt-join-information>
```

Description

<pim-group-flags>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <pim-group-flags>
        <sparse>
          sparse
        </sparse>
        <dense>
          dense
        </dense>
        <delete>
          delete
        </delete>
        <rptree>
          rptree
        </rptree>
        <wildcard>
          wildcard
        </wildcard>
        <spt>
          spt
        </spt>
      </pim-group-flags>
    </join-group>
  </join-family>
</pim-join-information>
```

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Description

<pim-interface>

Usage

```
<pim-interfaces-information>
  <pim-interface>
    <pim-interface-name>
      pim-interface-name
    </pim-interface-name>
    <status>
      status
    </status>
    <pim-interface-mode>
      pim-interface-mode
    </pim-interface-mode>
    <ip-protocol-version>
      ip-protocol-version
    </ip-protocol-version>
    <protocol-version>
      protocol-version
    </protocol-version>
    <interface-state>
      interface-state
    </interface-state>
    <neighbor-count>
      neighbor-count
    </neighbor-count>
    <interface-join-sg-count>
      interface-join-sg-count
    </interface-join-sg-count>
    <interface-join-tsg-count>
      interface-join-tsg-count
    </interface-join-tsg-count>
    <designated-router-address>
      designated-router-address
    </designated-router-address>
    <pim-neighbor>....</pim-neighbor>
  </pim-interface>
</pim-interfaces-information>
```

Description

<pim-interface>

Usage

```
<pim-neighbors-information>
  <pim-interface>
    <pim-interface-name>
      pim-interface-name
    </pim-interface-name>
    <status>
      status
    </status>
    <pim-interface-mode>
```


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```
      pim-interface-mode
    </pim-interface-mode>
    <ip-protocol-version>
      ip-protocol-version
    </ip-protocol-version>
    <protocol-version>
      protocol-version
    </protocol-version>
    <interface-state>
      interface-state
    </interface-state>
    <neighbor-count>
      neighbor-count
    </neighbor-count>
    <interface-join-sg-count>
      interface-join-sg-count
    </interface-join-sg-count>
    <interface-join-tsg-count>
      interface-join-tsg-count
    </interface-join-tsg-count>
    <designated-router-address>
      designated-router-address
    </designated-router-address>
    <pim-neighbor>....</pim-neighbor>
  </pim-interface>
</pim-neighbors-information>
```

Description

<pim-interface>

Usage

```
<pim-pktcache-information>
  <pim-interface>
    <pim-interface-name>
      pim-interface-name
    </pim-interface-name>
    <status>
      status
    </status>
    <pim-interface-mode>
      pim-interface-mode
    </pim-interface-mode>
    <ip-protocol-version>
      ip-protocol-version
    </ip-protocol-version>
    <protocol-version>
      protocol-version
    </protocol-version>
    <interface-state>
      interface-state
    </interface-state>
    <neighbor-count>
      neighbor-count
    </neighbor-count>
```

```
    <interface-join-sg-count>
      interface-join-sg-count
    </interface-join-sg-count>
    <interface-join-tsg-count>
      interface-join-tsg-count
    </interface-join-tsg-count>
    <designated-router-address>
      designated-router-address
    </designated-router-address>
    <pim-neighbor>....</pim-neighbor>
  </pim-interface>
</pim-pktcache-information>
```

Description

<pim-interfaces-information>

Usage

```
<pim-interfaces-information>
  <pim-instance>
    pim-instance
  </pim-instance>
  <pim-interface>....</pim-interface>
</pim-interfaces-information>
```

Description

<pim-join-information>

Usage

```
<pim-join-information>
  <join-family>....</join-family>
</pim-join-information>
```

Description

<pim-mdt-information>

Usage

```
<pim-mdt-information>
  <pim-instance>
    pim-instance
  </pim-instance>
  <mdt-default-group-address>
    mdt-default-group-address
  </mdt-default-group-address>
  <mdt-default-source-address>
    mdt-default-source-address
  </mdt-default-source-address>
  <mdt-default-interface-name>
    mdt-default-interface-name
  </mdt-default-interface-name>
  <mdt-default-tunnel-source>
```


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```
    mdt-default-tunnel-source
  </mdt-default-tunnel-source>
  <mdt-tunnel-direction>
    mdt-tunnel-direction
  </mdt-tunnel-direction>
  <mdt-tunnel-mode>
    mdt-tunnel-mode
  </mdt-tunnel-mode>
  <mdt-pim-instance>
    mdt-pim-instance
  </mdt-pim-instance>
  <mdt-default-tunnel-information>....</mdt-default-tunnel-information>
  <mdt-active-tunnel>....</mdt-active-tunnel>
</pim-mdt-information>
```

Description

<pim-mvpn-information>

Usage

```
<pim-mvpn-information>
  <pim-mvpn-instance-name>
    pim-mvpn-instance-name
  </pim-mvpn-instance-name>
  <address-family>
    address-family
  </address-family>
  <pim-mvpn-address>
    pim-mvpn-address
  </pim-mvpn-address>
  <pim-mvpn-mode>
    pim-mvpn-mode
  </pim-mvpn-mode>
  <pim-mvpn-tunnel>
    pim-mvpn-tunnel
  </pim-mvpn-tunnel>
</pim-mvpn-information>
```

Description

<pim-neighbor>

Usage

```
<pim-interfaces-information>
  <pim-interface>
    <pim-neighbor>
      <pim-interface-name>
        pim-interface-name
      </pim-interface-name>
      <ip-protocol-version>
        ip-protocol-version
      </ip-protocol-version>
      <protocol-version>
        protocol-version
```

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```
</protocol-version>
<pim-interface-mode>
  pim-interface-mode
</pim-interface-mode>
<neighbor-join-sg-count>
  neighbor-join-sg-count
</neighbor-join-sg-count>
<neighbor-join-tsg-count>
  neighbor-join-tsg-count
</neighbor-join-tsg-count>
<pim-neighbor-flags>....</pim-neighbor-flags>
<pim-neighbor-uptime>
  pim-neighbor-uptime
</pim-neighbor-uptime>
<pim-neighbor-address>
  pim-neighbor-address
</pim-neighbor-address>
<pim-neighbor-secondary-address>
  pim-neighbor-secondary-address
</pim-neighbor-secondary-address>
<hello-holdtime>
  hello-holdtime
</hello-holdtime>
<hello-holdtime-remaining>
  hello-holdtime-remaining
</hello-holdtime-remaining>
<hello-default-holdtime>
  hello-default-holdtime
</hello-default-holdtime>
<hello-default-holdtime-remaining>
  hello-default-holdtime-remaining
</hello-default-holdtime-remaining>
<hello-dr-priority>
  hello-dr-priority
</hello-dr-priority>
<hello-generation-id>
  hello-generation-id
</hello-generation-id>
<hello-lanprune-delay>
  hello-lanprune-delay
</hello-lanprune-delay>
<hello-override-interval>
  hello-override-interval
</hello-override-interval>
<hello-nbr-t-bit>
  hello-nbr-t-bit
</hello-nbr-t-bit>
<pim-neighbor-bfd>....</pim-neighbor-bfd>
<pim-neighbor-join>....</pim-neighbor-join>
<pim-neighbor-assert>....</pim-neighbor-assert>
<pim-pktcache-count>
  pim-pktcache-count
</pim-pktcache-count>
<pim-pktcache-time-remaining>
  pim-pktcache-time-remaining
</pim-pktcache-time-remaining>
```


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```
    </pim-neighbor>
  </pim-interface>
</pim-interfaces-information>
```

Description

<pim-neighbor>

Usage

```
<pim-neighbors-information>
  <pim-interface>
    <pim-neighbor>
      <pim-interface-name>
        pim-interface-name
      </pim-interface-name>
      <ip-protocol-version>
        ip-protocol-version
      </ip-protocol-version>
      <protocol-version>
        protocol-version
      </protocol-version>
      <pim-interface-mode>
        pim-interface-mode
      </pim-interface-mode>
      <neighbor-join-sg-count>
        neighbor-join-sg-count
      </neighbor-join-sg-count>
      <neighbor-join-tsg-count>
        neighbor-join-tsg-count
      </neighbor-join-tsg-count>
      <pim-neighbor-flags>....</pim-neighbor-flags>
      <pim-neighbor-uptime>
        pim-neighbor-uptime
      </pim-neighbor-uptime>
      <pim-neighbor-address>
        pim-neighbor-address
      </pim-neighbor-address>
      <pim-neighbor-secondary-address>
        pim-neighbor-secondary-address
      </pim-neighbor-secondary-address>
      <hello-holdtime>
        hello-holdtime
      </hello-holdtime>
      <hello-holdtime-remaining>
        hello-holdtime-remaining
      </hello-holdtime-remaining>
      <hello-default-holdtime>
        hello-default-holdtime
      </hello-default-holdtime>
      <hello-default-holdtime-remaining>
        hello-default-holdtime-remaining
      </hello-default-holdtime-remaining>
      <hello-dr-priority>
        hello-dr-priority
      </hello-dr-priority>
```

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```
        <hello-generation-id>
          hello-generation-id
        </hello-generation-id>
        <hello-lanprune-delay>
          hello-lanprune-delay
        </hello-lanprune-delay>
        <hello-override-interval>
          hello-override-interval
        </hello-override-interval>
        <hello-nbr-t-bit>
          hello-nbr-t-bit
        </hello-nbr-t-bit>
        <pim-neighbor-bfd>....</pim-neighbor-bfd>
        <pim-neighbor-join>....</pim-neighbor-join>
        <pim-neighbor-assert>....</pim-neighbor-assert>
        <pim-pktcache-count>
          pim-pktcache-count
        </pim-pktcache-count>
        <pim-pktcache-time-remaining>
          pim-pktcache-time-remaining
        </pim-pktcache-time-remaining>
      </pim-neighbor>
    </pim-interface>
  </pim-neighbors-information>
```

Description

<pim-neighbor>

Usage

```
<pim-pktcache-information>
  <pim-interface>
    <pim-neighbor>
      <pim-interface-name>
        pim-interface-name
      </pim-interface-name>
      <ip-protocol-version>
        ip-protocol-version
      </ip-protocol-version>
      <protocol-version>
        protocol-version
      </protocol-version>
      <pim-interface-mode>
        pim-interface-mode
      </pim-interface-mode>
      <neighbor-join-sg-count>
        neighbor-join-sg-count
      </neighbor-join-sg-count>
      <neighbor-join-tsg-count>
        neighbor-join-tsg-count
      </neighbor-join-tsg-count>
      <pim-neighbor-flags>....</pim-neighbor-flags>
      <pim-neighbor-uptime>
        pim-neighbor-uptime
      </pim-neighbor-uptime>
```


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```
        <pim-neighbor-address>
          pim-neighbor-address
        </pim-neighbor-address>
        <pim-neighbor-secondary-address>
          pim-neighbor-secondary-address
        </pim-neighbor-secondary-address>
        <hello-holdtime>
          hello-holdtime
        </hello-holdtime>
        <hello-holdtime-remaining>
          hello-holdtime-remaining
        </hello-holdtime-remaining>
        <hello-default-holdtime>
          hello-default-holdtime
        </hello-default-holdtime>
        <hello-default-holdtime-remaining>
          hello-default-holdtime-remaining
        </hello-default-holdtime-remaining>
        <hello-dr-priority>
          hello-dr-priority
        </hello-dr-priority>
        <hello-generation-id>
          hello-generation-id
        </hello-generation-id>
        <hello-lanprune-delay>
          hello-lanprune-delay
        </hello-lanprune-delay>
        <hello-override-interval>
          hello-override-interval
        </hello-override-interval>
        <hello-nbr-t-bit>
          hello-nbr-t-bit
        </hello-nbr-t-bit>
        <pim-neighbor-bfd>....</pim-neighbor-bfd>
        <pim-neighbor-join>....</pim-neighbor-join>
        <pim-neighbor-assert>....</pim-neighbor-assert>
        <pim-pktcache-count>
          pim-pktcache-count
        </pim-pktcache-count>
        <pim-pktcache-time-remaining>
          pim-pktcache-time-remaining
        </pim-pktcache-time-remaining>
      </pim-neighbor>
    </pim-interface>
  </pim-pktcache-information>
```

Description

<pim-neighbor-assert>

Usage

```
<pim-interfaces-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-assert>
```

```
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <assert-state>
          assert-state
        </assert-state>
        <pim-neighbor-address>
          pim-neighbor-address
        </pim-neighbor-address>
        <assert-timeout>
          assert-timeout
        </assert-timeout>
      </pim-neighbor-assert>
    </pim-neighbor>
  </pim-interface>
</pim-interfaces-information>
```

Description

<pim-neighbor-assert>

Usage

```
<pim-neighbors-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-assert>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <assert-state>
          assert-state
        </assert-state>
        <pim-neighbor-address>
          pim-neighbor-address
        </pim-neighbor-address>
        <assert-timeout>
          assert-timeout
        </assert-timeout>
      </pim-neighbor-assert>
    </pim-neighbor>
  </pim-interface>
</pim-neighbors-information>
```

Description

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<pim-neighbor-assert>

Usage

```
<pim-pktcache-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-assert>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <assert-state>
          assert-state
        </assert-state>
        <pim-neighbor-address>
          pim-neighbor-address
        </pim-neighbor-address>
        <assert-timeout>
          assert-timeout
        </assert-timeout>
      </pim-neighbor-assert>
    </pim-neighbor>
  </pim-interface>
</pim-pktcache-information>
```

Description

<pim-neighbor-bfd>

Usage

```
<pim-interfaces-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-bfd>
        <configuration-state>
          configuration-state
        </configuration-state>
        <operational-state>
          operational-state
        </operational-state>
      </pim-neighbor-bfd>
    </pim-neighbor>
  </pim-interface>
</pim-interfaces-information>
```

Description

<pim-neighbor-bfd>

Usage

```
<pim-neighbors-information>
```

```
<pim-interface>
  <pim-neighbor>
    <pim-neighbor-bfd>
      <configuration-state>
        configuration-state
      </configuration-state>
      <operational-state>
        operational-state
      </operational-state>
    </pim-neighbor-bfd>
  </pim-neighbor>
 </pim-interface>
</pim-neighbors-information>
```

Description

<pim-neighbor-bfd>

Usage

```
<pim-pktcache-information>
 <pim-interface>
  <pim-neighbor>
    <pim-neighbor-bfd>
      <configuration-state>
        configuration-state
      </configuration-state>
      <operational-state>
        operational-state
      </operational-state>
    </pim-neighbor-bfd>
  </pim-neighbor>
 </pim-interface>
</pim-pktcache-information>
```

Description

<pim-neighbor-flags>

Usage

```
<pim-interfaces-information>
 <pim-interface>
  <pim-neighbor>
    <pim-neighbor-flags>
      <pim-neighbor-hold-time-flag>
        pim-neighbor-hold-time-flag
      </pim-neighbor-hold-time-flag>
      <pim-neighbor-priority-flag>
        pim-neighbor-priority-flag
      </pim-neighbor-priority-flag>
      <pim-neighbor-lan-prune-flag>
        pim-neighbor-lan-prune-flag
      </pim-neighbor-lan-prune-flag>
      <pim-neighbor-generation-id-flag>
        pim-neighbor-generation-id-flag
```


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```
        </pim-neighbor-generation-id-flag>
        <pim-neighbor-bidirectional-flag>
          pim-neighbor-bidirectional-flag
        </pim-neighbor-bidirectional-flag>
        <pim-neighbor-t-bit-flag>
          pim-neighbor-t-bit-flag
        </pim-neighbor-t-bit-flag>
      </pim-neighbor-flags>
    </pim-neighbor>
  </pim-interface>
</pim-interfaces-information>
```

Description

<pim-neighbor-flags>

Usage

```
<pim-neighbors-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-flags>
        <pim-neighbor-hold-time-flag>
          pim-neighbor-hold-time-flag
        </pim-neighbor-hold-time-flag>
        <pim-neighbor-priority-flag>
          pim-neighbor-priority-flag
        </pim-neighbor-priority-flag>
        <pim-neighbor-lan-prune-flag>
          pim-neighbor-lan-prune-flag
        </pim-neighbor-lan-prune-flag>
        <pim-neighbor-generation-id-flag>
          pim-neighbor-generation-id-flag
        </pim-neighbor-generation-id-flag>
        <pim-neighbor-bidirectional-flag>
          pim-neighbor-bidirectional-flag
        </pim-neighbor-bidirectional-flag>
        <pim-neighbor-t-bit-flag>
          pim-neighbor-t-bit-flag
        </pim-neighbor-t-bit-flag>
      </pim-neighbor-flags>
    </pim-neighbor>
  </pim-interface>
</pim-neighbors-information>
```

Description

<pim-neighbor-flags>

Usage

```
<pim-pktcache-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-flags>
        <pim-neighbor-hold-time-flag>
```

```
            pim-neighbor-hold-time-flag
           </pim-neighbor-hold-time-flag>
           <pim-neighbor-priority-flag>
            pim-neighbor-priority-flag
           </pim-neighbor-priority-flag>
           <pim-neighbor-lan-prune-flag>
            pim-neighbor-lan-prune-flag
           </pim-neighbor-lan-prune-flag>
           <pim-neighbor-generation-id-flag>
            pim-neighbor-generation-id-flag
           </pim-neighbor-generation-id-flag>
           <pim-neighbor-bidirectional-flag>
            pim-neighbor-bidirectional-flag
           </pim-neighbor-bidirectional-flag>
           <pim-neighbor-t-bit-flag>
            pim-neighbor-t-bit-flag
           </pim-neighbor-t-bit-flag>
          </pim-neighbor-flags>
         </pim-neighbor>
        </pim-interface>
       </pim-pktcache-information>
```

Description

<pim-neighbor-join>

Usage

```
<pim-interfaces-information>
 <pim-interface>
  <pim-neighbor>
   <pim-neighbor-join>
    <multicast-group-address>
     multicast-group-address
    </multicast-group-address>
    <multicast-source-address>
     multicast-source-address
    </multicast-source-address>
    <join-timeout>
     join-timeout
    </join-timeout>
   </pim-neighbor-join>
  </pim-neighbor>
 </pim-interface>
</pim-interfaces-information>
```

Description

<pim-neighbor-join>

Usage

```
<pim-neighbors-information>
 <pim-interface>
  <pim-neighbor>
   <pim-neighbor-join>
```


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```
            <multicast-group-address>
              multicast-group-address
            </multicast-group-address>
            <multicast-source-address>
              multicast-source-address
            </multicast-source-address>
            <join-timeout>
              join-timeout
            </join-timeout>
          </pim-neighbor-join>
        </pim-neighbor>
      </pim-interface>
    </pim-neighbors-information>
```

Description

<pim-neighbor-join>

Usage

```
<pim-pktcache-information>
  <pim-interface>
    <pim-neighbor>
      <pim-neighbor-join>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <join-timeout>
          join-timeout
        </join-timeout>
      </pim-neighbor-join>
    </pim-neighbor>
  </pim-interface>
</pim-pktcache-information>
```

Description

<pim-neighbors-information>

Usage

```
<pim-neighbors-information>
  <pim-instance>
    pim-instance
  </pim-instance>
  <pim-interface>....</pim-interface>
</pim-neighbors-information>
```

Description

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<pim-other-statistic>

Usage

```
<pim-statistics-information>
  <pim-statistics-all>
    <pim-statistics-other>
      <pim-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </pim-other-statistic>
    </pim-statistics-other>
  </pim-statistics-all>
</pim-statistics-information>
```

Description

<pim-other-statistic>

Usage

```
<pim-statistics-information>
  <everything>
    <pim-statistics-other>
      <pim-other-statistic>
        <statistic-name>
          statistic-name
        </statistic-name>
        <statistic-count>
          statistic-count
        </statistic-count>
      </pim-other-statistic>
    </pim-statistics-other>
  </everything>
</pim-statistics-information>
```

Description

<pim-pktcache-information>

Usage

```
<pim-pktcache-information>
  <pim-instance>
    pim-instance
  </pim-instance>
  <pim-interface>....</pim-interface>
</pim-pktcache-information>
```

Description

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<pim-rps-information>

Usage

```
<pim-rps-information>
  <pim-instance>
    pim-instance
  </pim-instance>
  <rp-family>....</rp-family>
  <rendezvous-point-address-info>....</rendezvous-point-address-info>
</pim-rps-information>
```

Description

<pim-source>

Usage

```
<pim-source-information>
  <source-family>
    <pim-source>
      <multicast-source-address>
        multicast-source-address
      </multicast-source-address>
      <route-prefix>
        route-prefix
      </route-prefix>
      <upstream-interface-name>
        upstream-interface-name
      </upstream-interface-name>
      <upstream-neighbor>
        upstream-neighbor
      </upstream-neighbor>
      <upstream-group>....</upstream-group>
    </pim-source>
  </source-family>
</pim-source-information>
```

Description

<pim-source-information>

Usage

```
<pim-source-information>
  <source-family>....</source-family>
</pim-source-information>
```

Description

<pim-statistic>

Usage

```
<pim-statistics-information>
  <statistics-family>
```

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```
      <pim-statistics-interface>
       <pim-statistic>
        <statistic-name>
         statistic-name
        </statistic-name>
        <received-count>
         received-count
        </received-count>
        <sent-count>
         sent-count
        </sent-count>
        <error-count>
         error-count
        </error-count>
       </pim-statistic>
      </pim-statistics-interface>
     </statistics-family>
    </pim-statistics-information>
```

Description

<pim-statistic>

Usage

```
<pim-statistics-information>
 <pim-statistics-all>
  <pim-statistics-global>
   <pim-statistic>
    <statistic-name>
     statistic-name
    </statistic-name>
    <received-count>
     received-count
    </received-count>
    <sent-count>
     sent-count
    </sent-count>
    <error-count>
     error-count
    </error-count>
   </pim-statistic>
  </pim-statistics-global>
 </pim-statistics-all>
</pim-statistics-information>
```

Description

<pim-statistic>

Usage

```
<pim-statistics-information>
 <everything>
  <pim-statistics-global>
   <pim-statistic>
```


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```
        <statistic-name>
          statistic-name
        </statistic-name>
        <received-count>
          received-count
        </received-count>
        <sent-count>
          sent-count
        </sent-count>
        <error-count>
          error-count
        </error-count>
      </pim-statistic>
    </pim-statistics-global>
  </everything>
</pim-statistics-information>
```

Description

<pim-statistics-all>

Usage

```
<pim-statistics-information>
  <pim-statistics-all>
    <pim-instance>
      pim-instance
    </pim-instance>
    <pim-statistics-global>....</pim-statistics-global>
    <pim-statistics-other>....</pim-statistics-other>
  </pim-statistics-all>
</pim-statistics-information>
```

Description

<pim-statistics-global>

Usage

```
<pim-statistics-information>
  <pim-statistics-all>
    <pim-statistics-global>
      <pim-statistic>....</pim-statistic>
    </pim-statistics-global>
  </pim-statistics-all>
</pim-statistics-information>
```

Description

<pim-statistics-global>

Usage

```
<pim-statistics-information>
  <everything>
    <pim-statistics-global>
```

```
      <pim-statistic>....</pim-statistic>
    </pim-statistics-global>
  </everything>
</pim-statistics-information>
```

Description

<pim-statistics-information>

Usage

```
<pim-statistics-information>
  <statistics-family>....</statistics-family>
  <pim-statistics-all>....</pim-statistics-all>
  <everything>....</everything>
</pim-statistics-information>
```

Description

<pim-statistics-interface>

Usage

```
<pim-statistics-information>
  <statistics-family>
    <pim-statistics-interface>
      <pim-interface-name>
        pim-interface-name
      </pim-interface-name>
      <pim-statistic>....</pim-statistic>
    </pim-statistics-interface>
  </statistics-family>
</pim-statistics-information>
```

Description

<pim-statistics-other>

Usage

```
<pim-statistics-information>
  <pim-statistics-all>
    <pim-statistics-other>
      <pim-other-statistic>....</pim-other-statistic>
    </pim-statistics-other>
  </pim-statistics-all>
</pim-statistics-information>
```

Description

<pim-statistics-other>

Usage

```
<pim-statistics-information>
  <everything>
```


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```
    <pim-statistics-other>
     <pim-other-statistic>....</pim-other-statistic>
    </pim-statistics-other>
   </everything>
</pim-statistics-information>
```

Description

<prefix-element>

Usage

```
<isis-overview>
 <isis-spf-information>
  <isis-spf>
   <isis-spf-result>
    <prefix-element>
     <address-prefix>
      address-prefix
     </address-prefix>
     <prefix-metric>
      prefix-metric
     </prefix-metric>
     <external-prefix-metric>
      external-prefix-metric
     </external-prefix-metric>
    </prefix-element>
   </isis-spf-result>
  </isis-spf>
 </isis-spf-information>
</isis-overview>
```

Description

<prefix-element>

Usage

```
<isis-overview-information>
 <isis-overview>
  <isis-spf-information>
   <isis-spf>
    <isis-spf-result>
     <prefix-element>
      <address-prefix>
       address-prefix
      </address-prefix>
      <prefix-metric>
       prefix-metric
      </prefix-metric>
      <external-prefix-metric>
       external-prefix-metric
      </external-prefix-metric>
     </prefix-element>
    </isis-spf-result>
   </isis-spf>
```

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```
    </isis-spf-information>
  </isis-overview>
</isis-overview-information>
```

Description

<prefix-element>

Usage

```
<isis-spf-result>
  <prefix-element>
    <address-prefix>
      address-prefix
    </address-prefix>
    <prefix-metric>
      prefix-metric
    </prefix-metric>
    <external-prefix-metric>
      external-prefix-metric
    </external-prefix-metric>
  </prefix-element>
</isis-spf-result>
```

Description

<prefix-element>

Usage

```
<isis-spf>
  <isis-spf-result>
    <prefix-element>
      <address-prefix>
        address-prefix
      </address-prefix>
      <prefix-metric>
        prefix-metric
      </prefix-metric>
      <external-prefix-metric>
        external-prefix-metric
      </external-prefix-metric>
    </prefix-element>
  </isis-spf-result>
</isis-spf>
```

Description

<prefix-element>

Usage

```
<isis-spf-information>
  <isis-spf>
    <isis-spf-result>
      <prefix-element>
```


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```
        <address-prefix>
          address-prefix
        </address-prefix>
        <prefix-metric>
          prefix-metric
        </prefix-metric>
        <external-prefix-metric>
          external-prefix-metric
        </external-prefix-metric>
      </prefix-element>
    </isis-spf-result>
  </isis-spf>
</isis-spf-information>
```

Description

<prefix-limit>

Usage

```
<bgp-option-information>
  <prefix-limit>
    <nlri-type>
      nlri-type
    </nlri-type>
    <prefix-count>
      prefix-count
    </prefix-count>
    <limit-action>
      limit-action
    </limit-action>
    <warning-percentage>
      warning-percentage
    </warning-percentage>
  </prefix-limit>
</bgp-option-information>
```

Description

<prefix-limit>

Usage

```
<bgp-peer>
  <bgp-option-information>
    <prefix-limit>
      <nlri-type>
        nlri-type
      </nlri-type>
      <prefix-count>
        prefix-count
      </prefix-count>
      <limit-action>
        limit-action
      </limit-action>
      <warning-percentage>
```

```
            warning-percentage
           </warning-percentage>
          </prefix-limit>
         </bgp-option-information>
        </bgp-peer>
```

Description

<prefix-limit>

Usage

```
<bgp-group>
 <bgp-peer>
  <bgp-option-information>
   <prefix-limit>
    <nlri-type>
     nlri-type
    </nlri-type>
    <prefix-count>
     prefix-count
    </prefix-count>
    <limit-action>
     limit-action
    </limit-action>
    <warning-percentage>
     warning-percentage
    </warning-percentage>
   </prefix-limit>
  </bgp-option-information>
 </bgp-peer>
</bgp-group>
```

Description

<prefix-limit>

Usage

```
<bgp-group>
 <bgp-option-information>
  <prefix-limit>
   <nlri-type>
    nlri-type
   </nlri-type>
   <prefix-count>
    prefix-count
   </prefix-count>
   <limit-action>
    limit-action
   </limit-action>
   <warning-percentage>
    warning-percentage
   </warning-percentage>
  </prefix-limit>
 </bgp-option-information>
```


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```
</bgp-group>
```

Description

<prefix-limit>

Usage

```
<bgp-information>
 <bgp-peer>
  <bgp-option-information>
   <prefix-limit>
    <nlri-type>
     nlri-type
    </nlri-type>
    <prefix-count>
     prefix-count
    </prefix-count>
    <limit-action>
     limit-action
    </limit-action>
    <warning-percentage>
     warning-percentage
    </warning-percentage>
   </prefix-limit>
  </bgp-option-information>
 </bgp-peer>
</bgp-information>
```

Description

<prefix-limit>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <bgp-option-information>
    <prefix-limit>
     <nlri-type>
      nlri-type
     </nlri-type>
     <prefix-count>
      prefix-count
     </prefix-count>
     <limit-action>
      limit-action
     </limit-action>
     <warning-percentage>
      warning-percentage
     </warning-percentage>
    </prefix-limit>
   </bgp-option-information>
  </bgp-peer>
 </bgp-group>
```

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```
</bgp-group-information>
```

Description

<prefix-limit>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-option-information>
   <prefix-limit>
    <nlri-type>
     nlri-type
    </nlri-type>
    <prefix-count>
     prefix-count
    </prefix-count>
    <limit-action>
     limit-action
    </limit-action>
    <warning-percentage>
     warning-percentage
    </warning-percentage>
   </prefix-limit>
  </bgp-option-information>
 </bgp-group>
</bgp-group-information>
```

Description

<prefix-limit>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
   <bgp-option-information>
    <prefix-limit>
     <nlri-type>
      nlri-type
     </nlri-type>
     <prefix-count>
      prefix-count
     </prefix-count>
     <limit-action>
      limit-action
     </limit-action>
     <warning-percentage>
      warning-percentage
     </warning-percentage>
    </prefix-limit>
   </bgp-option-information>
  </bgp-peer>
 </bgp-information>
```


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```
</bgp-group-information>
```

Description

<prefix-reachability>

Usage

```
<isis-database-local>
  <isis-database-local-entry>
    <isis-database-local-data>
      <prefix-reachability>
        <address-prefix>
          address-prefix
        </address-prefix>
        <route-type>
          route-type
        </route-type>
        <metric>
          metric
        </metric>
        <flags>
          flags
        </flags>
        <level>
          level
        </level>
        <isis-fragment>
          isis-fragment
        </isis-fragment>
        <tsi>
          tsi
        </tsi>
        <isis-topology-id>
          isis-topology-id
        </isis-topology-id>
        <isis-prefix-tag>....</isis-prefix-tag>
      </prefix-reachability>
    </isis-database-local-data>
  </isis-database-local-entry>
</isis-database-local>
```

Description

<prefix-reachability>

Usage

```
<isis-database-local-information>
  <isis-database-local>
    <isis-database-local-entry>
      <isis-database-local-data>
        <prefix-reachability>
          <address-prefix>
            address-prefix
          </address-prefix>
```

```
            <route-type>
              route-type
            </route-type>
            <metric>
              metric
            </metric>
            <flags>
              flags
            </flags>
            <level>
              level
            </level>
            <isis-fragment>
              isis-fragment
            </isis-fragment>
            <tsi>
              tsi
            </tsi>
            <isis-topology-id>
              isis-topology-id
            </isis-topology-id>
            <isis-prefix-tag>....</isis-prefix-tag>
          </prefix-reachability>
        </isis-database-local-data>
      </isis-database-local-entry>
    </isis-database-local>
  </isis-database-local-information>
```

Description

<protocol-nh>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <protocol-nh>
          <to>
            to
          </to>
          <metric>
            metric
          </metric>
          <indirect-nh>
            indirect-nh
          </indirect-nh>
          <composite-nh>
            composite-nh
          </composite-nh>
          <vpnlabel-nh>
            vpnlabel-nh
          </vpnlabel-nh>
          <mpls-label>
            mpls-label
```


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```
            </mpls-label>
            <balance>
              balance
            </balance>
            <flags>
              flags
            </flags>
            <forwarding-nh-count>
              forwarding-nh-count
            </forwarding-nh-count>
            <nh-type>
              nh-type
            </nh-type>
            <ext-int-type>
              ext-int-type
            </ext-int-type>
            <nh>....</nh>
          </protocol-nh>
        </rt-entry>
      </rt>
    </route-table>
  </route-information>
```

Description Protocol next hop

<protocol-nh>

Usage

```
<route-resolution-information>
  <route-resolution-tree>
    <node>
      <protocol-nh>
        <to>
          to
        </to>
        <metric>
          metric
        </metric>
        <indirect-nh>
          indirect-nh
        </indirect-nh>
        <composite-nh>
          composite-nh
        </composite-nh>
        <vpnlabel-nh>
          vpnlabel-nh
        </vpnlabel-nh>
        <mpls-label>
          mpls-label
        </mpls-label>
        <balance>
          balance
        </balance>
        <flags>
```

```
            flags
          </flags>
          <forwarding-nh-count>
            forwarding-nh-count
          </forwarding-nh-count>
          <nh-type>
            nh-type
          </nh-type>
          <ext-int-type>
            ext-int-type
          </ext-int-type>
          <nh>....</nh>
        </protocol-nh>
      </node>
    </route-resolution-tree>
  </route-resolution-information>
```

Description Protocol next hop

<protocol-nh>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <protocol-nh>
          <to>
            to
          </to>
          <metric>
            metric
          </metric>
          <indirect-nh>
            indirect-nh
          </indirect-nh>
          <composite-nh>
            composite-nh
          </composite-nh>
          <vpnlabel-nh>
            vpnlabel-nh
          </vpnlabel-nh>
          <mpls-label>
            mpls-label
          </mpls-label>
          <balance>
            balance
          </balance>
          <flags>
            flags
          </flags>
          <forwarding-nh-count>
            forwarding-nh-count
          </forwarding-nh-count>
```


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```
            <nh-type>
              nh-type
            </nh-type>
            <ext-int-type>
              ext-int-type
            </ext-int-type>
            <nh>....</nh>
          </protocol-nh>
        </rt-entry>
      </rt>
    </route-table>
  </route-summary-information>
```

Description Protocol next hop

<protocols>

Usage

```
<route-information>
  <route-table>
    <protocols>
      <protocol-name>
        protocol-name
      </protocol-name>
      <protocol-route-count>
        protocol-route-count
      </protocol-route-count>
      <active-route-count>
        active-route-count
      </active-route-count>
    </protocols>
  </route-table>
</route-information>
```

Description

<protocols>

Usage

```
<route-summary-information>
  <route-table>
    <protocols>
      <protocol-name>
        protocol-name
      </protocol-name>
      <protocol-route-count>
        protocol-route-count
      </protocol-route-count>
      <active-route-count>
        active-route-count
      </active-route-count>
    </protocols>
  </route-table>
```

```
</route-summary-information>
```

Description

<protocols-tlv>

Usage

```
<isis-tlv>
  <protocols-tlv>
    <protocol>
      protocol
    </protocol>
  </protocols-tlv>
</isis-tlv>
```

Description

<protocols-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <protocols-tlv>
      <protocol>
        protocol
      </protocol>
    </protocols-tlv>
  </isis-tlv>
</isis-database-entry>
```

Description

<protocols-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <protocols-tlv>
        <protocol>
          protocol
        </protocol>
      </protocols-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

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<protocols-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <protocols-tlv>
          <protocol>
            protocol
          </protocol>
        </protocols-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<provider-tunnel>

Usage

```
<provider-tunnel>
  <provider-tunnel-id>
    provider-tunnel-id
  </provider-tunnel-id>
</provider-tunnel>
```

Description

<provider-tunnel>

Usage

```
<instance-entry>
  <provider-tunnel>
    <provider-tunnel-id>
      provider-tunnel-id
    </provider-tunnel-id>
  </provider-tunnel>
</instance-entry>
```

Description

<provider-tunnel>

Usage

```
<instance-family>
  <instance-entry>
    <provider-tunnel>
      <provider-tunnel-id>
        provider-tunnel-id
      </provider-tunnel-id>
```

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```
    </provider-tunnel>
  </instance-entry>
</instance-family>
```

Description

<provider-tunnel>

Usage

```
<mvpn-instance>
  <instance-family>
    <instance-entry>
      <provider-tunnel>
        <provider-tunnel-id>
          provider-tunnel-id
        </provider-tunnel-id>
      </provider-tunnel>
    </instance-entry>
  </instance-family>
</mvpn-instance>
```

Description

<provider-tunnel>

Usage

```
<mvpn-instance-information>
  <mvpn-instance>
    <instance-family>
      <instance-entry>
        <provider-tunnel>
          <provider-tunnel-id>
            provider-tunnel-id
          </provider-tunnel-id>
        </provider-tunnel>
      </instance-entry>
    </instance-family>
  </mvpn-instance>
</mvpn-instance-information>
```

Description

<provider-tunnel>

Usage

```
<mvpn-instance-information>
  <instance-family>
    <instance-entry>
      <provider-tunnel>
        <provider-tunnel-id>
          provider-tunnel-id
        </provider-tunnel-id>
      </provider-tunnel>
```


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```
    </instance-entry>
  </instance-family>
</mvpn-instance-information>
```

Description

<proxy-upstream-interface>

Usage

```
<proxy-upstream-interface>
  <interface-name>
    interface-name
  </interface-name>
</proxy-upstream-interface>
```

Description

<proxy-upstream-interface>

Usage

```
<multicast-pim-to-igmp-proxy-information>
  <multicast-pim-to-igmp-proxy>
    <proxy-upstream-interface>
      <interface-name>
        interface-name
      </interface-name>
    </proxy-upstream-interface>
  </multicast-pim-to-igmp-proxy>
</multicast-pim-to-igmp-proxy-information>
```

Description

<proxy-upstream-interface>

Usage

```
<multicast-pim-to-mld-proxy-information>
  <multicast-pim-to-mld-proxy>
    <proxy-upstream-interface>
      <interface-name>
        interface-name
      </interface-name>
    </proxy-upstream-interface>
  </multicast-pim-to-mld-proxy>
</multicast-pim-to-mld-proxy-information>
```

Description

<reachability-tlv>

Usage

```
<isis-tlv>
  <reachability-tlv>
```

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```
<isis-topology-id>
  isis-topology-id
</isis-topology-id>
<address-prefix>
  address-prefix
</address-prefix>
<metric>
  metric
</metric>
<metric-flag>
  metric-flag
</metric-flag>
<reachability-delay>
  reachability-delay
</reachability-delay>
<reachability-expense>
  reachability-expense
</reachability-expense>
<reachability-error>
  reachability-error
</reachability-error>
<prefix-status>
  prefix-status
</prefix-status>
<address>
  address
</address>
<neighbor-prefix>
  neighbor-prefix
</neighbor-prefix>
<tlv-length>
  tlv-length
</tlv-length>
<isis-reachability-subtlv>....</isis-reachability-subtlv>
</reachability-tlv>
</isis-tlv>
```

Description

<reachability-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <reachability-tlv>
      <isis-topology-id>
        isis-topology-id
      </isis-topology-id>
      <address-prefix>
        address-prefix
      </address-prefix>
      <metric>
        metric
      </metric>
      <metric-flag>
```


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```
        metric-flag
       </metric-flag>
       <reachability-delay>
        reachability-delay
       </reachability-delay>
       <reachability-expense>
        reachability-expense
       </reachability-expense>
       <reachability-error>
        reachability-error
       </reachability-error>
       <prefix-status>
        prefix-status
       </prefix-status>
       <address>
        address
       </address>
       <neighbor-prefix>
        neighbor-prefix
       </neighbor-prefix>
       <tlv-length>
        tlv-length
       </tlv-length>
       <isis-reachability-subtlv>....</isis-reachability-subtlv>
      </reachability-tlv>
     </isis-tlv>
    </isis-database-entry>
```

Description

<reachability-tlv>

Usage

```
<isis-database>
 <isis-database-entry>
  <isis-tlv>
   <reachability-tlv>
    <isis-topology-id>
     isis-topology-id
    </isis-topology-id>
    <address-prefix>
     address-prefix
    </address-prefix>
    <metric>
     metric
    </metric>
    <metric-flag>
     metric-flag
    </metric-flag>
    <reachability-delay>
     reachability-delay
    </reachability-delay>
    <reachability-expense>
     reachability-expense
    </reachability-expense>
```

```
            <reachability-error>
              reachability-error
            </reachability-error>
            <prefix-status>
              prefix-status
            </prefix-status>
            <address>
              address
            </address>
            <neighbor-prefix>
              neighbor-prefix
            </neighbor-prefix>
            <tlv-length>
              tlv-length
            </tlv-length>
            <isis-reachability-subtlv>....</isis-reachability-subtlv>
          </reachability-tlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
```

Description

<reachability-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <reachability-tlv>
          <isis-topology-id>
            isis-topology-id
          </isis-topology-id>
          <address-prefix>
            address-prefix
          </address-prefix>
          <metric>
            metric
          </metric>
          <metric-flag>
            metric-flag
          </metric-flag>
          <reachability-delay>
            reachability-delay
          </reachability-delay>
          <reachability-expense>
            reachability-expense
          </reachability-expense>
          <reachability-error>
            reachability-error
          </reachability-error>
          <prefix-status>
            prefix-status
          </prefix-status>
```


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```
            <address>
              address
            </address>
            <neighbor-prefix>
              neighbor-prefix
            </neighbor-prefix>
            <tlv-length>
              tlv-length
            </tlv-length>
            <isis-reachability-subtlv>....</isis-reachability-subtlv>
          </reachability-tlv>
        </isis-tlv>
      </isis-database-entry>
    </isis-database>
  </isis-database-information>
```

Description

<record-route>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <record-route>
      <address>
        address
      </address>
      <telink-id>
        telink-id
      </telink-id>
      <self>
        self
      </self>
      <incomplete>
        incomplete
      </incomplete>
    </record-route>
  </rsvp-session>
</rsvp-session-data>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <detour>
      <record-route>
        <address>
          address
        </address>
        <telink-id>
```

```
            telink-id
           </telink-id>
           <self>
            self
           </self>
           <incomplete>
            incomplete
           </incomplete>
          </record-route>
         </detour>
        </rsvp-session>
       </rsvp-session-data>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <detour-branch>
   <record-route>
    <address>
     address
    </address>
    <telink-id>
     telink-id
    </telink-id>
    <self>
     self
    </self>
    <incomplete>
     incomplete
    </incomplete>
   </record-route>
  </detour-branch>
 </rsvp-session>
</rsvp-session-data>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session>
 <record-route>
  <address>
   address
  </address>
  <telink-id>
   telink-id
  </telink-id>
```


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```
      <self>
       self
      </self>
      <incomplete>
       incomplete
      </incomplete>
     </record-route>
    </rsvp-session>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session>
 <detour>
  <record-route>
   <address>
    address
   </address>
   <telink-id>
    telink-id
   </telink-id>
   <self>
    self
   </self>
   <incomplete>
    incomplete
   </incomplete>
  </record-route>
 </detour>
</rsvp-session>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session>
 <detour-branch>
  <record-route>
   <address>
    address
   </address>
   <telink-id>
    telink-id
   </telink-id>
   <self>
    self
   </self>
   <incomplete>
    incomplete
```

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```
      </incomplete>
    </record-route>
  </detour-branch>
</rsvp-session>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<detour>
  <record-route>
    <address>
      address
    </address>
    <telink-id>
      telink-id
    </telink-id>
    <self>
      self
    </self>
    <incomplete>
      incomplete
    </incomplete>
  </record-route>
</detour>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<detour-branch>
  <record-route>
    <address>
      address
    </address>
    <telink-id>
      telink-id
    </telink-id>
    <self>
      self
    </self>
    <incomplete>
      incomplete
    </incomplete>
  </record-route>
</detour-branch>
```

Description Record Route Object (RRO)

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<record-route>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <record-route>
        <address>
          address
        </address>
        <telink-id>
          telink-id
        </telink-id>
        <self>
          self
        </self>
        <incomplete>
          incomplete
        </incomplete>
      </record-route>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <record-route>
          <address>
            address
          </address>
          <telink-id>
            telink-id
          </telink-id>
          <self>
            self
          </self>
          <incomplete>
            incomplete
          </incomplete>
        </record-route>
      </detour>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

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Description Record Route Object (RRO)

<record-route>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <record-route>
          <address>
            address
          </address>
          <telink-id>
            telink-id
          </telink-id>
          <self>
            self
          </self>
          <incomplete>
            incomplete
          </incomplete>
        </record-route>
      </detour-branch>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <record-route>
        <address>
          address
        </address>
        <telink-id>
          telink-id
        </telink-id>
        <self>
          self
        </self>
        <incomplete>
          incomplete
        </incomplete>
      </record-route>
    </rsvp-session>
  </rsvp-session-data>
```


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```
</mpls-lsp-information>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour>
        <record-route>
          <address>
            address
          </address>
          <telink-id>
            telink-id
          </telink-id>
          <self>
            self
          </self>
          <incomplete>
            incomplete
          </incomplete>
        </record-route>
      </detour>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Record Route Object (RRO)

<record-route>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <detour-branch>
        <record-route>
          <address>
            address
          </address>
          <telink-id>
            telink-id
          </telink-id>
          <self>
            self
          </self>
          <incomplete>
            incomplete
          </incomplete>
```

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```
            </record-route>
           </detour-branch>
          </rsvp-session>
         </rsvp-session-data>
        </mpls-lsp-information>
```

Description Record Route Object (RRO)

<redundant-sources>

Usage

```
<multicast-flow-maps-information>
 <multicast-flow-maps>
  <multicast-flow-map>
   <redundant-sources>
    <multicast-source-address>
     multicast-source-address
    </multicast-source-address>
   </redundant-sources>
  </multicast-flow-map>
 </multicast-flow-maps>
</multicast-flow-maps-information>
```

Description Redundant source addresses

<reference-site>

Usage

```
<instance>
 <reference-site>
  <vpls-signaling-protocol-identifier>
   vpls-signaling-protocol-identifier
  </vpls-signaling-protocol-identifier>
  <local-site-id>
   local-site-id
  </local-site-id>
  <vpls-id>
   vpls-id
  </vpls-id>
  <l2vpn-id>
   l2vpn-id
  </l2vpn-id>
  <local-id>
   local-id
  </local-id>
  <num-local-interfaces>
   num-local-interfaces
  </num-local-interfaces>
  <num-local-interfaces-up>
   num-local-interfaces-up
  </num-local-interfaces-up>
  <irb-present>
```


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```
      irb-present
    </irb-present>
    <mesh-group-count>
      mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
      mesh-group-up-count
    </mesh-group-up-count>
    <remote-site-id>
      remote-site-id
    </remote-site-id>
    <mesh-group-interfaces>....</mesh-group-interfaces>
    <interface>
      interface
    </interface>
    <label-block>....</label-block>
    <connection>....</connection>
    <mesh-group-connection>....</mesh-group-connection>
    <automatic-site-name>
      automatic-site-name
    </automatic-site-name>
    <automatic-site-id-status>
      automatic-site-id-status
    </automatic-site-id-status>
    <automatic-site-claim-id>
      automatic-site-claim-id
    </automatic-site-claim-id>
    <automatic-site-collisions>
      automatic-site-collisions
    </automatic-site-collisions>
    <automatic-site-timer-status>
      automatic-site-timer-status
    </automatic-site-timer-status>
    <automatic-site-timers>....</automatic-site-timers>
    <connections-summary>....</connections-summary>
  </reference-site>
</instance>
```

Description

<reference-site>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
```

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```
        <l2vpn-id>
          l2vpn-id
        </l2vpn-id>
        <local-id>
          local-id
        </local-id>
        <num-local-interfaces>
          num-local-interfaces
        </num-local-interfaces>
        <num-local-interfaces-up>
          num-local-interfaces-up
        </num-local-interfaces-up>
        <irb-present>
          irb-present
        </irb-present>
        <mesh-group-count>
          mesh-group-count
        </mesh-group-count>
        <mesh-group-up-count>
          mesh-group-up-count
        </mesh-group-up-count>
        <remote-site-id>
          remote-site-id
        </remote-site-id>
        <mesh-group-interfaces>....</mesh-group-interfaces>
        <interface>
          interface
        </interface>
        <label-block>....</label-block>
        <connection>....</connection>
        <mesh-group-connection>....</mesh-group-connection>
        <automatic-site-name>
          automatic-site-name
        </automatic-site-name>
        <automatic-site-id-status>
          automatic-site-id-status
        </automatic-site-id-status>
        <automatic-site-claim-id>
          automatic-site-claim-id
        </automatic-site-claim-id>
        <automatic-site-collisions>
          automatic-site-collisions
        </automatic-site-collisions>
        <automatic-site-timer-status>
          automatic-site-timer-status
        </automatic-site-timer-status>
        <automatic-site-timers>....</automatic-site-timers>
        <connections-summary>....</connections-summary>
      </reference-site>
    </vpls-protocol-state>
  </instance>
```

Description

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<reference-site>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <label-block>....</label-block>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <automatic-site-name>
        automatic-site-name
      </automatic-site-name>
      <automatic-site-id-status>
        automatic-site-id-status
      </automatic-site-id-status>
      <automatic-site-claim-id>
        automatic-site-claim-id
      </automatic-site-claim-id>
```

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```
      <automatic-site-collisions>
        automatic-site-collisions
      </automatic-site-collisions>
      <automatic-site-timer-status>
        automatic-site-timer-status
      </automatic-site-timer-status>
      <automatic-site-timers>....</automatic-site-timers>
      <connections-summary>....</connections-summary>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<reference-site>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <vpls-signaling-protocol-identifier>
          vpls-signaling-protocol-identifier
        </vpls-signaling-protocol-identifier>
        <local-site-id>
          local-site-id
        </local-site-id>
        <vpls-id>
          vpls-id
        </vpls-id>
        <l2vpn-id>
          l2vpn-id
        </l2vpn-id>
        <local-id>
          local-id
        </local-id>
        <num-local-interfaces>
          num-local-interfaces
        </num-local-interfaces>
        <num-local-interfaces-up>
          num-local-interfaces-up
        </num-local-interfaces-up>
        <irb-present>
          irb-present
        </irb-present>
        <mesh-group-count>
          mesh-group-count
        </mesh-group-count>
        <mesh-group-up-count>
          mesh-group-up-count
        </mesh-group-up-count>
        <remote-site-id>
          remote-site-id
        </remote-site-id>
        <mesh-group-interfaces>....</mesh-group-interfaces>
```


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```
        <interface>
          interface
        </interface>
        <label-block>....</label-block>
        <connection>....</connection>
        <mesh-group-connection>....</mesh-group-connection>
        <automatic-site-name>
          automatic-site-name
        </automatic-site-name>
        <automatic-site-id-status>
          automatic-site-id-status
        </automatic-site-id-status>
        <automatic-site-claim-id>
          automatic-site-claim-id
        </automatic-site-claim-id>
        <automatic-site-collisions>
          automatic-site-collisions
        </automatic-site-collisions>
        <automatic-site-timer-status>
          automatic-site-timer-status
        </automatic-site-timer-status>
        <automatic-site-timers>....</automatic-site-timers>
        <connections-summary>....</connections-summary>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<reference-site>

Usage

```
<vpls-connection-information>
  <instance>
    <reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
```

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```
          num-local-interfaces-up
        </num-local-interfaces-up>
        <irb-present>
          irb-present
        </irb-present>
        <mesh-group-count>
          mesh-group-count
        </mesh-group-count>
        <mesh-group-up-count>
          mesh-group-up-count
        </mesh-group-up-count>
        <remote-site-id>
          remote-site-id
        </remote-site-id>
        <mesh-group-interfaces>....</mesh-group-interfaces>
        <interface>
          interface
        </interface>
        <label-block>....</label-block>
        <connection>....</connection>
        <mesh-group-connection>....</mesh-group-connection>
        <automatic-site-name>
          automatic-site-name
        </automatic-site-name>
        <automatic-site-id-status>
          automatic-site-id-status
        </automatic-site-id-status>
        <automatic-site-claim-id>
          automatic-site-claim-id
        </automatic-site-claim-id>
        <automatic-site-collisions>
          automatic-site-collisions
        </automatic-site-collisions>
        <automatic-site-timer-status>
          automatic-site-timer-status
        </automatic-site-timer-status>
        <automatic-site-timers>....</automatic-site-timers>
        <connections-summary>....</connections-summary>
      </reference-site>
    </instance>
  </vpls-connection-information>
```

Description

<reference-site>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <vpls-signaling-protocol-identifier>
          vpls-signaling-protocol-identifier
        </vpls-signaling-protocol-identifier>
        <local-site-id>
```


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```
      local-site-id
    </local-site-id>
    <vpls-id>
      vpls-id
    </vpls-id>
    <l2vpn-id>
      l2vpn-id
    </l2vpn-id>
    <local-id>
      local-id
    </local-id>
    <num-local-interfaces>
      num-local-interfaces
    </num-local-interfaces>
    <num-local-interfaces-up>
      num-local-interfaces-up
    </num-local-interfaces-up>
    <irb-present>
      irb-present
    </irb-present>
    <mesh-group-count>
      mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
      mesh-group-up-count
    </mesh-group-up-count>
    <remote-site-id>
      remote-site-id
    </remote-site-id>
    <mesh-group-interfaces>....</mesh-group-interfaces>
    <interface>
      interface
    </interface>
    <label-block>....</label-block>
    <connection>....</connection>
    <mesh-group-connection>....</mesh-group-connection>
    <automatic-site-name>
      automatic-site-name
    </automatic-site-name>
    <automatic-site-id-status>
      automatic-site-id-status
    </automatic-site-id-status>
    <automatic-site-claim-id>
      automatic-site-claim-id
    </automatic-site-claim-id>
    <automatic-site-collisions>
      automatic-site-collisions
    </automatic-site-collisions>
    <automatic-site-timer-status>
      automatic-site-timer-status
    </automatic-site-timer-status>
    <automatic-site-timers>....</automatic-site-timers>
    <connections-summary>....</connections-summary>
   </reference-site>
  </vpls-protocol-state>
</instance>
```

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```
</vpls-connection-information>
```

Description

<reference-site>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <vpls-signaling-protocol-identifier>
    vpls-signaling-protocol-identifier
   </vpls-signaling-protocol-identifier>
   <local-site-id>
    local-site-id
   </local-site-id>
   <vpls-id>
    vpls-id
   </vpls-id>
   <l2vpn-id>
    l2vpn-id
   </l2vpn-id>
   <local-id>
    local-id
   </local-id>
   <num-local-interfaces>
    num-local-interfaces
   </num-local-interfaces>
   <num-local-interfaces-up>
    num-local-interfaces-up
   </num-local-interfaces-up>
   <irb-present>
    irb-present
   </irb-present>
   <mesh-group-count>
    mesh-group-count
   </mesh-group-count>
   <mesh-group-up-count>
    mesh-group-up-count
   </mesh-group-up-count>
   <remote-site-id>
    remote-site-id
   </remote-site-id>
   <mesh-group-interfaces>....</mesh-group-interfaces>
   <interface>
    interface
   </interface>
   <label-block>....</label-block>
   <connection>....</connection>
   <mesh-group-connection>....</mesh-group-connection>
   <automatic-site-name>
    automatic-site-name
   </automatic-site-name>
   <automatic-site-id-status>
    automatic-site-id-status
```


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```
    </automatic-site-id-status>
    <automatic-site-claim-id>
     automatic-site-claim-id
    </automatic-site-claim-id>
    <automatic-site-collisions>
     automatic-site-collisions
    </automatic-site-collisions>
    <automatic-site-timer-status>
     automatic-site-timer-status
    </automatic-site-timer-status>
    <automatic-site-timers>....</automatic-site-timers>
    <connections-summary>....</connections-summary>
   </reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<reference-site>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <vpls-signaling-protocol-identifier>
     vpls-signaling-protocol-identifier
    </vpls-signaling-protocol-identifier>
    <local-site-id>
     local-site-id
    </local-site-id>
    <vpls-id>
     vpls-id
    </vpls-id>
    <l2vpn-id>
     l2vpn-id
    </l2vpn-id>
    <local-id>
     local-id
    </local-id>
    <num-local-interfaces>
     num-local-interfaces
    </num-local-interfaces>
    <num-local-interfaces-up>
     num-local-interfaces-up
    </num-local-interfaces-up>
    <irb-present>
     irb-present
    </irb-present>
    <mesh-group-count>
     mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
     mesh-group-up-count
    </mesh-group-up-count>
```

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```
        <remote-site-id>
          remote-site-id
        </remote-site-id>
        <mesh-group-interfaces>....</mesh-group-interfaces>
        <interface>
          interface
        </interface>
        <label-block>....</label-block>
        <connection>....</connection>
        <mesh-group-connection>....</mesh-group-connection>
        <automatic-site-name>
          automatic-site-name
        </automatic-site-name>
        <automatic-site-id-status>
          automatic-site-id-status
        </automatic-site-id-status>
        <automatic-site-claim-id>
          automatic-site-claim-id
        </automatic-site-claim-id>
        <automatic-site-collisions>
          automatic-site-collisions
        </automatic-site-collisions>
        <automatic-site-timer-status>
          automatic-site-timer-status
        </automatic-site-timer-status>
        <automatic-site-timers>....</automatic-site-timers>
        <connections-summary>....</connections-summary>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<reference-site>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <local-site-id>
        local-site-id
      </local-site-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <l2vpn-id>
        l2vpn-id
      </l2vpn-id>
      <local-id>
        local-id
      </local-id>
```


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```
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <remote-site-id>
        remote-site-id
      </remote-site-id>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <label-block>....</label-block>
      <connection>....</connection>
      <mesh-group-connection>....</mesh-group-connection>
      <automatic-site-name>
        automatic-site-name
      </automatic-site-name>
      <automatic-site-id-status>
        automatic-site-id-status
      </automatic-site-id-status>
      <automatic-site-claim-id>
        automatic-site-claim-id
      </automatic-site-claim-id>
      <automatic-site-collisions>
        automatic-site-collisions
      </automatic-site-collisions>
      <automatic-site-timer-status>
        automatic-site-timer-status
      </automatic-site-timer-status>
      <automatic-site-timers>....</automatic-site-timers>
      <connections-summary>....</connections-summary>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<reference-site>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
```

```
<vpls-signaling-protocol-identifier>
  vpls-signaling-protocol-identifier
</vpls-signaling-protocol-identifier>
<local-site-id>
  local-site-id
</local-site-id>
<vpls-id>
  vpls-id
</vpls-id>
<l2vpn-id>
  l2vpn-id
</l2vpn-id>
<local-id>
  local-id
</local-id>
<num-local-interfaces>
  num-local-interfaces
</num-local-interfaces>
<num-local-interfaces-up>
  num-local-interfaces-up
</num-local-interfaces-up>
<irb-present>
  irb-present
</irb-present>
<mesh-group-count>
  mesh-group-count
</mesh-group-count>
<mesh-group-up-count>
  mesh-group-up-count
</mesh-group-up-count>
<remote-site-id>
  remote-site-id
</remote-site-id>
<mesh-group-interfaces>....</mesh-group-interfaces>
<interface>
  interface
</interface>
<label-block>....</label-block>
<connection>....</connection>
<mesh-group-connection>....</mesh-group-connection>
<automatic-site-name>
  automatic-site-name
</automatic-site-name>
<automatic-site-id-status>
  automatic-site-id-status
</automatic-site-id-status>
<automatic-site-claim-id>
  automatic-site-claim-id
</automatic-site-claim-id>
<automatic-site-collisions>
  automatic-site-collisions
</automatic-site-collisions>
<automatic-site-timer-status>
  automatic-site-timer-status
</automatic-site-timer-status>
<automatic-site-timers>....</automatic-site-timers>
```


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```
        <connections-summary>....</connections-summary>
       </reference-site>
      </vpls-protocol-state>
     </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
```

Description

<reference-site>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <vpls-signaling-protocol-identifier>
     vpls-signaling-protocol-identifier
    </vpls-signaling-protocol-identifier>
    <local-site-id>
     local-site-id
    </local-site-id>
    <vpls-id>
     vpls-id
    </vpls-id>
    <l2vpn-id>
     l2vpn-id
    </l2vpn-id>
    <local-id>
     local-id
    </local-id>
    <num-local-interfaces>
     num-local-interfaces
    </num-local-interfaces>
    <num-local-interfaces-up>
     num-local-interfaces-up
    </num-local-interfaces-up>
    <irb-present>
     irb-present
    </irb-present>
    <mesh-group-count>
     mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
     mesh-group-up-count
    </mesh-group-up-count>
    <remote-site-id>
     remote-site-id
    </remote-site-id>
    <mesh-group-interfaces>....</mesh-group-interfaces>
    <interface>
     interface
    </interface>
    <label-block>....</label-block>
    <connection>....</connection>
    <mesh-group-connection>....</mesh-group-connection>
```

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```
            <automatic-site-name>
              automatic-site-name
            </automatic-site-name>
            <automatic-site-id-status>
              automatic-site-id-status
            </automatic-site-id-status>
            <automatic-site-claim-id>
              automatic-site-claim-id
            </automatic-site-claim-id>
            <automatic-site-collisions>
              automatic-site-collisions
            </automatic-site-collisions>
            <automatic-site-timer-status>
              automatic-site-timer-status
            </automatic-site-timer-status>
            <automatic-site-timers>....</automatic-site-timers>
            <connections-summary>....</connections-summary>
          </reference-site>
        </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description

<reference-site>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <vpls-signaling-protocol-identifier>
            vpls-signaling-protocol-identifier
          </vpls-signaling-protocol-identifier>
          <local-site-id>
            local-site-id
          </local-site-id>
          <vpls-id>
            vpls-id
          </vpls-id>
          <l2vpn-id>
            l2vpn-id
          </l2vpn-id>
          <local-id>
            local-id
          </local-id>
          <num-local-interfaces>
            num-local-interfaces
          </num-local-interfaces>
          <num-local-interfaces-up>
            num-local-interfaces-up
          </num-local-interfaces-up>
          <irb-present>
            irb-present
```


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```
            </irb-present>
            <mesh-group-count>
              mesh-group-count
            </mesh-group-count>
            <mesh-group-up-count>
              mesh-group-up-count
            </mesh-group-up-count>
            <remote-site-id>
              remote-site-id
            </remote-site-id>
            <mesh-group-interfaces>....</mesh-group-interfaces>
            <interface>
              interface
            </interface>
            <label-block>....</label-block>
            <connection>....</connection>
            <mesh-group-connection>....</mesh-group-connection>
            <automatic-site-name>
              automatic-site-name
            </automatic-site-name>
            <automatic-site-id-status>
              automatic-site-id-status
            </automatic-site-id-status>
            <automatic-site-claim-id>
              automatic-site-claim-id
            </automatic-site-claim-id>
            <automatic-site-collisions>
              automatic-site-collisions
            </automatic-site-collisions>
            <automatic-site-timer-status>
              automatic-site-timer-status
            </automatic-site-timer-status>
            <automatic-site-timers>....</automatic-site-timers>
            <connections-summary>....</connections-summary>
          </reference-site>
        </vpls-protocol-state>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<connection>
  <remote-interface>
    <interface-name>
      interface-name
    </interface-name>
    <interface-status>
      interface-status
    </interface-status>
    <interface-encapsulation>
      interface-encapsulation
```

```
    </interface-encapsulation>
  </remote-interface>
</connection>
```

Description

<remote-interface>

Usage

```
<mesh-group-connection>
  <connection>
    <remote-interface>
      <interface-name>
        interface-name
      </interface-name>
      <interface-status>
        interface-status
      </interface-status>
      <interface-encapsulation>
        interface-encapsulation
      </interface-encapsulation>
    </remote-interface>
  </connection>
</mesh-group-connection>
```

Description

<remote-interface>

Usage

```
<instance>
  <reference-site>
    <connection>
      <remote-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-status>
          interface-status
        </interface-status>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
      </remote-interface>
    </connection>
  </reference-site>
</instance>
```

Description

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<remote-interface>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <remote-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
        </remote-interface>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description

<remote-interface>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <remote-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-status>
          interface-status
        </interface-status>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
      </remote-interface>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

Description

<remote-interface>

Usage

```
<instance>
  <ldp-vpls-reference-site>
```

```
    <mesh-group-connection>
     <connection>
      <remote-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
       </interface-status>
       <interface-encapsulation>
        interface-encapsulation
       </interface-encapsulation>
      </remote-interface>
     </connection>
    </mesh-group-connection>
   </ldp-vpls-reference-site>
  </instance>
```

Description

<remote-interface>

Usage

```
<instance>
 <vpls-protocol-state>
  <mesh-group-connection>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
    </remote-interface>
   </connection>
  </mesh-group-connection>
 </vpls-protocol-state>
</instance>
```

Description

<remote-interface>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <connection>
    <remote-interface>
     <interface-name>
```


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```
            interface-name
           </interface-name>
           <interface-status>
            interface-status
           </interface-status>
           <interface-encapsulation>
            interface-encapsulation
           </interface-encapsulation>
          </remote-interface>
         </connection>
        </reference-site>
       </vpls-protocol-state>
      </instance>
```

Description

<remote-interface>

Usage

```
<instance>
 <vpls-protocol-state>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
     </remote-interface>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </vpls-protocol-state>
</instance>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
 <instance>
  <reference-site>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
```

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```
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </reference-site>
    </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <remote-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
```


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```
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </ldp-vpls-reference-site>
    </instance>
  </l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
```

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```
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <remote-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
```


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```
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </vpls-protocol-state>
 </instance>
</l2vpn-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
    </remote-interface>
   </connection>
  </reference-site>
 </instance>
</vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
```

```
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </reference-site>
  </instance>
</vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <remote-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
        </remote-interface>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
```


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```
            </interface-encapsulation>
           </remote-interface>
          </connection>
         </mesh-group-connection>
        </ldp-vpls-reference-site>
       </instance>
      </vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <mesh-group-connection>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
     </remote-interface>
    </connection>
   </mesh-group-connection>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
```

```
            </interface-encapsulation>
           </remote-interface>
          </connection>
         </reference-site>
        </vpls-protocol-state>
       </instance>
      </vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-connection-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <remote-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
       </interface-status>
       <interface-encapsulation>
        interface-encapsulation
       </interface-encapsulation>
      </remote-interface>
     </connection>
    </mesh-group-connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-connection-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
```


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```
                interface-encapsulation
               </interface-encapsulation>
              </remote-interface>
             </connection>
            </reference-site>
           </instance>
          </vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <reference-site>
   <mesh-group-connection>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
     </remote-interface>
    </connection>
   </mesh-group-connection>
  </reference-site>
 </instance>
</vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
```

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```
            </remote-interface>
          </connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
```


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```
        </connection>
       </mesh-group-connection>
      </vpls-protocol-state>
     </instance>
    </vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
     </remote-interface>
    </connection>
   </reference-site>
  </vpls-protocol-state>
 </instance>
</vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-protocol-state>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <remote-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
       </interface-status>
       <interface-encapsulation>
        interface-encapsulation
       </interface-encapsulation>
```

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```
            </remote-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <connection>
        <remote-interface>
          <interface-name>
            interface-name
          </interface-name>
          <interface-status>
            interface-status
          </interface-status>
          <interface-encapsulation>
            interface-encapsulation
          </interface-encapsulation>
        </remote-interface>
      </connection>
    </reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
```


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```
      </connection>
     </mesh-group-connection>
    </reference-site>
   </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <connection>
    <remote-interface>
     <interface-name>
      interface-name
     </interface-name>
     <interface-status>
      interface-status
     </interface-status>
     <interface-encapsulation>
      interface-encapsulation
     </interface-encapsulation>
    </remote-interface>
   </connection>
  </ldp-vpls-reference-site>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <ldp-vpls-reference-site>
   <mesh-group-connection>
    <connection>
     <remote-interface>
      <interface-name>
       interface-name
      </interface-name>
      <interface-status>
       interface-status
      </interface-status>
      <interface-encapsulation>
       interface-encapsulation
      </interface-encapsulation>
     </remote-interface>
    </connection>
   </mesh-group-connection>
```

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```
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
        </connection>
      </reference-site>
```


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```
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <remote-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
            </remote-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
            </interface-encapsulation>
          </remote-interface>
```

```
      </connection>
     </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <remote-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
            </remote-interface>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connection>
          <remote-interface>
            <interface-name>
              interface-name
            </interface-name>
            <interface-status>
              interface-status
            </interface-status>
            <interface-encapsulation>
              interface-encapsulation
```


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```
            </interface-encapsulation>
           </remote-interface>
          </connection>
         </ldp-vpls-reference-site>
        </instance>
       </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <mesh-group-connection>
     <connection>
      <remote-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
       </interface-status>
       <interface-encapsulation>
        interface-encapsulation
       </interface-encapsulation>
      </remote-interface>
     </connection>
    </mesh-group-connection>
   </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-connection>
     <connection>
      <remote-interface>
       <interface-name>
        interface-name
       </interface-name>
       <interface-status>
        interface-status
```

```
                    </interface-status>
                    <interface-encapsulation>
                      interface-encapsulation
                    </interface-encapsulation>
                  </remote-interface>
                </connection>
              </mesh-group-connection>
            </vpls-protocol-state>
          </instance>
        </vpls-ldp-dynamic-interface-repository-entity>
      </vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <connection>
            <remote-interface>
              <interface-name>
                interface-name
              </interface-name>
              <interface-status>
                interface-status
              </interface-status>
              <interface-encapsulation>
                interface-encapsulation
              </interface-encapsulation>
            </remote-interface>
          </connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <reference-site>
          <mesh-group-connection>
            <connection>
              <remote-interface>
```


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```
                    <interface-name>
                      interface-name
                    </interface-name>
                    <interface-status>
                      interface-status
                    </interface-status>
                    <interface-encapsulation>
                      interface-encapsulation
                    </interface-encapsulation>
                  </remote-interface>
                </connection>
              </mesh-group-connection>
            </reference-site>
          </vpls-protocol-state>
        </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description

<remote-interface>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <remote-interface>
        <interface-name>
          interface-name
        </interface-name>
        <interface-status>
          interface-status
        </interface-status>
        <interface-encapsulation>
          interface-encapsulation
        </interface-encapsulation>
      </remote-interface>
    </connection>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description

<rendezvous-point>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-address>
        rendezvous-point-address
      </rendezvous-point-address>
      <rp-flag-static>
        rp-flag-static
```

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```
                </rp-flag-static>
                <rp-flag-autorp>
                  rp-flag-autorp
                </rp-flag-autorp>
                <rp-flag-bootstrap>
                  rp-flag-bootstrap
                </rp-flag-bootstrap>
                <rp-flag-embedded-rp>
                  rp-flag-embedded-rp
                </rp-flag-embedded-rp>
                <rendezvous-point-static-override>
                  rendezvous-point-static-override
                </rendezvous-point-static-override>
                <rendezvous-point-from-address>
                  rendezvous-point-from-address
                </rendezvous-point-from-address>
                <rendezvous-point-holdtime>
                  rendezvous-point-holdtime
                </rendezvous-point-holdtime>
                <rendezvous-point-refcount>
                  rendezvous-point-refcount
                </rendezvous-point-refcount>
                <rendezvous-point-time-active>
                  rendezvous-point-time-active
                </rendezvous-point-time-active>
                <rendezvous-point-holdtime-remaining>
                  rendezvous-point-holdtime-remaining
                </rendezvous-point-holdtime-remaining>
                <rp-interface-device-index>
                  rp-interface-device-index
                </rp-interface-device-index>
                <rp-interface-device-subunit>
                  rp-interface-device-subunit
                </rp-interface-device-subunit>
                <pim-interface-name>
                  pim-interface-name
                </pim-interface-name>
                <rendezvous-point-timeout>
                  rendezvous-point-timeout
                </rendezvous-point-timeout>
                <rendezvous-point-active-groups>
                  rendezvous-point-active-groups
                </rendezvous-point-active-groups>
                <rendezvous-point-group-prefixes>....</rendezvous-point-group-prefixes>

            <rendezvous-point-active-group-prefixes>....</rendezvous-point-active-group-prefixes>

                <rendezvous-point-register-state>....</rendezvous-point-register-state>

            <rendezvous-point-anycast-pim-rpset>....</rendezvous-point-anycast-pim-rpset>
                <rendezvous-point-anycast-pim-local-address>
                  rendezvous-point-anycast-pim-local-address
                </rendezvous-point-anycast-pim-local-address>

            <rendezvous-point-anycast-register-state>....</rendezvous-point-anycast-register-state>
```


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```
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description

<rendezvous-point-active-group-prefix>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-active-group-prefixes>
        <rendezvous-point-active-group-prefix>
          <multicast-group-address>
            multicast-group-address
          </multicast-group-address>
        </rendezvous-point-active-group-prefix>
      </rendezvous-point-active-group-prefixes>
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description

<rendezvous-point-active-group-prefixes>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-active-group-prefixes>

<rendezvous-point-active-group-prefix>....</rendezvous-point-active-group-prefix>
        <rendezvous-point-active-groups>
          rendezvous-point-active-groups
        </rendezvous-point-active-groups>
      </rendezvous-point-active-group-prefixes>
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description

<rendezvous-point-address-info>

Usage

```
<pim-rps-information>
  <rendezvous-point-address-info>
    <pim-instance>
      pim-instance
    </pim-instance>
    <rendezvous-point-trees>....</rendezvous-point-trees>
```

```
    <rendezvous-point-address>
     rendezvous-point-address
    </rendezvous-point-address>
    <rendezvous-point-embedded-rp-address>
     rendezvous-point-embedded-rp-address
    </rendezvous-point-embedded-rp-address>
    <rendezvous-point-no-address>
     rendezvous-point-no-address
    </rendezvous-point-no-address>
   </rendezvous-point-address-info>
</pim-rps-information>
```

Description

<rendezvous-point-addresses>

Usage

```
<pim-rps-information>
 <rendezvous-point-address-info>
  <rendezvous-point-trees>
   <rendezvous-point-addresses>
    <rendezvous-point-address>
     rendezvous-point-address
    </rendezvous-point-address>
    <rendezvous-point-hash>
     rendezvous-point-hash
    </rendezvous-point-hash>
   </rendezvous-point-addresses>
  </rendezvous-point-trees>
 </rendezvous-point-address-info>
</pim-rps-information>
```

Description

<rendezvous-point-anycast-pim-rpset>

Usage

```
<pim-rps-information>
 <rp-family>
  <rendezvous-point>
   <rendezvous-point-anycast-pim-rpset>
    <multicast-group-address>
     multicast-group-address
    </multicast-group-address>
   </rendezvous-point-anycast-pim-rpset>
  </rendezvous-point>
 </rp-family>
</pim-rps-information>
```

Description IPv4 address of one or more remote anycast RPs

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<rendezvous-point-anycast-register-state>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-anycast-register-state>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <pim-anycast-register-state-origin>
          pim-anycast-register-state-origin
        </pim-anycast-register-state-origin>
      </rendezvous-point-anycast-register-state>
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description Anycast register state

<rendezvous-point-group-prefixes>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-group-prefixes>
        <multicast-group-prefix>
          multicast-group-prefix
        </multicast-group-prefix>
        <rp-group-timeout>
          rp-group-timeout
        </rp-group-timeout>
        <rp-group-state>
          rp-group-state
        </rp-group-state>
      </rendezvous-point-group-prefixes>
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description

<rendezvous-point-register-state>

Usage

```
<pim-rps-information>
  <rp-family>
    <rendezvous-point>
      <rendezvous-point-register-state>
```

```
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
        <multicast-source-address>
          multicast-source-address
        </multicast-source-address>
        <first-hop-address>
          first-hop-address
        </first-hop-address>
        <rendezvous-point-address>
          rendezvous-point-address
        </rendezvous-point-address>
        <pim-register-state>
          pim-register-state
        </pim-register-state>
        <pim-register-timeout>
          pim-register-timeout
        </pim-register-timeout>
      </rendezvous-point-register-state>
    </rendezvous-point>
  </rp-family>
</pim-rps-information>
```

Description

<rendezvous-point-trees>

Usage

```
<pim-rps-information>
  <rendezvous-point-address-info>
    <rendezvous-point-trees>
      <multicast-group-prefix>
        multicast-group-prefix
      </multicast-group-prefix>
      <rendezvous-point-addresses>....</rendezvous-point-addresses>
    </rendezvous-point-trees>
  </rendezvous-point-address-info>
</pim-rps-information>
```

Description

<reserved-bandwidth>

Usage

```
<rsvp-telink>
  <reserved-bandwidth>
    <bandwidth-priority>
      bandwidth-priority
    </bandwidth-priority>
    <total-reserved-bandwidth>
      total-reserved-bandwidth
    </total-reserved-bandwidth>
  </reserved-bandwidth>
```


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```
</rsvp-telink>
```

Description Bandwidth reserved at different priority levels

<reserved-bandwidth>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <rsvp-telink>
      <reserved-bandwidth>
        <bandwidth-priority>
          bandwidth-priority
        </bandwidth-priority>
        <total-reserved-bandwidth>
          total-reserved-bandwidth
        </total-reserved-bandwidth>
      </reserved-bandwidth>
    </rsvp-telink>
  </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth reserved at different priority levels

<reserved-bandwidth>

Usage

```
<rsvp-session>
  <rsvp-telink>
    <reserved-bandwidth>
      <bandwidth-priority>
        bandwidth-priority
      </bandwidth-priority>
      <total-reserved-bandwidth>
        total-reserved-bandwidth
      </total-reserved-bandwidth>
    </reserved-bandwidth>
  </rsvp-telink>
</rsvp-session>
```

Description Bandwidth reserved at different priority levels

<reserved-bandwidth>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <reserved-bandwidth>
          <bandwidth-priority>
```

```
                bandwidth-priority
               </bandwidth-priority>
               <total-reserved-bandwidth>
                total-reserved-bandwidth
               </total-reserved-bandwidth>
              </reserved-bandwidth>
             </rsvp-telink>
            </rsvp-session>
           </rsvp-session-data>
          </rsvp-session-information>
```

Description Bandwidth reserved at different priority levels

<reserved-bandwidth>

Usage

```
<rsvp-interface>
 <rsvp-telink>
  <reserved-bandwidth>
   <bandwidth-priority>
    bandwidth-priority
   </bandwidth-priority>
   <total-reserved-bandwidth>
    total-reserved-bandwidth
   </total-reserved-bandwidth>
  </reserved-bandwidth>
 </rsvp-telink>
</rsvp-interface>
```

Description Bandwidth reserved at different priority levels

<reserved-bandwidth>

Usage

```
<rsvp-interface-information>
 <rsvp-interface>
  <rsvp-telink>
   <reserved-bandwidth>
    <bandwidth-priority>
     bandwidth-priority
    </bandwidth-priority>
    <total-reserved-bandwidth>
     total-reserved-bandwidth
    </total-reserved-bandwidth>
   </reserved-bandwidth>
  </rsvp-telink>
 </rsvp-interface>
</rsvp-interface-information>
```

Description Bandwidth reserved at different priority levels

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<reserved-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <reserved-bandwidth>
          <bandwidth-priority>
            bandwidth-priority
          </bandwidth-priority>
          <total-reserved-bandwidth>
            total-reserved-bandwidth
          </total-reserved-bandwidth>
        </reserved-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Bandwidth reserved at different priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-telink>
  <reserved-ct-bandwidth>
    <ct-class>
      ct-class
    </ct-class>
    <ct-bw0>
      ct-bw0
    </ct-bw0>
    <ct-bw1>
      ct-bw1
    </ct-bw1>
    <ct-bw2>
      ct-bw2
    </ct-bw2>
    <ct-bw3>
      ct-bw3
    </ct-bw3>
    <ct-bw4>
      ct-bw4
    </ct-bw4>
    <ct-bw5>
      ct-bw5
    </ct-bw5>
    <ct-bw6>
      ct-bw6
    </ct-bw6>
    <ct-bw7>
      ct-bw7
```

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```
    </ct-bw7>
   </reserved-ct-bandwidth>
</rsvp-telink>
```

Description Bandwidth reserved at different class and priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <rsvp-telink>
   <reserved-ct-bandwidth>
    <ct-class>
     ct-class
    </ct-class>
    <ct-bw0>
     ct-bw0
    </ct-bw0>
    <ct-bw1>
     ct-bw1
    </ct-bw1>
    <ct-bw2>
     ct-bw2
    </ct-bw2>
    <ct-bw3>
     ct-bw3
    </ct-bw3>
    <ct-bw4>
     ct-bw4
    </ct-bw4>
    <ct-bw5>
     ct-bw5
    </ct-bw5>
    <ct-bw6>
     ct-bw6
    </ct-bw6>
    <ct-bw7>
     ct-bw7
    </ct-bw7>
   </reserved-ct-bandwidth>
  </rsvp-telink>
 </rsvp-session>
</rsvp-session-data>
```

Description Bandwidth reserved at different class and priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-session>
 <rsvp-telink>
```


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```
<reserved-ct-bandwidth>
 <ct-class>
  ct-class
 </ct-class>
 <ct-bw0>
  ct-bw0
 </ct-bw0>
 <ct-bw1>
  ct-bw1
 </ct-bw1>
 <ct-bw2>
  ct-bw2
 </ct-bw2>
 <ct-bw3>
  ct-bw3
 </ct-bw3>
 <ct-bw4>
  ct-bw4
 </ct-bw4>
 <ct-bw5>
  ct-bw5
 </ct-bw5>
 <ct-bw6>
  ct-bw6
 </ct-bw6>
 <ct-bw7>
  ct-bw7
 </ct-bw7>
</reserved-ct-bandwidth>
</rsvp-telink>
</rsvp-session>
```

Description Bandwidth reserved at different class and priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <rsvp-telink>
    <reserved-ct-bandwidth>
     <ct-class>
      ct-class
     </ct-class>
     <ct-bw0>
      ct-bw0
     </ct-bw0>
     <ct-bw1>
      ct-bw1
     </ct-bw1>
     <ct-bw2>
      ct-bw2
     </ct-bw2>
```

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```
            <ct-bw3>
              ct-bw3
            </ct-bw3>
            <ct-bw4>
              ct-bw4
            </ct-bw4>
            <ct-bw5>
              ct-bw5
            </ct-bw5>
            <ct-bw6>
              ct-bw6
            </ct-bw6>
            <ct-bw7>
              ct-bw7
            </ct-bw7>
          </reserved-ct-bandwidth>
        </rsvp-telink>
      </rsvp-session>
    </rsvp-session-data>
  </rsvp-session-information>
```

Description Bandwidth reserved at different class and priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-interface>
  <rsvp-telink>
    <reserved-ct-bandwidth>
      <ct-class>
        ct-class
      </ct-class>
      <ct-bw0>
        ct-bw0
      </ct-bw0>
      <ct-bw1>
        ct-bw1
      </ct-bw1>
      <ct-bw2>
        ct-bw2
      </ct-bw2>
      <ct-bw3>
        ct-bw3
      </ct-bw3>
      <ct-bw4>
        ct-bw4
      </ct-bw4>
      <ct-bw5>
        ct-bw5
      </ct-bw5>
      <ct-bw6>
        ct-bw6
      </ct-bw6>
      <ct-bw7>
```


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```
        ct-bw7
       </ct-bw7>
      </reserved-ct-bandwidth>
     </rsvp-telink>
    </rsvp-interface>
```

Description Bandwidth reserved at different class and priority levels

<reserved-ct-bandwidth>

Usage

```
<rsvp-interface-information>
 <rsvp-interface>
  <rsvp-telink>
   <reserved-ct-bandwidth>
    <ct-class>
     ct-class
    </ct-class>
    <ct-bw0>
     ct-bw0
    </ct-bw0>
    <ct-bw1>
     ct-bw1
    </ct-bw1>
    <ct-bw2>
     ct-bw2
    </ct-bw2>
    <ct-bw3>
     ct-bw3
    </ct-bw3>
    <ct-bw4>
     ct-bw4
    </ct-bw4>
    <ct-bw5>
     ct-bw5
    </ct-bw5>
    <ct-bw6>
     ct-bw6
    </ct-bw6>
    <ct-bw7>
     ct-bw7
    </ct-bw7>
   </reserved-ct-bandwidth>
  </rsvp-telink>
 </rsvp-interface>
</rsvp-interface-information>
```

Description Bandwidth reserved at different class and priority levels

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<reserved-ct-bandwidth>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <reserved-ct-bandwidth>
          <ct-class>
            ct-class
          </ct-class>
          <ct-bw0>
            ct-bw0
          </ct-bw0>
          <ct-bw1>
            ct-bw1
          </ct-bw1>
          <ct-bw2>
            ct-bw2
          </ct-bw2>
          <ct-bw3>
            ct-bw3
          </ct-bw3>
          <ct-bw4>
            ct-bw4
          </ct-bw4>
          <ct-bw5>
            ct-bw5
          </ct-bw5>
          <ct-bw6>
            ct-bw6
          </ct-bw6>
          <ct-bw7>
            ct-bw7
          </ct-bw7>
        </reserved-ct-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description Bandwidth reserved at different class and priority levels

<reverse-oif>

Usage

```
<mgm-interface-groups>
  <mgm-group>
    <reverse-oif>
      <oif-name>
        oif-name
      </oif-name>
      <host-count>
```


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```
            host-count
           </host-count>
          </reverse-oif>
         </mgm-group>
        </mgm-interface-groups>
```

Description

<reverse-oif>

Usage

```
<igmp-group-information>
 <mgm-interface-groups>
  <mgm-group>
   <reverse-oif>
    <oif-name>
     oif-name
    </oif-name>
    <host-count>
     host-count
    </host-count>
   </reverse-oif>
  </mgm-group>
 </mgm-interface-groups>
</igmp-group-information>
```

Description

<reverse-oif>

Usage

```
<mld-group-information>
 <mgm-interface-groups>
  <mgm-group>
   <reverse-oif>
    <oif-name>
     oif-name
    </oif-name>
    <host-count>
     host-count
    </host-count>
   </reverse-oif>
  </mgm-group>
 </mgm-interface-groups>
</mld-group-information>
```

Description

<reverse-oif>

Usage

```
<amt-tunnel>
 <mgm-group>
```

```
      <reverse-oif>
       <oif-name>
        oif-name
       </oif-name>
       <host-count>
        host-count
       </host-count>
      </reverse-oif>
     </mgm-group>
    </amt-tunnel>
```

Description

<reverse-oif>

Usage

```
<amt-tunnel-information>
 <amt-tunnel>
  <mgm-group>
   <reverse-oif>
    <oif-name>
     oif-name
    </oif-name>
    <host-count>
     host-count
    </host-count>
   </reverse-oif>
  </mgm-group>
 </amt-tunnel>
</amt-tunnel-information>
```

Description

<rip-error>

Usage

```
<rip-error>
 <rip-error-message>
  rip-error-message
 </rip-error-message>
</rip-error>
```

Description

<rip-general-statistics>

Usage

```
<rip-general-statistics>
 <rip-protocol-name>
  rip-protocol-name
 </rip-protocol-name>
 <rip-bad-messages>
  rip-bad-messages
```


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```
  </rip-bad-messages>
  <rip-interface-count>
    rip-interface-count
  </rip-interface-count>
  <rip-current-memory>
    rip-current-memory
  </rip-current-memory>
  <rip-maximum-memory>
    rip-maximum-memory
  </rip-maximum-memory>
</rip-general-statistics>
```

Description

<rip-general-statistics>

Usage

```
<rip-general-statistics-information>
  <rip-general-statistics>
    <rip-protocol-name>
      rip-protocol-name
    </rip-protocol-name>
    <rip-bad-messages>
      rip-bad-messages
    </rip-bad-messages>
    <rip-interface-count>
      rip-interface-count
    </rip-interface-count>
    <rip-current-memory>
      rip-current-memory
    </rip-current-memory>
    <rip-maximum-memory>
      rip-maximum-memory
    </rip-maximum-memory>
  </rip-general-statistics>
</rip-general-statistics-information>
```

Description

<rip-general-statistics-information>

Usage

```
<rip-general-statistics-information>
  <rip-general-statistics>....</rip-general-statistics>
</rip-general-statistics-information>
```

Description

<rip-global-statistics>

Usage

```
<rip-global-statistics>
  <rip-routes-learned>
```

```
    rip-routes-learned
   </rip-routes-learned>
   <rip-routes-holddown>
    rip-routes-holddown
   </rip-routes-holddown>
   <rip-requests-dropped>
    rip-requests-dropped
   </rip-requests-dropped>
   <rip-responses-dropped>
    rip-responses-dropped
   </rip-responses-dropped>
  </rip-global-statistics>
```

Description RIP global statistics

<rip-global-statistics>

Usage

```
<rip-statistics-information>
 <rip-global-statistics>
  <rip-routes-learned>
   rip-routes-learned
  </rip-routes-learned>
  <rip-routes-holddown>
   rip-routes-holddown
  </rip-routes-holddown>
  <rip-requests-dropped>
   rip-requests-dropped
  </rip-requests-dropped>
  <rip-responses-dropped>
   rip-responses-dropped
  </rip-responses-dropped>
 </rip-global-statistics>
</rip-statistics-information>
```

Description RIP global statistics

<rip-global-statistics>

Usage

```
<rip-statistics-information-all>
 <rip-instance-statistics>
  <rip-global-statistics>
   <rip-routes-learned>
    rip-routes-learned
   </rip-routes-learned>
   <rip-routes-holddown>
    rip-routes-holddown
   </rip-routes-holddown>
   <rip-requests-dropped>
    rip-requests-dropped
   </rip-requests-dropped>
```


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```
        <rip-responses-dropped>
          rip-responses-dropped
        </rip-responses-dropped>
      </rip-global-statistics>
    </rip-instance-statistics>
</rip-statistics-information-all>
```

Description RIP global statistics

<rip-instance-neighbor>

Usage

```
<rip-neighbor-information-all>
  <rip-instance-neighbor>
    <rip-instance-name>
      rip-instance-name
    </rip-instance-name>
    <rip-neighbor>....</rip-neighbor>
  </rip-instance-neighbor>
</rip-neighbor-information-all>
```

Description Information about RIP neighbors within this routing instance

<rip-instance-statistics>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>
    <rip-instance-name>
      rip-instance-name
    </rip-instance-name>
    <rip-timer-values>....</rip-timer-values>
    <rip-restart-values>....</rip-restart-values>
    <rip-global-statistics>....</rip-global-statistics>
    <rip-neighbor-statistics>....</rip-neighbor-statistics>
  </rip-instance-statistics>
</rip-statistics-information-all>
```

Description Information about statistics for this routing instance

<rip-message-statistics>

Usage

```
<rip-message-statistics>
  <rip-message>
    rip-message
  </rip-message>
  <rip-message-total>
    rip-message-total
  </rip-message-total>
  <rip-message-last-5minutes>
```

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```
    rip-message-last-5minutes
  </rip-message-last-5minutes>
  <rip-message-last-minute>
    rip-message-last-minute
  </rip-message-last-minute>
</rip-message-statistics>
```

Description

<rip-message-statistics>

Usage

```
<rip-neighbor-statistics>
  <rip-message-statistics>
    <rip-message>
      rip-message
    </rip-message>
    <rip-message-total>
      rip-message-total
    </rip-message-total>
    <rip-message-last-5minutes>
      rip-message-last-5minutes
    </rip-message-last-5minutes>
    <rip-message-last-minute>
      rip-message-last-minute
    </rip-message-last-minute>
  </rip-message-statistics>
</rip-neighbor-statistics>
```

Description

<rip-message-statistics>

Usage

```
<rip-statistics-information>
  <rip-neighbor-statistics>
    <rip-message-statistics>
      <rip-message>
        rip-message
      </rip-message>
      <rip-message-total>
        rip-message-total
      </rip-message-total>
      <rip-message-last-5minutes>
        rip-message-last-5minutes
      </rip-message-last-5minutes>
      <rip-message-last-minute>
        rip-message-last-minute
      </rip-message-last-minute>
    </rip-message-statistics>
  </rip-neighbor-statistics>
</rip-statistics-information>
```


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Description

<rip-message-statistics>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>
    <rip-neighbor-statistics>
      <rip-message-statistics>
        <rip-message>
          rip-message
        </rip-message>
        <rip-message-total>
          rip-message-total
        </rip-message-total>
        <rip-message-last-5minutes>
          rip-message-last-5minutes
        </rip-message-last-5minutes>
        <rip-message-last-minute>
          rip-message-last-minute
        </rip-message-last-minute>
      </rip-message-statistics>
    </rip-neighbor-statistics>
  </rip-instance-statistics>
</rip-statistics-information-all>
```

Description

<rip-neighbor>

Usage

```
<rip-neighbor>
  <rip-neighbor-name>
    rip-neighbor-name
  </rip-neighbor-name>
  <rip-neighbor-state>
    rip-neighbor-state
  </rip-neighbor-state>
  <rip-neighbor-metric-in>
    rip-neighbor-metric-in
  </rip-neighbor-metric-in>
  <rip-local-address-ipv4>
    rip-local-address-ipv4
  </rip-local-address-ipv4>
  <rip-remote-address-ipv4>
    rip-remote-address-ipv4
  </rip-remote-address-ipv4>
  <send-mode-ripv2>
    send-mode-ripv2
  </send-mode-ripv2>
  <receive-mode-ripv2>
    receive-mode-ripv2
  </receive-mode-ripv2>
  <rip-local-address-ipv6>
    rip-local-address-ipv6
```

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```
  </rip-local-address-ipv6>
  <rip-remote-address-ipv6>
   rip-remote-address-ipv6
  </rip-remote-address-ipv6>
  <send-mode-ripng>
   send-mode-ripng
  </send-mode-ripng>
  <receive-mode-ripng>
   receive-mode-ripng
  </receive-mode-ripng>
</rip-neighbor>
```

Description

<rip-neighbor>

Usage

```
<rip-neighbor-information>
  <rip-neighbor>
    <rip-neighbor-name>
     rip-neighbor-name
    </rip-neighbor-name>
    <rip-neighbor-state>
     rip-neighbor-state
    </rip-neighbor-state>
    <rip-neighbor-metric-in>
     rip-neighbor-metric-in
    </rip-neighbor-metric-in>
    <rip-local-address-ipv4>
     rip-local-address-ipv4
    </rip-local-address-ipv4>
    <rip-remote-address-ipv4>
     rip-remote-address-ipv4
    </rip-remote-address-ipv4>
    <send-mode-ripv2>
     send-mode-ripv2
    </send-mode-ripv2>
    <receive-mode-ripv2>
     receive-mode-ripv2
    </receive-mode-ripv2>
    <rip-local-address-ipv6>
     rip-local-address-ipv6
    </rip-local-address-ipv6>
    <rip-remote-address-ipv6>
     rip-remote-address-ipv6
    </rip-remote-address-ipv6>
    <send-mode-ripng>
     send-mode-ripng
    </send-mode-ripng>
    <receive-mode-ripng>
     receive-mode-ripng
    </receive-mode-ripng>
  </rip-neighbor>
</rip-neighbor-information>
```


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Description

<rip-neighbor>

Usage

```
<rip-neighbor-information-all>
  <rip-instance-neighbor>
    <rip-neighbor>
      <rip-neighbor-name>
        rip-neighbor-name
      </rip-neighbor-name>
      <rip-neighbor-state>
        rip-neighbor-state
      </rip-neighbor-state>
      <rip-neighbor-metric-in>
        rip-neighbor-metric-in
      </rip-neighbor-metric-in>
      <rip-local-address-ipv4>
        rip-local-address-ipv4
      </rip-local-address-ipv4>
      <rip-remote-address-ipv4>
        rip-remote-address-ipv4
      </rip-remote-address-ipv4>
      <send-mode-ripv2>
        send-mode-ripv2
      </send-mode-ripv2>
      <receive-mode-ripv2>
        receive-mode-ripv2
      </receive-mode-ripv2>
      <rip-local-address-ipv6>
        rip-local-address-ipv6
      </rip-local-address-ipv6>
      <rip-remote-address-ipv6>
        rip-remote-address-ipv6
      </rip-remote-address-ipv6>
      <send-mode-ripng>
        send-mode-ripng
      </send-mode-ripng>
      <receive-mode-ripng>
        receive-mode-ripng
      </receive-mode-ripng>
    </rip-neighbor>
  </rip-instance-neighbor>
</rip-neighbor-information-all>
```

Description

<rip-neighbor-information>

Usage

```
<rip-neighbor-information>
  <rip-neighbor>....</rip-neighbor>
</rip-neighbor-information>
```

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Description Information about RIP neighbors in a routing instance

<rip-neighbor-information-all>

Usage

```
<rip-neighbor-information-all>
  <rip-instance-neighbor>....</rip-instance-neighbor>
</rip-neighbor-information-all>
```

Description Information about RIP neighbors in all routing instances

<rip-neighbor-statistics>

Usage

```
<rip-neighbor-statistics>
  <rip-neighbor-name>
    rip-neighbor-name
  </rip-neighbor-name>
  <rip-neighbor-learnt-routes>
    rip-neighbor-learnt-routes
  </rip-neighbor-learnt-routes>
  <rip-neighbor-advertised-routes>
    rip-neighbor-advertised-routes
  </rip-neighbor-advertised-routes>
  <rip-neighbor-route-timeout>
    rip-neighbor-route-timeout
  </rip-neighbor-route-timeout>
  <rip-neighbor-update-interval>
    rip-neighbor-update-interval
  </rip-neighbor-update-interval>
  <rip-message-statistics>....</rip-message-statistics>
</rip-neighbor-statistics>
```

Description RIP neighbor statistics

<rip-neighbor-statistics>

Usage

```
<rip-statistics-information>
  <rip-neighbor-statistics>
    <rip-neighbor-name>
      rip-neighbor-name
    </rip-neighbor-name>
    <rip-neighbor-learnt-routes>
      rip-neighbor-learnt-routes
    </rip-neighbor-learnt-routes>
    <rip-neighbor-advertised-routes>
      rip-neighbor-advertised-routes
    </rip-neighbor-advertised-routes>
    <rip-neighbor-route-timeout>
      rip-neighbor-route-timeout
    </rip-neighbor-route-timeout>
```


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```
    <rip-neighbor-update-interval>
      rip-neighbor-update-interval
    </rip-neighbor-update-interval>
    <rip-message-statistics>....</rip-message-statistics>
  </rip-neighbor-statistics>
</rip-statistics-information>
```

Description RIP neighbor statistics

<rip-neighbor-statistics>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>
    <rip-neighbor-statistics>
      <rip-neighbor-name>
        rip-neighbor-name
      </rip-neighbor-name>
      <rip-neighbor-learnt-routes>
        rip-neighbor-learnt-routes
      </rip-neighbor-learnt-routes>
      <rip-neighbor-advertised-routes>
        rip-neighbor-advertised-routes
      </rip-neighbor-advertised-routes>
      <rip-neighbor-route-timeout>
        rip-neighbor-route-timeout
      </rip-neighbor-route-timeout>
      <rip-neighbor-update-interval>
        rip-neighbor-update-interval
      </rip-neighbor-update-interval>
      <rip-message-statistics>....</rip-message-statistics>
    </rip-neighbor-statistics>
  </rip-instance-statistics>
</rip-statistics-information-all>
```

Description RIP neighbor statistics

<rip-restart-values>

Usage

```
<rip-restart-values>
  <rip-restart-state>
    rip-restart-state
  </rip-restart-state>
  <rip-restart-time>
    rip-restart-time
  </rip-restart-time>
  <rip-restart-timeout>
    rip-restart-timeout
  </rip-restart-timeout>
</rip-restart-values>
```

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Description Information about RIP restart values

<rip-restart-values>

Usage

```
<rip-statistics-information>
  <rip-restart-values>
    <rip-restart-state>
      rip-restart-state
    </rip-restart-state>
    <rip-restart-time>
      rip-restart-time
    </rip-restart-time>
    <rip-restart-timeout>
      rip-restart-timeout
    </rip-restart-timeout>
  </rip-restart-values>
</rip-statistics-information>
```

Description Information about RIP restart values

<rip-restart-values>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>
    <rip-restart-values>
      <rip-restart-state>
        rip-restart-state
      </rip-restart-state>
      <rip-restart-time>
        rip-restart-time
      </rip-restart-time>
      <rip-restart-timeout>
        rip-restart-timeout
      </rip-restart-timeout>
    </rip-restart-values>
  </rip-instance-statistics>
</rip-statistics-information-all>
```

Description Information about RIP restart values

<rip-statistics-information>

Usage

```
<rip-statistics-information>
  <rip-timer-values>....</rip-timer-values>
  <rip-restart-values>....</rip-restart-values>
  <rip-global-statistics>....</rip-global-statistics>
  <rip-neighbor-statistics>....</rip-neighbor-statistics>
</rip-statistics-information>
```


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Description Information about RIP statistics for a routing instance

<rip-statistics-information-all>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>....</rip-instance-statistics>
</rip-statistics-information-all>
```

Description Information about RIP statistics for all routing instances

<rip-timer-values>

Usage

```
<rip-timer-values>
  <rip-protocol-name>
    rip-protocol-name
  </rip-protocol-name>
  <rip-port>
    rip-port
  </rip-port>
  <rip-holddown>
    rip-holddown
  </rip-holddown>
</rip-timer-values>
```

Description Information about RIP timer values

<rip-timer-values>

Usage

```
<rip-statistics-information>
  <rip-timer-values>
    <rip-protocol-name>
      rip-protocol-name
    </rip-protocol-name>
    <rip-port>
      rip-port
    </rip-port>
    <rip-holddown>
      rip-holddown
    </rip-holddown>
  </rip-timer-values>
</rip-statistics-information>
```

Description Information about RIP timer values

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<rip-timer-values>

Usage

```
<rip-statistics-information-all>
  <rip-instance-statistics>
    <rip-timer-values>
      <rip-protocol-name>
        rip-protocol-name
      </rip-protocol-name>
      <rip-port>
        rip-port
      </rip-port>
      <rip-holddown>
        rip-holddown
      </rip-holddown>
    </rip-timer-values>
  </rip-instance-statistics>
</rip-statistics-information-all>
```

Description Information about RIP timer values

<route-family>

Usage

```
<multicast-route-information>
  <route-family>
    <bulking-indicator>
      bulking-indicator
    </bulking-indicator>
    <multicast-instance>
      multicast-instance
    </multicast-instance>
    <address-family>
      address-family
    </address-family>
    <multicast-route-summary>....</multicast-route-summary>
    <multicast-route>....</multicast-route>
  </route-family>
</multicast-route-information>
```

Description

<route-filter>

Usage

```
<route-filter>
  <address>
    address
  </address>
  <flags>
    flags
  </flags>
  <extended-information>
```


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```
    extended-information
  </extended-information>
</route-filter>
```

Description Entries in martian table

<route-filter>

Usage

```
<route-information>
  <rt-martians>
    <route-filter>
      <address>
        address
      </address>
      <flags>
        flags
      </flags>
      <extended-information>
        extended-information
      </extended-information>
    </route-filter>
  </rt-martians>
</route-information>
```

Description Entries in martian table

<route-filter>

Usage

```
<bgp-group>
  <unconfigured-peers>
    <route-filter>
      <address>
        address
      </address>
      <flags>
        flags
      </flags>
      <extended-information>
        extended-information
      </extended-information>
    </route-filter>
  </unconfigured-peers>
</bgp-group>
```

Description Entries in martian table

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<route-filter>

Usage

```
<bgp-group-information>
  <bgp-group>
    <unconfigured-peers>
      <route-filter>
        <address>
          address
        </address>
        <flags>
          flags
        </flags>
        <extended-information>
          extended-information
        </extended-information>
      </route-filter>
    </unconfigured-peers>
  </bgp-group>
</bgp-group-information>
```

Description Entries in martian table

<route-flap-damping>

Usage

```
<route-flap-damping>
  <merit>
    merit
  </merit>
  <last-merit>
    last-merit
  </last-merit>
  <damping-parameters>
    damping-parameters
  </damping-parameters>
  <default-damping-parameters>
    default-damping-parameters
  </default-damping-parameters>
  <last-update>
    last-update
  </last-update>
  <first-update>
    first-update
  </first-update>
  <route-flap-count>
    route-flap-count
  </route-flap-count>
  <suppressed>
    suppressed
  </suppressed>
  <reuse-time>
    reuse-time
```


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```
  </reuse-time>
  <reuse-preference>
   reuse-preference
  </reuse-preference>
  <expire-time>
   expire-time
  </expire-time>
</route-flap-damping>
```

Description

<route-flap-damping>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <route-flap-damping>
          <merit>
            merit
          </merit>
          <last-merit>
            last-merit
          </last-merit>
          <damping-parameters>
            damping-parameters
          </damping-parameters>
          <default-damping-parameters>
            default-damping-parameters
          </default-damping-parameters>
          <last-update>
            last-update
          </last-update>
          <first-update>
            first-update
          </first-update>
          <route-flap-count>
            route-flap-count
          </route-flap-count>
          <suppressed>
            suppressed
          </suppressed>
          <reuse-time>
            reuse-time
          </reuse-time>
          <reuse-preference>
            reuse-preference
          </reuse-preference>
          <expire-time>
            expire-time
          </expire-time>
        </route-flap-damping>
      </rt-entry>
    </rt>
```

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```
  </route-table>
</route-information>
```

Description

<route-flap-damping>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <route-flap-damping>
          <merit>
            merit
          </merit>
          <last-merit>
            last-merit
          </last-merit>
          <damping-parameters>
            damping-parameters
          </damping-parameters>
          <default-damping-parameters>
            default-damping-parameters
          </default-damping-parameters>
          <last-update>
            last-update
          </last-update>
          <first-update>
            first-update
          </first-update>
          <route-flap-count>
            route-flap-count
          </route-flap-count>
          <suppressed>
            suppressed
          </suppressed>
          <reuse-time>
            reuse-time
          </reuse-time>
          <reuse-preference>
            reuse-preference
          </reuse-preference>
          <expire-time>
            expire-time
          </expire-time>
        </route-flap-damping>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

Description

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<route-information>

Usage

```
<route-information>
  <as-number>
    as-number
  </as-number>
  <router-id>
    router-id
  </router-id>
  <maximum-ecmp>
    maximum-ecmp
  </maximum-ecmp>
  <note-network-services-mode>
    note-network-services-mode
  </note-network-services-mode>
  <route-table>....</route-table>
  <rt-martians>....</rt-martians>
  <rt-ribgroup>....</rt-ribgroup>
  <rt-test-policy-prefix>....</rt-test-policy-prefix>
  <rt-test-policy>....</rt-test-policy>
</route-information>
```

Description

<route-queue>

Usage

```
<bgp-peer>
  <route-queue>
    <timer>
      timer
    </timer>
    <state>
      state
    </state>
    <element>
      element
    </element>
  </route-queue>
</bgp-peer>
```

Description

<route-queue>

Usage

```
<bgp-group>
  <route-queue>
    <timer>
      timer
    </timer>
    <state>
```

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```
      state
    </state>
    <element>
      element
    </element>
  </route-queue>
</bgp-group>
```

Description

<route-queue>

Usage

```
<bgp-group>
  <bgp-peer>
    <route-queue>
      <timer>
        timer
      </timer>
      <state>
        state
      </state>
      <element>
        element
      </element>
    </route-queue>
  </bgp-peer>
</bgp-group>
```

Description

<route-queue>

Usage

```
<bgp-information>
  <bgp-peer>
    <route-queue>
      <timer>
        timer
      </timer>
      <state>
        state
      </state>
      <element>
        element
      </element>
    </route-queue>
  </bgp-peer>
</bgp-information>
```

Description

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<route-queue>

Usage

```
<bgp-group-information>
  <bgp-group>
    <route-queue>
      <timer>
        timer
      </timer>
      <state>
        state
      </state>
      <element>
        element
      </element>
    </route-queue>
  </bgp-group>
</bgp-group-information>
```

Description

<route-queue>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <route-queue>
        <timer>
          timer
        </timer>
        <state>
          state
        </state>
        <element>
          element
        </element>
      </route-queue>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

Description

<route-queue>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <route-queue>
        <timer>
          timer
```

```
        </timer>
        <state>
          state
        </state>
        <element>
          element
        </element>
      </route-queue>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<route-resolution-information>

Usage

```
<route-resolution-information>
  <route-resolution-tree>....</route-resolution-tree>
</route-resolution-information>
```

Description

<route-resolution-tree>

Usage

```
<route-resolution-information>
  <route-resolution-tree>
    <tree-index>
      tree-index
    </tree-index>
    <nodes>
      nodes
    </nodes>
    <tree-reference-count>
      tree-reference-count
    </tree-reference-count>
    <tree-contributing-ribs>
      tree-contributing-ribs
    </tree-contributing-ribs>
    <tree-policy>
      tree-policy
    </tree-policy>
    <node>....</node>
  </route-resolution-tree>
</route-resolution-information>
```

Description

<route-summary-information>

Usage

```
<route-summary-information>
```


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```
  <as-number>
   as-number
  </as-number>
  <router-id>
   router-id
  </router-id>
  <maximum-ecmp>
   maximum-ecmp
  </maximum-ecmp>
  <note-network-services-mode>
   note-network-services-mode
  </note-network-services-mode>
  <route-table>....</route-table>
</route-summary-information>
```

Description

<route-table>

Usage

```
<route-information>
  <route-table>
    <protocols>....</protocols>
    <table-name>
     table-name
    </table-name>
    <destination-count>
     destination-count
    </destination-count>
    <total-route-count>
     total-route-count
    </total-route-count>
    <active-route-count>
     active-route-count
    </active-route-count>
    <holddown-route-count>
     holddown-route-count
    </holddown-route-count>
    <hidden-route-count>
     hidden-route-count
    </hidden-route-count>
    <restart-state>
     restart-state
    </restart-state>
    <rt>....</rt>
  </route-table>
</route-information>
```

Description

<route-table>

Usage

```
<route-summary-information>
```

```
<route-table>
  <protocols>....</protocols>
  <table-name>
    table-name
  </table-name>
  <destination-count>
    destination-count
  </destination-count>
  <total-route-count>
    total-route-count
  </total-route-count>
  <active-route-count>
    active-route-count
  </active-route-count>
  <holddown-route-count>
    holddown-route-count
  </holddown-route-count>
  <hidden-route-count>
    hidden-route-count
  </hidden-route-count>
  <restart-state>
    restart-state
  </restart-state>
  <rt>....</rt>
</route-table>
</route-summary-information>
```

Description

<router-id-tlv>

Usage

```
<isis-tlv>
  <router-id-tlv>
    <router-id>
      router-id
    </router-id>
  </router-id-tlv>
</isis-tlv>
```

Description

<router-id-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <router-id-tlv>
      <router-id>
        router-id
      </router-id>
    </router-id-tlv>
  </isis-tlv>
```


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```
</isis-database-entry>
```

Description

<router-id-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <router-id-tlv>
        <router-id>
          router-id
        </router-id>
      </router-id-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<router-id-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <router-id-tlv>
          <router-id>
            router-id
          </router-id>
        </router-id-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<rp-family>

Usage

```
<pim-rps-information>
  <rp-family>
    <address-family>
      address-family
    </address-family>
    <rendezvous-point>....</rendezvous-point>
  </rp-family>
</pim-rps-information>
```

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Description

<rpf-family>

Usage

```
<multicast-rpf-information>
  <rpf-family>
    <address-family>
      address-family
    </address-family>
    <rpf-table-name>
      rpf-table-name
    </rpf-table-name>
    <rpf-table-entry-count>
      rpf-table-entry-count
    </rpf-table-entry-count>
    <rpf-route>....</rpf-route>
  </rpf-family>
</multicast-rpf-information>
```

Description

<rpf-route>

Usage

```
<multicast-rpf-information>
  <rpf-family>
    <rpf-route>
      <prefix>
        prefix
      </prefix>
      <rpf-route-inactive>
        rpf-route-inactive
      </rpf-route-inactive>
      <rpf-route-protocol>
        rpf-route-protocol
      </rpf-route-protocol>
      <interface-name>
        interface-name
      </interface-name>
      <rpf-route-neighbor>
        rpf-route-neighbor
      </rpf-route-neighbor>
    </rpf-route>
  </rpf-family>
</multicast-rpf-information>
```

Description

<rsvp-bypass-repl>

Usage

```
<rsvp-bypass-repl>
  <bypass-repl-interface-id>
```


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```
    bypass-repl-interface-id
   </bypass-repl-interface-id>
   <bypass-repl-to-addr>
    bypass-repl-to-addr
   </bypass-repl-to-addr>
   <bypass-repl-avoid-addr>
    bypass-repl-avoid-addr
   </bypass-repl-avoid-addr>
   <bypass-repl-lp-num>
    bypass-repl-lp-num
   </bypass-repl-lp-num>
   <bypass-repl-id>
    bypass-repl-id
   </bypass-repl-id>
   <bypass-repl-resolve-status>
    bypass-repl-resolve-status
   </bypass-repl-resolve-status>
   <bypass-repl-psb-id>
    bypass-repl-psb-id
   </bypass-repl-psb-id>
   <bypass-repl-state>
    bypass-repl-state
   </bypass-repl-state>
   <bypass-repl-manual-bypass-name>
    bypass-repl-manual-bypass-name
   </bypass-repl-manual-bypass-name>
  </rsvp-bypass-repl>
```

Description Information replicated for a bypass LSP

<rsvp-bypass-repl>

Usage

```
<rsvp-bypass-repl-information>
 <rsvp-bypass-repl>
  <bypass-repl-interface-id>
   bypass-repl-interface-id
  </bypass-repl-interface-id>
  <bypass-repl-to-addr>
   bypass-repl-to-addr
  </bypass-repl-to-addr>
  <bypass-repl-avoid-addr>
   bypass-repl-avoid-addr
  </bypass-repl-avoid-addr>
  <bypass-repl-lp-num>
   bypass-repl-lp-num
  </bypass-repl-lp-num>
  <bypass-repl-id>
   bypass-repl-id
  </bypass-repl-id>
  <bypass-repl-resolve-status>
   bypass-repl-resolve-status
  </bypass-repl-resolve-status>
  <bypass-repl-psb-id>
```

```
        bypass-repl-psb-id
      </bypass-repl-psb-id>
      <bypass-repl-state>
        bypass-repl-state
      </bypass-repl-state>
      <bypass-repl-manual-bypass-name>
        bypass-repl-manual-bypass-name
      </bypass-repl-manual-bypass-name>
    </rsvp-bypass-repl>
  </rsvp-bypass-repl-information>
```

Description Information replicated for a bypass LSP

<rsvp-bypass-repl-information>

Usage

```
<rsvp-bypass-repl-information>
  <rsvp-bypass-repl>....</rsvp-bypass-repl>
</rsvp-bypass-repl-information>
```

Description Information replicated for one or more bypasses

<rsvp-error>

Usage

```
<rsvp-error>
  <error-message>
    error-message
  </error-message>
  <error-count>
    error-count
  </error-count>
  <error-count-5seconds>
    error-count-5seconds
  </error-count-5seconds>
</rsvp-error>
```

Description

<rsvp-error>

Usage

```
<rsvp-statistics-information>
  <rsvp-error>
    <error-message>
      error-message
    </error-message>
    <error-count>
      error-count
    </error-count>
    <error-count-5seconds>
```


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```
      error-count-5seconds
    </error-count-5seconds>
  </rsvp-error>
</rsvp-statistics-information>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-graceful-restart>
  <restart-status>
    restart-status
  </restart-status>
  <helper-status>
    helper-status
  </helper-status>
  <maximum-helper-restart-time>
    maximum-helper-restart-time
  </maximum-helper-restart-time>
  <maximum-helper-recovery-time>
    maximum-helper-recovery-time
  </maximum-helper-recovery-time>
  <restart-time>
    restart-time
  </restart-time>
  <recovery-time>
    recovery-time
  </recovery-time>
</rsvp-graceful-restart>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-neighbor>
  <rsvp-graceful-restart>
    <restart-status>
      restart-status
    </restart-status>
    <helper-status>
      helper-status
    </helper-status>
    <maximum-helper-restart-time>
      maximum-helper-restart-time
    </maximum-helper-restart-time>
    <maximum-helper-recovery-time>
      maximum-helper-recovery-time
    </maximum-helper-recovery-time>
    <restart-time>
      restart-time
    </restart-time>
    <recovery-time>
```

```
      recovery-time
    </recovery-time>
  </rsvp-graceful-restart>
</rsvp-neighbor>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-neighbor-information>
  <rsvp-neighbor>
    <rsvp-graceful-restart>
      <restart-status>
        restart-status
      </restart-status>
      <helper-status>
        helper-status
      </helper-status>
      <maximum-helper-restart-time>
        maximum-helper-restart-time
      </maximum-helper-restart-time>
      <maximum-helper-recovery-time>
        maximum-helper-recovery-time
      </maximum-helper-recovery-time>
      <restart-time>
        restart-time
      </restart-time>
      <recovery-time>
        recovery-time
      </recovery-time>
    </rsvp-graceful-restart>
  </rsvp-neighbor>
</rsvp-neighbor-information>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-replication-neighbor>
  <rsvp-graceful-restart>
    <restart-status>
      restart-status
    </restart-status>
    <helper-status>
      helper-status
    </helper-status>
    <maximum-helper-restart-time>
      maximum-helper-restart-time
    </maximum-helper-restart-time>
    <maximum-helper-recovery-time>
      maximum-helper-recovery-time
    </maximum-helper-recovery-time>
```


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```
    <restart-time>
     restart-time
    </restart-time>
    <recovery-time>
     recovery-time
    </recovery-time>
   </rsvp-graceful-restart>
</rsvp-replication-neighbor>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-neighbor-replication-information>
  <rsvp-replication-neighbor>
    <rsvp-graceful-restart>
      <restart-status>
       restart-status
      </restart-status>
      <helper-status>
       helper-status
      </helper-status>
      <maximum-helper-restart-time>
       maximum-helper-restart-time
      </maximum-helper-restart-time>
      <maximum-helper-recovery-time>
       maximum-helper-recovery-time
      </maximum-helper-recovery-time>
      <restart-time>
       restart-time
      </restart-time>
      <recovery-time>
       recovery-time
      </recovery-time>
    </rsvp-graceful-restart>
  </rsvp-replication-neighbor>
</rsvp-neighbor-replication-information>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-version>
  <rsvp-graceful-restart>
    <restart-status>
     restart-status
    </restart-status>
    <helper-status>
     helper-status
    </helper-status>
    <maximum-helper-restart-time>
     maximum-helper-restart-time
```

```
    </maximum-helper-restart-time>
    <maximum-helper-recovery-time>
     maximum-helper-recovery-time
    </maximum-helper-recovery-time>
    <restart-time>
     restart-time
    </restart-time>
    <recovery-time>
     recovery-time
    </recovery-time>
   </rsvp-graceful-restart>
</rsvp-version>
```

Description

<rsvp-graceful-restart>

Usage

```
<rsvp-version-information>
 <rsvp-version>
  <rsvp-graceful-restart>
   <restart-status>
    restart-status
   </restart-status>
   <helper-status>
    helper-status
   </helper-status>
   <maximum-helper-restart-time>
    maximum-helper-restart-time
   </maximum-helper-restart-time>
   <maximum-helper-recovery-time>
    maximum-helper-recovery-time
   </maximum-helper-recovery-time>
   <restart-time>
    restart-time
   </restart-time>
   <recovery-time>
    recovery-time
   </recovery-time>
  </rsvp-graceful-restart>
 </rsvp-version>
</rsvp-version-information>
```

Description

<rsvp-interface>

Usage

```
<rsvp-interface>
 <interface-name>
  interface-name
 </interface-name>
 <rsvp-status>
  rsvp-status
```


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```
  </rsvp-status>
  <active-control-channel>
    active-control-channel
  </active-control-channel>
  <control-channel-unusable>
    control-channel-unusable
  </control-channel-unusable>
  <index>
    index
  </index>
  <authentication-flag>
    authentication-flag
  </authentication-flag>
  <aggregate-flag>
    aggregate-flag
  </aggregate-flag>
  <ack-flag>
    ack-flag
  </ack-flag>
  <protect-flag>
    protect-flag
  </protect-flag>
  <hello-interval>
    hello-interval
  </hello-interval>
  <forward-rsvp>
    forward-rsvp
  </forward-rsvp>
  <interface-address>
    interface-address
  </interface-address>
  <loopback-address>
    loopback-address
  </loopback-address>
  <rsvp-telink>....</rsvp-telink>
  <message-statistics>....</message-statistics>
  <bypass-info>....</bypass-info>
  <cos-info>....</cos-info>
</rsvp-interface>
```

Description

<rsvp-interface>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <interface-name>
      interface-name
    </interface-name>
    <rsvp-status>
      rsvp-status
    </rsvp-status>
    <active-control-channel>
      active-control-channel
```

```
    </active-control-channel>
    <control-channel-unusable>
      control-channel-unusable
    </control-channel-unusable>
    <index>
      index
    </index>
    <authentication-flag>
      authentication-flag
    </authentication-flag>
    <aggregate-flag>
      aggregate-flag
    </aggregate-flag>
    <ack-flag>
      ack-flag
    </ack-flag>
    <protect-flag>
      protect-flag
    </protect-flag>
    <hello-interval>
      hello-interval
    </hello-interval>
    <forward-rsvp>
      forward-rsvp
    </forward-rsvp>
    <interface-address>
      interface-address
    </interface-address>
    <loopback-address>
      loopback-address
    </loopback-address>
    <rsvp-telink>....</rsvp-telink>
    <message-statistics>....</message-statistics>
    <bypass-info>....</bypass-info>
    <cos-info>....</cos-info>
  </rsvp-interface>
</rsvp-interface-information>
```

Description

<rsvp-interface-information>

Usage

```
<rsvp-interface-information>
  <active-count>
    active-count
  </active-count>
  <rsvp-interface>....</rsvp-interface>
</rsvp-interface-information>
```

Description

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<rsvp-interface-replication-information>

Usage

```
<rsvp-interface-replication-information>
  <rsvp-replication-te-link>....</rsvp-replication-te-link>
</rsvp-interface-replication-information>
```

Description Information about one or more replicated RSVP traffic-engineering links

<rsvp-neighbor>

Usage

```
<rsvp-neighbor>
  <rsvp-neighbor-address>
    rsvp-neighbor-address
  </rsvp-neighbor-address>
  <rsvp-neighbor-interface>
    rsvp-neighbor-interface
  </rsvp-neighbor-interface>
  <rsvp-neighbor-status>
    rsvp-neighbor-status
  </rsvp-neighbor-status>
  <rsvp-neighbor-remote>
    rsvp-neighbor-remote
  </rsvp-neighbor-remote>
  <rsvp-neighbor-node>
    rsvp-neighbor-node
  </rsvp-neighbor-node>
  <neighbor-idle>
    neighbor-idle
  </neighbor-idle>
  <neighbor-up-count>
    neighbor-up-count
  </neighbor-up-count>
  <neighbor-down-count>
    neighbor-down-count
  </neighbor-down-count>
  <last-changed-time>
    last-changed-time
  </last-changed-time>
  <hello-interval>
    hello-interval
  </hello-interval>
  <hellos-sent>
    hellos-sent
  </hellos-sent>
  <hellos-received>
    hellos-received
  </hellos-received>
  <messages-received>
    messages-received
  </messages-received>
  <rsvp-neighbor-remote-instance>
```

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```
    rsvp-neighbor-remote-instance
  </rsvp-neighbor-remote-instance>
  <rsvp-neighbor-local-instance>
    rsvp-neighbor-local-instance
  </rsvp-neighbor-local-instance>
  <rsvp-message>
    rsvp-message
  </rsvp-message>
  <rsvp-refresh-reduct-status>
    rsvp-refresh-reduct-status
  </rsvp-refresh-reduct-status>
  <rsvp-refresh-reduct-remote-status>
    rsvp-refresh-reduct-remote-status
  </rsvp-refresh-reduct-remote-status>
  <rsvp-refresh-reduct-ack-status>
    rsvp-refresh-reduct-ack-status
  </rsvp-refresh-reduct-ack-status>
  <rsvp-graceful-restart>....</rsvp-graceful-restart>
</rsvp-neighbor>
```

Description

<rsvp-neighbor>

Usage

```
<rsvp-neighbor-information>
  <rsvp-neighbor>
    <rsvp-neighbor-address>
      rsvp-neighbor-address
    </rsvp-neighbor-address>
    <rsvp-neighbor-interface>
      rsvp-neighbor-interface
    </rsvp-neighbor-interface>
    <rsvp-neighbor-status>
      rsvp-neighbor-status
    </rsvp-neighbor-status>
    <rsvp-neighbor-remote>
      rsvp-neighbor-remote
    </rsvp-neighbor-remote>
    <rsvp-neighbor-node>
      rsvp-neighbor-node
    </rsvp-neighbor-node>
    <neighbor-idle>
      neighbor-idle
    </neighbor-idle>
    <neighbor-up-count>
      neighbor-up-count
    </neighbor-up-count>
    <neighbor-down-count>
      neighbor-down-count
    </neighbor-down-count>
    <last-changed-time>
      last-changed-time
    </last-changed-time>
    <hello-interval>
```


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```
    hello-interval
   </hello-interval>
   <hellos-sent>
    hellos-sent
   </hellos-sent>
   <hellos-received>
    hellos-received
   </hellos-received>
   <messages-received>
    messages-received
   </messages-received>
   <rsvp-neighbor-remote-instance>
    rsvp-neighbor-remote-instance
   </rsvp-neighbor-remote-instance>
   <rsvp-neighbor-local-instance>
    rsvp-neighbor-local-instance
   </rsvp-neighbor-local-instance>
   <rsvp-message>
    rsvp-message
   </rsvp-message>
   <rsvp-refresh-reduct-status>
    rsvp-refresh-reduct-status
   </rsvp-refresh-reduct-status>
   <rsvp-refresh-reduct-remote-status>
    rsvp-refresh-reduct-remote-status
   </rsvp-refresh-reduct-remote-status>
   <rsvp-refresh-reduct-ack-status>
    rsvp-refresh-reduct-ack-status
   </rsvp-refresh-reduct-ack-status>
   <rsvp-graceful-restart>....</rsvp-graceful-restart>
  </rsvp-neighbor>
</rsvp-neighbor-information>
```

Description

<rsvp-neighbor-information>

Usage

```
<rsvp-neighbor-information>
  <rsvp-neighbor-count>
   rsvp-neighbor-count
  </rsvp-neighbor-count>
  <rsvp-neighbor>....</rsvp-neighbor>
</rsvp-neighbor-information>
```

Description

<rsvp-neighbor-replication-information>

Usage

```
<rsvp-neighbor-replication-information>
  <rsvp-replication-neighbor>....</rsvp-replication-neighbor>
</rsvp-neighbor-replication-information>
```

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Description Information about one or more RSVP replication neighbors

<rsvp-path-state-replication-information>

Usage

```
<rsvp-path-state-replication-information>
  <rsvp-replication-path-state>....</rsvp-replication-path-state>
</rsvp-path-state-replication-information>
```

Description Information about one or more replicated RSVP PATH state blocks

<rsvp-replication-neighbor>

Usage

```
<rsvp-replication-neighbor>
  <replication-neighbor-address>
    replication-neighbor-address
  </replication-neighbor-address>
  <neighbor-interface>
    neighbor-interface
  </neighbor-interface>
  <neighbor-status>
    neighbor-status
  </neighbor-status>
  <replication-neighbor-up-count>
    replication-neighbor-up-count
  </replication-neighbor-up-count>
  <neighbor-flags>
    neighbor-flags
  </neighbor-flags>
  <neighbor-replication-sync-status>
    neighbor-replication-sync-status
  </neighbor-replication-sync-status>
  <neighbor-remote-instance>
    neighbor-remote-instance
  </neighbor-remote-instance>
  <neighbor-local-instance>
    neighbor-local-instance
  </neighbor-local-instance>
  <rsvp-graceful-restart>....</rsvp-graceful-restart>
</rsvp-replication-neighbor>
```

Description Replication information for an RSVP neighbor

<rsvp-replication-neighbor>

Usage

```
<rsvp-neighbor-replication-information>
  <rsvp-replication-neighbor>
    <replication-neighbor-address>
      replication-neighbor-address
    </replication-neighbor-address>
```


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```
    <neighbor-interface>
      neighbor-interface
    </neighbor-interface>
    <neighbor-status>
      neighbor-status
    </neighbor-status>
    <replication-neighbor-up-count>
      replication-neighbor-up-count
    </replication-neighbor-up-count>
    <neighbor-flags>
      neighbor-flags
    </neighbor-flags>
    <neighbor-replication-sync-status>
      neighbor-replication-sync-status
    </neighbor-replication-sync-status>
    <neighbor-remote-instance>
      neighbor-remote-instance
    </neighbor-remote-instance>
    <neighbor-local-instance>
      neighbor-local-instance
    </neighbor-local-instance>
    <rsvp-graceful-restart>....</rsvp-graceful-restart>
  </rsvp-replication-neighbor>
</rsvp-neighbor-replication-information>
```

Description Replication information for an RSVP neighbor

<rsvp-replication-path-state>

Usage

```
<rsvp-replication-path-state>
  <path-state-address>
    path-state-address
  </path-state-address>
  <path-state-interface-id>
    path-state-interface-id
  </path-state-interface-id>
  <path-state-session-id>
    path-state-session-id
  </path-state-session-id>
  <path-state-id>
    path-state-id
  </path-state-id>
  <path-state-self-id>
    path-state-self-id
  </path-state-self-id>
  <path-state-tag>
    path-state-tag
  </path-state-tag>
  <path-state-rr-epoch>
    path-state-rr-epoch
  </path-state-rr-epoch>
  <path-state-p2mp-remerge-head>
    path-state-p2mp-remerge-head
```

```
</path-state-p2mp-remerge-head>
<path-state-resv-msg-id>
  path-state-resv-msg-id
</path-state-resv-msg-id>
<path-state-bypass-id>
  path-state-bypass-id
</path-state-bypass-id>
<path-state-nh-type>
  path-state-nh-type
</path-state-nh-type>
<path-state-nh-outgoing-interface>
  path-state-nh-outgoing-interface
</path-state-nh-outgoing-interface>
<path-state-nh-upstream-tag>
  path-state-nh-upstream-tag
</path-state-nh-upstream-tag>
<path-state-nh-te-link-id>
  path-state-nh-te-link-id
</path-state-nh-te-link-id>
<path-state-nh-peer-address>
  path-state-nh-peer-address
</path-state-nh-peer-address>
<path-state-nh-avoid-address>
  path-state-nh-avoid-address
</path-state-nh-avoid-address>
<path-state-nh-ero>
  path-state-nh-ero
</path-state-nh-ero>
<path-state-nh-msg-id>
  path-state-nh-msg-id
</path-state-nh-msg-id>
</rsvp-replication-path-state>
```

Description Information about a replicated RSVP PATH state block

<rsvp-replication-path-state>

Usage

```
<rsvp-path-state-replication-information>
  <rsvp-replication-path-state>
    <path-state-address>
      path-state-address
    </path-state-address>
    <path-state-interface-id>
      path-state-interface-id
    </path-state-interface-id>
    <path-state-session-id>
      path-state-session-id
    </path-state-session-id>
    <path-state-id>
      path-state-id
    </path-state-id>
    <path-state-self-id>
      path-state-self-id
```


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```
    </path-state-self-id>
    <path-state-tag>
      path-state-tag
    </path-state-tag>
    <path-state-rr-epoch>
      path-state-rr-epoch
    </path-state-rr-epoch>
    <path-state-p2mp-remerge-head>
      path-state-p2mp-remerge-head
    </path-state-p2mp-remerge-head>
    <path-state-resv-msg-id>
      path-state-resv-msg-id
    </path-state-resv-msg-id>
    <path-state-bypass-id>
      path-state-bypass-id
    </path-state-bypass-id>
    <path-state-nh-type>
      path-state-nh-type
    </path-state-nh-type>
    <path-state-nh-outgoing-interface>
      path-state-nh-outgoing-interface
    </path-state-nh-outgoing-interface>
    <path-state-nh-upstream-tag>
      path-state-nh-upstream-tag
    </path-state-nh-upstream-tag>
    <path-state-nh-te-link-id>
      path-state-nh-te-link-id
    </path-state-nh-te-link-id>
    <path-state-nh-peer-address>
      path-state-nh-peer-address
    </path-state-nh-peer-address>
    <path-state-nh-avoid-address>
      path-state-nh-avoid-address
    </path-state-nh-avoid-address>
    <path-state-nh-ero>
      path-state-nh-ero
    </path-state-nh-ero>
    <path-state-nh-msg-id>
      path-state-nh-msg-id
    </path-state-nh-msg-id>
  </rsvp-replication-path-state>
</rsvp-path-state-replication-information>
```

Description Information about a replicated RSVP PATH state block

<rsvp-replication-resv-state>

Usage

```
<rsvp-replication-resv-state>
  <resv-state-interface-id>
    resv-state-interface-id
  </resv-state-interface-id>
  <resv-state-session-id>
    resv-state-session-id
```

```
  </resv-state-session-id>
  <resv-state-self-id>
    resv-state-self-id
  </resv-state-self-id>
</rsvp-replication-resv-state>
```

Description Information about replicated RESV state block

<rsvp-replication-resv-state>

Usage

```
<rsvp-resv-state-replication-information>
  <rsvp-replication-resv-state>
    <resv-state-interface-id>
      resv-state-interface-id
    </resv-state-interface-id>
    <resv-state-session-id>
      resv-state-session-id
    </resv-state-session-id>
    <resv-state-self-id>
      resv-state-self-id
    </resv-state-self-id>
  </rsvp-replication-resv-state>
</rsvp-resv-state-replication-information>
```

Description Information about replicated RESV state block

<rsvp-replication-session>

Usage

```
<rsvp-replication-session>
  <destination-address>
    destination-address
  </destination-address>
  <source-address>
    source-address
  </source-address>
  <label-in>
    label-in
  </label-in>
  <path-state-id>
    path-state-id
  </path-state-id>
  <session-id>
    session-id
  </session-id>
  <name>
    name
  </name>
  <replication-state>
    replication-state
  </replication-state>
```


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```
</rsvp-replication-session>
```

Description Information about a replicated RSVP session

<rsvp-replication-session>

Usage

```
<rsvp-session-replication-information>
  <rsvp-replication-session>
    <destination-address>
      destination-address
    </destination-address>
    <source-address>
      source-address
    </source-address>
    <label-in>
      label-in
    </label-in>
    <path-state-id>
      path-state-id
    </path-state-id>
    <session-id>
      session-id
    </session-id>
    <name>
      name
    </name>
    <replication-state>
      replication-state
    </replication-state>
  </rsvp-replication-session>
</rsvp-session-replication-information>
```

Description Information about a replicated RSVP session

<rsvp-replication-te-link>

Usage

```
<rsvp-replication-te-link>
  <te-link-id>
    te-link-id
  </te-link-id>
  <te-link-interface-id>
    te-link-interface-id
  </te-link-interface-id>
  <te-link-reference-count>
    te-link-reference-count
  </te-link-reference-count>
</rsvp-replication-te-link>
```

Description Information about a replicated traffic-engineering link

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<rsvp-replication-te-link>

Usage

```
<rsvp-interface-replication-information>
  <rsvp-replication-te-link>
    <te-link-id>
      te-link-id
    </te-link-id>
    <te-link-interface-id>
      te-link-interface-id
    </te-link-interface-id>
    <te-link-reference-count>
      te-link-reference-count
    </te-link-reference-count>
  </rsvp-replication-te-link>
</rsvp-interface-replication-information>
```

Description Information about a replicated traffic-engineering link

<rsvp-resv-state-replication-information>

Usage

```
<rsvp-resv-state-replication-information>
  <rsvp-replication-resv-state>....</rsvp-replication-resv-state>
</rsvp-resv-state-replication-information>
```

Description Information about one or more replicated RSVP RESV state blocks

<rsvp-session>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <destination-address>
      destination-address
    </destination-address>
    <is-detour>
      is-detour
    </is-detour>
    <source-address>
      source-address
    </source-address>
    <lsp-state>
      lsp-state
    </lsp-state>
    <lsp-pktbytes>
      lsp-pktbytes
    </lsp-pktbytes>
    <bypass-name>
      bypass-name
    </bypass-name>
    <no-statistics>
```


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```
  no-statistics
</no-statistics>
<route-count>
  route-count
</route-count>
<rsb-count>
  rsb-count
</rsb-count>
<resv-style>
  resv-style
</resv-style>
<label-in>
  label-in
</label-in>
<label-out>
  label-out
</label-out>
<name>
  name
</name>
<mpls-p2mp-lsp-name>
  mpls-p2mp-lsp-name
</mpls-p2mp-lsp-name>
<p2mp-remerge-state>
  p2mp-remerge-state
</p2mp-remerge-state>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-path-type>
  lsp-path-type
</lsp-path-type>
<mpls-lsp-type>
  mpls-lsp-type
</mpls-lsp-type>
<lsp-aggregation>
  lsp-aggregation
</lsp-aggregation>
<graceful-deletion-triggered>
  graceful-deletion-triggered
</graceful-deletion-triggered>
<source-tna-address>
  source-tna-address
</source-tna-address>
<destination-tna-address>
  destination-tna-address
</destination-tna-address>
<bidirectional>
  bidirectional
</bidirectional>
<upstream-label-in>
  upstream-label-in
</upstream-label-in>
<upstream-label-out>
  upstream-label-out
</upstream-label-out>
```

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```
<suggested-label-in>
  suggested-label-in
</suggested-label-in>
<suggested-label-out>
  suggested-label-out
</suggested-label-out>
<recovery-label-in>
  recovery-label-in
</recovery-label-in>
<recovery-label-out>
  recovery-label-out
</recovery-label-out>
<psb-lifetime>
  psb-lifetime
</psb-lifetime>
<psb-creation-time>
  psb-creation-time
</psb-creation-time>
<path-mtu>
  path-mtu
</path-mtu>
<path-mtu-in-kernel>
  path-mtu-in-kernel
</path-mtu-in-kernel>
<sender-tspec>
  sender-tspec
</sender-tspec>
<layer2-tspec>....</layer2-tspec>
<adspec>
  adspec
</adspec>
<ct-bw>
  ct-bw
</ct-bw>
<lsp-diffserv-info>
  lsp-diffserv-info
</lsp-diffserv-info>
<lsp-id>
  lsp-id
</lsp-id>
<tunnel-id>
  tunnel-id
</tunnel-id>
<proto-id>
  proto-id
</proto-id>
<self-id>
  self-id
</self-id>
<session-id>
  session-id
</session-id>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
```


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```
        is-linkprotection
      </is-linkprotection>
      <is-nodeprotection>
        is-nodeprotection
      </is-nodeprotection>
      <is-soft-preemption>
        is-soft-preemption
      </is-soft-preemption>
      <rsvp-path-status>
        rsvp-path-status
      </rsvp-path-status>
      <rsvp-lp-backup-route-cnt>
        rsvp-lp-backup-route-cnt
      </rsvp-lp-backup-route-cnt>
      <rsvp-lp-backup-lsp-cnt>
        rsvp-lp-backup-lsp-cnt
      </rsvp-lp-backup-lsp-cnt>
      <packet-information>....</packet-information>
      <explicit-route>....</explicit-route>
      <record-route>....</record-route>
      <lsp-attribute-flags>....</lsp-attribute-flags>
      <lp-history>....</lp-history>
      <rsvp-telink>....</rsvp-telink>
      <detour>....</detour>
      <detour-branch>....</detour-branch>
      <mpls-lsp>....</mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
```

Description Single RSVP session

<rsvp-session>

Usage

```
<rsvp-session>
  <destination-address>
    destination-address
  </destination-address>
  <is-detour>
    is-detour
  </is-detour>
  <source-address>
    source-address
  </source-address>
  <lsp-state>
    lsp-state
  </lsp-state>
  <lsp-pktbytes>
    lsp-pktbytes
  </lsp-pktbytes>
  <bypass-name>
    bypass-name
  </bypass-name>
  <no-statistics>
```

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```
  no-statistics
</no-statistics>
<route-count>
  route-count
</route-count>
<rsb-count>
  rsb-count
</rsb-count>
<resv-style>
  resv-style
</resv-style>
<label-in>
  label-in
</label-in>
<label-out>
  label-out
</label-out>
<name>
  name
</name>
<mpls-p2mp-lsp-name>
  mpls-p2mp-lsp-name
</mpls-p2mp-lsp-name>
<p2mp-remerge-state>
  p2mp-remerge-state
</p2mp-remerge-state>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-path-type>
  lsp-path-type
</lsp-path-type>
<mpls-lsp-type>
  mpls-lsp-type
</mpls-lsp-type>
<lsp-aggregation>
  lsp-aggregation
</lsp-aggregation>
<graceful-deletion-triggered>
  graceful-deletion-triggered
</graceful-deletion-triggered>
<source-tna-address>
  source-tna-address
</source-tna-address>
<destination-tna-address>
  destination-tna-address
</destination-tna-address>
<bidirectional>
  bidirectional
</bidirectional>
<upstream-label-in>
  upstream-label-in
</upstream-label-in>
<upstream-label-out>
  upstream-label-out
</upstream-label-out>
```


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```
<suggested-label-in>
  suggested-label-in
</suggested-label-in>
<suggested-label-out>
  suggested-label-out
</suggested-label-out>
<recovery-label-in>
  recovery-label-in
</recovery-label-in>
<recovery-label-out>
  recovery-label-out
</recovery-label-out>
<psb-lifetime>
  psb-lifetime
</psb-lifetime>
<psb-creation-time>
  psb-creation-time
</psb-creation-time>
<path-mtu>
  path-mtu
</path-mtu>
<path-mtu-in-kernel>
  path-mtu-in-kernel
</path-mtu-in-kernel>
<sender-tspec>
  sender-tspec
</sender-tspec>
<layer2-tspec>....</layer2-tspec>
<adspec>
  adspec
</adspec>
<ct-bw>
  ct-bw
</ct-bw>
<lsp-diffserv-info>
  lsp-diffserv-info
</lsp-diffserv-info>
<lsp-id>
  lsp-id
</lsp-id>
<tunnel-id>
  tunnel-id
</tunnel-id>
<proto-id>
  proto-id
</proto-id>
<self-id>
  self-id
</self-id>
<session-id>
  session-id
</session-id>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
```

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```
  is-linkprotection
 </is-linkprotection>
 <is-nodeprotection>
  is-nodeprotection
 </is-nodeprotection>
 <is-soft-preemption>
  is-soft-preemption
 </is-soft-preemption>
 <rsvp-path-status>
  rsvp-path-status
 </rsvp-path-status>
 <rsvp-lp-backup-route-cnt>
  rsvp-lp-backup-route-cnt
 </rsvp-lp-backup-route-cnt>
 <rsvp-lp-backup-lsp-cnt>
  rsvp-lp-backup-lsp-cnt
 </rsvp-lp-backup-lsp-cnt>
 <packet-information>....</packet-information>
 <explicit-route>....</explicit-route>
 <record-route>....</record-route>
 <lsp-attribute-flags>....</lsp-attribute-flags>
 <lp-history>....</lp-history>
 <rsvp-telink>....</rsvp-telink>
 <detour>....</detour>
 <detour-branch>....</detour-branch>
 <mpls-lsp>....</mpls-lsp>
</rsvp-session>
```

Description Single RSVP session

<rsvp-session>

Usage

```
<rsvp-session-information>
 <rsvp-session-data>
  <rsvp-session>
   <destination-address>
    destination-address
   </destination-address>
   <is-detour>
    is-detour
   </is-detour>
   <source-address>
    source-address
   </source-address>
   <lsp-state>
    lsp-state
   </lsp-state>
   <lsp-pktbytes>
    lsp-pktbytes
   </lsp-pktbytes>
   <bypass-name>
    bypass-name
   </bypass-name>
```


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```
<no-statistics>
  no-statistics
</no-statistics>
<route-count>
  route-count
</route-count>
<rsb-count>
  rsb-count
</rsb-count>
<resv-style>
  resv-style
</resv-style>
<label-in>
  label-in
</label-in>
<label-out>
  label-out
</label-out>
<name>
  name
</name>
<mpls-p2mp-lsp-name>
  mpls-p2mp-lsp-name
</mpls-p2mp-lsp-name>
<p2mp-remerge-state>
  p2mp-remerge-state
</p2mp-remerge-state>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-path-type>
  lsp-path-type
</lsp-path-type>
<mpls-lsp-type>
  mpls-lsp-type
</mpls-lsp-type>
<lsp-aggregation>
  lsp-aggregation
</lsp-aggregation>
<graceful-deletion-triggered>
  graceful-deletion-triggered
</graceful-deletion-triggered>
<source-tna-address>
  source-tna-address
</source-tna-address>
<destination-tna-address>
  destination-tna-address
</destination-tna-address>
<bidirectional>
  bidirectional
</bidirectional>
<upstream-label-in>
  upstream-label-in
</upstream-label-in>
<upstream-label-out>
  upstream-label-out
```

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```
</upstream-label-out>
<suggested-label-in>
  suggested-label-in
</suggested-label-in>
<suggested-label-out>
  suggested-label-out
</suggested-label-out>
<recovery-label-in>
  recovery-label-in
</recovery-label-in>
<recovery-label-out>
  recovery-label-out
</recovery-label-out>
<psb-lifetime>
  psb-lifetime
</psb-lifetime>
<psb-creation-time>
  psb-creation-time
</psb-creation-time>
<path-mtu>
  path-mtu
</path-mtu>
<path-mtu-in-kernel>
  path-mtu-in-kernel
</path-mtu-in-kernel>
<sender-tspec>
  sender-tspec
</sender-tspec>
<layer2-tspec>....</layer2-tspec>
<adspec>
  adspec
</adspec>
<ct-bw>
  ct-bw
</ct-bw>
<lsp-diffserv-info>
  lsp-diffserv-info
</lsp-diffserv-info>
<lsp-id>
  lsp-id
</lsp-id>
<tunnel-id>
  tunnel-id
</tunnel-id>
<proto-id>
  proto-id
</proto-id>
<self-id>
  self-id
</self-id>
<session-id>
  session-id
</session-id>
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
```


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```
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-soft-preemption>
  is-soft-preemption
</is-soft-preemption>
<rsvp-path-status>
  rsvp-path-status
</rsvp-path-status>
<rsvp-lp-backup-route-cnt>
  rsvp-lp-backup-route-cnt
</rsvp-lp-backup-route-cnt>
<rsvp-lp-backup-lsp-cnt>
  rsvp-lp-backup-lsp-cnt
</rsvp-lp-backup-lsp-cnt>
<packet-information>....</packet-information>
<explicit-route>....</explicit-route>
<record-route>....</record-route>
<lsp-attribute-flags>....</lsp-attribute-flags>
<lp-history>....</lp-history>
<rsvp-telink>....</rsvp-telink>
<detour>....</detour>
<detour-branch>....</detour-branch>
<mpls-lsp>....</mpls-lsp>
</rsvp-session>
</rsvp-session-data>
</rsvp-session-information>
```

Description Single RSVP session

<rsvp-session>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <destination-address>
        destination-address
      </destination-address>
      <is-detour>
        is-detour
      </is-detour>
      <source-address>
        source-address
      </source-address>
      <lsp-state>
        lsp-state
      </lsp-state>
      <lsp-pktbytes>
        lsp-pktbytes
      </lsp-pktbytes>
```

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```
<bypass-name>
  bypass-name
</bypass-name>
<no-statistics>
  no-statistics
</no-statistics>
<route-count>
  route-count
</route-count>
<rsb-count>
  rsb-count
</rsb-count>
<resv-style>
  resv-style
</resv-style>
<label-in>
  label-in
</label-in>
<label-out>
  label-out
</label-out>
<name>
  name
</name>
<mpls-p2mp-lsp-name>
  mpls-p2mp-lsp-name
</mpls-p2mp-lsp-name>
<p2mp-remerge-state>
  p2mp-remerge-state
</p2mp-remerge-state>
<lsp-description>
  lsp-description
</lsp-description>
<lsp-path-type>
  lsp-path-type
</lsp-path-type>
<mpls-lsp-type>
  mpls-lsp-type
</mpls-lsp-type>
<lsp-aggregation>
  lsp-aggregation
</lsp-aggregation>
<graceful-deletion-triggered>
  graceful-deletion-triggered
</graceful-deletion-triggered>
<source-tna-address>
  source-tna-address
</source-tna-address>
<destination-tna-address>
  destination-tna-address
</destination-tna-address>
<bidirectional>
  bidirectional
</bidirectional>
<upstream-label-in>
  upstream-label-in
```


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```
</upstream-label-in>
<upstream-label-out>
  upstream-label-out
</upstream-label-out>
<suggested-label-in>
  suggested-label-in
</suggested-label-in>
<suggested-label-out>
  suggested-label-out
</suggested-label-out>
<recovery-label-in>
  recovery-label-in
</recovery-label-in>
<recovery-label-out>
  recovery-label-out
</recovery-label-out>
<psb-lifetime>
  psb-lifetime
</psb-lifetime>
<psb-creation-time>
  psb-creation-time
</psb-creation-time>
<path-mtu>
  path-mtu
</path-mtu>
<path-mtu-in-kernel>
  path-mtu-in-kernel
</path-mtu-in-kernel>
<sender-tspec>
  sender-tspec
</sender-tspec>
<layer2-tspec>....</layer2-tspec>
<adspec>
  adspec
</adspec>
<ct-bw>
  ct-bw
</ct-bw>
<lsp-diffserv-info>
  lsp-diffserv-info
</lsp-diffserv-info>
<lsp-id>
  lsp-id
</lsp-id>
<tunnel-id>
  tunnel-id
</tunnel-id>
<proto-id>
  proto-id
</proto-id>
<self-id>
  self-id
</self-id>
<session-id>
  session-id
</session-id>
```

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```
<is-fastreroute>
  is-fastreroute
</is-fastreroute>
<is-linkprotection>
  is-linkprotection
</is-linkprotection>
<is-nodeprotection>
  is-nodeprotection
</is-nodeprotection>
<is-soft-preemption>
  is-soft-preemption
</is-soft-preemption>
<rsvp-path-status>
  rsvp-path-status
</rsvp-path-status>
<rsvp-lp-backup-route-cnt>
  rsvp-lp-backup-route-cnt
</rsvp-lp-backup-route-cnt>
<rsvp-lp-backup-lsp-cnt>
  rsvp-lp-backup-lsp-cnt
</rsvp-lp-backup-lsp-cnt>
<packet-information>....</packet-information>
<explicit-route>....</explicit-route>
<record-route>....</record-route>
<lsp-attribute-flags>....</lsp-attribute-flags>
<lp-history>....</lp-history>
<rsvp-telink>....</rsvp-telink>
<detour>....</detour>
<detour-branch>....</detour-branch>
<mpls-lsp>....</mpls-lsp>
</rsvp-session>
</rsvp-session-data>
</mpls-lsp-information>
```

Description Single RSVP session

<rsvp-session-data>

Usage

```
<rsvp-session-data>
  <session-type>
    session-type
  </session-type>
  <count>
    count
  </count>
  <display-count>
    display-count
  </display-count>
  <up-count>
    up-count
  </up-count>
  <down-count>
    down-count
```


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```
  </down-count>
  <detours>
    detours
  </detours>
  <rsvp-session>....</rsvp-session>
  <mpls-p2mp-lsp>....</mpls-p2mp-lsp>
</rsvp-session-data>
```

Description

<rsvp-session-data>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <session-type>
      session-type
    </session-type>
    <count>
      count
    </count>
    <display-count>
      display-count
    </display-count>
    <up-count>
      up-count
    </up-count>
    <down-count>
      down-count
    </down-count>
    <detours>
      detours
    </detours>
    <rsvp-session>....</rsvp-session>
    <mpls-p2mp-lsp>....</mpls-p2mp-lsp>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<rsvp-session-data>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <session-type>
      session-type
    </session-type>
    <count>
      count
    </count>
    <display-count>
      display-count
    </display-count>
```

```
    <up-count>
      up-count
    </up-count>
    <down-count>
      down-count
    </down-count>
    <detours>
      detours
    </detours>
    <rsvp-session>....</rsvp-session>
    <mpls-p2mp-lsp>....</mpls-p2mp-lsp>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<rsvp-session-information>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>....</rsvp-session-data>
</rsvp-session-information>
```

Description

<rsvp-session-replication-information>

Usage

```
<rsvp-session-replication-information>
  <rsvp-replication-session>....</rsvp-replication-session>
</rsvp-session-replication-information>
```

Description Information about one or more replicated RSVP sessions

<rsvp-statistics-information>

Usage

```
<rsvp-statistics-information>
  <message-statistics>....</message-statistics>
  <rsvp-error>....</rsvp-error>
</rsvp-statistics-information>
```

Description

<rsvp-telink>

Usage

```
<rsvp-telink>
  <telink-name>
    telink-name
  </telink-name>
```


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```
<telink-local-id>
  telink-local-id
</telink-local-id>
<telink-state>
  telink-state
</telink-state>
<active-reservation>
  active-reservation
</active-reservation>
<subscription>
  subscription
</subscription>
<ct-subscription>
  ct-subscription
</ct-subscription>
<static-bandwidth>
  static-bandwidth
</static-bandwidth>
<available-bandwidth>
  available-bandwidth
</available-bandwidth>
<max-available-bandwidth>
  max-available-bandwidth
</max-available-bandwidth>
<max-available-description>
  max-available-description
</max-available-description>
<static-bc-bandwidth>
  static-bc-bandwidth
</static-bc-bandwidth>
<total-reserved-bandwidth>
  total-reserved-bandwidth
</total-reserved-bandwidth>
<bc>
  bc
</bc>
<bc-description>
  bc-description
</bc-description>
<ct-class>
  ct-class
</ct-class>
<ct-bw0>
  ct-bw0
</ct-bw0>
<ct-bw1>
  ct-bw1
</ct-bw1>
<ct-bw2>
  ct-bw2
</ct-bw2>
<ct-bw3>
  ct-bw3
</ct-bw3>
<ct-bw4>
  ct-bw4
```

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```
</ct-bw4>
<ct-bw5>
  ct-bw5
</ct-bw5>
<ct-bw6>
  ct-bw6
</ct-bw6>
<ct-bw7>
  ct-bw7
</ct-bw7>
<high-watermark>
  high-watermark
</high-watermark>
<preemption-count>
  preemption-count
</preemption-count>
<soft-preemption-count>
  soft-preemption-count
</soft-preemption-count>
<soft-preemption-pending>
  soft-preemption-pending
</soft-preemption-pending>
<update-threshold>
  update-threshold
</update-threshold>
<reserved-bandwidth>....</reserved-bandwidth>
<reserved-ct-bandwidth>....</reserved-ct-bandwidth>
<detour-bandwidth>....</detour-bandwidth>
<overbooked-bandwidth>....</overbooked-bandwidth>
<overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
</rsvp-telink>
```

Description

<rsvp-telink>

Usage

```
<rsvp-session-data>
  <rsvp-session>
    <rsvp-telink>
      <telink-name>
        telink-name
      </telink-name>
      <telink-local-id>
        telink-local-id
      </telink-local-id>
      <telink-state>
        telink-state
      </telink-state>
      <active-reservation>
        active-reservation
      </active-reservation>
      <subscription>
        subscription
      </subscription>
```


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```
<ct-subscription>
  ct-subscription
</ct-subscription>
<static-bandwidth>
  static-bandwidth
</static-bandwidth>
<available-bandwidth>
  available-bandwidth
</available-bandwidth>
<max-available-bandwidth>
  max-available-bandwidth
</max-available-bandwidth>
<max-available-description>
  max-available-description
</max-available-description>
<static-bc-bandwidth>
  static-bc-bandwidth
</static-bc-bandwidth>
<total-reserved-bandwidth>
  total-reserved-bandwidth
</total-reserved-bandwidth>
<bc>
  bc
</bc>
<bc-description>
  bc-description
</bc-description>
<ct-class>
  ct-class
</ct-class>
<ct-bw0>
  ct-bw0
</ct-bw0>
<ct-bw1>
  ct-bw1
</ct-bw1>
<ct-bw2>
  ct-bw2
</ct-bw2>
<ct-bw3>
  ct-bw3
</ct-bw3>
<ct-bw4>
  ct-bw4
</ct-bw4>
<ct-bw5>
  ct-bw5
</ct-bw5>
<ct-bw6>
  ct-bw6
</ct-bw6>
<ct-bw7>
  ct-bw7
</ct-bw7>
<high-watermark>
  high-watermark
```

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```
      </high-watermark>
      <preemption-count>
        preemption-count
      </preemption-count>
      <soft-preemption-count>
        soft-preemption-count
      </soft-preemption-count>
      <soft-preemption-pending>
        soft-preemption-pending
      </soft-preemption-pending>
      <update-threshold>
        update-threshold
      </update-threshold>
      <reserved-bandwidth>....</reserved-bandwidth>
      <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
      <detour-bandwidth>....</detour-bandwidth>
      <overbooked-bandwidth>....</overbooked-bandwidth>
      <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
    </rsvp-telink>
  </rsvp-session>
</rsvp-session-data>
```

Description

<rsvp-telink>

Usage

```
<rsvp-session>
  <rsvp-telink>
    <telink-name>
      telink-name
    </telink-name>
    <telink-local-id>
      telink-local-id
    </telink-local-id>
    <telink-state>
      telink-state
    </telink-state>
    <active-reservation>
      active-reservation
    </active-reservation>
    <subscription>
      subscription
    </subscription>
    <ct-subscription>
      ct-subscription
    </ct-subscription>
    <static-bandwidth>
      static-bandwidth
    </static-bandwidth>
    <available-bandwidth>
      available-bandwidth
    </available-bandwidth>
    <max-available-bandwidth>
      max-available-bandwidth
```


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```
</max-available-bandwidth>
<max-available-description>
  max-available-description
</max-available-description>
<static-bc-bandwidth>
  static-bc-bandwidth
</static-bc-bandwidth>
<total-reserved-bandwidth>
  total-reserved-bandwidth
</total-reserved-bandwidth>
<bc>
  bc
</bc>
<bc-description>
  bc-description
</bc-description>
<ct-class>
  ct-class
</ct-class>
<ct-bw0>
  ct-bw0
</ct-bw0>
<ct-bw1>
  ct-bw1
</ct-bw1>
<ct-bw2>
  ct-bw2
</ct-bw2>
<ct-bw3>
  ct-bw3
</ct-bw3>
<ct-bw4>
  ct-bw4
</ct-bw4>
<ct-bw5>
  ct-bw5
</ct-bw5>
<ct-bw6>
  ct-bw6
</ct-bw6>
<ct-bw7>
  ct-bw7
</ct-bw7>
<high-watermark>
  high-watermark
</high-watermark>
<preemption-count>
  preemption-count
</preemption-count>
<soft-preemption-count>
  soft-preemption-count
</soft-preemption-count>
<soft-preemption-pending>
  soft-preemption-pending
</soft-preemption-pending>
<update-threshold>
```

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```
      update-threshold
    </update-threshold>
    <reserved-bandwidth>....</reserved-bandwidth>
    <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
    <detour-bandwidth>....</detour-bandwidth>
    <overbooked-bandwidth>....</overbooked-bandwidth>
    <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
  </rsvp-telink>
</rsvp-session>
```

Description

<rsvp-telink>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <telink-name>
          telink-name
        </telink-name>
        <telink-local-id>
          telink-local-id
        </telink-local-id>
        <telink-state>
          telink-state
        </telink-state>
        <active-reservation>
          active-reservation
        </active-reservation>
        <subscription>
          subscription
        </subscription>
        <ct-subscription>
          ct-subscription
        </ct-subscription>
        <static-bandwidth>
          static-bandwidth
        </static-bandwidth>
        <available-bandwidth>
          available-bandwidth
        </available-bandwidth>
        <max-available-bandwidth>
          max-available-bandwidth
        </max-available-bandwidth>
        <max-available-description>
          max-available-description
        </max-available-description>
        <static-bc-bandwidth>
          static-bc-bandwidth
        </static-bc-bandwidth>
        <total-reserved-bandwidth>
          total-reserved-bandwidth
        </total-reserved-bandwidth>
```


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```
        <bc>
          bc
        </bc>
        <bc-description>
          bc-description
        </bc-description>
        <ct-class>
          ct-class
        </ct-class>
        <ct-bw0>
          ct-bw0
        </ct-bw0>
        <ct-bw1>
          ct-bw1
        </ct-bw1>
        <ct-bw2>
          ct-bw2
        </ct-bw2>
        <ct-bw3>
          ct-bw3
        </ct-bw3>
        <ct-bw4>
          ct-bw4
        </ct-bw4>
        <ct-bw5>
          ct-bw5
        </ct-bw5>
        <ct-bw6>
          ct-bw6
        </ct-bw6>
        <ct-bw7>
          ct-bw7
        </ct-bw7>
        <high-watermark>
          high-watermark
        </high-watermark>
        <preemption-count>
          preemption-count
        </preemption-count>
        <soft-preemption-count>
          soft-preemption-count
        </soft-preemption-count>
        <soft-preemption-pending>
          soft-preemption-pending
        </soft-preemption-pending>
        <update-threshold>
          update-threshold
        </update-threshold>
        <reserved-bandwidth>....</reserved-bandwidth>
        <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
        <detour-bandwidth>....</detour-bandwidth>
        <overbooked-bandwidth>....</overbooked-bandwidth>
        <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
```

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```
</rsvp-session-information>
```

Description

<rsvp-telink>

Usage

```
<rsvp-interface>
 <rsvp-telink>
  <telink-name>
   telink-name
  </telink-name>
  <telink-local-id>
   telink-local-id
  </telink-local-id>
  <telink-state>
   telink-state
  </telink-state>
  <active-reservation>
   active-reservation
  </active-reservation>
  <subscription>
   subscription
  </subscription>
  <ct-subscription>
   ct-subscription
  </ct-subscription>
  <static-bandwidth>
   static-bandwidth
  </static-bandwidth>
  <available-bandwidth>
   available-bandwidth
  </available-bandwidth>
  <max-available-bandwidth>
   max-available-bandwidth
  </max-available-bandwidth>
  <max-available-description>
   max-available-description
  </max-available-description>
  <static-bc-bandwidth>
   static-bc-bandwidth
  </static-bc-bandwidth>
  <total-reserved-bandwidth>
   total-reserved-bandwidth
  </total-reserved-bandwidth>
  <bc>
   bc
  </bc>
  <bc-description>
   bc-description
  </bc-description>
  <ct-class>
   ct-class
  </ct-class>
  <ct-bw0>
```


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```
      ct-bw0
    </ct-bw0>
    <ct-bw1>
      ct-bw1
    </ct-bw1>
    <ct-bw2>
      ct-bw2
    </ct-bw2>
    <ct-bw3>
      ct-bw3
    </ct-bw3>
    <ct-bw4>
      ct-bw4
    </ct-bw4>
    <ct-bw5>
      ct-bw5
    </ct-bw5>
    <ct-bw6>
      ct-bw6
    </ct-bw6>
    <ct-bw7>
      ct-bw7
    </ct-bw7>
    <high-watermark>
      high-watermark
    </high-watermark>
    <preemption-count>
      preemption-count
    </preemption-count>
    <soft-preemption-count>
      soft-preemption-count
    </soft-preemption-count>
    <soft-preemption-pending>
      soft-preemption-pending
    </soft-preemption-pending>
    <update-threshold>
      update-threshold
    </update-threshold>
    <reserved-bandwidth>....</reserved-bandwidth>
    <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
    <detour-bandwidth>....</detour-bandwidth>
    <overbooked-bandwidth>....</overbooked-bandwidth>
    <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
  </rsvp-telink>
</rsvp-interface>
```

Description

<rsvp-telink>

Usage

```
<rsvp-interface-information>
  <rsvp-interface>
    <rsvp-telink>
      <telink-name>
```

```
  telink-name
</telink-name>
<telink-local-id>
  telink-local-id
</telink-local-id>
<telink-state>
  telink-state
</telink-state>
<active-reservation>
  active-reservation
</active-reservation>
<subscription>
  subscription
</subscription>
<ct-subscription>
  ct-subscription
</ct-subscription>
<static-bandwidth>
  static-bandwidth
</static-bandwidth>
<available-bandwidth>
  available-bandwidth
</available-bandwidth>
<max-available-bandwidth>
  max-available-bandwidth
</max-available-bandwidth>
<max-available-description>
  max-available-description
</max-available-description>
<static-bc-bandwidth>
  static-bc-bandwidth
</static-bc-bandwidth>
<total-reserved-bandwidth>
  total-reserved-bandwidth
</total-reserved-bandwidth>
<bc>
  bc
</bc>
<bc-description>
  bc-description
</bc-description>
<ct-class>
  ct-class
</ct-class>
<ct-bw0>
  ct-bw0
</ct-bw0>
<ct-bw1>
  ct-bw1
</ct-bw1>
<ct-bw2>
  ct-bw2
</ct-bw2>
<ct-bw3>
  ct-bw3
</ct-bw3>
```


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```
            <ct-bw4>
              ct-bw4
            </ct-bw4>
            <ct-bw5>
              ct-bw5
            </ct-bw5>
            <ct-bw6>
              ct-bw6
            </ct-bw6>
            <ct-bw7>
              ct-bw7
            </ct-bw7>
            <high-watermark>
              high-watermark
            </high-watermark>
            <preemption-count>
              preemption-count
            </preemption-count>
            <soft-preemption-count>
              soft-preemption-count
            </soft-preemption-count>
            <soft-preemption-pending>
              soft-preemption-pending
            </soft-preemption-pending>
            <update-threshold>
              update-threshold
            </update-threshold>
            <reserved-bandwidth>....</reserved-bandwidth>
            <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
            <detour-bandwidth>....</detour-bandwidth>
            <overbooked-bandwidth>....</overbooked-bandwidth>
            <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
          </rsvp-telink>
        </rsvp-interface>
      </rsvp-interface-information>
```

Description

<rsvp-telink>

Usage

```
<mpls-lsp-information>
  <rsvp-session-data>
    <rsvp-session>
      <rsvp-telink>
        <telink-name>
          telink-name
        </telink-name>
        <telink-local-id>
          telink-local-id
        </telink-local-id>
        <telink-state>
          telink-state
        </telink-state>
        <active-reservation>
```

```
  active-reservation
</active-reservation>
<subscription>
  subscription
</subscription>
<ct-subscription>
  ct-subscription
</ct-subscription>
<static-bandwidth>
  static-bandwidth
</static-bandwidth>
<available-bandwidth>
  available-bandwidth
</available-bandwidth>
<max-available-bandwidth>
  max-available-bandwidth
</max-available-bandwidth>
<max-available-description>
  max-available-description
</max-available-description>
<static-bc-bandwidth>
  static-bc-bandwidth
</static-bc-bandwidth>
<total-reserved-bandwidth>
  total-reserved-bandwidth
</total-reserved-bandwidth>
<bc>
  bc
</bc>
<bc-description>
  bc-description
</bc-description>
<ct-class>
  ct-class
</ct-class>
<ct-bw0>
  ct-bw0
</ct-bw0>
<ct-bw1>
  ct-bw1
</ct-bw1>
<ct-bw2>
  ct-bw2
</ct-bw2>
<ct-bw3>
  ct-bw3
</ct-bw3>
<ct-bw4>
  ct-bw4
</ct-bw4>
<ct-bw5>
  ct-bw5
</ct-bw5>
<ct-bw6>
  ct-bw6
</ct-bw6>
```


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```
        <ct-bw7>
          ct-bw7
        </ct-bw7>
        <high-watermark>
          high-watermark
        </high-watermark>
        <preemption-count>
          preemption-count
        </preemption-count>
        <soft-preemption-count>
          soft-preemption-count
        </soft-preemption-count>
        <soft-preemption-pending>
          soft-preemption-pending
        </soft-preemption-pending>
        <update-threshold>
          update-threshold
        </update-threshold>
        <reserved-bandwidth>....</reserved-bandwidth>
        <reserved-ct-bandwidth>....</reserved-ct-bandwidth>
        <detour-bandwidth>....</detour-bandwidth>
        <overbooked-bandwidth>....</overbooked-bandwidth>
        <overbooked-ct-bandwidth>....</overbooked-ct-bandwidth>
      </rsvp-telink>
    </rsvp-session>
  </rsvp-session-data>
</mpls-lsp-information>
```

Description

<rsvp-version>

Usage

```
<rsvp-version>
  <rsvp-status>
    rsvp-status
  </rsvp-status>
  <rsvp-restart-flag>
    rsvp-restart-flag
  </rsvp-restart-flag>
  <refresh-timer>
    refresh-timer
  </refresh-timer>
  <keep-multiplier>
    keep-multiplier
  </keep-multiplier>
  <preemption-type>
    preemption-type
  </preemption-type>
  <soft-preemption-cleanup-timer>
    soft-preemption-cleanup-timer
  </soft-preemption-cleanup-timer>
  <graceful-deletion-timeout>
    graceful-deletion-timeout
  </graceful-deletion-timeout>
```

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```
  <rsvp-nsr-mode>
    rsvp-nsr-mode
  </rsvp-nsr-mode>
  <rsvp-nsr-state>
    rsvp-nsr-state
  </rsvp-nsr-state>
  <rsvp-graceful-restart>....</rsvp-graceful-restart>
  <rsvp-setup-protection>
    rsvp-setup-protection
  </rsvp-setup-protection>
</rsvp-version>
```

Description

<rsvp-version>

Usage

```
<rsvp-version-information>
  <rsvp-version>
    <rsvp-status>
      rsvp-status
    </rsvp-status>
    <rsvp-restart-flag>
      rsvp-restart-flag
    </rsvp-restart-flag>
    <refresh-timer>
      refresh-timer
    </refresh-timer>
    <keep-multiplier>
      keep-multiplier
    </keep-multiplier>
    <preemption-type>
      preemption-type
    </preemption-type>
    <soft-preemption-cleanup-timer>
      soft-preemption-cleanup-timer
    </soft-preemption-cleanup-timer>
    <graceful-deletion-timeout>
      graceful-deletion-timeout
    </graceful-deletion-timeout>
    <rsvp-nsr-mode>
      rsvp-nsr-mode
    </rsvp-nsr-mode>
    <rsvp-nsr-state>
      rsvp-nsr-state
    </rsvp-nsr-state>
    <rsvp-graceful-restart>....</rsvp-graceful-restart>
    <rsvp-setup-protection>
      rsvp-setup-protection
    </rsvp-setup-protection>
  </rsvp-version>
</rsvp-version-information>
```

Description

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<rsvp-version-information>

Usage

```
<rsvp-version-information>
  <rsvp-version>....</rsvp-version>
</rsvp-version-information>
```

Description

<rt>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-destination>
        rt-destination
      </rt-destination>
      <rt-prefix-length>
        rt-prefix-length
      </rt-prefix-length>
      <rt-entry-count>
        rt-entry-count
      </rt-entry-count>
      <rt-announced-count>
        rt-announced-count
      </rt-announced-count>
      <rt-state>
        rt-state
      </rt-state>
      <rt-entry>....</rt-entry>
      <tsi>
        tsi
      </tsi>
      <communities>....</communities>
    </rt>
  </route-table>
</route-information>
```

Description

<rt>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-destination>
        rt-destination
      </rt-destination>
      <rt-prefix-length>
        rt-prefix-length
      </rt-prefix-length>
```

```
      <rt-entry-count>
       rt-entry-count
      </rt-entry-count>
      <rt-announced-count>
       rt-announced-count
      </rt-announced-count>
      <rt-state>
       rt-state
      </rt-state>
      <rt-entry>....</rt-entry>
      <tsi>
       tsi
      </tsi>
      <communities>....</communities>
     </rt>
    </route-table>
</route-summary-information>
```

Description

<rt-entry>

Usage

```
<route-information>
 <route-table>
  <rt>
   <rt-entry>
    <active-tag>
     active-tag
    </active-tag>
    <last-active>
     last-active
    </last-active>
    <current-active>
     current-active
    </current-active>
    <protocol-name>
     protocol-name
    </protocol-name>
    <preference>
     preference
    </preference>
    <preference2>
     preference2
    </preference2>
    <route-distinguisher>
     route-distinguisher
    </route-distinguisher>
    <pmsi>
     pmsi
    </pmsi>
    <color>
     color
    </color>
    <rt-isis-level>
```


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```
  rt-isis-level
</rt-isis-level>
<color2>
  color2
</color2>
<rt-isis-downbit>
  rt-isis-downbit
</rt-isis-downbit>
<age>
  age
</age>
<metric>
  metric
</metric>
<metric2>
  metric2
</metric2>
<med-plus-igp>
  med-plus-igp
</med-plus-igp>
<rt-tag>
  rt-tag
</rt-tag>
<rt-tag2>
  rt-tag2
</rt-tag2>
<rt-ospf-area>
  rt-ospf-area
</rt-ospf-area>
<learned-from>
  learned-from
</learned-from>
<peer-as>
  peer-as
</peer-as>
<local-as>
  local-as
</local-as>
<rt-entry-state>
  rt-entry-state
</rt-entry-state>
<inactive-reason>
  inactive-reason
</inactive-reason>
<task-name>
  task-name
</task-name>
<announce-bits>
  announce-bits
</announce-bits>
<announce-tasks>
  announce-tasks
</announce-tasks>
<bgp-rt-flag>
  bgp-rt-flag
</bgp-rt-flag>
```

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```
<label-base>
  label-base
</label-base>
<label-range>
  label-range
</label-range>
<l2vpn-status-vector>
  l2vpn-status-vector
</l2vpn-status-vector>
<l2vpn-mesh-group>
  l2vpn-mesh-group
</l2vpn-mesh-group>
<vc-label>
  vc-label
</vc-label>
<mtu>
  mtu
</mtu>
<cell-bundle-size>
  cell-bundle-size
</cell-bundle-size>
<vlan-id>
  vlan-id
</vlan-id>
<tdm-payload-size>
  tdm-payload-size
</tdm-payload-size>
<tdm-bitrate>
  tdm-bitrate
</tdm-bitrate>
<pw-status-code>
  pw-status-code
</pw-status-code>
<connection-bandwidth>....</connection-bandwidth>
<cac-bandwidth-failure>
  cac-bandwidth-failure
</cac-bandwidth-failure>
<context-id>
  context-id
</context-id>
<route-control-word>
  route-control-word
</route-control-word>
<vpn-label>
  vpn-label
</vpn-label>
<route-label>
  route-label
</route-label>
<bgp-no-label-reason>
  bgp-no-label-reason
</bgp-no-label-reason>
<rtd-flow-dep>....</rtd-flow-dep>
<as-path>
  as-path
</as-path>
```


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```
<communities>....</communities>
<helper-nhid>
  helper-nhid
</helper-nhid>
<helper-refcount>
  helper-refcount
</helper-refcount>
<bgp-metric-flags>
  bgp-metric-flags
</bgp-metric-flags>
<local-preference>
  local-preference
</local-preference>
<med>
  med
</med>
<peer-id>
  peer-id
</peer-id>
<cluster-id>
  cluster-id
</cluster-id>
<path-id>
  path-id
</path-id>
<originator>
  originator
</originator>
<attrset>....</attrset>
<bgp-group-name>
  bgp-group-name
</bgp-group-name>
<deleted>
  deleted
</deleted>
<route-flap-damping>....</route-flap-damping>
<aggregate>....</aggregate>
<gateway>
  gateway
</gateway>
<indirect-nh-count>
  indirect-nh-count
</indirect-nh-count>
<composite-nh-count>
  composite-nh-count
</composite-nh-count>
<nh-type>
  nh-type
</nh-type>
<nh-index>
  nh-index
</nh-index>
<nh-address>
  nh-address
</nh-address>
<nh-reference-count>
```

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```
            nh-reference-count
          </nh-reference-count>
          <nh-kernel-id>
            nh-kernel-id
          </nh-kernel-id>
          <ext-int-intf-index>
            ext-int-intf-index
          </ext-int-intf-index>
          <nh-flood-overflow>
            nh-flood-overflow
          </nh-flood-overflow>
          <nhh>....</nhh>
          <nh>....</nh>
          <protocol-nh>....</protocol-nh>
          <rtrib-primary>
            rtrib-primary
          </rtrib-primary>
          <rtrib-secondary>
            rtrib-secondary
          </rtrib-secondary>
          <backup-pe-group-name>
            backup-pe-group-name
          </backup-pe-group-name>
          <designated-forwarder>
            designated-forwarder
          </designated-forwarder>
        </rt-entry>
      </rt>
    </route-table>
  </route-information>
```

Description

<rt-entry>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <active-tag>
          active-tag
        </active-tag>
        <last-active>
          last-active
        </last-active>
        <current-active>
          current-active
        </current-active>
        <protocol-name>
          protocol-name
        </protocol-name>
        <preference>
          preference
        </preference>
```


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```
<preference2>
  preference2
</preference2>
<route-distinguisher>
  route-distinguisher
</route-distinguisher>
<pmsi>
  pmsi
</pmsi>
<color>
  color
</color>
<rt-isis-level>
  rt-isis-level
</rt-isis-level>
<color2>
  color2
</color2>
<rt-isis-downbit>
  rt-isis-downbit
</rt-isis-downbit>
<age>
  age
</age>
<metric>
  metric
</metric>
<metric2>
  metric2
</metric2>
<med-plus-igp>
  med-plus-igp
</med-plus-igp>
<rt-tag>
  rt-tag
</rt-tag>
<rt-tag2>
  rt-tag2
</rt-tag2>
<rt-ospf-area>
  rt-ospf-area
</rt-ospf-area>
<learned-from>
  learned-from
</learned-from>
<peer-as>
  peer-as
</peer-as>
<local-as>
  local-as
</local-as>
<rt-entry-state>
  rt-entry-state
</rt-entry-state>
<inactive-reason>
  inactive-reason
```

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```
</inactive-reason>
<task-name>
  task-name
</task-name>
<announce-bits>
  announce-bits
</announce-bits>
<announce-tasks>
  announce-tasks
</announce-tasks>
<bgp-rt-flag>
  bgp-rt-flag
</bgp-rt-flag>
<label-base>
  label-base
</label-base>
<label-range>
  label-range
</label-range>
<l2vpn-status-vector>
  l2vpn-status-vector
</l2vpn-status-vector>
<l2vpn-mesh-group>
  l2vpn-mesh-group
</l2vpn-mesh-group>
<vc-label>
  vc-label
</vc-label>
<mtu>
  mtu
</mtu>
<cell-bundle-size>
  cell-bundle-size
</cell-bundle-size>
<vlan-id>
  vlan-id
</vlan-id>
<tdm-payload-size>
  tdm-payload-size
</tdm-payload-size>
<tdm-bitrate>
  tdm-bitrate
</tdm-bitrate>
<pw-status-code>
  pw-status-code
</pw-status-code>
<connection-bandwidth>....</connection-bandwidth>
<cac-bandwidth-failure>
  cac-bandwidth-failure
</cac-bandwidth-failure>
<context-id>
  context-id
</context-id>
<route-control-word>
  route-control-word
</route-control-word>
```


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```
<vpn-label>
  vpn-label
</vpn-label>
<route-label>
  route-label
</route-label>
<bgp-no-label-reason>
  bgp-no-label-reason
</bgp-no-label-reason>
<rtd-flow-dep>....</rtd-flow-dep>
<as-path>
  as-path
</as-path>
<communities>....</communities>
<helper-nhid>
  helper-nhid
</helper-nhid>
<helper-refcount>
  helper-refcount
</helper-refcount>
<bgp-metric-flags>
  bgp-metric-flags
</bgp-metric-flags>
<local-preference>
  local-preference
</local-preference>
<med>
  med
</med>
<peer-id>
  peer-id
</peer-id>
<cluster-id>
  cluster-id
</cluster-id>
<path-id>
  path-id
</path-id>
<originator>
  originator
</originator>
<attrset>....</attrset>
<bgp-group-name>
  bgp-group-name
</bgp-group-name>
<deleted>
  deleted
</deleted>
<route-flap-damping>....</route-flap-damping>
<aggregate>....</aggregate>
<gateway>
  gateway
</gateway>
<indirect-nh-count>
  indirect-nh-count
</indirect-nh-count>
```

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```
            <composite-nh-count>
              composite-nh-count
            </composite-nh-count>
            <nh-type>
              nh-type
            </nh-type>
            <nh-index>
              nh-index
            </nh-index>
            <nh-address>
              nh-address
            </nh-address>
            <nh-reference-count>
              nh-reference-count
            </nh-reference-count>
            <nh-kernel-id>
              nh-kernel-id
            </nh-kernel-id>
            <ext-int-intf-index>
              ext-int-intf-index
            </ext-int-intf-index>
            <nh-flood-overflow>
              nh-flood-overflow
            </nh-flood-overflow>
            <nhh>....</nhh>
            <nh>....</nh>
            <protocol-nh>....</protocol-nh>
            <rtrib-primary>
              rtrib-primary
            </rtrib-primary>
            <rtrib-secondary>
              rtrib-secondary
            </rtrib-secondary>
            <backup-pe-group-name>
              backup-pe-group-name
            </backup-pe-group-name>
            <designated-forwarder>
              designated-forwarder
            </designated-forwarder>
          </rt-entry>
        </rt>
      </route-table>
    </route-summary-information>
```

Description

<rt-martians>

Usage

```
<route-information>
  <rt-martians>
    <rt-martian-table-name>
      rt-martian-table-name
    </rt-martian-table-name>
    <route-filter>....</route-filter>
```


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```
  </rt-martians>
</route-information>
```

Description

<rt-ribgroup>

Usage

```
<route-information>
  <rt-ribgroup>
    <rt-ribgroup-name>
      rt-ribgroup-name
    </rt-ribgroup-name>
    <rt-ribgroup-address>
      rt-ribgroup-address
    </rt-ribgroup-address>
    <rt-ribgroup-flags>
      rt-ribgroup-flags
    </rt-ribgroup-flags>
    <rt-ribgroup-address-family>
      rt-ribgroup-address-family
    </rt-ribgroup-address-family>
    <rt-ribgroup-refcount>
      rt-ribgroup-refcount
    </rt-ribgroup-refcount>
    <rt-ribgroup-export-name>
      rt-ribgroup-export-name
    </rt-ribgroup-export-name>
    <rt-ribgroup-import-name>
      rt-ribgroup-import-name
    </rt-ribgroup-import-name>
    <rt-ribgroup-import-policy-name>
      rt-ribgroup-import-policy-name
    </rt-ribgroup-import-policy-name>
    <rt-ribgroup-import-secondary-name>
      rt-ribgroup-import-secondary-name
    </rt-ribgroup-import-secondary-name>
    <rt-ribgroup-union-head-name>
      rt-ribgroup-union-head-name
    </rt-ribgroup-union-head-name>
    <rt-ribgroup-union-child-name>
      rt-ribgroup-union-child-name
    </rt-ribgroup-union-child-name>
  </rt-ribgroup>
</route-information>
```

Description

<rt-test-policy>

Usage

```
<route-information>
  <rt-test-policy>
    <rt-policy-name>
```

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```
      rt-policy-name
    </rt-policy-name>
    <rt-route-accepted>
      rt-route-accepted
    </rt-route-accepted>
    <rt-route-rejected>
      rt-route-rejected
    </rt-route-rejected>
  </rt-test-policy>
</route-information>
```

Description

<rt-test-policy-prefix>

Usage

```
<route-information>
  <rt-test-policy-prefix>
    <rt-policy-name>
      rt-policy-name
    </rt-policy-name>
    <rt-destination>
      rt-destination
    </rt-destination>
    <rt-prefix-length>
      rt-prefix-length
    </rt-prefix-length>
    <rt-test-policy-term>....</rt-test-policy-term>
  </rt-test-policy-prefix>
</route-information>
```

Description

<rt-test-policy-term>

Usage

```
<route-information>
  <rt-test-policy-prefix>
    <rt-test-policy-term>
      <rt-policy-term-name>
        rt-policy-term-name
      </rt-policy-term-name>
      <rt-policy-term-result>
        rt-policy-term-result
      </rt-policy-term-result>
      <rt-policy-term-action>
        rt-policy-term-action
      </rt-policy-term-action>
    </rt-test-policy-term>
  </rt-test-policy-prefix>
</route-information>
```

Description

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<rtd-flow-dep>

Usage

```
<route-information>
  <route-table>
    <rt>
      <rt-entry>
        <rtd-flow-dep>
          <flow-origin>
            flow-origin
          </flow-origin>
          <flow-dep-state>
            flow-dep-state
          </flow-dep-state>
          <flow-ucast-rt>....</flow-ucast-rt>
        </rtd-flow-dep>
      </rt-entry>
    </rt>
  </route-table>
</route-information>
```

Description

<rtd-flow-dep>

Usage

```
<route-summary-information>
  <route-table>
    <rt>
      <rt-entry>
        <rtd-flow-dep>
          <flow-origin>
            flow-origin
          </flow-origin>
          <flow-dep-state>
            flow-dep-state
          </flow-dep-state>
          <flow-ucast-rt>....</flow-ucast-rt>
        </rtd-flow-dep>
      </rt-entry>
    </rt>
  </route-table>
</route-summary-information>
```

Description

<rte-instance>

Usage

```
<rte-instance>
  <instance-name>
    instance-name
  </instance-name>
```

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```
  <rte-instance-type>
   rte-instance-type
  </rte-instance-type>
  <instance-flags>
   instance-flags
  </instance-flags>
  <instance-options>
   instance-options
  </instance-options>
  <import-policy>
   import-policy
  </import-policy>
  <export-policy>
   export-policy
  </export-policy>
</rte-instance>
```

Description

<rte-instance>

Usage

```
<rtexport-table-information>
  <rte-instance>
    <instance-name>
     instance-name
    </instance-name>
    <rte-instance-type>
     rte-instance-type
    </rte-instance-type>
    <instance-flags>
     instance-flags
    </instance-flags>
    <instance-options>
     instance-options
    </instance-options>
    <import-policy>
     import-policy
    </import-policy>
    <export-policy>
     export-policy
    </export-policy>
  </rte-instance>
</rtexport-table-information>
```

Description

<rte-table>

Usage

```
<rte-table>
  <table-name>
   table-name
  </table-name>
```


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```
  <table-export-on>
    table-export-on
  </table-export-on>
  <import-list>
    import-list
  </import-list>
  <table-flags>
    table-flags
  </table-flags>
  <table-usage>
    table-usage
  </table-usage>
</rte-table>
```

Description

<rte-table>

Usage

```
<rtexport-table-information>
  <rte-table>
    <table-name>
      table-name
    </table-name>
    <table-export-on>
      table-export-on
    </table-export-on>
    <import-list>
      import-list
    </import-list>
    <table-flags>
      table-flags
    </table-flags>
    <table-usage>
      table-usage
    </table-usage>
  </rte-table>
</rtexport-table-information>
```

Description

<rte-target>

Usage

```
<rte-target>
  <target-string>
    target-string
  </target-string>
  <family>
    family
  </family>
  <subaf>
    subaf
  </subaf>
```

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```
  <import-count>
   import-count
  </import-count>
  <export-count>
   export-count
  </export-count>
  <import-list>
   import-list
  </import-list>
  <export-list>
   export-list
  </export-list>
</rte-target>
```

Description

<rte-target>

Usage

```
<rtexport-table-information>
  <rte-target>
    <target-string>
     target-string
    </target-string>
    <family>
     family
    </family>
    <subaf>
     subaf
    </subaf>
    <import-count>
     import-count
    </import-count>
    <export-count>
     export-count
    </export-count>
    <import-list>
     import-list
    </import-list>
    <export-list>
     export-list
    </export-list>
  </rte-target>
</rtexport-table-information>
```

Description

<rtexport-table-information>

Usage

```
<rtexport-table-information>
  <rte-table>....</rte-table>
  <rte-target>....</rte-target>
  <rte-instance>....</rte-instance>
```


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```
</rtexport-table-information>
```

Description Operational information policy-based instance export

<rtflow-dep-information>

Usage

```
<rtflow-dep-information>
  <rtflow-dep-table>....</rtflow-dep-table>
</rtflow-dep-information>
```

Description Operational information on flow route validation

<rtflow-dep-table>

Usage

```
<rtflow-dep-information>
  <rtflow-dep-table>
    <table-name>
      table-name
    </table-name>
    <fdep-node>....</fdep-node>
  </rtflow-dep-table>
</rtflow-dep-information>
```

Description

<sap-listen>

Usage

```
<sap-listen-information>
  <sap-listen>
    <sap-listen-group>
      sap-listen-group
    </sap-listen-group>
    <sap-listen-port>
      sap-listen-port
    </sap-listen-port>
  </sap-listen>
</sap-listen-information>
```

Description

<sap-listen-information>

Usage

```
<sap-listen-information>
  <sap-listen>....</sap-listen>
</sap-listen-information>
```

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Description

<session-connection-data>

Usage

```
<multicast-sessions-information>
 <multicast-session>
  <session-connection-data>
   <session-address>
    session-address
   </session-address>
   <session-ttl>
    session-ttl
   </session-ttl>
   <session-layers>
    session-layers
   </session-layers>
  </session-connection-data>
 </multicast-session>
</multicast-sessions-information>
```

Description

<session-origin>

Usage

```
<multicast-sessions-information>
 <multicast-session>
  <session-origin>
   <session-originator-username>
    session-originator-username
   </session-originator-username>
   <session-originator-address>
    session-originator-address
   </session-originator-address>
  </session-origin>
 </multicast-session>
</multicast-sessions-information>
```

Description

<source-family>

Usage

```
<pim-source-information>
 <source-family>
  <pim-instance>
   pim-instance
  </pim-instance>
  <address-family>
   address-family
  </address-family>
  <pim-source>....</pim-source>
 </source-family>
```


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```
</pim-source-information>
```

Description

<sparse-downstream-interface>

Usage

```
<pim-join-information>
 <join-family>
  <join-group>
   <sparse-downstream-interface>
    <pim-interface-name>
     pim-interface-name
    </pim-interface-name>
    <register-rp>
     register-rp
    </register-rp>
    <register-interface-name>
     register-interface-name
    </register-interface-name>
    <pim-interface-state>
     pim-interface-state
    </pim-interface-state>
    <pim-pseudo-downstream-interface-name>
     pim-pseudo-downstream-interface-name
    </pim-pseudo-downstream-interface-name>
    <downstream-neighbor>....</downstream-neighbor>
    <downstream-assert-neighbor>....</downstream-assert-neighbor>
   </sparse-downstream-interface>
  </join-group>
 </join-family>
</pim-join-information>
```

Description

<srlg>

Usage

```
<rsvp-session-data>
 <rsvp-session>
  <mpls-lsp>
   <mpls-lsp-path>
    <srlg>
     <srlg-name>
      srlg-name
     </srlg-name>
    </srlg>
   </mpls-lsp-path>
  </mpls-lsp>
 </rsvp-session>
</rsvp-session-data>
```

Description

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<srlg>

Usage

```
<rsvp-session>
  <mpls-lsp>
    <mpls-lsp-path>
      <srlg>
        <srlg-name>
          srlg-name
        </srlg-name>
      </srlg>
    </mpls-lsp-path>
  </mpls-lsp>
</rsvp-session>
```

Description

<srlg>

Usage

```
<rsvp-session-information>
  <rsvp-session-data>
    <rsvp-session>
      <mpls-lsp>
        <mpls-lsp-path>
          <srlg>
            <srlg-name>
              srlg-name
            </srlg-name>
          </srlg>
        </mpls-lsp-path>
      </mpls-lsp>
    </rsvp-session>
  </rsvp-session-data>
</rsvp-session-information>
```

Description

<srlg>

Usage

```
<mpls-lsp-path>
  <srlg>
    <srlg-name>
      srlg-name
    </srlg-name>
  </srlg>
</mpls-lsp-path>
```

Description

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<srlg>

Usage

```
<mpls-lsp>
 <mpls-lsp-path>
  <srlg>
   <srlg-name>
    srlg-name
   </srlg-name>
  </srlg>
 </mpls-lsp-path>
</mpls-lsp>
```

Description

<srlg>

Usage

```
<mpls-lsp-information>
 <rsvp-session-data>
  <rsvp-session>
   <mpls-lsp>
    <mpls-lsp-path>
     <srlg>
      <srlg-name>
       srlg-name
      </srlg-name>
     </srlg>
    </mpls-lsp-path>
   </mpls-lsp>
  </rsvp-session>
 </rsvp-session-data>
</mpls-lsp-information>
```

Description

<srlg>

Usage

```
<mpls-call-admission-control-information>
 <mpls-call-admission-control>
  <mpls-lsp>
   <mpls-lsp-path>
    <srlg>
     <srlg-name>
      srlg-name
     </srlg-name>
    </srlg>
   </mpls-lsp-path>
  </mpls-lsp>
 </mpls-call-admission-control>
</mpls-call-admission-control-information>
```

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Description

<statistics-family>

Usage

```
<pim-statistics-information>
 <statistics-family>
  <pim-instance>
   pim-instance
  </pim-instance>
  <address-family>
   address-family
  </address-family>
  <pim-statistics-interface>....</pim-statistics-interface>
 </statistics-family>
</pim-statistics-information>
```

Description

<switching-capability-descriptor>

Usage

```
<switching-capability-descriptor>
 <encoding-type>
  encoding-type
 </encoding-type>
 <switching-type>
  switching-type
 </switching-type>
 <maximum-lsp-bw0>
  maximum-lsp-bw0
 </maximum-lsp-bw0>
 <maximum-lsp-bw1>
  maximum-lsp-bw1
 </maximum-lsp-bw1>
 <maximum-lsp-bw2>
  maximum-lsp-bw2
 </maximum-lsp-bw2>
 <maximum-lsp-bw3>
  maximum-lsp-bw3
 </maximum-lsp-bw3>
 <maximum-lsp-bw4>
  maximum-lsp-bw4
 </maximum-lsp-bw4>
 <maximum-lsp-bw5>
  maximum-lsp-bw5
 </maximum-lsp-bw5>
 <maximum-lsp-bw6>
  maximum-lsp-bw6
 </maximum-lsp-bw6>
 <maximum-lsp-bw7>
  maximum-lsp-bw7
 </maximum-lsp-bw7>
 <minimum-lsp-bw>
  minimum-lsp-bw
```


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```
</minimum-lsp-bw>
<mtu>
  mtu
</mtu>
<tdm-indication>
  tdm-indication
</tdm-indication>
</switching-capability-descriptor>
```

Description Switching capability of an interface

<switching-capability-descriptor>

Usage

```
<ted-link>
  <switching-capability-descriptor>
    <encoding-type>
      encoding-type
    </encoding-type>
    <switching-type>
      switching-type
    </switching-type>
    <maximum-lsp-bw0>
      maximum-lsp-bw0
    </maximum-lsp-bw0>
    <maximum-lsp-bw1>
      maximum-lsp-bw1
    </maximum-lsp-bw1>
    <maximum-lsp-bw2>
      maximum-lsp-bw2
    </maximum-lsp-bw2>
    <maximum-lsp-bw3>
      maximum-lsp-bw3
    </maximum-lsp-bw3>
    <maximum-lsp-bw4>
      maximum-lsp-bw4
    </maximum-lsp-bw4>
    <maximum-lsp-bw5>
      maximum-lsp-bw5
    </maximum-lsp-bw5>
    <maximum-lsp-bw6>
      maximum-lsp-bw6
    </maximum-lsp-bw6>
    <maximum-lsp-bw7>
      maximum-lsp-bw7
    </maximum-lsp-bw7>
    <minimum-lsp-bw>
      minimum-lsp-bw
    </minimum-lsp-bw>
    <mtu>
      mtu
    </mtu>
    <tdm-indication>
      tdm-indication
```

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```
    </tdm-indication>
  </switching-capability-descriptor>
</ted-link>
```

Description Switching capability of an interface

<switching-capability-descriptor>

Usage

```
<ted-database>
  <ted-link>
    <switching-capability-descriptor>
      <encoding-type>
        encoding-type
      </encoding-type>
      <switching-type>
        switching-type
      </switching-type>
      <maximum-lsp-bw0>
        maximum-lsp-bw0
      </maximum-lsp-bw0>
      <maximum-lsp-bw1>
        maximum-lsp-bw1
      </maximum-lsp-bw1>
      <maximum-lsp-bw2>
        maximum-lsp-bw2
      </maximum-lsp-bw2>
      <maximum-lsp-bw3>
        maximum-lsp-bw3
      </maximum-lsp-bw3>
      <maximum-lsp-bw4>
        maximum-lsp-bw4
      </maximum-lsp-bw4>
      <maximum-lsp-bw5>
        maximum-lsp-bw5
      </maximum-lsp-bw5>
      <maximum-lsp-bw6>
        maximum-lsp-bw6
      </maximum-lsp-bw6>
      <maximum-lsp-bw7>
        maximum-lsp-bw7
      </maximum-lsp-bw7>
      <minimum-lsp-bw>
        minimum-lsp-bw
      </minimum-lsp-bw>
      <mtu>
        mtu
      </mtu>
      <tdm-indication>
        tdm-indication
      </tdm-indication>
    </switching-capability-descriptor>
  </ted-link>
```


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```
</ted-database>
```

Description Switching capability of an interface

<switching-capability-descriptor>

Usage

```
<ted-database-information>
 <ted-database>
  <ted-link>
   <switching-capability-descriptor>
    <encoding-type>
     encoding-type
    </encoding-type>
    <switching-type>
     switching-type
    </switching-type>
    <maximum-lsp-bw0>
     maximum-lsp-bw0
    </maximum-lsp-bw0>
    <maximum-lsp-bw1>
     maximum-lsp-bw1
    </maximum-lsp-bw1>
    <maximum-lsp-bw2>
     maximum-lsp-bw2
    </maximum-lsp-bw2>
    <maximum-lsp-bw3>
     maximum-lsp-bw3
    </maximum-lsp-bw3>
    <maximum-lsp-bw4>
     maximum-lsp-bw4
    </maximum-lsp-bw4>
    <maximum-lsp-bw5>
     maximum-lsp-bw5
    </maximum-lsp-bw5>
    <maximum-lsp-bw6>
     maximum-lsp-bw6
    </maximum-lsp-bw6>
    <maximum-lsp-bw7>
     maximum-lsp-bw7
    </maximum-lsp-bw7>
    <minimum-lsp-bw>
     minimum-lsp-bw
    </minimum-lsp-bw>
    <mtu>
     mtu
    </mtu>
    <tdm-indication>
     tdm-indication
    </tdm-indication>
   </switching-capability-descriptor>
  </ted-link>
 </ted-database>
```

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```
</ted-database-information>
```

Description Switching capability of an interface

<switching-capability-descriptor>

Usage

```
<ted-link-information>
  <ted-link>
    <switching-capability-descriptor>
      <encoding-type>
        encoding-type
      </encoding-type>
      <switching-type>
        switching-type
      </switching-type>
      <maximum-lsp-bw0>
        maximum-lsp-bw0
      </maximum-lsp-bw0>
      <maximum-lsp-bw1>
        maximum-lsp-bw1
      </maximum-lsp-bw1>
      <maximum-lsp-bw2>
        maximum-lsp-bw2
      </maximum-lsp-bw2>
      <maximum-lsp-bw3>
        maximum-lsp-bw3
      </maximum-lsp-bw3>
      <maximum-lsp-bw4>
        maximum-lsp-bw4
      </maximum-lsp-bw4>
      <maximum-lsp-bw5>
        maximum-lsp-bw5
      </maximum-lsp-bw5>
      <maximum-lsp-bw6>
        maximum-lsp-bw6
      </maximum-lsp-bw6>
      <maximum-lsp-bw7>
        maximum-lsp-bw7
      </maximum-lsp-bw7>
      <minimum-lsp-bw>
        minimum-lsp-bw
      </minimum-lsp-bw>
      <mtu>
        mtu
      </mtu>
      <tdm-indication>
        tdm-indication
      </tdm-indication>
    </switching-capability-descriptor>
  </ted-link>
</ted-link-information>
```


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Description Switching capability of an interface

<task>

Usage

```
<task-information>
  <task>
    <task-name>
      task-name
    </task-name>
    <task-no-information>
      task-no-information
    </task-no-information>
    <task-timer>....</task-timer>
  </task>
</task-information>
```

Description

<task>

Usage

```
<task-timer-information>
  <task>
    <task-name>
      task-name
    </task-name>
    <task-no-information>
      task-no-information
    </task-no-information>
    <task-timer>....</task-timer>
  </task>
</task-timer-information>
```

Description

<task-block>

Usage

```
<task-block-list>
  <task-block>
    <tb-name>
      tb-name
    </tb-name>
    <tb-size>
      tb-size
    </tb-size>
    <tb-alloc-size>
      tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
      tb-terse-transient
    </tb-terse-transient>
```

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```
    <tb-terse-fullpage>
      tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
      tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
      tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
      tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
      tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
      tb-max-alloc-bytes
    </tb-max-alloc-bytes>
  </task-block>
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>
        <tb-name>
          tb-name
        </tb-name>
        <tb-size>
          tb-size
        </tb-size>
        <tb-alloc-size>
          tb-alloc-size
        </tb-alloc-size>
        <tb-terse-transient>
          tb-terse-transient
        </tb-terse-transient>
        <tb-terse-fullpage>
          tb-terse-fullpage
        </tb-terse-fullpage>
        <tb-terse-debug>
          tb-terse-debug
        </tb-terse-debug>
        <tb-alloc-blocks>
          tb-alloc-blocks
        </tb-alloc-blocks>
        <tb-alloc-bytes>
          tb-alloc-bytes
        </tb-alloc-bytes>
        <tb-max-alloc-blocks>
```


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```
            tb-max-alloc-blocks
           </tb-max-alloc-blocks>
           <tb-max-alloc-bytes>
            tb-max-alloc-bytes
           </tb-max-alloc-bytes>
          </task-block>
         </task-block-list>
        </task-memory-allocator-report>
       </task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
 <task-block>....</task-block>
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-block-list>
   <task-block>....</task-block>
  </task-block-list>
 </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-information>

Usage

```
<task-information>
 <task>....</task>
</task-information>
```

Description

<task-lite-page>

Usage

```
<task-lite-page-list>
 <task-lite-page>
  <tlp-name>
   tlp-name
  </tlp-name>
  <tlp-alloc-pages>
```

```
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>
        <tlp-name>
          tlp-name
        </tlp-name>
        <tlp-alloc-pages>
          tlp-alloc-pages
        </tlp-alloc-pages>
        <tlp-alloc-bytes>
          tlp-alloc-bytes
        </tlp-alloc-bytes>
        <tlp-max-alloc-pages>
          tlp-max-alloc-pages
        </tlp-max-alloc-pages>
        <tlp-max-alloc-bytes>
          tlp-max-alloc-bytes
        </tlp-max-alloc-bytes>
      </task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page-list>

Usage

```
<task-lite-page-list>
  <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

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<task-lite-page-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>....</task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
  </task-malloc>
</task-malloc-list>
```

Description

<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
```

```
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
      </task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
```


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```
            task-memory-total-max-bytes
          </task-memory-total-max-bytes>
        </task-memory-allocator-report>
      </task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
    task-memory-in-use-size
  </task-memory-in-use-size>
  <task-memory-in-use-avail>
    task-memory-in-use-avail
  </task-memory-in-use-avail>
  <task-memory-max-size>
    task-memory-max-size
  </task-memory-max-size>
  <task-memory-max-avail>
    task-memory-max-avail
  </task-memory-max-avail>
  <task-memory-max-when>
    task-memory-max-when
  </task-memory-max-when>
  <task-memory-free-size>
    task-memory-free-size
  </task-memory-free-size>
  <task-memory-overall-report>....</task-memory-overall-report>
  <task-memory-allocator-report>....</task-memory-allocator-report>
  <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
  <task-memory-dynamic-allocs>
    task-memory-dynamic-allocs
  </task-memory-dynamic-allocs>
  <task-memory-max-dynamic-allocs>
    task-memory-max-dynamic-allocs
  </task-memory-max-dynamic-allocs>
  <task-memory-bss-bytes>
    task-memory-bss-bytes
  </task-memory-bss-bytes>
  <task-memory-max-bss-bytes>
    task-memory-max-bss-bytes
  </task-memory-max-bss-bytes>
  <task-memory-page-data-bytes>
    task-memory-page-data-bytes
  </task-memory-page-data-bytes>
  <task-memory-max-page-data-bytes>
    task-memory-max-page-data-bytes
  </task-memory-max-page-data-bytes>
  <task-memory-dir-bytes>
    task-memory-dir-bytes
  </task-memory-dir-bytes>
  <task-memory-max-dir-bytes>
    task-memory-max-dir-bytes
```

```
  </task-memory-max-dir-bytes>
  <task-memory-total-bytes-in-use>
    task-memory-total-bytes-in-use
  </task-memory-total-bytes-in-use>
  <task-memory-total-bytes-percent>
    task-memory-total-bytes-percent
  </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
    <task-memory-total-free-bytes>
      task-memory-total-free-bytes
    </task-memory-total-free-bytes>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
```


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```
<tms-name>
  tms-name
</tms-name>
<tms-allocs>
  tms-allocs
</tms-allocs>
<tms-mallocs>
  tms-mallocs
</tms-mallocs>
<tms-alloc-bytes>
  tms-alloc-bytes
</tms-alloc-bytes>
<tms-max-allocs>
  tms-max-allocs
</tms-max-allocs>
<tms-max-bytes>
  tms-max-bytes
</tms-max-bytes>
<tms-free-bytes>
  tms-free-bytes
</tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>
        <tms-name>
          tms-name
        </tms-name>
        <tms-allocs>
          tms-allocs
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
          tms-alloc-bytes
        </tms-alloc-bytes>
        <tms-max-allocs>
          tms-max-allocs
        </tms-max-allocs>
        <tms-max-bytes>
          tms-max-bytes
        </tms-max-bytes>
        <tms-free-bytes>
          tms-free-bytes
        </tms-free-bytes>
      </task-memory-stats>
    </task-memory-stats-list>
```

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```
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>....</task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
  <task-gres-state>
    task-gres-state
  </task-gres-state>
  <task-re-mode>
    task-re-mode
  </task-re-mode>
  <task-protocol-replication-state>
    task-protocol-replication-state
  </task-protocol-replication-state>
  <task-protocol-replication-name>
    task-protocol-replication-name
  </task-protocol-replication-name>
</task-replication-state>
```

Description Current state of task replication

<task-size-block>

Usage

```
<task-size-block-list>
  <task-size-block>
    <tsb-size>
      tsb-size
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
```


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```
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
          tsb-allocs
        </tsb-allocs>
        <tsb-mallocs>
          tsb-mallocs
        </tsb-mallocs>
        <tsb-alloc-bytes>
          tsb-alloc-bytes
        </tsb-alloc-bytes>
        <tsb-max-allocs>
          tsb-max-allocs
        </tsb-max-allocs>
        <tsb-max-bytes>
          tsb-max-bytes
        </tsb-max-bytes>
        <tsb-free-bytes>
```

```
            tsb-free-bytes
           </tsb-free-bytes>
          </task-size-block>
         </task-size-block-list>
        </task-memory-overall-report>
       </task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
 <task-size-block>....</task-size-block>
</task-size-block-list>
```

Description

<task-size-block-list>

Usage

```
<task-memory-information>
 <task-memory-overall-report>
  <task-size-block-list>
   <task-size-block>....</task-size-block>
  </task-size-block-list>
 </task-memory-overall-report>
</task-memory-information>
```

Description

<task-timer>

Usage

```
<task-information>
 <task>
  <task-timer>
   <timer-name>
    timer-name
   </timer-name>
   <timer-late>
    timer-late
   </timer-late>
   <timer-expires>
    timer-expires
   </timer-expires>
   <timer-jitter>
    timer-jitter
   </timer-jitter>
   <timer-interval>
    timer-interval
   </timer-interval>
   <timer-flags>
```


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```
            timer-flags
           </timer-flags>
          </task-timer>
         </task>
        </task-information>
```

Description

<task-timer>

Usage

```
<task-timer>
 <timer-name>
  timer-name
 </timer-name>
 <timer-late>
  timer-late
 </timer-late>
 <timer-expires>
  timer-expires
 </timer-expires>
 <timer-jitter>
  timer-jitter
 </timer-jitter>
 <timer-interval>
  timer-interval
 </timer-interval>
 <timer-flags>
  timer-flags
 </timer-flags>
</task-timer>
```

Description

<task-timer>

Usage

```
<task-timer-information>
 <task>
  <task-timer>
   <timer-name>
    timer-name
   </timer-name>
   <timer-late>
    timer-late
   </timer-late>
   <timer-expires>
    timer-expires
   </timer-expires>
   <timer-jitter>
    timer-jitter
   </timer-jitter>
   <timer-interval>
    timer-interval
```

```
      </timer-interval>
      <timer-flags>
       timer-flags
      </timer-flags>
     </task-timer>
    </task>
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
</task-timer-information>
```

Description

<te-class-map>

Usage

```
<te-class-map>
  <te-class>
   te-class
  </te-class>
  <traffic-class>
   traffic-class
  </traffic-class>
  <te-prio>
   te-prio
  </te-prio>
</te-class-map>
```

Description

<te-class-map>

Usage

```
<mpls-diffserv-te-information>
  <te-class-map>
    <te-class>
     te-class
    </te-class>
    <traffic-class>
     traffic-class
    </traffic-class>
    <te-prio>
     te-prio
    </te-prio>
  </te-class-map>
</mpls-diffserv-te-information>
```


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Description

<te-subtlv>

Usage

```
<te-subtlv>
  <tlv-type-name>
    tlv-type-name
  </tlv-type-name>
  <tlv-type-value>
    tlv-type-value
  </tlv-type-value>
  <tlv-length>
    tlv-length
  </tlv-length>
  <bytes-left>
    bytes-left
  </bytes-left>
  <formatted-tlv-data>
    formatted-tlv-data
  </formatted-tlv-data>
</te-subtlv>
```

Description

<te-subtlv>

Usage

```
<ospf-opaque-area-lsa>
  <te-subtlv>
    <tlv-type-name>
      tlv-type-name
    </tlv-type-name>
    <tlv-type-value>
      tlv-type-value
    </tlv-type-value>
    <tlv-length>
      tlv-length
    </tlv-length>
    <bytes-left>
      bytes-left
    </bytes-left>
    <formatted-tlv-data>
      formatted-tlv-data
    </formatted-tlv-data>
  </te-subtlv>
</ospf-opaque-area-lsa>
```

Description

<te-subtlv>

Usage

```
<ospf-database>
```

```
  <ospf-opaque-area-lsa>
   <te-subtlv>
    <tlv-type-name>
     tlv-type-name
    </tlv-type-name>
    <tlv-type-value>
     tlv-type-value
    </tlv-type-value>
    <tlv-length>
     tlv-length
    </tlv-length>
    <bytes-left>
     bytes-left
    </bytes-left>
    <formatted-tlv-data>
     formatted-tlv-data
    </formatted-tlv-data>
   </te-subtlv>
  </ospf-opaque-area-lsa>
</ospf-database>
```

Description

<te-subtlv>

Usage

```
<ospf-database-information>
 <ospf-database>
  <ospf-opaque-area-lsa>
   <te-subtlv>
    <tlv-type-name>
     tlv-type-name
    </tlv-type-name>
    <tlv-type-value>
     tlv-type-value
    </tlv-type-value>
    <tlv-length>
     tlv-length
    </tlv-length>
    <bytes-left>
     bytes-left
    </bytes-left>
    <formatted-tlv-data>
     formatted-tlv-data
    </formatted-tlv-data>
   </te-subtlv>
  </ospf-opaque-area-lsa>
 </ospf-database>
</ospf-database-information>
```

Description

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<ted-database>

Usage

```
<ted-database>
  <ted-database-id>
    ted-database-id
  </ted-database-id>
  <ted-database-id-overload>
    ted-database-id-overload
  </ted-database-id-overload>
  <ted-database-type>
    ted-database-type
  </ted-database-type>
  <ted-database-age>
    ted-database-age
  </ted-database-age>
  <ted-database-link-in>
    ted-database-link-in
  </ted-database-link-in>
  <ted-database-link-out>
    ted-database-link-out
  </ted-database-link-out>
  <ted-database-protocol>
    ted-database-protocol
  </ted-database-protocol>
  <ted-link>....</ted-link>
  <ted-database-lcl-addr>....</ted-database-lcl-addr>
</ted-database>
```

Description MPLS traffic engineering database

<ted-database>

Usage

```
<ted-database-information>
  <ted-database>
    <ted-database-id>
      ted-database-id
    </ted-database-id>
    <ted-database-id-overload>
      ted-database-id-overload
    </ted-database-id-overload>
    <ted-database-type>
      ted-database-type
    </ted-database-type>
    <ted-database-age>
      ted-database-age
    </ted-database-age>
    <ted-database-link-in>
      ted-database-link-in
    </ted-database-link-in>
    <ted-database-link-out>
      ted-database-link-out
```

```
    </ted-database-link-out>
    <ted-database-protocol>
     ted-database-protocol
    </ted-database-protocol>
    <ted-link>....</ted-link>
    <ted-database-lcl-addr>....</ted-database-lcl-addr>
   </ted-database>
</ted-database-information>
```

Description MPLS traffic engineering database

<ted-database-information>

Usage

```
<ted-database-information>
  <ted-database-summary>....</ted-database-summary>
  <ted-database>....</ted-database>
</ted-database-information>
```

Description

<ted-database-lcl-addr>

Usage

```
<ted-database-lcl-addr>
  <ted-lcl-addr>
    ted-lcl-addr
  </ted-lcl-addr>
</ted-database-lcl-addr>
```

Description

<ted-database-lcl-addr>

Usage

```
<ted-database>
  <ted-database-lcl-addr>
    <ted-lcl-addr>
      ted-lcl-addr
    </ted-lcl-addr>
  </ted-database-lcl-addr>
</ted-database>
```

Description

<ted-database-lcl-addr>

Usage

```
<ted-database-information>
  <ted-database>
    <ted-database-lcl-addr>
```


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```
        <ted-lcl-addr>
          ted-lcl-addr
        </ted-lcl-addr>
      </ted-database-lcl-addr>
    </ted-database>
  </ted-database-information>
```

Description

<ted-database-summary>

Usage

```
<ted-database-summary>
  <ted-database-iso-count>
    ted-database-iso-count
  </ted-database-iso-count>
  <ted-database-inet-count>
    ted-database-inet-count
  </ted-database-inet-count>
</ted-database-summary>
```

Description

<ted-database-summary>

Usage

```
<ted-database-information>
  <ted-database-summary>
    <ted-database-iso-count>
      ted-database-iso-count
    </ted-database-iso-count>
    <ted-database-inet-count>
      ted-database-inet-count
    </ted-database-inet-count>
  </ted-database-summary>
</ted-database-information>
```

Description

<ted-link>

Usage

```
<ted-link>
  <ted-link-from>
    ted-link-from
  </ted-link-from>
  <ted-link-to>
    ted-link-to
  </ted-link-to>
  <ted-link-local-address>
    ted-link-local-address
  </ted-link-local-address>
  <ted-link-remote-address>
```

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```
  ted-link-remote-address
</ted-link-remote-address>
<ted-link-local-ifindex>
  ted-link-local-ifindex
</ted-link-local-ifindex>
<ted-link-remote-ifindex>
  ted-link-remote-ifindex
</ted-link-remote-ifindex>
<admin-groups>....</admin-groups>
<ted-link-extended-admin-group>....</ted-link-extended-admin-group>
<ted-link-metric>
  ted-link-metric
</ted-link-metric>
<ted-link-link-out>
  ted-link-link-out
</ted-link-link-out>
<ted-link-static-bandwidth>
  ted-link-static-bandwidth
</ted-link-static-bandwidth>
<ted-link-reservable-bandwidth>
  ted-link-reservable-bandwidth
</ted-link-reservable-bandwidth>
<ted-link-forwarding-adjacency>
  ted-link-forwarding-adjacency
</ted-link-forwarding-adjacency>
<ted-link-local-bw0>
  ted-link-local-bw0
</ted-link-local-bw0>
<ted-link-local-bw1>
  ted-link-local-bw1
</ted-link-local-bw1>
<ted-link-local-bw2>
  ted-link-local-bw2
</ted-link-local-bw2>
<ted-link-local-bw3>
  ted-link-local-bw3
</ted-link-local-bw3>
<ted-link-local-bw4>
  ted-link-local-bw4
</ted-link-local-bw4>
<ted-link-local-bw5>
  ted-link-local-bw5
</ted-link-local-bw5>
<ted-link-local-bw6>
  ted-link-local-bw6
</ted-link-local-bw6>
<ted-link-local-bw7>
  ted-link-local-bw7
</ted-link-local-bw7>
<ted-link-avail-bw0>
  ted-link-avail-bw0
</ted-link-avail-bw0>
<ted-link-avail-bw1>
  ted-link-avail-bw1
</ted-link-avail-bw1>
<ted-link-avail-bw2>
```


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```
  ted-link-avail-bw2
 </ted-link-avail-bw2>
 <ted-link-avail-bw3>
  ted-link-avail-bw3
 </ted-link-avail-bw3>
 <ted-link-avail-bw4>
  ted-link-avail-bw4
 </ted-link-avail-bw4>
 <ted-link-avail-bw5>
  ted-link-avail-bw5
 </ted-link-avail-bw5>
 <ted-link-avail-bw6>
  ted-link-avail-bw6
 </ted-link-avail-bw6>
 <ted-link-avail-bw7>
  ted-link-avail-bw7
 </ted-link-avail-bw7>
 <ted-link-model>
  ted-link-model
 </ted-link-model>
 <ted-link-ct-bw0>
  ted-link-ct-bw0
 </ted-link-ct-bw0>
 <ted-link-ct-bw1>
  ted-link-ct-bw1
 </ted-link-ct-bw1>
 <ted-link-ct-bw2>
  ted-link-ct-bw2
 </ted-link-ct-bw2>
 <ted-link-ct-bw3>
  ted-link-ct-bw3
 </ted-link-ct-bw3>
 <ted-link-ct-bw4>
  ted-link-ct-bw4
 </ted-link-ct-bw4>
 <ted-link-ct-bw5>
  ted-link-ct-bw5
 </ted-link-ct-bw5>
 <ted-link-ct-bw6>
  ted-link-ct-bw6
 </ted-link-ct-bw6>
 <ted-link-ct-bw7>
  ted-link-ct-bw7
 </ted-link-ct-bw7>
 <switching-capability-descriptor>....</switching-capability-descriptor>
 <ted-link-srlg>....</ted-link-srlg>
 <ted-link-unreserved-bw-tlv-meaning>
  ted-link-unreserved-bw-tlv-meaning
 </ted-link-unreserved-bw-tlv-meaning>
 <ted-link-dste-tlv-meaning>
  ted-link-dste-tlv-meaning
 </ted-link-dste-tlv-meaning>
</ted-link>
```

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Description

<ted-link>

Usage

```
<ted-database>
 <ted-link>
  <ted-link-from>
   ted-link-from
  </ted-link-from>
  <ted-link-to>
   ted-link-to
  </ted-link-to>
  <ted-link-local-address>
   ted-link-local-address
  </ted-link-local-address>
  <ted-link-remote-address>
   ted-link-remote-address
  </ted-link-remote-address>
  <ted-link-local-ifindex>
   ted-link-local-ifindex
  </ted-link-local-ifindex>
  <ted-link-remote-ifindex>
   ted-link-remote-ifindex
  </ted-link-remote-ifindex>
  <admin-groups>....</admin-groups>
  <ted-link-extended-admin-group>....</ted-link-extended-admin-group>
  <ted-link-metric>
   ted-link-metric
  </ted-link-metric>
  <ted-link-link-out>
   ted-link-link-out
  </ted-link-link-out>
  <ted-link-static-bandwidth>
   ted-link-static-bandwidth
  </ted-link-static-bandwidth>
  <ted-link-reservable-bandwidth>
   ted-link-reservable-bandwidth
  </ted-link-reservable-bandwidth>
  <ted-link-forwarding-adjacency>
   ted-link-forwarding-adjacency
  </ted-link-forwarding-adjacency>
  <ted-link-local-bw0>
   ted-link-local-bw0
  </ted-link-local-bw0>
  <ted-link-local-bw1>
   ted-link-local-bw1
  </ted-link-local-bw1>
  <ted-link-local-bw2>
   ted-link-local-bw2
  </ted-link-local-bw2>
  <ted-link-local-bw3>
   ted-link-local-bw3
  </ted-link-local-bw3>
  <ted-link-local-bw4>
   ted-link-local-bw4
```


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```
</ted-link-local-bw4>
<ted-link-local-bw5>
  ted-link-local-bw5
</ted-link-local-bw5>
<ted-link-local-bw6>
  ted-link-local-bw6
</ted-link-local-bw6>
<ted-link-local-bw7>
  ted-link-local-bw7
</ted-link-local-bw7>
<ted-link-avail-bw0>
  ted-link-avail-bw0
</ted-link-avail-bw0>
<ted-link-avail-bw1>
  ted-link-avail-bw1
</ted-link-avail-bw1>
<ted-link-avail-bw2>
  ted-link-avail-bw2
</ted-link-avail-bw2>
<ted-link-avail-bw3>
  ted-link-avail-bw3
</ted-link-avail-bw3>
<ted-link-avail-bw4>
  ted-link-avail-bw4
</ted-link-avail-bw4>
<ted-link-avail-bw5>
  ted-link-avail-bw5
</ted-link-avail-bw5>
<ted-link-avail-bw6>
  ted-link-avail-bw6
</ted-link-avail-bw6>
<ted-link-avail-bw7>
  ted-link-avail-bw7
</ted-link-avail-bw7>
<ted-link-model>
  ted-link-model
</ted-link-model>
<ted-link-ct-bw0>
  ted-link-ct-bw0
</ted-link-ct-bw0>
<ted-link-ct-bw1>
  ted-link-ct-bw1
</ted-link-ct-bw1>
<ted-link-ct-bw2>
  ted-link-ct-bw2
</ted-link-ct-bw2>
<ted-link-ct-bw3>
  ted-link-ct-bw3
</ted-link-ct-bw3>
<ted-link-ct-bw4>
  ted-link-ct-bw4
</ted-link-ct-bw4>
<ted-link-ct-bw5>
  ted-link-ct-bw5
</ted-link-ct-bw5>
<ted-link-ct-bw6>
```

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```
      ted-link-ct-bw6
    </ted-link-ct-bw6>
    <ted-link-ct-bw7>
      ted-link-ct-bw7
    </ted-link-ct-bw7>
    <switching-capability-descriptor>....</switching-capability-descriptor>
    <ted-link-srlg>....</ted-link-srlg>
    <ted-link-unreserved-bw-tlv-meaning>
      ted-link-unreserved-bw-tlv-meaning
    </ted-link-unreserved-bw-tlv-meaning>
    <ted-link-dste-tlv-meaning>
      ted-link-dste-tlv-meaning
    </ted-link-dste-tlv-meaning>
  </ted-link>
</ted-database>
```

Description

<ted-link>

Usage

```
<ted-database-information>
  <ted-database>
    <ted-link>
      <ted-link-from>
        ted-link-from
      </ted-link-from>
      <ted-link-to>
        ted-link-to
      </ted-link-to>
      <ted-link-local-address>
        ted-link-local-address
      </ted-link-local-address>
      <ted-link-remote-address>
        ted-link-remote-address
      </ted-link-remote-address>
      <ted-link-local-ifindex>
        ted-link-local-ifindex
      </ted-link-local-ifindex>
      <ted-link-remote-ifindex>
        ted-link-remote-ifindex
      </ted-link-remote-ifindex>
      <admin-groups>....</admin-groups>
      <ted-link-extended-admin-group>....</ted-link-extended-admin-group>
      <ted-link-metric>
        ted-link-metric
      </ted-link-metric>
      <ted-link-link-out>
        ted-link-link-out
      </ted-link-link-out>
      <ted-link-static-bandwidth>
        ted-link-static-bandwidth
      </ted-link-static-bandwidth>
      <ted-link-reservable-bandwidth>
        ted-link-reservable-bandwidth
```


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```
</ted-link-reservable-bandwidth>
<ted-link-forwarding-adjacency>
  ted-link-forwarding-adjacency
</ted-link-forwarding-adjacency>
<ted-link-local-bw0>
  ted-link-local-bw0
</ted-link-local-bw0>
<ted-link-local-bw1>
  ted-link-local-bw1
</ted-link-local-bw1>
<ted-link-local-bw2>
  ted-link-local-bw2
</ted-link-local-bw2>
<ted-link-local-bw3>
  ted-link-local-bw3
</ted-link-local-bw3>
<ted-link-local-bw4>
  ted-link-local-bw4
</ted-link-local-bw4>
<ted-link-local-bw5>
  ted-link-local-bw5
</ted-link-local-bw5>
<ted-link-local-bw6>
  ted-link-local-bw6
</ted-link-local-bw6>
<ted-link-local-bw7>
  ted-link-local-bw7
</ted-link-local-bw7>
<ted-link-avail-bw0>
  ted-link-avail-bw0
</ted-link-avail-bw0>
<ted-link-avail-bw1>
  ted-link-avail-bw1
</ted-link-avail-bw1>
<ted-link-avail-bw2>
  ted-link-avail-bw2
</ted-link-avail-bw2>
<ted-link-avail-bw3>
  ted-link-avail-bw3
</ted-link-avail-bw3>
<ted-link-avail-bw4>
  ted-link-avail-bw4
</ted-link-avail-bw4>
<ted-link-avail-bw5>
  ted-link-avail-bw5
</ted-link-avail-bw5>
<ted-link-avail-bw6>
  ted-link-avail-bw6
</ted-link-avail-bw6>
<ted-link-avail-bw7>
  ted-link-avail-bw7
</ted-link-avail-bw7>
<ted-link-model>
  ted-link-model
</ted-link-model>
<ted-link-ct-bw0>
```

```
            ted-link-ct-bw0
           </ted-link-ct-bw0>
           <ted-link-ct-bw1>
            ted-link-ct-bw1
           </ted-link-ct-bw1>
           <ted-link-ct-bw2>
            ted-link-ct-bw2
           </ted-link-ct-bw2>
           <ted-link-ct-bw3>
            ted-link-ct-bw3
           </ted-link-ct-bw3>
           <ted-link-ct-bw4>
            ted-link-ct-bw4
           </ted-link-ct-bw4>
           <ted-link-ct-bw5>
            ted-link-ct-bw5
           </ted-link-ct-bw5>
           <ted-link-ct-bw6>
            ted-link-ct-bw6
           </ted-link-ct-bw6>
           <ted-link-ct-bw7>
            ted-link-ct-bw7
           </ted-link-ct-bw7>
           <switching-capability-descriptor>....</switching-capability-descriptor>
           <ted-link-srlg>....</ted-link-srlg>
           <ted-link-unreserved-bw-tlv-meaning>
            ted-link-unreserved-bw-tlv-meaning
           </ted-link-unreserved-bw-tlv-meaning>
           <ted-link-dste-tlv-meaning>
            ted-link-dste-tlv-meaning
           </ted-link-dste-tlv-meaning>
          </ted-link>
         </ted-database>
        </ted-database-information>
```

Description

<ted-link>

Usage

```
<ted-link-information>
 <ted-link>
  <ted-link-from>
   ted-link-from
  </ted-link-from>
  <ted-link-to>
   ted-link-to
  </ted-link-to>
  <ted-link-local-address>
   ted-link-local-address
  </ted-link-local-address>
  <ted-link-remote-address>
   ted-link-remote-address
  </ted-link-remote-address>
  <ted-link-local-ifindex>
```


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```
  ted-link-local-ifindex
</ted-link-local-ifindex>
<ted-link-remote-ifindex>
  ted-link-remote-ifindex
</ted-link-remote-ifindex>
<admin-groups>....</admin-groups>
<ted-link-extended-admin-group>....</ted-link-extended-admin-group>
<ted-link-metric>
  ted-link-metric
</ted-link-metric>
<ted-link-link-out>
  ted-link-link-out
</ted-link-link-out>
<ted-link-static-bandwidth>
  ted-link-static-bandwidth
</ted-link-static-bandwidth>
<ted-link-reservable-bandwidth>
  ted-link-reservable-bandwidth
</ted-link-reservable-bandwidth>
<ted-link-forwarding-adjacency>
  ted-link-forwarding-adjacency
</ted-link-forwarding-adjacency>
<ted-link-local-bw0>
  ted-link-local-bw0
</ted-link-local-bw0>
<ted-link-local-bw1>
  ted-link-local-bw1
</ted-link-local-bw1>
<ted-link-local-bw2>
  ted-link-local-bw2
</ted-link-local-bw2>
<ted-link-local-bw3>
  ted-link-local-bw3
</ted-link-local-bw3>
<ted-link-local-bw4>
  ted-link-local-bw4
</ted-link-local-bw4>
<ted-link-local-bw5>
  ted-link-local-bw5
</ted-link-local-bw5>
<ted-link-local-bw6>
  ted-link-local-bw6
</ted-link-local-bw6>
<ted-link-local-bw7>
  ted-link-local-bw7
</ted-link-local-bw7>
<ted-link-avail-bw0>
  ted-link-avail-bw0
</ted-link-avail-bw0>
<ted-link-avail-bw1>
  ted-link-avail-bw1
</ted-link-avail-bw1>
<ted-link-avail-bw2>
  ted-link-avail-bw2
</ted-link-avail-bw2>
<ted-link-avail-bw3>
```

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```
      ted-link-avail-bw3
    </ted-link-avail-bw3>
    <ted-link-avail-bw4>
      ted-link-avail-bw4
    </ted-link-avail-bw4>
    <ted-link-avail-bw5>
      ted-link-avail-bw5
    </ted-link-avail-bw5>
    <ted-link-avail-bw6>
      ted-link-avail-bw6
    </ted-link-avail-bw6>
    <ted-link-avail-bw7>
      ted-link-avail-bw7
    </ted-link-avail-bw7>
    <ted-link-model>
      ted-link-model
    </ted-link-model>
    <ted-link-ct-bw0>
      ted-link-ct-bw0
    </ted-link-ct-bw0>
    <ted-link-ct-bw1>
      ted-link-ct-bw1
    </ted-link-ct-bw1>
    <ted-link-ct-bw2>
      ted-link-ct-bw2
    </ted-link-ct-bw2>
    <ted-link-ct-bw3>
      ted-link-ct-bw3
    </ted-link-ct-bw3>
    <ted-link-ct-bw4>
      ted-link-ct-bw4
    </ted-link-ct-bw4>
    <ted-link-ct-bw5>
      ted-link-ct-bw5
    </ted-link-ct-bw5>
    <ted-link-ct-bw6>
      ted-link-ct-bw6
    </ted-link-ct-bw6>
    <ted-link-ct-bw7>
      ted-link-ct-bw7
    </ted-link-ct-bw7>
    <switching-capability-descriptor>....</switching-capability-descriptor>
    <ted-link-srlg>....</ted-link-srlg>
    <ted-link-unreserved-bw-tlv-meaning>
      ted-link-unreserved-bw-tlv-meaning
    </ted-link-unreserved-bw-tlv-meaning>
    <ted-link-dste-tlv-meaning>
      ted-link-dste-tlv-meaning
    </ted-link-dste-tlv-meaning>
  </ted-link>
</ted-link-information>
```

Description

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<ted-link-extended-admin-group>

Usage

```
<ted-link-extended-admin-group>
  <admin-group-name>
    admin-group-name
  </admin-group-name>
</ted-link-extended-admin-group>
```

Description

<ted-link-extended-admin-group>

Usage

```
<ted-link>
  <ted-link-extended-admin-group>
    <admin-group-name>
      admin-group-name
    </admin-group-name>
  </ted-link-extended-admin-group>
</ted-link>
```

Description

<ted-link-extended-admin-group>

Usage

```
<ted-database>
  <ted-link>
    <ted-link-extended-admin-group>
      <admin-group-name>
        admin-group-name
      </admin-group-name>
    </ted-link-extended-admin-group>
  </ted-link>
</ted-database>
```

Description

<ted-link-extended-admin-group>

Usage

```
<ted-database-information>
  <ted-database>
    <ted-link>
      <ted-link-extended-admin-group>
        <admin-group-name>
          admin-group-name
        </admin-group-name>
      </ted-link-extended-admin-group>
    </ted-link>
  </ted-database>
```

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```
</ted-database-information>
```

Description

<ted-link-extended-admin-group>

Usage

```
<ted-link-information>
  <ted-link>
    <ted-link-extended-admin-group>
      <admin-group-name>
        admin-group-name
      </admin-group-name>
    </ted-link-extended-admin-group>
  </ted-link>
</ted-link-information>
```

Description

<ted-link-information>

Usage

```
<ted-link-information>
  <ted-link>....</ted-link>
</ted-link-information>
```

Description

<ted-link-srlg>

Usage

```
<ted-link-srlg>
  <srlg-name>
    srlg-name
  </srlg-name>
</ted-link-srlg>
```

Description

<ted-link-srlg>

Usage

```
<ted-link>
  <ted-link-srlg>
    <srlg-name>
      srlg-name
    </srlg-name>
  </ted-link-srlg>
</ted-link>
```

Description

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<ted-link-srlg>

Usage

```
<ted-database>
  <ted-link>
    <ted-link-srlg>
      <srlg-name>
        srlg-name
      </srlg-name>
    </ted-link-srlg>
  </ted-link>
</ted-database>
```

Description

<ted-link-srlg>

Usage

```
<ted-database-information>
  <ted-database>
    <ted-link>
      <ted-link-srlg>
        <srlg-name>
          srlg-name
        </srlg-name>
      </ted-link-srlg>
    </ted-link>
  </ted-database>
</ted-database-information>
```

Description

<ted-link-srlg>

Usage

```
<ted-link-information>
  <ted-link>
    <ted-link-srlg>
      <srlg-name>
        srlg-name
      </srlg-name>
    </ted-link-srlg>
  </ted-link>
</ted-link-information>
```

Description

<ted-protocol>

Usage

```
<ted-protocol>
  <ted-protocol-name>
```

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```
    ted-protocol-name
  </ted-protocol-name>
  <ted-protocol-credibility>
    ted-protocol-credibility
  </ted-protocol-credibility>
  <ted-protocol-self-node>
    ted-protocol-self-node
  </ted-protocol-self-node>
</ted-protocol>
```

Description

<ted-protocol>

Usage

```
<ted-protocol-information>
  <ted-protocol>
    <ted-protocol-name>
      ted-protocol-name
    </ted-protocol-name>
    <ted-protocol-credibility>
      ted-protocol-credibility
    </ted-protocol-credibility>
    <ted-protocol-self-node>
      ted-protocol-self-node
    </ted-protocol-self-node>
  </ted-protocol>
</ted-protocol-information>
```

Description

<ted-protocol-information>

Usage

```
<ted-protocol-information>
  <ted-protocol>....</ted-protocol>
</ted-protocol-information>
```

Description

<tlv-block>

Usage

```
<tlv-block>
  <tlv-type-name>
    tlv-type-name
  </tlv-type-name>
  <tlv-type-value>
    tlv-type-value
  </tlv-type-value>
  <tlv-length>
    tlv-length
  </tlv-length>
```


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```
  <bytes-left>
   bytes-left
  </bytes-left>
  <formatted-tlv-data>
   formatted-tlv-data
  </formatted-tlv-data>
</tlv-block>
```

Description

<tlv-block>

Usage

```
<ospf-opaque-area-lsa>
  <tlv-block>
    <tlv-type-name>
     tlv-type-name
    </tlv-type-name>
    <tlv-type-value>
     tlv-type-value
    </tlv-type-value>
    <tlv-length>
     tlv-length
    </tlv-length>
    <bytes-left>
     bytes-left
    </bytes-left>
    <formatted-tlv-data>
     formatted-tlv-data
    </formatted-tlv-data>
  </tlv-block>
</ospf-opaque-area-lsa>
```

Description

<tlv-block>

Usage

```
<ospf-database>
  <ospf-opaque-area-lsa>
    <tlv-block>
      <tlv-type-name>
       tlv-type-name
      </tlv-type-name>
      <tlv-type-value>
       tlv-type-value
      </tlv-type-value>
      <tlv-length>
       tlv-length
      </tlv-length>
      <bytes-left>
       bytes-left
      </bytes-left>
      <formatted-tlv-data>
```

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```
            formatted-tlv-data
          </formatted-tlv-data>
        </tlv-block>
      </ospf-opaque-area-lsa>
    </ospf-database>
```

Description

<tlv-block>

Usage

```
<ospf-database-information>
  <ospf-database>
    <ospf-opaque-area-lsa>
      <tlv-block>
        <tlv-type-name>
          tlv-type-name
        </tlv-type-name>
        <tlv-type-value>
          tlv-type-value
        </tlv-type-value>
        <tlv-length>
          tlv-length
        </tlv-length>
        <bytes-left>
          bytes-left
        </bytes-left>
        <formatted-tlv-data>
          formatted-tlv-data
        </formatted-tlv-data>
      </tlv-block>
    </ospf-opaque-area-lsa>
  </ospf-database>
</ospf-database-information>
```

Description

<tlv-stragglers>

Usage

```
<isis-tlv>
  <tlv-stragglers>
    <bytes-left>
      bytes-left
    </bytes-left>
  </tlv-stragglers>
</isis-tlv>
```

Description

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<tlv-stragglers>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <tlv-stragglers>
      <bytes-left>
        bytes-left
      </bytes-left>
    </tlv-stragglers>
  </isis-tlv>
</isis-database-entry>
```

Description

<tlv-stragglers>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <tlv-stragglers>
        <bytes-left>
          bytes-left
        </bytes-left>
      </tlv-stragglers>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<tlv-stragglers>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <tlv-stragglers>
          <bytes-left>
            bytes-left
          </bytes-left>
        </tlv-stragglers>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

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<totals-information>

Usage

```
<isis-statistics>
  <totals-information>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent>
      packets-sent
    </packets-sent>
  </totals-information>
</isis-statistics>
```

Description

<totals-information>

Usage

```
<isis-statistics-information>
  <isis-statistics>
    <totals-information>
      <packets-received>
        packets-received
      </packets-received>
      <packets-sent>
        packets-sent
      </packets-sent>
    </totals-information>
  </isis-statistics>
</isis-statistics-information>
```

Description

<tracing-information>

Usage

```
<tracing-information>
  <flags>
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```


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Description

<tracing-information>

Usage

```
<bgp-option-information>
 <nlri-information>
  <nlri-traffic-stats>
   <tracing-information>
    <flags>
     flags
    </flags>
    <filename>
     filename
    </filename>
    <filesize>
     filesize
    </filesize>
    <filelimit>
     filelimit
    </filelimit>
   </tracing-information>
  </nlri-traffic-stats>
 </nlri-information>
</bgp-option-information>
```

Description

<tracing-information>

Usage

```
<bgp-peer>
 <bgp-option-information>
  <nlri-information>
   <nlri-traffic-stats>
    <tracing-information>
     <flags>
      flags
     </flags>
     <filename>
      filename
     </filename>
     <filesize>
      filesize
     </filesize>
     <filelimit>
      filelimit
     </filelimit>
    </tracing-information>
   </nlri-traffic-stats>
  </nlri-information>
 </bgp-option-information>
</bgp-peer>
```

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Description

<tracing-information>

Usage

```
<bgp-peer>
  <tracing-information>
    <flags>
      flags
    </flags>
    <filename>
      filename
    </filename>
    <filesize>
      filesize
    </filesize>
    <filelimit>
      filelimit
    </filelimit>
  </tracing-information>
</bgp-peer>
```

Description

<tracing-information>

Usage

```
<bgp-group>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-traffic-stats>
          <tracing-information>
            <flags>
              flags
            </flags>
            <filename>
              filename
            </filename>
            <filesize>
              filesize
            </filesize>
            <filelimit>
              filelimit
            </filelimit>
          </tracing-information>
        </nlri-traffic-stats>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-group>
```

Description

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<tracing-information>

Usage

```
<bgp-group>
  <bgp-peer>
    <tracing-information>
      <flags>
        flags
      </flags>
      <filename>
        filename
      </filename>
      <filesize>
        filesize
      </filesize>
      <filelimit>
        filelimit
      </filelimit>
    </tracing-information>
  </bgp-peer>
</bgp-group>
```

Description

<tracing-information>

Usage

```
<bgp-group>
  <bgp-option-information>
    <nlri-information>
      <nlri-traffic-stats>
        <tracing-information>
          <flags>
            flags
          </flags>
          <filename>
            filename
          </filename>
          <filesize>
            filesize
          </filesize>
          <filelimit>
            filelimit
          </filelimit>
        </tracing-information>
      </nlri-traffic-stats>
    </nlri-information>
  </bgp-option-information>
</bgp-group>
```

Description

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<tracing-information>

Usage

```
<bgp-group>
  <tracing-information>
    <flags>
      flags
    </flags>
    <filename>
      filename
    </filename>
    <filesize>
      filesize
    </filesize>
    <filelimit>
      filelimit
    </filelimit>
  </tracing-information>
</bgp-group>
```

Description

<tracing-information>

Usage

```
<bgp-information>
  <bgp-peer>
    <bgp-option-information>
      <nlri-information>
        <nlri-traffic-stats>
          <tracing-information>
            <flags>
              flags
            </flags>
            <filename>
              filename
            </filename>
            <filesize>
              filesize
            </filesize>
            <filelimit>
              filelimit
            </filelimit>
          </tracing-information>
        </nlri-traffic-stats>
      </nlri-information>
    </bgp-option-information>
  </bgp-peer>
</bgp-information>
```

Description

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<tracing-information>

Usage

```
<bgp-information>
  <bgp-peer>
    <tracing-information>
      <flags>
        flags
      </flags>
      <filename>
        filename
      </filename>
      <filesize>
        filesize
      </filesize>
      <filelimit>
        filelimit
      </filelimit>
    </tracing-information>
  </bgp-peer>
</bgp-information>
```

Description

<tracing-information>

Usage

```
<bgp-group-information>
  <bgp-group>
    <bgp-peer>
      <bgp-option-information>
        <nlri-information>
          <nlri-traffic-stats>
            <tracing-information>
              <flags>
                flags
              </flags>
              <filename>
                filename
              </filename>
              <filesize>
                filesize
              </filesize>
              <filelimit>
                filelimit
              </filelimit>
            </tracing-information>
          </nlri-traffic-stats>
        </nlri-information>
      </bgp-option-information>
    </bgp-peer>
  </bgp-group>
</bgp-group-information>
```

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Description

<tracing-information>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-peer>
   <tracing-information>
    <flags>
     flags
    </flags>
    <filename>
     filename
    </filename>
    <filesize>
     filesize
    </filesize>
    <filelimit>
     filelimit
    </filelimit>
   </tracing-information>
  </bgp-peer>
 </bgp-group>
</bgp-group-information>
```

Description

<tracing-information>

Usage

```
<bgp-group-information>
 <bgp-group>
  <bgp-option-information>
   <nlri-information>
    <nlri-traffic-stats>
     <tracing-information>
      <flags>
       flags
      </flags>
      <filename>
       filename
      </filename>
      <filesize>
       filesize
      </filesize>
      <filelimit>
       filelimit
      </filelimit>
     </tracing-information>
    </nlri-traffic-stats>
   </nlri-information>
  </bgp-option-information>
 </bgp-group>
```


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```
</bgp-group-information>
```

Description

<tracing-information>

Usage

```
<bgp-group-information>
 <bgp-group>
  <tracing-information>
   <flags>
    flags
   </flags>
   <filename>
    filename
   </filename>
   <filesize>
    filesize
   </filesize>
   <filelimit>
    filelimit
   </filelimit>
  </tracing-information>
 </bgp-group>
</bgp-group-information>
```

Description

<tracing-information>

Usage

```
<bgp-group-information>
 <bgp-information>
  <bgp-peer>
   <bgp-option-information>
    <nlri-information>
     <nlri-traffic-stats>
      <tracing-information>
       <flags>
        flags
       </flags>
       <filename>
        filename
       </filename>
       <filesize>
        filesize
       </filesize>
       <filelimit>
        filelimit
       </filelimit>
      </tracing-information>
     </nlri-traffic-stats>
    </nlri-information>
   </bgp-option-information>
```

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```
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<tracing-information>

Usage

```
<bgp-group-information>
  <bgp-information>
    <bgp-peer>
      <tracing-information>
        <flags>
          flags
        </flags>
        <filename>
          filename
        </filename>
        <filesize>
          filesize
        </filesize>
        <filelimit>
          filelimit
        </filelimit>
      </tracing-information>
    </bgp-peer>
  </bgp-information>
</bgp-group-information>
```

Description

<tracing-information>

Usage

```
<ospf-overview>
  <tracing-information>
    <flags>
      flags
    </flags>
    <filename>
      filename
    </filename>
    <filesize>
      filesize
    </filesize>
    <filelimit>
      filelimit
    </filelimit>
  </tracing-information>
</ospf-overview>
```

Description

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<tracing-information>

Usage

```
<ospf-overview-information>
  <ospf-overview>
    <tracing-information>
      <flags>
        flags
      </flags>
      <filename>
        filename
      </filename>
      <filesize>
        filesize
      </filesize>
      <filelimit>
        filelimit
      </filelimit>
    </tracing-information>
  </ospf-overview>
</ospf-overview-information>
```

Description

<tracing-information>

Usage

```
<ospf3-overview-information>
  <ospf-overview>
    <tracing-information>
      <flags>
        flags
      </flags>
      <filename>
        filename
      </filename>
      <filesize>
        filesize
      </filesize>
      <filelimit>
        filelimit
      </filelimit>
    </tracing-information>
  </ospf-overview>
</ospf3-overview-information>
```

Description

<transmission-status>

Usage

```
<transmission-status>
  <transmit-count>
```

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```
    transmit-count
   </transmit-count>
   <message>
    message
   </message>
   <interface-name>
    interface-name
   </interface-name>
   <transmit-time>
    transmit-time
   </transmit-time>
  </transmission-status>
```

Description

<transmission-status>

Usage

```
<isis-database-entry>
  <transmission-status>
    <transmit-count>
      transmit-count
    </transmit-count>
    <message>
      message
    </message>
    <interface-name>
      interface-name
    </interface-name>
    <transmit-time>
      transmit-time
    </transmit-time>
  </transmission-status>
</isis-database-entry>
```

Description

<transmission-status>

Usage

```
<isis-database>
  <isis-database-entry>
    <transmission-status>
      <transmit-count>
        transmit-count
      </transmit-count>
      <message>
        message
      </message>
      <interface-name>
        interface-name
      </interface-name>
      <transmit-time>
        transmit-time
```


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```
      </transmit-time>
    </transmission-status>
  </isis-database-entry>
</isis-database>
```

Description

<transmission-status>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <transmission-status>
        <transmit-count>
          transmit-count
        </transmit-count>
        <message>
          message
        </message>
        <interface-name>
          interface-name
        </interface-name>
        <transmit-time>
          transmit-time
        </transmit-time>
      </transmission-status>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<tunnel-nexthop>

Usage

```
<dynamic-tunnel>
  <tunnel-nexthop>
    <tunnel-nh-type>
      tunnel-nh-type
    </tunnel-nh-type>
    <tunnel-nh-src>
      tunnel-nh-src
    </tunnel-nh-src>
    <via>
      via
    </via>
    <tunnel-nh-state>
      tunnel-nh-state
    </tunnel-nh-state>
    <tunnel-nh-reason>
      tunnel-nh-reason
    </tunnel-nh-reason>
    <tunnel-nh-lsp-name>
```

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```
      tunnel-nh-lsp-name
    </tunnel-nh-lsp-name>
  </tunnel-nexthop>
</dynamic-tunnel>
```

Description

<tunnel-nexthop>

Usage

```
<destination-network>
  <dynamic-tunnel>
    <tunnel-nexthop>
      <tunnel-nh-type>
        tunnel-nh-type
      </tunnel-nh-type>
      <tunnel-nh-src>
        tunnel-nh-src
      </tunnel-nh-src>
      <via>
        via
      </via>
      <tunnel-nh-state>
        tunnel-nh-state
      </tunnel-nh-state>
      <tunnel-nh-reason>
        tunnel-nh-reason
      </tunnel-nh-reason>
      <tunnel-nh-lsp-name>
        tunnel-nh-lsp-name
      </tunnel-nh-lsp-name>
    </tunnel-nexthop>
  </dynamic-tunnel>
</destination-network>
```

Description

<tunnel-nexthop>

Usage

```
<dynamic-tunnel-table>
  <destination-network>
    <dynamic-tunnel>
      <tunnel-nexthop>
        <tunnel-nh-type>
          tunnel-nh-type
        </tunnel-nh-type>
        <tunnel-nh-src>
          tunnel-nh-src
        </tunnel-nh-src>
        <via>
          via
        </via>
        <tunnel-nh-state>
```


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```
            tunnel-nh-state
          </tunnel-nh-state>
          <tunnel-nh-reason>
            tunnel-nh-reason
          </tunnel-nh-reason>
          <tunnel-nh-lsp-name>
            tunnel-nh-lsp-name
          </tunnel-nh-lsp-name>
        </tunnel-nexthop>
      </dynamic-tunnel>
    </destination-network>
  </dynamic-tunnel-table>
```

Description

<tunnel-nexthop>

Usage

```
<dynamic-tunnels-information>
  <dynamic-tunnel-table>
    <destination-network>
      <dynamic-tunnel>
        <tunnel-nexthop>
          <tunnel-nh-type>
            tunnel-nh-type
          </tunnel-nh-type>
          <tunnel-nh-src>
            tunnel-nh-src
          </tunnel-nh-src>
          <via>
            via
          </via>
          <tunnel-nh-state>
            tunnel-nh-state
          </tunnel-nh-state>
          <tunnel-nh-reason>
            tunnel-nh-reason
          </tunnel-nh-reason>
          <tunnel-nh-lsp-name>
            tunnel-nh-lsp-name
          </tunnel-nh-lsp-name>
        </tunnel-nexthop>
      </dynamic-tunnel>
    </destination-network>
  </dynamic-tunnel-table>
</dynamic-tunnels-information>
```

Description

<unconfigured-peers>

Usage

```
<bgp-group>
  <unconfigured-peers>
```

```
    <route-filter>....</route-filter>
  </unconfigured-peers>
</bgp-group>
```

Description Set of address prefixes from which this group allows peering

<unconfigured-peers>

Usage

```
<bgp-group-information>
  <bgp-group>
    <unconfigured-peers>
      <route-filter>....</route-filter>
    </unconfigured-peers>
  </bgp-group>
</bgp-group-information>
```

Description Set of address prefixes from which this group allows peering

<unknown-tlv>

Usage

```
<isis-tlv>
  <unknown-tlv>
    <isis-tlv-type>
      isis-tlv-type
    </isis-tlv-type>
    <tlv-length>
      tlv-length
    </tlv-length>
  </unknown-tlv>
</isis-tlv>
```

Description

<unknown-tlv>

Usage

```
<isis-database-entry>
  <isis-tlv>
    <unknown-tlv>
      <isis-tlv-type>
        isis-tlv-type
      </isis-tlv-type>
      <tlv-length>
        tlv-length
      </tlv-length>
    </unknown-tlv>
  </isis-tlv>
</isis-database-entry>
```


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Description

<unknown-tlv>

Usage

```
<isis-database>
  <isis-database-entry>
    <isis-tlv>
      <unknown-tlv>
        <isis-tlv-type>
          isis-tlv-type
        </isis-tlv-type>
        <tlv-length>
          tlv-length
        </tlv-length>
      </unknown-tlv>
    </isis-tlv>
  </isis-database-entry>
</isis-database>
```

Description

<unknown-tlv>

Usage

```
<isis-database-information>
  <isis-database>
    <isis-database-entry>
      <isis-tlv>
        <unknown-tlv>
          <isis-tlv-type>
            isis-tlv-type
          </isis-tlv-type>
          <tlv-length>
            tlv-length
          </tlv-length>
        </unknown-tlv>
      </isis-tlv>
    </isis-database-entry>
  </isis-database>
</isis-database-information>
```

Description

<upstream-group>

Usage

```
<pim-source-information>
  <source-family>
    <pim-source>
      <upstream-group>
        <multicast-group-address>
          multicast-group-address
        </multicast-group-address>
```

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```
      </upstream-group>
    </pim-source>
  </source-family>
</pim-source-information>
```

Description

<upstream-state-flags>

Usage

```
<pim-join-information>
  <join-family>
    <join-group>
      <upstream-state-flags>
        <none>
          none
        </none>
        <local-source>
          local-source
        </local-source>
        <local-rp>
          local-rp
        </local-rp>
        <join-to-rp>
          join-to-rp
        </join-to-rp>
        <join-to-source>
          join-to-source
        </join-to-source>
        <prune-to-rp>
          prune-to-rp
        </prune-to-rp>
        <prune-to-source>
          prune-to-source
        </prune-to-source>
      </upstream-state-flags>
    </join-group>
  </join-family>
</pim-join-information>
```

Description

<vpls-auto-site-repository>

Usage

```
<vpls-auto-site-repository>
  <route-distinguisher>
    route-distinguisher
  </route-distinguisher>
  <instance-id>
    instance-id
  </instance-id>
  <local-site-id>
    local-site-id
```


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```
  </local-site-id>
  <auto-site-count>
    auto-site-count
  </auto-site-count>
  <auto-site-repository-state>
    auto-site-repository-state
  </auto-site-repository-state>
</vpls-auto-site-repository>
```

Description Information about one or more automatic site replication entries

<vpls-auto-site-repository>

Usage

```
<vpls-auto-site-repository-information>
  <vpls-auto-site-repository>
    <route-distinguisher>
      route-distinguisher
    </route-distinguisher>
    <instance-id>
      instance-id
    </instance-id>
    <local-site-id>
      local-site-id
    </local-site-id>
    <auto-site-count>
      auto-site-count
    </auto-site-count>
    <auto-site-repository-state>
      auto-site-repository-state
    </auto-site-repository-state>
  </vpls-auto-site-repository>
</vpls-auto-site-repository-information>
```

Description Information about one or more automatic site replication entries

<vpls-auto-site-repository-information>

Usage

```
<vpls-auto-site-repository-information>
  <vpls-auto-site-repository>....</vpls-auto-site-repository>
</vpls-auto-site-repository-information>
```

Description Information about automatic site replication repository

<vpls-bgp-label-repository-information>

Usage

```
<vpls-bgp-label-repository-information>

<vpls-bgp-route-distinguisher-information>....</vpls-bgp-route-distinguisher-information>
```

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```
</vpls-bgp-label-repository-information>
```

Description Information about VPLS label replication using BGP signaling

<vpls-bgp-route-distinguisher-information>

Usage

```
<vpls-bgp-route-distinguisher-information>
  <route-distinguisher>
    route-distinguisher
  </route-distinguisher>
  <instance-id>
    instance-id
  </instance-id>
  <l2vpn-nlri-advertisement>....</l2vpn-nlri-advertisement>
</vpls-bgp-route-distinguisher-information>
```

Description Information about one or more VPLS route distinguisher replication entries

<vpls-bgp-route-distinguisher-information>

Usage

```
<vpls-bgp-label-repository-information>
  <vpls-bgp-route-distinguisher-information>
    <route-distinguisher>
      route-distinguisher
    </route-distinguisher>
    <instance-id>
      instance-id
    </instance-id>
    <l2vpn-nlri-advertisement>....</l2vpn-nlri-advertisement>
  </vpls-bgp-route-distinguisher-information>
</vpls-bgp-label-repository-information>
```

Description Information about one or more VPLS route distinguisher replication entries

<vpls-connection-information>

Usage

```
<vpls-connection-information>
  <instance>....</instance>
</vpls-connection-information>
```

Description

<vpls-dyn-prof-session-information>

Usage

```
<vpls-dyn-prof-session-information>
```


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```
  <vpls-dyn-session-entry>....</vpls-dyn-session-entry>
</vpls-dyn-prof-session-information>
```

Description Information about the dynamic profiles for VE Ifls

<vpls-dyn-session-entry>

Usage

```
<vpls-dyn-session-entry>
  <vpls-dyn-session-id>
    vpls-dyn-session-id
  </vpls-dyn-session-id>
  <vpls-dyn-profile-name>
    vpls-dyn-profile-name
  </vpls-dyn-profile-name>
  <vpls-dyn-interface-name>
    vpls-dyn-interface-name
  </vpls-dyn-interface-name>
  <vpls-dyn-instance-name>
    vpls-dyn-instance-name
  </vpls-dyn-instance-name>
</vpls-dyn-session-entry>
```

Description Information for sessions created using dynamic profiles for VE ifls

<vpls-dyn-session-entry>

Usage

```
<vpls-dyn-prof-session-information>
  <vpls-dyn-session-entry>
    <vpls-dyn-session-id>
      vpls-dyn-session-id
    </vpls-dyn-session-id>
    <vpls-dyn-profile-name>
      vpls-dyn-profile-name
    </vpls-dyn-profile-name>
    <vpls-dyn-interface-name>
      vpls-dyn-interface-name
    </vpls-dyn-interface-name>
    <vpls-dyn-instance-name>
      vpls-dyn-instance-name
    </vpls-dyn-instance-name>
  </vpls-dyn-session-entry>
</vpls-dyn-prof-session-information>
```

Description Information for sessions created using dynamic profiles for VE ifls

<vpls-dynamic-interface-repository>

Usage

```
<vpls-dynamic-interface-repository>
```

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```
<instance-id>
  instance-id
</instance-id>
<local-site-id>
  local-site-id
</local-site-id>
<remote-site-id>
  remote-site-id
</remote-site-id>
<interface-name>
  interface-name
</interface-name>
<local-interface-index>
  local-interface-index
</local-interface-index>
<vpls-label>
  vpls-label
</vpls-label>
<interface-repository-state>
  interface-repository-state
</interface-repository-state>
<mesh-group-id>
  mesh-group-id
</mesh-group-id>
</vpls-dynamic-interface-repository>
```

Description Information about one or more dynamic interface replication entries

<vpls-dynamic-interface-repository>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-dynamic-interface-repository>
    <instance-id>
      instance-id
    </instance-id>
    <local-site-id>
      local-site-id
    </local-site-id>
    <remote-site-id>
      remote-site-id
    </remote-site-id>
    <interface-name>
      interface-name
    </interface-name>
    <local-interface-index>
      local-interface-index
    </local-interface-index>
    <vpls-label>
      vpls-label
    </vpls-label>
    <interface-repository-state>
      interface-repository-state
    </interface-repository-state>
```


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```
    <mesh-group-id>
      mesh-group-id
    </mesh-group-id>
  </vpls-dynamic-interface-repository>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more dynamic interface replication entries

<vpls-dynamic-interface-repository-information>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-dynamic-interface-repository>....</vpls-dynamic-interface-repository>

<vpls-fec129-dynamic-interface-repository>....</vpls-fec129-dynamic-interface-repository>


<vpls-ldp-dynamic-interface-repository-entity>....</vpls-ldp-dynamic-interface-repository-entity>

</vpls-dynamic-interface-repository-information>
```

Description Information about the VPLS dynamic interface replication repository

<vpls-fec129-dynamic-interface-repository>

Usage

```
<vpls-fec129-dynamic-interface-repository>
  <interface-name>
    interface-name
  </interface-name>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <agi>
    agi
  </agi>
  <saii>
    saii
  </saii>
  <taii>
    taii
  </taii>
  <vpls-label>
    vpls-label
  </vpls-label>
  <interface-repository-state>
    interface-repository-state
  </interface-repository-state>
  <mesh-group-id>
    mesh-group-id
  </mesh-group-id>
```

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```
</vpls-fec129-dynamic-interface-repository>
```

Description Information about one or more dynamic interface replication entries

<vpls-fec129-dynamic-interface-repository>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-fec129-dynamic-interface-repository>
    <interface-name>
      interface-name
    </interface-name>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <agi>
      agi
    </agi>
    <saii>
      saii
    </saii>
    <taii>
      taii
    </taii>
    <vpls-label>
      vpls-label
    </vpls-label>
    <interface-repository-state>
      interface-repository-state
    </interface-repository-state>
    <mesh-group-id>
      mesh-group-id
    </mesh-group-id>
  </vpls-fec129-dynamic-interface-repository>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more dynamic interface replication entries

<vpls-ldp-dynamic-interface-repository>

Usage

```
<vpls-ldp-dynamic-interface-repository>
  <vpls-id>
    vpls-id
  </vpls-id>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <interface-name>
    interface-name
  </interface-name>
  <vpls-label>
```


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```
    vpls-label
   </vpls-label>
   <ifl-repository-state>
    ifl-repository-state
   </ifl-repository-state>
   <mesh-group-id>
    mesh-group-id
   </mesh-group-id>
  </vpls-ldp-dynamic-interface-repository>
```

Description Information about one or more dynamic interface replication entries

<vpls-ldp-dynamic-interface-repository>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <vpls-ldp-dynamic-interface-repository>
  <vpls-id>
   vpls-id
  </vpls-id>
  <neighbor-id>
   neighbor-id
  </neighbor-id>
  <interface-name>
   interface-name
  </interface-name>
  <vpls-label>
   vpls-label
  </vpls-label>
  <ifl-repository-state>
   ifl-repository-state
  </ifl-repository-state>
  <mesh-group-id>
   mesh-group-id
  </mesh-group-id>
 </vpls-ldp-dynamic-interface-repository>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more dynamic interface replication entries

<vpls-ldp-dynamic-interface-repository>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <vpls-ldp-dynamic-interface-repository>
   <vpls-id>
    vpls-id
   </vpls-id>
   <neighbor-id>
    neighbor-id
   </neighbor-id>
```

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```
<interface-name>
  interface-name
</interface-name>
<vpls-label>
  vpls-label
</vpls-label>
<ifl-repository-state>
  ifl-repository-state
</ifl-repository-state>
<mesh-group-id>
  mesh-group-id
</mesh-group-id>
</vpls-ldp-dynamic-interface-repository>
</vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more dynamic interface replication entries

<vpls-ldp-dynamic-interface-repository-entity>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>....</instance>

<vpls-ldp-dynamic-interface-repository>....</vpls-ldp-dynamic-interface-repository>
  </vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about the VPLS dynamic interface using LDP signaling

<vpls-ldp-dynamic-interface-repository-entity>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>....</instance>

<vpls-ldp-dynamic-interface-repository>....</vpls-ldp-dynamic-interface-repository>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about the VPLS dynamic interface using LDP signaling

<vpls-ldp-label-repository>

Usage

```
<vpls-ldp-label-repository>
  <neighbor-id>
    neighbor-id
  </neighbor-id>
  <vpls-id>
    vpls-id
```


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```
  </vpls-id>
  <vpls-label>
    vpls-label
  </vpls-label>
  <label-repository-state>
    label-repository-state
  </label-repository-state>
</vpls-ldp-label-repository>
```

Description Information about one or more VPLS label replication entries

<vpls-ldp-label-repository>

Usage

```
<vpls-ldp-label-repository-entity>
  <vpls-ldp-label-repository>
    <neighbor-id>
      neighbor-id
    </neighbor-id>
    <vpls-id>
      vpls-id
    </vpls-id>
    <vpls-label>
      vpls-label
    </vpls-label>
    <label-repository-state>
      label-repository-state
    </label-repository-state>
  </vpls-ldp-label-repository>
</vpls-ldp-label-repository-entity>
```

Description Information about one or more VPLS label replication entries

<vpls-ldp-label-repository>

Usage

```
<vpls-ldp-label-repository-information>
  <vpls-ldp-label-repository-entity>
    <vpls-ldp-label-repository>
      <neighbor-id>
        neighbor-id
      </neighbor-id>
      <vpls-id>
        vpls-id
      </vpls-id>
      <vpls-label>
        vpls-label
      </vpls-label>
      <label-repository-state>
        label-repository-state
      </label-repository-state>
    </vpls-ldp-label-repository>
```

```
  </vpls-ldp-label-repository-entity>
</vpls-ldp-label-repository-information>
```

Description Information about one or more VPLS label replication entries

<vpls-ldp-label-repository-entity>

Usage

```
<vpls-ldp-label-repository-entity>
  <instance-name>
    instance-name
  </instance-name>
  <vpls-ldp-label-repository>....</vpls-ldp-label-repository>
</vpls-ldp-label-repository-entity>
```

Description Information about VPLS label replication using LDP signaling

<vpls-ldp-label-repository-entity>

Usage

```
<vpls-ldp-label-repository-information>
  <vpls-ldp-label-repository-entity>
    <instance-name>
      instance-name
    </instance-name>
    <vpls-ldp-label-repository>....</vpls-ldp-label-repository>
  </vpls-ldp-label-repository-entity>
</vpls-ldp-label-repository-information>
```

Description Information about VPLS label replication using LDP signaling

<vpls-ldp-label-repository-information>

Usage

```
<vpls-ldp-label-repository-information>
  <vpls-ldp-label-repository-entity>....</vpls-ldp-label-repository-entity>
</vpls-ldp-label-repository-information>
```

Description Information about VPLS label replication using LDP signaling

<vpls-protocol-state>

Usage

```
<instance>
  <vpls-protocol-state>
    <vpls-signaling-protocol-identifier>
      vpls-signaling-protocol-identifier
    </vpls-signaling-protocol-identifier>
    <num-local-interfaces>
```


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```
      num-local-interfaces
    </num-local-interfaces>
    <num-local-interfaces-up>
      num-local-interfaces-up
    </num-local-interfaces-up>
    <irb-present>
      irb-present
    </irb-present>
    <mesh-group-count>
      mesh-group-count
    </mesh-group-count>
    <mesh-group-up-count>
      mesh-group-up-count
    </mesh-group-up-count>
    <mesh-group-interfaces>....</mesh-group-interfaces>
    <interface>
      interface
    </interface>
    <mesh-group-connection>....</mesh-group-connection>
    <reference-site>....</reference-site>
  </vpls-protocol-state>
</instance>
```

Description

<vpls-protocol-state>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <mesh-group-connection>....</mesh-group-connection>
      <reference-site>....</reference-site>
```

```
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description

<vpls-protocol-state>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-protocol-state>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <mesh-group-connection>....</mesh-group-connection>
      <reference-site>....</reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-connection-information>
```

Description

<vpls-protocol-state>

Usage

```
<vpls-statistics-information>
  <instance>
    <vpls-protocol-state>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
```


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```
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <mesh-group-connection>....</mesh-group-connection>
      <reference-site>....</reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-statistics-information>
```

Description

<vpls-protocol-state>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <vpls-signaling-protocol-identifier>
        vpls-signaling-protocol-identifier
      </vpls-signaling-protocol-identifier>
      <num-local-interfaces>
        num-local-interfaces
      </num-local-interfaces>
      <num-local-interfaces-up>
        num-local-interfaces-up
      </num-local-interfaces-up>
      <irb-present>
        irb-present
      </irb-present>
      <mesh-group-count>
        mesh-group-count
      </mesh-group-count>
      <mesh-group-up-count>
        mesh-group-up-count
      </mesh-group-up-count>
      <mesh-group-interfaces>....</mesh-group-interfaces>
      <interface>
        interface
      </interface>
      <mesh-group-connection>....</mesh-group-connection>
      <reference-site>....</reference-site>
    </vpls-protocol-state>
```

```
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<vpls-protocol-state>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <vpls-protocol-state>
        <vpls-signaling-protocol-identifier>
          vpls-signaling-protocol-identifier
        </vpls-signaling-protocol-identifier>
        <num-local-interfaces>
          num-local-interfaces
        </num-local-interfaces>
        <num-local-interfaces-up>
          num-local-interfaces-up
        </num-local-interfaces-up>
        <irb-present>
          irb-present
        </irb-present>
        <mesh-group-count>
          mesh-group-count
        </mesh-group-count>
        <mesh-group-up-count>
          mesh-group-up-count
        </mesh-group-up-count>
        <mesh-group-interfaces>....</mesh-group-interfaces>
        <interface>
          interface
        </interface>
        <mesh-group-connection>....</mesh-group-connection>
        <reference-site>....</reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<vpls-rsvp-te-ingress-p2mp-lsp>
  <vpls-ingress-p2mp-lsp-name>
    vpls-ingress-p2mp-lsp-name
  </vpls-ingress-p2mp-lsp-name>
  <vpls-rsvp-te-p2mp-flood-nexthop-id>
    vpls-rsvp-te-p2mp-flood-nexthop-id
  </vpls-rsvp-te-p2mp-flood-nexthop-id>
```


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```
</vpls-rsvp-te-ingress-p2mp-lsp>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<instance>
  <vpls-rsvp-te-ingress-p2mp-lsp>
    <vpls-ingress-p2mp-lsp-name>
      vpls-ingress-p2mp-lsp-name
    </vpls-ingress-p2mp-lsp-name>
    <vpls-rsvp-te-p2mp-flood-nexthop-id>
      vpls-rsvp-te-p2mp-flood-nexthop-id
    </vpls-rsvp-te-p2mp-flood-nexthop-id>
  </vpls-rsvp-te-ingress-p2mp-lsp>
</instance>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-rsvp-te-ingress-p2mp-lsp>
      <vpls-ingress-p2mp-lsp-name>
        vpls-ingress-p2mp-lsp-name
      </vpls-ingress-p2mp-lsp-name>
      <vpls-rsvp-te-p2mp-flood-nexthop-id>
        vpls-rsvp-te-p2mp-flood-nexthop-id
      </vpls-rsvp-te-p2mp-flood-nexthop-id>
    </vpls-rsvp-te-ingress-p2mp-lsp>
  </instance>
</l2vpn-connection-information>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<vpls-connection-information>
  <instance>
    <vpls-rsvp-te-ingress-p2mp-lsp>
      <vpls-ingress-p2mp-lsp-name>
        vpls-ingress-p2mp-lsp-name
      </vpls-ingress-p2mp-lsp-name>
      <vpls-rsvp-te-p2mp-flood-nexthop-id>
        vpls-rsvp-te-p2mp-flood-nexthop-id
      </vpls-rsvp-te-p2mp-flood-nexthop-id>
    </vpls-rsvp-te-ingress-p2mp-lsp>
  </instance>
```

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```
</vpls-connection-information>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<vpls-statistics-information>
 <instance>
  <vpls-rsvp-te-ingress-p2mp-lsp>
   <vpls-ingress-p2mp-lsp-name>
    vpls-ingress-p2mp-lsp-name
   </vpls-ingress-p2mp-lsp-name>
   <vpls-rsvp-te-p2mp-flood-nexthop-id>
    vpls-rsvp-te-p2mp-flood-nexthop-id
   </vpls-rsvp-te-p2mp-flood-nexthop-id>
  </vpls-rsvp-te-ingress-p2mp-lsp>
 </instance>
</vpls-statistics-information>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
 <instance>
  <vpls-rsvp-te-ingress-p2mp-lsp>
   <vpls-ingress-p2mp-lsp-name>
    vpls-ingress-p2mp-lsp-name
   </vpls-ingress-p2mp-lsp-name>
   <vpls-rsvp-te-p2mp-flood-nexthop-id>
    vpls-rsvp-te-p2mp-flood-nexthop-id
   </vpls-rsvp-te-p2mp-flood-nexthop-id>
  </vpls-rsvp-te-ingress-p2mp-lsp>
 </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description

<vpls-rsvp-te-ingress-p2mp-lsp>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-rsvp-te-ingress-p2mp-lsp>
    <vpls-ingress-p2mp-lsp-name>
     vpls-ingress-p2mp-lsp-name
    </vpls-ingress-p2mp-lsp-name>
    <vpls-rsvp-te-p2mp-flood-nexthop-id>
     vpls-rsvp-te-p2mp-flood-nexthop-id
    </vpls-rsvp-te-p2mp-flood-nexthop-id>
```


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```
      </vpls-rsvp-te-ingress-p2mp-lsp>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-rsvp-te-p2mp-lsp-information>
  <vpls-ingress-p2mp-branch-lsp-name>
    vpls-ingress-p2mp-branch-lsp-name
  </vpls-ingress-p2mp-branch-lsp-name>
  <vpls-ingress-p2mp-branch-lsp-state>
    vpls-ingress-p2mp-branch-lsp-state
  </vpls-ingress-p2mp-branch-lsp-state>
  <vpls-egress-p2mp-branch-lsp-name>
    vpls-egress-p2mp-branch-lsp-name
  </vpls-egress-p2mp-branch-lsp-name>
  <vpls-egress-p2mp-branch-lsp-state>
    vpls-egress-p2mp-branch-lsp-state
  </vpls-egress-p2mp-branch-lsp-state>
</vpls-rsvp-te-p2mp-lsp-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<connection>
  <vpls-rsvp-te-p2mp-lsp-information>
    <vpls-ingress-p2mp-branch-lsp-name>
      vpls-ingress-p2mp-branch-lsp-name
    </vpls-ingress-p2mp-branch-lsp-name>
    <vpls-ingress-p2mp-branch-lsp-state>
      vpls-ingress-p2mp-branch-lsp-state
    </vpls-ingress-p2mp-branch-lsp-state>
    <vpls-egress-p2mp-branch-lsp-name>
      vpls-egress-p2mp-branch-lsp-name
    </vpls-egress-p2mp-branch-lsp-name>
    <vpls-egress-p2mp-branch-lsp-state>
      vpls-egress-p2mp-branch-lsp-state
    </vpls-egress-p2mp-branch-lsp-state>
  </vpls-rsvp-te-p2mp-lsp-information>
</connection>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<mesh-group-connection>
  <connection>
    <vpls-rsvp-te-p2mp-lsp-information>
      <vpls-ingress-p2mp-branch-lsp-name>
        vpls-ingress-p2mp-branch-lsp-name
      </vpls-ingress-p2mp-branch-lsp-name>
      <vpls-ingress-p2mp-branch-lsp-state>
        vpls-ingress-p2mp-branch-lsp-state
      </vpls-ingress-p2mp-branch-lsp-state>
      <vpls-egress-p2mp-branch-lsp-name>
        vpls-egress-p2mp-branch-lsp-name
      </vpls-egress-p2mp-branch-lsp-name>
      <vpls-egress-p2mp-branch-lsp-state>
        vpls-egress-p2mp-branch-lsp-state
      </vpls-egress-p2mp-branch-lsp-state>
    </vpls-rsvp-te-p2mp-lsp-information>
  </connection>
</mesh-group-connection>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <reference-site>
    <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
        <vpls-ingress-p2mp-branch-lsp-name>
          vpls-ingress-p2mp-branch-lsp-name
        </vpls-ingress-p2mp-branch-lsp-name>
        <vpls-ingress-p2mp-branch-lsp-state>
          vpls-ingress-p2mp-branch-lsp-state
        </vpls-ingress-p2mp-branch-lsp-state>
        <vpls-egress-p2mp-branch-lsp-name>
          vpls-egress-p2mp-branch-lsp-name
        </vpls-egress-p2mp-branch-lsp-name>
        <vpls-egress-p2mp-branch-lsp-state>
          vpls-egress-p2mp-branch-lsp-state
        </vpls-egress-p2mp-branch-lsp-state>
      </vpls-rsvp-te-p2mp-lsp-information>
    </connection>
  </reference-site>
</instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <reference-site>
    <mesh-group-connection>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </mesh-group-connection>
  </reference-site>
</instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
        <vpls-ingress-p2mp-branch-lsp-name>
          vpls-ingress-p2mp-branch-lsp-name
        </vpls-ingress-p2mp-branch-lsp-name>
        <vpls-ingress-p2mp-branch-lsp-state>
          vpls-ingress-p2mp-branch-lsp-state
        </vpls-ingress-p2mp-branch-lsp-state>
        <vpls-egress-p2mp-branch-lsp-name>
          vpls-egress-p2mp-branch-lsp-name
        </vpls-egress-p2mp-branch-lsp-name>
        <vpls-egress-p2mp-branch-lsp-state>
          vpls-egress-p2mp-branch-lsp-state
        </vpls-egress-p2mp-branch-lsp-state>
      </vpls-rsvp-te-p2mp-lsp-information>
    </connection>
  </ldp-vpls-reference-site>
</instance>
```

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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <ldp-vpls-reference-site>
    <mesh-group-connection>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </mesh-group-connection>
  </ldp-vpls-reference-site>
</instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <vpls-protocol-state>
    <mesh-group-connection>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </mesh-group-connection>
```


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```
  </vpls-protocol-state>
</instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </reference-site>
  </vpls-protocol-state>
</instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<instance>
  <vpls-protocol-state>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
```

```
                    vpls-egress-p2mp-branch-lsp-state
                  </vpls-egress-p2mp-branch-lsp-state>
                </vpls-rsvp-te-p2mp-lsp-information>
              </connection>
            </mesh-group-connection>
          </reference-site>
        </vpls-protocol-state>
      </instance>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <reference-site>
      <mesh-group-connection>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
```


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```
                vpls-ingress-p2mp-branch-lsp-state
              </vpls-ingress-p2mp-branch-lsp-state>
              <vpls-egress-p2mp-branch-lsp-name>
                vpls-egress-p2mp-branch-lsp-name
              </vpls-egress-p2mp-branch-lsp-name>
              <vpls-egress-p2mp-branch-lsp-state>
                vpls-egress-p2mp-branch-lsp-state
              </vpls-egress-p2mp-branch-lsp-state>
            </vpls-rsvp-te-p2mp-lsp-information>
          </connection>
        </mesh-group-connection>
      </reference-site>
    </instance>
  </l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
          <vpls-ingress-p2mp-branch-lsp-name>
            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
          <vpls-ingress-p2mp-branch-lsp-state>
            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
```

```
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
          </vpls-rsvp-te-p2mp-lsp-information>
        </connection>
      </mesh-group-connection>
    </ldp-vpls-reference-site>
  </instance>
</l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
          </vpls-rsvp-te-p2mp-lsp-information>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2vpn-connection-information>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
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            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
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        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
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    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <vpls-rsvp-te-p2mp-lsp-information>
              <vpls-ingress-p2mp-branch-lsp-name>
                vpls-ingress-p2mp-branch-lsp-name
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              <vpls-ingress-p2mp-branch-lsp-state>
                vpls-ingress-p2mp-branch-lsp-state
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                vpls-egress-p2mp-branch-lsp-state
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```

```
            </connection>
          </mesh-group-connection>
        </reference-site>
      </vpls-protocol-state>
    </instance>
  </l2vpn-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-connection-information>
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      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
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            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
```

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```
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              vpls-egress-p2mp-branch-lsp-state
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```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
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      <connection>
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          </vpls-ingress-p2mp-branch-lsp-name>
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            vpls-ingress-p2mp-branch-lsp-state
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-connection-information>
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        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
```

```
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                </vpls-ingress-p2mp-branch-lsp-state>
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                </vpls-egress-p2mp-branch-lsp-name>
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                </vpls-egress-p2mp-branch-lsp-state>
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          </mesh-group-connection>
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      </instance>
    </vpls-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-connection-information>
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            </vpls-ingress-p2mp-branch-lsp-name>
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            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
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```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

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            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
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              vpls-egress-p2mp-branch-lsp-name
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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                vpls-egress-p2mp-branch-lsp-state
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            </vpls-rsvp-te-p2mp-lsp-information>
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            </connection>
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        </reference-site>
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    </instance>
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```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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            vpls-ingress-p2mp-branch-lsp-state
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          </vpls-egress-p2mp-branch-lsp-name>
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            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
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    </reference-site>
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</vpls-statistics-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-statistics-information>
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            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
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            <vpls-egress-p2mp-branch-lsp-name>
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              vpls-egress-p2mp-branch-lsp-state
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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    <ldp-vpls-reference-site>
      <connection>
        <vpls-rsvp-te-p2mp-lsp-information>
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            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-statistics-information>
  <instance>
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        <connection>
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```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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<vpls-statistics-information>
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</vpls-statistics-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-statistics-information>
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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              <vpls-ingress-p2mp-branch-lsp-state>
                vpls-ingress-p2mp-branch-lsp-state
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                vpls-egress-p2mp-branch-lsp-state
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            </vpls-rsvp-te-p2mp-lsp-information>
```

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            </connection>
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        </reference-site>
      </vpls-protocol-state>
    </instance>
  </vpls-statistics-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
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      <connection>
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            vpls-ingress-p2mp-branch-lsp-name
          </vpls-ingress-p2mp-branch-lsp-name>
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            vpls-ingress-p2mp-branch-lsp-state
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            vpls-egress-p2mp-branch-lsp-name
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            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
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      </connection>
    </reference-site>
  </instance>
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```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
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Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

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          </vpls-ingress-p2mp-branch-lsp-name>
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            vpls-ingress-p2mp-branch-lsp-state
          </vpls-ingress-p2mp-branch-lsp-state>
          <vpls-egress-p2mp-branch-lsp-name>
            vpls-egress-p2mp-branch-lsp-name
          </vpls-egress-p2mp-branch-lsp-name>
          <vpls-egress-p2mp-branch-lsp-state>
            vpls-egress-p2mp-branch-lsp-state
          </vpls-egress-p2mp-branch-lsp-state>
        </vpls-rsvp-te-p2mp-lsp-information>
      </connection>
    </ldp-vpls-reference-site>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <ldp-vpls-reference-site>
      <mesh-group-connection>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
```

```
                <vpls-ingress-p2mp-branch-lsp-name>
                  vpls-ingress-p2mp-branch-lsp-name
                </vpls-ingress-p2mp-branch-lsp-name>
                <vpls-ingress-p2mp-branch-lsp-state>
                  vpls-ingress-p2mp-branch-lsp-state
                </vpls-ingress-p2mp-branch-lsp-state>
                <vpls-egress-p2mp-branch-lsp-name>
                  vpls-egress-p2mp-branch-lsp-name
                </vpls-egress-p2mp-branch-lsp-name>
                <vpls-egress-p2mp-branch-lsp-state>
                  vpls-egress-p2mp-branch-lsp-state
                </vpls-egress-p2mp-branch-lsp-state>
              </vpls-rsvp-te-p2mp-lsp-information>
            </connection>
          </mesh-group-connection>
        </ldp-vpls-reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <mesh-group-connection>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
          </vpls-rsvp-te-p2mp-lsp-information>
        </connection>
      </mesh-group-connection>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
          </vpls-rsvp-te-p2mp-lsp-information>
        </connection>
      </reference-site>
    </vpls-protocol-state>
  </instance>
</vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-ldp-dynamic-interface-repository-entity>
  <instance>
    <vpls-protocol-state>
      <reference-site>
        <mesh-group-connection>
          <connection>
            <vpls-rsvp-te-p2mp-lsp-information>
              <vpls-ingress-p2mp-branch-lsp-name>
                vpls-ingress-p2mp-branch-lsp-name
              </vpls-ingress-p2mp-branch-lsp-name>
              <vpls-ingress-p2mp-branch-lsp-state>
                vpls-ingress-p2mp-branch-lsp-state
              </vpls-ingress-p2mp-branch-lsp-state>
              <vpls-egress-p2mp-branch-lsp-name>
                vpls-egress-p2mp-branch-lsp-name
              </vpls-egress-p2mp-branch-lsp-name>
              <vpls-egress-p2mp-branch-lsp-state>
                vpls-egress-p2mp-branch-lsp-state
              </vpls-egress-p2mp-branch-lsp-state>
            </vpls-rsvp-te-p2mp-lsp-information>
```

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```
        </connection>
       </mesh-group-connection>
      </reference-site>
     </vpls-protocol-state>
    </instance>
   </vpls-ldp-dynamic-interface-repository-entity>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <connection>
     <vpls-rsvp-te-p2mp-lsp-information>
      <vpls-ingress-p2mp-branch-lsp-name>
       vpls-ingress-p2mp-branch-lsp-name
      </vpls-ingress-p2mp-branch-lsp-name>
      <vpls-ingress-p2mp-branch-lsp-state>
       vpls-ingress-p2mp-branch-lsp-state
      </vpls-ingress-p2mp-branch-lsp-state>
      <vpls-egress-p2mp-branch-lsp-name>
       vpls-egress-p2mp-branch-lsp-name
      </vpls-egress-p2mp-branch-lsp-name>
      <vpls-egress-p2mp-branch-lsp-state>
       vpls-egress-p2mp-branch-lsp-state
      </vpls-egress-p2mp-branch-lsp-state>
     </vpls-rsvp-te-p2mp-lsp-information>
    </connection>
   </reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <reference-site>
    <mesh-group-connection>
     <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
       <vpls-ingress-p2mp-branch-lsp-name>
        vpls-ingress-p2mp-branch-lsp-name
       </vpls-ingress-p2mp-branch-lsp-name>
```


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```
                <vpls-ingress-p2mp-branch-lsp-state>
                  vpls-ingress-p2mp-branch-lsp-state
                </vpls-ingress-p2mp-branch-lsp-state>
                <vpls-egress-p2mp-branch-lsp-name>
                  vpls-egress-p2mp-branch-lsp-name
                </vpls-egress-p2mp-branch-lsp-name>
                <vpls-egress-p2mp-branch-lsp-state>
                  vpls-egress-p2mp-branch-lsp-state
                </vpls-egress-p2mp-branch-lsp-state>
              </vpls-rsvp-te-p2mp-lsp-information>
            </connection>
          </mesh-group-connection>
        </reference-site>
      </instance>
    </vpls-ldp-dynamic-interface-repository-entity>
  </vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
  <vpls-ldp-dynamic-interface-repository-entity>
    <instance>
      <ldp-vpls-reference-site>
        <connection>
          <vpls-rsvp-te-p2mp-lsp-information>
            <vpls-ingress-p2mp-branch-lsp-name>
              vpls-ingress-p2mp-branch-lsp-name
            </vpls-ingress-p2mp-branch-lsp-name>
            <vpls-ingress-p2mp-branch-lsp-state>
              vpls-ingress-p2mp-branch-lsp-state
            </vpls-ingress-p2mp-branch-lsp-state>
            <vpls-egress-p2mp-branch-lsp-name>
              vpls-egress-p2mp-branch-lsp-name
            </vpls-egress-p2mp-branch-lsp-name>
            <vpls-egress-p2mp-branch-lsp-state>
              vpls-egress-p2mp-branch-lsp-state
            </vpls-egress-p2mp-branch-lsp-state>
          </vpls-rsvp-te-p2mp-lsp-information>
        </connection>
      </ldp-vpls-reference-site>
    </instance>
  </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <ldp-vpls-reference-site>
    <mesh-group-connection>
     <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
       <vpls-ingress-p2mp-branch-lsp-name>
        vpls-ingress-p2mp-branch-lsp-name
       </vpls-ingress-p2mp-branch-lsp-name>
       <vpls-ingress-p2mp-branch-lsp-state>
        vpls-ingress-p2mp-branch-lsp-state
       </vpls-ingress-p2mp-branch-lsp-state>
       <vpls-egress-p2mp-branch-lsp-name>
        vpls-egress-p2mp-branch-lsp-name
       </vpls-egress-p2mp-branch-lsp-name>
       <vpls-egress-p2mp-branch-lsp-state>
        vpls-egress-p2mp-branch-lsp-state
       </vpls-egress-p2mp-branch-lsp-state>
      </vpls-rsvp-te-p2mp-lsp-information>
     </connection>
    </mesh-group-connection>
   </ldp-vpls-reference-site>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <mesh-group-connection>
     <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
       <vpls-ingress-p2mp-branch-lsp-name>
        vpls-ingress-p2mp-branch-lsp-name
       </vpls-ingress-p2mp-branch-lsp-name>
       <vpls-ingress-p2mp-branch-lsp-state>
        vpls-ingress-p2mp-branch-lsp-state
       </vpls-ingress-p2mp-branch-lsp-state>
       <vpls-egress-p2mp-branch-lsp-name>
        vpls-egress-p2mp-branch-lsp-name
       </vpls-egress-p2mp-branch-lsp-name>
       <vpls-egress-p2mp-branch-lsp-state>
        vpls-egress-p2mp-branch-lsp-state
```


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```
            </vpls-egress-p2mp-branch-lsp-state>
           </vpls-rsvp-te-p2mp-lsp-information>
          </connection>
         </mesh-group-connection>
        </vpls-protocol-state>
       </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
     </vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
       <vpls-ingress-p2mp-branch-lsp-name>
        vpls-ingress-p2mp-branch-lsp-name
       </vpls-ingress-p2mp-branch-lsp-name>
       <vpls-ingress-p2mp-branch-lsp-state>
        vpls-ingress-p2mp-branch-lsp-state
       </vpls-ingress-p2mp-branch-lsp-state>
       <vpls-egress-p2mp-branch-lsp-name>
        vpls-egress-p2mp-branch-lsp-name
       </vpls-egress-p2mp-branch-lsp-name>
       <vpls-egress-p2mp-branch-lsp-state>
        vpls-egress-p2mp-branch-lsp-state
       </vpls-egress-p2mp-branch-lsp-state>
      </vpls-rsvp-te-p2mp-lsp-information>
     </connection>
    </reference-site>
   </vpls-protocol-state>
  </instance>
 </vpls-ldp-dynamic-interface-repository-entity>
</vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<vpls-dynamic-interface-repository-information>
 <vpls-ldp-dynamic-interface-repository-entity>
  <instance>
   <vpls-protocol-state>
    <reference-site>
     <mesh-group-connection>
```

```
                <connection>
                  <vpls-rsvp-te-p2mp-lsp-information>
                    <vpls-ingress-p2mp-branch-lsp-name>
                      vpls-ingress-p2mp-branch-lsp-name
                    </vpls-ingress-p2mp-branch-lsp-name>
                    <vpls-ingress-p2mp-branch-lsp-state>
                      vpls-ingress-p2mp-branch-lsp-state
                    </vpls-ingress-p2mp-branch-lsp-state>
                    <vpls-egress-p2mp-branch-lsp-name>
                      vpls-egress-p2mp-branch-lsp-name
                    </vpls-egress-p2mp-branch-lsp-name>
                    <vpls-egress-p2mp-branch-lsp-state>
                      vpls-egress-p2mp-branch-lsp-state
                    </vpls-egress-p2mp-branch-lsp-state>
                  </vpls-rsvp-te-p2mp-lsp-information>
                </connection>
              </mesh-group-connection>
            </reference-site>
          </vpls-protocol-state>
        </instance>
      </vpls-ldp-dynamic-interface-repository-entity>
    </vpls-dynamic-interface-repository-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

<vpls-rsvp-te-p2mp-lsp-information>

Usage

```
<l2circuit-connection-information>
  <l2circuit-neighbor>
    <connection>
      <vpls-rsvp-te-p2mp-lsp-information>
        <vpls-ingress-p2mp-branch-lsp-name>
          vpls-ingress-p2mp-branch-lsp-name
        </vpls-ingress-p2mp-branch-lsp-name>
        <vpls-ingress-p2mp-branch-lsp-state>
          vpls-ingress-p2mp-branch-lsp-state
        </vpls-ingress-p2mp-branch-lsp-state>
        <vpls-egress-p2mp-branch-lsp-name>
          vpls-egress-p2mp-branch-lsp-name
        </vpls-egress-p2mp-branch-lsp-name>
        <vpls-egress-p2mp-branch-lsp-state>
          vpls-egress-p2mp-branch-lsp-state
        </vpls-egress-p2mp-branch-lsp-state>
      </vpls-rsvp-te-p2mp-lsp-information>
    </connection>
  </l2circuit-neighbor>
</l2circuit-connection-information>
```

Description Information about one or more VPLS RSVP-TE point-to-multipoint LSPs

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<vpls-statistics-information>

Usage

```
<vpls-statistics-information>
  <instance>....</instance>
  <interface-statistics>....</interface-statistics>
</vpls-statistics-information>
```

Description

<vrrp-group>

Usage

```
<ipv6-ra-interface>
  <vrrp-group>
    <vrrp-group-id>
      vrrp-group-id
    </vrrp-group-id>
    <vrrp-advertisements-sent>
      vrrp-advertisements-sent
    </vrrp-advertisements-sent>
    <vrrp-advertisement-sent-time>
      vrrp-advertisement-sent-time
    </vrrp-advertisement-sent-time>
    <vrrp-solicits-received>
      vrrp-solicits-received
    </vrrp-solicits-received>
    <vrrp-solicit-receive-time>
      vrrp-solicit-receive-time
    </vrrp-solicit-receive-time>
    <vrrp-advertisements-received>
      vrrp-advertisements-received
    </vrrp-advertisements-received>
  </vrrp-group>
</ipv6-ra-interface>
```

Description

<vrrp-group>

Usage

```
<ipv6-ra-information>
  <ipv6-ra-interface>
    <vrrp-group>
      <vrrp-group-id>
        vrrp-group-id
      </vrrp-group-id>
      <vrrp-advertisements-sent>
        vrrp-advertisements-sent
      </vrrp-advertisements-sent>
      <vrrp-advertisement-sent-time>
        vrrp-advertisement-sent-time
      </vrrp-advertisement-sent-time>
```

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```
      <vrrp-solicits-received>
        vrrp-solicits-received
      </vrrp-solicits-received>
      <vrrp-solicit-receive-time>
        vrrp-solicit-receive-time
      </vrrp-solicit-receive-time>
      <vrrp-advertisements-received>
        vrrp-advertisements-received
      </vrrp-advertisements-received>
    </vrrp-group>
  </ipv6-ra-interface>
</ipv6-ra-information>
```

Description

Summary of Real-Time Performance Monitoring Response Tags

<active-servers>

Usage

```
<active-servers>
  <configured-servers>....</configured-servers>
</active-servers>
```

Description

<configured-servers>

Usage

```
<configured-servers>
  <protocol>
    protocol
  </protocol>
  <port>
    port
  </port>
  <destination-interface>
    destination-interface
  </destination-interface>
</configured-servers>
```

Description

<configured-servers>

Usage

```
<active-servers>
  <configured-servers>
    <protocol>
      protocol
    </protocol>
    <port>
      port
```


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```
    </port>
    <destination-interface>
      destination-interface
    </destination-interface>
  </configured-servers>
</active-servers>
```

Description

<connection>

Usage

```
<twamp-server-information>
  <connection>
    <connection-id>
      connection-id
    </connection-id>
    <client-address>
      client-address
    </client-address>
    <client-port>
      client-port
    </client-port>
    <server-address>
      server-address
    </server-address>
    <server-port>
      server-port
    </server-port>
    <session-count>
      session-count
    </session-count>
    <authentication-mode>
      authentication-mode
    </authentication-mode>
  </connection>
</twamp-server-information>
```

Description Server connection

<history-results>

Usage

```
<history-results>
  <history-test-results>....</history-test-results>
</history-results>
```

Description

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<history-test-results>

Usage

```
<history-results>
  <history-test-results>
    <owner>
      owner
    </owner>
    <test-name>
      test-name
    </test-name>
    <target-address>
      target-address
    </target-address>
    <target-url>
      target-url
    </target-url>
    <source-address>
      source-address
    </source-address>
    <destination-interface>
      destination-interface
    </destination-interface>
    <probe-type>
      probe-type
    </probe-type>
    <probe-single-results>....</probe-single-results>
    <probe-test-current-results>....</probe-test-current-results>
    <loss-thresh-total>
      loss-thresh-total
    </loss-thresh-total>
    <loss-thresh-succ>
      loss-thresh-succ
    </loss-thresh-succ>
    <delay-thresh>
      delay-thresh
    </delay-thresh>
    <jitter-thresh>
      jitter-thresh
    </jitter-thresh>
    <stddev-thresh>
      stddev-thresh
    </stddev-thresh>
    <egress-thresh>
      egress-thresh
    </egress-thresh>
    <egress-jitter-thresh>
      egress-jitter-thresh
    </egress-jitter-thresh>
    <ingress-thresh>
      ingress-thresh
    </ingress-thresh>
    <ingress-jitter-thresh>
      ingress-jitter-thresh
    </ingress-jitter-thresh>
```


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```
  </history-test-results>
</history-results>
```

Description

<packet-statistics>

Usage

```
<twamp-server-information>
  <server>
    <session>
      <packet-statistics>
        <request-sessions-received>
          request-sessions-received
        </request-sessions-received>
        <accept-sessions-sent>
          accept-sessions-sent
        </accept-sessions-sent>
        <start-sessions-received>
          start-sessions-received
        </start-sessions-received>
        <stop-sessions-received>
          stop-sessions-received
        </stop-sessions-received>
        <test-packets-received>
          test-packets-received
        </test-packets-received>
        <test-packets-reflected>
          test-packets-reflected
        </test-packets-reflected>
        <last-sequence-number-received>
          last-sequence-number-received
        </last-sequence-number-received>
        <last-sequence-number-sent>
          last-sequence-number-sent
        </last-sequence-number-sent>
        <test-packets-dropped>
          test-packets-dropped
        </test-packets-dropped>
        <test-packets-dropped-details>....</test-packets-dropped-details>
      </packet-statistics>
    </session>
  </server>
</twamp-server-information>
```

Description Test session packet statistics

<packet-statistics>

Usage

```
<twamp-server-information>
  <server-statistics>
    <packet-statistics>
```

```
<request-sessions-received>
  request-sessions-received
</request-sessions-received>
<accept-sessions-sent>
  accept-sessions-sent
</accept-sessions-sent>
<start-sessions-received>
  start-sessions-received
</start-sessions-received>
<stop-sessions-received>
  stop-sessions-received
</stop-sessions-received>
<test-packets-received>
  test-packets-received
</test-packets-received>
<test-packets-reflected>
  test-packets-reflected
</test-packets-reflected>
<last-sequence-number-received>
  last-sequence-number-received
</last-sequence-number-received>
<last-sequence-number-sent>
  last-sequence-number-sent
</last-sequence-number-sent>
<test-packets-dropped>
  test-packets-dropped
</test-packets-dropped>
<test-packets-dropped-details>....</test-packets-dropped-details>
</packet-statistics>
</server-statistics>
</twamp-server-information>
```

Description Test session packet statistics

<probe-last-test-info>

Usage

```
<probe-last-test-info>
  <last-test-time>
    last-test-time
  </last-test-time>
</probe-last-test-info>
```

Description

<probe-last-test-info>

Usage

```
<probe-test-generic-results>
  <probe-last-test-info>
    <last-test-time>
      last-test-time
    </last-test-time>
```


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```
  </probe-last-test-info>
</probe-test-generic-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-last-test-info>
      <last-test-time>
        last-test-time
      </last-test-time>
    </probe-last-test-info>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-last-test-info>
      <last-test-time>
        last-test-time
      </last-test-time>
    </probe-last-test-info>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-last-test-info>
      <last-test-time>
        last-test-time
      </last-test-time>
    </probe-last-test-info>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-last-test-info>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-last-test-info>
      <last-test-time>
        last-test-time
      </last-test-time>
    </probe-last-test-info>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-last-test-info>
          <last-test-time>
            last-test-time
          </last-test-time>
        </probe-last-test-info>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-last-test-info>
          <last-test-time>
            last-test-time
          </last-test-time>
        </probe-last-test-info>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-last-test-info>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-last-test-info>
          <last-test-time>
            last-test-time
          </last-test-time>
        </probe-last-test-info>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-last-test-info>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-last-test-info>
          <last-test-time>
            last-test-time
          </last-test-time>
        </probe-last-test-info>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-last-test-info>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-last-test-info>
          <last-test-time>
            last-test-time
          </last-test-time>
        </probe-last-test-info>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
```

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```
</history-results>
```

Description

<probe-last-test-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>....</probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-last-test-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>....</probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-results>

Usage

```
<probe-results>
  <probe-test-results>....</probe-test-results>
</probe-results>
```

Description

<probe-single-results>

Usage

```
<probe-single-results>
  <owner>
    owner
  </owner>
  <test-name>
    test-name
  </test-name>
  <probe-time>
    probe-time
  </probe-time>
  <probe-status>
    probe-status
  </probe-status>
  <hardware-timestamp-status>
```


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```
    hardware-timestamp-status
  </hardware-timestamp-status>
  <rtt>
    rtt
  </rtt>
  <ingress>
    ingress
  </ingress>
  <egress>
    egress
  </egress>
  <egress-jitter>
    egress-jitter
  </egress-jitter>
  <ingress-jitter>
    ingress-jitter
  </ingress-jitter>
  <round-trip-jitter>
    round-trip-jitter
  </round-trip-jitter>
  <egress-interarrival-jitter>
    egress-interarrival-jitter
  </egress-interarrival-jitter>
  <ingress-interarrival-jitter>
    ingress-interarrival-jitter
  </ingress-interarrival-jitter>
  <round-trip-interarrival-jitter>
    round-trip-interarrival-jitter
  </round-trip-interarrival-jitter>
</probe-single-results>
```

Description

<probe-single-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-single-results>
      <owner>
        owner
      </owner>
      <test-name>
        test-name
      </test-name>
      <probe-time>
        probe-time
      </probe-time>
      <probe-status>
        probe-status
      </probe-status>
      <hardware-timestamp-status>
        hardware-timestamp-status
      </hardware-timestamp-status>
      <rtt>
```

```
        rtt
      </rtt>
      <ingress>
        ingress
      </ingress>
      <egress>
        egress
      </egress>
      <egress-jitter>
        egress-jitter
      </egress-jitter>
      <ingress-jitter>
        ingress-jitter
      </ingress-jitter>
      <round-trip-jitter>
        round-trip-jitter
      </round-trip-jitter>
      <egress-interarrival-jitter>
        egress-interarrival-jitter
      </egress-interarrival-jitter>
      <ingress-interarrival-jitter>
        ingress-interarrival-jitter
      </ingress-interarrival-jitter>
      <round-trip-interarrival-jitter>
        round-trip-interarrival-jitter
      </round-trip-interarrival-jitter>
    </probe-single-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-single-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-single-results>
      <owner>
        owner
      </owner>
      <test-name>
        test-name
      </test-name>
      <probe-time>
        probe-time
      </probe-time>
      <probe-status>
        probe-status
      </probe-status>
      <hardware-timestamp-status>
        hardware-timestamp-status
      </hardware-timestamp-status>
      <rtt>
        rtt
```


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```
      </rtt>
      <ingress>
        ingress
      </ingress>
      <egress>
        egress
      </egress>
      <egress-jitter>
        egress-jitter
      </egress-jitter>
      <ingress-jitter>
        ingress-jitter
      </ingress-jitter>
      <round-trip-jitter>
        round-trip-jitter
      </round-trip-jitter>
      <egress-interarrival-jitter>
        egress-interarrival-jitter
      </egress-interarrival-jitter>
      <ingress-interarrival-jitter>
        ingress-interarrival-jitter
      </ingress-interarrival-jitter>
      <round-trip-interarrival-jitter>
        round-trip-interarrival-jitter
      </round-trip-interarrival-jitter>
    </probe-single-results>
  </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<probe-summary-results>
  <probe-results-type>
    probe-results-type
  </probe-results-type>
  <min-delay>
    min-delay
  </min-delay>
  <max-delay>
    max-delay
  </max-delay>
  <avg-delay>
    avg-delay
  </avg-delay>
  <jitter-delay>
    jitter-delay
  </jitter-delay>
  <stddev-delay>
    stddev-delay
  </stddev-delay>
  <sum-delay>
    sum-delay
```

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```
  </sum-delay>
  <samples>
   samples
  </samples>
</probe-summary-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-rtt>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-rtt>
```

Description

<probe-summary-results>

Usage

```
<probe-test-ingress>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
```


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```
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-ingress>
```

Description

<probe-summary-results>

Usage

```
<probe-test-egress>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-egress>
```

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Description

<probe-summary-results>

Usage

```
<probe-test-positive-egress-jitter>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-positive-egress-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-negative-egress-jitter>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
```


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```
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-negative-egress-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-positive-ingress-jitter>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-positive-ingress-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-negative-ingress-jitter>
  <probe-summary-results>
```

```
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
    <samples>
      samples
    </samples>
  </probe-summary-results>
</probe-test-negative-ingress-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-positive-round-trip-jitter>
  <probe-summary-results>
    <probe-results-type>
      probe-results-type
    </probe-results-type>
    <min-delay>
      min-delay
    </min-delay>
    <max-delay>
      max-delay
    </max-delay>
    <avg-delay>
      avg-delay
    </avg-delay>
    <jitter-delay>
      jitter-delay
    </jitter-delay>
    <stddev-delay>
      stddev-delay
    </stddev-delay>
    <sum-delay>
      sum-delay
    </sum-delay>
```


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```
    <samples>
     samples
    </samples>
   </probe-summary-results>
</probe-test-positive-round-trip-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-negative-round-trip-jitter>
 <probe-summary-results>
  <probe-results-type>
   probe-results-type
  </probe-results-type>
  <min-delay>
   min-delay
  </min-delay>
  <max-delay>
   max-delay
  </max-delay>
  <avg-delay>
   avg-delay
  </avg-delay>
  <jitter-delay>
   jitter-delay
  </jitter-delay>
  <stddev-delay>
   stddev-delay
  </stddev-delay>
  <sum-delay>
   sum-delay
  </sum-delay>
  <samples>
   samples
  </samples>
 </probe-summary-results>
</probe-test-negative-round-trip-jitter>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
 <probe-test-rtt>
  <probe-summary-results>
   <probe-results-type>
    probe-results-type
   </probe-results-type>
   <min-delay>
    min-delay
   </min-delay>
```

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```
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-rtt>
  </probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
```


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```
  </probe-test-egress>
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-ingress>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-ingress>
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-egress-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
```

```
            max-delay
           </max-delay>
           <avg-delay>
            avg-delay
           </avg-delay>
           <jitter-delay>
            jitter-delay
           </jitter-delay>
           <stddev-delay>
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-positive-egress-jitter>
        </probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
 <probe-test-negative-egress-jitter>
  <probe-summary-results>
   <probe-results-type>
    probe-results-type
   </probe-results-type>
   <min-delay>
    min-delay
   </min-delay>
   <max-delay>
    max-delay
   </max-delay>
   <avg-delay>
    avg-delay
   </avg-delay>
   <jitter-delay>
    jitter-delay
   </jitter-delay>
   <stddev-delay>
    stddev-delay
   </stddev-delay>
   <sum-delay>
    sum-delay
   </sum-delay>
   <samples>
    samples
   </samples>
  </probe-summary-results>
 </probe-test-negative-egress-jitter>
```


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```
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-ingress-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-positive-ingress-jitter>
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-negative-ingress-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
```

```
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-negative-ingress-jitter>
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-round-trip-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-positive-round-trip-jitter>
```


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```
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-generic-results>
  <probe-test-negative-round-trip-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-negative-round-trip-jitter>
</probe-test-generic-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
```

```
                max-delay
               </max-delay>
               <avg-delay>
                avg-delay
               </avg-delay>
               <jitter-delay>
                jitter-delay
               </jitter-delay>
               <stddev-delay>
                stddev-delay
               </stddev-delay>
               <sum-delay>
                sum-delay
               </sum-delay>
               <samples>
                samples
               </samples>
              </probe-summary-results>
             </probe-test-rtt>
            </probe-test-generic-results>
           </probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
 <probe-test-generic-results>
  <probe-test-egress>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
    <samples>
     samples
    </samples>
```


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```
      </probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
```

```
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
```


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```
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-negative-egress-jitter>
        </probe-test-generic-results>
       </probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
 <probe-test-generic-results>
  <probe-test-positive-ingress-jitter>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
    <samples>
     samples
    </samples>
   </probe-summary-results>
  </probe-test-positive-ingress-jitter>
 </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
```

```
<probe-test-generic-results>
  <probe-test-negative-ingress-jitter>
    <probe-summary-results>
      <probe-results-type>
        probe-results-type
      </probe-results-type>
      <min-delay>
        min-delay
      </min-delay>
      <max-delay>
        max-delay
      </max-delay>
      <avg-delay>
        avg-delay
      </avg-delay>
      <jitter-delay>
        jitter-delay
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-negative-ingress-jitter>
 </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
```


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```
      </jitter-delay>
      <stddev-delay>
        stddev-delay
      </stddev-delay>
      <sum-delay>
        sum-delay
      </sum-delay>
      <samples>
        samples
      </samples>
    </probe-summary-results>
  </probe-test-positive-round-trip-jitter>
 </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-current-results>
 <probe-test-generic-results>
  <probe-test-negative-round-trip-jitter>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
    <samples>
     samples
    </samples>
   </probe-summary-results>
  </probe-test-negative-round-trip-jitter>
 </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-rtt>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
```


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```
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-ingress>
```

```
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
```


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```
        min-delay
       </min-delay>
       <max-delay>
        max-delay
       </max-delay>
       <avg-delay>
        avg-delay
       </avg-delay>
       <jitter-delay>
        jitter-delay
       </jitter-delay>
       <stddev-delay>
        stddev-delay
       </stddev-delay>
       <sum-delay>
        sum-delay
       </sum-delay>
       <samples>
        samples
       </samples>
      </probe-summary-results>
     </probe-test-negative-egress-jitter>
    </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
 <probe-test-generic-results>
  <probe-test-positive-ingress-jitter>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
```

```
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
```


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```
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
```

```
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-negative-round-trip-jitter>
        </probe-test-generic-results>
       </probe-test-global-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
 <probe-test-generic-results>
  <probe-test-rtt>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
    <samples>
     samples
    </samples>
   </probe-summary-results>
  </probe-test-rtt>
 </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
```

```
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-ingress>
      </probe-test-generic-results>
    </probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-egress-jitter>
```


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```
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-egress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
```

```
            min-delay
           </min-delay>
           <max-delay>
            max-delay
           </max-delay>
           <avg-delay>
            avg-delay
           </avg-delay>
           <jitter-delay>
            jitter-delay
           </jitter-delay>
           <stddev-delay>
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-positive-ingress-jitter>
        </probe-test-generic-results>
       </probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
 <probe-test-generic-results>
  <probe-test-negative-ingress-jitter>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
```


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```
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
```

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```
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
```


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```
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-rtt>
        </probe-test-generic-results>
       </probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
 <probe-test-generic-results>
  <probe-test-egress>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
    <samples>
     samples
    </samples>
   </probe-summary-results>
  </probe-test-egress>
 </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
```


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```
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-egress-jitter>
```

```
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
```


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```
        min-delay
       </min-delay>
       <max-delay>
        max-delay
       </max-delay>
       <avg-delay>
        avg-delay
       </avg-delay>
       <jitter-delay>
        jitter-delay
       </jitter-delay>
       <stddev-delay>
        stddev-delay
       </stddev-delay>
       <sum-delay>
        sum-delay
       </sum-delay>
       <samples>
        samples
       </samples>
      </probe-summary-results>
     </probe-test-negative-ingress-jitter>
    </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
 <probe-test-generic-results>
  <probe-test-positive-round-trip-jitter>
   <probe-summary-results>
    <probe-results-type>
     probe-results-type
    </probe-results-type>
    <min-delay>
     min-delay
    </min-delay>
    <max-delay>
     max-delay
    </max-delay>
    <avg-delay>
     avg-delay
    </avg-delay>
    <jitter-delay>
     jitter-delay
    </jitter-delay>
    <stddev-delay>
     stddev-delay
    </stddev-delay>
    <sum-delay>
     sum-delay
    </sum-delay>
```

```
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>
        <probe-results-type>
          probe-results-type
        </probe-results-type>
        <min-delay>
          min-delay
        </min-delay>
        <max-delay>
          max-delay
        </max-delay>
        <avg-delay>
          avg-delay
        </avg-delay>
        <jitter-delay>
          jitter-delay
        </jitter-delay>
        <stddev-delay>
          stddev-delay
        </stddev-delay>
        <sum-delay>
          sum-delay
        </sum-delay>
        <samples>
          samples
        </samples>
      </probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
```


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```
<probe-test-generic-results>
 <probe-test-rtt>
  <probe-summary-results>
   <probe-results-type>
    probe-results-type
   </probe-results-type>
   <min-delay>
    min-delay
   </min-delay>
   <max-delay>
    max-delay
   </max-delay>
   <avg-delay>
    avg-delay
   </avg-delay>
   <jitter-delay>
    jitter-delay
   </jitter-delay>
   <stddev-delay>
    stddev-delay
   </stddev-delay>
   <sum-delay>
    sum-delay
   </sum-delay>
   <samples>
    samples
   </samples>
  </probe-summary-results>
 </probe-test-rtt>
</probe-test-generic-results>
</probe-test-current-results>
</probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-egress>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
```

```
            avg-delay
           </avg-delay>
           <jitter-delay>
            jitter-delay
           </jitter-delay>
           <stddev-delay>
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-egress>
        </probe-test-generic-results>
       </probe-test-current-results>
      </probe-test-results>
     </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
```


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```
            </samples>
           </probe-summary-results>
          </probe-test-ingress>
         </probe-test-generic-results>
        </probe-test-current-results>
       </probe-test-results>
      </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-positive-egress-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-egress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-egress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
```


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```
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
```

```
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-negative-ingress-jitter>
        </probe-test-generic-results>
       </probe-test-current-results>
      </probe-test-results>
     </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-positive-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </probe-test-results>
```


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```
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-negative-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-last-test-results>
   <probe-test-generic-results>
    <probe-test-rtt>
```

```
            <probe-summary-results>
              <probe-results-type>
                probe-results-type
              </probe-results-type>
              <min-delay>
                min-delay
              </min-delay>
              <max-delay>
                max-delay
              </max-delay>
              <avg-delay>
                avg-delay
              </avg-delay>
              <jitter-delay>
                jitter-delay
              </jitter-delay>
              <stddev-delay>
                stddev-delay
              </stddev-delay>
              <sum-delay>
                sum-delay
              </sum-delay>
              <samples>
                samples
              </samples>
            </probe-summary-results>
          </probe-test-rtt>
        </probe-test-generic-results>
      </probe-last-test-results>
    </probe-test-results>
  </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
```


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```
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-ingress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
```

```
        </probe-test-ingress>
       </probe-test-generic-results>
      </probe-last-test-results>
     </probe-test-results>
    </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-last-test-results>
   <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-positive-egress-jitter>
   </probe-test-generic-results>
  </probe-last-test-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
```


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```
<probe-test-results>
  <probe-last-test-results>
    <probe-test-generic-results>
      <probe-test-negative-egress-jitter>
        <probe-summary-results>
          <probe-results-type>
            probe-results-type
          </probe-results-type>
          <min-delay>
            min-delay
          </min-delay>
          <max-delay>
            max-delay
          </max-delay>
          <avg-delay>
            avg-delay
          </avg-delay>
          <jitter-delay>
            jitter-delay
          </jitter-delay>
          <stddev-delay>
            stddev-delay
          </stddev-delay>
          <sum-delay>
            sum-delay
          </sum-delay>
          <samples>
            samples
          </samples>
        </probe-summary-results>
      </probe-test-negative-egress-jitter>
    </probe-test-generic-results>
  </probe-last-test-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
```

```
                    </max-delay>
                    <avg-delay>
                      avg-delay
                    </avg-delay>
                    <jitter-delay>
                      jitter-delay
                    </jitter-delay>
                    <stddev-delay>
                      stddev-delay
                    </stddev-delay>
                    <sum-delay>
                      sum-delay
                    </sum-delay>
                    <samples>
                      samples
                    </samples>
                  </probe-summary-results>
                </probe-test-positive-ingress-jitter>
              </probe-test-generic-results>
            </probe-last-test-results>
          </probe-test-results>
        </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
```


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```
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-ingress-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-positive-round-trip-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-round-trip-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-negative-round-trip-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-round-trip-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
```


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```
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
```

```
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-egress>
        </probe-test-generic-results>
       </probe-test-moving-results>
      </probe-test-results>
     </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-moving-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-ingress>
   </probe-test-generic-results>
  </probe-test-moving-results>
 </probe-test-results>
```


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```
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-moving-results>
   <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-positive-egress-jitter>
   </probe-test-generic-results>
  </probe-test-moving-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-moving-results>
   <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
```

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```
            <probe-summary-results>
              <probe-results-type>
                probe-results-type
              </probe-results-type>
              <min-delay>
                min-delay
              </min-delay>
              <max-delay>
                max-delay
              </max-delay>
              <avg-delay>
                avg-delay
              </avg-delay>
              <jitter-delay>
                jitter-delay
              </jitter-delay>
              <stddev-delay>
                stddev-delay
              </stddev-delay>
              <sum-delay>
                sum-delay
              </sum-delay>
              <samples>
                samples
              </samples>
            </probe-summary-results>
          </probe-test-negative-egress-jitter>
        </probe-test-generic-results>
      </probe-test-moving-results>
    </probe-test-results>
  </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
```


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```
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
```

```
        </probe-test-negative-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-positive-round-trip-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-round-trip-jitter>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
```


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```
<probe-test-results>
  <probe-test-moving-results>
    <probe-test-generic-results>
      <probe-test-negative-round-trip-jitter>
        <probe-summary-results>
          <probe-results-type>
            probe-results-type
          </probe-results-type>
          <min-delay>
            min-delay
          </min-delay>
          <max-delay>
            max-delay
          </max-delay>
          <avg-delay>
            avg-delay
          </avg-delay>
          <jitter-delay>
            jitter-delay
          </jitter-delay>
          <stddev-delay>
            stddev-delay
          </stddev-delay>
          <sum-delay>
            sum-delay
          </sum-delay>
          <samples>
            samples
          </samples>
        </probe-summary-results>
      </probe-test-negative-round-trip-jitter>
    </probe-test-generic-results>
  </probe-test-moving-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-rtt>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
```

```
                    </max-delay>
                    <avg-delay>
                      avg-delay
                    </avg-delay>
                    <jitter-delay>
                      jitter-delay
                    </jitter-delay>
                    <stddev-delay>
                      stddev-delay
                    </stddev-delay>
                    <sum-delay>
                      sum-delay
                    </sum-delay>
                    <samples>
                      samples
                    </samples>
                  </probe-summary-results>
                </probe-test-rtt>
              </probe-test-generic-results>
            </probe-test-global-results>
          </probe-test-results>
        </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
```


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```
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-ingress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-ingress>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-positive-egress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-egress-jitter>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-negative-egress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
```


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```
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-egress-jitter>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
```

```
            stddev-delay
           </stddev-delay>
           <sum-delay>
            sum-delay
           </sum-delay>
           <samples>
            samples
           </samples>
          </probe-summary-results>
         </probe-test-positive-ingress-jitter>
        </probe-test-generic-results>
       </probe-test-global-results>
      </probe-test-results>
     </probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-negative-ingress-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
```


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```
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-positive-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-summary-results>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
```

```
            <probe-summary-results>
              <probe-results-type>
                probe-results-type
              </probe-results-type>
              <min-delay>
                min-delay
              </min-delay>
              <max-delay>
                max-delay
              </max-delay>
              <avg-delay>
                avg-delay
              </avg-delay>
              <jitter-delay>
                jitter-delay
              </jitter-delay>
              <stddev-delay>
                stddev-delay
              </stddev-delay>
              <sum-delay>
                sum-delay
              </sum-delay>
              <samples>
                samples
              </samples>
            </probe-summary-results>
          </probe-test-negative-round-trip-jitter>
        </probe-test-generic-results>
      </probe-test-global-results>
    </probe-test-results>
  </probe-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
```


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```
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
```

```
        </probe-test-egress>
       </probe-test-generic-results>
      </probe-test-current-results>
     </history-test-results>
    </history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
      </max-delay>
      <avg-delay>
       avg-delay
      </avg-delay>
      <jitter-delay>
       jitter-delay
      </jitter-delay>
      <stddev-delay>
       stddev-delay
      </stddev-delay>
      <sum-delay>
       sum-delay
      </sum-delay>
      <samples>
       samples
      </samples>
     </probe-summary-results>
    </probe-test-ingress>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
```


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```
<history-test-results>
  <probe-test-current-results>
    <probe-test-generic-results>
      <probe-test-positive-egress-jitter>
        <probe-summary-results>
          <probe-results-type>
            probe-results-type
          </probe-results-type>
          <min-delay>
            min-delay
          </min-delay>
          <max-delay>
            max-delay
          </max-delay>
          <avg-delay>
            avg-delay
          </avg-delay>
          <jitter-delay>
            jitter-delay
          </jitter-delay>
          <stddev-delay>
            stddev-delay
          </stddev-delay>
          <sum-delay>
            sum-delay
          </sum-delay>
          <samples>
            samples
          </samples>
        </probe-summary-results>
      </probe-test-positive-egress-jitter>
    </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
     <probe-summary-results>
      <probe-results-type>
       probe-results-type
      </probe-results-type>
      <min-delay>
       min-delay
      </min-delay>
      <max-delay>
       max-delay
```

```
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-egress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
```


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```
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-negative-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

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<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-round-trip-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
            <min-delay>
              min-delay
            </min-delay>
            <max-delay>
              max-delay
            </max-delay>
            <avg-delay>
              avg-delay
            </avg-delay>
            <jitter-delay>
              jitter-delay
            </jitter-delay>
            <stddev-delay>
              stddev-delay
            </stddev-delay>
            <sum-delay>
              sum-delay
            </sum-delay>
            <samples>
              samples
            </samples>
          </probe-summary-results>
        </probe-test-positive-round-trip-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-summary-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-round-trip-jitter>
          <probe-summary-results>
            <probe-results-type>
              probe-results-type
            </probe-results-type>
```


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```
                <min-delay>
                  min-delay
                </min-delay>
                <max-delay>
                  max-delay
                </max-delay>
                <avg-delay>
                  avg-delay
                </avg-delay>
                <jitter-delay>
                  jitter-delay
                </jitter-delay>
                <stddev-delay>
                  stddev-delay
                </stddev-delay>
                <sum-delay>
                  sum-delay
                </sum-delay>
                <samples>
                  samples
                </samples>
              </probe-summary-results>
            </probe-test-negative-round-trip-jitter>
          </probe-test-generic-results>
        </probe-test-current-results>
      </history-test-results>
    </history-results>
```

Description

<probe-test-current-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>....</probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-current-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>....</probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-test-current-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>....</probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-test-egress>

Usage

```
<probe-test-egress>
  <probe-summary-results>....</probe-summary-results>
</probe-test-egress>
```

Description

<probe-test-egress>

Usage

```
<probe-test-generic-results>
  <probe-test-egress>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-egress>
</probe-test-generic-results>
```

Description

<probe-test-egress>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-egress>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-egress>
```


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```
      <probe-summary-results>....</probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-egress>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-test-egress>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-egress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-egress>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-egress>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-test-egress>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-egress>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-egress>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-test-egress>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-egress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-egress>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-test-generic-results>
  <probes-sent>
    probes-sent
  </probes-sent>
  <probe-responses>
    probe-responses
  </probe-responses>
  <loss-percentage>
    loss-percentage
  </loss-percentage>
  <results-scope>
    results-scope
  </results-scope>
  <probe-last-test-info>....</probe-last-test-info>
  <probe-test-rtt>....</probe-test-rtt>
  <probe-test-egress>....</probe-test-egress>
  <probe-test-ingress>....</probe-test-ingress>
  <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
  <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
  <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
  <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
  <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>
 <probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>

</probe-test-generic-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
```

```
<probes-sent>
  probes-sent
</probes-sent>
<probe-responses>
  probe-responses
</probe-responses>
<loss-percentage>
  loss-percentage
</loss-percentage>
<results-scope>
  results-scope
</results-scope>
<probe-last-test-info>....</probe-last-test-info>
<probe-test-rtt>....</probe-test-rtt>
<probe-test-egress>....</probe-test-egress>
<probe-test-ingress>....</probe-test-ingress>
<probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
<probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
<probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
<probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
<probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>

<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>

</probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probes-sent>
      probes-sent
    </probes-sent>
    <probe-responses>
      probe-responses
    </probe-responses>
    <loss-percentage>
      loss-percentage
    </loss-percentage>
    <results-scope>
      results-scope
    </results-scope>
    <probe-last-test-info>....</probe-last-test-info>
    <probe-test-rtt>....</probe-test-rtt>
    <probe-test-egress>....</probe-test-egress>
    <probe-test-ingress>....</probe-test-ingress>
    <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
    <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
    <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
    <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
    <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>
```


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```
<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>

 </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-test-moving-results>
 <probe-test-generic-results>
  <probes-sent>
   probes-sent
  </probes-sent>
  <probe-responses>
   probe-responses
  </probe-responses>
  <loss-percentage>
   loss-percentage
  </loss-percentage>
  <results-scope>
   results-scope
  </results-scope>
  <probe-last-test-info>....</probe-last-test-info>
  <probe-test-rtt>....</probe-test-rtt>
  <probe-test-egress>....</probe-test-egress>
  <probe-test-ingress>....</probe-test-ingress>
  <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
  <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
  <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
  <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
  <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>

 <probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>

 </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-last-test-results>
 <probe-test-generic-results>
  <probes-sent>
   probes-sent
  </probes-sent>
  <probe-responses>
   probe-responses
  </probe-responses>
  <loss-percentage>
```

```
      loss-percentage
    </loss-percentage>
    <results-scope>
      results-scope
    </results-scope>
    <probe-last-test-info>....</probe-last-test-info>
    <probe-test-rtt>....</probe-test-rtt>
    <probe-test-egress>....</probe-test-egress>
    <probe-test-ingress>....</probe-test-ingress>
    <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
    <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
    <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
    <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
   <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>

  <probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>

   </probe-test-generic-results>
  </probe-last-test-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probes-sent>
          probes-sent
        </probes-sent>
        <probe-responses>
          probe-responses
        </probe-responses>
        <loss-percentage>
          loss-percentage
        </loss-percentage>
        <results-scope>
          results-scope
        </results-scope>
        <probe-last-test-info>....</probe-last-test-info>
        <probe-test-rtt>....</probe-test-rtt>
        <probe-test-egress>....</probe-test-egress>
        <probe-test-ingress>....</probe-test-ingress>
        <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
        <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
        <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
        <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
      <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>


<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>
        </probe-test-generic-results>
      </probe-test-current-results>
```


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```
  </probe-test-results>
</probe-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probes-sent>
          probes-sent
        </probes-sent>
        <probe-responses>
          probe-responses
        </probe-responses>
        <loss-percentage>
          loss-percentage
        </loss-percentage>
        <results-scope>
          results-scope
        </results-scope>
        <probe-last-test-info>....</probe-last-test-info>
        <probe-test-rtt>....</probe-test-rtt>
        <probe-test-egress>....</probe-test-egress>
        <probe-test-ingress>....</probe-test-ingress>
        <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
        <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
        <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
        <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
      <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>


<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>
        </probe-test-generic-results>
      </probe-last-test-results>
    </probe-test-results>
</probe-results>
```

Description

<probe-test-generic-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probes-sent>
          probes-sent
        </probes-sent>
        <probe-responses>
```

```
                    probe-responses
                  </probe-responses>
                  <loss-percentage>
                    loss-percentage
                  </loss-percentage>
                  <results-scope>
                    results-scope
                  </results-scope>
                  <probe-last-test-info>....</probe-last-test-info>
                  <probe-test-rtt>....</probe-test-rtt>
                  <probe-test-egress>....</probe-test-egress>
                  <probe-test-ingress>....</probe-test-ingress>
                  <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
                  <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
                  <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
                  <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
                <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>


<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>
                  </probe-test-generic-results>
                </probe-test-moving-results>
              </probe-test-results>
            </probe-results>
```

Description

<probe-test-generic-results>

Usage

```
            <probe-results>
              <probe-test-results>
                <probe-test-global-results>
                  <probe-test-generic-results>
                    <probes-sent>
                      probes-sent
                    </probes-sent>
                    <probe-responses>
                      probe-responses
                    </probe-responses>
                    <loss-percentage>
                      loss-percentage
                    </loss-percentage>
                    <results-scope>
                      results-scope
                    </results-scope>
                    <probe-last-test-info>....</probe-last-test-info>
                    <probe-test-rtt>....</probe-test-rtt>
                    <probe-test-egress>....</probe-test-egress>
                    <probe-test-ingress>....</probe-test-ingress>
                    <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
                    <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
                    <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
                    <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
                  <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>
```


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```
<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>
          </probe-test-generic-results>
        </probe-test-global-results>
      </probe-test-results>
    </probe-results>
```

Description

<probe-test-generic-results>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probes-sent>
          probes-sent
        </probes-sent>
        <probe-responses>
          probe-responses
        </probe-responses>
        <loss-percentage>
          loss-percentage
        </loss-percentage>
        <results-scope>
          results-scope
        </results-scope>
        <probe-last-test-info>....</probe-last-test-info>
        <probe-test-rtt>....</probe-test-rtt>
        <probe-test-egress>....</probe-test-egress>
        <probe-test-ingress>....</probe-test-ingress>
        <probe-test-positive-egress-jitter>....</probe-test-positive-egress-jitter>
        <probe-test-negative-egress-jitter>....</probe-test-negative-egress-jitter>
        <probe-test-positive-ingress-jitter>....</probe-test-positive-ingress-jitter>
        <probe-test-negative-ingress-jitter>....</probe-test-negative-ingress-jitter>
      <probe-test-positive-round-trip-jitter>....</probe-test-positive-round-trip-jitter>


<probe-test-negative-round-trip-jitter>....</probe-test-negative-round-trip-jitter>
          </probe-test-generic-results>
        </probe-test-current-results>
      </history-test-results>
    </history-results>
```

Description

<probe-test-global-results>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>....</probe-test-generic-results>
```

```
</probe-test-global-results>
```

Description

<probe-test-global-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>....</probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-test-ingress>
  <probe-summary-results>....</probe-summary-results>
</probe-test-ingress>
```

Description

<probe-test-ingress>

Usage

```
<probe-test-generic-results>
  <probe-test-ingress>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-ingress>
</probe-test-generic-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

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<probe-test-ingress>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-ingress>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-ingress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-ingress>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
```

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```
</probe-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-last-test-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
   </probe-test-generic-results>
  </probe-last-test-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-moving-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
   </probe-test-generic-results>
  </probe-test-moving-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-ingress>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-ingress>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-ingress>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```


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Description

<probe-test-ingress>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-ingress>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-ingress>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<probe-test-moving-results>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>....</probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-test-moving-results>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>....</probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-test-negative-egress-jitter>
  <probe-summary-results>....</probe-summary-results>
</probe-test-negative-egress-jitter>
```

Description

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<probe-test-negative-egress-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-negative-egress-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-negative-egress-jitter>
</probe-test-generic-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-negative-egress-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-egress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-egress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-negative-egress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-egress-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```

```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-negative-egress-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-negative-egress-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-egress-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-negative-egress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-egress-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-test-negative-ingress-jitter>
 <probe-summary-results>....</probe-summary-results>
</probe-test-negative-ingress-jitter>
```


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Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-negative-ingress-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-negative-ingress-jitter>
</probe-test-generic-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-negative-ingress-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-negative-ingress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-ingress-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```


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```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-negative-ingress-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-negative-ingress-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-ingress-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-negative-ingress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-ingress-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-test-negative-round-trip-jitter>
 <probe-summary-results>....</probe-summary-results>
</probe-test-negative-round-trip-jitter>
```

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Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-negative-round-trip-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-negative-round-trip-jitter>
</probe-test-generic-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-negative-round-trip-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-negative-round-trip-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-round-trip-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-negative-round-trip-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-negative-round-trip-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```

```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-negative-round-trip-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-negative-round-trip-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-negative-round-trip-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-negative-round-trip-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-negative-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-test-positive-egress-jitter>
 <probe-summary-results>....</probe-summary-results>
</probe-test-positive-egress-jitter>
```


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Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-egress-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-positive-egress-jitter>
</probe-test-generic-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-positive-egress-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-egress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-egress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-positive-egress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-egress-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```


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```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-positive-egress-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-positive-egress-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-egress-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-positive-egress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-egress-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-test-positive-ingress-jitter>
 <probe-summary-results>....</probe-summary-results>
</probe-test-positive-ingress-jitter>
```

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Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-ingress-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-positive-ingress-jitter>
</probe-test-generic-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-positive-ingress-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-ingress-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-positive-ingress-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-ingress-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```

```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-positive-ingress-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-positive-ingress-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-ingress-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-positive-ingress-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-ingress-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-test-positive-round-trip-jitter>
 <probe-summary-results>....</probe-summary-results>
</probe-test-positive-round-trip-jitter>
```


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Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-test-generic-results>
  <probe-test-positive-round-trip-jitter>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-positive-round-trip-jitter>
</probe-test-generic-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

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<probe-test-positive-round-trip-jitter>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-positive-round-trip-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-round-trip-jitter>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-positive-round-trip-jitter>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-positive-round-trip-jitter>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-results>
  <probe-test-results>
```


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```
    <probe-test-moving-results>
     <probe-test-generic-results>
      <probe-test-positive-round-trip-jitter>
       <probe-summary-results>....</probe-summary-results>
      </probe-test-positive-round-trip-jitter>
     </probe-test-generic-results>
    </probe-test-moving-results>
   </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<probe-results>
 <probe-test-results>
  <probe-test-global-results>
   <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-global-results>
 </probe-test-results>
</probe-results>
```

Description

<probe-test-positive-round-trip-jitter>

Usage

```
<history-results>
 <history-test-results>
  <probe-test-current-results>
   <probe-test-generic-results>
    <probe-test-positive-round-trip-jitter>
     <probe-summary-results>....</probe-summary-results>
    </probe-test-positive-round-trip-jitter>
   </probe-test-generic-results>
  </probe-test-current-results>
 </history-test-results>
</history-results>
```

Description

<probe-test-results>

Usage

```
<probe-results>
 <probe-test-results>
  <owner>
   owner
```

```
</owner>
<test-name>
  test-name
</test-name>
<target-address>
  target-address
</target-address>
<target-url>
  target-url
</target-url>
<source-address>
  source-address
</source-address>
<destination-interface>
  destination-interface
</destination-interface>
<probe-type>
  probe-type
</probe-type>
<test-size>
  test-size
</test-size>
<routing-instance-name>
  routing-instance-name
</routing-instance-name>
<loss-thresh-total>
  loss-thresh-total
</loss-thresh-total>
<loss-thresh-succ>
  loss-thresh-succ
</loss-thresh-succ>
<delay-thresh>
  delay-thresh
</delay-thresh>
<jitter-thresh>
  jitter-thresh
</jitter-thresh>
<stddev-thresh>
  stddev-thresh
</stddev-thresh>
<egress-thresh>
  egress-thresh
</egress-thresh>
<egress-jitter-thresh>
  egress-jitter-thresh
</egress-jitter-thresh>
<egress-stddev-thresh>
  egress-stddev-thresh
</egress-stddev-thresh>
<ingress-thresh>
  ingress-thresh
</ingress-thresh>
<ingress-jitter-thresh>
  ingress-jitter-thresh
</ingress-jitter-thresh>
<ingress-stddev-thresh>
```


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```
    ingress-stddev-thresh
   </ingress-stddev-thresh>
   <probe-single-results>....</probe-single-results>
   <probe-test-current-results>....</probe-test-current-results>
   <probe-last-test-results>....</probe-last-test-results>
   <probe-test-moving-results>....</probe-test-moving-results>
   <probe-test-global-results>....</probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-test-rtt>
  <probe-summary-results>....</probe-summary-results>
</probe-test-rtt>
```

Description

<probe-test-rtt>

Usage

```
<probe-test-generic-results>
  <probe-test-rtt>
    <probe-summary-results>....</probe-summary-results>
  </probe-test-rtt>
</probe-test-generic-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-test-current-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-rtt>
  </probe-test-generic-results>
</probe-test-current-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-test-global-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>....</probe-summary-results>
```

```
    </probe-test-rtt>
  </probe-test-generic-results>
</probe-test-global-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-test-moving-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-rtt>
  </probe-test-generic-results>
</probe-test-moving-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-last-test-results>
  <probe-test-generic-results>
    <probe-test-rtt>
      <probe-summary-results>....</probe-summary-results>
    </probe-test-rtt>
  </probe-test-generic-results>
</probe-last-test-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-current-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-test-rtt>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-last-test-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-last-test-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-moving-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-moving-results>
  </probe-test-results>
</probe-results>
```

Description

<probe-test-rtt>

Usage

```
<probe-results>
  <probe-test-results>
    <probe-test-global-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-global-results>
  </probe-test-results>
</probe-results>
```

Description

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<probe-test-rtt>

Usage

```
<history-results>
  <history-test-results>
    <probe-test-current-results>
      <probe-test-generic-results>
        <probe-test-rtt>
          <probe-summary-results>....</probe-summary-results>
        </probe-test-rtt>
      </probe-test-generic-results>
    </probe-test-current-results>
  </history-test-results>
</history-results>
```

Description

<server>

Usage

```
<twamp-server-information>
  <server>
    <session>....</session>
  </server>
</twamp-server-information>
```

Description Server information

<server-statistics>

Usage

```
<twamp-server-information>
  <server-statistics>
    <packet-statistics>....</packet-statistics>
  </server-statistics>
</twamp-server-information>
```

Description Server statistics

<session>

Usage

```
<twamp-server-information>
  <server>
    <session>
      <session-id>
        session-id
      </session-id>
      <connection-id>
        connection-id
      </connection-id>
```


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```
<sender-address>
  sender-address
</sender-address>
<sender-port>
  sender-port
</sender-port>
<reflector-address>
  reflector-address
</reflector-address>
<reflector-port>
  reflector-port
</reflector-port>
<session-state>
  session-state
</session-state>
<authentication-mode>
  authentication-mode
</authentication-mode>
<ip-version>
  ip-version
</ip-version>
<padding-length>
  padding-length
</padding-length>
<start-time>
  start-time
</start-time>
<timeout>
  timeout
</timeout>
<packet-statistics>....</packet-statistics>
</session>
</server>
</twamp-server-information>
```

Description Server session

<test-packets-dropped-details>

Usage

```
<twamp-server-information>
  <server>
    <session>
      <packet-statistics>
        <test-packets-dropped-details>
          <session-nonexist>
            session-nonexist
          </session-nonexist>
          <session-notactive>
            session-notactive
          </session-notactive>
          <packet-unsupported>
            packet-unsupported
          </packet-unsupported>
```

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```
            <packet-malformed>
              packet-malformed
            </packet-malformed>
            <internal-error>
              internal-error
            </internal-error>
          </test-packets-dropped-details>
        </packet-statistics>
      </session>
    </server>
  </twamp-server-information>
```

Description Test packets dropped details

<test-packets-dropped-details>

Usage

```
<twamp-server-information>
  <server-statistics>
    <packet-statistics>
      <test-packets-dropped-details>
        <session-nonexist>
          session-nonexist
        </session-nonexist>
        <session-notactive>
          session-notactive
        </session-notactive>
        <packet-unsupported>
          packet-unsupported
        </packet-unsupported>
        <packet-malformed>
          packet-malformed
        </packet-malformed>
        <internal-error>
          internal-error
        </internal-error>
      </test-packets-dropped-details>
    </packet-statistics>
  </server-statistics>
</twamp-server-information>
```

Description Test packets dropped details

<twamp-server-information>

Usage

```
<twamp-server-information>
  <connection>....</connection>
  <server>....</server>
  <server-statistics>....</server-statistics>
</twamp-server-information>
```


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Description

Summary of Routing and Forwarding Table Response Tags

<bridge-mac-destination-address-statistics>

Usage

```
<bridge-mac-destination-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</bridge-mac-destination-address-statistics>
```

Description MAC destination address statistics

<bridge-mac-destination-address-statistics>

Usage

```
<rt-entry>
  <bridge-mac-destination-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </bridge-mac-destination-address-statistics>
</rt-entry>
```

Description MAC destination address statistics

<bridge-mac-destination-address-statistics>

Usage

```
<route-table>
  <rt-entry>
    <bridge-mac-destination-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </bridge-mac-destination-address-statistics>
  </rt-entry>
</route-table>
```

Description MAC destination address statistics

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<bridge-mac-destination-address-statistics>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <bridge-mac-destination-address-statistics>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
      </bridge-mac-destination-address-statistics>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```

Description MAC destination address statistics

<bridge-mac-source-address-statistics>

Usage

```
<bridge-mac-source-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</bridge-mac-source-address-statistics>
```

Description MAC source address statistics

<bridge-mac-source-address-statistics>

Usage

```
<rt-entry>
  <bridge-mac-source-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </bridge-mac-source-address-statistics>
</rt-entry>
```

Description MAC source address statistics

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<bridge-mac-source-address-statistics>

Usage

```
<route-table>
  <rt-entry>
    <bridge-mac-source-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </bridge-mac-source-address-statistics>
  </rt-entry>
</route-table>
```

Description MAC source address statistics

<bridge-mac-source-address-statistics>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <bridge-mac-source-address-statistics>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
      </bridge-mac-source-address-statistics>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```

Description MAC source address statistics

<fib-localization-configuration>

Usage

```
<fib-localization-configuration>
  <configured-protocols>
    configured-protocols
  </configured-protocols>
  <configured-fib-local>
    configured-fib-local
  </configured-fib-local>
  <configured-fib-remote>
    configured-fib-remote
  </configured-fib-remote>
  <configuration-read-error>
```

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```
    configuration-read-error
   </configuration-read-error>
  </fib-localization-configuration>
```

Description FIB localization configuration

<fib-localization-configuration>

Usage

```
<fib-localization-information>
 <fib-localization-configuration>
  <configured-protocols>
   configured-protocols
  </configured-protocols>
  <configured-fib-local>
   configured-fib-local
  </configured-fib-local>
  <configured-fib-remote>
   configured-fib-remote
  </configured-fib-remote>
  <configuration-read-error>
   configuration-read-error
  </configuration-read-error>
 </fib-localization-configuration>
</fib-localization-information>
```

Description FIB localization configuration

<fib-localization-information>

Usage

```
<fib-localization-information>
  <fib-localization-configuration>....</fib-localization-configuration>
  <fib-localization-state>....</fib-localization-state>

<fpc-slot-to-forwarding-engine-addresses-map>....</fpc-slot-to-forwarding-engine-addresses-map>

</fib-localization-information>
```

Description Information about FIB localization

<fib-localization-state>

Usage

```
<fib-localization-state>
 <ready-fib-local>
  ready-fib-local
 </ready-fib-local>
 <ready-fib-remote>
  ready-fib-remote
 </ready-fib-remote>
```


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```
<ready-normal>
  ready-normal
</ready-normal>
<state-read-failed-on-backup>
  state-read-failed-on-backup
</state-read-failed-on-backup>
<state-read-error>
  state-read-error
</state-read-error>
</fib-localization-state>
```

Description FIB localization state

<fib-localization-state>

Usage

```
<fib-localization-information>
  <fib-localization-state>
    <ready-fib-local>
      ready-fib-local
    </ready-fib-local>
    <ready-fib-remote>
      ready-fib-remote
    </ready-fib-remote>
    <ready-normal>
      ready-normal
    </ready-normal>
    <state-read-failed-on-backup>
      state-read-failed-on-backup
    </state-read-failed-on-backup>
    <state-read-error>
      state-read-error
    </state-read-error>
  </fib-localization-state>
</fib-localization-information>
```

Description FIB localization state

<forwarding-table-information>

Usage

```
<forwarding-table-information>
  <route-table>....</route-table>
</forwarding-table-information>
```

Description Information about forwarding-table routing entries

<fpc-slot-to-forwarding-engine-addresses-map>

Usage

```
<fpc-slot-to-forwarding-engine-addresses-map>
```

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```
<map-entry>
  map-entry
</map-entry>
<map-read-error>
  map-read-error
</map-read-error>
</fpc-slot-to-forwarding-engine-addresses-map>
```

Description All known FPC slot-to-Forwarding-Engine-addresses mappings

<fpc-slot-to-forwarding-engine-addresses-map>

Usage

```
<fib-localization-information>
  <fpc-slot-to-forwarding-engine-addresses-map>
    <map-entry>
      map-entry
    </map-entry>
    <map-read-error>
      map-read-error
    </map-read-error>
  </fpc-slot-to-forwarding-engine-addresses-map>
</fib-localization-information>
```

Description All known FPC slot-to-Forwarding-Engine-addresses mappings

<nh>

Usage

```
<nh>
  <to>
    to
  </to>
  <nh-type>
    nh-type
  </nh-type>
  <nh-index>
    nh-index
  </nh-index>
  <nh-reference-count>
    nh-reference-count
  </nh-reference-count>
  <nh-cfi-index>
    nh-cfi-index
  </nh-cfi-index>
  <via>
    via
  </via>
  <nh-weight>
    nh-weight
  </nh-weight>
  <nh-balance>
```


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```
  nh-balance
 </nh-balance>
 <nh-uflags>
  nh-uflags
 </nh-uflags>
 <nh-composite-num-nhs>
  nh-composite-num-nhs
 </nh-composite-num-nhs>
 <nh-composite-nh-index>
  nh-composite-nh-index
 </nh-composite-nh-index>
 <nh-composite-function>
  nh-composite-function
 </nh-composite-function>
 <nh-composite-num-derived-nhs>
  nh-composite-num-derived-nhs
 </nh-composite-num-derived-nhs>
 <nh-composite-derived-nh-index>
  nh-composite-derived-nh-index
 </nh-composite-derived-nh-index>
 <alt-fwdnh-index>
  alt-fwdnh-index
 </alt-fwdnh-index>
 <nh-l3-interface>
  nh-l3-interface
 </nh-l3-interface>
 <nh-l2-interface>....</nh-l2-interface>
 <nh-le-beb-mac>
  nh-le-beb-mac
 </nh-le-beb-mac>
</nh>
```

Description Next hop for this routing table entry

<nh>

Usage

```
<rt-entry>
 <nh>
  <to>
   to
  </to>
  <nh-type>
   nh-type
  </nh-type>
  <nh-index>
   nh-index
  </nh-index>
  <nh-reference-count>
   nh-reference-count
  </nh-reference-count>
  <nh-cfi-index>
   nh-cfi-index
  </nh-cfi-index>
```

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```
<via>
  via
</via>
<nh-weight>
  nh-weight
</nh-weight>
<nh-balance>
  nh-balance
</nh-balance>
<nh-uflags>
  nh-uflags
</nh-uflags>
<nh-composite-num-nhs>
  nh-composite-num-nhs
</nh-composite-num-nhs>
<nh-composite-nh-index>
  nh-composite-nh-index
</nh-composite-nh-index>
<nh-composite-function>
  nh-composite-function
</nh-composite-function>
<nh-composite-num-derived-nhs>
  nh-composite-num-derived-nhs
</nh-composite-num-derived-nhs>
<nh-composite-derived-nh-index>
  nh-composite-derived-nh-index
</nh-composite-derived-nh-index>
<alt-fwdnh-index>
  alt-fwdnh-index
</alt-fwdnh-index>
<nh-l3-interface>
  nh-l3-interface
</nh-l3-interface>
<nh-l2-interface>....</nh-l2-interface>
<nh-le-beb-mac>
  nh-le-beb-mac
</nh-le-beb-mac>
</nh>
</rt-entry>
```

Description Next hop for this routing table entry

<nh>

Usage

```
<route-table>
  <rt-entry>
    <nh>
      <to>
        to
      </to>
      <nh-type>
        nh-type
      </nh-type>
```


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```
<nh-index>
  nh-index
</nh-index>
<nh-reference-count>
  nh-reference-count
</nh-reference-count>
<nh-cfi-index>
  nh-cfi-index
</nh-cfi-index>
<via>
  via
</via>
<nh-weight>
  nh-weight
</nh-weight>
<nh-balance>
  nh-balance
</nh-balance>
<nh-uflags>
  nh-uflags
</nh-uflags>
<nh-composite-num-nhs>
  nh-composite-num-nhs
</nh-composite-num-nhs>
<nh-composite-nh-index>
  nh-composite-nh-index
</nh-composite-nh-index>
<nh-composite-function>
  nh-composite-function
</nh-composite-function>
<nh-composite-num-derived-nhs>
  nh-composite-num-derived-nhs
</nh-composite-num-derived-nhs>
<nh-composite-derived-nh-index>
  nh-composite-derived-nh-index
</nh-composite-derived-nh-index>
<alt-fwdnh-index>
  alt-fwdnh-index
</alt-fwdnh-index>
<nh-l3-interface>
  nh-l3-interface
</nh-l3-interface>
<nh-l2-interface>....</nh-l2-interface>
<nh-le-beb-mac>
  nh-le-beb-mac
</nh-le-beb-mac>
</nh>
</rt-entry>
</route-table>
```

Description Next hop for this routing table entry

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<nh>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <nh>
        <to>
          to
        </to>
        <nh-type>
          nh-type
        </nh-type>
        <nh-index>
          nh-index
        </nh-index>
        <nh-reference-count>
          nh-reference-count
        </nh-reference-count>
        <nh-cfi-index>
          nh-cfi-index
        </nh-cfi-index>
        <via>
          via
        </via>
        <nh-weight>
          nh-weight
        </nh-weight>
        <nh-balance>
          nh-balance
        </nh-balance>
        <nh-uflags>
          nh-uflags
        </nh-uflags>
        <nh-composite-num-nhs>
          nh-composite-num-nhs
        </nh-composite-num-nhs>
        <nh-composite-nh-index>
          nh-composite-nh-index
        </nh-composite-nh-index>
        <nh-composite-function>
          nh-composite-function
        </nh-composite-function>
        <nh-composite-num-derived-nhs>
          nh-composite-num-derived-nhs
        </nh-composite-num-derived-nhs>
        <nh-composite-derived-nh-index>
          nh-composite-derived-nh-index
        </nh-composite-derived-nh-index>
        <alt-fwdnh-index>
          alt-fwdnh-index
        </alt-fwdnh-index>
        <nh-l3-interface>
          nh-l3-interface
        </nh-l3-interface>
```


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```
        <nh-l2-interface>....</nh-l2-interface>
        <nh-le-beb-mac>
          nh-le-beb-mac
        </nh-le-beb-mac>
      </nh>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```

Description Next hop for this routing table entry

<nh-l2-interface>

Usage

```
<nh-l2-interface>
  <nh-l2-interface-name>
    nh-l2-interface-name
  </nh-l2-interface-name>
</nh-l2-interface>
```

Description

<nh-l2-interface>

Usage

```
<nh>
  <nh-l2-interface>
    <nh-l2-interface-name>
      nh-l2-interface-name
    </nh-l2-interface-name>
  </nh-l2-interface>
</nh>
```

Description

<nh-l2-interface>

Usage

```
<rt-entry>
  <nh>
    <nh-l2-interface>
      <nh-l2-interface-name>
        nh-l2-interface-name
      </nh-l2-interface-name>
    </nh-l2-interface>
  </nh>
</rt-entry>
```

Description

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<nh-l2-interface>

Usage

```
<route-table>
  <rt-entry>
    <nh>
      <nh-l2-interface>
        <nh-l2-interface-name>
          nh-l2-interface-name
        </nh-l2-interface-name>
      </nh-l2-interface>
    </nh>
  </rt-entry>
</route-table>
```

Description

<nh-l2-interface>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <nh>
        <nh-l2-interface>
          <nh-l2-interface-name>
            nh-l2-interface-name
          </nh-l2-interface-name>
        </nh-l2-interface>
      </nh>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```

Description

<route-table>

Usage

```
<route-table>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <table-name>
    table-name
  </table-name>
  <bd-name>
    bd-name
  </bd-name>
  <pbbn-table-name>
    pbbn-table-name
  </pbbn-table-name>
  <route-table-deleted>
```


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```
  route-table-deleted
 </route-table-deleted>
 <pbbn-route-table-deleted>
  pbbn-route-table-deleted
 </pbbn-route-table-deleted>
 <bridge-table-deleted>
  bridge-table-deleted
 </bridge-table-deleted>
 <address-family>
  address-family
 </address-family>
 <address-family-number>
  address-family-number
 </address-family-number>
 <rt-entry>....</rt-entry>
 <route-table-summary>....</route-table-summary>
</route-table>
```

Description Denotes a routing table

<route-table>

Usage

```
<forwarding-table-information>
 <route-table>
  <logical-system-name>
   logical-system-name
  </logical-system-name>
  <table-name>
   table-name
  </table-name>
  <bd-name>
   bd-name
  </bd-name>
  <pbbn-table-name>
   pbbn-table-name
  </pbbn-table-name>
  <route-table-deleted>
   route-table-deleted
  </route-table-deleted>
  <pbbn-route-table-deleted>
   pbbn-route-table-deleted
  </pbbn-route-table-deleted>
  <bridge-table-deleted>
   bridge-table-deleted
  </bridge-table-deleted>
  <address-family>
   address-family
  </address-family>
  <address-family-number>
   address-family-number
  </address-family-number>
  <rt-entry>....</rt-entry>
  <route-table-summary>....</route-table-summary>
```

```
  </route-table>
</forwarding-table-information>
```

Description Denotes a routing table

<route-table-summary>

Usage

```
<route-table-summary>
  <route-table-type>
    route-table-type
  </route-table-type>
  <route-count>
    route-count
  </route-count>
</route-table-summary>
```

Description Routing table summary

<route-table-summary>

Usage

```
<route-table>
  <route-table-summary>
    <route-table-type>
      route-table-type
    </route-table-type>
    <route-count>
      route-count
    </route-count>
  </route-table-summary>
</route-table>
```

Description Routing table summary

<route-table-summary>

Usage

```
<forwarding-table-information>
  <route-table>
    <route-table-summary>
      <route-table-type>
        route-table-type
      </route-table-type>
      <route-count>
        route-count
      </route-count>
    </route-table-summary>
  </route-table>
</forwarding-table-information>
```


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Description Routing table summary

<rpf-information>

Usage

```
<rpf-information>
  <via>
    via
  </via>
</rpf-information>
```

Description Reverse-path forwarding check for this route

<rpf-information>

Usage

```
<rt-entry>
  <rpf-information>
    <via>
      via
    </via>
  </rpf-information>
</rt-entry>
```

Description Reverse-path forwarding check for this route

<rpf-information>

Usage

```
<route-table>
  <rt-entry>
    <rpf-information>
      <via>
        via
      </via>
    </rpf-information>
  </rt-entry>
</route-table>
```

Description Reverse-path forwarding check for this route

<rpf-information>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <rpf-information>
        <via>
          via
```

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```
        </via>
       </rpf-information>
      </rt-entry>
     </route-table>
    </forwarding-table-information>
```

Description Reverse-path forwarding check for this route

<rt-entry>

Usage

```
<rt-entry>
 <rt-destination>
  rt-destination
 </rt-destination>
 <learn-vlan>
  learn-vlan
 </learn-vlan>
 <destination-type>
  destination-type
 </destination-type>
 <route-reference-count>
  route-reference-count
 </route-reference-count>
 <route-interface-index>
  route-interface-index
 </route-interface-index>
 <ifl-generation>
  ifl-generation
 </ifl-generation>
 <epoch>
  epoch
 </epoch>
 <flood-token>
  flood-token
 </flood-token>
 <mac-sequence-number>
  mac-sequence-number
 </mac-sequence-number>
 <learn-mask>
  learn-mask
 </learn-mask>
 <l2al-rtflags>
  l2al-rtflags
 </l2al-rtflags>
 <route-flags>
  route-flags
 </route-flags>
 <vlan-index>
  vlan-index
 </vlan-index>
 <vlan-flags>
  vlan-flags
 </vlan-flags>
```


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```
<nh>....</nh>
<rpf-information>....</rpf-information>
<vpls-mac-source-address-statistics>....</vpls-mac-source-address-statistics>
<vpls-mac-destination-address-statistics>....</vpls-mac-destination-address-statistics>
<bridge-mac-source-address-statistics>....</bridge-mac-source-address-statistics>
<bridge-mac-destination-address-statistics>....</bridge-mac-destination-address-statistics>
</rt-entry>
```

Description Routing table entry for a destination

<rt-entry>

Usage

```
<route-table>
 <rt-entry>
  <rt-destination>
   rt-destination
  </rt-destination>
  <learn-vlan>
   learn-vlan
  </learn-vlan>
  <destination-type>
   destination-type
  </destination-type>
  <route-reference-count>
   route-reference-count
  </route-reference-count>
  <route-interface-index>
   route-interface-index
  </route-interface-index>
  <ifl-generation>
   ifl-generation
  </ifl-generation>
  <epoch>
   epoch
  </epoch>
  <flood-token>
   flood-token
  </flood-token>
  <mac-sequence-number>
   mac-sequence-number
  </mac-sequence-number>
  <learn-mask>
   learn-mask
  </learn-mask>
  <l2al-rtflags>
   l2al-rtflags
  </l2al-rtflags>
  <route-flags>
```

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```
                route-flags
               </route-flags>
               <vlan-index>
                vlan-index
               </vlan-index>
               <vlan-flags>
                vlan-flags
               </vlan-flags>
               <nh>....</nh>
               <rpf-information>....</rpf-information>
              <vpls-mac-source-address-statistics>....</vpls-mac-source-address-statistics>

<vpls-mac-destination-address-statistics>....</vpls-mac-destination-address-statistics>

<bridge-mac-source-address-statistics>....</bridge-mac-source-address-statistics>

<bridge-mac-destination-address-statistics>....</bridge-mac-destination-address-statistics>

              </rt-entry>
             </route-table>
```

Description Routing table entry for a destination

<rt-entry>

Usage

```
<forwarding-table-information>
 <route-table>
  <rt-entry>
   <rt-destination>
    rt-destination
   </rt-destination>
   <learn-vlan>
    learn-vlan
   </learn-vlan>
   <destination-type>
    destination-type
   </destination-type>
   <route-reference-count>
    route-reference-count
   </route-reference-count>
   <route-interface-index>
    route-interface-index
   </route-interface-index>
   <ifl-generation>
    ifl-generation
   </ifl-generation>
   <epoch>
    epoch
   </epoch>
   <flood-token>
    flood-token
```


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```
                    </flood-token>
                    <mac-sequence-number>
                      mac-sequence-number
                    </mac-sequence-number>
                    <learn-mask>
                      learn-mask
                    </learn-mask>
                    <l2al-rtflags>
                      l2al-rtflags
                    </l2al-rtflags>
                    <route-flags>
                      route-flags
                    </route-flags>
                    <vlan-index>
                      vlan-index
                    </vlan-index>
                    <vlan-flags>
                      vlan-flags
                    </vlan-flags>
                    <nh>....</nh>
                    <rpf-information>....</rpf-information>
                  <vpls-mac-source-address-statistics>....</vpls-mac-source-address-statistics>

                <vpls-mac-destination-address-statistics>....</vpls-mac-destination-address-statistics>

                <bridge-mac-source-address-statistics>....</bridge-mac-source-address-statistics>

                <bridge-mac-destination-address-statistics>....</bridge-mac-destination-address-statistics>

                    </rt-entry>
                  </route-table>
                </forwarding-table-information>
```

Description Routing table entry for a destination

<vpls-mac-destination-address-statistics>

Usage

```
<vpls-mac-destination-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</vpls-mac-destination-address-statistics>
```

Description MAC destination address statistics

<vpls-mac-destination-address-statistics>

Usage

```
<rt-entry>
  <vpls-mac-destination-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </vpls-mac-destination-address-statistics>
</rt-entry>
```

Description MAC destination address statistics

<vpls-mac-destination-address-statistics>

Usage

```
<route-table>
  <rt-entry>
    <vpls-mac-destination-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </vpls-mac-destination-address-statistics>
  </rt-entry>
</route-table>
```

Description MAC destination address statistics

<vpls-mac-destination-address-statistics>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <vpls-mac-destination-address-statistics>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
      </vpls-mac-destination-address-statistics>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```


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Description MAC destination address statistics

<vpls-mac-source-address-statistics>

Usage

```
<vpls-mac-source-address-statistics>
  <packet-count>
    packet-count
  </packet-count>
  <byte-count>
    byte-count
  </byte-count>
</vpls-mac-source-address-statistics>
```

Description MAC source address statistics

<vpls-mac-source-address-statistics>

Usage

```
<rt-entry>
  <vpls-mac-source-address-statistics>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
  </vpls-mac-source-address-statistics>
</rt-entry>
```

Description MAC source address statistics

<vpls-mac-source-address-statistics>

Usage

```
<route-table>
  <rt-entry>
    <vpls-mac-source-address-statistics>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
    </vpls-mac-source-address-statistics>
  </rt-entry>
</route-table>
```

Description MAC source address statistics

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<vpls-mac-source-address-statistics>

Usage

```
<forwarding-table-information>
  <route-table>
    <rt-entry>
      <vpls-mac-source-address-statistics>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
      </vpls-mac-source-address-statistics>
    </rt-entry>
  </route-table>
</forwarding-table-information>
```

Description MAC source address statistics

Summary of SDX Response Tags

<connection-status>

Usage

```
<sdx-information>
  <connection-status>
    <state>
      state
    </state>
    <address>
      address
    </address>
    <port>
      port
    </port>
    <date-time>
      date-time
    </date-time>
  </connection-status>
</sdx-information>
```

Description Status of the connection to SDX

<keepalive-information>

Usage

```
<sdx-information>
  <keepalive-information>
    <interval>
      interval
```


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```
    </interval>
    <keepalive-count>
      keepalive-count
    </keepalive-count>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
  </keepalive-information>
</sdx-information>
```

Description Keepalive settings and statistics

<notification-information>

Usage

```
<sdx-information>
  <notification-information>
    <notification-count>
      notification-count
    </notification-count>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
  </notification-information>
</sdx-information>
```

Description Notification statistics

<peer-information>

Usage

```
<sdx-information>
  <peer-information>
    <elapsed-time>
      elapsed-time
    </elapsed-time>
  </peer-information>
</sdx-information>
```

Description Peer statistics

<sdx-information>

Usage

```
<sdx-information>
  <unconfigured>
    unconfigured
  </unconfigured>
  <connection-status>....</connection-status>
  <keepalive-information>....</keepalive-information>
  <notification-information>....</notification-information>
```

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```
    <peer-information>....</peer-information>
</sdx-information>
```

Description Information about service deployment application

Summary of SecPolInfo Response Tags

<resource>

Usage

```
<resource-utilization>
  <resource>
    <area>
      area
    </area>
    <current>
      current
    </current>
    <maximum>
      maximum
    </maximum>
  </resource>
</resource-utilization>
```

Description Resource information

<resource>

Usage

```
<secpolinfo-policy-information>
  <secpolinfo-policy>
    <resource-utilization>
      <resource>
        <area>
          area
        </area>
        <current>
          current
        </current>
        <maximum>
          maximum
        </maximum>
      </resource>
    </resource-utilization>
  </secpolinfo-policy>
</secpolinfo-policy-information>
```

Description Resource information

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<resource-utilization>

Usage

```
<resource-utilization>
  <resource>....</resource>
</resource-utilization>
```

Description Resources used by a process

<resource-utilization>

Usage

```
<secpolinfo-policy-information>
  <secpolinfo-policy>
    <resource-utilization>
      <resource>....</resource>
    </resource-utilization>
  </secpolinfo-policy>
</secpolinfo-policy-information>
```

Description Resources used by a process

<secpolinfo-policy>

Usage

```
<secpolinfo-policy-information>
  <secpolinfo-policy>
    <secpolinfo-policy-provider-prefix>
      secpolinfo-policy-provider-prefix
    </secpolinfo-policy-provider-prefix>
    <secpolinfo-policy-provider-id>
      secpolinfo-policy-provider-id
    </secpolinfo-policy-provider-id>
    <secpolinfo-policy-applied-role>
      secpolinfo-policy-applied-role
    </secpolinfo-policy-applied-role>
    <secpolinfo-policy-applied-policy>
      secpolinfo-policy-applied-policy
    </secpolinfo-policy-applied-policy>
    <secpolinfo-policy-inherited-role>
      secpolinfo-policy-inherited-role
    </secpolinfo-policy-inherited-role>
    <secpolinfo-policy-inherited-policy>
      secpolinfo-policy-inherited-policy
    </secpolinfo-policy-inherited-policy>
    <resource-utilization>....</resource-utilization>
  </secpolinfo-policy>
</secpolinfo-policy-information>
```

Description

<secpolinfo-policy-information>

Usage

```
<secpolinfo-policy-information>
  <secpolinfo-policy>....</secpolinfo-policy>
</secpolinfo-policy-information>
```

Description

Summary of Services Accounting Response Tags

<detail-entry>

Usage

```
<detail-entry>
  <tos>
    tos
  </tos>
  <protocol>
    protocol
  </protocol>
  <tcp-flags>
    tcp-flags
  </tcp-flags>
  <source-address>
    source-address
  </source-address>
  <source-prefix-length>
    source-prefix-length
  </source-prefix-length>
  <destination-address>
    destination-address
  </destination-address>
  <destination-prefix-length>
    destination-prefix-length
  </destination-prefix-length>
  <source-port>
    source-port
  </source-port>
  <destination-port>
    destination-port
  </destination-port>
  <input-snmp-interface-index>
    input-snmp-interface-index
  </input-snmp-interface-index>
  <output-snmp-interface-index>
    output-snmp-interface-index
  </output-snmp-interface-index>
  <input-interface-name>
    input-interface-name
  </input-interface-name>
  <output-interface-name>
    output-interface-name
  </output-interface-name>
```


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```
<source-as>
  source-as
</source-as>
<destination-as>
  destination-as
</destination-as>
<start-time>
  start-time
</start-time>
<end-time>
  end-time
</end-time>
<packet-count>
  packet-count
</packet-count>
<byte-count>
  byte-count
</byte-count>
<last-active-timeout>....</last-active-timeout>
<source-mask>
  source-mask
</source-mask>
<destination-mask>
  destination-mask
</destination-mask>
<icmp-type>
  icmp-type
</icmp-type>
<mpls-label-1>
  mpls-label-1
</mpls-label-1>
<mpls-label-2>
  mpls-label-2
</mpls-label-2>
<mpls-label-3>
  mpls-label-3
</mpls-label-3>
<top-label-address>
  top-label-address
</top-label-address>
<source-ipv6-address>
  source-ipv6-address
</source-ipv6-address>
<destination-ipv6-address>
  destination-ipv6-address
</destination-ipv6-address>
<destination-peer-as>
  destination-peer-as
</destination-peer-as>
<bgp-nexthop>
  bgp-nexthop
</bgp-nexthop>
<flow-count>
  flow-count
</flow-count>
```

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```
</detail-entry>
```

Description Detail entry

<detail-entry>

Usage

```
<services-accounting-information>
  <flow-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
```


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```
        </destination-as>
        <start-time>
          start-time
        </start-time>
        <end-time>
          end-time
        </end-time>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
        <last-active-timeout>....</last-active-timeout>
        <source-mask>
          source-mask
        </source-mask>
        <destination-mask>
          destination-mask
        </destination-mask>
        <icmp-type>
          icmp-type
        </icmp-type>
        <mpls-label-1>
          mpls-label-1
        </mpls-label-1>
        <mpls-label-2>
          mpls-label-2
        </mpls-label-2>
        <mpls-label-3>
          mpls-label-3
        </mpls-label-3>
        <top-label-address>
          top-label-address
        </top-label-address>
        <source-ipv6-address>
          source-ipv6-address
        </source-ipv6-address>
        <destination-ipv6-address>
          destination-ipv6-address
        </destination-ipv6-address>
        <destination-peer-as>
          destination-peer-as
        </destination-peer-as>
        <bgp-nexthop>
          bgp-nexthop
        </bgp-nexthop>
        <flow-count>
          flow-count
        </flow-count>
      </detail-entry>
    </flow-detail>
  </services-accounting-information>
```

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Description Detail entry

<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv4>
      <detail-entry>
        <tos>
          tos
        </tos>
        <protocol>
          protocol
        </protocol>
        <tcp-flags>
          tcp-flags
        </tcp-flags>
        <source-address>
          source-address
        </source-address>
        <source-prefix-length>
          source-prefix-length
        </source-prefix-length>
        <destination-address>
          destination-address
        </destination-address>
        <destination-prefix-length>
          destination-prefix-length
        </destination-prefix-length>
        <source-port>
          source-port
        </source-port>
        <destination-port>
          destination-port
        </destination-port>
        <input-snmp-interface-index>
          input-snmp-interface-index
        </input-snmp-interface-index>
        <output-snmp-interface-index>
          output-snmp-interface-index
        </output-snmp-interface-index>
        <input-interface-name>
          input-interface-name
        </input-interface-name>
        <output-interface-name>
          output-interface-name
        </output-interface-name>
        <source-as>
          source-as
        </source-as>
        <destination-as>
          destination-as
        </destination-as>
        <start-time>
```


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```
          start-time
        </start-time>
        <end-time>
          end-time
        </end-time>
        <packet-count>
          packet-count
        </packet-count>
        <byte-count>
          byte-count
        </byte-count>
        <last-active-timeout>....</last-active-timeout>
        <source-mask>
          source-mask
        </source-mask>
        <destination-mask>
          destination-mask
        </destination-mask>
        <icmp-type>
          icmp-type
        </icmp-type>
        <mpls-label-1>
          mpls-label-1
        </mpls-label-1>
        <mpls-label-2>
          mpls-label-2
        </mpls-label-2>
        <mpls-label-3>
          mpls-label-3
        </mpls-label-3>
        <top-label-address>
          top-label-address
        </top-label-address>
        <source-ipv6-address>
          source-ipv6-address
        </source-ipv6-address>
        <destination-ipv6-address>
          destination-ipv6-address
        </destination-ipv6-address>
        <destination-peer-as>
          destination-peer-as
        </destination-peer-as>
        <bgp-nexthop>
          bgp-nexthop
        </bgp-nexthop>
        <flow-count>
          flow-count
        </flow-count>
      </detail-entry>
    </flow-aggregate-template-detail-ipv4>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-mpls>
      <detail-entry>
        <tos>
          tos
        </tos>
        <protocol>
          protocol
        </protocol>
        <tcp-flags>
          tcp-flags
        </tcp-flags>
        <source-address>
          source-address
        </source-address>
        <source-prefix-length>
          source-prefix-length
        </source-prefix-length>
        <destination-address>
          destination-address
        </destination-address>
        <destination-prefix-length>
          destination-prefix-length
        </destination-prefix-length>
        <source-port>
          source-port
        </source-port>
        <destination-port>
          destination-port
        </destination-port>
        <input-snmp-interface-index>
          input-snmp-interface-index
        </input-snmp-interface-index>
        <output-snmp-interface-index>
          output-snmp-interface-index
        </output-snmp-interface-index>
        <input-interface-name>
          input-interface-name
        </input-interface-name>
        <output-interface-name>
          output-interface-name
        </output-interface-name>
        <source-as>
          source-as
        </source-as>
        <destination-as>
          destination-as
        </destination-as>
        <start-time>
          start-time
        </start-time>
```


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```
<end-time>
  end-time
</end-time>
<packet-count>
  packet-count
</packet-count>
<byte-count>
  byte-count
</byte-count>
<last-active-timeout>....</last-active-timeout>
<source-mask>
  source-mask
</source-mask>
<destination-mask>
  destination-mask
</destination-mask>
<icmp-type>
  icmp-type
</icmp-type>
<mpls-label-1>
  mpls-label-1
</mpls-label-1>
<mpls-label-2>
  mpls-label-2
</mpls-label-2>
<mpls-label-3>
  mpls-label-3
</mpls-label-3>
<top-label-address>
  top-label-address
</top-label-address>
<source-ipv6-address>
  source-ipv6-address
</source-ipv6-address>
<destination-ipv6-address>
  destination-ipv6-address
</destination-ipv6-address>
<destination-peer-as>
  destination-peer-as
</destination-peer-as>
<bgp-nexthop>
  bgp-nexthop
</bgp-nexthop>
<flow-count>
  flow-count
</flow-count>
</detail-entry>
</flow-aggregate-template-detail-mpls>
</flow-aggregate-template-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-mpls-ipv4>
      <detail-entry>
        <tos>
          tos
        </tos>
        <protocol>
          protocol
        </protocol>
        <tcp-flags>
          tcp-flags
        </tcp-flags>
        <source-address>
          source-address
        </source-address>
        <source-prefix-length>
          source-prefix-length
        </source-prefix-length>
        <destination-address>
          destination-address
        </destination-address>
        <destination-prefix-length>
          destination-prefix-length
        </destination-prefix-length>
        <source-port>
          source-port
        </source-port>
        <destination-port>
          destination-port
        </destination-port>
        <input-snmp-interface-index>
          input-snmp-interface-index
        </input-snmp-interface-index>
        <output-snmp-interface-index>
          output-snmp-interface-index
        </output-snmp-interface-index>
        <input-interface-name>
          input-interface-name
        </input-interface-name>
        <output-interface-name>
          output-interface-name
        </output-interface-name>
        <source-as>
          source-as
        </source-as>
        <destination-as>
          destination-as
        </destination-as>
        <start-time>
          start-time
        </start-time>
```


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```
<end-time>
  end-time
</end-time>
<packet-count>
  packet-count
</packet-count>
<byte-count>
  byte-count
</byte-count>
<last-active-timeout>....</last-active-timeout>
<source-mask>
  source-mask
</source-mask>
<destination-mask>
  destination-mask
</destination-mask>
<icmp-type>
  icmp-type
</icmp-type>
<mpls-label-1>
  mpls-label-1
</mpls-label-1>
<mpls-label-2>
  mpls-label-2
</mpls-label-2>
<mpls-label-3>
  mpls-label-3
</mpls-label-3>
<top-label-address>
  top-label-address
</top-label-address>
<source-ipv6-address>
  source-ipv6-address
</source-ipv6-address>
<destination-ipv6-address>
  destination-ipv6-address
</destination-ipv6-address>
<destination-peer-as>
  destination-peer-as
</destination-peer-as>
<bgp-nexthop>
  bgp-nexthop
</bgp-nexthop>
<flow-count>
  flow-count
</flow-count>
</detail-entry>
</flow-aggregate-template-detail-mpls-ipv4>
</flow-aggregate-template-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv6>
      <detail-entry>
        <tos>
          tos
        </tos>
        <protocol>
          protocol
        </protocol>
        <tcp-flags>
          tcp-flags
        </tcp-flags>
        <source-address>
          source-address
        </source-address>
        <source-prefix-length>
          source-prefix-length
        </source-prefix-length>
        <destination-address>
          destination-address
        </destination-address>
        <destination-prefix-length>
          destination-prefix-length
        </destination-prefix-length>
        <source-port>
          source-port
        </source-port>
        <destination-port>
          destination-port
        </destination-port>
        <input-snmp-interface-index>
          input-snmp-interface-index
        </input-snmp-interface-index>
        <output-snmp-interface-index>
          output-snmp-interface-index
        </output-snmp-interface-index>
        <input-interface-name>
          input-interface-name
        </input-interface-name>
        <output-interface-name>
          output-interface-name
        </output-interface-name>
        <source-as>
          source-as
        </source-as>
        <destination-as>
          destination-as
        </destination-as>
        <start-time>
          start-time
        </start-time>
```


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```
<end-time>
  end-time
</end-time>
<packet-count>
  packet-count
</packet-count>
<byte-count>
  byte-count
</byte-count>
<last-active-timeout>....</last-active-timeout>
<source-mask>
  source-mask
</source-mask>
<destination-mask>
  destination-mask
</destination-mask>
<icmp-type>
  icmp-type
</icmp-type>
<mpls-label-1>
  mpls-label-1
</mpls-label-1>
<mpls-label-2>
  mpls-label-2
</mpls-label-2>
<mpls-label-3>
  mpls-label-3
</mpls-label-3>
<top-label-address>
  top-label-address
</top-label-address>
<source-ipv6-address>
  source-ipv6-address
</source-ipv6-address>
<destination-ipv6-address>
  destination-ipv6-address
</destination-ipv6-address>
<destination-peer-as>
  destination-peer-as
</destination-peer-as>
<bgp-nexthop>
  bgp-nexthop
</bgp-nexthop>
<flow-count>
  flow-count
</flow-count>
</detail-entry>
</flow-aggregate-template-detail-ipv6>
</flow-aggregate-template-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-peer-as-billing>
      <detail-entry>
        <tos>
          tos
        </tos>
        <protocol>
          protocol
        </protocol>
        <tcp-flags>
          tcp-flags
        </tcp-flags>
        <source-address>
          source-address
        </source-address>
        <source-prefix-length>
          source-prefix-length
        </source-prefix-length>
        <destination-address>
          destination-address
        </destination-address>
        <destination-prefix-length>
          destination-prefix-length
        </destination-prefix-length>
        <source-port>
          source-port
        </source-port>
        <destination-port>
          destination-port
        </destination-port>
        <input-snmp-interface-index>
          input-snmp-interface-index
        </input-snmp-interface-index>
        <output-snmp-interface-index>
          output-snmp-interface-index
        </output-snmp-interface-index>
        <input-interface-name>
          input-interface-name
        </input-interface-name>
        <output-interface-name>
          output-interface-name
        </output-interface-name>
        <source-as>
          source-as
        </source-as>
        <destination-as>
          destination-as
        </destination-as>
        <start-time>
          start-time
        </start-time>
```


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```
<end-time>
  end-time
</end-time>
<packet-count>
  packet-count
</packet-count>
<byte-count>
  byte-count
</byte-count>
<last-active-timeout>....</last-active-timeout>
<source-mask>
  source-mask
</source-mask>
<destination-mask>
  destination-mask
</destination-mask>
<icmp-type>
  icmp-type
</icmp-type>
<mpls-label-1>
  mpls-label-1
</mpls-label-1>
<mpls-label-2>
  mpls-label-2
</mpls-label-2>
<mpls-label-3>
  mpls-label-3
</mpls-label-3>
<top-label-address>
  top-label-address
</top-label-address>
<source-ipv6-address>
  source-ipv6-address
</source-ipv6-address>
<destination-ipv6-address>
  destination-ipv6-address
</destination-ipv6-address>
<destination-peer-as>
  destination-peer-as
</destination-peer-as>
<bgp-nexthop>
  bgp-nexthop
</bgp-nexthop>
<flow-count>
  flow-count
</flow-count>
</detail-entry>
</flow-aggregate-template-detail-peer-as-billing>
</flow-aggregate-template-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-as-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
      </destination-as>
      <start-time>
        start-time
      </start-time>
      <end-time>
```


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```
        end-time
      </end-time>
      <packet-count>
        packet-count
      </packet-count>
      <byte-count>
        byte-count
      </byte-count>
      <last-active-timeout>....</last-active-timeout>
      <source-mask>
        source-mask
      </source-mask>
      <destination-mask>
        destination-mask
      </destination-mask>
      <icmp-type>
        icmp-type
      </icmp-type>
      <mpls-label-1>
        mpls-label-1
      </mpls-label-1>
      <mpls-label-2>
        mpls-label-2
      </mpls-label-2>
      <mpls-label-3>
        mpls-label-3
      </mpls-label-3>
      <top-label-address>
        top-label-address
      </top-label-address>
      <source-ipv6-address>
        source-ipv6-address
      </source-ipv6-address>
      <destination-ipv6-address>
        destination-ipv6-address
      </destination-ipv6-address>
      <destination-peer-as>
        destination-peer-as
      </destination-peer-as>
      <bgp-nexthop>
        bgp-nexthop
      </bgp-nexthop>
      <flow-count>
        flow-count
      </flow-count>
    </detail-entry>
  </flow-aggregate-as-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-protocol-port-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
      </destination-as>
      <start-time>
        start-time
      </start-time>
      <end-time>
```


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```
      end-time
    </end-time>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
    <last-active-timeout>....</last-active-timeout>
    <source-mask>
      source-mask
    </source-mask>
    <destination-mask>
      destination-mask
    </destination-mask>
    <icmp-type>
      icmp-type
    </icmp-type>
    <mpls-label-1>
      mpls-label-1
    </mpls-label-1>
    <mpls-label-2>
      mpls-label-2
    </mpls-label-2>
    <mpls-label-3>
      mpls-label-3
    </mpls-label-3>
    <top-label-address>
      top-label-address
    </top-label-address>
    <source-ipv6-address>
      source-ipv6-address
    </source-ipv6-address>
    <destination-ipv6-address>
      destination-ipv6-address
    </destination-ipv6-address>
    <destination-peer-as>
      destination-peer-as
    </destination-peer-as>
    <bgp-nexthop>
      bgp-nexthop
    </bgp-nexthop>
    <flow-count>
      flow-count
    </flow-count>
  </detail-entry>
 </flow-aggregate-protocol-port-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-source-prefix-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
      </destination-as>
      <start-time>
        start-time
      </start-time>
      <end-time>
```


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```
      end-time
    </end-time>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
    <last-active-timeout>....</last-active-timeout>
    <source-mask>
      source-mask
    </source-mask>
    <destination-mask>
      destination-mask
    </destination-mask>
    <icmp-type>
      icmp-type
    </icmp-type>
    <mpls-label-1>
      mpls-label-1
    </mpls-label-1>
    <mpls-label-2>
      mpls-label-2
    </mpls-label-2>
    <mpls-label-3>
      mpls-label-3
    </mpls-label-3>
    <top-label-address>
      top-label-address
    </top-label-address>
    <source-ipv6-address>
      source-ipv6-address
    </source-ipv6-address>
    <destination-ipv6-address>
      destination-ipv6-address
    </destination-ipv6-address>
    <destination-peer-as>
      destination-peer-as
    </destination-peer-as>
    <bgp-nexthop>
      bgp-nexthop
    </bgp-nexthop>
    <flow-count>
      flow-count
    </flow-count>
  </detail-entry>
 </flow-aggregate-source-prefix-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-destination-prefix-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
      </destination-as>
      <start-time>
        start-time
      </start-time>
      <end-time>
```


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```
      end-time
    </end-time>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
    <last-active-timeout>....</last-active-timeout>
    <source-mask>
      source-mask
    </source-mask>
    <destination-mask>
      destination-mask
    </destination-mask>
    <icmp-type>
      icmp-type
    </icmp-type>
    <mpls-label-1>
      mpls-label-1
    </mpls-label-1>
    <mpls-label-2>
      mpls-label-2
    </mpls-label-2>
    <mpls-label-3>
      mpls-label-3
    </mpls-label-3>
    <top-label-address>
      top-label-address
    </top-label-address>
    <source-ipv6-address>
      source-ipv6-address
    </source-ipv6-address>
    <destination-ipv6-address>
      destination-ipv6-address
    </destination-ipv6-address>
    <destination-peer-as>
      destination-peer-as
    </destination-peer-as>
    <bgp-nexthop>
      bgp-nexthop
    </bgp-nexthop>
    <flow-count>
      flow-count
    </flow-count>
  </detail-entry>
 </flow-aggregate-destination-prefix-detail>
</services-accounting-information>
```

Description Detail entry

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<detail-entry>

Usage

```
<services-accounting-information>
  <flow-aggregate-source-destination-prefix-detail>
    <detail-entry>
      <tos>
        tos
      </tos>
      <protocol>
        protocol
      </protocol>
      <tcp-flags>
        tcp-flags
      </tcp-flags>
      <source-address>
        source-address
      </source-address>
      <source-prefix-length>
        source-prefix-length
      </source-prefix-length>
      <destination-address>
        destination-address
      </destination-address>
      <destination-prefix-length>
        destination-prefix-length
      </destination-prefix-length>
      <source-port>
        source-port
      </source-port>
      <destination-port>
        destination-port
      </destination-port>
      <input-snmp-interface-index>
        input-snmp-interface-index
      </input-snmp-interface-index>
      <output-snmp-interface-index>
        output-snmp-interface-index
      </output-snmp-interface-index>
      <input-interface-name>
        input-interface-name
      </input-interface-name>
      <output-interface-name>
        output-interface-name
      </output-interface-name>
      <source-as>
        source-as
      </source-as>
      <destination-as>
        destination-as
      </destination-as>
      <start-time>
        start-time
      </start-time>
      <end-time>
```


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```
      end-time
    </end-time>
    <packet-count>
      packet-count
    </packet-count>
    <byte-count>
      byte-count
    </byte-count>
    <last-active-timeout>....</last-active-timeout>
    <source-mask>
      source-mask
    </source-mask>
    <destination-mask>
      destination-mask
    </destination-mask>
    <icmp-type>
      icmp-type
    </icmp-type>
    <mpls-label-1>
      mpls-label-1
    </mpls-label-1>
    <mpls-label-2>
      mpls-label-2
    </mpls-label-2>
    <mpls-label-3>
      mpls-label-3
    </mpls-label-3>
    <top-label-address>
      top-label-address
    </top-label-address>
    <source-ipv6-address>
      source-ipv6-address
    </source-ipv6-address>
    <destination-ipv6-address>
      destination-ipv6-address
    </destination-ipv6-address>
    <destination-peer-as>
      destination-peer-as
    </destination-peer-as>
    <bgp-nexthop>
      bgp-nexthop
    </bgp-nexthop>
    <flow-count>
      flow-count
    </flow-count>
  </detail-entry>
 </flow-aggregate-source-destination-prefix-detail>
</services-accounting-information>
```

Description Detail entry

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<error-information>

Usage

```
<services-accounting-information>
  <error-information>
    <error-packets-dropped-no-memory>
      error-packets-dropped-no-memory
    </error-packets-dropped-no-memory>
    <error-packets-dropped-not-ip>
      error-packets-dropped-not-ip
    </error-packets-dropped-not-ip>
    <error-packets-dropped-not-ipv4>
      error-packets-dropped-not-ipv4
    </error-packets-dropped-not-ipv4>
    <error-packets-too-small>
      error-packets-too-small
    </error-packets-too-small>
    <error-allocation-failures>
      error-allocation-failures
    </error-allocation-failures>
    <error-free-failures>
      error-free-failures
    </error-free-failures>
    <error-free-list-failures>
      error-free-list-failures
    </error-free-list-failures>
    <error-memory-warning>
      error-memory-warning
    </error-memory-warning>
    <error-memory-overload>
      error-memory-overload
    </error-memory-overload>
    <error-packets-per-second-overload>
      error-packets-per-second-overload
    </error-packets-per-second-overload>
    <error-bytes-per-second-overload>
      error-bytes-per-second-overload
    </error-bytes-per-second-overload>
  </error-information>
</services-accounting-information>
```

Description Service accounting error information

<flow-aggregate-as-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-as-detail>
    <detail-entry>....</detail-entry>
  </flow-aggregate-as-detail>
</services-accounting-information>
```


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Description Service accounting AS flow aggregate record detail

<flow-aggregate-destination-prefix-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-destination-prefix-detail>
    <detail-entry>....</detail-entry>
  </flow-aggregate-destination-prefix-detail>
</services-accounting-information>
```

Description Service accounting destination prefix aggregate record detail

<flow-aggregate-protocol-port-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-protocol-port-detail>
    <detail-entry>....</detail-entry>
  </flow-aggregate-protocol-port-detail>
</services-accounting-information>
```

Description Service accounting protocol-port aggregate record detail

<flow-aggregate-source-destination-prefix-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-source-destination-prefix-detail>
    <detail-entry>....</detail-entry>
  </flow-aggregate-source-destination-prefix-detail>
</services-accounting-information>
```

Description Service accounting source-destination prefix aggregate record detail

<flow-aggregate-source-prefix-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-source-prefix-detail>
    <detail-entry>....</detail-entry>
  </flow-aggregate-source-prefix-detail>
</services-accounting-information>
```

Description Service accounting source prefix aggregate record detail

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<flow-aggregate-template-detail>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
 <flow-aggregate-template-detail-ipv4>....</flow-aggregate-template-detail-ipv4>

<flow-aggregate-template-detail-mpls>....</flow-aggregate-template-detail-mpls>

<flow-aggregate-template-detail-mpls-ipv4>....</flow-aggregate-template-detail-mpls-ipv4>

 <flow-aggregate-template-detail-ipv6>....</flow-aggregate-template-detail-ipv6>

<flow-aggregate-template-detail-peer-as-billing>....</flow-aggregate-template-detail-peer-as-billing>

  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Service accounting template aggregate record detail

<flow-aggregate-template-detail-ipv4>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv4>
      <detail-entry>....</detail-entry>
    </flow-aggregate-template-detail-ipv4>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description

<flow-aggregate-template-detail-ipv6>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv6>
      <detail-entry>....</detail-entry>
    </flow-aggregate-template-detail-ipv6>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description

<flow-aggregate-template-detail-mpls>

Usage

```
<services-accounting-information>
```


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```
<flow-aggregate-template-detail>
  <flow-aggregate-template-detail-mpls>
    <detail-entry>....</detail-entry>
  </flow-aggregate-template-detail-mpls>
 </flow-aggregate-template-detail>
</services-accounting-information>
```

Description

<flow-aggregate-template-detail-mpls-ipv4>

Usage

```
<services-accounting-information>
 <flow-aggregate-template-detail>
  <flow-aggregate-template-detail-mpls-ipv4>
    <detail-entry>....</detail-entry>
  </flow-aggregate-template-detail-mpls-ipv4>
 </flow-aggregate-template-detail>
</services-accounting-information>
```

Description

<flow-aggregate-template-detail-peer-as-billing>

Usage

```
<services-accounting-information>
 <flow-aggregate-template-detail>
  <flow-aggregate-template-detail-peer-as-billing>
    <detail-entry>....</detail-entry>
  </flow-aggregate-template-detail-peer-as-billing>
 </flow-aggregate-template-detail>
</services-accounting-information>
```

Description

<flow-detail>

Usage

```
<services-accounting-information>
 <flow-detail>
  <detail-entry>....</detail-entry>
 </flow-detail>
</services-accounting-information>
```

Description Service accounting flow record detail

<flow-information>

Usage

```
<services-accounting-information>
 <flow-information>
```

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```
<interface-name>
  interface-name
</interface-name>
<local_ifd_index>
  local_ifd_index
</local_ifd_index>
<flow-packets>
  flow-packets
</flow-packets>
<flow-bytes>
  flow-bytes
</flow-bytes>
<flow-packets-ten-second-rate>
  flow-packets-ten-second-rate
</flow-packets-ten-second-rate>
<flow-bytes-ten-second-rate>
  flow-bytes-ten-second-rate
</flow-bytes-ten-second-rate>
<active-flows>
  active-flows
</active-flows>
<flows>
  flows
</flows>
<flows-exported>
  flows-exported
</flows-exported>
<flow-packets-exported>
  flow-packets-exported
</flow-packets-exported>
<flows-expired>
  flows-expired
</flows-expired>
<flows-aged>
  flows-aged
</flows-aged>
</flow-information>
</services-accounting-information>
```

Description Service accounting flow information

<inline-jflow-error-information>

Usage

```
<services-accounting-information>
  <inline-jflow-error-information>
    <fpc-slot>
      fpc-slot
    </fpc-slot>
    <tfeb-slot>
      tfeb-slot
    </tfeb-slot>
    <inline-flow-creation-failures>
      inline-flow-creation-failures
```


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```
    </inline-flow-creation-failures>
    <ring-buffer-failures>
      ring-buffer-failures
    </ring-buffer-failures>
    <inline-route-record-lookup-failure>
      inline-route-record-lookup-failure
    </inline-route-record-lookup-failure>
    <inline-as-lookup-failures>
      inline-as-lookup-failures
    </inline-as-lookup-failures>
    <inline-export-packet-failures>
      inline-export-packet-failures
    </inline-export-packet-failures>
    <inline-memory-overload>
      inline-memory-overload
    </inline-memory-overload>
  </inline-jflow-error-information>
</services-accounting-information>
```

Description Inline Jflow accounting error information

<inline-jflow-flow-information>

Usage

```
<services-accounting-information>
  <inline-jflow-flow-information>
    <fpc-slot>
      fpc-slot
    </fpc-slot>
    <tfeb-slot>
      tfeb-slot
    </tfeb-slot>
    <inline-flow-packets>
      inline-flow-packets
    </inline-flow-packets>
    <inline-flow-bytes>
      inline-flow-bytes
    </inline-flow-bytes>
    <inline-active-flows>
      inline-active-flows
    </inline-active-flows>
    <inline-flows>
      inline-flows
    </inline-flows>
    <inline-flows-exported>
      inline-flows-exported
    </inline-flows-exported>
    <inline-flow-packets-exported>
      inline-flow-packets-exported
    </inline-flow-packets-exported>
    <inline-flows-expired>
      inline-flows-expired
    </inline-flows-expired>
    <inline-flows-aged>
```

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```
      inline-flows-aged
    </inline-flows-aged>
  </inline-jflow-flow-information>
</services-accounting-information>
```

Description Service accounting flow information

<inline-jflow-status-information>

Usage

```
<services-accounting-information>
  <inline-jflow-status-information>
    <fpc-slot>
      fpc-slot
    </fpc-slot>
    <tfeb-slot>
      tfeb-slot
    </tfeb-slot>
    <inline-status-export-format>
      inline-status-export-format
    </inline-status-export-format>
    <inline-status-route-record-count>
      inline-status-route-record-count
    </inline-status-route-record-count>
    <inline-status-as-count>
      inline-status-as-count
    </inline-status-as-count>
    <ring-buffer-entries>
      ring-buffer-entries
    </ring-buffer-entries>
    <inline-status-route-record-set>
      inline-status-route-record-set
    </inline-status-route-record-set>
    <inline-status-config-set>
      inline-status-config-set
    </inline-status-config-set>
  </inline-jflow-status-information>
</services-accounting-information>
```

Description Service accounting status information

<last-active-timeout>

Usage

```
<last-active-timeout>
  <time-delta>
    time-delta
  </time-delta>
  <last-packet-count>
    last-packet-count
  </last-packet-count>
  <last-byte-count>
```


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```
    last-byte-count
   </last-byte-count>
  </last-active-timeout>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<detail-entry>
  <last-active-timeout>
    <time-delta>
      time-delta
    </time-delta>
    <last-packet-count>
      last-packet-count
    </last-packet-count>
    <last-byte-count>
      last-byte-count
    </last-byte-count>
  </last-active-timeout>
</detail-entry>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-detail>
    <detail-entry>
      <last-active-timeout>
        <time-delta>
          time-delta
        </time-delta>
        <last-packet-count>
          last-packet-count
        </last-packet-count>
        <last-byte-count>
          last-byte-count
        </last-byte-count>
      </last-active-timeout>
    </detail-entry>
  </flow-detail>
</services-accounting-information>
```

Description Last active timeout data

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<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv4>
      <detail-entry>
        <last-active-timeout>
          <time-delta>
            time-delta
          </time-delta>
          <last-packet-count>
            last-packet-count
          </last-packet-count>
          <last-byte-count>
            last-byte-count
          </last-byte-count>
        </last-active-timeout>
      </detail-entry>
    </flow-aggregate-template-detail-ipv4>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-mpls>
      <detail-entry>
        <last-active-timeout>
          <time-delta>
            time-delta
          </time-delta>
          <last-packet-count>
            last-packet-count
          </last-packet-count>
          <last-byte-count>
            last-byte-count
          </last-byte-count>
        </last-active-timeout>
      </detail-entry>
    </flow-aggregate-template-detail-mpls>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Last active timeout data

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<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-mpls-ipv4>
      <detail-entry>
        <last-active-timeout>
          <time-delta>
            time-delta
          </time-delta>
          <last-packet-count>
            last-packet-count
          </last-packet-count>
          <last-byte-count>
            last-byte-count
          </last-byte-count>
        </last-active-timeout>
      </detail-entry>
    </flow-aggregate-template-detail-mpls-ipv4>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-ipv6>
      <detail-entry>
        <last-active-timeout>
          <time-delta>
            time-delta
          </time-delta>
          <last-packet-count>
            last-packet-count
          </last-packet-count>
          <last-byte-count>
            last-byte-count
          </last-byte-count>
        </last-active-timeout>
      </detail-entry>
    </flow-aggregate-template-detail-ipv6>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-template-detail>
    <flow-aggregate-template-detail-peer-as-billing>
      <detail-entry>
        <last-active-timeout>
          <time-delta>
            time-delta
          </time-delta>
          <last-packet-count>
            last-packet-count
          </last-packet-count>
          <last-byte-count>
            last-byte-count
          </last-byte-count>
        </last-active-timeout>
      </detail-entry>
    </flow-aggregate-template-detail-peer-as-billing>
  </flow-aggregate-template-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-as-detail>
    <detail-entry>
      <last-active-timeout>
        <time-delta>
          time-delta
        </time-delta>
        <last-packet-count>
          last-packet-count
        </last-packet-count>
        <last-byte-count>
          last-byte-count
        </last-byte-count>
      </last-active-timeout>
    </detail-entry>
  </flow-aggregate-as-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
```


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```
<flow-aggregate-protocol-port-detail>
  <detail-entry>
    <last-active-timeout>
      <time-delta>
        time-delta
      </time-delta>
      <last-packet-count>
        last-packet-count
      </last-packet-count>
      <last-byte-count>
        last-byte-count
      </last-byte-count>
    </last-active-timeout>
  </detail-entry>
 </flow-aggregate-protocol-port-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
 <flow-aggregate-source-prefix-detail>
  <detail-entry>
   <last-active-timeout>
    <time-delta>
     time-delta
    </time-delta>
    <last-packet-count>
     last-packet-count
    </last-packet-count>
    <last-byte-count>
     last-byte-count
    </last-byte-count>
   </last-active-timeout>
  </detail-entry>
 </flow-aggregate-source-prefix-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
 <flow-aggregate-destination-prefix-detail>
  <detail-entry>
   <last-active-timeout>
    <time-delta>
     time-delta
    </time-delta>
```

```
        <last-packet-count>
          last-packet-count
        </last-packet-count>
        <last-byte-count>
          last-byte-count
        </last-byte-count>
      </last-active-timeout>
    </detail-entry>
  </flow-aggregate-destination-prefix-detail>
</services-accounting-information>
```

Description Last active timeout data

<last-active-timeout>

Usage

```
<services-accounting-information>
  <flow-aggregate-source-destination-prefix-detail>
    <detail-entry>
      <last-active-timeout>
        <time-delta>
          time-delta
        </time-delta>
        <last-packet-count>
          last-packet-count
        </last-packet-count>
        <last-byte-count>
          last-byte-count
        </last-byte-count>
      </last-active-timeout>
    </detail-entry>
  </flow-aggregate-source-destination-prefix-detail>
</services-accounting-information>
```

Description Last active timeout data

<memory-information>

Usage

```
<services-accounting-information>
  <memory-information>
    <interface-name>
      interface-name
    </interface-name>
    <allocation-count>
      allocation-count
    </allocation-count>
    <free-count>
      free-count
    </free-count>
    <maximum-allocated>
      maximum-allocated
```


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```
    </maximum-allocated>
    <allocations-per-second>
      allocations-per-second
    </allocations-per-second>
    <frees-per-second>
      frees-per-second
    </frees-per-second>
    <memory-used>
      memory-used
    </memory-used>
    <memory-free>
      memory-free
    </memory-free>
    <v9-memory-used>
      v9-memory-used
    </v9-memory-used>
  </memory-information>
</services-accounting-information>
```

Description Service accounting memory utilization

<packet-distribution-information>

Usage

```
<services-accounting-information>
  <packet-distribution-information>
    <packet-size-range-start>
      packet-size-range-start
    </packet-size-range-start>
    <packet-size-range-end>
      packet-size-range-end
    </packet-size-range-end>
    <range-number-packets>
      range-number-packets
    </range-number-packets>
    <range-percentage-packets>
      range-percentage-packets
    </range-percentage-packets>
  </packet-distribution-information>
</services-accounting-information>
```

Description Service accounting packet distribution information

<services-accounting-information>

Usage

```
<services-accounting-information>
  <service-name>
    service-name
  </service-name>
  <interface-name>
    interface-name
```

```
</interface-name>
<pic-status>
  pic-status
</pic-status>
<local-index>
  local-index
</local-index>
<usage-information>....</usage-information>
<memory-information>....</memory-information>
<flow-information>....</flow-information>
<inline-jflow-flow-information>....</inline-jflow-flow-information>
<packet-distribution-information>....</packet-distribution-information>
<error-information>....</error-information>
<inline-jflow-error-information>....</inline-jflow-error-information>
<v9-error-information>....</v9-error-information>
<status-information>....</status-information>
<inline-jflow-status-information>....</inline-jflow-status-information>
<flow-detail>....</flow-detail>
<flow-aggregate-template-detail>....</flow-aggregate-template-detail>
<flow-aggregate-as-detail>....</flow-aggregate-as-detail>
<flow-aggregate-protocol-port-detail>....</flow-aggregate-protocol-port-detail>

<flow-aggregate-source-prefix-detail>....</flow-aggregate-source-prefix-detail>


<flow-aggregate-destination-prefix-detail>....</flow-aggregate-destination-prefix-detail>


<flow-aggregate-source-destination-prefix-detail>....</flow-aggregate-source-destination-prefix-detail>

</services-accounting-information>
```

Description

<status-information>

Usage

```
<services-accounting-information>
  <status-information>
    <status-service-id>
      status-service-id
    </status-service-id>
    <status-export-interval>
      status-export-interval
    </status-export-interval>
    <interface-name>
      interface-name
    </interface-name>
    <status-export-format>
      status-export-format
    </status-export-format>
    <status-proto>
      status-proto
    </status-proto>
    <status-engine-type>
```


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```
      status-engine-type
    </status-engine-type>
    <status-engine-id>
      status-engine-id
    </status-engine-id>
    <status-route-record-count>
      status-route-record-count
    </status-route-record-count>
    <status-ifl-snmp-map-count>
      status-ifl-snmp-map-count
    </status-ifl-snmp-map-count>
    <status-as-count>
      status-as-count
    </status-as-count>
    <status-monitor-time-set>
      status-monitor-time-set
    </status-monitor-time-set>
    <status-monitor-config-set>
      status-monitor-config-set
    </status-monitor-config-set>
    <status-monitor-route-record-set>
      status-monitor-route-record-set
    </status-monitor-route-record-set>
    <status-monitor-ifl-snmp-set>
      status-monitor-ifl-snmp-set
    </status-monitor-ifl-snmp-set>
  </status-information>
</services-accounting-information>
```

Description Service accounting status information

<usage-information>

Usage

```
<services-accounting-information>
  <usage-information>
    <interface-name>
      interface-name
    </interface-name>
    <uptime>
      uptime
    </uptime>
    <inttime>
      inttime
    </inttime>
    <five-second-load>
      five-second-load
    </five-second-load>
    <one-minute-load>
      one-minute-load
    </one-minute-load>
  </usage-information>
</services-accounting-information>
```

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Description Service accounting CPU utilization

<v9-error-information>

Usage

```
<services-accounting-information>
  <v9-error-information>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-dropped>
      service-set-dropped
    </service-set-dropped>
    <active-timeout-failures>
      active-timeout-failures
    </active-timeout-failures>
    <export-packet-failures>
      export-packet-failures
    </export-packet-failures>
    <flow-creation-failures>
      flow-creation-failures
    </flow-creation-failures>
    <memory-overload>
      memory-overload
    </memory-overload>
  </v9-error-information>
</services-accounting-information>
```

Description Jflow-v9 accounting error information

Summary of Services Flow Collector Response Tags

<export-channel>

Usage

```
<services-flow-collector-information>
  <statistics-information>
    <export-channel>
      <export-channel-index>
        export-channel-index
      </export-channel-index>
      <current-server>
        current-server
      </current-server>
      <primary-server-state>
        primary-server-state
      </primary-server-state>
      <secondary-server-state>
        secondary-server-state
      </secondary-server-state>
    </export-channel>
  </statistics-information>
```


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```
</services-flow-collector-information>
```

Description Export channel on interface

<file>

Usage

```
<services-flow-collector-information>
  <file-information>
    <file>
      <file-name>
        file-name
      </file-name>
      <flow-records>
        flow-records
      </flow-records>
      <flow-records-per-second>
        flow-records-per-second
      </flow-records-per-second>
      <peak-flow-records-per-second>
        peak-flow-records-per-second
      </peak-flow-records-per-second>
      <uncompressed-bytes>
        uncompressed-bytes
      </uncompressed-bytes>
      <uncompressed-bytes-per-second>
        uncompressed-bytes-per-second
      </uncompressed-bytes-per-second>
      <peak-uncompressed-bytes-per-second>
        peak-uncompressed-bytes-per-second
      </peak-uncompressed-bytes-per-second>
      <compressed-bytes>
        compressed-bytes
      </compressed-bytes>
      <compressed-bytes-per-second>
        compressed-bytes-per-second
      </compressed-bytes-per-second>
      <peak-compressed-bytes-per-second>
        peak-compressed-bytes-per-second
      </peak-compressed-bytes-per-second>
      <compressed-block-count>
        compressed-block-count
      </compressed-block-count>
      <block-count>
        block-count
      </block-count>
      <state>
        state
      </state>
      <transfer-attempts>
        transfer-attempts
      </transfer-attempts>
    </file>
  </file-information>
```

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```
</services-flow-collector-information>
```

Description File statistics

<file-information>

Usage

```
<services-flow-collector-information>
  <file-information>
    <file>....</file>
  </file-information>
</services-flow-collector-information>
```

Description Service flow collector information about files

<input>

Usage

```
<services-flow-collector-information>
  <input-information>
    <input>
      <input-interface>
        input-interface
      </input-interface>
      <packets>
        packets
      </packets>
      <bytes>
        bytes
      </bytes>
    </input>
  </input-information>
</services-flow-collector-information>
```

Description Input interface statistics

<input-information>

Usage

```
<services-flow-collector-information>
  <input-information>
    <input>....</input>
  </input-information>
</services-flow-collector-information>
```

Description Service flow collector information for each input

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<services-flow-collector-information>

Usage

```
<services-flow-collector-information>
  <interface-name>
    interface-name
  </interface-name>
  <pic-status>
    pic-status
  </pic-status>
  <statistics-information>....</statistics-information>
  <file-information>....</file-information>
  <input-information>....</input-information>
  <flow-collector-destination-response>
    flow-collector-destination-response
  </flow-collector-destination-response>
  <test-file-transfer-response>
    test-file-transfer-response
  </test-file-transfer-response>
  <clear-flow-collector-statistics-response>
    clear-flow-collector-statistics-response
  </clear-flow-collector-statistics-response>
</services-flow-collector-information>
```

Description

<statistics-information>

Usage

```
<services-flow-collector-information>
  <statistics-information>
    <memory-used>
      memory-used
    </memory-used>
    <memory-free>
      memory-free
    </memory-free>
    <packets>
      packets
    </packets>
    <packets-per-second>
      packets-per-second
    </packets-per-second>
    <peak-packets-per-second>
      peak-packets-per-second
    </peak-packets-per-second>
    <bytes>
      bytes
    </bytes>
    <bytes-per-second>
      bytes-per-second
    </bytes-per-second>
    <peak-bytes-per-second>
      peak-bytes-per-second
```

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```
</peak-bytes-per-second>
<flow-record-processed>
  flow-record-processed
</flow-record-processed>
<flow-record-processed-per-second>
  flow-record-processed-per-second
</flow-record-processed-per-second>
<peak-flow-record-processed-per-second>
  peak-flow-record-processed-per-second
</peak-flow-record-processed-per-second>
<blocks-allocated>
  blocks-allocated
</blocks-allocated>
<blocks-allocated-per-second>
  blocks-allocated-per-second
</blocks-allocated-per-second>
<peak-blocks-allocated-per-second>
  peak-blocks-allocated-per-second
</peak-blocks-allocated-per-second>
<blocks-freed>
  blocks-freed
</blocks-freed>
<blocks-freed-per-second>
  blocks-freed-per-second
</blocks-freed-per-second>
<peak-blocks-freed-per-second>
  peak-blocks-freed-per-second
</peak-blocks-freed-per-second>
<blocks-unavailable>
  blocks-unavailable
</blocks-unavailable>
<blocks-unavailable-per-second>
  blocks-unavailable-per-second
</blocks-unavailable-per-second>
<peak-blocks-unavailable-per-second>
  peak-blocks-unavailable-per-second
</peak-blocks-unavailable-per-second>
<files-created>
  files-created
</files-created>
<files-created-per-second>
  files-created-per-second
</files-created-per-second>
<peak-files-created-per-second>
  peak-files-created-per-second
</peak-files-created-per-second>
<files-exported>
  files-exported
</files-exported>
<files-exported-per-second>
  files-exported-per-second
</files-exported-per-second>
<peak-files-exported-per-second>
  peak-files-exported-per-second
</peak-files-exported-per-second>
<files-destroyed>
```


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```
  files-destroyed
</files-destroyed>
<files-destroyed-per-second>
  files-destroyed-per-second
</files-destroyed-per-second>
<peak-files-destroyed-per-second>
  peak-files-destroyed-per-second
</peak-files-destroyed-per-second>
<uncompressed-bytes>
  uncompressed-bytes
</uncompressed-bytes>
<uncompressed-bytes-per-second>
  uncompressed-bytes-per-second
</uncompressed-bytes-per-second>
<peak-uncompressed-bytes-per-second>
  peak-uncompressed-bytes-per-second
</peak-uncompressed-bytes-per-second>
<compressed-bytes>
  compressed-bytes
</compressed-bytes>
<compressed-bytes-per-second>
  compressed-bytes-per-second
</compressed-bytes-per-second>
<peak-compressed-bytes-per-second>
  peak-compressed-bytes-per-second
</peak-compressed-bytes-per-second>
<packet-no-memory-drops>
  packet-no-memory-drops
</packet-no-memory-drops>
<packet-not-ip-drops>
  packet-not-ip-drops
</packet-not-ip-drops>
<packet-not-ipv4-drops>
  packet-not-ipv4-drops
</packet-not-ipv4-drops>
<packet-too-small-drops>
  packet-too-small-drops
</packet-too-small-drops>
<packet-ip-fragment-drops>
  packet-ip-fragment-drops
</packet-ip-fragment-drops>
<packet-icmp-drops>
  packet-icmp-drops
</packet-icmp-drops>
<packet-tcp-drops>
  packet-tcp-drops
</packet-tcp-drops>
<packet-unknown-drops>
  packet-unknown-drops
</packet-unknown-drops>
<packet-not-jflow-drops>
  packet-not-jflow-drops
</packet-not-jflow-drops>
<ftp-bytes>
  ftp-bytes
</ftp-bytes>
```

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```
    <ftp-bytes-per-second>
      ftp-bytes-per-second
    </ftp-bytes-per-second>
    <peak-ftp-bytes-per-second>
      peak-ftp-bytes-per-second
    </peak-ftp-bytes-per-second>
    <ftp-files>
      ftp-files
    </ftp-files>
    <ftp-files-per-second>
      ftp-files-per-second
    </ftp-files-per-second>
    <peak-ftp-files-per-second>
      peak-ftp-files-per-second
    </peak-ftp-files-per-second>
    <ftp-failures>
      ftp-failures
    </ftp-failures>
    <export-channel>....</export-channel>
  </statistics-information>
</services-flow-collector-information>
```

Description Service flow collector application information

(Remove)

Summary of Shared Memory Event Library Response Tags

<shmlog-information>

Usage

```
<shmlog-information>
  <user-information>
    user-information
  </user-information>
</shmlog-information>
```

Description

Summary of Shutdown Response Tags

<clear-reboot-status>

Usage

```
<clear-reboot-status>
  <reboot-information-results>
    reboot-information-results
  </reboot-information-results>
  <clear-reboot-status-results>
    clear-reboot-status-results
  </clear-reboot-status-results>
```


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```
</clear-reboot-status>
```

Description Clear any pending reboots

<reboot-information>

Usage

```
<reboot-information>
  <reboot-information-results>
    reboot-information-results
  </reboot-information-results>
</reboot-information>
```

Description

<request-reboot-results>

Usage

```
<request-reboot-results>
  <request-reboot-status>
    request-reboot-status
  </request-reboot-status>
</request-reboot-results>
```

Description

Summary of Server Load Balance Response Tags

<ext-manager-information>

Usage

```
<ext-manager-information>
  <slb-ext-manager-information>....</slb-ext-manager-information>
</ext-manager-information>
```

Description Information about one or more ext managers

<ext-manager-statistics-information>

Usage

```
<ext-manager-statistics-information>
  <slb-ext-manager-statistics>....</slb-ext-manager-statistics>
</ext-manager-statistics-information>
```

Description Statistics about one or more external managers

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<hash-table-information>

Usage

```
<hash-table-information>
  <slb-hash-information>....</slb-hash-information>
</hash-table-information>
```

Description Information of hash table for one or more real server groups

<health-monitor-clear>

Usage

```
<health-monitor-clear>
  <slb-hm-stats-clear>....</slb-hm-stats-clear>
</health-monitor-clear>
```

Description Clear health monitor statistics

<health-monitor-information>

Usage

```
<health-monitor-information>
  <slb-hm-information>....</slb-hm-information>
</health-monitor-information>
```

Description Health monitor configuration information about one or more health monitors

<health-monitor-statistics-information>

Usage

```
<health-monitor-statistics-information>
  <slb-hm-statistics>....</slb-hm-statistics>
</health-monitor-statistics-information>
```

Description Health monitor statistics information about one or more health monitors

<real-server-group-information>

Usage

```
<real-server-group-information>
  <slb-rsg-information>....</slb-rsg-information>
</real-server-group-information>
```

Description Information about one or more real server groups

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<real-server-group-statistics-information>

Usage

```
<real-server-group-statistics-information>
  <slb-rsg-statistics>....</slb-rsg-statistics>
</real-server-group-statistics-information>
```

Description Statistics of one or more real server groups

<real-server-information>

Usage

```
<real-server-information>
  <slb-rs-information>....</slb-rs-information>
</real-server-information>
```

Description Information about one or more real servers

<real-server-statistics-information>

Usage

```
<real-server-statistics-information>
  <slb-rs-statistics>....</slb-rs-statistics>
</real-server-statistics-information>
```

Description Statistics of one or more real servers

<slb-ext-manager-information>

Usage

```
<ext-manager-information>
  <slb-ext-manager-information>
    <slb-ext-manager-name>
      slb-ext-manager-name
    </slb-ext-manager-name>
    <slb-ext-manager-protocol>
      slb-ext-manager-protocol
    </slb-ext-manager-protocol>
    <slb-ext-manager-ip>
      slb-ext-manager-ip
    </slb-ext-manager-ip>
    <slb-ext-manager-port>
      slb-ext-manager-port
    </slb-ext-manager-port>
    <slb-ext-manager-status>
      slb-ext-manager-status
    </slb-ext-manager-status>
    <slb-ext-last-connection-time>
      slb-ext-last-connection-time
    </slb-ext-last-connection-time>
```

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```
    <slb-ext-manager-rsg-count>
     slb-ext-manager-rsg-count
    </slb-ext-manager-rsg-count>
    <slb-ext-manager-rsg-information>....</slb-ext-manager-rsg-information>
   </slb-ext-manager-information>
</ext-manager-information>
```

Description

<slb-ext-manager-rs-information>

Usage

```
<ext-manager-information>
 <slb-ext-manager-information>
  <slb-ext-manager-rsg-information>
   <slb-ext-manager-rs-information>
    <slb-rs-servername>
     slb-rs-servername
    </slb-rs-servername>
    <slb-rs-ip>
     slb-rs-ip
    </slb-rs-ip>
    <slb-rs-port>
     slb-rs-port
    </slb-rs-port>
    <slb-static-rs-weight>
     slb-static-rs-weight
    </slb-static-rs-weight>
    <slb-sasp-rs-weight>
     slb-sasp-rs-weight
    </slb-sasp-rs-weight>
    <slb-sasp-rs-contact-flag>
     slb-sasp-rs-contact-flag
    </slb-sasp-rs-contact-flag>
    <slb-sasp-rs-quiesce-flag>
     slb-sasp-rs-quiesce-flag
    </slb-sasp-rs-quiesce-flag>
    <slb-sasp-rs-registration-flag>
     slb-sasp-rs-registration-flag
    </slb-sasp-rs-registration-flag>
    <slb-sasp-rs-confident-flag>
     slb-sasp-rs-confident-flag
    </slb-sasp-rs-confident-flag>
    <slb-ext-rs-last-update-time>
     slb-ext-rs-last-update-time
    </slb-ext-rs-last-update-time>
    <slb-rs-admin-state>
     slb-rs-admin-state
    </slb-rs-admin-state>
    <slb-rs-hm-state>
     slb-rs-hm-state
    </slb-rs-hm-state>
   </slb-ext-manager-rs-information>
  </slb-ext-manager-rsg-information>
 </slb-ext-manager-information>
```


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```
</ext-manager-information>
```

Description

<slb-ext-manager-rsg-information>

Usage

```
<ext-manager-information>
 <slb-ext-manager-information>
  <slb-ext-manager-rsg-information>
   <slb-rsg-servername>
    slb-rsg-servername
   </slb-rsg-servername>
   <slb-rsg-algorithm>
    slb-rsg-algorithm
   </slb-rsg-algorithm>
   <slb-rsg-rs-count>
    slb-rsg-rs-count
   </slb-rsg-rs-count>
   <slb-ext-manager-rs-information>....</slb-ext-manager-rs-information>
  </slb-ext-manager-rsg-information>
 </slb-ext-manager-information>
</ext-manager-information>
```

Description

<slb-ext-manager-statistics>

Usage

```
<ext-manager-statistics-information>
 <slb-ext-manager-statistics>
  <slb-ext-manager-name>
   slb-ext-manager-name
  </slb-ext-manager-name>
  <slb-ext-manager-protocol>
   slb-ext-manager-protocol
  </slb-ext-manager-protocol>
  <slb-sasp-reg-req>
   slb-sasp-reg-req
  </slb-sasp-reg-req>
  <slb-sasp-reg-reply>
   slb-sasp-reg-reply
  </slb-sasp-reg-reply>
  <slb-sasp-reg-err>
   slb-sasp-reg-err
  </slb-sasp-reg-err>
  <slb-sasp-dereg-req>
   slb-sasp-dereg-req
  </slb-sasp-dereg-req>
  <slb-sasp-dereg-reply>
   slb-sasp-dereg-reply
  </slb-sasp-dereg-reply>
  <slb-sasp-dereg-err>
   slb-sasp-dereg-err
```

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```
    </slb-sasp-dereg-err>
    <slb-sasp-get-weights-req>
      slb-sasp-get-weights-req
    </slb-sasp-get-weights-req>
    <slb-sasp-get-weights-reply>
      slb-sasp-get-weights-reply
    </slb-sasp-get-weights-reply>
    <slb-sasp-get-weights-err>
      slb-sasp-get-weights-err
    </slb-sasp-get-weights-err>
    <slb-sasp-set-mbr-state-req>
      slb-sasp-set-mbr-state-req
    </slb-sasp-set-mbr-state-req>
    <slb-sasp-set-mbr-state-reply>
      slb-sasp-set-mbr-state-reply
    </slb-sasp-set-mbr-state-reply>
    <slb-sasp-set-mbr-state-err>
      slb-sasp-set-mbr-state-err
    </slb-sasp-set-mbr-state-err>
    <slb-sasp-set-lb-state-req>
      slb-sasp-set-lb-state-req
    </slb-sasp-set-lb-state-req>
    <slb-sasp-set-lb-state-reply>
      slb-sasp-set-lb-state-reply
    </slb-sasp-set-lb-state-reply>
    <slb-sasp-set-lb-state-err>
      slb-sasp-set-lb-state-err
    </slb-sasp-set-lb-state-err>
    <slb-sasp-send-weights-req>
      slb-sasp-send-weights-req
    </slb-sasp-send-weights-req>
    <slb-sasp-send-weights-err>
      slb-sasp-send-weights-err
    </slb-sasp-send-weights-err>
    <slb-ext-conn-err>
      slb-ext-conn-err
    </slb-ext-conn-err>
    <slb-ext-total-msg-sent>
      slb-ext-total-msg-sent
    </slb-ext-total-msg-sent>
    <slb-ext-total-msg-rcvd>
      slb-ext-total-msg-rcvd
    </slb-ext-total-msg-rcvd>
  </slb-ext-manager-statistics>
</ext-manager-statistics-information>
```

Description

<slb-hash-information>

Usage

```
<hash-table-information>
  <slb-hash-information>
    <slb-rsg-servername>
      slb-rsg-servername
```


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```
    </slb-rsg-servername>
    <slb-spu-slot>
      slb-spu-slot
    </slb-spu-slot>
    <slb-spu-pic>
      slb-spu-pic
    </slb-spu-pic>
    <slb-hash-index>
      slb-hash-index
    </slb-hash-index>
    <slb-rs-servername>
      slb-rs-servername
    </slb-rs-servername>
    <slb-hash-hits>
      slb-hash-hits
    </slb-hash-hits>
    <slb-hash-rs-servername>
      slb-hash-rs-servername
    </slb-hash-rs-servername>
    <slb-hash-keys-total>
      slb-hash-keys-total
    </slb-hash-keys-total>
    <slb-hash-hits-total>
      slb-hash-hits-total
    </slb-hash-hits-total>
  </slb-hash-information>
</hash-table-information>
```

Description

<slb-hm-information>

Usage

```
<health-monitor-information>
  <slb-hm-information>
    <slb-hm-rulename>
      slb-hm-rulename
    </slb-hm-rulename>
    <slb-hm-protocol>
      slb-hm-protocol
    </slb-hm-protocol>
    <slb-hm-port>
      slb-hm-port
    </slb-hm-port>
    <slb-hm-timeout>
      slb-hm-timeout
    </slb-hm-timeout>
    <slb-hm-itvl-down>
      slb-hm-itvl-down
    </slb-hm-itvl-down>
    <slb-hm-itvl-up>
      slb-hm-itvl-up
    </slb-hm-itvl-up>
    <slb-hm-max-retry>
      slb-hm-max-retry
```

```
    </slb-hm-max-retry>
    <slb-hm-rs-count>
      slb-hm-rs-count
    </slb-hm-rs-count>
    <slb-hm-rsg-count>
      slb-hm-rsg-count
    </slb-hm-rsg-count>
    <slb-rs-servername>
      slb-rs-servername
    </slb-rs-servername>
    <slb-rs-hm-state>
      slb-rs-hm-state
    </slb-rs-hm-state>
    <slb-spu-slot>
      slb-spu-slot
    </slb-spu-slot>
    <slb-spu-pic>
      slb-spu-pic
    </slb-spu-pic>
    <slb-rsg-servername>
      slb-rsg-servername
    </slb-rsg-servername>
    <slb-rsg-rs-count>
      slb-rsg-rs-count
    </slb-rsg-rs-count>
  </slb-hm-information>
</health-monitor-information>
```

Description

<slb-hm-statistics>

Usage

```
<health-monitor-statistics-information>
  <slb-hm-statistics>
    <slb-hm-rulename>
      slb-hm-rulename
    </slb-hm-rulename>
    <slb-rsg-servername>
      slb-rsg-servername
    </slb-rsg-servername>
    <slb-rs-servername>
      slb-rs-servername
    </slb-rs-servername>
    <slb-spu-slot>
      slb-spu-slot
    </slb-spu-slot>
    <slb-spu-pic>
      slb-spu-pic
    </slb-spu-pic>
    <slb-rs-probe-state>
      slb-rs-probe-state
    </slb-rs-probe-state>
    <slb-hm-probe-up>
      slb-hm-probe-up
```


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```
    </slb-hm-probe-up>
    <slb-hm-probe-down>
      slb-hm-probe-down
    </slb-hm-probe-down>
    <slb-hm-probe-tx-ok>
      slb-hm-probe-tx-ok
    </slb-hm-probe-tx-ok>
    <slb-hm-probe-tx-err>
      slb-hm-probe-tx-err
    </slb-hm-probe-tx-err>
    <slb-hm-packet-tx-ok>
      slb-hm-packet-tx-ok
    </slb-hm-packet-tx-ok>
    <slb-hm-packet-tx-err>
      slb-hm-packet-tx-err
    </slb-hm-packet-tx-err>
    <slb-hm-packet-rx-ok>
      slb-hm-packet-rx-ok
    </slb-hm-packet-rx-ok>
    <slb-hm-packet-rx-err>
      slb-hm-packet-rx-err
    </slb-hm-packet-rx-err>
  </slb-hm-statistics>
</health-monitor-statistics-information>
```

Description

<slb-hm-stats-clear>

Usage

```
<health-monitor-clear>
  <slb-hm-stats-clear>
    <slb-hm-clear-percent>
      slb-hm-clear-percent
    </slb-hm-clear-percent>
  </slb-hm-stats-clear>
</health-monitor-clear>
```

Description

<slb-rs-information>

Usage

```
<real-server-information>
  <slb-rs-information>
    <slb-rs-servername>
      slb-rs-servername
    </slb-rs-servername>
    <slb-rs-ip>
      slb-rs-ip
    </slb-rs-ip>
    <slb-rs-protocol>
      slb-rs-protocol
    </slb-rs-protocol>
```

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```
      <slb-rs-port>
        slb-rs-port
      </slb-rs-port>
      <slb-rs-weight>
        slb-rs-weight
      </slb-rs-weight>
      <slb-rs-admin-state>
        slb-rs-admin-state
      </slb-rs-admin-state>
      <slb-rs-hm-state>
        slb-rs-hm-state
      </slb-rs-hm-state>
      <slb-static-rs-weight>
        slb-static-rs-weight
      </slb-static-rs-weight>
      <slb-rs-ramp-up-time>
        slb-rs-ramp-up-time
      </slb-rs-ramp-up-time>
      <slb-rs-cur-conn-limit>
        slb-rs-cur-conn-limit
      </slb-rs-cur-conn-limit>
      <slb-rs-max-conn-limit>
        slb-rs-max-conn-limit
      </slb-rs-max-conn-limit>
      <slb-rs-min-conn-limit>
        slb-rs-min-conn-limit
      </slb-rs-min-conn-limit>
      <slb-routing-instance>
        slb-routing-instance
      </slb-routing-instance>
      <slb-hm-rulename>
        slb-hm-rulename
      </slb-hm-rulename>
      <slb-spu-slot>
        slb-spu-slot
      </slb-spu-slot>
      <slb-spu-pic>
        slb-spu-pic
      </slb-spu-pic>
    </slb-rs-information>
  </real-server-information>
```

Description

<slb-rs-statistics>

Usage

```
  <real-server-statistics-information>
    <slb-rs-statistics>
      <slb-rs-servername>
        slb-rs-servername
      </slb-rs-servername>
      <slb-rs-total-conn>
        slb-rs-total-conn
      </slb-rs-total-conn>
```


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```
<slb-rs-active-conn>
  slb-rs-active-conn
</slb-rs-active-conn>
<slb-rs-conn-rate>
  slb-rs-conn-rate
</slb-rs-conn-rate>
<slb-rs-pkts>
  slb-rs-pkts
</slb-rs-pkts>
<slb-rs-pkt-rate>
  slb-rs-pkt-rate
</slb-rs-pkt-rate>
<slb-rs-bytes>
  slb-rs-bytes
</slb-rs-bytes>
<slb-rs-byte-rate>
  slb-rs-byte-rate
</slb-rs-byte-rate>
<slb-rs-spu-total-conn>
  slb-rs-spu-total-conn
</slb-rs-spu-total-conn>
<slb-rs-spu-active-conn>
  slb-rs-spu-active-conn
</slb-rs-spu-active-conn>
<slb-rs-spu-pkts>
  slb-rs-spu-pkts
</slb-rs-spu-pkts>
<slb-rs-spu-bytes>
  slb-rs-spu-bytes
</slb-rs-spu-bytes>
<slb-spu-slot>
  slb-spu-slot
</slb-spu-slot>
<slb-spu-pic>
  slb-spu-pic
</slb-spu-pic>
<slb-rs-probe-state>
  slb-rs-probe-state
</slb-rs-probe-state>
<slb-hm-probe-up>
  slb-hm-probe-up
</slb-hm-probe-up>
<slb-hm-probe-down>
  slb-hm-probe-down
</slb-hm-probe-down>
<slb-hm-probe-tx-ok>
  slb-hm-probe-tx-ok
</slb-hm-probe-tx-ok>
<slb-hm-probe-tx-err>
  slb-hm-probe-tx-err
</slb-hm-probe-tx-err>
<slb-hm-packet-tx-ok>
  slb-hm-packet-tx-ok
</slb-hm-packet-tx-ok>
<slb-hm-packet-tx-err>
  slb-hm-packet-tx-err
```

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```
    </slb-hm-packet-tx-err>
    <slb-hm-packet-rx-ok>
      slb-hm-packet-rx-ok
    </slb-hm-packet-rx-ok>
    <slb-hm-packet-rx-err>
      slb-hm-packet-rx-err
    </slb-hm-packet-rx-err>
  </slb-rs-statistics>
</real-server-statistics-information>
```

Description

<slb-rsg-ent-statistics>

Usage

```
<real-server-group-statistics-information>
  <slb-rsg-statistics>
    <slb-rsg-ent-statistics>
      <slb-rs-servername>
        slb-rs-servername
      </slb-rs-servername>
      <slb-rs-total-conn>
        slb-rs-total-conn
      </slb-rs-total-conn>
      <slb-rs-active-conn>
        slb-rs-active-conn
      </slb-rs-active-conn>
      <slb-rs-pkts>
        slb-rs-pkts
      </slb-rs-pkts>
      <slb-rs-bytes>
        slb-rs-bytes
      </slb-rs-bytes>
    </slb-rsg-ent-statistics>
  </slb-rsg-statistics>
</real-server-group-statistics-information>
```

Description

<slb-rsg-information>

Usage

```
<real-server-group-information>
  <slb-rsg-information>
    <slb-rsg-servername>
      slb-rsg-servername
    </slb-rsg-servername>
    <slb-rsg-algorithm>
      slb-rsg-algorithm
    </slb-rsg-algorithm>
    <slb-rsg-sticky-mode>
      slb-rsg-sticky-mode
    </slb-rsg-sticky-mode>
    <slb-routing-instance>
```


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```
      slb-routing-instance
    </slb-routing-instance>
    <slb-rsg-rs-count>
      slb-rsg-rs-count
    </slb-rsg-rs-count>
    <slb-rsg-failure-count>
      slb-rsg-failure-count
    </slb-rsg-failure-count>
    <slb-rsg-failure-ratio>
      slb-rsg-failure-ratio
    </slb-rsg-failure-ratio>
    <slb-hm-rulename>
      slb-hm-rulename
    </slb-hm-rulename>
    <slb-rsg-ext-manager>
      slb-rsg-ext-manager
    </slb-rsg-ext-manager>
    <slb-rsg-rs-information>....</slb-rsg-rs-information>
  </slb-rsg-information>
</real-server-group-information>
```

Description

<slb-rsg-rs-information>

Usage

```
<real-server-group-information>
  <slb-rsg-information>
    <slb-rsg-rs-information>
      <slb-rs-servername>
        slb-rs-servername
      </slb-rs-servername>
      <slb-rs-ip>
        slb-rs-ip
      </slb-rs-ip>
      <slb-rs-protocol>
        slb-rs-protocol
      </slb-rs-protocol>
      <slb-rs-port>
        slb-rs-port
      </slb-rs-port>
      <slb-rs-weight>
        slb-rs-weight
      </slb-rs-weight>
      <slb-rs-admin-state>
        slb-rs-admin-state
      </slb-rs-admin-state>
      <slb-rs-hm-state>
        slb-rs-hm-state
      </slb-rs-hm-state>
    </slb-rsg-rs-information>
  </slb-rsg-information>
</real-server-group-information>
```

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Description

<slb-rsg-statistics>

Usage

```
<real-server-group-statistics-information>
 <slb-rsg-statistics>
  <slb-rsg-servername>
   slb-rsg-servername
  </slb-rsg-servername>
  <slb-rsg-total-conn>
   slb-rsg-total-conn
  </slb-rsg-total-conn>
  <slb-rsg-active-conn>
   slb-rsg-active-conn
  </slb-rsg-active-conn>
  <slb-rsg-conn-rate>
   slb-rsg-conn-rate
  </slb-rsg-conn-rate>
  <slb-rsg-pkts>
   slb-rsg-pkts
  </slb-rsg-pkts>
  <slb-rsg-pkt-rate>
   slb-rsg-pkt-rate
  </slb-rsg-pkt-rate>
  <slb-rsg-bytes>
   slb-rsg-bytes
  </slb-rsg-bytes>
  <slb-rsg-byte-rate>
   slb-rsg-byte-rate
  </slb-rsg-byte-rate>
  <slb-spu-slot>
   slb-spu-slot
  </slb-spu-slot>
  <slb-spu-pic>
   slb-spu-pic
  </slb-spu-pic>
  <slb-rsg-spu-total-conn>
   slb-rsg-spu-total-conn
  </slb-rsg-spu-total-conn>
  <slb-rsg-spu-active-conn>
   slb-rsg-spu-active-conn
  </slb-rsg-spu-active-conn>
  <slb-rsg-spu-pkts>
   slb-rsg-spu-pkts
  </slb-rsg-spu-pkts>
  <slb-rsg-spu-bytes>
   slb-rsg-spu-bytes
  </slb-rsg-spu-bytes>
  <slb-rsg-ent-statistics>....</slb-rsg-ent-statistics>
 </slb-rsg-statistics>
</real-server-group-statistics-information>
```

Description

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<slb-sticky-clear>

Usage

```
<sticky-table-clear>
  <slb-sticky-clear>
    <slb-rsg-servername>
      slb-rsg-servername
    </slb-rsg-servername>
  </slb-sticky-clear>
</sticky-table-clear>
```

Description

<slb-sticky-information>

Usage

```
<sticky-table-information>
  <slb-sticky-information>
    <slb-rsg-servername>
      slb-rsg-servername
    </slb-rsg-servername>
    <slb-spu-slot>
      slb-spu-slot
    </slb-spu-slot>
    <slb-spu-pic>
      slb-spu-pic
    </slb-spu-pic>
    <slb-sticky-index>
      slb-sticky-index
    </slb-sticky-index>
    <slb-sticky-key>
      slb-sticky-key
    </slb-sticky-key>
    <slb-rs-servername>
      slb-rs-servername
    </slb-rs-servername>
    <slb-sticky-hits>
      slb-sticky-hits
    </slb-sticky-hits>
    <slb-sticky-ttl>
      slb-sticky-ttl
    </slb-sticky-ttl>
    <slb-sticky-rsg-servername>
      slb-sticky-rsg-servername
    </slb-sticky-rsg-servername>
    <slb-sticky-rs-servername>
      slb-sticky-rs-servername
    </slb-sticky-rs-servername>
    <slb-sticky-keys-total>
      slb-sticky-keys-total
    </slb-sticky-keys-total>
    <slb-sticky-hits-total>
      slb-sticky-hits-total
    </slb-sticky-hits-total>
```

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```
    </slb-sticky-information>
</sticky-table-information>
```

Description

<slb-vs-information>

Usage

```
<virtual-server-information>
  <slb-vs-information>
    <slb-vs-servername>
      slb-vs-servername
    </slb-vs-servername>
    <slb-vs-ip>
      slb-vs-ip
    </slb-vs-ip>
    <slb-vs-protocol>
      slb-vs-protocol
    </slb-vs-protocol>
    <slb-vs-port>
      slb-vs-port
    </slb-vs-port>
    <slb-vs-service-port>
      slb-vs-service-port
    </slb-vs-service-port>
    <slb-vs-ssl-offload>
      slb-vs-ssl-offload
    </slb-vs-ssl-offload>
    <slb-vs-mss>
      slb-vs-mss
    </slb-vs-mss>
    <slb-vs-sack-permitted>
      slb-vs-sack-permitted
    </slb-vs-sack-permitted>
    <slb-vs-wind-scale>
      slb-vs-wind-scale
    </slb-vs-wind-scale>
    <slb-vs-nat-mode>
      slb-vs-nat-mode
    </slb-vs-nat-mode>
    <slb-vs-lb-mode>
      slb-vs-lb-mode
    </slb-vs-lb-mode>
    <slb-routing-instance>
      slb-routing-instance
    </slb-routing-instance>
    <slb-vs-admin-state>
      slb-vs-admin-state
    </slb-vs-admin-state>
    <slb-vs-op-state>
      slb-vs-op-state
    </slb-vs-op-state>
    <slb-vs-failover-threshold>
      slb-vs-failover-threshold
    </slb-vs-failover-threshold>
```


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```
    <slb-vs-failback-threshold>
     slb-vs-failback-threshold
    </slb-vs-failback-threshold>
    <slb-vs-rsg-information>....</slb-vs-rsg-information>
   </slb-vs-information>
</virtual-server-information>
```

Description

<slb-vs-rsg-information>

Usage

```
<virtual-server-information>
 <slb-vs-information>
  <slb-vs-rsg-information>
   <slb-rsg-servername>
    slb-rsg-servername
   </slb-rsg-servername>
   <slb-rsg-active>
    slb-rsg-active
   </slb-rsg-active>
   <slb-rsg-algorithm>
    slb-rsg-algorithm
   </slb-rsg-algorithm>
   <slb-rsg-rs-count>
    slb-rsg-rs-count
   </slb-rsg-rs-count>
   <slb-rsg-failure-count>
    slb-rsg-failure-count
   </slb-rsg-failure-count>
   <slb-rsg-failure-ratio>
    slb-rsg-failure-ratio
   </slb-rsg-failure-ratio>
  </slb-vs-rsg-information>
 </slb-vs-information>
</virtual-server-information>
```

Description

<slb-vs-statistics>

Usage

```
<virtual-server-statistics-information>
 <slb-vs-statistics>
  <slb-vs-servername>
   slb-vs-servername
  </slb-vs-servername>
  <slb-vs-total-conn>
   slb-vs-total-conn
  </slb-vs-total-conn>
  <slb-vs-active-conn>
   slb-vs-active-conn
  </slb-vs-active-conn>
  <slb-vs-dropped-conn>
```

```
      slb-vs-dropped-conn
    </slb-vs-dropped-conn>
    <slb-vs-conn-rate>
      slb-vs-conn-rate
    </slb-vs-conn-rate>
    <slb-vs-pkts>
      slb-vs-pkts
    </slb-vs-pkts>
    <slb-vs-pkt-rate>
      slb-vs-pkt-rate
    </slb-vs-pkt-rate>
    <slb-vs-bytes>
      slb-vs-bytes
    </slb-vs-bytes>
    <slb-vs-byte-rate>
      slb-vs-byte-rate
    </slb-vs-byte-rate>
    <slb-vs-spu-total-conn>
      slb-vs-spu-total-conn
    </slb-vs-spu-total-conn>
    <slb-vs-spu-active-conn>
      slb-vs-spu-active-conn
    </slb-vs-spu-active-conn>
    <slb-vs-spu-pkts>
      slb-vs-spu-pkts
    </slb-vs-spu-pkts>
    <slb-vs-spu-bytes>
      slb-vs-spu-bytes
    </slb-vs-spu-bytes>
    <slb-vs-spu-drop-vs-down>
      slb-vs-spu-drop-vs-down
    </slb-vs-spu-drop-vs-down>
    <slb-vs-spu-drop-no-rs>
      slb-vs-spu-drop-no-rs
    </slb-vs-spu-drop-no-rs>
    <slb-vs-spu-drop-no-nh>
      slb-vs-spu-drop-no-nh
    </slb-vs-spu-drop-no-nh>
    <slb-vs-spu-drop-no-mem>
      slb-vs-spu-drop-no-mem
    </slb-vs-spu-drop-no-mem>
    <slb-vs-spu-drop-misc>
      slb-vs-spu-drop-misc
    </slb-vs-spu-drop-misc>
    <slb-spu-slot>
      slb-spu-slot
    </slb-spu-slot>
    <slb-spu-pic>
      slb-spu-pic
    </slb-spu-pic>
  </slb-vs-statistics>
</virtual-server-statistics-information>
```

Description

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<sticky-table-clear>

Usage

```
<sticky-table-clear>
  <slb-sticky-clear>....</slb-sticky-clear>
</sticky-table-clear>
```

Description Clear sticky tables

<sticky-table-information>

Usage

```
<sticky-table-information>
  <slb-sticky-information>....</slb-sticky-information>
</sticky-table-information>
```

Description Information of sticky table for one or more real server groups

<virtual-server-information>

Usage

```
<virtual-server-information>
  <slb-vs-information>....</slb-vs-information>
</virtual-server-information>
```

Description Information about one or more virtual servers

<virtual-server-statistics-information>

Usage

```
<virtual-server-statistics-information>
  <slb-vs-statistics>....</slb-vs-statistics>
</virtual-server-statistics-information>
```

Description Statistics of one or more virtual servers

Summary of SMPL Response Tags

<smpl-next-hop-group>

Usage

```
<smpl-next-hop-group>
  <smpl-nhgroup>....</smpl-nhgroup>
</smpl-next-hop-group>
```

Description Information about next-hop-groups

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<smpl-nhgroup>

Usage

```
<smpl-nhgroup>
  <smpl-nhgroup-member-list>....</smpl-nhgroup-member-list>
  <smpl-nhgroup-subgroup>....</smpl-nhgroup-subgroup>
  <smpl-nhgroup-name>
    smpl-nhgroup-name
  </smpl-nhgroup-name>
  <smpl-nhgroup-type>
    smpl-nhgroup-type
  </smpl-nhgroup-type>
  <smpl-nhgroup-state>
    smpl-nhgroup-state
  </smpl-nhgroup-state>
  <smpl-nhgroup-nhid-header>
    smpl-nhgroup-nhid-header
  </smpl-nhgroup-nhid-header>
  <smpl-nhgroup-num-members-configured>
    smpl-nhgroup-num-members-configured
  </smpl-nhgroup-num-members-configured>
  <smpl-nhgroup-num-members-up>
    smpl-nhgroup-num-members-up
  </smpl-nhgroup-num-members-up>
  <smpl-nhgroup-subgroups-configured>
    smpl-nhgroup-subgroups-configured
  </smpl-nhgroup-subgroups-configured>
  <smpl-nhgroup-subgroups-up>
    smpl-nhgroup-subgroups-up
  </smpl-nhgroup-subgroups-up>
</smpl-nhgroup>
```

Description

<smpl-nhgroup>

Usage

```
<smpl-next-hop-group>
  <smpl-nhgroup>
    <smpl-nhgroup-member-list>....</smpl-nhgroup-member-list>
    <smpl-nhgroup-subgroup>....</smpl-nhgroup-subgroup>
    <smpl-nhgroup-name>
      smpl-nhgroup-name
    </smpl-nhgroup-name>
    <smpl-nhgroup-type>
      smpl-nhgroup-type
    </smpl-nhgroup-type>
    <smpl-nhgroup-state>
      smpl-nhgroup-state
    </smpl-nhgroup-state>
    <smpl-nhgroup-nhid-header>
      smpl-nhgroup-nhid-header
    </smpl-nhgroup-nhid-header>
    <smpl-nhgroup-num-members-configured>
```


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```
      smpl-nhgroup-num-members-configured
    </smpl-nhgroup-num-members-configured>
    <smpl-nhgroup-num-members-up>
      smpl-nhgroup-num-members-up
    </smpl-nhgroup-num-members-up>
    <smpl-nhgroup-subgroups-configured>
      smpl-nhgroup-subgroups-configured
    </smpl-nhgroup-subgroups-configured>
    <smpl-nhgroup-subgroups-up>
      smpl-nhgroup-subgroups-up
    </smpl-nhgroup-subgroups-up>
  </smpl-nhgroup>
</smpl-next-hop-group>
```

Description

<smpl-nhgroup-member-list>

Usage

```
<smpl-nhgroup-member-list>
  <smpl-nhgroup-member-interface>
    smpl-nhgroup-member-interface
  </smpl-nhgroup-member-interface>
  <smpl-nhgroup-nexthop-address>
    smpl-nhgroup-nexthop-address
  </smpl-nhgroup-nexthop-address>
  <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
  </smpl-nhgroup-nexthop-state>
  <smpl-nexthop-index>
    smpl-nexthop-index
  </smpl-nexthop-index>
</smpl-nhgroup-member-list>
```

Description

<smpl-nhgroup-member-list>

Usage

```
<smpl-nhgroup>
  <smpl-nhgroup-member-list>
    <smpl-nhgroup-member-interface>
      smpl-nhgroup-member-interface
    </smpl-nhgroup-member-interface>
    <smpl-nhgroup-nexthop-address>
      smpl-nhgroup-nexthop-address
    </smpl-nhgroup-nexthop-address>
    <smpl-nhgroup-nexthop-state>
      smpl-nhgroup-nexthop-state
    </smpl-nhgroup-nexthop-state>
    <smpl-nexthop-index>
      smpl-nexthop-index
    </smpl-nexthop-index>
  </smpl-nhgroup-member-list>
```

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```
</smpl-nhgroup>
```

Description

<smpl-nhgroup-member-list>

Usage

```
<smpl-next-hop-group>
 <smpl-nhgroup>
  <smpl-nhgroup-member-list>
   <smpl-nhgroup-member-interface>
    smpl-nhgroup-member-interface
   </smpl-nhgroup-member-interface>
   <smpl-nhgroup-nexthop-address>
    smpl-nhgroup-nexthop-address
   </smpl-nhgroup-nexthop-address>
   <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
   </smpl-nhgroup-nexthop-state>
   <smpl-nexthop-index>
    smpl-nexthop-index
   </smpl-nexthop-index>
  </smpl-nhgroup-member-list>
 </smpl-nhgroup>
</smpl-next-hop-group>
```

Description

<smpl-nhgroup-member-list>

Usage

```
<smpl-port-mirror-output-family-list>
 <smpl-nhgroup-member-list>
  <smpl-nhgroup-member-interface>
   smpl-nhgroup-member-interface
  </smpl-nhgroup-member-interface>
  <smpl-nhgroup-nexthop-address>
   smpl-nhgroup-nexthop-address
  </smpl-nhgroup-nexthop-address>
  <smpl-nhgroup-nexthop-state>
   smpl-nhgroup-nexthop-state
  </smpl-nhgroup-nexthop-state>
  <smpl-nexthop-index>
   smpl-nexthop-index
  </smpl-nexthop-index>
 </smpl-nhgroup-member-list>
</smpl-port-mirror-output-family-list>
```

Description

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<smpl-nhgroup-member-list>

Usage

```
<smpl-port-mirroring-instance>
  <smpl-port-mirror-output-family-list>
    <smpl-nhgroup-member-list>
      <smpl-nhgroup-member-interface>
        smpl-nhgroup-member-interface
      </smpl-nhgroup-member-interface>
      <smpl-nhgroup-nexthop-address>
        smpl-nhgroup-nexthop-address
      </smpl-nhgroup-nexthop-address>
      <smpl-nhgroup-nexthop-state>
        smpl-nhgroup-nexthop-state
      </smpl-nhgroup-nexthop-state>
      <smpl-nexthop-index>
        smpl-nexthop-index
      </smpl-nexthop-index>
    </smpl-nhgroup-member-list>
  </smpl-port-mirror-output-family-list>
</smpl-port-mirroring-instance>
```

Description

<smpl-nhgroup-member-list>

Usage

```
<smpl-port-mirroring>
  <smpl-port-mirroring-instance>
    <smpl-port-mirror-output-family-list>
      <smpl-nhgroup-member-list>
        <smpl-nhgroup-member-interface>
          smpl-nhgroup-member-interface
        </smpl-nhgroup-member-interface>
        <smpl-nhgroup-nexthop-address>
          smpl-nhgroup-nexthop-address
        </smpl-nhgroup-nexthop-address>
        <smpl-nhgroup-nexthop-state>
          smpl-nhgroup-nexthop-state
        </smpl-nhgroup-nexthop-state>
        <smpl-nexthop-index>
          smpl-nexthop-index
        </smpl-nexthop-index>
      </smpl-nhgroup-member-list>
    </smpl-port-mirror-output-family-list>
  </smpl-port-mirroring-instance>
</smpl-port-mirroring>
```

Description

<smpl-nhgroup-subgroup>

Usage

```
<smpl-nhgroup-subgroup>
  <smpl-nhgroup-name>
    smpl-nhgroup-name
  </smpl-nhgroup-name>
  <smpl-nhgroup-state>
    smpl-nhgroup-state
  </smpl-nhgroup-state>
  <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
  </smpl-nhgroup-nexthop-state>
  <smpl-nexthop-index>
    smpl-nexthop-index
  </smpl-nexthop-index>
  <smpl-nhgroup-nhid-header>
    smpl-nhgroup-nhid-header
  </smpl-nhgroup-nhid-header>
  <smpl-subgroup-num-members-configured>
    smpl-subgroup-num-members-configured
  </smpl-subgroup-num-members-configured>
  <smpl-subgroup-num-members-up>
    smpl-subgroup-num-members-up
  </smpl-subgroup-num-members-up>
  <smpl-subgroup-member-list>....</smpl-subgroup-member-list>
</smpl-nhgroup-subgroup>
```

Description

<smpl-nhgroup-subgroup>

Usage

```
<smpl-nhgroup>
  <smpl-nhgroup-subgroup>
    <smpl-nhgroup-name>
      smpl-nhgroup-name
    </smpl-nhgroup-name>
    <smpl-nhgroup-state>
      smpl-nhgroup-state
    </smpl-nhgroup-state>
    <smpl-nhgroup-nexthop-state>
      smpl-nhgroup-nexthop-state
    </smpl-nhgroup-nexthop-state>
    <smpl-nexthop-index>
      smpl-nexthop-index
    </smpl-nexthop-index>
    <smpl-nhgroup-nhid-header>
      smpl-nhgroup-nhid-header
    </smpl-nhgroup-nhid-header>
    <smpl-subgroup-num-members-configured>
      smpl-subgroup-num-members-configured
    </smpl-subgroup-num-members-configured>
    <smpl-subgroup-num-members-up>
```


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```
    smpl-subgroup-num-members-up
   </smpl-subgroup-num-members-up>
   <smpl-subgroup-member-list>....</smpl-subgroup-member-list>
  </smpl-nhgroup-subgroup>
</smpl-nhgroup>
```

Description

<smpl-nhgroup-subgroup>

Usage

```
<smpl-next-hop-group>
 <smpl-nhgroup>
  <smpl-nhgroup-subgroup>
   <smpl-nhgroup-name>
    smpl-nhgroup-name
   </smpl-nhgroup-name>
   <smpl-nhgroup-state>
    smpl-nhgroup-state
   </smpl-nhgroup-state>
   <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
   </smpl-nhgroup-nexthop-state>
   <smpl-nexthop-index>
    smpl-nexthop-index
   </smpl-nexthop-index>
   <smpl-nhgroup-nhid-header>
    smpl-nhgroup-nhid-header
   </smpl-nhgroup-nhid-header>
   <smpl-subgroup-num-members-configured>
    smpl-subgroup-num-members-configured
   </smpl-subgroup-num-members-configured>
   <smpl-subgroup-num-members-up>
    smpl-subgroup-num-members-up
   </smpl-subgroup-num-members-up>
   <smpl-subgroup-member-list>....</smpl-subgroup-member-list>
  </smpl-nhgroup-subgroup>
 </smpl-nhgroup>
</smpl-next-hop-group>
```

Description

<smpl-port-mirror-output-family-list>

Usage

```
<smpl-port-mirror-output-family-list>
 <smpl-output-family-name>
  smpl-output-family-name
 </smpl-output-family-name>
 <smpl-output-family-state>
  smpl-output-family-state
 </smpl-output-family-state>
 <smpl-output-family-destination>
  smpl-output-family-destination
```

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```
  </smpl-output-family-destination>
  <smpl-nexthop-index>
    smpl-nexthop-index
  </smpl-nexthop-index>
  <smpl-nhgroup-member-list>....</smpl-nhgroup-member-list>
</smpl-port-mirror-output-family-list>
```

Description

<smpl-port-mirror-output-family-list>

Usage

```
<smpl-port-mirroring-instance>
  <smpl-port-mirror-output-family-list>
    <smpl-output-family-name>
      smpl-output-family-name
    </smpl-output-family-name>
    <smpl-output-family-state>
      smpl-output-family-state
    </smpl-output-family-state>
    <smpl-output-family-destination>
      smpl-output-family-destination
    </smpl-output-family-destination>
    <smpl-nexthop-index>
      smpl-nexthop-index
    </smpl-nexthop-index>
    <smpl-nhgroup-member-list>....</smpl-nhgroup-member-list>
  </smpl-port-mirror-output-family-list>
</smpl-port-mirroring-instance>
```

Description

<smpl-port-mirror-output-family-list>

Usage

```
<smpl-port-mirroring>
  <smpl-port-mirroring-instance>
    <smpl-port-mirror-output-family-list>
      <smpl-output-family-name>
        smpl-output-family-name
      </smpl-output-family-name>
      <smpl-output-family-state>
        smpl-output-family-state
      </smpl-output-family-state>
      <smpl-output-family-destination>
        smpl-output-family-destination
      </smpl-output-family-destination>
      <smpl-nexthop-index>
        smpl-nexthop-index
      </smpl-nexthop-index>
      <smpl-nhgroup-member-list>....</smpl-nhgroup-member-list>
    </smpl-port-mirror-output-family-list>
  </smpl-port-mirroring-instance>
```


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```
</smpl-port-mirroring>
```

Description

<smpl-port-mirroring>

Usage

```
<smpl-port-mirroring>
  <smpl-port-mirroring-instance>....</smpl-port-mirroring-instance>
</smpl-port-mirroring>
```

Description Information about port-mirroring instances

<smpl-port-mirroring-instance>

Usage

```
<smpl-port-mirroring-instance>
  <smpl-port-mirror-output-family-list>....</smpl-port-mirror-output-family-list>
  <smpl-instance-name>
    smpl-instance-name
  </smpl-instance-name>
  <smpl-instance-state>
    smpl-instance-state
  </smpl-instance-state>
  <smpl-instance-id>
    smpl-instance-id
  </smpl-instance-id>
  <smpl-instance-input-rate>
    smpl-instance-input-rate
  </smpl-instance-input-rate>
  <smpl-instance-input-run-length>
    smpl-instance-input-run-length
  </smpl-instance-input-run-length>
  <smpl-instance-input-maximum-packet-length>
    smpl-instance-input-maximum-packet-length
  </smpl-instance-input-maximum-packet-length>
  <smpl-instance-nhid-header>
    smpl-instance-nhid-header
  </smpl-instance-nhid-header>
</smpl-port-mirroring-instance>
```

Description

<smpl-port-mirroring-instance>

Usage

```
<smpl-port-mirroring>
  <smpl-port-mirroring-instance>
    <smpl-port-mirror-output-family-list>....</smpl-port-mirror-output-family-list>

    <smpl-instance-name>
      smpl-instance-name
```

```
    </smpl-instance-name>
    <smpl-instance-state>
      smpl-instance-state
    </smpl-instance-state>
    <smpl-instance-id>
      smpl-instance-id
    </smpl-instance-id>
    <smpl-instance-input-rate>
      smpl-instance-input-rate
    </smpl-instance-input-rate>
    <smpl-instance-input-run-length>
      smpl-instance-input-run-length
    </smpl-instance-input-run-length>
    <smpl-instance-input-maximum-packet-length>
      smpl-instance-input-maximum-packet-length
    </smpl-instance-input-maximum-packet-length>
    <smpl-instance-nhid-header>
      smpl-instance-nhid-header
    </smpl-instance-nhid-header>
  </smpl-port-mirroring-instance>
</smpl-port-mirroring>
```

Description

<smpl-subgroup-member-list>

Usage

```
<smpl-subgroup-member-list>
  <smpl-nhgroup-member-interface>
    smpl-nhgroup-member-interface
  </smpl-nhgroup-member-interface>
  <smpl-nhgroup-nexthop-address>
    smpl-nhgroup-nexthop-address
  </smpl-nhgroup-nexthop-address>
  <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
  </smpl-nhgroup-nexthop-state>
  <smpl-nexthop-index>
    smpl-nexthop-index
  </smpl-nexthop-index>
</smpl-subgroup-member-list>
```

Description

<smpl-subgroup-member-list>

Usage

```
<smpl-nhgroup-subgroup>
  <smpl-subgroup-member-list>
    <smpl-nhgroup-member-interface>
      smpl-nhgroup-member-interface
    </smpl-nhgroup-member-interface>
    <smpl-nhgroup-nexthop-address>
      smpl-nhgroup-nexthop-address
```


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```
    </smpl-nhgroup-nexthop-address>
    <smpl-nhgroup-nexthop-state>
     smpl-nhgroup-nexthop-state
    </smpl-nhgroup-nexthop-state>
    <smpl-nexthop-index>
     smpl-nexthop-index
    </smpl-nexthop-index>
   </smpl-subgroup-member-list>
  </smpl-nhgroup-subgroup>
```

Description

<smpl-subgroup-member-list>

Usage

```
<smpl-nhgroup>
 <smpl-nhgroup-subgroup>
  <smpl-subgroup-member-list>
   <smpl-nhgroup-member-interface>
    smpl-nhgroup-member-interface
   </smpl-nhgroup-member-interface>
   <smpl-nhgroup-nexthop-address>
    smpl-nhgroup-nexthop-address
   </smpl-nhgroup-nexthop-address>
   <smpl-nhgroup-nexthop-state>
    smpl-nhgroup-nexthop-state
   </smpl-nhgroup-nexthop-state>
   <smpl-nexthop-index>
    smpl-nexthop-index
   </smpl-nexthop-index>
  </smpl-subgroup-member-list>
 </smpl-nhgroup-subgroup>
</smpl-nhgroup>
```

Description

<smpl-subgroup-member-list>

Usage

```
<smpl-next-hop-group>
 <smpl-nhgroup>
  <smpl-nhgroup-subgroup>
   <smpl-subgroup-member-list>
    <smpl-nhgroup-member-interface>
     smpl-nhgroup-member-interface
    </smpl-nhgroup-member-interface>
    <smpl-nhgroup-nexthop-address>
     smpl-nhgroup-nexthop-address
    </smpl-nhgroup-nexthop-address>
    <smpl-nhgroup-nexthop-state>
     smpl-nhgroup-nexthop-state
    </smpl-nhgroup-nexthop-state>
    <smpl-nexthop-index>
     smpl-nexthop-index
```

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```
        </smpl-nexthop-index>
       </smpl-subgroup-member-list>
      </smpl-nhgroup-subgroup>
     </smpl-nhgroup>
</smpl-next-hop-group>
```

Description

Summary of SNMP Response Tags

<health-monitor-information>

Usage

```
<health-monitor-information>
  <rmon-alarm-information>....</rmon-alarm-information>
  <rmon-log-information>....</rmon-log-information>
  <rmon-history-information>....</rmon-history-information>
</health-monitor-information>
```

Description

<history-sample>

Usage

```
<rmon-history-information>
  <history-sample>
    <history-sample-index>
      history-sample-index
    </history-sample-index>
    <history-sample-start-time>
      history-sample-start-time
    </history-sample-start-time>
    <history-sample-drop-events>
      history-sample-drop-events
    </history-sample-drop-events>
    <history-sample-octect>
      history-sample-octect
    </history-sample-octect>
    <history-sample-packets>
      history-sample-packets
    </history-sample-packets>
    <history-sample-broadcast-packets>
      history-sample-broadcast-packets
    </history-sample-broadcast-packets>
    <history-sample-multicast-packets>
      history-sample-multicast-packets
    </history-sample-multicast-packets>
    <history-sample-crc-errors>
      history-sample-crc-errors
    </history-sample-crc-errors>
    <history-sample-undersize-packets>
      history-sample-undersize-packets
    </history-sample-undersize-packets>
    <history-sample-oversize-packets>
```


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```
      history-sample-oversize-packets
    </history-sample-oversize-packets>
    <history-sample-fragments>
      history-sample-fragments
    </history-sample-fragments>
    <history-sample-jabbers>
      history-sample-jabbers
    </history-sample-jabbers>
    <history-sample-collisions>
      history-sample-collisions
    </history-sample-collisions>
    <history-sample-utilization>
      history-sample-utilization
    </history-sample-utilization>
  </history-sample>
</rmon-history-information>
```

Description

<history-sample>

Usage

```
<rmon-information>
  <rmon-history-information>
    <history-sample>
      <history-sample-index>
        history-sample-index
      </history-sample-index>
      <history-sample-start-time>
        history-sample-start-time
      </history-sample-start-time>
      <history-sample-drop-events>
        history-sample-drop-events
      </history-sample-drop-events>
      <history-sample-octect>
        history-sample-octect
      </history-sample-octect>
      <history-sample-packets>
        history-sample-packets
      </history-sample-packets>
      <history-sample-broadcast-packets>
        history-sample-broadcast-packets
      </history-sample-broadcast-packets>
      <history-sample-multicast-packets>
        history-sample-multicast-packets
      </history-sample-multicast-packets>
      <history-sample-crc-errors>
        history-sample-crc-errors
      </history-sample-crc-errors>
      <history-sample-undersize-packets>
        history-sample-undersize-packets
      </history-sample-undersize-packets>
      <history-sample-oversize-packets>
        history-sample-oversize-packets
      </history-sample-oversize-packets>
```

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```
      <history-sample-fragments>
        history-sample-fragments
      </history-sample-fragments>
      <history-sample-jabbers>
        history-sample-jabbers
      </history-sample-jabbers>
      <history-sample-collisions>
        history-sample-collisions
      </history-sample-collisions>
      <history-sample-utilization>
        history-sample-utilization
      </history-sample-utilization>
    </history-sample>
  </rmon-history-information>
</rmon-information>
```

Description

<history-sample>

Usage

```
<health-monitor-information>
  <rmon-history-information>
    <history-sample>
      <history-sample-index>
        history-sample-index
      </history-sample-index>
      <history-sample-start-time>
        history-sample-start-time
      </history-sample-start-time>
      <history-sample-drop-events>
        history-sample-drop-events
      </history-sample-drop-events>
      <history-sample-octect>
        history-sample-octect
      </history-sample-octect>
      <history-sample-packets>
        history-sample-packets
      </history-sample-packets>
      <history-sample-broadcast-packets>
        history-sample-broadcast-packets
      </history-sample-broadcast-packets>
      <history-sample-multicast-packets>
        history-sample-multicast-packets
      </history-sample-multicast-packets>
      <history-sample-crc-errors>
        history-sample-crc-errors
      </history-sample-crc-errors>
      <history-sample-undersize-packets>
        history-sample-undersize-packets
      </history-sample-undersize-packets>
      <history-sample-oversize-packets>
        history-sample-oversize-packets
      </history-sample-oversize-packets>
      <history-sample-fragments>
```


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```
            history-sample-fragments
           </history-sample-fragments>
           <history-sample-jabbers>
            history-sample-jabbers
           </history-sample-jabbers>
           <history-sample-collisions>
            history-sample-collisions
           </history-sample-collisions>
           <history-sample-utilization>
            history-sample-utilization
           </history-sample-utilization>
          </history-sample>
         </rmon-history-information>
        </health-monitor-information>
```

Description

<index>

Usage

```
<snmp-object-information>
 <snmp-object>
  <index>
   <index-name>
    index-name
   </index-name>
   <index-value>
    index-value
   </index-value>
  </index>
 </snmp-object>
</snmp-object-information>
```

Description

<rmon-alarm>

Usage

```
<rmon-alarm-information>
 <rmon-alarm>
  <alarm-index>
   alarm-index
  </alarm-index>
  <var-name>
   var-name
  </var-name>
  <var-oid>
   var-oid
  </var-oid>
  <sample-type>
   sample-type
  </sample-type>
  <alarm-value>
   alarm-value
```

```
    </alarm-value>
    <startup>
      startup
    </startup>
    <alarm-interval>
      alarm-interval
    </alarm-interval>
    <rising-threshold>
      rising-threshold
    </rising-threshold>
    <falling-threshold>
      falling-threshold
    </falling-threshold>
    <rising-event-index>
      rising-event-index
    </rising-event-index>
    <falling-event-index>
      falling-event-index
    </falling-event-index>
    <alarm-owner>
      alarm-owner
    </alarm-owner>
    <alarm-subtag>
      alarm-subtag
    </alarm-subtag>
    <alarm-creator>
      alarm-creator
    </alarm-creator>
    <alarm-state>
      alarm-state
    </alarm-state>
    <rmon-alarm-instance-information>....</rmon-alarm-instance-information>
  </rmon-alarm>
</rmon-alarm-information>
```

Description

<rmon-alarm>

Usage

```
<rmon-information>
  <rmon-alarm-information>
    <rmon-alarm>
      <alarm-index>
        alarm-index
      </alarm-index>
      <var-name>
        var-name
      </var-name>
      <var-oid>
        var-oid
      </var-oid>
      <sample-type>
        sample-type
      </sample-type>
```


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```
        <alarm-value>
          alarm-value
        </alarm-value>
        <startup>
          startup
        </startup>
        <alarm-interval>
          alarm-interval
        </alarm-interval>
        <rising-threshold>
          rising-threshold
        </rising-threshold>
        <falling-threshold>
          falling-threshold
        </falling-threshold>
        <rising-event-index>
          rising-event-index
        </rising-event-index>
        <falling-event-index>
          falling-event-index
        </falling-event-index>
        <alarm-owner>
          alarm-owner
        </alarm-owner>
        <alarm-subtag>
          alarm-subtag
        </alarm-subtag>
        <alarm-creator>
          alarm-creator
        </alarm-creator>
        <alarm-state>
          alarm-state
        </alarm-state>
        <rmon-alarm-instance-information>....</rmon-alarm-instance-information>
      </rmon-alarm>
    </rmon-alarm-information>
  </rmon-information>
```

Description

<rmon-alarm>

Usage

```
<health-monitor-information>
  <rmon-alarm-information>
    <rmon-alarm>
      <alarm-index>
        alarm-index
      </alarm-index>
      <var-name>
        var-name
      </var-name>
      <var-oid>
        var-oid
      </var-oid>
```

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```
<sample-type>
  sample-type
</sample-type>
<alarm-value>
  alarm-value
</alarm-value>
<startup>
  startup
</startup>
<alarm-interval>
  alarm-interval
</alarm-interval>
<rising-threshold>
  rising-threshold
</rising-threshold>
<falling-threshold>
  falling-threshold
</falling-threshold>
<rising-event-index>
  rising-event-index
</rising-event-index>
<falling-event-index>
  falling-event-index
</falling-event-index>
<alarm-owner>
  alarm-owner
</alarm-owner>
<alarm-subtag>
  alarm-subtag
</alarm-subtag>
<alarm-creator>
  alarm-creator
</alarm-creator>
<alarm-state>
  alarm-state
</alarm-state>
<rmon-alarm-instance-information>....</rmon-alarm-instance-information>
</rmon-alarm>
</rmon-alarm-information>
</health-monitor-information>
```

Description

<rmon-alarm-information>

Usage

```
<rmon-alarm-information>
  <rmon-alarm>....</rmon-alarm>
</rmon-alarm-information>
```

Description

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<rmon-alarm-information>

Usage

```
<rmon-information>
  <rmon-alarm-information>
    <rmon-alarm>....</rmon-alarm>
  </rmon-alarm-information>
</rmon-information>
```

Description

<rmon-alarm-information>

Usage

```
<health-monitor-information>
  <rmon-alarm-information>
    <rmon-alarm>....</rmon-alarm>
  </rmon-alarm-information>
</health-monitor-information>
```

Description

<rmon-alarm-instance>

Usage

```
<rmon-alarm-information>
  <rmon-alarm>
    <rmon-alarm-instance-information>
      <rmon-alarm-instance>
        <inst-var-name>
          inst-var-name
        </inst-var-name>
        <inst-description>
          inst-description
        </inst-description>
        <inst-value>
          inst-value
        </inst-value>
        <inst-state>
          inst-state
        </inst-state>
      </rmon-alarm-instance>
    </rmon-alarm-instance-information>
  </rmon-alarm>
</rmon-alarm-information>
```

Description Information about an alarm instance

<rmon-alarm-instance>

Usage

```
<rmon-information>
```

```
<rmon-alarm-information>
 <rmon-alarm>
  <rmon-alarm-instance-information>
   <rmon-alarm-instance>
    <inst-var-name>
     inst-var-name
    </inst-var-name>
    <inst-description>
     inst-description
    </inst-description>
    <inst-value>
     inst-value
    </inst-value>
    <inst-state>
     inst-state
    </inst-state>
   </rmon-alarm-instance>
  </rmon-alarm-instance-information>
 </rmon-alarm>
</rmon-alarm-information>
</rmon-information>
```

Description Information about an alarm instance

<rmon-alarm-instance>

Usage

```
<health-monitor-information>
 <rmon-alarm-information>
  <rmon-alarm>
   <rmon-alarm-instance-information>
    <rmon-alarm-instance>
     <inst-var-name>
      inst-var-name
     </inst-var-name>
     <inst-description>
      inst-description
     </inst-description>
     <inst-value>
      inst-value
     </inst-value>
     <inst-state>
      inst-state
     </inst-state>
    </rmon-alarm-instance>
   </rmon-alarm-instance-information>
  </rmon-alarm>
 </rmon-alarm-information>
</health-monitor-information>
```

Description Information about an alarm instance

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<rmon-alarm-instance-information>

Usage

```
<rmon-alarm-information>
  <rmon-alarm>
    <rmon-alarm-instance-information>
      <rmon-alarm-instance>....</rmon-alarm-instance>
    </rmon-alarm-instance-information>
  </rmon-alarm>
</rmon-alarm-information>
```

Description Information about one or more alarm instances

<rmon-alarm-instance-information>

Usage

```
<rmon-information>
  <rmon-alarm-information>
    <rmon-alarm>
      <rmon-alarm-instance-information>
        <rmon-alarm-instance>....</rmon-alarm-instance>
      </rmon-alarm-instance-information>
    </rmon-alarm>
  </rmon-alarm-information>
</rmon-information>
```

Description Information about one or more alarm instances

<rmon-alarm-instance-information>

Usage

```
<health-monitor-information>
  <rmon-alarm-information>
    <rmon-alarm>
      <rmon-alarm-instance-information>
        <rmon-alarm-instance>....</rmon-alarm-instance>
      </rmon-alarm-instance-information>
    </rmon-alarm>
  </rmon-alarm-information>
</health-monitor-information>
```

Description Information about one or more alarm instances

<rmon-event>

Usage

```
<rmon-event-information>
  <rmon-event>
    <event-index>
      event-index
```

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```
    </event-index>
    <event-descr>
      event-descr
    </event-descr>
    <event-type>
      event-type
    </event-type>
    <community>
      community
    </community>
    <last-time-sent>
      last-time-sent
    </last-time-sent>
    <event-owner>
      event-owner
    </event-owner>
    <event-creator>
      event-creator
    </event-creator>
    <event-state>
      event-state
    </event-state>
  </rmon-event>
</rmon-event-information>
```

Description

<rmon-event>

Usage

```
<rmon-information>
  <rmon-event-information>
    <rmon-event>
      <event-index>
        event-index
      </event-index>
      <event-descr>
        event-descr
      </event-descr>
      <event-type>
        event-type
      </event-type>
      <community>
        community
      </community>
      <last-time-sent>
        last-time-sent
      </last-time-sent>
      <event-owner>
        event-owner
      </event-owner>
      <event-creator>
        event-creator
      </event-creator>
      <event-state>
```


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```
            event-state
           </event-state>
          </rmon-event>
         </rmon-event-information>
        </rmon-information>
```

Description

<rmon-event-information>

Usage

```
<rmon-event-information>
 <rmon-event>....</rmon-event>
</rmon-event-information>
```

Description

<rmon-event-information>

Usage

```
<rmon-information>
 <rmon-event-information>
  <rmon-event>....</rmon-event>
 </rmon-event-information>
</rmon-information>
```

Description

<rmon-history>

Usage

```
<rmon-history-information>
 <rmon-history>
  <history-index>
   history-index
  </history-index>
  <history-interface>
   history-interface
  </history-interface>
  <history-requested-buckets>
   history-requested-buckets
  </history-requested-buckets>
  <history-interval>
   history-interval
  </history-interval>
  <history-owner>
   history-owner
  </history-owner>
  <history-status>
   history-status
  </history-status>
 </rmon-history>
```

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```
</rmon-history-information>
```

Description

<rmon-history>

Usage

```
<rmon-information>
 <rmon-history-information>
  <rmon-history>
   <history-index>
    history-index
   </history-index>
   <history-interface>
    history-interface
   </history-interface>
   <history-requested-buckets>
    history-requested-buckets
   </history-requested-buckets>
   <history-interval>
    history-interval
   </history-interval>
   <history-owner>
    history-owner
   </history-owner>
   <history-status>
    history-status
   </history-status>
  </rmon-history>
 </rmon-history-information>
</rmon-information>
```

Description

<rmon-history>

Usage

```
<health-monitor-information>
 <rmon-history-information>
  <rmon-history>
   <history-index>
    history-index
   </history-index>
   <history-interface>
    history-interface
   </history-interface>
   <history-requested-buckets>
    history-requested-buckets
   </history-requested-buckets>
   <history-interval>
    history-interval
   </history-interval>
   <history-owner>
    history-owner
```


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```
    </history-owner>
    <history-status>
      history-status
    </history-status>
  </rmon-history>
 </rmon-history-information>
</health-monitor-information>
```

Description

<rmon-history-information>

Usage

```
<rmon-history-information>
 <rmon-history>....</rmon-history>
 <history-sample>....</history-sample>
</rmon-history-information>
```

Description

<rmon-history-information>

Usage

```
<rmon-information>
 <rmon-history-information>
  <rmon-history>....</rmon-history>
  <history-sample>....</history-sample>
 </rmon-history-information>
</rmon-information>
```

Description

<rmon-history-information>

Usage

```
<health-monitor-information>
 <rmon-history-information>
  <rmon-history>....</rmon-history>
  <history-sample>....</history-sample>
 </rmon-history-information>
</health-monitor-information>
```

Description

<rmon-information>

Usage

```
<rmon-information>
 <rmon-alarm-information>....</rmon-alarm-information>
 <rmon-event-information>....</rmon-event-information>
 <rmon-history-information>....</rmon-history-information>
```

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```
</rmon-information>
```

Description

<rmon-log>

Usage

```
<rmon-log-information>
 <rmon-log>
  <rmon-log-event-index>
   rmon-log-event-index
  </rmon-log-event-index>
  <rmon-log-index>
   rmon-log-index
  </rmon-log-index>
  <rmon-log-descr>
   rmon-log-descr
  </rmon-log-descr>
  <rmon-log-time>
   rmon-log-time
  </rmon-log-time>
 </rmon-log>
</rmon-log-information>
```

Description

<rmon-log>

Usage

```
<health-monitor-information>
 <rmon-log-information>
  <rmon-log>
   <rmon-log-event-index>
    rmon-log-event-index
   </rmon-log-event-index>
   <rmon-log-index>
    rmon-log-index
   </rmon-log-index>
   <rmon-log-descr>
    rmon-log-descr
   </rmon-log-descr>
   <rmon-log-time>
    rmon-log-time
   </rmon-log-time>
  </rmon-log>
 </rmon-log-information>
</health-monitor-information>
```

Description

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<rmon-log-information>

Usage

```
<rmon-log-information>
  <rmon-log>....</rmon-log>
</rmon-log-information>
```

Description

<rmon-log-information>

Usage

```
<health-monitor-information>
  <rmon-log-information>
    <rmon-log>....</rmon-log>
  </rmon-log-information>
</health-monitor-information>
```

Description

<snmp-generate-trap-results>

Usage

```
<snmp-generate-trap-results>
  <snmp-generate-trap-result>
    snmp-generate-trap-result
  </snmp-generate-trap-result>
</snmp-generate-trap-results>
```

Description

<snmp-input-statistics>

Usage

```
<snmp-statistics>
  <snmp-input-statistics>
    <packets>
      packets
    </packets>
    <bad-versions>
      bad-versions
    </bad-versions>
    <bad-community-names>
      bad-community-names
    </bad-community-names>
    <bad-community-uses>
      bad-community-uses
    </bad-community-uses>
    <asn-parse-errors>
      asn-parse-errors
    </asn-parse-errors>
    <too-bigs>
```

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```
      too-bigs
    </too-bigs>
    <no-such-names>
      no-such-names
    </no-such-names>
    <bad-values>
      bad-values
    </bad-values>
    <read-onlys>
      read-onlys
    </read-onlys>
    <general-errors>
      general-errors
    </general-errors>
    <total-request-varbinds>
      total-request-varbinds
    </total-request-varbinds>
    <total-set-varbinds>
      total-set-varbinds
    </total-set-varbinds>
    <get-requests>
      get-requests
    </get-requests>
    <get-nexts>
      get-nexts
    </get-nexts>
    <set-requests>
      set-requests
    </set-requests>
    <get-responses>
      get-responses
    </get-responses>
    <traps>
      traps
    </traps>
    <silent-drops>
      silent-drops
    </silent-drops>
    <proxy-drops>
      proxy-drops
    </proxy-drops>
    <throttle-drops>
      throttle-drops
    </throttle-drops>
    <commit-pending-drops>
      commit-pending-drops
    </commit-pending-drops>
    <duplicate-request-drops>
      duplicate-request-drops
    </duplicate-request-drops>
  </snmp-input-statistics>
</snmp-statistics>
```

Description

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<snmp-object>

Usage

```
<snmp-object-information>
  <snmp-object>
    <name>
      name
    </name>
    <index>....</index>
    <oid>
      oid
    </oid>
    <object-value>
      object-value
    </object-value>
    <object-value-type>
      object-value-type
    </object-value-type>
    <error>
      error
    </error>
  </snmp-object>
</snmp-object-information>
```

Description

<snmp-object-information>

Usage

```
<snmp-object-information>
  <snmp-object>....</snmp-object>
  <snmp-request-error>....</snmp-request-error>
</snmp-object-information>
```

Description

<snmp-output-statistics>

Usage

```
<snmp-statistics>
  <snmp-output-statistics>
    <packets>
      packets
    </packets>
    <too-bigs>
      too-bigs
    </too-bigs>
    <no-such-names>
      no-such-names
    </no-such-names>
    <bad-values>
      bad-values
    </bad-values>
```

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```
    <general-errors>
      general-errors
    </general-errors>
    <get-requests>
      get-requests
    </get-requests>
    <get-nexts>
      get-nexts
    </get-nexts>
    <set-requests>
      set-requests
    </set-requests>
    <get-responses>
      get-responses
    </get-responses>
    <traps>
      traps
    </traps>
  </snmp-output-statistics>
</snmp-statistics>
```

Description

<snmp-request-error>

Usage

```
<snmp-object-information>
  <snmp-request-error>
    <snmp-req-error-value>
      snmp-req-error-value
    </snmp-req-error-value>
  </snmp-request-error>
</snmp-object-information>
```

Description

<snmp-set-stats>

Usage

```
<snmp-statistics>
  <snmp-set-stats>
    <nvs-commit-pending>
      nvs-commit-pending
    </nvs-commit-pending>
    <nvs-conflock-failures>
      nvs-conflock-failures
    </nvs-conflock-failures>
    <nvs-rpc-mgd-failures>
      nvs-rpc-mgd-failures
    </nvs-rpc-mgd-failures>
    <nvs-journal-write-failures>
      nvs-journal-write-failures
    </nvs-journal-write-failures>
    <nvs-mgd-connect-failures>
```


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```
    nvs-mgd-connect-failures
   </nvs-mgd-connect-failures>
   <nvs-commit-failures>
    nvs-commit-failures
   </nvs-commit-failures>
  </snmp-set-stats>
</snmp-statistics>
```

Description

<snmp-spoof-trap-results>

Usage

```
<snmp-spoof-trap-results>
  <snmp-spoof-trap-result>
   snmp-spoof-trap-result
  </snmp-spoof-trap-result>
  <snmp-spoofable-traps>
   snmp-spoofable-traps
  </snmp-spoofable-traps>
</snmp-spoof-trap-results>
```

Description

<snmp-statistics>

Usage

```
<snmp-statistics>
  <snmp-input-statistics>....</snmp-input-statistics>
  <snmp-v3-input-statistics>....</snmp-v3-input-statistics>
  <snmp-output-statistics>....</snmp-output-statistics>
  <sub-agent-control-blocks>....</sub-agent-control-blocks>
  <sub-agent-registration>....</sub-agent-registration>
  <trap-queue-stats>....</trap-queue-stats>
  <trap-throttle-stats>....</trap-throttle-stats>
  <snmp-set-stats>....</snmp-set-stats>
</snmp-statistics>
```

Description

<snmp-v3-access>

Usage

```
<snmp-v3-access-information>
  <snmp-v3-access>
   <group-name>
    group-name
   </group-name>
   <context-prefix>
    context-prefix
   </context-prefix>
   <security-model>
    security-model
```

```
    </security-model>
    <security-level>
      security-level
    </security-level>
    <context-match>
      context-match
    </context-match>
    <read-view>
      read-view
    </read-view>
    <write-view>
      write-view
    </write-view>
    <notify-view>
      notify-view
    </notify-view>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-access>
</snmp-v3-access-information>
```

Description

<snmp-v3-access>

Usage

```
<snmp-v3-information>
  <snmp-v3-access-information>
    <snmp-v3-access>
      <group-name>
        group-name
      </group-name>
      <context-prefix>
        context-prefix
      </context-prefix>
      <security-model>
        security-model
      </security-model>
      <security-level>
        security-level
      </security-level>
      <context-match>
        context-match
      </context-match>
      <read-view>
        read-view
      </read-view>
      <write-view>
        write-view
      </write-view>
      <notify-view>
```


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```
      notify-view
     </notify-view>
     <storage-type>
      storage-type
     </storage-type>
     <row-status>
      row-status
     </row-status>
    </snmp-v3-access>
   </snmp-v3-access-information>
</snmp-v3-information>
```

Description

<snmp-v3-access-information>

Usage

```
<snmp-v3-access-information>
 <snmp-v3-access>....</snmp-v3-access>
</snmp-v3-access-information>
```

Description

<snmp-v3-access-information>

Usage

```
<snmp-v3-information>
 <snmp-v3-access-information>
  <snmp-v3-access>....</snmp-v3-access>
 </snmp-v3-access-information>
</snmp-v3-information>
```

Description

<snmp-v3-community>

Usage

```
<snmp-v3-community-information>
 <snmp-v3-community>
  <community-index>
   community-index
  </community-index>
  <security-name>
   security-name
  </security-name>
  <context-name>
   context-name
  </context-name>
  <transport-tag>
   transport-tag
  </transport-tag>
  <storage-type>
   storage-type
```

```
    </storage-type>
    <row-status>
     row-status
    </row-status>
   </snmp-v3-community>
  </snmp-v3-community-information>
```

Description SNMPv3 community

<snmp-v3-community>

Usage

```
<snmp-v3-information>
 <snmp-v3-community-information>
  <snmp-v3-community>
   <community-index>
    community-index
   </community-index>
   <security-name>
    security-name
   </security-name>
   <context-name>
    context-name
   </context-name>
   <transport-tag>
    transport-tag
   </transport-tag>
   <storage-type>
    storage-type
   </storage-type>
   <row-status>
    row-status
   </row-status>
  </snmp-v3-community>
 </snmp-v3-community-information>
</snmp-v3-information>
```

Description SNMPv3 community

<snmp-v3-community-information>

Usage

```
<snmp-v3-community-information>
 <snmp-v3-community>....</snmp-v3-community>
</snmp-v3-community-information>
```

Description SNMPv3 community information

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<snmp-v3-community-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-community-information>
    <snmp-v3-community>....</snmp-v3-community>
  </snmp-v3-community-information>
</snmp-v3-information>
```

Description SNMPv3 community information

<snmp-v3-engine-information>

Usage

```
<snmp-v3-general-information>
  <snmp-v3-engine-information>
    <engine-id>
      engine-id
    </engine-id>
    <engine-boots>
      engine-boots
    </engine-boots>
    <engine-time>
      engine-time
    </engine-time>
    <max-msg-size>
      max-msg-size
    </max-msg-size>
  </snmp-v3-engine-information>
</snmp-v3-general-information>
```

Description

<snmp-v3-engine-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-general-information>
    <snmp-v3-engine-information>
      <engine-id>
        engine-id
      </engine-id>
      <engine-boots>
        engine-boots
      </engine-boots>
      <engine-time>
        engine-time
      </engine-time>
      <max-msg-size>
        max-msg-size
      </max-msg-size>
    </snmp-v3-engine-information>
  </snmp-v3-general-information>
```

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```
</snmp-v3-information>
```

Description

<snmp-v3-general-information>

Usage

```
<snmp-v3-general-information>
  <snmp-v3-engine-information>....</snmp-v3-engine-information>
</snmp-v3-general-information>
```

Description

<snmp-v3-general-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-general-information>
    <snmp-v3-engine-information>....</snmp-v3-engine-information>
  </snmp-v3-general-information>
</snmp-v3-information>
```

Description

<snmp-v3-group>

Usage

```
<snmp-v3-group-information>
  <snmp-v3-group>
    <group-name>
      group-name
    </group-name>
    <security-model>
      security-model
    </security-model>
    <security-name>
      security-name
    </security-name>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-group>
</snmp-v3-group-information>
```

Description

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<snmp-v3-group>

Usage

```
<snmp-v3-information>
  <snmp-v3-group-information>
    <snmp-v3-group>
      <group-name>
        group-name
      </group-name>
      <security-model>
        security-model
      </security-model>
      <security-name>
        security-name
      </security-name>
      <storage-type>
        storage-type
      </storage-type>
      <row-status>
        row-status
      </row-status>
    </snmp-v3-group>
  </snmp-v3-group-information>
</snmp-v3-information>
```

Description

<snmp-v3-group-information>

Usage

```
<snmp-v3-group-information>
  <snmp-v3-group>....</snmp-v3-group>
</snmp-v3-group-information>
```

Description

<snmp-v3-group-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-group-information>
    <snmp-v3-group>....</snmp-v3-group>
  </snmp-v3-group-information>
</snmp-v3-information>
```

Description

<snmp-v3-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-general-information>....</snmp-v3-general-information>
```

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```
  <snmp-v3-usm-user-information>....</snmp-v3-usm-user-information>
  <snmp-v3-group-information>....</snmp-v3-group-information>
  <snmp-v3-access-information>....</snmp-v3-access-information>
  <snmp-v3-target-information>....</snmp-v3-target-information>
  <snmp-v3-notify-information>....</snmp-v3-notify-information>
  <snmp-v3-notify-filter-information>....</snmp-v3-notify-filter-information>
  <snmp-v3-community-information>....</snmp-v3-community-information>
</snmp-v3-information>
```

Description

<snmp-v3-input-statistics>

Usage

```
<snmp-statistics>
  <snmp-v3-input-statistics>
    <unknown-secmodels>
      unknown-secmodels
    </unknown-secmodels>
    <invalid-msgs>
      invalid-msgs
    </invalid-msgs>
    <unknown-pduhandlers>
      unknown-pduhandlers
    </unknown-pduhandlers>
    <unavail-contexts>
      unavail-contexts
    </unavail-contexts>
    <unknown-contexts>
      unknown-contexts
    </unknown-contexts>
    <unsupported-seclevels>
      unsupported-seclevels
    </unsupported-seclevels>
    <not-in-timewindows>
      not-in-timewindows
    </not-in-timewindows>
    <unknown-usernames>
      unknown-usernames
    </unknown-usernames>
    <unknown-eids>
      unknown-eids
    </unknown-eids>
    <wrong-digests>
      wrong-digests
    </wrong-digests>
    <decrypt-errors>
      decrypt-errors
    </decrypt-errors>
  </snmp-v3-input-statistics>
</snmp-statistics>
```

Description

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<snmp-v3-notify>

Usage

```
<snmp-v3-notify-information>
  <snmp-v3-notify>
    <notify-name>
      notify-name
    </notify-name>
    <notify-tag>
      notify-tag
    </notify-tag>
    <notify-type>
      notify-type
    </notify-type>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-notify>
</snmp-v3-notify-information>
```

Description SNMPv3 notify

<snmp-v3-notify>

Usage

```
<snmp-v3-information>
  <snmp-v3-notify-information>
    <snmp-v3-notify>
      <notify-name>
        notify-name
      </notify-name>
      <notify-tag>
        notify-tag
      </notify-tag>
      <notify-type>
        notify-type
      </notify-type>
      <storage-type>
        storage-type
      </storage-type>
      <row-status>
        row-status
      </row-status>
    </snmp-v3-notify>
  </snmp-v3-notify-information>
</snmp-v3-information>
```

Description SNMPv3 notify

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<snmp-v3-notify-filter>

Usage

```
<snmp-v3-notify-filter-information>
  <snmp-v3-notify-filter>
    <filter-name>
      filter-name
    </filter-name>
    <subtree>
      subtree
    </subtree>
    <filter-type>
      filter-type
    </filter-type>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-notify-filter>
</snmp-v3-notify-filter-information>
```

Description SNMPv3 notify filter

<snmp-v3-notify-filter>

Usage

```
<snmp-v3-information>
  <snmp-v3-notify-filter-information>
    <snmp-v3-notify-filter>
      <filter-name>
        filter-name
      </filter-name>
      <subtree>
        subtree
      </subtree>
      <filter-type>
        filter-type
      </filter-type>
      <storage-type>
        storage-type
      </storage-type>
      <row-status>
        row-status
      </row-status>
    </snmp-v3-notify-filter>
  </snmp-v3-notify-filter-information>
</snmp-v3-information>
```

Description SNMPv3 notify filter

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<snmp-v3-notify-filter-information>

Usage

```
<snmp-v3-notify-filter-information>
  <snmp-v3-notify-filter>....</snmp-v3-notify-filter>
</snmp-v3-notify-filter-information>
```

Description SNMPv3 notify filter information

<snmp-v3-notify-filter-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-notify-filter-information>
    <snmp-v3-notify-filter>....</snmp-v3-notify-filter>
  </snmp-v3-notify-filter-information>
</snmp-v3-information>
```

Description SNMPv3 notify filter information

<snmp-v3-notify-information>

Usage

```
<snmp-v3-notify-information>
  <snmp-v3-notify>....</snmp-v3-notify>
</snmp-v3-notify-information>
```

Description SNMPv3 notify information

<snmp-v3-notify-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-notify-information>
    <snmp-v3-notify>....</snmp-v3-notify>
  </snmp-v3-notify-information>
</snmp-v3-information>
```

Description SNMPv3 notify information

<snmp-v3-target-address-information>

Usage

```
<snmp-v3-target-address-information>
  <snmp-v3-target_address>....</snmp-v3-target_address>
</snmp-v3-target-address-information>
```

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Description SNMPv3 target address information

<snmp-v3-target-address-information>

Usage

```
<snmp-v3-target-information>
  <snmp-v3-target-address-information>
    <snmp-v3-target_address>....</snmp-v3-target_address>
  </snmp-v3-target-address-information>
</snmp-v3-target-information>
```

Description SNMPv3 target address information

<snmp-v3-target-address-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-target-information>
    <snmp-v3-target-address-information>
      <snmp-v3-target_address>....</snmp-v3-target_address>
    </snmp-v3-target-address-information>
  </snmp-v3-target-information>
</snmp-v3-information>
```

Description SNMPv3 target address information

<snmp-v3-target-information>

Usage

```
<snmp-v3-target-information>
<snmp-v3-target-address-information>....</snmp-v3-target-address-information>

<snmp-v3-target-parameters-information>....</snmp-v3-target-parameters-information>

</snmp-v3-target-information>
```

Description

<snmp-v3-target-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-target-information>
 <snmp-v3-target-address-information>....</snmp-v3-target-address-information>

<snmp-v3-target-parameters-information>....</snmp-v3-target-parameters-information>

  </snmp-v3-target-information>
```


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```
</snmp-v3-information>
```

Description

<snmp-v3-target-parameters-information>

Usage

```
<snmp-v3-target-parameters-information>
  <snmp-v3-target_parameters>....</snmp-v3-target_parameters>
</snmp-v3-target-parameters-information>
```

Description SNMPv3 target parameters information

<snmp-v3-target-parameters-information>

Usage

```
<snmp-v3-target-information>
  <snmp-v3-target-parameters-information>
    <snmp-v3-target_parameters>....</snmp-v3-target_parameters>
  </snmp-v3-target-parameters-information>
</snmp-v3-target-information>
```

Description SNMPv3 target parameters information

<snmp-v3-target-parameters-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-target-information>
    <snmp-v3-target-parameters-information>
      <snmp-v3-target_parameters>....</snmp-v3-target_parameters>
    </snmp-v3-target-parameters-information>
  </snmp-v3-target-information>
</snmp-v3-information>
```

Description SNMPv3 target parameters information

<snmp-v3-target_address>

Usage

```
<snmp-v3-target-address-information>
  <snmp-v3-target_address>
    <target-address-name>
      target-address-name
    </target-address-name>
    <address>
      address
    </address>
    <port>
      port
```

```
    </port>
    <target-parameters-name>
     target-parameters-name
    </target-parameters-name>
    <storage-type>
     storage-type
    </storage-type>
    <row-status>
     row-status
    </row-status>
   </snmp-v3-target_address>
  </snmp-v3-target-address-information>
</snmp-v3-target-information>
```

Description SNMPv3 target address

<snmp-v3-target_address>

Usage

```
<snmp-v3-target-information>
  <snmp-v3-target-address-information>
    <snmp-v3-target_address>
      <target-address-name>
       target-address-name
      </target-address-name>
      <address>
       address
      </address>
      <port>
       port
      </port>
      <target-parameters-name>
       target-parameters-name
      </target-parameters-name>
      <storage-type>
       storage-type
      </storage-type>
      <row-status>
       row-status
      </row-status>
    </snmp-v3-target_address>
  </snmp-v3-target-address-information>
</snmp-v3-target-information>
```

Description SNMPv3 target address

<snmp-v3-target_address>

Usage

```
<snmp-v3-information>
  <snmp-v3-target-information>
    <snmp-v3-target-address-information>
      <snmp-v3-target_address>
```


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```
        <target-address-name>
          target-address-name
        </target-address-name>
        <address>
          address
        </address>
        <port>
          port
        </port>
        <target-parameters-name>
          target-parameters-name
        </target-parameters-name>
        <storage-type>
          storage-type
        </storage-type>
        <row-status>
          row-status
        </row-status>
      </snmp-v3-target_address>
    </snmp-v3-target-address-information>
  </snmp-v3-target-information>
</snmp-v3-information>
```

Description SNMPv3 target address

<snmp-v3-target_parameters>

Usage

```
<snmp-v3-target-parameters-information>
  <snmp-v3-target_parameters>
    <target-parameters-name>
      target-parameters-name
    </target-parameters-name>
    <security-name>
      security-name
    </security-name>
    <security-model>
      security-model
    </security-model>
    <security-level>
      security-level
    </security-level>
    <notify-filter-name>
      notify-filter-name
    </notify-filter-name>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-target_parameters>
</snmp-v3-target-parameters-information>
```

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Description SNMPv3 target parameters

<snmp-v3-target_parameters>

Usage

```
<snmp-v3-target-information>
  <snmp-v3-target-parameters-information>
    <snmp-v3-target_parameters>
      <target-parameters-name>
        target-parameters-name
      </target-parameters-name>
      <security-name>
        security-name
      </security-name>
      <security-model>
        security-model
      </security-model>
      <security-level>
        security-level
      </security-level>
      <notify-filter-name>
        notify-filter-name
      </notify-filter-name>
      <storage-type>
        storage-type
      </storage-type>
      <row-status>
        row-status
      </row-status>
    </snmp-v3-target_parameters>
  </snmp-v3-target-parameters-information>
</snmp-v3-target-information>
```

Description SNMPv3 target parameters

<snmp-v3-target_parameters>

Usage

```
<snmp-v3-information>
  <snmp-v3-target-information>
    <snmp-v3-target-parameters-information>
      <snmp-v3-target_parameters>
        <target-parameters-name>
          target-parameters-name
        </target-parameters-name>
        <security-name>
          security-name
        </security-name>
        <security-model>
          security-model
        </security-model>
        <security-level>
          security-level
```


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```
        </security-level>
        <notify-filter-name>
          notify-filter-name
        </notify-filter-name>
        <storage-type>
          storage-type
        </storage-type>
        <row-status>
          row-status
        </row-status>
      </snmp-v3-target_parameters>
    </snmp-v3-target-parameters-information>
  </snmp-v3-target-information>
</snmp-v3-information>
```

Description SNMPv3 target parameters

<snmp-v3-usm-user>

Usage

```
<snmp-v3-usm-user-information>
  <snmp-v3-usm-user>
    <user-name>
      user-name
    </user-name>
    <auth-type>
      auth-type
    </auth-type>
    <priv-type>
      priv-type
    </priv-type>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-usm-user>
</snmp-v3-usm-user-information>
```

Description

<snmp-v3-usm-user>

Usage

```
<snmp-v3-information>
  <snmp-v3-usm-user-information>
    <snmp-v3-usm-user>
      <user-name>
        user-name
      </user-name>
      <auth-type>
        auth-type
```

```
    </auth-type>
    <priv-type>
      priv-type
    </priv-type>
    <storage-type>
      storage-type
    </storage-type>
    <row-status>
      row-status
    </row-status>
  </snmp-v3-usm-user>
 </snmp-v3-usm-user-information>
</snmp-v3-information>
```

Description

<snmp-v3-usm-user-engine-id>

Usage

```
<snmp-v3-usm-user-information>
 <snmp-v3-usm-user-engine-id>
  <user-engine-id>
   user-engine-id
  </user-engine-id>
 </snmp-v3-usm-user-engine-id>
</snmp-v3-usm-user-information>
```

Description

<snmp-v3-usm-user-engine-id>

Usage

```
<snmp-v3-information>
 <snmp-v3-usm-user-information>
  <snmp-v3-usm-user-engine-id>
   <user-engine-id>
    user-engine-id
   </user-engine-id>
  </snmp-v3-usm-user-engine-id>
 </snmp-v3-usm-user-information>
</snmp-v3-information>
```

Description

<snmp-v3-usm-user-information>

Usage

```
<snmp-v3-usm-user-information>
 <snmp-v3-usm-user-engine-id>....</snmp-v3-usm-user-engine-id>
 <snmp-v3-usm-user>....</snmp-v3-usm-user>
</snmp-v3-usm-user-information>
```


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Description

<snmp-v3-usm-user-information>

Usage

```
<snmp-v3-information>
  <snmp-v3-usm-user-information>
    <snmp-v3-usm-user-engine-id>....</snmp-v3-usm-user-engine-id>
    <snmp-v3-usm-user>....</snmp-v3-usm-user>
  </snmp-v3-usm-user-information>
</snmp-v3-information>
```

Description

<sub-agent-control-blocks>

Usage

```
<snmp-statistics>
  <sub-agent-control-blocks>
    <total>
      total
    </total>
    <currently-active>
      currently-active
    </currently-active>
    <max-active>
      max-active
    </max-active>
    <not-found>
      not-found
    </not-found>
    <timed-out>
      timed-out
    </timed-out>
    <max-latency>
      max-latency
    </max-latency>
  </sub-agent-control-blocks>
</snmp-statistics>
```

Description

<sub-agent-registration>

Usage

```
<snmp-statistics>
  <sub-agent-registration>
    <group-registers>
      group-registers
    </group-registers>
    <group-deregisters>
      group-deregisters
    </group-deregisters>
    <group-removes>
```

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```
      group-removes
    </group-removes>
  </sub-agent-registration>
</snmp-statistics>
```

Description

<trap-queue-stats>

Usage

```
<snmp-statistics>
  <trap-queue-stats>
    <current-queued>
      current-queued
    </current-queued>
    <total-queued>
      total-queued
    </total-queued>
    <total-discards>
      total-discards
    </total-discards>
    <total-overflows>
      total-overflows
    </total-overflows>
  </trap-queue-stats>
</snmp-statistics>
```

Description

<trap-throttle-stats>

Usage

```
<snmp-statistics>
  <trap-throttle-stats>
    <current-throttled>
      current-throttled
    </current-throttled>
    <total-throttles>
      total-throttles
    </total-throttles>
  </trap-throttle-stats>
</snmp-statistics>
```

Description

Summary of Static Subscribers Response Tags

<results>

Usage

```
<static-subscribers-information>
  <results>
    <success>
```


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```
      success
    </success>
    <failure>
      failure
    </failure>
  </results>
</static-subscribers-information>
```

Description Result for static subscriber operation

<static-subscribers-information>

Usage

```
<static-subscribers-information>
  <results>....</results>
  <subscriber-session>....</subscriber-session>
</static-subscribers-information>
```

Description Static subscribers information

<subscriber-session>

Usage

```
<static-subscribers-information>
  <subscriber-session>
    <username>
      username
    </username>
    <interface>
      interface
    </interface>
    <group>
      group
    </group>
    <state>
      state
    </state>
  </subscriber-session>
</static-subscribers-information>
```

Description

Summary of Statistics Response Tags

<arp>

Usage

```
<statistics>
  <arp>
    <datagrams-received>
      datagrams-received
```

```
</datagrams-received>
<arp-requests-received>
  arp-requests-received
</arp-requests-received>
<arp-replies-received>
  arp-replies-received
</arp-replies-received>
<resolution-request-received>
  resolution-request-received
</resolution-request-received>
<unrestricted-proxy-requests>
  unrestricted-proxy-requests
</unrestricted-proxy-requests>
<restricted-proxy-requests>
  restricted-proxy-requests
</restricted-proxy-requests>
<received-proxy-requests>
  received-proxy-requests
</received-proxy-requests>
<proxy-requests-not-proxied>
  proxy-requests-not-proxied
</proxy-requests-not-proxied>
<restricted-proxy-requests-not-proxied>
  restricted-proxy-requests-not-proxied
</restricted-proxy-requests-not-proxied>
<datagrams-with-bogus-interface>
  datagrams-with-bogus-interface
</datagrams-with-bogus-interface>
<datagrams-with-incorrect-length>
  datagrams-with-incorrect-length
</datagrams-with-incorrect-length>
<datagrams-for-non-ip-protocol>
  datagrams-for-non-ip-protocol
</datagrams-for-non-ip-protocol>
<datagrams-with-unsupported-opcode>
  datagrams-with-unsupported-opcode
</datagrams-with-unsupported-opcode>
<datagrams-with-bad-protocol-address-length>
  datagrams-with-bad-protocol-address-length
</datagrams-with-bad-protocol-address-length>
<datagrams-with-bad-hardware-address-length>
  datagrams-with-bad-hardware-address-length
</datagrams-with-bad-hardware-address-length>
<datagrams-with-multicast-source-address>
  datagrams-with-multicast-source-address
</datagrams-with-multicast-source-address>
<datagrams-with-multicast-target-address>
  datagrams-with-multicast-target-address
</datagrams-with-multicast-target-address>
<datagrams-with-my-own-hardware-address>
  datagrams-with-my-own-hardware-address
</datagrams-with-my-own-hardware-address>
<datagrams-for-an-address-not-on-the-interface>
  datagrams-for-an-address-not-on-the-interface
</datagrams-for-an-address-not-on-the-interface>
<datagrams-with-a-broadcast-source-address>
```


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```
      datagrams-with-a-broadcast-source-address
    </datagrams-with-a-broadcast-source-address>
    <datagrams-with-source-address-duplicate-to-mine>
      datagrams-with-source-address-duplicate-to-mine
    </datagrams-with-source-address-duplicate-to-mine>
    <datagrams-which-were-not-for-me>
      datagrams-which-were-not-for-me
    </datagrams-which-were-not-for-me>
    <packets-discarded-waiting-for-resolution>
      packets-discarded-waiting-for-resolution
    </packets-discarded-waiting-for-resolution>
    <packets-sent-after-waiting-for-resolution>
      packets-sent-after-waiting-for-resolution
    </packets-sent-after-waiting-for-resolution>
    <arp-requests-sent>
      arp-requests-sent
    </arp-requests-sent>
    <arp-replies-sent>
      arp-replies-sent
    </arp-replies-sent>
    <requests-for-memory-denied>
      requests-for-memory-denied
    </requests-for-memory-denied>
    <requests-dropped-on-entry>
      requests-dropped-on-entry
    </requests-dropped-on-entry>
    <requests-dropped-during-retry>
      requests-dropped-during-retry
    </requests-dropped-during-retry>
    <requests-dropped-due-to-interface-deletion>
      requests-dropped-due-to-interface-deletion
    </requests-dropped-due-to-interface-deletion>
    <requests-on-unnumbered-interfaces>
      requests-on-unnumbered-interfaces
    </requests-on-unnumbered-interfaces>
    <new-requests-on-unnumbered-interfaces>
      new-requests-on-unnumbered-interfaces
    </new-requests-on-unnumbered-interfaces>
    <replies-from-unnumbered-interfaces>
      replies-from-unnumbered-interfaces
    </replies-from-unnumbered-interfaces>
    <requests-on-unnumbered-interface-with-non-subnetted-donor>
      requests-on-unnumbered-interface-with-non-subnetted-donor
    </requests-on-unnumbered-interface-with-non-subnetted-donor>
    <replies-from-unnumbered-interface-with-non-subnetted-donor>
      replies-from-unnumbered-interface-with-non-subnetted-donor
    </replies-from-unnumbered-interface-with-non-subnetted-donor>
  </arp>
</statistics>
```

Description

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<bridge>

Usage

```
<statistics>
 <bridge>
  <heading>
   heading
  </heading>
  <bridge-packets-received>
   bridge-packets-received
  </bridge-packets-received>
  <bridge-packets-forwarded>
   bridge-packets-forwarded
  </bridge-packets-forwarded>
  <packets-failed-to-forward>
   packets-failed-to-forward
  </packets-failed-to-forward>
  <bridge-packets-dropped>
   bridge-packets-dropped
  </bridge-packets-dropped>
  <packets-with-vmember-lookup-failures>
   packets-with-vmember-lookup-failures
  </packets-with-vmember-lookup-failures>
  <packets-with-vlan-lookup-failures>
   packets-with-vlan-lookup-failures
  </packets-with-vlan-lookup-failures>
  <packets-with-stp-state-lookup-failures>
   packets-with-stp-state-lookup-failures
  </packets-with-stp-state-lookup-failures>
  <packets-dropped-due-to-stp-blocked-or-listening>
   packets-dropped-due-to-stp-blocked-or-listening
  </packets-dropped-due-to-stp-blocked-or-listening>
  <packets-dropped-due-to-stp-learning>
   packets-dropped-due-to-stp-learning
  </packets-dropped-due-to-stp-learning>
  <packets-with-src-mac-learning-failures>
   packets-with-src-mac-learning-failures
  </packets-with-src-mac-learning-failures>
  <packets-with-input-control-processing-failures>
   packets-with-input-control-processing-failures
  </packets-with-input-control-processing-failures>
  <packets-sent-successfully>
   packets-sent-successfully
  </packets-sent-successfully>
  <packets-with-send-failures>
   packets-with-send-failures
  </packets-with-send-failures>
  <packets-forwarded-to-l3-interface>
   packets-forwarded-to-l3-interface
  </packets-forwarded-to-l3-interface>
  <packets-with-l3-send-failures>
   packets-with-l3-send-failures
  </packets-with-l3-send-failures>
  <packets-discarded>
   packets-discarded
```


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```
</packets-discarded>
<packets-with-l2-ifl-store-failures>
  packets-with-l2-ifl-store-failures
</packets-with-l2-ifl-store-failures>
<packets-with-ifl-mismatch-failures>
  packets-with-ifl-mismatch-failures
</packets-with-ifl-mismatch-failures>
<packets-with-packet-duplication-failures>
  packets-with-packet-duplication-failures
</packets-with-packet-duplication-failures>
<packets-with-tag-lookup-failures>
  packets-with-tag-lookup-failures
</packets-with-tag-lookup-failures>
<packets-with-no-route-for-dmac>
  packets-with-no-route-for-dmac
</packets-with-no-route-for-dmac>
<packets-with-no-route-table>
  packets-with-no-route-table
</packets-with-no-route-table>
<packets-with-no-nexthop>
  packets-with-no-nexthop
</packets-with-no-nexthop>
<packets-with-dead-nexthop>
  packets-with-dead-nexthop
</packets-with-dead-nexthop>
<packets-with-eof-reached-error>
  packets-with-eof-reached-error
</packets-with-eof-reached-error>
<macs-learned>
  macs-learned
</macs-learned>
<packets-sent-to-l3-interface>
  packets-sent-to-l3-interface
</packets-sent-to-l3-interface>
<packets-hit-hold-queue-while-learning>
  packets-hit-hold-queue-while-learning
</packets-hit-hold-queue-while-learning>
<mac-moves>
  mac-moves
</mac-moves>
<packets-with-no-route-for-smac>
  packets-with-no-route-for-smac
</packets-with-no-route-for-smac>
<packets-dropped-due-to-no-resolve-route>
  packets-dropped-due-to-no-resolve-route
</packets-dropped-due-to-no-resolve-route>
<packets-with-l3-ifd-lookup-failures>
  packets-with-l3-ifd-lookup-failures
</packets-with-l3-ifd-lookup-failures>
<packets-with-l3-ifl-lookup-failures>
  packets-with-l3-ifl-lookup-failures
</packets-with-l3-ifl-lookup-failures>
<packets-with-l3-invalid-rnh>
  packets-with-l3-invalid-rnh
</packets-with-l3-invalid-rnh>
<packets-with-no-route-for-smac-in-clone-learning>
```

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```
      packets-with-no-route-for-smac-in-clone-learning
    </packets-with-no-route-for-smac-in-clone-learning>
    <packets-with-no-nexthop-in-clone-learning>
      packets-with-no-nexthop-in-clone-learning
    </packets-with-no-nexthop-in-clone-learning>
    <packets-with-dead-nexthop-in-clone-learning>
      packets-with-dead-nexthop-in-clone-learning
    </packets-with-dead-nexthop-in-clone-learning>
    <packets-dropped-due-to-no-resolve-nh-in-clone-learning>
      packets-dropped-due-to-no-resolve-nh-in-clone-learning
    </packets-dropped-due-to-no-resolve-nh-in-clone-learning>
    <packets-dropped-due-to-interface-down>
      packets-dropped-due-to-interface-down
    </packets-dropped-due-to-interface-down>
    <packets-with-dev-output-failures>
      packets-with-dev-output-failures
    </packets-with-dev-output-failures>
    <blocked-ifl-discards>
      blocked-ifl-discards
    </blocked-ifl-discards>
    <packets-with-tag-insertion-failures>
      packets-with-tag-insertion-failures
    </packets-with-tag-insertion-failures>
    <packets-with-tag-removal-failures>
      packets-with-tag-removal-failures
    </packets-with-tag-removal-failures>
    <packets-flooded>
      packets-flooded
    </packets-flooded>
    <flood-failures>
      flood-failures
    </flood-failures>
    <packets-with-mpull-failures>
      packets-with-mpull-failures
    </packets-with-mpull-failures>
    <packets-with-ifl-lookup-failures>
      packets-with-ifl-lookup-failures
    </packets-with-ifl-lookup-failures>
    <bridge-packets-with-size-smaller-than-minimum>
      bridge-packets-with-size-smaller-than-minimum
    </bridge-packets-with-size-smaller-than-minimum>
    <packets-with-double-tags>
      packets-with-double-tags
    </packets-with-double-tags>
    <packets-with-no-ifl>
      packets-with-no-ifl
    </packets-with-no-ifl>
    <packets-with-no-family>
      packets-with-no-family
    </packets-with-no-family>
  </bridge>
</statistics>
```

Description

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<clnl>

Usage

```
<statistics>
 <clnl>
  <total-clnl-packets-received>
   total-clnl-packets-received
  </total-clnl-packets-received>
  <packets-delivered>
   packets-delivered
  </packets-delivered>
  <too-small-packets>
   too-small-packets
  </too-small-packets>
  <packets-with-bad-header-length>
   packets-with-bad-header-length
  </packets-with-bad-header-length>
  <packets-with-bad-checksum>
   packets-with-bad-checksum
  </packets-with-bad-checksum>
  <bad-version-packets>
   bad-version-packets
  </bad-version-packets>
  <unknown-or-unsupported-protocol-packets>
   unknown-or-unsupported-protocol-packets
  </unknown-or-unsupported-protocol-packets>
  <packets-with-bogus-sdl-size>
   packets-with-bogus-sdl-size
  </packets-with-bogus-sdl-size>
  <no-free-memory-in-socket-buffer>
   no-free-memory-in-socket-buffer
  </no-free-memory-in-socket-buffer>
  <send-packets-discarded>
   send-packets-discarded
  </send-packets-discarded>
  <sbappend-failure>
   sbappend-failure
  </sbappend-failure>
  <mcopy-failure>
   mcopy-failure
  </mcopy-failure>
  <address-fields-were-not-reasonable>
   address-fields-were-not-reasonable
  </address-fields-were-not-reasonable>
  <segment-information-forgotten>
   segment-information-forgotten
  </segment-information-forgotten>
  <forwarded-packets>
   forwarded-packets
  </forwarded-packets>
  <total-packets-sent>
   total-packets-sent
  </total-packets-sent>
  <output-packets-discarded>
   output-packets-discarded
```

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```
    </output-packets-discarded>
    <non-forwarded-packets>
      non-forwarded-packets
    </non-forwarded-packets>
    <packets-fragmented>
      packets-fragmented
    </packets-fragmented>
    <fragments-sent>
      fragments-sent
    </fragments-sent>
    <fragments-discarded>
      fragments-discarded
    </fragments-discarded>
    <fragments-timed-out>
      fragments-timed-out
    </fragments-timed-out>
    <fragmentation-prohibited>
      fragmentation-prohibited
    </fragmentation-prohibited>
    <packets-reconstructed>
      packets-reconstructed
    </packets-reconstructed>
    <packets-destined-to-dead-nexthop>
      packets-destined-to-dead-nexthop
    </packets-destined-to-dead-nexthop>
    <packets-discarded-due-to-no-route>
      packets-discarded-due-to-no-route
    </packets-discarded-due-to-no-route>
    <error-pdu-rate-drops>
      error-pdu-rate-drops
    </error-pdu-rate-drops>
    <er-pdu-generation-failure>
      er-pdu-generation-failure
    </er-pdu-generation-failure>
  </clnl>
</statistics>
```

Description

<esis>

Usage

```
<statistics>
  <esis>
    <total-esis-packets-received>
      total-esis-packets-received
    </total-esis-packets-received>
    <total-packets-consumed-by-protocol>
      total-packets-consumed-by-protocol
    </total-packets-consumed-by-protocol>
    <pdus-received-with-bad-checksum>
      pdus-received-with-bad-checksum
    </pdus-received-with-bad-checksum>
    <pdus-received-with-bad-version-number>
      pdus-received-with-bad-version-number
```


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```
    </pdus-received-with-bad-version-number>
    <pdus-received-with-bad-type-field>
      pdus-received-with-bad-type-field
    </pdus-received-with-bad-type-field>
    <short-pdus-received>
      short-pdus-received
    </short-pdus-received>
    <pdus-with-bogus-sdl-size>
      pdus-with-bogus-sdl-size
    </pdus-with-bogus-sdl-size>
    <pdus-with-bad-header-length>
      pdus-with-bad-header-length
    </pdus-with-bad-header-length>
    <pdus-with-unknown-or-unsupport-protocol>
      pdus-with-unknown-or-unsupport-protocol
    </pdus-with-unknown-or-unsupport-protocol>
    <no-free-memory-in-socket-buffer>
      no-free-memory-in-socket-buffer
    </no-free-memory-in-socket-buffer>
    <send-packets-discarded>
      send-packets-discarded
    </send-packets-discarded>
    <sbappend-failure>
      sbappend-failure
    </sbappend-failure>
    <mcopy-failure>
      mcopy-failure
    </mcopy-failure>
    <iso-family-not-configured>
      iso-family-not-configured
    </iso-family-not-configured>
  </esis>
</statistics>
```

Description

<ethoamcfm>

Usage

```
<statistics>
  <ethoamcfm>
    <total-packets-received>
      total-packets-received
    </total-packets-received>
    <input-packets-drop-bad-interface-state>
      input-packets-drop-bad-interface-state
    </input-packets-drop-bad-interface-state>
    <received-packets-forwarded>
      received-packets-forwarded
    </received-packets-forwarded>
    <total-packets-transmitted>
      total-packets-transmitted
    </total-packets-transmitted>
    <packets-sent>
      packets-sent
```

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```
    </packets-sent>
    <output-packets-drop-bad-interface-state>
     output-packets-drop-bad-interface-state
    </output-packets-drop-bad-interface-state>
    <flood-requests-forwarded-to-pfe>
     flood-requests-forwarded-to-pfe
    </flood-requests-forwarded-to-pfe>
    <flood-requests-dropped>
     flood-requests-dropped
    </flood-requests-dropped>
  </ethoamcfm>
</statistics>
```

Description

<ethoamlfm>

Usage

```
<statistics>
  <ethoamlfm>
    <total-packets-received>
     total-packets-received
    </total-packets-received>
    <input-packets-drop-bad-interface-state>
     input-packets-drop-bad-interface-state
    </input-packets-drop-bad-interface-state>
    <received-packets-forwarded>
     received-packets-forwarded
    </received-packets-forwarded>
    <total-packets-transmitted>
     total-packets-transmitted
    </total-packets-transmitted>
    <packets-sent>
     packets-sent
    </packets-sent>
    <output-packets-drop-bad-interface-state>
     output-packets-drop-bad-interface-state
    </output-packets-drop-bad-interface-state>
  </ethoamlfm>
</statistics>
```

Description

<icmp>

Usage

```
<statistics>
  <icmp>
    <drops-due-to-rate-limit>
     drops-due-to-rate-limit
    </drops-due-to-rate-limit>
    <drops-at-server-ine>
     drops-at-server-ine
    </drops-at-server-ine>
```


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```
    <calls-to-icmp-error>
      calls-to-icmp-error
    </calls-to-icmp-error>
    <errors-not-generated-because-old-message-was-icmp>
      errors-not-generated-because-old-message-was-icmp
    </errors-not-generated-because-old-message-was-icmp>
    <histogram>
      histogram
    </histogram>
    <messages-with-bad-code-fields>
      messages-with-bad-code-fields
    </messages-with-bad-code-fields>
    <messages-less-than-the-minimum-length>
      messages-less-than-the-minimum-length
    </messages-less-than-the-minimum-length>
    <messages-with-bad-checksum>
      messages-with-bad-checksum
    </messages-with-bad-checksum>
    <messages-with-bad-source-address>
      messages-with-bad-source-address
    </messages-with-bad-source-address>
    <messages-with-bad-length>
      messages-with-bad-length
    </messages-with-bad-length>
    <echo-drops-with-broadcast-or-multicast-destinaton-address>
      echo-drops-with-broadcast-or-multicast-destinaton-address
    </echo-drops-with-broadcast-or-multicast-destinaton-address>
    <timestamp-drops-with-broadcast-or-multicast-destination-address>
      timestamp-drops-with-broadcast-or-multicast-destination-address
    </timestamp-drops-with-broadcast-or-multicast-destination-address>
    <message-responses-generated>
      message-responses-generated
    </message-responses-generated>
  </icmp>
</statistics>
```

Description

<icmp6>

Usage

```
<statistics>
  <icmp6>
    <calls-to-icmp6-error>
      calls-to-icmp6-error
    </calls-to-icmp6-error>
    <errors-not-generated-because-old-message-was-icmp-error>
      errors-not-generated-because-old-message-was-icmp-error
    </errors-not-generated-because-old-message-was-icmp-error>
    <errors-not-generated-because-rate-limitation>
      errors-not-generated-because-rate-limitation
    </errors-not-generated-because-rate-limitation>
    <histogram>
      histogram
    </histogram>
```

```
<unreachable-icmp6-packets>
  unreachable-icmp6-packets
</unreachable-icmp6-packets>
<packet-too-big>
  packet-too-big
</packet-too-big>
<time-exceeded-icmp6-packets>
  time-exceeded-icmp6-packets
</time-exceeded-icmp6-packets>
<parameter-problem-icmp6-packets>
  parameter-problem-icmp6-packets
</parameter-problem-icmp6-packets>
<icmp6-echo>
  icmp6-echo
</icmp6-echo>
<icmp6-echo-reply>
  icmp6-echo-reply
</icmp6-echo-reply>
<multicast-listener-query>
  multicast-listener-query
</multicast-listener-query>
<multicast-listener-report>
  multicast-listener-report
</multicast-listener-report>
<multicast-listener-done>
  multicast-listener-done
</multicast-listener-done>
<router-solicitation-icmp6-packets>
  router-solicitation-icmp6-packets
</router-solicitation-icmp6-packets>
<router-advertisement-icmp6-packets>
  router-advertisement-icmp6-packets
</router-advertisement-icmp6-packets>
<neighbor-solicitation>
  neighbor-solicitation
</neighbor-solicitation>
<neighbor-advertisement>
  neighbor-advertisement
</neighbor-advertisement>
<redirect>
  redirect
</redirect>
<router-renumbering>
  router-renumbering
</router-renumbering>
<node-information-request>
  node-information-request
</node-information-request>
<node-information-reply>
  node-information-reply
</node-information-reply>
<icmp6-messages-with-bad-code-fields>
  icmp6-messages-with-bad-code-fields
</icmp6-messages-with-bad-code-fields>
<messages-less-than-minimum-length>
  messages-less-than-minimum-length
```


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```
    </messages-less-than-minimum-length>
    <bad-checksums>
      bad-checksums
    </bad-checksums>
    <icmp6-messages-with-bad-length>
      icmp6-messages-with-bad-length
    </icmp6-messages-with-bad-length>
    <histogram-of-error-messages-to-be-generated>
      histogram-of-error-messages-to-be-generated
    </histogram-of-error-messages-to-be-generated>
    <no-route>
      no-route
    </no-route>
    <administratively-prohibited>
      administratively-prohibited
    </administratively-prohibited>
    <beyond-scope>
      beyond-scope
    </beyond-scope>
    <address-unreachable>
      address-unreachable
    </address-unreachable>
    <port-unreachable>
      port-unreachable
    </port-unreachable>
    <time-exceed-transit>
      time-exceed-transit
    </time-exceed-transit>
    <time-exceed-reassembly>
      time-exceed-reassembly
    </time-exceed-reassembly>
    <erroneous-header-field>
      erroneous-header-field
    </erroneous-header-field>
    <unrecognized-next-header>
      unrecognized-next-header
    </unrecognized-next-header>
    <unrecognized-option>
      unrecognized-option
    </unrecognized-option>
    <unknown>
      unknown
    </unknown>
    <icmp6-message-responses-generated>
      icmp6-message-responses-generated
    </icmp6-message-responses-generated>
    <messages-with-too-many-nd-options>
      messages-with-too-many-nd-options
    </messages-with-too-many-nd-options>
  </icmp6>
</statistics>
```

Description

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<igmp>

Usage

```
<statistics>
 <igmp>
  <messages-received>
   messages-received
  </messages-received>
  <messages-received-with-too-few-bytes>
   messages-received-with-too-few-bytes
  </messages-received-with-too-few-bytes>
  <messages-received-with-bad-checksum>
   messages-received-with-bad-checksum
  </messages-received-with-bad-checksum>
  <membership-queries-received>
   membership-queries-received
  </membership-queries-received>
  <membership-queries-received-with-invalid-fields>
   membership-queries-received-with-invalid-fields
  </membership-queries-received-with-invalid-fields>
  <membership-reports-received>
   membership-reports-received
  </membership-reports-received>
  <membership-reports-received-with-invalid-fields>
   membership-reports-received-with-invalid-fields
  </membership-reports-received-with-invalid-fields>
  <membership-reports-received-for-groups-to-which-we-belong>
   membership-reports-received-for-groups-to-which-we-belong
  </membership-reports-received-for-groups-to-which-we-belong>
  <membership-reports-sent>
   membership-reports-sent
  </membership-reports-sent>
 </igmp>
</statistics>
```

Description

<ip>

Usage

```
<statistics>
 <ip>
  <packets-received>
   packets-received
  </packets-received>
  <bad-header-checksums>
   bad-header-checksums
  </bad-header-checksums>
  <packets-with-size-smaller-than-minimum>
   packets-with-size-smaller-than-minimum
  </packets-with-size-smaller-than-minimum>
  <packets-with-data-size-less-than-datalength>
   packets-with-data-size-less-than-datalength
  </packets-with-data-size-less-than-datalength>
```


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```
<packets-with-header-length-less-than-data-size>
  packets-with-header-length-less-than-data-size
</packets-with-header-length-less-than-data-size>
<packets-with-data-length-less-than-headerlength>
  packets-with-data-length-less-than-headerlength
</packets-with-data-length-less-than-headerlength>
<packets-with-incorrect-version-number>
  packets-with-incorrect-version-number
</packets-with-incorrect-version-number>
<packets-destined-to-dead-next-hop>
  packets-destined-to-dead-next-hop
</packets-destined-to-dead-next-hop>
<fragments-received>
  fragments-received
</fragments-received>
<fragments-dropped-due-to-outofspace-or-dup>
  fragments-dropped-due-to-outofspace-or-dup
</fragments-dropped-due-to-outofspace-or-dup>
<fragments-dropped-due-to-queueoverflow>
  fragments-dropped-due-to-queueoverflow
</fragments-dropped-due-to-queueoverflow>
<fragments-dropped-after-timeout>
  fragments-dropped-after-timeout
</fragments-dropped-after-timeout>
<fragments-dropped-due-to-over-limit>
  fragments-dropped-due-to-over-limit
</fragments-dropped-due-to-over-limit>
<packets-reassembled-ok>
  packets-reassembled-ok
</packets-reassembled-ok>
<packets-for-this-host>
  packets-for-this-host
</packets-for-this-host>
<packets-for-unknown-or-unsupported-protocol>
  packets-for-unknown-or-unsupported-protocol
</packets-for-unknown-or-unsupported-protocol>
<packets-forwarded>
  packets-forwarded
</packets-forwarded>
<packets-not-forwardable>
  packets-not-forwardable
</packets-not-forwardable>
<redirects-sent>
  redirects-sent
</redirects-sent>
<packets-sent-from-this-host>
  packets-sent-from-this-host
</packets-sent-from-this-host>
<packets-sent-with-fabricated-ip-header>
  packets-sent-with-fabricated-ip-header
</packets-sent-with-fabricated-ip-header>
<output-packets-dropped-due-to-no-bufs>
  output-packets-dropped-due-to-no-bufs
</output-packets-dropped-due-to-no-bufs>
<output-packets-discarded-due-to-no-route>
  output-packets-discarded-due-to-no-route
```

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```
</output-packets-discarded-due-to-no-route>
<output-datagrams-fragmented>
  output-datagrams-fragmented
</output-datagrams-fragmented>
<fragments-created>
  fragments-created
</fragments-created>
<datagrams-that-can-not-be-fragmented>
  datagrams-that-can-not-be-fragmented
</datagrams-that-can-not-be-fragmented>
<packets-with-bad-options>
  packets-with-bad-options
</packets-with-bad-options>
<packets-with-options-handled-without-error>
  packets-with-options-handled-without-error
</packets-with-options-handled-without-error>
<strict-source-and-record-route-options>
  strict-source-and-record-route-options
</strict-source-and-record-route-options>
<loose-source-and-record-route-options>
  loose-source-and-record-route-options
</loose-source-and-record-route-options>
<record-route-options>
  record-route-options
</record-route-options>
<timestamp-options>
  timestamp-options
</timestamp-options>
<timestamp-and-address-options>
  timestamp-and-address-options
</timestamp-and-address-options>
<timestamp-and-prespecified-address-options>
  timestamp-and-prespecified-address-options
</timestamp-and-prespecified-address-options>
<option-packets-dropped-due-to-rate-limit>
  option-packets-dropped-due-to-rate-limit
</option-packets-dropped-due-to-rate-limit>
<router-alert-options>
  router-alert-options
</router-alert-options>
<multicast-packets-dropped>
  multicast-packets-dropped
</multicast-packets-dropped>
<packets-dropped>
  packets-dropped
</packets-dropped>
<transit-re-packets-dropped-on-mgmt-interface>
  transit-re-packets-dropped-on-mgmt-interface
</transit-re-packets-dropped-on-mgmt-interface>
<packets-used-first-nexthop-in-ecmp-unilist>
  packets-used-first-nexthop-in-ecmp-unilist
</packets-used-first-nexthop-in-ecmp-unilist>
<incoming-ttpoip-packets-received>
  incoming-ttpoip-packets-received
</incoming-ttpoip-packets-received>
<incoming-ttpoip-packets-dropped>
```


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```
      incoming-ttpoip-packets-dropped
    </incoming-ttpoip-packets-dropped>
    <outgoing-ttpoip-packets-sent>
      outgoing-ttpoip-packets-sent
    </outgoing-ttpoip-packets-sent>
    <outgoing-ttpoip-packets-dropped>
      outgoing-ttpoip-packets-dropped
    </outgoing-ttpoip-packets-dropped>
    <incoming-rawip-packets-dropped-no-socket-buffer>
      incoming-rawip-packets-dropped-no-socket-buffer
    </incoming-rawip-packets-dropped-no-socket-buffer>
  </ip>
</statistics>
```

Description

<ip6>

Usage

```
<statistics>
  <ip6>
    <total-packets-received>
      total-packets-received
    </total-packets-received>
    <ip6-packets-with-size-smaller-than-minimum>
      ip6-packets-with-size-smaller-than-minimum
    </ip6-packets-with-size-smaller-than-minimum>
    <packets-with-datasize-less-than-data-length>
      packets-with-datasize-less-than-data-length
    </packets-with-datasize-less-than-data-length>
    <ip6-packets-with-bad-options>
      ip6-packets-with-bad-options
    </ip6-packets-with-bad-options>
    <ip6-packets-with-incorrect-version-number>
      ip6-packets-with-incorrect-version-number
    </ip6-packets-with-incorrect-version-number>
    <ip6-fragments-received>
      ip6-fragments-received
    </ip6-fragments-received>
    <duplicate-or-out-of-space-fragments-dropped>
      duplicate-or-out-of-space-fragments-dropped
    </duplicate-or-out-of-space-fragments-dropped>
    <ip6-fragments-dropped-after-timeout>
      ip6-fragments-dropped-after-timeout
    </ip6-fragments-dropped-after-timeout>
    <fragments-that-exceeded-limit>
      fragments-that-exceeded-limit
    </fragments-that-exceeded-limit>
    <ip6-packets-reassembled-ok>
      ip6-packets-reassembled-ok
    </ip6-packets-reassembled-ok>
    <ip6-packets-for-this-host>
      ip6-packets-for-this-host
    </ip6-packets-for-this-host>
    <ip6-packets-forwarded>
```

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```
  ip6-packets-forwarded
</ip6-packets-forwarded>
<ip6-packets-not-forwardable>
  ip6-packets-not-forwardable
</ip6-packets-not-forwardable>
<ip6-redirects-sent>
  ip6-redirects-sent
</ip6-redirects-sent>
<ip6-packets-sent-from-this-host>
  ip6-packets-sent-from-this-host
</ip6-packets-sent-from-this-host>
<ip6-packets-sent-with-fabricated-ip-header>
  ip6-packets-sent-with-fabricated-ip-header
</ip6-packets-sent-with-fabricated-ip-header>
<ip6-output-packets-dropped-due-to-no-bufs>
  ip6-output-packets-dropped-due-to-no-bufs
</ip6-output-packets-dropped-due-to-no-bufs>
<ip6-output-packets-discarded-due-to-no-route>
  ip6-output-packets-discarded-due-to-no-route
</ip6-output-packets-discarded-due-to-no-route>
<ip6-output-datagrams-fragmented>
  ip6-output-datagrams-fragmented
</ip6-output-datagrams-fragmented>
<ip6-fragments-created>
  ip6-fragments-created
</ip6-fragments-created>
<ip6-datagrams-that-can-not-be-fragmented>
  ip6-datagrams-that-can-not-be-fragmented
</ip6-datagrams-that-can-not-be-fragmented>
<packets-that-violated-scope-rules>
  packets-that-violated-scope-rules
</packets-that-violated-scope-rules>
<multicast-packets-which-we-do-not-join>
  multicast-packets-which-we-do-not-join
</multicast-packets-which-we-do-not-join>
<histogram>
  histogram
</histogram>
<ip6nh-hop-by-hop>
  ip6nh-hop-by-hop
</ip6nh-hop-by-hop>
<ip6nh-icmp>
  ip6nh-icmp
</ip6nh-icmp>
<ip6nh-igmp>
  ip6nh-igmp
</ip6nh-igmp>
<ip6nh-ip>
  ip6nh-ip
</ip6nh-ip>
<ip6nh-tcp>
  ip6nh-tcp
</ip6nh-tcp>
<ip6nh-udp>
  ip6nh-udp
</ip6nh-udp>
```


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```
<ip6nh-idp>
  ip6nh-idp
</ip6nh-idp>
<ip6nh-tp>
  ip6nh-tp
</ip6nh-tp>
<ip6nh-ip6>
  ip6nh-ip6
</ip6nh-ip6>
<ip6nh-routing>
  ip6nh-routing
</ip6nh-routing>
<ip6nh-fragment>
  ip6nh-fragment
</ip6nh-fragment>
<ip6nh-esp>
  ip6nh-esp
</ip6nh-esp>
<ip6nh-ah>
  ip6nh-ah
</ip6nh-ah>
<ip6nh-icmp6>
  ip6nh-icmp6
</ip6nh-icmp6>
<ip6nh-no-next-header>
  ip6nh-no-next-header
</ip6nh-no-next-header>
<ip6nh-destination-option>
  ip6nh-destination-option
</ip6nh-destination-option>
<ip6nh-isoip>
  ip6nh-isoip
</ip6nh-isoip>
<ip6nh-ospf>
  ip6nh-ospf
</ip6nh-ospf>
<ip6nh-ethernet>
  ip6nh-ethernet
</ip6nh-ethernet>
<ip6nh-pim>
  ip6nh-pim
</ip6nh-pim>
<mbuf-statistics>
  mbuf-statistics
</mbuf-statistics>
<node-locals>
  node-locals
</node-locals>
<link-locals>
  link-locals
</link-locals>
<site-locals>
  site-locals
</site-locals>
<globals>
  globals
```

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```
    </globals>
    <address-scope>
      address-scope
    </address-scope>
    <hex-value>
      hex-value
    </hex-value>
    <header-for-source-address-selection>
      header-for-source-address-selection
    </header-for-source-address-selection>
    <packets-whose-headers-are-not-continuous>
      packets-whose-headers-are-not-continuous
    </packets-whose-headers-are-not-continuous>
    <tunneling-packets-that-can-not-find-gif>
      tunneling-packets-that-can-not-find-gif
    </tunneling-packets-that-can-not-find-gif>
    <packets-discarded-due-to-too-may-headers>
      packets-discarded-due-to-too-may-headers
    </packets-discarded-due-to-too-may-headers>
    <failures-of-source-address-selection>
      failures-of-source-address-selection
    </failures-of-source-address-selection>
    <forward-cache-hit>
      forward-cache-hit
    </forward-cache-hit>
    <forward-cache-miss>
      forward-cache-miss
    </forward-cache-miss>
    <ip6-packets-destined-to-dead-next-hop>
      ip6-packets-destined-to-dead-next-hop
    </ip6-packets-destined-to-dead-next-hop>
    <ip6-option-packets-dropped-due-to-rate-limit>
      ip6-option-packets-dropped-due-to-rate-limit
    </ip6-option-packets-dropped-due-to-rate-limit>
    <ip6-packets-dropped>
      ip6-packets-dropped
    </ip6-packets-dropped>
    <packets-dropped-due-to-bad-protocol>
      packets-dropped-due-to-bad-protocol
    </packets-dropped-due-to-bad-protocol>
    <transit-re-packet-dropped-on-mgmt-interface>
      transit-re-packet-dropped-on-mgmt-interface
    </transit-re-packet-dropped-on-mgmt-interface>
    <packet-used-first-nexthop-in-ecmp-unilist>
      packet-used-first-nexthop-in-ecmp-unilist
    </packet-used-first-nexthop-in-ecmp-unilist>
  </ip6>
</statistics>
```

Description

<ipsec>

Usage

```
<statistics>
```


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```
<ipsec>
  <inbound-packets-processed-successfully>
    inbound-packets-processed-successfully
  </inbound-packets-processed-successfully>
  <inbound-packets-violated-process-security-policy>
    inbound-packets-violated-process-security-policy
  </inbound-packets-violated-process-security-policy>
  <inbound-packets-with-no-sa-available>
    inbound-packets-with-no-sa-available
  </inbound-packets-with-no-sa-available>
  <invalid-inbound-packets>
    invalid-inbound-packets
  </invalid-inbound-packets>
  <inbound-packets-failed-due-to-insufficient-memory>
    inbound-packets-failed-due-to-insufficient-memory
  </inbound-packets-failed-due-to-insufficient-memory>
  <inbound-packets-failed-getting-spi>
    inbound-packets-failed-getting-spi
  </inbound-packets-failed-getting-spi>
  <inbound-packets-failed-on-ah-replay-check>
    inbound-packets-failed-on-ah-replay-check
  </inbound-packets-failed-on-ah-replay-check>
  <inbound-packets-failed-on-esp-replay-check>
    inbound-packets-failed-on-esp-replay-check
  </inbound-packets-failed-on-esp-replay-check>
  <inbound-packets-considered-authentic>
    inbound-packets-considered-authentic
  </inbound-packets-considered-authentic>
  <inbound-packets-failed-on-authentication>
    inbound-packets-failed-on-authentication
  </inbound-packets-failed-on-authentication>
  <inbound-esp-packets-considered-authentic>
    inbound-esp-packets-considered-authentic
  </inbound-esp-packets-considered-authentic>
  <inbound-esp-packets-failed-on-authentication>
    inbound-esp-packets-failed-on-authentication
  </inbound-esp-packets-failed-on-authentication>
  <histogram>
    histogram
  </histogram>
  <ahnames-none>
    ahnames-none
  </ahnames-none>
  <ahnames-hmac-md5>
    ahnames-hmac-md5
  </ahnames-hmac-md5>
  <ahnames-hmac-sha1>
    ahnames-hmac-sha1
  </ahnames-hmac-sha1>
  <ahnames-md5>
    ahnames-md5
  </ahnames-md5>
  <ahnames-sha>
    ahnames-sha
  </ahnames-sha>
  <ahnames-null>
```

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```
  ahnames-null
</ahnames-null>
<ahnames-hmac-sha2-256>
  ahnames-hmac-sha2-256
</ahnames-hmac-sha2-256>
<ahnames-hmac-sha2-384>
  ahnames-hmac-sha2-384
</ahnames-hmac-sha2-384>
<ahnames-hmac-sha2-512>
  ahnames-hmac-sha2-512
</ahnames-hmac-sha2-512>
<ahnames-hmac-ripemd160>
  ahnames-hmac-ripemd160
</ahnames-hmac-ripemd160>
<ahnames-aes-xcbc-mac>
  ahnames-aes-xcbc-mac
</ahnames-aes-xcbc-mac>
<espnames-none>
  espnames-none
</espnames-none>
<espnames-des-cbc>
  espnames-des-cbc
</espnames-des-cbc>
<espnames-3des-cbc>
  espnames-3des-cbc
</espnames-3des-cbc>
<espnames-null>
  espnames-null
</espnames-null>
<espnames-cast128-cbc>
  espnames-cast128-cbc
</espnames-cast128-cbc>
<espnames-blowfish-cbc>
  espnames-blowfish-cbc
</espnames-blowfish-cbc>
<espnames-rijndael-cbc>
  espnames-rijndael-cbc
</espnames-rijndael-cbc>
<espnames-aes-ctr>
  espnames-aes-ctr
</espnames-aes-ctr>
<compnames-none>
  compnames-none
</compnames-none>
<compnames-oui>
  compnames-oui
</compnames-oui>
<compnames-deflate>
  compnames-deflate
</compnames-deflate>
<compnames-lzs>
  compnames-lzs
</compnames-lzs>
<protocol>
  protocol
</protocol>
```


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```
    <outbound-packets-processed-successfully>
     outbound-packets-processed-successfully
    </outbound-packets-processed-successfully>
    <outbound-packets-violated-process-security-policy>
     outbound-packets-violated-process-security-policy
    </outbound-packets-violated-process-security-policy>
    <outbound-packets-with-no-sa-available>
     outbound-packets-with-no-sa-available
    </outbound-packets-with-no-sa-available>
    <invalid-outbound-packets>
     invalid-outbound-packets
    </invalid-outbound-packets>
    <outbound-packets-failed-due-to-insufficient-memory>
     outbound-packets-failed-due-to-insufficient-memory
    </outbound-packets-failed-due-to-insufficient-memory>
    <outbound-packets-with-no-route>
     outbound-packets-with-no-route
    </outbound-packets-with-no-route>
    <spd-cache-lookups>
     spd-cache-lookups
    </spd-cache-lookups>
    <spd-cache-misses>
     spd-cache-misses
    </spd-cache-misses>
   </ipsec>
  </statistics>
```

Description

<ipsec6>

Usage

```
<statistics>
 <ipsec6>
  <inbound-packets-processed-successfully>
   inbound-packets-processed-successfully
  </inbound-packets-processed-successfully>
  <inbound-packets-violated-process-security-policy>
   inbound-packets-violated-process-security-policy
  </inbound-packets-violated-process-security-policy>
  <inbound-packets-with-no-sa-available>
   inbound-packets-with-no-sa-available
  </inbound-packets-with-no-sa-available>
  <invalid-inbound-packets>
   invalid-inbound-packets
  </invalid-inbound-packets>
  <inbound-packets-failed-due-to-insufficient-memory>
   inbound-packets-failed-due-to-insufficient-memory
  </inbound-packets-failed-due-to-insufficient-memory>
  <inbound-packets-failed-getting-spi>
   inbound-packets-failed-getting-spi
  </inbound-packets-failed-getting-spi>
  <inbound-packets-failed-on-ah-replay-check>
   inbound-packets-failed-on-ah-replay-check
  </inbound-packets-failed-on-ah-replay-check>
```

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```
<inbound-packets-failed-on-esp-replay-check>
  inbound-packets-failed-on-esp-replay-check
</inbound-packets-failed-on-esp-replay-check>
<inbound-packets-considered-authentic>
  inbound-packets-considered-authentic
</inbound-packets-considered-authentic>
<inbound-packets-failed-on-authentication>
  inbound-packets-failed-on-authentication
</inbound-packets-failed-on-authentication>
<inbound-esp-packets-considered-authentic>
  inbound-esp-packets-considered-authentic
</inbound-esp-packets-considered-authentic>
<inbound-esp-packets-failed-on-authentication>
  inbound-esp-packets-failed-on-authentication
</inbound-esp-packets-failed-on-authentication>
<histogram>
  histogram
</histogram>
<ahnames-none>
  ahnames-none
</ahnames-none>
<ahnames-hmac-md5>
  ahnames-hmac-md5
</ahnames-hmac-md5>
<ahnames-hmac-sha1>
  ahnames-hmac-sha1
</ahnames-hmac-sha1>
<ahnames-md5>
  ahnames-md5
</ahnames-md5>
<ahnames-sha>
  ahnames-sha
</ahnames-sha>
<ahnames-null>
  ahnames-null
</ahnames-null>
<ahnames-hmac-sha2-256>
  ahnames-hmac-sha2-256
</ahnames-hmac-sha2-256>
<ahnames-hmac-sha2-384>
  ahnames-hmac-sha2-384
</ahnames-hmac-sha2-384>
<ahnames-hmac-sha2-512>
  ahnames-hmac-sha2-512
</ahnames-hmac-sha2-512>
<ahnames-hmac-ripemd160>
  ahnames-hmac-ripemd160
</ahnames-hmac-ripemd160>
<ahnames-aes-xcbc-mac>
  ahnames-aes-xcbc-mac
</ahnames-aes-xcbc-mac>
<espnames-none>
  espnames-none
</espnames-none>
<espnames-des-cbc>
  espnames-des-cbc
```


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```
</espnames-des-cbc>
<espnames-3des-cbc>
  espnames-3des-cbc
</espnames-3des-cbc>
<espnames-null>
  espnames-null
</espnames-null>
<espnames-cast128-cbc>
  espnames-cast128-cbc
</espnames-cast128-cbc>
<espnames-blowfish-cbc>
  espnames-blowfish-cbc
</espnames-blowfish-cbc>
<espnames-rijndael-cbc>
  espnames-rijndael-cbc
</espnames-rijndael-cbc>
<espnames-aes-ctr>
  espnames-aes-ctr
</espnames-aes-ctr>
<compnames-none>
  compnames-none
</compnames-none>
<compnames-oui>
  compnames-oui
</compnames-oui>
<compnames-deflate>
  compnames-deflate
</compnames-deflate>
<compnames-lzs>
  compnames-lzs
</compnames-lzs>
<proto>
  proto
</proto>
<outbound-packets-processed-successfully>
  outbound-packets-processed-successfully
</outbound-packets-processed-successfully>
<outbound-packets-violated-process-security-policy>
  outbound-packets-violated-process-security-policy
</outbound-packets-violated-process-security-policy>
<outbound-packets-with-no-sa-available>
  outbound-packets-with-no-sa-available
</outbound-packets-with-no-sa-available>
<invalid-outbound-packets>
  invalid-outbound-packets
</invalid-outbound-packets>
<outbound-packets-failed-due-to-insufficient-memory>
  outbound-packets-failed-due-to-insufficient-memory
</outbound-packets-failed-due-to-insufficient-memory>
<outbound-packets-with-no-route>
  outbound-packets-with-no-route
</outbound-packets-with-no-route>
<spd-cache-lookups>
  spd-cache-lookups
</spd-cache-lookups>
<spd-cache-misses>
```

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```
      spd-cache-misses
    </spd-cache-misses>
  </ipsec6>
</statistics>
```

Description

<mpls>

Usage

```
<statistics>
  <mpls>
    <total-mpls-packets-received>
      total-mpls-packets-received
    </total-mpls-packets-received>
    <packets-forwarded>
      packets-forwarded
    </packets-forwarded>
    <packets-dropped>
      packets-dropped
    </packets-dropped>
    <packets-with-header-too-small>
      packets-with-header-too-small
    </packets-with-header-too-small>
    <after-tagging-packets-can-not-fit-link-mtu>
      after-tagging-packets-can-not-fit-link-mtu
    </after-tagging-packets-can-not-fit-link-mtu>
    <packets-with-ipv4-explicit-null-tag>
      packets-with-ipv4-explicit-null-tag
    </packets-with-ipv4-explicit-null-tag>
    <packets-with-ipv4-explicit-null-checksum-errors>
      packets-with-ipv4-explicit-null-checksum-errors
    </packets-with-ipv4-explicit-null-checksum-errors>
    <packets-with-router-alert-tag>
      packets-with-router-alert-tag
    </packets-with-router-alert-tag>
    <lsp-ping-packets>
      lsp-ping-packets
    </lsp-ping-packets>
    <packets-with-ttl-expired>
      packets-with-ttl-expired
    </packets-with-ttl-expired>
    <packets-with-tag-encoding-error>
      packets-with-tag-encoding-error
    </packets-with-tag-encoding-error>
    <packets-discarded-due-to-no-route>
      packets-discarded-due-to-no-route
    </packets-discarded-due-to-no-route>
    <packets-used-first-nexthop-in-ecmp-unilist>
      packets-used-first-nexthop-in-ecmp-unilist
    </packets-used-first-nexthop-in-ecmp-unilist>
  </mpls>
</statistics>
```


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Description

<pfkey>

Usage

```
<statistics>
  <pfkey>
    <requests-sent-from-userland>
      requests-sent-from-userland
    </requests-sent-from-userland>
    <bytes-sent-from-userland>
      bytes-sent-from-userland
    </bytes-sent-from-userland>
    <histogram>
      histogram
    </histogram>
    <reserved>
      reserved
    </reserved>
    <getspi>
      getspi
    </getspi>
    <update>
      update
    </update>
    <add>
      add
    </add>
    <delete>
      delete
    </delete>
    <get>
      get
    </get>
    <acquire>
      acquire
    </acquire>
    <register>
      register
    </register>
    <expire>
      expire
    </expire>
    <flush>
      flush
    </flush>
    <dump>
      dump
    </dump>
    <x-promisc>
      x-promisc
    </x-promisc>
    <x-pchange>
      x-pchange
    </x-pchange>
    <x-spdupdate>
```

```
  x-spdupdate
</x-spdupdate>
<x-spdadd>
  x-spdadd
</x-spdadd>
<x-spddelete>
  x-spddelete
</x-spddelete>
<x-spdget>
  x-spdget
</x-spdget>
<x-spdacquire>
  x-spdacquire
</x-spdacquire>
<x-spddump>
  x-spddump
</x-spddump>
<x-spdflush>
  x-spdflush
</x-spdflush>
<x-spdsetidx>
  x-spdsetidx
</x-spdsetidx>
<x-spdexpire>
  x-spdexpire
</x-spdexpire>
<x-spddelete2>
  x-spddelete2
</x-spddelete2>
<messages-with-invalid-length-field>
  messages-with-invalid-length-field
</messages-with-invalid-length-field>
<messages-with-invalid-version-field>
  messages-with-invalid-version-field
</messages-with-invalid-version-field>
<messages-with-invalid-message-type-field>
  messages-with-invalid-message-type-field
</messages-with-invalid-message-type-field>
<messages-too-short>
  messages-too-short
</messages-too-short>
<outgoing-messages-with-memory-allocation-failure>
  outgoing-messages-with-memory-allocation-failure
</outgoing-messages-with-memory-allocation-failure>
<messages-with-duplicate-extension>
  messages-with-duplicate-extension
</messages-with-duplicate-extension>
<messages-with-invalid-extension-type>
  messages-with-invalid-extension-type
</messages-with-invalid-extension-type>
<messages-with-invalid-sa-type>
  messages-with-invalid-sa-type
</messages-with-invalid-sa-type>
<messages-with-invalid-address-extension>
  messages-with-invalid-address-extension
</messages-with-invalid-address-extension>
```


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```
    <requests-sent-to-userland>
      requests-sent-to-userland
    </requests-sent-to-userland>
    <bytes-sent-to-userland>
      bytes-sent-to-userland
    </bytes-sent-to-userland>
    <messages-toward-single-socket>
      messages-toward-single-socket
    </messages-toward-single-socket>
    <messages-toward-all-sockets>
      messages-toward-all-sockets
    </messages-toward-all-sockets>
    <messages-toward-registered-sockets>
      messages-toward-registered-sockets
    </messages-toward-registered-sockets>
    <incoming-messages-with-memory-allocation-failure>
      incoming-messages-with-memory-allocation-failure
    </incoming-messages-with-memory-allocation-failure>
  </pfkey>
</statistics>
```

Description

<raw-interface>

Usage

```
<statistics>
  <raw-interface>
    <raw-packets-transmitted>
      raw-packets-transmitted
    </raw-packets-transmitted>
    <ppoe-packets-transmitted>
      ppoe-packets-transmitted
    </ppoe-packets-transmitted>
    <isdn-packets-transmitted>
      isdn-packets-transmitted
    </isdn-packets-transmitted>
    <dialer-packets-transmitted>
      dialer-packets-transmitted
    </dialer-packets-transmitted>
    <ppp-packets-transmitted-to-pppd>
      ppp-packets-transmitted-to-pppd
    </ppp-packets-transmitted-to-pppd>
    <ppp-packets-transmitted-to-jppd>
      ppp-packets-transmitted-to-jppd
    </ppp-packets-transmitted-to-jppd>
    <igmpl2-packets-transmitted>
      igmpl2-packets-transmitted
    </igmpl2-packets-transmitted>
    <fibre-channel-packets-transmitted>
      fibre-channel-packets-transmitted
    </fibre-channel-packets-transmitted>
    <fip-packets-transmitted>
      fip-packets-transmitted
    </fip-packets-transmitted>
```

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```
<stp-packets-transmitted>
  stp-packets-transmitted
</stp-packets-transmitted>
<faboam-packets-transmitted>
  faboam-packets-transmitted
</faboam-packets-transmitted>
<output-drops-due-to-transmit-error>
  output-drops-due-to-transmit-error
</output-drops-due-to-transmit-error>
<mpu-packets-transmitted>
  mpu-packets-transmitted
</mpu-packets-transmitted>
<pppoe-packets-received>
  pppoe-packets-received
</pppoe-packets-received>
<isdn-packets-received>
  isdn-packets-received
</isdn-packets-received>
<dialer-packets-received>
  dialer-packets-received
</dialer-packets-received>
<ppp-packets-received-from-pppd>
  ppp-packets-received-from-pppd
</ppp-packets-received-from-pppd>
<mpu-packets-received>
  mpu-packets-received
</mpu-packets-received>
<ppp-packets-received-from-jppd>
  ppp-packets-received-from-jppd
</ppp-packets-received-from-jppd>
<igmpl2-packets-received>
  igmpl2-packets-received
</igmpl2-packets-received>
<fibre-channel-packets-received>
  fibre-channel-packets-received
</fibre-channel-packets-received>
<fip-packets-received>
  fip-packets-received
</fip-packets-received>
<stp-packets-received>
  stp-packets-received
</stp-packets-received>
<faboam-packets-received>
  faboam-packets-received
</faboam-packets-received>
<fibre-channel-packets-dropped>
  fibre-channel-packets-dropped
</fibre-channel-packets-dropped>
<fip-packets-dropped>
  fip-packets-dropped
</fip-packets-dropped>
<stp-packets-dropped>
  stp-packets-dropped
</stp-packets-dropped>
<faboam-packets-dropped>
  faboam-packets-dropped
```


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```
    </faboam-packets-dropped>
    <input-drops-due-to-bogus-protocol>
     input-drops-due-to-bogus-protocol
    </input-drops-due-to-bogus-protocol>
    <input-drops-due-to-no-mbufs-available>
     input-drops-due-to-no-mbufs-available
    </input-drops-due-to-no-mbufs-available>
    <input-drops-due-to-no-space-in-socket>
     input-drops-due-to-no-space-in-socket
    </input-drops-due-to-no-space-in-socket>
    <input-drops-due-to-no-socket>
     input-drops-due-to-no-socket
    </input-drops-due-to-no-socket>
   </raw-interface>
</statistics>
```

Description

<rdp>

Usage

```
<statistics>
 <rdp>
   <input-packets>
    input-packets
   </input-packets>
   <packets-discarded-for-bad-checksum>
    packets-discarded-for-bad-checksum
   </packets-discarded-for-bad-checksum>
   <packets-discarded-due-to-bad-sequence-number>
    packets-discarded-due-to-bad-sequence-number
   </packets-discarded-due-to-bad-sequence-number>
   <refused-connections>
    refused-connections
   </refused-connections>
   <acks-received>
    acks-received
   </acks-received>
   <packets-dropped-due-to-full-socket-buffers>
    packets-dropped-due-to-full-socket-buffers
   </packets-dropped-due-to-full-socket-buffers>
   <packets-dropped-full-repl-sock-buf>
    packets-dropped-full-repl-sock-buf
   </packets-dropped-full-repl-sock-buf>
   <retransmits>
    retransmits
   </retransmits>
   <output-packets>
    output-packets
   </output-packets>
   <acks-sent>
    acks-sent
   </acks-sent>
   <connects>
    connects
```

```
    </connects>
    <closes>
     closes
    </closes>
    <keepalives-received>
     keepalives-received
    </keepalives-received>
    <keepalives-sent>
     keepalives-sent
    </keepalives-sent>
  </rdp>
</statistics>
```

Description

<statistics>

Usage

```
<statistics>
  <tcp>....</tcp>
  <udp>....</udp>
  <ip>....</ip>
  <icmp>....</icmp>
  <igmp>....</igmp>
  <ipsec>....</ipsec>
  <raw-interface>....</raw-interface>
  <arp>....</arp>
  <ip6>....</ip6>
  <icmp6>....</icmp6>
  <ipsec6>....</ipsec6>
  <pfkey>....</pfkey>
  <clnl>....</clnl>
  <esis>....</esis>
  <tnp>....</tnp>
  <rdp>....</rdp>
  <tudp>....</tudp>
  <ttp>....</ttp>
  <mpls>....</mpls>
  <vpls>....</vpls>
  <bridge>....</bridge>
  <ethoamcfm>....</ethoamcfm>
  <ethoamlfm>....</ethoamlfm>
</statistics>
```

Description

<tcp>

Usage

```
<statistics>
  <tcp>
    <packets-sent>
     packets-sent
    </packets-sent>
```


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```
<sent-data-packets>
  sent-data-packets
</sent-data-packets>
<data-packets-bytes>
  data-packets-bytes
</data-packets-bytes>
<sent-data-packets-retransmitted>
  sent-data-packets-retransmitted
</sent-data-packets-retransmitted>
<retransmitted-bytes>
  retransmitted-bytes
</retransmitted-bytes>
<sent-resends-by-mtu-discovery>
  sent-resends-by-mtu-discovery
</sent-resends-by-mtu-discovery>
<sent-ack-only-packets>
  sent-ack-only-packets
</sent-ack-only-packets>
<sent-packets-delayed>
  sent-packets-delayed
</sent-packets-delayed>
<sent-urg-only-packets>
  sent-urg-only-packets
</sent-urg-only-packets>
<sent-window-probe-packets>
  sent-window-probe-packets
</sent-window-probe-packets>
<sent-window-update-packets>
  sent-window-update-packets
</sent-window-update-packets>
<sent-control-packets>
  sent-control-packets
</sent-control-packets>
<packets-received>
  packets-received
</packets-received>
<received-acks>
  received-acks
</received-acks>
<acks-bytes>
  acks-bytes
</acks-bytes>
<received-duplicate-acks>
  received-duplicate-acks
</received-duplicate-acks>
<received-acks-for-unsent-data>
  received-acks-for-unsent-data
</received-acks-for-unsent-data>
<packets-received-in-sequence>
  packets-received-in-sequence
</packets-received-in-sequence>
<in-sequence-bytes>
  in-sequence-bytes
</in-sequence-bytes>
<received-completely-duplicate-packet>
  received-completely-duplicate-packet
```

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```
</received-completely-duplicate-packet>
<duplicate-in-bytes>
  duplicate-in-bytes
</duplicate-in-bytes>
<received-old-duplicate-packets>
  received-old-duplicate-packets
</received-old-duplicate-packets>
<received-packets-with-some-dupliacte-data>
  received-packets-with-some-dupliacte-data
</received-packets-with-some-dupliacte-data>
<some-duplicate-in-bytes>
  some-duplicate-in-bytes
</some-duplicate-in-bytes>
<received-out-of-order-packets>
  received-out-of-order-packets
</received-out-of-order-packets>
<out-of-order-in-bytes>
  out-of-order-in-bytes
</out-of-order-in-bytes>
<received-packets-of-data-after-window>
  received-packets-of-data-after-window
</received-packets-of-data-after-window>
<bytes>
  bytes
</bytes>
<received-window-probes>
  received-window-probes
</received-window-probes>
<received-window-update-packets>
  received-window-update-packets
</received-window-update-packets>
<packets-received-after-close>
  packets-received-after-close
</packets-received-after-close>
<received-discarded-for-bad-checksum>
  received-discarded-for-bad-checksum
</received-discarded-for-bad-checksum>
<received-discarded-for-bad-header-offset>
  received-discarded-for-bad-header-offset
</received-discarded-for-bad-header-offset>
<received-discarded-because-packet-too-short>
  received-discarded-because-packet-too-short
</received-discarded-because-packet-too-short>
<connection-requests>
  connection-requests
</connection-requests>
<connection-accepts>
  connection-accepts
</connection-accepts>
<bad-connection-attempts>
  bad-connection-attempts
</bad-connection-attempts>
<listen-queue-overflows>
  listen-queue-overflows
</listen-queue-overflows>
<connections-established>
```


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```
  connections-established
</connections-established>
<connections-closed>
  connections-closed
</connections-closed>
<drops>
  drops
</drops>
<connections-updated-rtt-on-close>
  connections-updated-rtt-on-close
</connections-updated-rtt-on-close>
<connections-updated-variance-on-close>
  connections-updated-variance-on-close
</connections-updated-variance-on-close>
<connections-updated-ssthresh-on-close>
  connections-updated-ssthresh-on-close
</connections-updated-ssthresh-on-close>
<embryonic-connections-dropped>
  embryonic-connections-dropped
</embryonic-connections-dropped>
<segments-updated-rtt>
  segments-updated-rtt
</segments-updated-rtt>
<attempts>
  attempts
</attempts>
<retransmit-timeouts>
  retransmit-timeouts
</retransmit-timeouts>
<connections-dropped-by-retransmit-timeout>
  connections-dropped-by-retransmit-timeout
</connections-dropped-by-retransmit-timeout>
<persist-timeouts>
  persist-timeouts
</persist-timeouts>
<connections-dropped-by-persist-timeout>
  connections-dropped-by-persist-timeout
</connections-dropped-by-persist-timeout>
<keepalive-timeouts>
  keepalive-timeouts
</keepalive-timeouts>
<keepalive-probes-sent>
  keepalive-probes-sent
</keepalive-probes-sent>
<keepalive-connections-dropped>
  keepalive-connections-dropped
</keepalive-connections-dropped>
<ack-header-predictions>
  ack-header-predictions
</ack-header-predictions>
<data-packet-header-predictions>
  data-packet-header-predictions
</data-packet-header-predictions>
<syncache-entries-added>
  syncache-entries-added
</syncache-entries-added>
```

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```
<retransmitted>
  retransmitted
</retransmitted>
<dupsyn>
  dupsyn
</dupsyn>
<dropped>
  dropped
</dropped>
<completed>
  completed
</completed>
<bucket-overflow>
  bucket-overflow
</bucket-overflow>
<cache-overflow>
  cache-overflow
</cache-overflow>
<reset>
  reset
</reset>
<stale>
  stale
</stale>
<aborted>
  aborted
</aborted>
<badack>
  badack
</badack>
<unreach>
  unreach
</unreach>
<zone-failures>
  zone-failures
</zone-failures>
<cookies-sent>
  cookies-sent
</cookies-sent>
<cookies-received>
  cookies-received
</cookies-received>
<sack-recovery-episodes>
  sack-recovery-episodes
</sack-recovery-episodes>
<segment-retransmits>
  segment-retransmits
</segment-retransmits>
<byte-retransmits>
  byte-retransmits
</byte-retransmits>
<sack-options-received>
  sack-options-received
</sack-options-received>
<sack-opitions-sent>
  sack-opitions-sent
```


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```
    </sack-opitions-sent>
    <sack-scoreboard-overflow>
      sack-scoreboard-overflow
    </sack-scoreboard-overflow>
    <acks-sent-in-response-but-not-exact-rsts>
      acks-sent-in-response-but-not-exact-rsts
    </acks-sent-in-response-but-not-exact-rsts>
    <acks-sent-in-response-to-syns-on-established-connections>
      acks-sent-in-response-to-syns-on-established-connections
    </acks-sent-in-response-to-syns-on-established-connections>
    <rcv-packets-dropped-due-to-bad-address>
      rcv-packets-dropped-due-to-bad-address
    </rcv-packets-dropped-due-to-bad-address>
    <out-of-sequence-segment-drops>
      out-of-sequence-segment-drops
    </out-of-sequence-segment-drops>
    <rst-packets>
      rst-packets
    </rst-packets>
    <icmp-packets-ignored>
      icmp-packets-ignored
    </icmp-packets-ignored>
    <send-packets-dropped>
      send-packets-dropped
    </send-packets-dropped>
    <rcv-packets-dropped>
      rcv-packets-dropped
    </rcv-packets-dropped>
    <outgoing-segments-dropped>
      outgoing-segments-dropped
    </outgoing-segments-dropped>
  </tcp>
</statistics>
```

Description

<tnp>

Usage

```
<statistics>
  <tnp>
    <unicast-packets-received>
      unicast-packets-received
    </unicast-packets-received>
    <broadcast-packets-received>
      broadcast-packets-received
    </broadcast-packets-received>
    <fragmented-packets-received>
      fragmented-packets-received
    </fragmented-packets-received>
    <received-hello-packets-dropped>
      received-hello-packets-dropped
    </received-hello-packets-dropped>
    <received-fragments-dropped>
      received-fragments-dropped
```

```
</received-fragments-dropped>
<fragment-reassembly-queue-flushes>
  fragment-reassembly-queue-flushes
</fragment-reassembly-queue-flushes>
<packets-with-tnp-src-address-collision-received>
  packets-with-tnp-src-address-collision-received
</packets-with-tnp-src-address-collision-received>
<hello-packets-received>
  hello-packets-received
</hello-packets-received>
<control-packets-received>
  control-packets-received
</control-packets-received>
<rdp-packets-received>
  rdp-packets-received
</rdp-packets-received>
<udp-packets-received>
  udp-packets-received
</udp-packets-received>
<tunnel-packets-received>
  tunnel-packets-received
</tunnel-packets-received>
<input-packets-discarded-with-no-protocol>
  input-packets-discarded-with-no-protocol
</input-packets-discarded-with-no-protocol>
<packets-of-version-unspecified-received>
  packets-of-version-unspecified-received
</packets-of-version-unspecified-received>
<packets-of-version1-received>
  packets-of-version1-received
</packets-of-version1-received>
<packets-of-version2-received>
  packets-of-version2-received
</packets-of-version2-received>
<packets-of-version3-received>
  packets-of-version3-received
</packets-of-version3-received>
<unicast-packets-sent>
  unicast-packets-sent
</unicast-packets-sent>
<broadcast-packets-sent>
  broadcast-packets-sent
</broadcast-packets-sent>
<fragmented-packets-sent>
  fragmented-packets-sent
</fragmented-packets-sent>
<sent-hello-packets-dropped>
  sent-hello-packets-dropped
</sent-hello-packets-dropped>
<sent-fragments-dropped>
  sent-fragments-dropped
</sent-fragments-dropped>
<hello-packets-sent>
  hello-packets-sent
</hello-packets-sent>
<control-packets-sent>
```


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```
      control-packets-sent
    </control-packets-sent>
    <rdp-packets-sent>
      rdp-packets-sent
    </rdp-packets-sent>
    <udp-packets-sent>
      udp-packets-sent
    </udp-packets-sent>
    <tunnel-packets-sent>
      tunnel-packets-sent
    </tunnel-packets-sent>
    <packets-sent-with-unknown-protocol>
      packets-sent-with-unknown-protocol
    </packets-sent-with-unknown-protocol>
    <packets-of-version-unspecified-sent>
      packets-of-version-unspecified-sent
    </packets-of-version-unspecified-sent>
    <packets-of-version1-sent>
      packets-of-version1-sent
    </packets-of-version1-sent>
    <packets-of-version2-sent>
      packets-of-version2-sent
    </packets-of-version2-sent>
    <packets-of-version3-sent>
      packets-of-version3-sent
    </packets-of-version3-sent>
  </tnp>
</statistics>
```

Description

<ttp>

Usage

```
<statistics>
  <ttp>
    <ttp-packets-sent>
      ttp-packets-sent
    </ttp-packets-sent>
    <packets-sent-while-unconnected>
      packets-sent-while-unconnected
    </packets-sent-while-unconnected>
    <packets-sent-while-interface-down>
      packets-sent-while-interface-down
    </packets-sent-while-interface-down>
    <packets-sent-could-not-get-buffer>
      packets-sent-could-not-get-buffer
    </packets-sent-could-not-get-buffer>
    <packets-sent-could-not-find-neighbor>
      packets-sent-could-not-find-neighbor
    </packets-sent-could-not-find-neighbor>
    <l2-packets-received>
      l2-packets-received
    </l2-packets-received>
    <unknown-l3-packets-received>
```

```
      unknown-l3-packets-received
    </unknown-l3-packets-received>
    <ipv4-l3-packets-received>
      ipv4-l3-packets-received
    </ipv4-l3-packets-received>
    <mpls-l3-packets-received>
      mpls-l3-packets-received
    </mpls-l3-packets-received>
    <mpls-to-ipv4-l3-packets-received>
      mpls-to-ipv4-l3-packets-received
    </mpls-to-ipv4-l3-packets-received>
    <ipv4-to-mpls-l3-packets-received>
      ipv4-to-mpls-l3-packets-received
    </ipv4-to-mpls-l3-packets-received>
    <ipv6-l3-packets-received>
      ipv6-l3-packets-received
    </ipv6-l3-packets-received>
    <arp-l3-packets-received>
      arp-l3-packets-received
    </arp-l3-packets-received>
    <clnp-l3-packets-received>
      clnp-l3-packets-received
    </clnp-l3-packets-received>
    <tnp-l3-packets-received>
      tnp-l3-packets-received
    </tnp-l3-packets-received>
    <null-l3-packets-received>
      null-l3-packets-received
    </null-l3-packets-received>
    <cyclotron-cycle-l3-packets-received>
      cyclotron-cycle-l3-packets-received
    </cyclotron-cycle-l3-packets-received>
    <cyclotron-send-l3-packets-received>
      cyclotron-send-l3-packets-received
    </cyclotron-send-l3-packets-received>
    <packets-received-while-unconnected>
      packets-received-while-unconnected
    </packets-received-while-unconnected>
    <packets-received-from-unknown-ifl>
      packets-received-from-unknown-ifl
    </packets-received-from-unknown-ifl>
    <input-packets-could-not-get-buffer>
      input-packets-could-not-get-buffer
    </input-packets-could-not-get-buffer>
    <input-packets-with-bad-type>
      input-packets-with-bad-type
    </input-packets-with-bad-type>
    <input-packets-with-discard-type>
      input-packets-with-discard-type
    </input-packets-with-discard-type>
    <input-packets-for-which-route-lookup-is-bypassed>
      input-packets-for-which-route-lookup-is-bypassed
    </input-packets-for-which-route-lookup-is-bypassed>
  </ttp>
</statistics>
```


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Description

<tudp>

Usage

```
<statistics>
 <tudp>
  <datagrams-received>
   datagrams-received
  </datagrams-received>
  <datagrams-with-incomplete-header>
   datagrams-with-incomplete-header
  </datagrams-with-incomplete-header>
  <datagrams-with-bad-data-length-field>
   datagrams-with-bad-data-length-field
  </datagrams-with-bad-data-length-field>
  <datagrams-with-bad-checksum>
   datagrams-with-bad-checksum
  </datagrams-with-bad-checksum>
  <datagrams-dropped-due-to-no-socket>
   datagrams-dropped-due-to-no-socket
  </datagrams-dropped-due-to-no-socket>
  <broadcast-or-multicast-datagrams-dropped-due-to-no-socket>
   broadcast-or-multicast-datagrams-dropped-due-to-no-socket
  </broadcast-or-multicast-datagrams-dropped-due-to-no-socket>
  <datagrams-dropped-due-to-full-socket-buffers>
   datagrams-dropped-due-to-full-socket-buffers
  </datagrams-dropped-due-to-full-socket-buffers>
  <delivered>
   delivered
  </delivered>
  <datagrams-output>
   datagrams-output
  </datagrams-output>
 </tudp>
</statistics>
```

Description

<udp>

Usage

```
<statistics>
 <udp>
  <datagrams-received>
   datagrams-received
  </datagrams-received>
  <datagrams-with-incomplete-header>
   datagrams-with-incomplete-header
  </datagrams-with-incomplete-header>
  <datagrams-with-bad-datalength-field>
   datagrams-with-bad-datalength-field
  </datagrams-with-bad-datalength-field>
  <datagrams-with-bad-checksum>
   datagrams-with-bad-checksum
```

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```
    </datagrams-with-bad-checksum>
    <datagrams-dropped-due-to-no-socket>
     datagrams-dropped-due-to-no-socket
    </datagrams-dropped-due-to-no-socket>
    <broadcast-or-multicast-datagrams-dropped-due-to-no-socket>
     broadcast-or-multicast-datagrams-dropped-due-to-no-socket
    </broadcast-or-multicast-datagrams-dropped-due-to-no-socket>
    <datagrams-dropped-due-to-full-socket-buffers>
     datagrams-dropped-due-to-full-socket-buffers
    </datagrams-dropped-due-to-full-socket-buffers>
    <datagrams-not-for-hashed-pcb>
     datagrams-not-for-hashed-pcb
    </datagrams-not-for-hashed-pcb>
    <datagrams-delivered>
     datagrams-delivered
    </datagrams-delivered>
    <datagrams-output>
     datagrams-output
    </datagrams-output>
   </udp>
</statistics>
```

Description

<vpls>

Usage

```
<statistics>
 <vpls>
  <total-packets-received>
   total-packets-received
  </total-packets-received>
  <vpls-packets-with-size-smaller-than-minimum>
   vpls-packets-with-size-smaller-than-minimum
  </vpls-packets-with-size-smaller-than-minimum>
  <vpls-packets-with-incorrect-version-number>
   vpls-packets-with-incorrect-version-number
  </vpls-packets-with-incorrect-version-number>
  <vpls-packets-for-this-host>
   vpls-packets-for-this-host
  </vpls-packets-for-this-host>
  <packets-with-no-logical-interface>
   packets-with-no-logical-interface
  </packets-with-no-logical-interface>
  <packets-with-no-family>
   packets-with-no-family
  </packets-with-no-family>
  <packets-with-no-route-table>
   packets-with-no-route-table
  </packets-with-no-route-table>
  <packets-with-no-auxiliary-table>
   packets-with-no-auxiliary-table
  </packets-with-no-auxiliary-table>
  <packets-with-no-corefacing-entry>
   packets-with-no-corefacing-entry
```


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```
</packets-with-no-corefacing-entry>
<packets-with-no-ce-facing-entry>
  packets-with-no-ce-facing-entry
</packets-with-no-ce-facing-entry>
<mac-route-learning-requests>
  mac-route-learning-requests
</mac-route-learning-requests>
<mac-routes-learned>
  mac-routes-learned
</mac-routes-learned>
<requests-to-learn-an-existing-route>
  requests-to-learn-an-existing-route
</requests-to-learn-an-existing-route>
<learning-requests-while-learning-disabled-on-interface>
  learning-requests-while-learning-disabled-on-interface
</learning-requests-while-learning-disabled-on-interface>
<learning-requests-over-capacity>
  learning-requests-over-capacity
</learning-requests-over-capacity>
<mac-routes-moved>
  mac-routes-moved
</mac-routes-moved>
<requests-to-move-static-route>
  requests-to-move-static-route
</requests-to-move-static-route>
<mac-route-aging-requests>
  mac-route-aging-requests
</mac-route-aging-requests>
<mac-routes-aged>
  mac-routes-aged
</mac-routes-aged>
<bogus-address-in-aging-requests>
  bogus-address-in-aging-requests
</bogus-address-in-aging-requests>
<requests-to-age-static-route>
  requests-to-age-static-route
</requests-to-age-static-route>
<requests-to-re-ageout-aged-route>
  requests-to-re-ageout-aged-route
</requests-to-re-ageout-aged-route>
<requests-involving-multiple-peer-fes>
  requests-involving-multiple-peer-fes
</requests-involving-multiple-peer-fes>
<aging-acks-from-pfe>
  aging-acks-from-pfe
</aging-acks-from-pfe>
<aging-non-acks-from-pfe>
  aging-non-acks-from-pfe
</aging-non-acks-from-pfe>
<aging-requests-timed-out-waiting-on-fes>
  aging-requests-timed-out-waiting-on-fes
</aging-requests-timed-out-waiting-on-fes>
<aging-requests-over-max-rate>
  aging-requests-over-max-rate
</aging-requests-over-max-rate>
<errors-finding-peer-fes>
```

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```
      errors-finding-peer-fes
    </errors-finding-peer-fes>
    <unsupported-platform>
      unsupported-platform
    </unsupported-platform>
    <packets-dropped-due-to-no-l3-route-table>
      packets-dropped-due-to-no-l3-route-table
    </packets-dropped-due-to-no-l3-route-table>
    <packets-dropped-due-to-no-local-ifl>
      packets-dropped-due-to-no-local-ifl
    </packets-dropped-due-to-no-local-ifl>
    <packets-punted>
      packets-punted
    </packets-punted>
    <packets-dropped-due-to-no-socket>
      packets-dropped-due-to-no-socket
    </packets-dropped-due-to-no-socket>
  </vpls>
</statistics>
```

Description

Summary of Subscriber Management Response Tags

<subscriber-management-summary-information>

Usage

```
<subscriber-management-summary-information>
  <subscriber-management-gres>
    subscriber-management-gres
  </subscriber-management-gres>
  <subscriber-management-mastership>
    subscriber-management-mastership
  </subscriber-management-mastership>
  <subscriber-management-db>
    subscriber-management-db
  </subscriber-management-db>
  <subscriber-management-chassisd-issu-state>
    subscriber-management-chassisd-issu-state
  </subscriber-management-chassisd-issu-state>
  <subscriber-management-issu-state>
    subscriber-management-issu-state
  </subscriber-management-issu-state>
  <subscriber-management-issu-wait>
    subscriber-management-issu-wait
  </subscriber-management-issu-wait>
  <no-information>
    no-information
  </no-information>
</subscriber-management-summary-information>
```

Description General state information about the Subscriber management status

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Summary of Subscribers Response Tags

<counters>

Usage

```
<subscribers-summary-information>
  <counters>
    <session-total>
      session-total
    </session-total>
    <session-state-init>
      session-state-init
    </session-state-init>
    <session-state-configured>
      session-state-configured
    </session-state-configured>
    <session-state-active>
      session-state-active
    </session-state-active>
    <session-state-terminating>
      session-state-terminating
    </session-state-terminating>
    <session-state-terminated>
      session-state-terminated
    </session-state-terminated>
    <session-state-unknown>
      session-state-unknown
    </session-state-unknown>
    <session-state-total>
      session-state-total
    </session-state-total>
    <session-type-none>
      session-type-none
    </session-type-none>
    <session-type-dhcp>
      session-type-dhcp
    </session-type-dhcp>
    <session-type-vlan>
      session-type-vlan
    </session-type-vlan>
    <session-type-generic>
      session-type-generic
    </session-type-generic>
    <session-type-mobileip>
      session-type-mobileip
    </session-type-mobileip>
    <session-type-vpls-pw>
      session-type-vpls-pw
    </session-type-vpls-pw>
    <session-type-ppp>
      session-type-ppp
    </session-type-ppp>
    <session-type-pppoe>
      session-type-pppoe
    </session-type-pppoe>
```

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```
<session-type-l2tp>
  session-type-l2tp
</session-type-l2tp>
<session-type-static>
  session-type-static
</session-type-static>
<session-type-mlppp>
  session-type-mlppp
</session-type-mlppp>
<session-type-xauth>
  session-type-xauth
</session-type-xauth>
<session-type-fwauth>
  session-type-fwauth
</session-type-fwauth>
<session-type-dot1x>
  session-type-dot1x
</session-type-dot1x>
<session-type-unknown>
  session-type-unknown
</session-type-unknown>
<session-type-total>
  session-type-total
</session-type-total>
<ifl-type-none>
  ifl-type-none
</ifl-type-none>
<ifl-type-static>
  ifl-type-static
</ifl-type-static>
<ifl-type-dynamic>
  ifl-type-dynamic
</ifl-type-dynamic>
<ifl-type-unknown>
  ifl-type-unknown
</ifl-type-unknown>
<config-bit-interface>
  config-bit-interface
</config-bit-interface>
<config-bit-inet>
  config-bit-inet
</config-bit-inet>
<config-bit-inet-filter>
  config-bit-inet-filter
</config-bit-inet-filter>
<config-bit-inet-service>
  config-bit-inet-service
</config-bit-inet-service>
<config-bit-routing-instance>
  config-bit-routing-instance
</config-bit-routing-instance>
<config-bit-routing-options>
  config-bit-routing-options
</config-bit-routing-options>
<config-bit-igmp>
  config-bit-igmp
```


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```
</config-bit-igmp>
<config-bit-cos>
  config-bit-cos
</config-bit-cos>
<config-bit-inet6>
  config-bit-inet6
</config-bit-inet6>
<config-bit-inet6-filter>
  config-bit-inet6-filter
</config-bit-inet6-filter>
<config-bit-inet6-service>
  config-bit-inet6-service
</config-bit-inet6-service>
<config-bit-mld>
  config-bit-mld
</config-bit-mld>
<config-bit-li>
  config-bit-li
</config-bit-li>
<config-bit-ra>
  config-bit-ra
</config-bit-ra>
<config-bit-ifl-filter>
  config-bit-ifl-filter
</config-bit-ifl-filter>
<config-bit-access-internal>
  config-bit-access-internal
</config-bit-access-internal>
<config-bit-iflset>
  config-bit-iflset
</config-bit-iflset>
<config-bit-vpls>
  config-bit-vpls
</config-bit-vpls>
<config-bit-unknown>
  config-bit-unknown
</config-bit-unknown>
<lsri-name>
  lsri-name
</lsri-name>
<lsri-count>
  lsri-count
</lsri-count>
<lsri-total>
  lsri-total
</lsri-total>
</counters>
</subscribers-summary-information>
```

Description Session Summary

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<error>

Usage

```
<subscribers-information>
  <error>
    <input-error-message>
      input-error-message
    </input-error-message>
  </error>
</subscribers-information>
```

Description

<subscriber>

Usage

```
<subscribers-information>
  <subscriber>
    <access-type>
      access-type
    </access-type>
    <user-name>
      user-name
    </user-name>
    <ip-address>
      ip-address
    </ip-address>
    <ip-netmask>
      ip-netmask
    </ip-netmask>
    <ipv6-address>
      ipv6-address
    </ipv6-address>
    <ipv6-network-prefix-length>
      ipv6-network-prefix-length
    </ipv6-network-prefix-length>
    <ipv6-prefix>
      ipv6-prefix
    </ipv6-prefix>
    <ipv6-address-pool>
      ipv6-address-pool
    </ipv6-address-pool>
    <logical-system>
      logical-system
    </logical-system>
    <routing-instance>
      routing-instance
    </routing-instance>
    <interface>
      interface
    </interface>
    <interface-type>
      interface-type
    </interface-type>
```


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```
<stacked-vlan-id>
  stacked-vlan-id
</stacked-vlan-id>
<vlan-id>
  vlan-id
</vlan-id>
<profile>
  profile
</profile>
<profile-version>
  profile-version
</profile-version>
<mac-address>
  mac-address
</mac-address>
<login-time>
  login-time
</login-time>
<state>
  state
</state>
<interface-set-name>
  interface-set-name
</interface-set-name>
<interface-set-type>
  interface-set-type
</interface-set-type>
<local-ip-address>
  local-ip-address
</local-ip-address>
<remote-ip-address>
  remote-ip-address
</remote-ip-address>
<ppp-state>
  ppp-state
</ppp-state>
<gw-address>
  gw-address
</gw-address>
<radius-accounting-id>
  radius-accounting-id
</radius-accounting-id>
<session-id>
  session-id
</session-id>
<underlying-session-id>
  underlying-session-id
</underlying-session-id>
<session-timeout>
  session-timeout
</session-timeout>
<idle-timeout>
  idle-timeout
</idle-timeout>
<agent-circuit-id>
  agent-circuit-id
```

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```
</agent-circuit-id>
<agent-remote-id>
  agent-remote-id
</agent-remote-id>
<ipv4-input-filter-name>
  ipv4-input-filter-name
</ipv4-input-filter-name>
<ipv4-output-filter-name>
  ipv4-output-filter-name
</ipv4-output-filter-name>
<ipv6-input-filter-name>
  ipv6-input-filter-name
</ipv6-input-filter-name>
<ipv6-output-filter-name>
  ipv6-output-filter-name
</ipv6-output-filter-name>
<ifl-input-filter-name>
  ifl-input-filter-name
</ifl-input-filter-name>
<ifl-output-filter-name>
  ifl-output-filter-name
</ifl-output-filter-name>
<adfv4-input-filter-name>
  adfv4-input-filter-name
</adfv4-input-filter-name>
<adfv4-input-rule>
  adfv4-input-rule
</adfv4-input-rule>
<adfv4-input-rule-decoded>
  adfv4-input-rule-decoded
</adfv4-input-rule-decoded>
<adfv4-output-filter-name>
  adfv4-output-filter-name
</adfv4-output-filter-name>
<adfv4-output-rule>
  adfv4-output-rule
</adfv4-output-rule>
<adfv4-output-rule-decoded>
  adfv4-output-rule-decoded
</adfv4-output-rule-decoded>
<adfv6-input-filter-name>
  adfv6-input-filter-name
</adfv6-input-filter-name>
<adfv6-input-rule>
  adfv6-input-rule
</adfv6-input-rule>
<adfv6-input-rule-decoded>
  adfv6-input-rule-decoded
</adfv6-input-rule-decoded>
<adfv6-output-filter-name>
  adfv6-output-filter-name
</adfv6-output-filter-name>
<adfv6-output-rule>
  adfv6-output-rule
</adfv6-output-rule>
<adfv6-output-rule-decoded>
```


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```
      adfv6-output-rule-decoded
    </adfv6-output-rule-decoded>
    <vpls-input-filter-name>
      vpls-input-filter-name
    </vpls-input-filter-name>
    <vpls-output-filter-name>
      vpls-output-filter-name
    </vpls-output-filter-name>
    <l2pol-input-filter-name>
      l2pol-input-filter-name
    </l2pol-input-filter-name>
    <l2pol-output-filter-name>
      l2pol-output-filter-name
    </l2pol-output-filter-name>
    <subscriber-id>
      subscriber-id
    </subscriber-id>
    <service-session-ids>
      service-session-ids
    </service-session-ids>
    <service-session-id>
      service-session-id
    </service-session-id>
    <service-session-name>
      service-session-name
    </service-session-name>
    <service-session-version>
      service-session-version
    </service-session-version>
    <number-of-service-sessions>
      number-of-service-sessions
    </number-of-service-sessions>
    <number-of-subscribers>
      number-of-subscribers
    </number-of-subscribers>
    <number-of-active-subscribers>
      number-of-active-subscribers
    </number-of-active-subscribers>
    <private-data>
      private-data
    </private-data>
    <hex-data>
      hex-data
    </hex-data>
    <dhcp-options>
      dhcp-options
    </dhcp-options>
    <server-dhcp-options>
      server-dhcp-options
    </server-dhcp-options>
    <no-attributes>
      no-attributes
    </no-attributes>
  </subscriber>
</subscribers-information>
```

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Description Active subscriber

<subscribers-information>

Usage

```
<subscribers-information>
  <subscriber>....</subscriber>
  <error>....</error>
</subscribers-information>
```

Description Subscribers

<subscribers-summary-information>

Usage

```
<subscribers-summary-information>
  <counters>....</counters>
</subscribers-summary-information>
```

Description Summary

Summary of Graceful Switchover Response Tags

<configuration-state>

Usage

```
<configuration-state>
  <configuration-ready>
    configuration-ready
  </configuration-ready>
  <configuration-synchronizing>
    configuration-synchronizing
  </configuration-synchronizing>
  <configuration-synchronize-error>
    configuration-synchronize-error
  </configuration-synchronize-error>
</configuration-state>
```

Description

<configuration-state>

Usage

```
<switchover-information>
  <configuration-state>
    <configuration-ready>
      configuration-ready
    </configuration-ready>
    <configuration-synchronizing>
      configuration-synchronizing
```


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```
    </configuration-synchronizing>
    <configuration-synchronize-error>
     configuration-synchronize-error
    </configuration-synchronize-error>
   </configuration-state>
</switchover-information>
```

Description

<configuration-state>

Usage

```
<multi-routing-engine-results>
 <multi-routing-engine-item>
  <switchover-information>
   <configuration-state>
    <configuration-ready>
     configuration-ready
    </configuration-ready>
    <configuration-synchronizing>
     configuration-synchronizing
    </configuration-synchronizing>
    <configuration-synchronize-error>
     configuration-synchronize-error
    </configuration-synchronize-error>
   </configuration-state>
  </switchover-information>
 </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<multi-routing-engine-item>

Usage

```
<multi-routing-engine-results>
 <multi-routing-engine-item>
  <re-name>
   re-name
  </re-name>
  <switchover-information>....</switchover-information>
 </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<multi-routing-engine-results>

Usage

```
<multi-routing-engine-results>
 <multi-routing-engine-item>....</multi-routing-engine-item>
</multi-routing-engine-results>
```

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Description

<peer-transition-state>

Usage

```
<peer-transition-state>
  <peer-connected>
    peer-connected
  </peer-connected>
  <peer-in-steady-state>
    peer-in-steady-state
  </peer-in-steady-state>
</peer-transition-state>
```

Description

<peer-transition-state>

Usage

```
<switchover-information>
  <peer-transition-state>
    <peer-connected>
      peer-connected
    </peer-connected>
    <peer-in-steady-state>
      peer-in-steady-state
    </peer-in-steady-state>
  </peer-transition-state>
</switchover-information>
```

Description

<peer-transition-state>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <switchover-information>
      <peer-transition-state>
        <peer-connected>
          peer-connected
        </peer-connected>
        <peer-in-steady-state>
          peer-in-steady-state
        </peer-in-steady-state>
      </peer-transition-state>
    </switchover-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

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<replication-state>

Usage

```
<replication-state>
  <replication-ready>
    replication-ready
  </replication-ready>
  <replication-synchronizing>
    replication-synchronizing
  </replication-synchronizing>
  <replication-error>
    replication-error
  </replication-error>
  <replication-version-mismatch>
    replication-version-mismatch
  </replication-version-mismatch>
  <replication-connection-error>
    replication-connection-error
  </replication-connection-error>
  <replication-reconnect-error>
    replication-reconnect-error
  </replication-reconnect-error>
  <replication-init-error>
    replication-init-error
  </replication-init-error>
  <replication-relay-enable>
    replication-relay-enable
  </replication-relay-enable>
</replication-state>
```

Description

<replication-state>

Usage

```
<switchover-information>
  <replication-state>
    <replication-ready>
      replication-ready
    </replication-ready>
    <replication-synchronizing>
      replication-synchronizing
    </replication-synchronizing>
    <replication-error>
      replication-error
    </replication-error>
    <replication-version-mismatch>
      replication-version-mismatch
    </replication-version-mismatch>
    <replication-connection-error>
      replication-connection-error
    </replication-connection-error>
    <replication-reconnect-error>
      replication-reconnect-error
```

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```
    </replication-reconnect-error>
    <replication-init-error>
     replication-init-error
    </replication-init-error>
    <replication-relay-enable>
     replication-relay-enable
    </replication-relay-enable>
   </replication-state>
  </switchover-information>
```

Description

<replication-state>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <switchover-information>
      <replication-state>
        <replication-ready>
          replication-ready
        </replication-ready>
        <replication-synchronizing>
          replication-synchronizing
        </replication-synchronizing>
        <replication-error>
          replication-error
        </replication-error>
        <replication-version-mismatch>
          replication-version-mismatch
        </replication-version-mismatch>
        <replication-connection-error>
          replication-connection-error
        </replication-connection-error>
        <replication-reconnect-error>
          replication-reconnect-error
        </replication-reconnect-error>
        <replication-init-error>
          replication-init-error
        </replication-init-error>
        <replication-relay-enable>
          replication-relay-enable
        </replication-relay-enable>
      </replication-state>
    </switchover-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<switchover-information>

Usage

```
<switchover-information>
```


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```
  <switchover-state>
    switchover-state
  </switchover-state>
  <switchover-mode>....</switchover-mode>
  <configuration-state>....</configuration-state>
  <replication-state>....</replication-state>
  <peer-transition-state>....</peer-transition-state>
</switchover-information>
```

Description

<switchover-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <switchover-information>
      <switchover-state>
        switchover-state
      </switchover-state>
      <switchover-mode>....</switchover-mode>
      <configuration-state>....</configuration-state>
      <replication-state>....</replication-state>
      <peer-transition-state>....</peer-transition-state>
    </switchover-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<switchover-mode>

Usage

```
<switchover-mode>
  <multichassis-mode>
    multichassis-mode
  </multichassis-mode>
  <gres-mode>
    gres-mode
  </gres-mode>
  <unknown-mode>
    unknown-mode
  </unknown-mode>
</switchover-mode>
```

Description

<switchover-mode>

Usage

```
<switchover-information>
  <switchover-mode>
    <multichassis-mode>
```

```
      multichassis-mode
    </multichassis-mode>
    <gres-mode>
      gres-mode
    </gres-mode>
    <unknown-mode>
      unknown-mode
    </unknown-mode>
  </switchover-mode>
</switchover-information>
```

Description

<switchover-mode>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <switchover-information>
      <switchover-mode>
        <multichassis-mode>
          multichassis-mode
        </multichassis-mode>
        <gres-mode>
          gres-mode
        </gres-mode>
        <unknown-mode>
          unknown-mode
        </unknown-mode>
      </switchover-mode>
    </switchover-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

Summary of CNLP Traceroute Response Tags

<clnp-err-code>

Usage

```
<clnp-err-code>
  <clnp-code-none>
    clnp-code-none
  </clnp-code-none>
</clnp-err-code>
```

Description Code of CLNP Error PDU message sub type

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<clnp-err-code>

Usage

```
<probe-result>
  <clnp-err-code>
    <clnp-code-none>
      clnp-code-none
    </clnp-code-none>
  </clnp-err-code>
</probe-result>
```

Description Code of CLNP Error PDU message sub type

<clnp-err-code>

Usage

```
<hop>
  <probe-result>
    <clnp-err-code>
      <clnp-code-none>
        clnp-code-none
      </clnp-code-none>
    </clnp-err-code>
  </probe-result>
</hop>
```

Description Code of CLNP Error PDU message sub type

<clnp-err-code>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <clnp-err-code>
        <clnp-code-none>
          clnp-code-none
        </clnp-code-none>
      </clnp-err-code>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Code of CLNP Error PDU message sub type

<clnp-err-type>

Usage

```
<clnp-err-type>
  <clnp-type-none>
```

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```
  clnp-type-none
 </clnp-type-none>
 <clnp-echoreply>
  clnp-echoreply
 </clnp-echoreply>
 <clnp-echo>
  clnp-echo
 </clnp-echo>
 <clnp-gen-noreas>
  clnp-gen-noreas
 </clnp-gen-noreas>
 <clnp-gen-protoerr>
  clnp-gen-protoerr
 </clnp-gen-protoerr>
 <clnp-gen-badcsum>
  clnp-gen-badcsum
 </clnp-gen-badcsum>
 <clnp-gen-hdrsyntax>
  clnp-gen-hdrsyntax
 </clnp-gen-hdrsyntax>
 <clnp-gen-segneeded>
  clnp-gen-segneeded
 </clnp-gen-segneeded>
 <clnp-gen-incomplete>
  clnp-gen-incomplete
 </clnp-gen-incomplete>
 <clnp-addr-destunreach>
  clnp-addr-destunreach
 </clnp-addr-destunreach>
 <clnp-addr-destunknown>
  clnp-addr-destunknown
 </clnp-addr-destunknown>
 <clnp-timxceed-intrans>
  clnp-timxceed-intrans
 </clnp-timxceed-intrans>
 <clnp-timxceed-reass>
  clnp-timxceed-reass
 </clnp-timxceed-reass>
</clnp-err-type>
```

Description Type of CLNP Error PDU message

<clnp-err-type>

Usage

```
<probe-result>
 <clnp-err-type>
  <clnp-type-none>
   clnp-type-none
  </clnp-type-none>
  <clnp-echoreply>
   clnp-echoreply
  </clnp-echoreply>
  <clnp-echo>
```


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```
      clnp-echo
     </clnp-echo>
     <clnp-gen-noreas>
      clnp-gen-noreas
     </clnp-gen-noreas>
     <clnp-gen-protoerr>
      clnp-gen-protoerr
     </clnp-gen-protoerr>
     <clnp-gen-badcsum>
      clnp-gen-badcsum
     </clnp-gen-badcsum>
     <clnp-gen-hdrsyntax>
      clnp-gen-hdrsyntax
     </clnp-gen-hdrsyntax>
     <clnp-gen-segneeded>
      clnp-gen-segneeded
     </clnp-gen-segneeded>
     <clnp-gen-incomplete>
      clnp-gen-incomplete
     </clnp-gen-incomplete>
     <clnp-addr-destunreach>
      clnp-addr-destunreach
     </clnp-addr-destunreach>
     <clnp-addr-destunknown>
      clnp-addr-destunknown
     </clnp-addr-destunknown>
     <clnp-timxceed-intrans>
      clnp-timxceed-intrans
     </clnp-timxceed-intrans>
     <clnp-timxceed-reass>
      clnp-timxceed-reass
     </clnp-timxceed-reass>
    </clnp-err-type>
   </probe-result>
```

Description Type of CLNP Error PDU message

<clnp-err-type>

Usage

```
<hop>
 <probe-result>
  <clnp-err-type>
   <clnp-type-none>
    clnp-type-none
   </clnp-type-none>
   <clnp-echoreply>
    clnp-echoreply
   </clnp-echoreply>
   <clnp-echo>
    clnp-echo
   </clnp-echo>
   <clnp-gen-noreas>
    clnp-gen-noreas
```

```
        </clnp-gen-noreas>
        <clnp-gen-protoerr>
          clnp-gen-protoerr
        </clnp-gen-protoerr>
        <clnp-gen-badcsum>
          clnp-gen-badcsum
        </clnp-gen-badcsum>
        <clnp-gen-hdrsyntax>
          clnp-gen-hdrsyntax
        </clnp-gen-hdrsyntax>
        <clnp-gen-segneeded>
          clnp-gen-segneeded
        </clnp-gen-segneeded>
        <clnp-gen-incomplete>
          clnp-gen-incomplete
        </clnp-gen-incomplete>
        <clnp-addr-destunreach>
          clnp-addr-destunreach
        </clnp-addr-destunreach>
        <clnp-addr-destunknown>
          clnp-addr-destunknown
        </clnp-addr-destunknown>
        <clnp-timxceed-intrans>
          clnp-timxceed-intrans
        </clnp-timxceed-intrans>
        <clnp-timxceed-reass>
          clnp-timxceed-reass
        </clnp-timxceed-reass>
      </clnp-err-type>
    </probe-result>
  </hop>
```

Description Type of CLNP Error PDU message

<clnp-err-type>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <clnp-err-type>
        <clnp-type-none>
          clnp-type-none
        </clnp-type-none>
        <clnp-echoreply>
          clnp-echoreply
        </clnp-echoreply>
        <clnp-echo>
          clnp-echo
        </clnp-echo>
        <clnp-gen-noreas>
          clnp-gen-noreas
        </clnp-gen-noreas>
        <clnp-gen-protoerr>
```


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```
        clnp-gen-protoerr
       </clnp-gen-protoerr>
       <clnp-gen-badcsum>
        clnp-gen-badcsum
       </clnp-gen-badcsum>
       <clnp-gen-hdrsyntax>
        clnp-gen-hdrsyntax
       </clnp-gen-hdrsyntax>
       <clnp-gen-segneeded>
        clnp-gen-segneeded
       </clnp-gen-segneeded>
       <clnp-gen-incomplete>
        clnp-gen-incomplete
       </clnp-gen-incomplete>
       <clnp-addr-destunreach>
        clnp-addr-destunreach
       </clnp-addr-destunreach>
       <clnp-addr-destunknown>
        clnp-addr-destunknown
       </clnp-addr-destunknown>
       <clnp-timxceed-intrans>
        clnp-timxceed-intrans
       </clnp-timxceed-intrans>
       <clnp-timxceed-reass>
        clnp-timxceed-reass
       </clnp-timxceed-reass>
      </clnp-err-type>
     </probe-result>
    </hop>
   </traceroute-results>
```

Description Type of CLNP Error PDU message

<hop>

Usage

```
<hop>
 <ttl-value>
  ttl-value
 </ttl-value>
 <last-iso-address>
  last-iso-address
 </last-iso-address>
 <last-host-name>
  last-host-name
 </last-host-name>
 <percent-loss>
  percent-loss
 </percent-loss>
 <probe-result>....</probe-result>
</hop>
```

Description Traceroute results for a single hop (TTL value)

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<hop>

Usage

```
<traceroute-results>
  <hop>
    <ttl-value>
      ttl-value
    </ttl-value>
    <last-iso-address>
      last-iso-address
    </last-iso-address>
    <last-host-name>
      last-host-name
    </last-host-name>
    <percent-loss>
      percent-loss
    </percent-loss>
    <probe-result>....</probe-result>
  </hop>
</traceroute-results>
```

Description Traceroute results for a single hop (TTL value)

<probe-result>

Usage

```
<probe-result>
  <date-determined>
    date-determined
  </date-determined>
  <probe-index>
    probe-index
  </probe-index>
  <probe-status>....</probe-status>
  <clnp-err-type>....</clnp-err-type>
  <clnp-err-code>....</clnp-err-code>
  <iso-address>
    iso-address
  </iso-address>
  <host-name>
    host-name
  </host-name>
  <rtt-us>
    rtt-us
  </rtt-us>
  <rtt-ms>
    rtt-ms
  </rtt-ms>
  <error-indicator>
    error-indicator
  </error-indicator>
</probe-result>
```


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Description Result of CLNP probe

<probe-result>

Usage

```
<hop>
  <probe-result>
    <date-determined>
      date-determined
    </date-determined>
    <probe-index>
      probe-index
    </probe-index>
    <probe-status>....</probe-status>
    <clnp-err-type>....</clnp-err-type>
    <clnp-err-code>....</clnp-err-code>
    <iso-address>
      iso-address
    </iso-address>
    <host-name>
      host-name
    </host-name>
    <rtt-us>
      rtt-us
    </rtt-us>
    <rtt-ms>
      rtt-ms
    </rtt-ms>
    <error-indicator>
      error-indicator
    </error-indicator>
  </probe-result>
</hop>
```

Description Result of CLNP probe

<probe-result>

Usage

```
<traceroute-results>
  <hop>
    <probe-result>
      <date-determined>
        date-determined
      </date-determined>
      <probe-index>
        probe-index
      </probe-index>
      <probe-status>....</probe-status>
      <clnp-err-type>....</clnp-err-type>
      <clnp-err-code>....</clnp-err-code>
      <iso-address>
        iso-address
```

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```
      </iso-address>
      <host-name>
        host-name
      </host-name>
      <rtt-us>
        rtt-us
      </rtt-us>
      <rtt-ms>
        rtt-ms
      </rtt-ms>
      <error-indicator>
        error-indicator
      </error-indicator>
    </probe-result>
  </hop>
</traceroute-results>
```

Description Result of CLNP probe

<probe-status>

Usage

```
<probe-status>
  <no-reply>
    no-reply
  </no-reply>
  <probe-success>
    probe-success
  </probe-success>
  <probe-error>
    probe-error
  </probe-error>
  <probe-reached>
    probe-reached
  </probe-reached>
  <internal-err>
    internal-err
  </internal-err>
  <no-route-to-target>
    no-route-to-target
  </no-route-to-target>
  <interface-inactive-to-target>
    interface-inactive-to-target
  </interface-inactive-to-target>
  <invalid-host-address>
    invalid-host-address
  </invalid-host-address>
</probe-status>
```

Description Status of CLNP probe

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<probe-status>

Usage

```
<probe-result>
  <probe-status>
    <no-reply>
      no-reply
    </no-reply>
    <probe-success>
      probe-success
    </probe-success>
    <probe-error>
      probe-error
    </probe-error>
    <probe-reached>
      probe-reached
    </probe-reached>
    <internal-err>
      internal-err
    </internal-err>
    <no-route-to-target>
      no-route-to-target
    </no-route-to-target>
    <interface-inactive-to-target>
      interface-inactive-to-target
    </interface-inactive-to-target>
    <invalid-host-address>
      invalid-host-address
    </invalid-host-address>
  </probe-status>
</probe-result>
```

Description Status of CLNP probe

<probe-status>

Usage

```
<hop>
  <probe-result>
    <probe-status>
      <no-reply>
        no-reply
      </no-reply>
      <probe-success>
        probe-success
      </probe-success>
      <probe-error>
        probe-error
      </probe-error>
      <probe-reached>
        probe-reached
      </probe-reached>
      <internal-err>
```

```
      internal-err
     </internal-err>
     <no-route-to-target>
      no-route-to-target
     </no-route-to-target>
     <interface-inactive-to-target>
      interface-inactive-to-target
     </interface-inactive-to-target>
     <invalid-host-address>
      invalid-host-address
     </invalid-host-address>
    </probe-status>
   </probe-result>
  </hop>
```

Description Status of CLNP probe

<probe-status>

Usage

```
<traceroute-results>
 <hop>
  <probe-result>
   <probe-status>
    <no-reply>
     no-reply
    </no-reply>
    <probe-success>
     probe-success
    </probe-success>
    <probe-error>
     probe-error
    </probe-error>
    <probe-reached>
     probe-reached
    </probe-reached>
    <internal-err>
     internal-err
    </internal-err>
    <no-route-to-target>
     no-route-to-target
    </no-route-to-target>
    <interface-inactive-to-target>
     interface-inactive-to-target
    </interface-inactive-to-target>
    <invalid-host-address>
     invalid-host-address
    </invalid-host-address>
   </probe-status>
  </probe-result>
 </hop>
</traceroute-results>
```


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Description Status of CLNP probe

<test-status>

Usage

```
<test-status>
  <success>
    success
  </success>
  <failure>
    failure
  </failure>
  <internal-error>
    internal-error
  </internal-error>
  <target-unresolved>
    target-unresolved
  </target-unresolved>
  <target-invalid>
    target-invalid
  </target-invalid>
  <source-unresolved>
    source-unresolved
  </source-unresolved>
  <source-invalid>
    source-invalid
  </source-invalid>
  <routing-instance-invalid>
    routing-instance-invalid
  </routing-instance-invalid>
  <interface-invalid>
    interface-invalid
  </interface-invalid>
</test-status>
```

Description Results of a single traceroute test

<traceroute-results>

Usage

```
<traceroute-results>
  <target>
    target
  </target>
  <source>
    source
  </source>
  <target-iso>
    target-iso
  </target-iso>
  <max-hop-index>
    max-hop-index
  </max-hop-index>
```

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```
<packet-size>
  packet-size
</packet-size>
<hop>....</hop>
</traceroute-results>
```

Description

Summary of Virtual Router Redundancy Protocol Response Tags

<active-inherit>

Usage

```
<active-inherit>
  <vrrp-mode>
    vrrp-mode
  </vrrp-mode>
  <active-node>
    active-node
  </active-node>
  <active-group>
    active-group
  </active-group>
  <accept-data-mode>
    accept-data-mode
  </accept-data-mode>
  <vip-count>
    vip-count
  </vip-count>
  <vip>
    vip
  </vip>
  <active-router-ip>
    active-router-ip
  </active-router-ip>
  <virtual-mac>
    virtual-mac
  </virtual-mac>
</active-inherit>
```

Description Display active-inherit related parameters

<active-inherit>

Usage

```
<vrrp-interface>
  <active-inherit>
    <vrrp-mode>
      vrrp-mode
    </vrrp-mode>
    <active-node>
      active-node
    </active-node>
```


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```
<active-group>
  active-group
</active-group>
<accept-data-mode>
  accept-data-mode
</accept-data-mode>
<vip-count>
  vip-count
</vip-count>
<vip>
  vip
</vip>
<active-router-ip>
  active-router-ip
</active-router-ip>
<virtual-mac>
  virtual-mac
</virtual-mac>
</active-inherit>
</vrrp-interface>
```

Description Display active-inherit related parameters

<active-inherit>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <active-inherit>
      <vrrp-mode>
        vrrp-mode
      </vrrp-mode>
      <active-node>
        active-node
      </active-node>
      <active-group>
        active-group
      </active-group>
      <accept-data-mode>
        accept-data-mode
      </accept-data-mode>
      <vip-count>
        vip-count
      </vip-count>
      <vip>
        vip
      </vip>
      <active-router-ip>
        active-router-ip
      </active-router-ip>
      <virtual-mac>
        virtual-mac
      </virtual-mac>
    </active-inherit>
```

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```
  </vrrp-interface>
</vrrp-information>
```

Description Display active-inherit related parameters

<bandwidth>

Usage

```
<bandwidth>
  <bandwidth-threshold>
    bandwidth-threshold
  </bandwidth-threshold>
  <bandwidth-priority-cost>
    bandwidth-priority-cost
  </bandwidth-priority-cost>
  <bandwidth-active>
    bandwidth-active
  </bandwidth-active>
  <priority-down-status>
    priority-down-status
  </priority-down-status>
  <priority-cost>
    priority-cost
  </priority-cost>
  <priority-active>
    priority-active
  </priority-active>
</bandwidth>
```

Description Display bandwidth parameters.

<bandwidth>

Usage

```
<track-vrrpd-interface>
  <bandwidth>
    <bandwidth-threshold>
      bandwidth-threshold
    </bandwidth-threshold>
    <bandwidth-priority-cost>
      bandwidth-priority-cost
    </bandwidth-priority-cost>
    <bandwidth-active>
      bandwidth-active
    </bandwidth-active>
    <priority-down-status>
      priority-down-status
    </priority-down-status>
    <priority-cost>
      priority-cost
    </priority-cost>
    <priority-active>
```


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```
      priority-active
    </priority-active>
  </bandwidth>
</track-vrrpd-interface>
```

Description Display bandwidth parameters.

<bandwidth>

Usage

```
<vrrp-interface>
  <bandwidth>
    <bandwidth-threshold>
      bandwidth-threshold
    </bandwidth-threshold>
    <bandwidth-priority-cost>
      bandwidth-priority-cost
    </bandwidth-priority-cost>
    <bandwidth-active>
      bandwidth-active
    </bandwidth-active>
    <priority-down-status>
      priority-down-status
    </priority-down-status>
    <priority-cost>
      priority-cost
    </priority-cost>
    <priority-active>
      priority-active
    </priority-active>
  </bandwidth>
</vrrp-interface>
```

Description Display bandwidth parameters.

<bandwidth>

Usage

```
<vrrp-interface>
  <track-vrrpd-interface>
    <bandwidth>
      <bandwidth-threshold>
        bandwidth-threshold
      </bandwidth-threshold>
      <bandwidth-priority-cost>
        bandwidth-priority-cost
      </bandwidth-priority-cost>
      <bandwidth-active>
        bandwidth-active
      </bandwidth-active>
      <priority-down-status>
        priority-down-status
```

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```
      </priority-down-status>
      <priority-cost>
        priority-cost
      </priority-cost>
      <priority-active>
        priority-active
      </priority-active>
    </bandwidth>
  </track-vrrpd-interface>
</vrrp-interface>
```

Description Display bandwidth parameters.

<bandwidth>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <bandwidth>
      <bandwidth-threshold>
        bandwidth-threshold
      </bandwidth-threshold>
      <bandwidth-priority-cost>
        bandwidth-priority-cost
      </bandwidth-priority-cost>
      <bandwidth-active>
        bandwidth-active
      </bandwidth-active>
      <priority-down-status>
        priority-down-status
      </priority-down-status>
      <priority-cost>
        priority-cost
      </priority-cost>
      <priority-active>
        priority-active
      </priority-active>
    </bandwidth>
  </vrrp-interface>
</vrrp-information>
```

Description Display bandwidth parameters.

<bandwidth>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <track-vrrpd-interface>
      <bandwidth>
        <bandwidth-threshold>
          bandwidth-threshold
```


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```
        </bandwidth-threshold>
        <bandwidth-priority-cost>
          bandwidth-priority-cost
        </bandwidth-priority-cost>
        <bandwidth-active>
          bandwidth-active
        </bandwidth-active>
        <priority-down-status>
          priority-down-status
        </priority-down-status>
        <priority-cost>
          priority-cost
        </priority-cost>
        <priority-active>
          priority-active
        </priority-active>
      </bandwidth>
    </track-vrrpd-interface>
  </vrrp-interface>
</vrrp-information>
```

Description Display bandwidth parameters.

<group-vrrp-pdu-error-statistics>

Usage

```
<group-vrrp-pdu-error-statistics>
  <bad-authentication-type-received>
    bad-authentication-type-received
  </bad-authentication-type-received>
  <bad-password-received>
    bad-password-received
  </bad-password-received>
  <bad-md5-digest-received>
    bad-md5-digest-received
  </bad-md5-digest-received>
  <bad-advertisement-timer-received>
    bad-advertisement-timer-received
  </bad-advertisement-timer-received>
  <bad-vip-count-received>
    bad-vip-count-received
  </bad-vip-count-received>
  <bad-vipaddr-received>
    bad-vipaddr-received
  </bad-vipaddr-received>
</group-vrrp-pdu-error-statistics>
```

Description Errored statistics for the VRRP group.

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<group-vrrp-pdu-error-statistics>

Usage

```
<vrrp-interface>
  <group-vrrp-pdu-error-statistics>
    <bad-authentication-type-received>
      bad-authentication-type-received
    </bad-authentication-type-received>
    <bad-password-received>
      bad-password-received
    </bad-password-received>
    <bad-md5-digest-received>
      bad-md5-digest-received
    </bad-md5-digest-received>
    <bad-advertisement-timer-received>
      bad-advertisement-timer-received
    </bad-advertisement-timer-received>
    <bad-vip-count-received>
      bad-vip-count-received
    </bad-vip-count-received>
    <bad-vipaddr-received>
      bad-vipaddr-received
    </bad-vipaddr-received>
  </group-vrrp-pdu-error-statistics>
</vrrp-interface>
```

Description Errored statistics for the VRRP group.

<group-vrrp-pdu-error-statistics>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <group-vrrp-pdu-error-statistics>
      <bad-authentication-type-received>
        bad-authentication-type-received
      </bad-authentication-type-received>
      <bad-password-received>
        bad-password-received
      </bad-password-received>
      <bad-md5-digest-received>
        bad-md5-digest-received
      </bad-md5-digest-received>
      <bad-advertisement-timer-received>
        bad-advertisement-timer-received
      </bad-advertisement-timer-received>
      <bad-vip-count-received>
        bad-vip-count-received
      </bad-vip-count-received>
      <bad-vipaddr-received>
        bad-vipaddr-received
      </bad-vipaddr-received>
    </group-vrrp-pdu-error-statistics>
```


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```
  </vrrp-interface>
</vrrp-information>
```

Description Errored statistics for the VRRP group.

<group-vrrp-pdu-statistics>

Usage

```
<group-vrrp-pdu-statistics>
  <advertisement-sent>
    advertisement-sent
  </advertisement-sent>
  <advertisement-received>
    advertisement-received
  </advertisement-received>
</group-vrrp-pdu-statistics>
```

Description Number of VRRP advertisements sent and received by the group.

<group-vrrp-pdu-statistics>

Usage

```
<vrrp-interface>
  <group-vrrp-pdu-statistics>
    <advertisement-sent>
      advertisement-sent
    </advertisement-sent>
    <advertisement-received>
      advertisement-received
    </advertisement-received>
  </group-vrrp-pdu-statistics>
</vrrp-interface>
```

Description Number of VRRP advertisements sent and received by the group.

<group-vrrp-pdu-statistics>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <group-vrrp-pdu-statistics>
      <advertisement-sent>
        advertisement-sent
      </advertisement-sent>
      <advertisement-received>
        advertisement-received
      </advertisement-received>
    </group-vrrp-pdu-statistics>
  </vrrp-interface>
</vrrp-information>
```

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Description Number of VRRP advertisements sent and received by the group.

<group-vrrp-state-transition-statistics>

Usage

```
<group-vrrp-state-transition-statistics>
  <idle-master-transitions>
    idle-master-transitions
  </idle-master-transitions>
  <idle-backup-transitions>
    idle-backup-transitions
  </idle-backup-transitions>
  <backup-master-transitions>
    backup-master-transitions
  </backup-master-transitions>
  <master-backup-transitions>
    master-backup-transitions
  </master-backup-transitions>
</group-vrrp-state-transition-statistics>
```

Description State transition statistics for the VRRP group.

<group-vrrp-state-transition-statistics>

Usage

```
<vrrp-interface>
  <group-vrrp-state-transition-statistics>
    <idle-master-transitions>
      idle-master-transitions
    </idle-master-transitions>
    <idle-backup-transitions>
      idle-backup-transitions
    </idle-backup-transitions>
    <backup-master-transitions>
      backup-master-transitions
    </backup-master-transitions>
    <master-backup-transitions>
      master-backup-transitions
    </master-backup-transitions>
  </group-vrrp-state-transition-statistics>
</vrrp-interface>
```

Description State transition statistics for the VRRP group.

<group-vrrp-state-transition-statistics>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <group-vrrp-state-transition-statistics>
      <idle-master-transitions>
        idle-master-transitions
```

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```
      </idle-master-transitions>
      <idle-backup-transitions>
       idle-backup-transitions
      </idle-backup-transitions>
      <backup-master-transitions>
       backup-master-transitions
      </backup-master-transitions>
      <master-backup-transitions>
       master-backup-transitions
      </master-backup-transitions>
     </group-vrrp-state-transition-statistics>
    </vrrp-interface>
</vrrp-information>
```

Description State transition statistics for the VRRP group.

<preempt-hold>

Usage

```
<preempt-hold>
 <preempt>
  preempt
 </preempt>
 <preempt-hold-time>
  preempt-hold-time
 </preempt-hold-time>
 <accept-data-mode>
  accept-data-mode
 </accept-data-mode>
 <vip-count>
  vip-count
 </vip-count>
 <vip>
  vip
 </vip>
</preempt-hold>
```

Description Display preempt related parameters

<preempt-hold>

Usage

```
<vrrp-interface>
 <preempt-hold>
  <preempt>
   preempt
  </preempt>
  <preempt-hold-time>
   preempt-hold-time
  </preempt-hold-time>
  <accept-data-mode>
   accept-data-mode
```

```
    </accept-data-mode>
    <vip-count>
     vip-count
    </vip-count>
    <vip>
     vip
    </vip>
   </preempt-hold>
  </vrrp-interface>
```

Description Display preempt related parameters

<preempt-hold>

Usage

```
<vrrp-information>
 <vrrp-interface>
  <preempt-hold>
   <preempt>
    preempt
   </preempt>
   <preempt-hold-time>
    preempt-hold-time
   </preempt-hold-time>
   <accept-data-mode>
    accept-data-mode
   </accept-data-mode>
   <vip-count>
    vip-count
   </vip-count>
   <vip>
    vip
   </vip>
  </preempt-hold>
 </vrrp-interface>
</vrrp-information>
```

Description Display preempt related parameters

<track-route-entry>

Usage

```
<track-route-entry>
 <route-addr>
  route-addr
 </route-addr>
 <route-state>
  route-state
 </route-state>
 <route-priority>
  route-priority
 </route-priority>
```


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```
<interface>
  interface
</interface>
<group>
  group
</group>
<configured-priority>
  configured-priority
</configured-priority>
<current-priority>
  current-priority
</current-priority>
<vrrp-state>
  vrrp-state
</vrrp-state>
</track-route-entry>
```

Description Route Tracking entry table.

<track-route-entry>

Usage

```
<vrrp-interface>
  <track-route-entry>
    <route-addr>
      route-addr
    </route-addr>
    <route-state>
      route-state
    </route-state>
    <route-priority>
      route-priority
    </route-priority>
    <interface>
      interface
    </interface>
    <group>
      group
    </group>
    <configured-priority>
      configured-priority
    </configured-priority>
    <current-priority>
      current-priority
    </current-priority>
    <vrrp-state>
      vrrp-state
    </vrrp-state>
  </track-route-entry>
</vrrp-interface>
```

Description Route Tracking entry table.

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<track-route-entry>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <track-route-entry>
      <route-addr>
        route-addr
      </route-addr>
      <route-state>
        route-state
      </route-state>
      <route-priority>
        route-priority
      </route-priority>
      <interface>
        interface
      </interface>
      <group>
        group
      </group>
      <configured-priority>
        configured-priority
      </configured-priority>
      <current-priority>
        current-priority
      </current-priority>
      <vrrp-state>
        vrrp-state
      </vrrp-state>
    </track-route-entry>
  </vrrp-interface>
</vrrp-information>
```

Description Route Tracking entry table.

<track-route-node-information>

Usage

```
<track-route-node-information>
  <route-addr>
    route-addr
  </route-addr>
  <route-instance>
    route-instance
  </route-instance>
  <route-state>
    route-state
  </route-state>
  <route-priority>
    route-priority
  </route-priority>
```


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```
</track-route-node-information>
```

Description Display route tracking details.

<track-route-node-information>

Usage

```
<vrrp-interface>
  <track-route-node-information>
    <route-addr>
      route-addr
    </route-addr>
    <route-instance>
      route-instance
    </route-instance>
    <route-state>
      route-state
    </route-state>
    <route-priority>
      route-priority
    </route-priority>
  </track-route-node-information>
</vrrp-interface>
```

Description Display route tracking details.

<track-route-node-information>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <track-route-node-information>
      <route-addr>
        route-addr
      </route-addr>
      <route-instance>
        route-instance
      </route-instance>
      <route-state>
        route-state
      </route-state>
      <route-priority>
        route-priority
      </route-priority>
    </track-route-node-information>
  </vrrp-interface>
</vrrp-information>
```

Description Display route tracking details.

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<track-vrrpd-interface>

Usage

```
<track-vrrpd-interface>
  <tracked-interface>
    tracked-interface
  </tracked-interface>
  <interface-state>
    interface-state
  </interface-state>
  <interface-speed>
    interface-speed
  </interface-speed>
  <current-priority-cost>
    current-priority-cost
  </current-priority-cost>
  <bandwidth>....</bandwidth>
</track-vrrpd-interface>
```

Description Display VRRP interface tracking details

<track-vrrpd-interface>

Usage

```
<vrrp-interface>
  <track-vrrpd-interface>
    <tracked-interface>
      tracked-interface
    </tracked-interface>
    <interface-state>
      interface-state
    </interface-state>
    <interface-speed>
      interface-speed
    </interface-speed>
    <current-priority-cost>
      current-priority-cost
    </current-priority-cost>
    <bandwidth>....</bandwidth>
  </track-vrrpd-interface>
</vrrp-interface>
```

Description Display VRRP interface tracking details

<track-vrrpd-interface>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <track-vrrpd-interface>
      <tracked-interface>
        tracked-interface
```


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```
      </tracked-interface>
      <interface-state>
        interface-state
      </interface-state>
      <interface-speed>
        interface-speed
      </interface-speed>
      <current-priority-cost>
        current-priority-cost
      </current-priority-cost>
      <bandwidth>....</bandwidth>
    </track-vrrpd-interface>
  </vrrp-interface>
</vrrp-information>
```

Description Display VRRP interface tracking details

<vrrp-information>

Usage

```
<vrrp-information>
  <vrrp-interface>....</vrrp-interface>
</vrrp-information>
```

Description Display vrrp information

<vrrp-interface>

Usage

```
<vrrp-interface>
  <groups>
    groups
  </groups>
  <active>
    active
  </active>
  <physical-interface>
    physical-interface
  </physical-interface>
  <interface>
    interface
  </interface>
  <address>
    address
  </address>
  <interface-state>
    interface-state
  </interface-state>
  <group>
    group
  </group>
  <vrrp-state>
```

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```
    vrrp-state
  </vrrp-state>
  <timer-name>
    timer-name
  </timer-name>
  <timer-value>
    timer-value
  </timer-value>
  <local-interface-address>
    local-interface-address
  </local-interface-address>
  <vrrp-vlan>....</vrrp-vlan>
  <bandwidth>....</bandwidth>
  <group-vrrp-pdu-statistics>....</group-vrrp-pdu-statistics>
  <group-vrrp-pdu-error-statistics>....</group-vrrp-pdu-error-statistics>
<group-vrrp-state-transition-statistics>....</group-vrrp-state-transition-statistics>

  <preempt-hold>....</preempt-hold>
  <virtual-ip-address>
    virtual-ip-address
  </virtual-ip-address>
  <unit>
    unit
  </unit>
  <index>
    index
  </index>
  <interface-index>
    interface-index
  </interface-index>
  <snmp-interface-index>
    snmp-interface-index
  </snmp-interface-index>
  <vrrp-traps>
    vrrp-traps
  </vrrp-traps>
  <group-priority>
    group-priority
  </group-priority>
  <advertisement-interval>
    advertisement-interval
  </advertisement-interval>
  <authentication-type>
    authentication-type
  </authentication-type>
  <delay-threshold>
    delay-threshold
  </delay-threshold>
  <computed-send-rate>
    computed-send-rate
  </computed-send-rate>
  <preempt>
    preempt
  </preempt>
  <accept-data-mode>
    accept-data-mode
```


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```
</accept-data-mode>
<vip-count>
  vip-count
</vip-count>
<vip>
  vip
</vip>
<dead-timer>
  dead-timer
</dead-timer>
<master-priority>
  master-priority
</master-priority>
<master-router-ip>
  master-router-ip
</master-router-ip>
<active-router-ip>
  active-router-ip
</active-router-ip>
<master-router>
  master-router
</master-router>
<router-ip>
  router-ip
</router-ip>
<virtual-router-uptime>
  virtual-router-uptime
</virtual-router-uptime>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<virtual-mac>
  virtual-mac
</virtual-mac>
<tracking>
  tracking
</tracking>
<preempt-hold-time>
  preempt-hold-time
</preempt-hold-time>
<current-priority>
  current-priority
</current-priority>
<configured-priority>
  configured-priority
</configured-priority>
<priority-hold-time>
  priority-hold-time
</priority-hold-time>
<remaining-time>
  remaining-time
</remaining-time>
<pending-priority>
  pending-priority
</pending-priority>
<interface-tracking-state>
```

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```
  interface-tracking-state
</interface-tracking-state>
<interface-count>
  interface-count
</interface-count>
<route-tracking-state>
  route-tracking-state
</route-tracking-state>
<route-count>
  route-count
</route-count>
<interface-speed>
  interface-speed
</interface-speed>
<current-priority-cost>
  current-priority-cost
</current-priority-cost>
<tracked-interface>
  tracked-interface
</tracked-interface>
<track-route-node-information>....</track-route-node-information>
<track-vrrpd-interface>....</track-vrrpd-interface>
<track-route-entry>....</track-route-entry>
<vrrp-message>....</vrrp-message>
<invalid-ipah-next-type-received>
  invalid-ipah-next-type-received
</invalid-ipah-next-type-received>
<invalid-vrrp-ttl-value-received>
  invalid-vrrp-ttl-value-received
</invalid-vrrp-ttl-value-received>
<invalid-vrrp-version-received>
  invalid-vrrp-version-received
</invalid-vrrp-version-received>
<invalid-vrrp-pdu-type-received>
  invalid-vrrp-pdu-type-received
</invalid-vrrp-pdu-type-received>
<invalid-vrrp-authentication-type-received>
  invalid-vrrp-authentication-type-received
</invalid-vrrp-authentication-type-received>
<invalid-vrrp-ip-count-received>
  invalid-vrrp-ip-count-received
</invalid-vrrp-ip-count-received>
<invalid-vrrp-checksum-received>
  invalid-vrrp-checksum-received
</invalid-vrrp-checksum-received>
<advertisement-timer>
  advertisement-timer
</advertisement-timer>
<packets-received>
  packets-received
</packets-received>
<no-group-match-received>
  no-group-match-received
</no-group-match-received>
<advertisement-sent>
  advertisement-sent
```


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```
</advertisement-sent>
<advertisement-received>
  advertisement-received
</advertisement-received>
<vrrp-mode>
  vrrp-mode
</vrrp-mode>
<active-node>
  active-node
</active-node>
<active-group>
  active-group
</active-group>
<active-inherit>....</active-inherit>
</vrrp-interface>
```

Description Describes vrrp interface.

<vrrp-interface>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <groups>
      groups
    </groups>
    <active>
      active
    </active>
    <physical-interface>
      physical-interface
    </physical-interface>
    <interface>
      interface
    </interface>
    <address>
      address
    </address>
    <interface-state>
      interface-state
    </interface-state>
    <group>
      group
    </group>
    <vrrp-state>
      vrrp-state
    </vrrp-state>
    <timer-name>
      timer-name
    </timer-name>
    <timer-value>
      timer-value
    </timer-value>
    <local-interface-address>
```

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```
      local-interface-address
    </local-interface-address>
    <vrrp-vlan>....</vrrp-vlan>
    <bandwidth>....</bandwidth>
    <group-vrrp-pdu-statistics>....</group-vrrp-pdu-statistics>
    <group-vrrp-pdu-error-statistics>....</group-vrrp-pdu-error-statistics>
  <group-vrrp-state-transition-statistics>....</group-vrrp-state-transition-statistics>

    <preempt-hold>....</preempt-hold>
    <virtual-ip-address>
      virtual-ip-address
    </virtual-ip-address>
    <unit>
      unit
    </unit>
    <index>
      index
    </index>
    <interface-index>
      interface-index
    </interface-index>
    <snmp-interface-index>
      snmp-interface-index
    </snmp-interface-index>
    <vrrp-traps>
      vrrp-traps
    </vrrp-traps>
    <group-priority>
      group-priority
    </group-priority>
    <advertisement-interval>
      advertisement-interval
    </advertisement-interval>
    <authentication-type>
      authentication-type
    </authentication-type>
    <delay-threshold>
      delay-threshold
    </delay-threshold>
    <computed-send-rate>
      computed-send-rate
    </computed-send-rate>
    <preempt>
      preempt
    </preempt>
    <accept-data-mode>
      accept-data-mode
    </accept-data-mode>
    <vip-count>
      vip-count
    </vip-count>
    <vip>
      vip
    </vip>
    <dead-timer>
      dead-timer
```


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```
</dead-timer>
<master-priority>
  master-priority
</master-priority>
<master-router-ip>
  master-router-ip
</master-router-ip>
<active-router-ip>
  active-router-ip
</active-router-ip>
<master-router>
  master-router
</master-router>
<router-ip>
  router-ip
</router-ip>
<virtual-router-uptime>
  virtual-router-uptime
</virtual-router-uptime>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<virtual-mac>
  virtual-mac
</virtual-mac>
<tracking>
  tracking
</tracking>
<preempt-hold-time>
  preempt-hold-time
</preempt-hold-time>
<current-priority>
  current-priority
</current-priority>
<configured-priority>
  configured-priority
</configured-priority>
<priority-hold-time>
  priority-hold-time
</priority-hold-time>
<remaining-time>
  remaining-time
</remaining-time>
<pending-priority>
  pending-priority
</pending-priority>
<interface-tracking-state>
  interface-tracking-state
</interface-tracking-state>
<interface-count>
  interface-count
</interface-count>
<route-tracking-state>
  route-tracking-state
</route-tracking-state>
<route-count>
```

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```
  route-count
</route-count>
<interface-speed>
  interface-speed
</interface-speed>
<current-priority-cost>
  current-priority-cost
</current-priority-cost>
<tracked-interface>
  tracked-interface
</tracked-interface>
<track-route-node-information>....</track-route-node-information>
<track-vrrpd-interface>....</track-vrrpd-interface>
<track-route-entry>....</track-route-entry>
<vrrp-message>....</vrrp-message>
<invalid-ipah-next-type-received>
  invalid-ipah-next-type-received
</invalid-ipah-next-type-received>
<invalid-vrrp-ttl-value-received>
  invalid-vrrp-ttl-value-received
</invalid-vrrp-ttl-value-received>
<invalid-vrrp-version-received>
  invalid-vrrp-version-received
</invalid-vrrp-version-received>
<invalid-vrrp-pdu-type-received>
  invalid-vrrp-pdu-type-received
</invalid-vrrp-pdu-type-received>
<invalid-vrrp-authentication-type-received>
  invalid-vrrp-authentication-type-received
</invalid-vrrp-authentication-type-received>
<invalid-vrrp-ip-count-received>
  invalid-vrrp-ip-count-received
</invalid-vrrp-ip-count-received>
<invalid-vrrp-checksum-received>
  invalid-vrrp-checksum-received
</invalid-vrrp-checksum-received>
<advertisement-timer>
  advertisement-timer
</advertisement-timer>
<packets-received>
  packets-received
</packets-received>
<no-group-match-received>
  no-group-match-received
</no-group-match-received>
<advertisement-sent>
  advertisement-sent
</advertisement-sent>
<advertisement-received>
  advertisement-received
</advertisement-received>
<vrrp-mode>
  vrrp-mode
</vrrp-mode>
<active-node>
  active-node
```


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```
    </active-node>
    <active-group>
      active-group
    </active-group>
    <active-inherit>....</active-inherit>
  </vrrp-interface>
</vrrp-information>
```

Description Describes vrrp interface.

<vrrp-interface-profile>

Usage

```
<vrrp-interface-profile>
  <interface>
    interface
  </interface>
  <unit>
    unit
  </unit>
  <group>
    group
  </group>
  <advertisement-timer>
    advertisement-timer
  </advertisement-timer>
  <delay>
    delay
  </delay>
</vrrp-interface-profile>
```

Description Profile of vrrp interface.

<vrrp-interface-profile>

Usage

```
<vrrp-profile-statistics>
  <vrrp-interface-profile>
    <interface>
      interface
    </interface>
    <unit>
      unit
    </unit>
    <group>
      group
    </group>
    <advertisement-timer>
      advertisement-timer
    </advertisement-timer>
    <delay>
      delay
```

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```
    </delay>
  </vrrp-interface-profile>
</vrrp-profile-statistics>
```

Description Profile of vrrp interface.

<vrrp-message>

Usage

```
<vrrp-message>
  <message>
    message
  </message>
</vrrp-message>
```

Description Display vrrp message.

<vrrp-message>

Usage

```
<vrrp-interface>
  <vrrp-message>
    <message>
      message
    </message>
  </vrrp-message>
</vrrp-interface>
```

Description Display vrrp message.

<vrrp-message>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <vrrp-message>
      <message>
        message
      </message>
    </vrrp-message>
  </vrrp-interface>
</vrrp-information>
```

Description Display vrrp message.

<vrrp-profile-statistics>

Usage

```
<vrrp-profile-statistics>
```


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```
<vrrp-interface-profile>....</vrrp-interface-profile>
<parse-time>
  parse-time
</parse-time>
<delay-violations>
  delay-violations
</delay-violations>
<delay-violations-rate>
  delay-violations-rate
</delay-violations-rate>
<peak-delay-violations-rate>
  peak-delay-violations-rate
</peak-delay-violations-rate>
<missed-three-consecutive-send>
  missed-three-consecutive-send
</missed-three-consecutive-send>
<send-rate>
  send-rate
</send-rate>
<peak-send-rate>
  peak-send-rate
</peak-send-rate>
<receive-rate>
  receive-rate
</receive-rate>
<peak-receive-rate>
  peak-receive-rate
</peak-receive-rate>
<expirations>
  expirations
</expirations>
<expiration-rate>
  expiration-rate
</expiration-rate>
<peak-expiration-rate>
  peak-expiration-rate
</peak-expiration-rate>
</vrrp-profile-statistics>
```

Description Vrrp profile statistics.

<vrrp-vlan>

Usage

```
<vrrp-vlan>
  <physical-interface>
    physical-interface
  </physical-interface>
  <unit>
    unit
  </unit>
  <vlan-id>
    vlan-id
  </vlan-id>
```

```
<vlan-tag>
  vlan-tag
</vlan-tag>
<vlan-address>
  vlan-address
</vlan-address>
</vrrp-vlan>
```

Description Display vrrp when configured on vlan.

<vrrp-vlan>

Usage

```
<vrrp-interface>
  <vrrp-vlan>
    <physical-interface>
      physical-interface
    </physical-interface>
    <unit>
      unit
    </unit>
    <vlan-id>
      vlan-id
    </vlan-id>
    <vlan-tag>
      vlan-tag
    </vlan-tag>
    <vlan-address>
      vlan-address
    </vlan-address>
  </vrrp-vlan>
</vrrp-interface>
```

Description Display vrrp when configured on vlan.

<vrrp-vlan>

Usage

```
<vrrp-information>
  <vrrp-interface>
    <vrrp-vlan>
      <physical-interface>
        physical-interface
      </physical-interface>
      <unit>
        unit
      </unit>
      <vlan-id>
        vlan-id
      </vlan-id>
      <vlan-tag>
        vlan-tag
```


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```
        </vlan-tag>
        <vlan-address>
          vlan-address
        </vlan-address>
      </vrrp-vlan>
    </vrrp-interface>
  </vrrp-information>
```

Description Display vrrp when configured on vlan.

Summary of X.509 Certificate Response Tags

<alternate-subject-list>

Usage

```
<alternate-subject-list>
  <alternate-subject>
    alternate-subject
  </alternate-subject>
</alternate-subject-list>
```

Description

<alternate-subject-list>

Usage

```
<x509-certificate-info>
  <alternate-subject-list>
    <alternate-subject>
      alternate-subject
    </alternate-subject>
  </alternate-subject-list>
</x509-certificate-info>
```

Description

<alternate-subject-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <alternate-subject-list>
      <alternate-subject>
        alternate-subject
      </alternate-subject>
    </alternate-subject-list>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description

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<alternate-subject-list>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <alternate-subject-list>
      <alternate-subject>
        alternate-subject
      </alternate-subject>
    </alternate-subject-list>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<auto-re-enrollment>

Usage

```
<auto-re-enrollment>
  <auto-re-enrollment-status>
    auto-re-enrollment-status
  </auto-re-enrollment-status>
  <auto-re-enrollment-next-trigger-time>
    auto-re-enrollment-next-trigger-time
  </auto-re-enrollment-next-trigger-time>
</auto-re-enrollment>
```

Description

<auto-re-enrollment>

Usage

```
<x509-certificate-info>
  <auto-re-enrollment>
    <auto-re-enrollment-status>
      auto-re-enrollment-status
    </auto-re-enrollment-status>
    <auto-re-enrollment-next-trigger-time>
      auto-re-enrollment-next-trigger-time
    </auto-re-enrollment-next-trigger-time>
  </auto-re-enrollment>
</x509-certificate-info>
```

Description

<auto-re-enrollment>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <auto-re-enrollment>
      <auto-re-enrollment-status>
```


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```
        auto-re-enrollment-status
       </auto-re-enrollment-status>
       <auto-re-enrollment-next-trigger-time>
        auto-re-enrollment-next-trigger-time
       </auto-re-enrollment-next-trigger-time>
      </auto-re-enrollment>
     </x509-certificate-info>
    </x509-certificate-info-list>
```

Description

<auto-re-enrollment>

Usage

```
<x509-certificate-add-results>
 <x509-certificate-info>
  <auto-re-enrollment>
   <auto-re-enrollment-status>
    auto-re-enrollment-status
   </auto-re-enrollment-status>
   <auto-re-enrollment-next-trigger-time>
    auto-re-enrollment-next-trigger-time
   </auto-re-enrollment-next-trigger-time>
  </auto-re-enrollment>
 </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<crl-issuer-alternate-subject-list>

Usage

```
<crl-issuer-alternate-subject-list>
 <crl-issuer-alternate-subject>
  crl-issuer-alternate-subject
 </crl-issuer-alternate-subject>
</crl-issuer-alternate-subject-list>
```

Description

<crl-issuer-alternate-subject-list>

Usage

```
<x509-crl-information>
 <crl-issuer-alternate-subject-list>
  <crl-issuer-alternate-subject>
   crl-issuer-alternate-subject
  </crl-issuer-alternate-subject>
 </crl-issuer-alternate-subject-list>
</x509-crl-information>
```

Description

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<crl-issuer-detail>

Usage

```
<x509-crl-information>
  <crl-issuer-detail>
    <distinguished-name>....</distinguished-name>
  </crl-issuer-detail>
</x509-crl-information>
```

Description Distinguished name of CRL issuer

<crl-revocation-list>

Usage

```
<crl-revocation-list>
  <revoked-cert-serial-number>
    revoked-cert-serial-number
  </revoked-cert-serial-number>
  <crl-revocation-date>
    crl-revocation-date
  </crl-revocation-date>
</crl-revocation-list>
```

Description

<crl-revocation-list>

Usage

```
<x509-crl-information>
  <crl-revocation-list>
    <revoked-cert-serial-number>
      revoked-cert-serial-number
    </revoked-cert-serial-number>
    <crl-revocation-date>
      crl-revocation-date
    </crl-revocation-date>
  </crl-revocation-list>
</x509-crl-information>
```

Description

<crl-validity>

Usage

```
<crl-validity>
  <effective-date>
    effective-date
  </effective-date>
  <next-update>
    next-update
  </next-update>
```


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```
</crl-validity>
```

Description Information about validity period for X.509 certificate revocation list

<crl-validity>

Usage

```
<x509-crl-information>
  <crl-validity>
    <effective-date>
      effective-date
    </effective-date>
    <next-update>
      next-update
    </next-update>
  </crl-validity>
</x509-crl-information>
```

Description Information about validity period for X.509 certificate revocation list

<distinguished-name>

Usage

```
<distinguished-name>
  <organization-name>
    organization-name
  </organization-name>
  <organizational-unit-name>
    organizational-unit-name
  </organizational-unit-name>
  <country-name>
    country-name
  </country-name>
  <state-or-province-name>
    state-or-province-name
  </state-or-province-name>
  <locality-name>
    locality-name
  </locality-name>
  <common-name>
    common-name
  </common-name>
  <email-address>
    email-address
  </email-address>
  <domain-component>
    domain-component
  </domain-component>
</distinguished-name>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-info>
  <issuer>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
      </state-or-province-name>
      <locality-name>
        locality-name
      </locality-name>
      <common-name>
        common-name
      </common-name>
      <email-address>
        email-address
      </email-address>
      <domain-component>
        domain-component
      </domain-component>
    </distinguished-name>
  </issuer>
</x509-certificate-info>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-info>
  <subject>
    <distinguished-name>
      <organization-name>
        organization-name
      </organization-name>
      <organizational-unit-name>
        organizational-unit-name
      </organizational-unit-name>
      <country-name>
        country-name
      </country-name>
      <state-or-province-name>
        state-or-province-name
      </state-or-province-name>
```


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```
      <locality-name>
       locality-name
      </locality-name>
      <common-name>
       common-name
      </common-name>
      <email-address>
       email-address
      </email-address>
      <domain-component>
       domain-component
      </domain-component>
     </distinguished-name>
    </subject>
</x509-certificate-info>
```

Description

<distinguished-name>

Usage

```
<x509-crl-information>
 <crl-issuer-detail>
  <distinguished-name>
   <organization-name>
    organization-name
   </organization-name>
   <organizational-unit-name>
    organizational-unit-name
   </organizational-unit-name>
   <country-name>
    country-name
   </country-name>
   <state-or-province-name>
    state-or-province-name
   </state-or-province-name>
   <locality-name>
    locality-name
   </locality-name>
   <common-name>
    common-name
   </common-name>
   <email-address>
    email-address
   </email-address>
   <domain-component>
    domain-component
   </domain-component>
  </distinguished-name>
 </crl-issuer-detail>
</x509-crl-information>
```

Description

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<distinguished-name>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <issuer>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </issuer>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <subject>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
```


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```
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <issuer>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </issuer>
```

```
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<distinguished-name>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <subject>
      <distinguished-name>
        <organization-name>
          organization-name
        </organization-name>
        <organizational-unit-name>
          organizational-unit-name
        </organizational-unit-name>
        <country-name>
          country-name
        </country-name>
        <state-or-province-name>
          state-or-province-name
        </state-or-province-name>
        <locality-name>
          locality-name
        </locality-name>
        <common-name>
          common-name
        </common-name>
        <email-address>
          email-address
        </email-address>
        <domain-component>
          domain-component
        </domain-component>
      </distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<distribution-crl-list>

Usage

```
<distribution-crl-list>
  <distribution-crl>
    distribution-crl
  </distribution-crl>
</distribution-crl-list>
```

Description Information about one or more distribution certificate revocation lists

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<distribution-crl-list>

Usage

```
<x509-certificate-info>
  <distribution-crl-list>
    <distribution-crl>
      distribution-crl
    </distribution-crl>
  </distribution-crl-list>
</x509-certificate-info>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <distribution-crl-list>
      <distribution-crl>
        distribution-crl
      </distribution-crl>
    </distribution-crl-list>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description Information about one or more distribution certificate revocation lists

<distribution-crl-list>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <distribution-crl-list>
      <distribution-crl>
        distribution-crl
      </distribution-crl>
    </distribution-crl-list>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description Information about one or more distribution certificate revocation lists

<fingerprint>

Usage

```
<fingerprint>
  <fingerprint-hash-algorithm>
    fingerprint-hash-algorithm
  </fingerprint-hash-algorithm>
```

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```
<fingerprint-content>
  fingerprint-content
 </fingerprint-content>
</fingerprint>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-info>
 <fingerprint>
  <fingerprint-hash-algorithm>
   fingerprint-hash-algorithm
  </fingerprint-hash-algorithm>
  <fingerprint-content>
   fingerprint-content
  </fingerprint-content>
 </fingerprint>
</x509-certificate-info>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-info-list>
 <x509-certificate-info>
  <fingerprint>
   <fingerprint-hash-algorithm>
    fingerprint-hash-algorithm
   </fingerprint-hash-algorithm>
   <fingerprint-content>
    fingerprint-content
   </fingerprint-content>
  </fingerprint>
 </x509-certificate-info>
</x509-certificate-info-list>
```

Description Fingerprint

<fingerprint>

Usage

```
<x509-certificate-add-results>
 <x509-certificate-info>
  <fingerprint>
   <fingerprint-hash-algorithm>
    fingerprint-hash-algorithm
   </fingerprint-hash-algorithm>
   <fingerprint-content>
```


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```
            fingerprint-content
          </fingerprint-content>
        </fingerprint>
      </x509-certificate-info>
    </x509-certificate-add-results>
```

Description Fingerprint

<issue-info>

Usage

```
<issue-info>
  <recipient>
    recipient
  </recipient>
  <issued-by>
    issued-by
  </issued-by>
</issue-info>
```

Description

<issue-info>

Usage

```
<x509-certificate-info>
  <issue-info>
    <recipient>
      recipient
    </recipient>
    <issued-by>
      issued-by
    </issued-by>
  </issue-info>
</x509-certificate-info>
```

Description

<issue-info>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <issue-info>
      <recipient>
        recipient
      </recipient>
      <issued-by>
        issued-by
      </issued-by>
    </issue-info>
  </x509-certificate-info>
```

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```
</x509-certificate-info-list>
```

Description

<issue-info>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <issue-info>
      <recipient>
        recipient
      </recipient>
      <issued-by>
        issued-by
      </issued-by>
    </issue-info>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<issuer>

Usage

```
<x509-certificate-info>
  <issuer>
    <distinguished-name>....</distinguished-name>
  </issuer>
</x509-certificate-info>
```

Description Identifies the CA that issued certificate

<issuer>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <issuer>
      <distinguished-name>....</distinguished-name>
    </issuer>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description Identifies the CA that issued certificate

<issuer>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
```


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```
    <issuer>
      <distinguished-name>....</distinguished-name>
    </issuer>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description Identifies the CA that issued certificate

<key-usage-list>

Usage

```
<key-usage-list>
  <key-usage>
    key-usage
  </key-usage>
</key-usage-list>
```

Description

<key-usage-list>

Usage

```
<x509-certificate-info>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</x509-certificate-info>
```

Description

<key-usage-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <key-usage-list>
      <key-usage>
        key-usage
      </key-usage>
    </key-usage-list>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description

<key-usage-list>

Usage

```
<x509-certificate-add-results>
```

```
<x509-certificate-info>
  <key-usage-list>
    <key-usage>
      key-usage
    </key-usage>
  </key-usage-list>
</x509-certificate-info>
</x509-certificate-add-results>
```

Description

<public-key>

Usage

```
<public-key>
  <public-key-algorithm>
    public-key-algorithm
  </public-key-algorithm>
  <public-key-length>
    public-key-length
  </public-key-length>
  <public-key-verification-status>
    public-key-verification-status
  </public-key-verification-status>
</public-key>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-info>
  <public-key>
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
</x509-certificate-info>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-info-list>
```


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```
<x509-certificate-info>
  <public-key>
    <public-key-algorithm>
      public-key-algorithm
    </public-key-algorithm>
    <public-key-length>
      public-key-length
    </public-key-length>
    <public-key-verification-status>
      public-key-verification-status
    </public-key-verification-status>
  </public-key>
 </x509-certificate-info>
</x509-certificate-info-list>
```

Description Information about an X.509 public key

<public-key>

Usage

```
<x509-certificate-add-results>
 <x509-certificate-info>
   <public-key>
     <public-key-algorithm>
       public-key-algorithm
     </public-key-algorithm>
     <public-key-length>
       public-key-length
     </public-key-length>
     <public-key-verification-status>
       public-key-verification-status
     </public-key-verification-status>
   </public-key>
 </x509-certificate-info>
</x509-certificate-add-results>
```

Description Information about an X.509 public key

<public-key-contents-list>

Usage

```
<public-key-contents-list>
  <key-contents>
    key-contents
  </key-contents>
</public-key-contents-list>
```

Description

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<public-key-contents-list>

Usage

```
<x509-certificate-info>
  <public-key-contents-list>
    <key-contents>
      key-contents
    </key-contents>
  </public-key-contents-list>
</x509-certificate-info>
```

Description

<public-key-contents-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <public-key-contents-list>
      <key-contents>
        key-contents
      </key-contents>
    </public-key-contents-list>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description

<public-key-contents-list>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <public-key-contents-list>
      <key-contents>
        key-contents
      </key-contents>
    </public-key-contents-list>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description

<serial-number-list>

Usage

```
<serial-number-list>
  <serial-number-x509>
    serial-number-x509
  </serial-number-x509>
</serial-number-list>
```


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Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-info>
  <serial-number-list>
    <serial-number-x509>
      serial-number-x509
    </serial-number-x509>
  </serial-number-list>
</x509-certificate-info>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <serial-number-list>
      <serial-number-x509>
        serial-number-x509
      </serial-number-x509>
    </serial-number-list>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description Serial numbers of one or more X.509 certificate

<serial-number-list>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <serial-number-list>
      <serial-number-x509>
        serial-number-x509
      </serial-number-x509>
    </serial-number-list>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description Serial numbers of one or more X.509 certificate

<subject>

Usage

```
<x509-certificate-info>
  <subject>
```

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```
    <distinguished-name>....</distinguished-name>
  </subject>
</x509-certificate-info>
```

Description Information about certificate owner

<subject>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <subject>
      <distinguished-name>....</distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description Information about certificate owner

<subject>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <subject>
      <distinguished-name>....</distinguished-name>
    </subject>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description Information about certificate owner

<validity>

Usage

```
<validity>
  <not-before>
    not-before
  </not-before>
  <not-after>
    not-after
  </not-after>
</validity>
```

Description Information about validity period for X.509 certificate

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<validity>

Usage

```
<x509-certificate-info>
  <validity>
    <not-before>
      not-before
    </not-before>
    <not-after>
      not-after
    </not-after>
  </validity>
</x509-certificate-info>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>
    <validity>
      <not-before>
        not-before
      </not-before>
      <not-after>
        not-after
      </not-after>
    </validity>
  </x509-certificate-info>
</x509-certificate-info-list>
```

Description Information about validity period for X.509 certificate

<validity>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <validity>
      <not-before>
        not-before
      </not-before>
      <not-after>
        not-after
      </not-after>
    </validity>
  </x509-certificate-info>
</x509-certificate-add-results>
```

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Description Information about validity period for X.509 certificate

<x509-certificate-add-results>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-add-success>
    x509-certificate-add-success
  </x509-certificate-add-success>
  <x509-certificate-info>....</x509-certificate-info>
</x509-certificate-add-results>
```

Description

<x509-certificate-info>

Usage

```
<x509-certificate-info>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
  </identifier>
  <validity>....</validity>
  <version>
    version
  </version>
  <auto-re-enrollment>....</auto-re-enrollment>
  <certificate-type>
    certificate-type
  </certificate-type>
  <status>
    status
  </status>
  <issuer>....</issuer>
  <subject>....</subject>
</x509-certificate-info>
```

Description Detailed information about an X.509 certificate

<x509-certificate-info>

Usage

```
<x509-certificate-info-list>
```


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```
<x509-certificate-info>
  <issue-info>....</issue-info>
  <serial-number-list>....</serial-number-list>
  <public-key>....</public-key>
  <fingerprint>....</fingerprint>
  <public-key-contents-list>....</public-key-contents-list>
  <alternate-subject-list>....</alternate-subject-list>
  <key-usage-list>....</key-usage-list>
  <distribution-crl-list>....</distribution-crl-list>
  <signature-algorithm>
    signature-algorithm
  </signature-algorithm>
  <identifier>
    identifier
  </identifier>
  <validity>....</validity>
  <version>
    version
  </version>
  <auto-re-enrollment>....</auto-re-enrollment>
  <certificate-type>
    certificate-type
  </certificate-type>
  <status>
    status
  </status>
  <issuer>....</issuer>
  <subject>....</subject>
</x509-certificate-info>
</x509-certificate-info-list>
```

Description Detailed information about an X.509 certificate

<x509-certificate-info>

Usage

```
<x509-certificate-add-results>
  <x509-certificate-info>
    <issue-info>....</issue-info>
    <serial-number-list>....</serial-number-list>
    <public-key>....</public-key>
    <fingerprint>....</fingerprint>
    <public-key-contents-list>....</public-key-contents-list>
    <alternate-subject-list>....</alternate-subject-list>
    <key-usage-list>....</key-usage-list>
    <distribution-crl-list>....</distribution-crl-list>
    <signature-algorithm>
      signature-algorithm
    </signature-algorithm>
    <identifier>
      identifier
    </identifier>
    <validity>....</validity>
    <version>
```

```
    version
   </version>
   <auto-re-enrollment>....</auto-re-enrollment>
   <certificate-type>
    certificate-type
   </certificate-type>
   <status>
    status
   </status>
   <issuer>....</issuer>
   <subject>....</subject>
  </x509-certificate-info>
</x509-certificate-add-results>
```

Description Detailed information about an X.509 certificate

<x509-certificate-info-list>

Usage

```
<x509-certificate-info-list>
  <x509-certificate-info>....</x509-certificate-info>
</x509-certificate-info-list>
```

Description

<x509-crl-information>

Usage

```
<x509-crl-information>
  <crl-number>
   crl-number
  </crl-number>
  <crl-revocation-list>....</crl-revocation-list>
  <crl-validity>....</crl-validity>
  <crl-version>
   crl-version
  </crl-version>
  <crl-issuer>
   crl-issuer
  </crl-issuer>
  <identifier>
   identifier
  </identifier>
  <crl-issuer-alternate-subject-list>....</crl-issuer-alternate-subject-list>
  <crl-issuer-detail>....</crl-issuer-detail>
</x509-crl-information>
```

Description Detailed information about X.509 certificate revocation list

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Summary of Junos OS CLI Administration Tags

<archived-directory-list>

Usage

```
<snapshot-information>
  <archived-directory-list>
    <directory-name>
      directory-name
    </directory-name>
  </archived-directory-list>
</snapshot-information>
```

Description

<authorization-information>

Usage

```
<authorization-information>
  <user-information>....</user-information>
  <user-permission-list>....</user-permission-list>
  <command-authorization>....</command-authorization>
</authorization-information>
```

Description Show user authorization

<checksum-information>

Usage

```
<checksum-information>
  <file-checksum>....</file-checksum>
</checksum-information>
```

Description

<choice>

Usage

```
<node-information>
  <choices>
    <choice>
      <id>
        id
      </id>
      <help>
        help
      </help>
    </choice>
  </choices>
</node-information>
```

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Description

<choices>

Usage

```
<node-information>
  <choices>
    <choice>....</choice>
    <default>
      default
    </default>
  </choices>
</node-information>
```

Description

<clear-security-alarm-results>

Usage

```
<clear-security-alarm-results>
  <security-alarms-disabled>
    security-alarms-disabled
  </security-alarms-disabled>
  <no-security-alarms-active>
    no-security-alarms-active
  </no-security-alarms-active>
  <no-security-alarms-cleared>
    no-security-alarms-cleared
  </no-security-alarms-cleared>
  <clear-security-alarm-result>
    clear-security-alarm-result
  </clear-security-alarm-result>
</clear-security-alarm-results>
```

Description Results of a clear security alarms command

<clear-security-log-results>

Usage

```
<clear-security-log-results>
  <security-logs-disabled>
    security-logs-disabled
  </security-logs-disabled>
  <no-security-events-active>....</no-security-events-active>
  <no-security-events-cleared>
    no-security-events-cleared
  </no-security-events-cleared>
  <clear-security-log-result>
    clear-security-log-result
  </clear-security-log-result>
</clear-security-log-results>
```


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Description Results of a clear security log command

<clear-system-login-lockout>

Usage

```
<clear-system-login-lockout>
  <no-login-lockout>
    no-login-lockout
  </no-login-lockout>
  <no-login-lockout-user>
    no-login-lockout-user
  </no-login-lockout-user>
</clear-system-login-lockout>
```

Description Results of a clear system login lockout command

<command-authorization>

Usage

```
<authorization-information>
  <command-authorization>
    <allow-command>
      allow-command
    </allow-command>
    <deny-command>
      deny-command
    </deny-command>
    <allow-config>
      allow-config
    </allow-config>
    <deny-config>
      deny-config
    </deny-config>
  </command-authorization>
</authorization-information>
```

Description

<commit-history>

Usage

```
<commit-history>
  <sequence-number>
    sequence-number
  </sequence-number>
  <user>
    user
  </user>
  <date-time>
    date-time
  </date-time>
  <client>
    client
```

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```
  </client>
  <comment>
   comment
  </comment>
  <log>
   log
  </log>
</commit-history>
```

Description

<commit-history>

Usage

```
<commit-information>
  <commit-history>
    <sequence-number>
     sequence-number
    </sequence-number>
    <user>
     user
    </user>
    <date-time>
     date-time
    </date-time>
    <client>
     client
    </client>
    <comment>
     comment
    </comment>
    <log>
     log
    </log>
  </commit-history>
</commit-information>
```

Description

<commit-information>

Usage

```
<commit-information>
  <pending-commit>....</pending-commit>
  <commit-history>....</commit-history>
  <rescue-configuration>....</rescue-configuration>
</commit-information>
```

Description

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<commit-results>

Usage

```
<commit-results>
  <routing-engine>....</routing-engine>
</commit-results>
```

Description

<configuration>

Usage

```
<configuration>
</configuration>
```

Description

<configuration-set>

Usage

```
<configuration-set>
</configuration-set>
```

Description

<core-information>

Usage

```
<core-information>
  <core-filename>
    core-filename
  </core-filename>
  <process-name>
    process-name
  </process-name>
  <signal-number>
    signal-number
  </signal-number>
  <signal-description>
    signal-description
  </signal-description>
  <stack-trace>
    stack-trace
  </stack-trace>
  <build-server>
    build-server
  </build-server>
  <build-date>
    build-date
  </build-date>
  <release>
    release
```

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```
  </release>
  <binary-path>
    binary-path
  </binary-path>
  <binary-details>
    binary-details
  </binary-details>
</core-information>
```

Description

<current-time>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <current-time>
        <date-time>
          date-time
        </date-time>
      </current-time>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Current time

<current-time>

Usage

```
<system-uptime-information>
  <current-time>
    <date-time>
      date-time
    </date-time>
  </current-time>
</system-uptime-information>
```

Description Current time

<database-status>

Usage

```
<database-status-information>
  <database-status>
    <user>
      user
    </user>
    <terminal>
      terminal
```


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```
    </terminal>
    <pid>
     pid
    </pid>
    <start-time>
     start-time
    </start-time>
    <idle-time>
     idle-time
    </idle-time>
    <commit-at>
     commit-at
    </commit-at>
    <commit-script-running>
     commit-script-running
    </commit-script-running>
    <exclusive>
     exclusive
    </exclusive>
    <edit-path>
     edit-path
    </edit-path>
   </database-status>
</database-status-information>
```

Description

<database-status>

Usage

```
<xnm:error>
 <database-status-information>
  <database-status>
   <user>
    user
   </user>
   <terminal>
    terminal
   </terminal>
   <pid>
    pid
   </pid>
   <start-time>
    start-time
   </start-time>
   <idle-time>
    idle-time
   </idle-time>
   <commit-at>
    commit-at
   </commit-at>
   <commit-script-running>
    commit-script-running
   </commit-script-running>
   <exclusive>
```

```
            exclusive
          </exclusive>
          <edit-path>
            edit-path
          </edit-path>
        </database-status>
      </database-status-information>
    </xnm:error>
```

Description

<database-status-information>

Usage

```
<database-status-information>
  <database-status>....</database-status>
</database-status-information>
```

Description

<database-status-information>

Usage

```
<xnm:error>
  <database-status-information>
    <database-status>....</database-status>
  </database-status-information>
</xnm:error>
```

Description

<diagnostic-tool>

Usage

```
<diagnostic-tool>
  <diagnostic-tool-component-name-header>
    diagnostic-tool-component-name-header
  </diagnostic-tool-component-name-header>
  <diagnostic-tool-component-name-value>
    diagnostic-tool-component-name-value
  </diagnostic-tool-component-name-value>
  <diagnostic-tool-component-role-header>
    diagnostic-tool-component-role-header
  </diagnostic-tool-component-role-header>
  <diagnostic-tool-component-role-value>
    diagnostic-tool-component-role-value
  </diagnostic-tool-component-role-value>
  <diagnostic-tool-component-version-header>
    diagnostic-tool-component-version-header
  </diagnostic-tool-component-version-header>
  <diagnostic-tool-component-version-value>
    diagnostic-tool-component-version-value
  </diagnostic-tool-component-version-value>
```


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```
<health-check-title>
  health-check-title
</health-check-title>
<health-check-header-item>
  health-check-header-item
</health-check-header-item>
<health-check-header-status>
  health-check-header-status
</health-check-header-status>
<health-check-header>
  health-check-header
</health-check-header>
<health-check-entry-item>
  health-check-entry-item
</health-check-entry-item>
<health-check-entry-marker>
  health-check-entry-marker
</health-check-entry-marker>
<health-check-entry-status>
  health-check-entry-status
</health-check-entry-status>
<health-check-entry>
  health-check-entry
</health-check-entry>
<diagnostic-tool-output>
  diagnostic-tool-output
</diagnostic-tool-output>
</diagnostic-tool>
```

Description

<diagnostic-tool-list>

Usage

```
<diagnostic-tool-list>
  <diagnostic-tool-list-title>
    diagnostic-tool-list-title
  </diagnostic-tool-list-title>
  <diagnostic-tool-list-header-toolname>
    diagnostic-tool-list-header-toolname
  </diagnostic-tool-list-header-toolname>
  <diagnostic-tool-list-header-provider>
    diagnostic-tool-list-header-provider
  </diagnostic-tool-list-header-provider>
  <diagnostic-tool-list-header-description>
    diagnostic-tool-list-header-description
  </diagnostic-tool-list-header-description>
  <diagnostic-tool-list-header>
    diagnostic-tool-list-header
  </diagnostic-tool-list-header>
  <diagnostic-tool-list-entry-toolname>
    diagnostic-tool-list-entry-toolname
  </diagnostic-tool-list-entry-toolname>
  <diagnostic-tool-list-entry-provider>
    diagnostic-tool-list-entry-provider
```

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```
  </diagnostic-tool-list-entry-provider>
  <diagnostic-tool-list-entry-description>
    diagnostic-tool-list-entry-description
  </diagnostic-tool-list-entry-description>
  <diagnostic-tool-list-entry>
    diagnostic-tool-list-entry
  </diagnostic-tool-list-entry>
</diagnostic-tool-list>
```

Description

<directory>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <directory-usage-information>
      <directory>
        <directory-name>
          directory-name
        </directory-name>
        <total-file-blocks>
          total-file-blocks
        </total-file-blocks>
        <file-information>....</file-information>
        <used-space>
          used-space
        </used-space>
      </directory>
    </directory-usage-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Information about system directory usage

<directory>

Usage

```
<directory-list>
  <directory>
    <directory-name>
      directory-name
    </directory-name>
    <total-file-blocks>
      total-file-blocks
    </total-file-blocks>
    <file-information>....</file-information>
    <used-space>
      used-space
    </used-space>
  </directory>
</directory-list>
```


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Description Information about system directory usage

<directory>

Usage

```
<directory-usage-information>
  <directory>
    <directory-name>
      directory-name
    </directory-name>
    <total-file-blocks>
      total-file-blocks
    </total-file-blocks>
    <file-information>....</file-information>
    <used-space>
      used-space
    </used-space>
  </directory>
</directory-usage-information>
```

Description Information about system directory usage

<directory-list>

Usage

```
<directory-list>
  <directory>....</directory>
</directory-list>
```

Description Show directory contents

<directory-usage-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <directory-usage-information>
      <directory>....</directory>
    </directory-usage-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<directory-usage-information>

Usage

```
<directory-usage-information>
  <directory>....</directory>
</directory-usage-information>
```

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Description

<dre-repository>

Usage

```
<dre-repository>
  <dre-repository-title>
    dre-repository-title
  </dre-repository-title>
  <dre-repository-header>
    dre-repository-header
  </dre-repository-header>
  <dre-repository-header-name>
    dre-repository-header-name
  </dre-repository-header-name>
  <dre-repository-header-count>
    dre-repository-header-count
  </dre-repository-header-count>
  <dre-repository-header-model>
    dre-repository-header-model
  </dre-repository-header-model>
  <dre-repository-header-usage>
    dre-repository-header-usage
  </dre-repository-header-usage>
  <dre-repository-entry>....</dre-repository-entry>
  <dre-repository-footer>
    dre-repository-footer
  </dre-repository-footer>
  <dre-repository-footer-string>
    dre-repository-footer-string
  </dre-repository-footer-string>
  <dre-repository-footer-value>
    dre-repository-footer-value
  </dre-repository-footer-value>
  <dre-repository-component-title>
    dre-repository-component-title
  </dre-repository-component-title>
  <dre-repository-component-title-caption>
    dre-repository-component-title-caption
  </dre-repository-component-title-caption>
  <dre-repository-component-title-node-name>
    dre-repository-component-title-node-name
  </dre-repository-component-title-node-name>
  <dre-repository-component-title-location-caption>
    dre-repository-component-title-location-caption
  </dre-repository-component-title-location-caption>
  <dre-repository-component-title-location-path>
    dre-repository-component-title-location-path
  </dre-repository-component-title-location-path>
  <dre-repository-component-header>
    dre-repository-component-header
  </dre-repository-component-header>
  <dre-repository-component-header-name>
    dre-repository-component-header-name
  </dre-repository-component-header-name>
  <dre-repository-component-header-date>
```


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```
    dre-repository-component-header-date
  </dre-repository-component-header-date>
  <dre-repository-component-header-size>
    dre-repository-component-header-size
  </dre-repository-component-header-size>
  <dre-repository-component-footer>
    dre-repository-component-footer
  </dre-repository-component-footer>
  <dre-repository-component-name>
    dre-repository-component-name
  </dre-repository-component-name>
  <dre-repository-component-dbgart-entry>
    dre-repository-component-dbgart-entry
  </dre-repository-component-dbgart-entry>
  <dre-repository-component-dbgart-entry-name>
    dre-repository-component-dbgart-entry-name
  </dre-repository-component-dbgart-entry-name>
  <dre-repository-component-dbgart-entry-date>
    dre-repository-component-dbgart-entry-date
  </dre-repository-component-dbgart-entry-date>
  <dre-repository-component-dbgart-entry-size>
    dre-repository-component-dbgart-entry-size
  </dre-repository-component-dbgart-entry-size>
  <dre-log-information>
    dre-log-information
  </dre-log-information>
  <dre-repository-header-node-group>
    dre-repository-header-node-group
  </dre-repository-header-node-group>
</dre-repository>
```

Description

<dre-repository-content>

Usage

```
<system-storage-cleanup-information>
  <dre-repository-content>
    <dre-repository-content-header>
      dre-repository-content-header
    </dre-repository-content-header>
    <dre-repository-content-entry>
      dre-repository-content-entry
    </dre-repository-content-entry>
    <dre-repository-content-footer>
      dre-repository-content-footer
    </dre-repository-content-footer>
  </dre-repository-content>
</system-storage-cleanup-information>
```

Description

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<error>

Usage

```
<error>
  <parse>
    parse
  </parse>
  <source-daemon>
    source-daemon
  </source-daemon>
  <filename>
    filename
  </filename>
  <line-number>
    line-number
  </line-number>
  <column>
    column
  </column>
  <token>
    token
  </token>
  <edit-path>
    edit-path
  </edit-path>
  <statement>
    statement
  </statement>
  <message>
    message
  </message>
</error>
```

Description

<error-info>

Usage

```
<rpc-error>
  <error-info>
    <bad-attribute>
      bad-attribute
    </bad-attribute>
    <bad-element>
      bad-element
    </bad-element>
  </error-info>
</rpc-error>
```

Description

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<facility-tag>

Usage

```
<facility-tag-list>
  <facility-tag>
    <name>
      name
    </name>
    <help>
      help
    </help>
  </facility-tag>
</facility-tag-list>
```

Description

<facility-tag-list>

Usage

```
<facility-tag-list>
  <facility-tag>....</facility-tag>
</facility-tag-list>
```

Description List of facility tags

<file-checksum>

Usage

```
<checksum-information>
  <file-checksum>
    <input-file>
      input-file
    </input-file>
    <computation-method>
      computation-method
    </computation-method>
    <checksum>
      checksum
    </checksum>
  </file-checksum>
</checksum-information>
```

Description Checksum information for a file

<file-get>

Usage

```
<file-get>
  <filename>
    filename
  </filename>
```

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```
  <encoding>
   encoding
  </encoding>
</file-get>
```

Description

<file-get-results>

Usage

```
<file-get-results>
  <success>
   success
  </success>
  <file-contents>
   file-contents
  </file-contents>
</file-get-results>
```

Description

<file-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <directory-usage-information>
      <directory>
        <file-information>
          <file-permissions>
            file-permissions
          </file-permissions>
          <file-links>
            file-links
          </file-links>
          <file-owner>
            file-owner
          </file-owner>
          <file-group>
            file-group
          </file-group>
          <file-size>
            file-size
          </file-size>
          <file-date>
            file-date
          </file-date>
          <file-name>
            file-name
          </file-name>
          <file-executable>
            file-executable
          </file-executable>
          <file-directory>
```


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```
            file-directory
          </file-directory>
          <file-symlink>
            file-symlink
          </file-symlink>
          <file-symlink-target>
            file-symlink-target
          </file-symlink-target>
        </file-information>
      </directory>
    </directory-usage-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<file-information>

Usage

```
<directory-list>
  <directory>
    <file-information>
      <file-permissions>
        file-permissions
      </file-permissions>
      <file-links>
        file-links
      </file-links>
      <file-owner>
        file-owner
      </file-owner>
      <file-group>
        file-group
      </file-group>
      <file-size>
        file-size
      </file-size>
      <file-date>
        file-date
      </file-date>
      <file-name>
        file-name
      </file-name>
      <file-executable>
        file-executable
      </file-executable>
      <file-directory>
        file-directory
      </file-directory>
      <file-symlink>
        file-symlink
      </file-symlink>
      <file-symlink-target>
        file-symlink-target
      </file-symlink-target>
```

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```
    </file-information>
  </directory>
</directory-list>
```

Description

<file-information>

Usage

```
<directory-usage-information>
  <directory>
    <file-information>
      <file-permissions>
        file-permissions
      </file-permissions>
      <file-links>
        file-links
      </file-links>
      <file-owner>
        file-owner
      </file-owner>
      <file-group>
        file-group
      </file-group>
      <file-size>
        file-size
      </file-size>
      <file-date>
        file-date
      </file-date>
      <file-name>
        file-name
      </file-name>
      <file-executable>
        file-executable
      </file-executable>
      <file-directory>
        file-directory
      </file-directory>
      <file-symlink>
        file-symlink
      </file-symlink>
      <file-symlink-target>
        file-symlink-target
      </file-symlink-target>
    </file-information>
  </directory>
</directory-usage-information>
```

Description

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<file-list>

Usage

```
<system-storage-cleanup-information>
  <file-list>
    <file>....</file>
  </file-list>
</system-storage-cleanup-information>
```

Description

<file-put-results>

Usage

```
<file-put-results>
  <success>
    success
  </success>
  <filename>
    filename
  </filename>
</file-put-results>
```

Description

<filesystem>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-storage-information>
      <filesystem>
        <filesystem-name>
          filesystem-name
        </filesystem-name>
        <total-blocks>
          total-blocks
        </total-blocks>
        <used-blocks>
          used-blocks
        </used-blocks>
        <available-blocks>
          available-blocks
        </available-blocks>
        <used-percent>
          used-percent
        </used-percent>
        <mounted-on>
          mounted-on
        </mounted-on>
      </filesystem>
    </system-storage-information>
  </multi-routing-engine-item>
```

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```
</multi-routing-engine-results>
```

Description Information about system storage

<filesystem>

Usage

```
<system-storage-information>
  <filesystem>
    <filesystem-name>
      filesystem-name
    </filesystem-name>
    <total-blocks>
      total-blocks
    </total-blocks>
    <used-blocks>
      used-blocks
    </used-blocks>
    <available-blocks>
      available-blocks
    </available-blocks>
    <used-percent>
      used-percent
    </used-percent>
    <mounted-on>
      mounted-on
    </mounted-on>
  </filesystem>
</system-storage-information>
```

Description Information about system storage

<fpc-version>

Usage

```
<fpc-version>
  <fpc-slot>
    fpc-slot
  </fpc-slot>
</fpc-version>
```

Description Kernel FPC version

<host-name-entry>

Usage

```
<host-name-list>
  <host-name-entry>
    <host>
      host
    </host>
```


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```
    <ip-address-list>....</ip-address-list>
    <resolution-error>
     resolution-error
    </resolution-error>
    <last-change>
     last-change
    </last-change>
   </host-name-entry>
</host-name-list>
```

Description Hostname entry

<host-name-entry>

Usage

```
<name-resolution-info>
 <host-name-list>
  <host-name-entry>
   <host>
    host
   </host>
   <ip-address-list>....</ip-address-list>
   <resolution-error>
    resolution-error
   </resolution-error>
   <last-change>
    last-change
   </last-change>
  </host-name-entry>
 </host-name-list>
</name-resolution-info>
```

Description Hostname entry

<host-name-list>

Usage

```
<host-name-list>
 <host-name-entry>....</host-name-entry>
</host-name-list>
```

Description

<host-name-list>

Usage

```
<name-resolution-info>
 <host-name-list>
  <host-name-entry>....</host-name-entry>
 </host-name-list>
```

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```
</name-resolution-info>
```

Description

<inform>

Usage

```
<inform>
  <message>
    message
  </message>
  <source-daemon>
    source-daemon
  </source-daemon>
</inform>
```

Description

<inform>

Usage

```
<snapshot-information>
  <inform>
    <message>
      message
    </message>
    <source-daemon>
      source-daemon
    </source-daemon>
  </inform>
</snapshot-information>
```

Description

<ip-address-list>

Usage

```
<host-name-list>
  <host-name-entry>
    <ip-address-list>
      <ip-address>
        ip-address
      </ip-address>
    </ip-address-list>
  </host-name-entry>
</host-name-list>
```

Description List of IP addresses

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<ip-address-list>

Usage

```
<name-resolution-info>
  <host-name-list>
    <host-name-entry>
      <ip-address-list>
        <ip-address>
          ip-address
        </ip-address>
      </ip-address-list>
    </host-name-entry>
  </host-name-list>
</name-resolution-info>
```

Description List of IP addresses

<last-configured-time>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <last-configured-time>
        <date-time>
          date-time
        </date-time>
        <time-length>
          time-length
        </time-length>
        <user>
          user
        </user>
      </last-configured-time>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Last configured time

<last-configured-time>

Usage

```
<system-uptime-information>
  <last-configured-time>
    <date-time>
      date-time
    </date-time>
    <time-length>
      time-length
    </time-length>
    <user>
```

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```
      user
    </user>
  </last-configured-time>
</system-uptime-information>
```

Description Last configured time

<load-configuration-results>

Usage

```
<load-configuration-results>
  <load-error-count>
    load-error-count
  </load-error-count>
  <load-success>
    load-success
  </load-success>
  <diff-error-count>
    diff-error-count
  </diff-error-count>
  <rollback-success>
    rollback-success
  </rollback-success>
</load-configuration-results>
```

Description

<load-configuration-results>

Usage

```
<rollback-information>
  <load-configuration-results>
    <load-error-count>
      load-error-count
    </load-error-count>
    <load-success>
      load-success
    </load-success>
    <diff-error-count>
      diff-error-count
    </diff-error-count>
    <rollback-success>
      rollback-success
    </rollback-success>
  </load-configuration-results>
</rollback-information>
```

Description

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<load-configuration-results>

Usage

```
<rescue-information>
  <load-configuration-results>
    <load-error-count>
      load-error-count
    </load-error-count>
    <load-success>
      load-success
    </load-success>
    <diff-error-count>
      diff-error-count
    </diff-error-count>
    <rollback-success>
      rollback-success
    </rollback-success>
  </load-configuration-results>
</rescue-information>
```

Description

<login-lockout-user-entry>

Usage

```
<system-login-lockout-information>
  <login-lockout-users-table>
    <login-lockout-user-entry>
      <login-lockout-user>
        login-lockout-user
      </login-lockout-user>
      <login-lockout-start-time>
        login-lockout-start-time
      </login-lockout-start-time>
      <login-lockout-end-time>
        login-lockout-end-time
      </login-lockout-end-time>
    </login-lockout-user-entry>
  </login-lockout-users-table>
</system-login-lockout-information>
```

Description Login lockout information for a user

<login-lockout-users-table>

Usage

```
<system-login-lockout-information>
  <login-lockout-users-table>
    <login-lockout-user-entry>....</login-lockout-user-entry>
  </login-lockout-users-table>
</system-login-lockout-information>
```

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Description

<logout-user>

Usage

```
<logout-user>
  <logout-user-message>
    logout-user-message
  </logout-user-message>
</logout-user>
```

Description

<multi-kmd-result>

Usage

```
<multi-kmd-result>
  <kmd-name>
    kmd-name
  </kmd-name>
</multi-kmd-result>
```

Description

<multi-routing-engine-item>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <re-name>
      re-name
    </re-name>
    <directory-usage-information>....</directory-usage-information>
    <output>
      output
    </output>
    <software-information>....</software-information>
    <system-storage-information>....</system-storage-information>
    <system-users-information>....</system-users-information>
    <system-uptime-information>....</system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<multi-routing-engine-results>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>....</multi-routing-engine-item>
</multi-routing-engine-results>
```


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Description

<name-resolution-info>

Usage

```
<name-resolution-info>
  <last-update>
    last-update
  </last-update>
  <refresh-interval>
    refresh-interval
  </refresh-interval>
  <host-name-list>....</host-name-list>
</name-resolution-info>
```

Description Show hostname resolution information

<no-security-events-active>

Usage

```
<clear-security-log-results>
  <no-security-events-active>
</no-security-events-active>
</clear-security-log-results>
```

Description

<node-information>

Usage

```
<node-information>
  <path>
    path
  </path>
  <help>
    help
  </help>
  <type>
    type
  </type>
  <units>
    units
  </units>
  <range-low>
    range-low
  </range-low>
  <range-high>
    range-high
  </range-high>
  <allow-no>
    allow-no
  </allow-no>
  <choices>....</choices>
```

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```
</node-information>
```

Description

<package>

Usage

```
<snapshot-information>
 <software-version>
  <package>
   <package-name>
    package-name
   </package-name>
   <package-version>
    package-version
   </package-version>
  </package>
 </software-version>
</snapshot-information>
```

Description Package in software snapshot

<package-backup>

Usage

```
<package-backup-information>
 <package-backup>
  <file-name>
   file-name
  </file-name>
  <file-size>
   file-size
  </file-size>
 </package-backup>
</package-backup-information>
```

Description

<package-backup-information>

Usage

```
<package-backup-information>
 <package-backup>....</package-backup>
</package-backup-information>
```

Description

<package-information>

Usage

```
<multi-routing-engine-results>
```


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```
<multi-routing-engine-item>
  <software-information>
    <package-information>
      <name>
        name
      </name>
      <comment>
        comment
      </comment>
      <version>
        version
      </version>
    </package-information>
  </software-information>
</multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<package-information>

Usage

```
<package-information>
  <name>
    name
  </name>
  <comment>
    comment
  </comment>
  <version>
    version
  </version>
</package-information>
```

Description

<package-information>

Usage

```
<system-information>
  <package-information>
    <name>
      name
    </name>
    <comment>
      comment
    </comment>
    <version>
      version
    </version>
  </package-information>
</system-information>
```

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Description

<package-information>

Usage

```
<software-information>
  <package-information>
    <name>
      name
    </name>
    <comment>
      comment
    </comment>
    <version>
      version
    </version>
  </package-information>
</software-information>
```

Description

<partition-information>

Usage

```
<snapshot-information>
  <snapshot-partitions>
    <partition-information>
      <partition>
        partition
      </partition>
      <mount-point>
        mount-point
      </mount-point>
      <partition-size>
        partition-size
      </partition-size>
      <snapshot-argument>
        snapshot-argument
      </snapshot-argument>
    </partition-information>
  </snapshot-partitions>
</snapshot-information>
```

Description Partition information

<partitions>

Usage

```
<system-storage-partitions-information>
  <partitions>
    <boot-media-name>
      boot-media-name
    </boot-media-name>
```


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```
    <boot-media>
     boot-media
    </boot-media>
    <active-partition>
     active-partition
    </active-partition>
    <backup-partition>
     backup-partition
    </backup-partition>
    <boot-partition>
     boot-partition
    </boot-partition>
    <booted-from>
     booted-from
    </booted-from>
   </partitions>
</system-storage-partitions-information>
```

Description Information about partitions on the system

<pending-commit>

Usage

```
<commit-information>
 <pending-commit>
  <user>
   user
  </user>
  <client>
   client
  </client>
  <date-time>
   date-time
  </date-time>
  <log>
   log
  </log>
 </pending-commit>
</commit-information>
```

Description

<process>

Usage

```
<process>
 <name>
  name
 </name>
 <pid>
  pid
 </pid>
```

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```
</process>
```

Description Process that generated the event

<process>

Usage

```
<security-alarm-information>
  <security-alarm>
    <process>
      <name>
        name
      </name>
      <pid>
        pid
      </pid>
    </process>
  </security-alarm>
</security-alarm-information>
```

Description Process that generated the event

<process>

Usage

```
<security-log-information>
  <security-event>
    <process>
      <name>
        name
      </name>
      <pid>
        pid
      </pid>
    </process>
  </security-event>
</security-log-information>
```

Description Process that generated the event

<process-entry>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>
        <user-table>
          <process-table>
            <process-entry>
              <process-id>
```


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```
                process-id
               </process-id>
               <command>
                command
               </command>
              </process-entry>
             </process-table>
            </user-table>
           </uptime-information>
          </system-users-information>
         </multi-routing-engine-item>
        </multi-routing-engine-results>
```

Description

<process-entry>

Usage

```
<multi-routing-engine-results>
 <multi-routing-engine-item>
  <system-uptime-information>
   <uptime-information>
    <user-table>
     <process-table>
      <process-entry>
       <process-id>
        process-id
       </process-id>
       <command>
        command
       </command>
      </process-entry>
     </process-table>
    </user-table>
   </uptime-information>
  </system-uptime-information>
 </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<process-entry>

Usage

```
<uptime-information>
 <user-table>
  <process-table>
   <process-entry>
    <process-id>
     process-id
    </process-id>
    <command>
     command
    </command>
```

```
      </process-entry>
    </process-table>
  </user-table>
</uptime-information>
```

Description

<process-entry>

Usage

```
<system-uptime-information>
  <uptime-information>
    <user-table>
      <process-table>
        <process-entry>
          <process-id>
            process-id
          </process-id>
          <command>
            command
          </command>
        </process-entry>
      </process-table>
    </user-table>
  </uptime-information>
</system-uptime-information>
```

Description

<process-entry>

Usage

```
<system-users-information>
  <uptime-information>
    <user-table>
      <process-table>
        <process-entry>
          <process-id>
            process-id
          </process-id>
          <command>
            command
          </command>
        </process-entry>
      </process-table>
    </user-table>
  </uptime-information>
</system-users-information>
```

Description

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<process-table>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>
        <user-table>
          <process-table>
            <process-entry>....</process-entry>
          </process-table>
        </user-table>
      </uptime-information>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<process-table>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <uptime-information>
        <user-table>
          <process-table>
            <process-entry>....</process-entry>
          </process-table>
        </user-table>
      </uptime-information>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<process-table>

Usage

```
<uptime-information>
  <user-table>
    <process-table>
      <process-entry>....</process-entry>
    </process-table>
  </user-table>
</uptime-information>
```

Description

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<process-table>

Usage

```
<system-uptime-information>
  <uptime-information>
    <user-table>
      <process-table>
        <process-entry>....</process-entry>
      </process-table>
    </user-table>
  </uptime-information>
</system-uptime-information>
```

Description

<process-table>

Usage

```
<system-users-information>
  <uptime-information>
    <user-table>
      <process-table>
        <process-entry>....</process-entry>
      </process-table>
    </user-table>
  </uptime-information>
</system-users-information>
```

Description

<progress-indicator>

Usage

```
<progress-indicator>
  <timestamp>
    timestamp
  </timestamp>
  <percent-complete>
    percent-complete
  </percent-complete>
  <message>
    message
  </message>
</progress-indicator>
```

Description

<protocols-started-time>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
```


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```
<system-uptime-information>
  <protocols-started-time>
    <date-time>
      date-time
    </date-time>
    <time-length>
      time-length
    </time-length>
  </protocols-started-time>
 </system-uptime-information>
</multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Protocols started time

<protocols-started-time>

Usage

```
<system-uptime-information>
  <protocols-started-time>
    <date-time>
      date-time
    </date-time>
    <time-length>
      time-length
    </time-length>
  </protocols-started-time>
</system-uptime-information>
```

Description Protocols started time

<pull-configuration-results>

Usage

```
<pull-configuration-results>
  <filename>
    filename
  </filename>
  <pull-configuration-success>
    pull-configuration-success
  </pull-configuration-success>
</pull-configuration-results>
```

Description

<real-memory-reserved-information>

Usage

```
<real-memory-reserved-information>
  <real-memory-reserved>
    real-memory-reserved
```

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```
  </real-memory-reserved>
  <real-memory-total>
    real-memory-total
  </real-memory-total>
</real-memory-reserved-information>
```

Description

<real-memory-reserved-information>

Usage

```
<system-kernel-memory-information>
  <real-memory-reserved-information>
    <real-memory-reserved>
      real-memory-reserved
    </real-memory-reserved>
    <real-memory-total>
      real-memory-total
    </real-memory-total>
  </real-memory-reserved-information>
</system-kernel-memory-information>
```

Description

<reason>

Usage

```
<reason>
  <daemon>
    daemon
  </daemon>
  <process-not-configured>
    process-not-configured
  </process-not-configured>
  <process-disabled>
    process-disabled
  </process-disabled>
  <process-not-running>
    process-not-running
  </process-not-running>
</reason>
```

Description

<reason>

Usage

```
<xnm:error>
  <reason>
    <daemon>
      daemon
    </daemon>
    <process-not-configured>
```


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```
      process-not-configured
    </process-not-configured>
    <process-disabled>
      process-disabled
    </process-disabled>
    <process-not-running>
      process-not-running
    </process-not-running>
  </reason>
</xnm:error>
```

Description

<reason>

Usage

```
<xnm:warning>
  <reason>
    <daemon>
      daemon
    </daemon>
    <process-not-configured>
      process-not-configured
    </process-not-configured>
    <process-disabled>
      process-disabled
    </process-disabled>
    <process-not-running>
      process-not-running
    </process-not-running>
  </reason>
</xnm:warning>
```

Description

<rescue-configuration>

Usage

```
<commit-information>
  <rescue-configuration>
    <user>
      user
    </user>
    <client>
      client
    </client>
    <date-time>
      date-time
    </date-time>
    <comment>
      comment
    </comment>
    <log>
      log
```

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```
    </log>
  </rescue-configuration>
</commit-information>
```

Description

<rescue-information>

Usage

```
<rescue-information>
  <load-configuration-results>....</load-configuration-results>
  <configuration-information>....</configuration-information>
</rescue-information>
```

Description

<rescue-management-results>

Usage

```
<rescue-management-results>
  <routing-engine>....</routing-engine>
</rescue-management-results>
```

Description

<reverse-connection>

Usage

```
<system-services-reverse-information>
  <reverse-connection>
    <reverse-since>
      reverse-since
    </reverse-since>
    <reverse-method>
      reverse-method
    </reverse-method>
  </reverse-connection>
</system-services-reverse-information>
```

Description

<rollback-information>

Usage

```
<rollback-information>
  <load-configuration-results>....</load-configuration-results>
  <configuration-information>....</configuration-information>
</rollback-information>
```

Description

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<routing-engine>

Usage

```
<rescue-management-results>
  <routing-engine>
    <name>
      name
    </name>
    <success>
      success
    </success>
    <commit-check-success>
      commit-check-success
    </commit-check-success>
    <commit-success>
      commit-success
    </commit-success>
  </routing-engine>
</rescue-management-results>
```

Description

<routing-engine>

Usage

```
<commit-results>
  <routing-engine>
    <name>
      name
    </name>
    <success>
      success
    </success>
    <commit-check-success>
      commit-check-success
    </commit-check-success>
    <commit-success>
      commit-success
    </commit-success>
  </routing-engine>
</commit-results>
```

Description

<rpc-error>

Usage

```
<rpc-error>
  <error-type>
    error-type
  </error-type>
  <error-tag>
    error-tag
```

```
  </error-tag>
  <error-severity>
    error-severity
  </error-severity>
  <error-path>
    error-path
  </error-path>
  <error-message>
    error-message
  </error-message>
  <error-info>....</error-info>
</rpc-error>
```

Description

<rpc-reply>

Usage

```
<rpc-reply>
  <ok>
    ok
  </ok>
  <expand-list>....</expand-list>
  <configuration-information>....</configuration-information>
  <event-scripts-reload>....</event-scripts-reload>
  <pipe>....</pipe>
  <run-command>....</run-command>
  <file-command>....</file-command>
  <errmsg-documentation>....</errmsg-documentation>
  <echo>
    echo
  </echo>
</rpc-reply>
```

Description

<sdk-version>

Usage

```
<sdk-version>
  <major>
    major
  </major>
  <minor>
    minor
  </minor>
</sdk-version>
```

Description Junos accepted SDK version

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<security-alarm>

Usage

```
<security-alarm-information>
  <security-alarm>
    <security-alarm-id>
      security-alarm-id
    </security-alarm-id>
    <security-alarm-time>
      security-alarm-time
    </security-alarm-time>
    <security-alarm-type>
      security-alarm-type
    </security-alarm-type>
    <security-alarm-message>
      security-alarm-message
    </security-alarm-message>
    <process>....</process>
    <severity>
      severity
    </severity>
  </security-alarm>
</security-alarm-information>
```

Description Detailed information about an active security alarm

<security-alarm-information>

Usage

```
<security-alarm-information>
  <security-alarms-disabled>
    security-alarms-disabled
  </security-alarms-disabled>
  <no-security-alarms-active>
    no-security-alarms-active
  </no-security-alarms-active>
  <no-security-alarms-returned>
    no-security-alarms-returned
  </no-security-alarms-returned>
  <security-alarm>....</security-alarm>
</security-alarm-information>
```

Description Information about all active security alarms

<security-event>

Usage

```
<security-log-information>
  <security-event>
    <security-event-id>
      security-event-id
    </security-event-id>
```

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```
<security-event-time>
  security-event-time
</security-event-time>
<security-event-message>
  security-event-message
</security-event-message>
<process>....</process>
<severity>
  severity
</severity>
<security-event-result>
  security-event-result
</security-event-result>
<security-event-username>
  security-event-username
</security-event-username>
<security-event-interface-name>
  security-event-interface-name
</security-event-interface-name>
<security-event-protocol>
  security-event-protocol
</security-event-protocol>
<security-event-destination-address>
  security-event-destination-address
</security-event-destination-address>
<security-event-destination-port>
  security-event-destination-port
</security-event-destination-port>
<security-event-source-address>
  security-event-source-address
</security-event-source-address>
<security-event-source-port>
  security-event-source-port
</security-event-source-port>
</security-event>
</security-log-information>
```

Description Detailed information about a security event

<security-log-information>

Usage

```
<security-log-information>
  <security-logs-disabled>
    security-logs-disabled
  </security-logs-disabled>
  <no-security-events>
    no-security-events
  </no-security-events>
  <no-security-events-returned>
    no-security-events-returned
  </no-security-events-returned>
  <security-event>....</security-event>
```


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```
</security-log-information>
```

Description Information about all active security events

<snapshot-copy>

Usage

```
<snapshot-information>
  <snapshot-copy>
    <source-directory>
      source-directory
    </source-directory>
    <destination-directory>
      destination-directory
    </destination-directory>
  </snapshot-copy>
</snapshot-information>
```

Description

<snapshot-information>

Usage

```
<snapshot-information>
  <inform>....</inform>
  <snapshot-copy>....</snapshot-copy>
  <archived-directory-list>....</archived-directory-list>
  <snapshot-partitions>....</snapshot-partitions>
  <snapshot-medium>
    snapshot-medium
  </snapshot-medium>
  <creation-date>
    creation-date
  </creation-date>
  <software-version>....</software-version>
</snapshot-information>
```

Description

<snapshot-partitions>

Usage

```
<snapshot-information>
  <snapshot-partitions>
    <partition-information>....</partition-information>
  </snapshot-partitions>
</snapshot-information>
```

Description Partitions on snapshot medium

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<software-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <software-information>
      <host-name>
        host-name
      </host-name>
      <product-model>
        product-model
      </product-model>
      <product-name>
        product-name
      </product-name>
      <jsr>
        jsr
      </jsr>
      <fips>
        fips
      </fips>
      <package-information>....</package-information>
      <version-information>....</version-information>
      <haiku>....</haiku>
    </software-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<software-information>

Usage

```
<software-information>
  <host-name>
    host-name
  </host-name>
  <product-model>
    product-model
  </product-model>
  <product-name>
    product-name
  </product-name>
  <jsr>
    jsr
  </jsr>
  <fips>
    fips
  </fips>
  <package-information>....</package-information>
  <version-information>....</version-information>
  <haiku>....</haiku>
</software-information>
```


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Description

<software-installation-status>

Usage

```
<software-installation-status>
  <install-in-progress>
    install-in-progress
  </install-in-progress>
  <install-needs-reboot>
    install-needs-reboot
  </install-needs-reboot>
</software-installation-status>
```

Description Information about the current software installation

<software-version>

Usage

```
<snapshot-information>
  <software-version>
    <package>....</package>
  </software-version>
</snapshot-information>
```

Description Version of software snapshot

<storage-partitions-information>

Usage

```
<system-storage-partitions-information>
  <storage-partitions-information>
    <partition>
      partition
    </partition>
    <partition-size>
      partition-size
    </partition-size>
    <mount-point>
      mount-point
    </mount-point>
  </storage-partitions-information>
</system-storage-partitions-information>
```

Description Partitions detailed information

<syslog-events>

Usage

```
<syslog-events>
  <syslog>
```

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```
    syslog
  </syslog>
  <data>
    data
  </data>
</syslog-events>
```

Description Information about one or more system log messages

<syslog-files>

Usage

```
<syslog-files>
  <syslog-file-name>
    syslog-file-name
  </syslog-file-name>
</syslog-files>
```

Description

<syslog-tag>

Usage

```
<syslog-tag-information-list>
  <syslog-tag-information>
    <syslog-tag>
      <name>
        name
      </name>
      <message>
        message
      </message>
      <help>
        help
      </help>
      <description>
        description
      </description>
      <type>
        type
      </type>
      <severity>
        severity
      </severity>
      <facility>
        facility
      </facility>
      <deprecated>
        deprecated
      </deprecated>
      <cause>
        cause
      </cause>
```


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```
      <action>
       action
      </action>
     </syslog-tag>
    </syslog-tag-information>
</syslog-tag-information-list>
```

Description

<syslog-tag>

Usage

```
<syslog-tag-list>
 <syslog-tag>
  <name>
   name
  </name>
  <message>
   message
  </message>
  <help>
   help
  </help>
  <description>
   description
  </description>
  <type>
   type
  </type>
  <severity>
   severity
  </severity>
  <facility>
   facility
  </facility>
  <deprecated>
   deprecated
  </deprecated>
  <cause>
   cause
  </cause>
  <action>
   action
  </action>
 </syslog-tag>
</syslog-tag-list>
```

Description

<syslog-tag-information>

Usage

```
<syslog-tag-information-list>
 <syslog-tag-information>
```

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```
    <syslog-tag>....</syslog-tag>
  </syslog-tag-information>
</syslog-tag-information-list>
```

Description Syslog message help information

<syslog-tag-information-list>

Usage

```
<syslog-tag-information-list>
  <syslog-tag-information>....</syslog-tag-information>
</syslog-tag-information-list>
```

Description List of syslog message help information

<syslog-tag-list>

Usage

```
<syslog-tag-list>
  <syslog-tag>....</syslog-tag>
</syslog-tag-list>
```

Description List of syslog tags

<system-booted-time>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <system-booted-time>
        <date-time>
          date-time
        </date-time>
        <time-length>
          time-length
        </time-length>
      </system-booted-time>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description System booted time

<system-booted-time>

Usage

```
<system-uptime-information>
  <system-booted-time>
```


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```
    <date-time>
      date-time
    </date-time>
    <time-length>
      time-length
    </time-length>
  </system-booted-time>
</system-uptime-information>
```

Description System booted time

<system-information>

Usage

```
<system-information>
  <host-name>
    host-name
  </host-name>
  <os-name>
    os-name
  </os-name>
  <hardware-model>
    hardware-model
  </hardware-model>
  <os-version>
    os-version
  </os-version>
  <serial-number>
    serial-number
  </serial-number>
  <virtual-chassis>
    virtual-chassis
  </virtual-chassis>
  <cluster-node>
    cluster-node
  </cluster-node>
  <package-information>....</package-information>
  <blade-server>
    blade-server
  </blade-server>
</system-information>
```

Description

<system-kernel-malloc-information>

Usage

```
<system-kernel-malloc-information>
  <vmstat-memstat-malloc>....</vmstat-memstat-malloc>
</system-kernel-malloc-information>
```

Description Show system kernel malloc statistics

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<system-kernel-memory-information>

Usage

```
<system-kernel-memory-information>
  <real-memory-reserved-information>....</real-memory-reserved-information>

<vm-kernel-dynamic-range-information>....</vm-kernel-dynamic-range-information>

  <vm-kernel-state>....</vm-kernel-state>
  <pmap-table-information>....</pmap-table-information>
</system-kernel-memory-information>
```

Description Show system kernel memory usage

<system-kernel-zone-information>

Usage

```
<system-kernel-zone-information>
  <vmstat-memstat-zone>....</vmstat-memstat-zone>
</system-kernel-zone-information>
```

Description Show system kernel malloc statistics

<system-login-lockout-information>

Usage

```
<system-login-lockout-information>
  <no-login-lockout>
    no-login-lockout
  </no-login-lockout>
  <no-login-lockout-user>
    no-login-lockout-user
  </no-login-lockout-user>
  <login-lockout-users-table>....</login-lockout-users-table>
</system-login-lockout-information>
```

Description Show users locked out from logins

<system-services-reverse-information>

Usage

```
<system-services-reverse-information>
  <reverse-connection>....</reverse-connection>
</system-services-reverse-information>
```

Description

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<system-storage-cleanup-information>

Usage

```
<system-storage-cleanup-information>
  <file-list>....</file-list>
  <dre-repository-status>
    dre-repository-status
  </dre-repository-status>
  <dre-repository-content>....</dre-repository-content>
</system-storage-cleanup-information>
```

Description

<system-storage-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-storage-information>
      <filesystem>....</filesystem>
      <device-size>
        device-size
      </device-size>
    </system-storage-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<system-storage-information>

Usage

```
<system-storage-information>
  <filesystem>....</filesystem>
  <device-size>
    device-size
  </device-size>
</system-storage-information>
```

Description

<system-storage-partitions-information>

Usage

```
<system-storage-partitions-information>
  <partitions>....</partitions>
  <storage-partitions-information>....</storage-partitions-information>
</system-storage-partitions-information>
```

Description

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<system-uptime-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <last-configured-time>....</last-configured-time>
      <current-time>....</current-time>
      <system-booted-time>....</system-booted-time>
      <protocols-started-time>....</protocols-started-time>
      <uptime-information>....</uptime-information>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description System uptime information

<system-uptime-information>

Usage

```
<system-uptime-information>
  <last-configured-time>....</last-configured-time>
  <current-time>....</current-time>
  <system-booted-time>....</system-booted-time>
  <protocols-started-time>....</protocols-started-time>
  <uptime-information>....</uptime-information>
</system-uptime-information>
```

Description System uptime information

<system-users-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>....</uptime-information>
      <web-management-users>....</web-management-users>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description Show system users

<system-users-information>

Usage

```
<system-users-information>
  <uptime-information>....</uptime-information>
  <web-management-users>....</web-management-users>
```


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```
</system-users-information>
```

Description Show system users

<system-virtual-memory-information>

Usage

```
<system-virtual-memory-information>
  <vmstat-memstat-malloc>....</vmstat-memstat-malloc>
  <vmstat-memstat-zone>....</vmstat-memstat-zone>
  <vmstat-intr>....</vmstat-intr>
  <vmstat-sumstat>....</vmstat-sumstat>
  <vm-kernel-state>....</vm-kernel-state>
  <vmstat-fork-stat>....</vmstat-fork-stat>
  <vmstat-times>....</vmstat-times>
</system-virtual-memory-information>
```

Description Show system virtual memory statistics

<tip>

Usage

```
<tip>
  <content>
    content
  </content>
</tip>
```

Description

<uptime-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>
        <date-time>
          date-time
        </date-time>
        <up-time>
          up-time
        </up-time>
        <active-user-count>
          active-user-count
        </active-user-count>
        <load-average-1>
          load-average-1
        </load-average-1>
        <load-average-5>
          load-average-5
```

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```
        </load-average-5>
        <load-average-15>
          load-average-15
        </load-average-15>
        <user-table>....</user-table>
      </uptime-information>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description System uptime details

<uptime-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <uptime-information>
        <date-time>
          date-time
        </date-time>
        <up-time>
          up-time
        </up-time>
        <active-user-count>
          active-user-count
        </active-user-count>
        <load-average-1>
          load-average-1
        </load-average-1>
        <load-average-5>
          load-average-5
        </load-average-5>
        <load-average-15>
          load-average-15
        </load-average-15>
        <user-table>....</user-table>
      </uptime-information>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description System uptime details

<uptime-information>

Usage

```
<uptime-information>
  <date-time>
    date-time
  </date-time>
```


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```
<up-time>
  up-time
</up-time>
<active-user-count>
  active-user-count
</active-user-count>
<load-average-1>
  load-average-1
</load-average-1>
<load-average-5>
  load-average-5
</load-average-5>
<load-average-15>
  load-average-15
</load-average-15>
<user-table>....</user-table>
</uptime-information>
```

Description System uptime details

<uptime-information>

Usage

```
<system-uptime-information>
  <uptime-information>
    <date-time>
      date-time
    </date-time>
    <up-time>
      up-time
    </up-time>
    <active-user-count>
      active-user-count
    </active-user-count>
    <load-average-1>
      load-average-1
    </load-average-1>
    <load-average-5>
      load-average-5
    </load-average-5>
    <load-average-15>
      load-average-15
    </load-average-15>
    <user-table>....</user-table>
  </uptime-information>
</system-uptime-information>
```

Description System uptime details

<uptime-information>

Usage

```
<system-users-information>
  <uptime-information>
    <date-time>
      date-time
    </date-time>
    <up-time>
      up-time
    </up-time>
    <active-user-count>
      active-user-count
    </active-user-count>
    <load-average-1>
      load-average-1
    </load-average-1>
    <load-average-5>
      load-average-5
    </load-average-5>
    <load-average-15>
      load-average-15
    </load-average-15>
    <user-table>....</user-table>
  </uptime-information>
</system-users-information>
```

Description System uptime details

<user-entry>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>
        <user-table>
          <user-entry>
            <user>
              user
            </user>
            <tty>
              tty
            </tty>
            <from>
              from
            </from>
            <login-time>
              login-time
            </login-time>
            <idle-time>
              idle-time
            </idle-time>
```


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```
            <command>
              command
            </command>
          </user-entry>
        </user-table>
      </uptime-information>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<user-entry>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-uptime-information>
      <uptime-information>
        <user-table>
          <user-entry>
            <user>
              user
            </user>
            <tty>
              tty
            </tty>
            <from>
              from
            </from>
            <login-time>
              login-time
            </login-time>
            <idle-time>
              idle-time
            </idle-time>
            <command>
              command
            </command>
          </user-entry>
        </user-table>
      </uptime-information>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<user-entry>

Usage

```
<uptime-information>
  <user-table>
    <user-entry>
```

```
      <user>
        user
      </user>
      <tty>
        tty
      </tty>
      <from>
        from
      </from>
      <login-time>
        login-time
      </login-time>
      <idle-time>
        idle-time
      </idle-time>
      <command>
        command
      </command>
    </user-entry>
  </user-table>
</uptime-information>
```

Description

<user-entry>

Usage

```
<system-uptime-information>
  <uptime-information>
    <user-table>
      <user-entry>
        <user>
          user
        </user>
        <tty>
          tty
        </tty>
        <from>
          from
        </from>
        <login-time>
          login-time
        </login-time>
        <idle-time>
          idle-time
        </idle-time>
        <command>
          command
        </command>
      </user-entry>
    </user-table>
  </uptime-information>
</system-uptime-information>
```


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Description

<user-entry>

Usage

```
<system-users-information>
 <uptime-information>
  <user-table>
   <user-entry>
    <user>
     user
    </user>
    <tty>
     tty
    </tty>
    <from>
     from
    </from>
    <login-time>
     login-time
    </login-time>
    <idle-time>
     idle-time
    </idle-time>
    <command>
     command
    </command>
   </user-entry>
  </user-table>
 </uptime-information>
</system-users-information>
```

Description

<user-information>

Usage

```
<authorization-information>
 <user-information>
  <user>
   user
  </user>
  <login-name>
   login-name
  </login-name>
  <user-class>
   user-class
  </user-class>
 </user-information>
</authorization-information>
```

Description

<user-permission-entry>

Usage

```
<authorization-information>
  <user-permission-list>
    <user-permission-entry>
      <permission-type>
        permission-type
      </permission-type>
      <permission-type-help>
        permission-type-help
      </permission-type-help>
    </user-permission-entry>
  </user-permission-list>
</authorization-information>
```

Description

<user-permission-list>

Usage

```
<authorization-information>
  <user-permission-list>
    <user-permission-entry>....</user-permission-entry>
  </user-permission-list>
</authorization-information>
```

Description

<user-table>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <uptime-information>
        <user-table>
          <user-entry>....</user-entry>
          <process-table>....</process-table>
        </user-table>
      </uptime-information>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<user-table>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
```


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```
    <system-uptime-information>
      <uptime-information>
        <user-table>
          <user-entry>....</user-entry>
          <process-table>....</process-table>
        </user-table>
      </uptime-information>
    </system-uptime-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<user-table>

Usage

```
<uptime-information>
  <user-table>
    <user-entry>....</user-entry>
    <process-table>....</process-table>
  </user-table>
</uptime-information>
```

Description

<user-table>

Usage

```
<system-uptime-information>
  <uptime-information>
    <user-table>
      <user-entry>....</user-entry>
      <process-table>....</process-table>
    </user-table>
  </uptime-information>
</system-uptime-information>
```

Description

<user-table>

Usage

```
<system-users-information>
  <uptime-information>
    <user-table>
      <user-entry>....</user-entry>
      <process-table>....</process-table>
    </user-table>
  </uptime-information>
</system-users-information>
```

Description

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<version-info-list>

Usage

```
<version-info-list>
  <source-daemon>
    source-daemon
  </source-daemon>
  <version-information>....</version-information>
</version-info-list>
```

Description

<version-information>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <software-information>
      <version-information>
        <component>
          component
        </component>
        <service-interface>
          service-interface
        </service-interface>
        <major>
          major
        </major>
        <minor>
          minor
        </minor>
        <release-category>
          release-category
        </release-category>
        <build-number>
          build-number
        </build-number>
        <spin>
          spin
        </spin>
        <builder>
          builder
        </builder>
        <build-date>
          build-date
        </build-date>
        <build-machine>
          build-machine
        </build-machine>
        <build-directory>
          build-directory
        </build-directory>
      </version-information>
    </software-information>
```


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```
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<version-information>

Usage

```
<version-information>
  <component>
    component
  </component>
  <service-interface>
    service-interface
  </service-interface>
  <major>
    major
  </major>
  <minor>
    minor
  </minor>
  <release-category>
    release-category
  </release-category>
  <build-number>
    build-number
  </build-number>
  <spin>
    spin
  </spin>
  <builder>
    builder
  </builder>
  <build-date>
    build-date
  </build-date>
  <build-machine>
    build-machine
  </build-machine>
  <build-directory>
    build-directory
  </build-directory>
</version-information>
```

Description

<version-information>

Usage

```
<software-information>
  <version-information>
    <component>
      component
    </component>
```

```
    <service-interface>
      service-interface
    </service-interface>
    <major>
      major
    </major>
    <minor>
      minor
    </minor>
    <release-category>
      release-category
    </release-category>
    <build-number>
      build-number
    </build-number>
    <spin>
      spin
    </spin>
    <builder>
      builder
    </builder>
    <build-date>
      build-date
    </build-date>
    <build-machine>
      build-machine
    </build-machine>
    <build-directory>
      build-directory
    </build-directory>
  </version-information>
</software-information>
```

Description

<version-information>

Usage

```
<version-info-list>
  <version-information>
    <component>
      component
    </component>
    <service-interface>
      service-interface
    </service-interface>
    <major>
      major
    </major>
    <minor>
      minor
    </minor>
    <release-category>
      release-category
    </release-category>
```


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```
    <build-number>
      build-number
    </build-number>
    <spin>
      spin
    </spin>
    <builder>
      builder
    </builder>
    <build-date>
      build-date
    </build-date>
    <build-machine>
      build-machine
    </build-machine>
    <build-directory>
      build-directory
    </build-directory>
  </version-information>
</version-info-list>
```

Description

<vm-kernel-dynamic-range-information>

Usage

```
<vm-kernel-dynamic-range-information>
  <vm-kernel-dynamic-range-start>
    vm-kernel-dynamic-range-start
  </vm-kernel-dynamic-range-start>
  <vm-kernel-dynamic-range-end>
    vm-kernel-dynamic-range-end
  </vm-kernel-dynamic-range-end>
  <vm-kernel-dynamic-range-size>
    vm-kernel-dynamic-range-size
  </vm-kernel-dynamic-range-size>
</vm-kernel-dynamic-range-information>
```

Description

<vm-kernel-dynamic-range-information>

Usage

```
<system-kernel-memory-information>
  <vm-kernel-dynamic-range-information>
    <vm-kernel-dynamic-range-start>
      vm-kernel-dynamic-range-start
    </vm-kernel-dynamic-range-start>
    <vm-kernel-dynamic-range-end>
      vm-kernel-dynamic-range-end
    </vm-kernel-dynamic-range-end>
    <vm-kernel-dynamic-range-size>
      vm-kernel-dynamic-range-size
    </vm-kernel-dynamic-range-size>
```

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```
  </vm-kernel-dynamic-range-information>
</system-kernel-memory-information>
```

Description

<vm-kernel-state>

Usage

```
<system-virtual-memory-information>
  <vm-kernel-state>
    <vm-kmem-map-free>
      vm-kmem-map-free
    </vm-kmem-map-free>
  </vm-kernel-state>
</system-virtual-memory-information>
```

Description

<vm-kernel-state>

Usage

```
<system-kernel-memory-information>
  <vm-kernel-state>
    <vm-kmem-map-free>
      vm-kmem-map-free
    </vm-kmem-map-free>
  </vm-kernel-state>
</system-kernel-memory-information>
```

Description

<vmstat-fork-stat>

Usage

```
<system-virtual-memory-information>
  <vmstat-fork-stat>
    <fork-stat>
      fork-stat
    </fork-stat>
    <fork-pages>
      fork-pages
    </fork-pages>
    <fork-average-pages-per-fork>
      fork-average-pages-per-fork
    </fork-average-pages-per-fork>
    <vfork-stat>
      vfork-stat
    </vfork-stat>
    <vfork-pages>
      vfork-pages
    </vfork-pages>
    <vfork-average-pages-per-vfork>
      vfork-average-pages-per-vfork
```


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```
    </vfork-average-pages-per-vfork>
    <rfork-stat>
     rfork-stat
    </rfork-stat>
    <rfork-pages>
     rfork-pages
    </rfork-pages>
    <rfork-average-pages-per-rfork>
     rfork-average-pages-per-rfork
    </rfork-average-pages-per-rfork>
   </vmstat-fork-stat>
</system-virtual-memory-information>
```

Description

<vmstat-intr>

Usage

```
<system-virtual-memory-information>
 <vmstat-intr>
  <intr-name>
   intr-name
  </intr-name>
  <intr-cnt>
   intr-cnt
  </intr-cnt>
  <intr-rate>
   intr-rate
  </intr-rate>
 </vmstat-intr>
</system-virtual-memory-information>
```

Description

<vmstat-memstat-zone>

Usage

```
<vmstat-memstat-zone>
 <zone-name>
  zone-name
 </zone-name>
 <zone-size>
  zone-size
 </zone-size>
 <count-limit>
  count-limit
 </count-limit>
 <used>
  used
 </used>
 <free>
  free
 </free>
 <zone-req>
```

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```
    zone-req
   </zone-req>
</vmstat-memstat-zone>
```

Description

<vmstat-memstat-zone>

Usage

```
<system-kernel-zone-information>
 <vmstat-memstat-zone>
  <zone-name>
   zone-name
  </zone-name>
  <zone-size>
   zone-size
  </zone-size>
  <count-limit>
   count-limit
  </count-limit>
  <used>
   used
  </used>
  <free>
   free
  </free>
  <zone-req>
   zone-req
  </zone-req>
 </vmstat-memstat-zone>
</system-kernel-zone-information>
```

Description

<vmstat-memstat-zone>

Usage

```
<system-virtual-memory-information>
 <vmstat-memstat-zone>
  <zone-name>
   zone-name
  </zone-name>
  <zone-size>
   zone-size
  </zone-size>
  <count-limit>
   count-limit
  </count-limit>
  <used>
   used
  </used>
  <free>
   free
  </free>
```


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```
    <zone-req>
     zone-req
    </zone-req>
   </vmstat-memstat-zone>
</system-virtual-memory-information>
```

Description

<vmstat-sumstat>

Usage

```
<system-virtual-memory-information>
 <vmstat-sumstat>
  <cpu-context-switch>
   cpu-context-switch
  </cpu-context-switch>
  <dev-intr>
   dev-intr
  </dev-intr>
  <soft-intr>
   soft-intr
  </soft-intr>
  <traps>
   traps
  </traps>
  <sys-calls>
   sys-calls
  </sys-calls>
  <kernel-thrds>
   kernel-thrds
  </kernel-thrds>
  <fork-calls>
   fork-calls
  </fork-calls>
  <vfork-calls>
   vfork-calls
  </vfork-calls>
  <rfork-calls>
   rfork-calls
  </rfork-calls>
  <swap-pageins>
   swap-pageins
  </swap-pageins>
  <swap-pagedin>
   swap-pagedin
  </swap-pagedin>
  <swap-pageouts>
   swap-pageouts
  </swap-pageouts>
  <swap-pagedout>
   swap-pagedout
  </swap-pagedout>
  <vnode-pageins>
   vnode-pageins
  </vnode-pageins>
```

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```
<vnode-pagedin>
  vnode-pagedin
</vnode-pagedin>
<vnode-pageouts>
  vnode-pageouts
</vnode-pageouts>
<vnode-pagedout>
  vnode-pagedout
</vnode-pagedout>
<page-daemon-wakeup>
  page-daemon-wakeup
</page-daemon-wakeup>
<page-daemon-examined-pages>
  page-daemon-examined-pages
</page-daemon-examined-pages>
<pages-reactivated>
  pages-reactivated
</pages-reactivated>
<copy-on-write-faults>
  copy-on-write-faults
</copy-on-write-faults>
<copy-on-write-optimized-faults>
  copy-on-write-optimized-faults
</copy-on-write-optimized-faults>
<zero-fill-pages-zeroed>
  zero-fill-pages-zeroed
</zero-fill-pages-zeroed>
<zero-fill-pages-prezeroed>
  zero-fill-pages-prezeroed
</zero-fill-pages-prezeroed>
<transit-blocking-page-faults>
  transit-blocking-page-faults
</transit-blocking-page-faults>
<total-vm-faults>
  total-vm-faults
</total-vm-faults>
<pages-affected-by-kernel-thrd-creat>
  pages-affected-by-kernel-thrd-creat
</pages-affected-by-kernel-thrd-creat>
<pages-affected-by-fork>
  pages-affected-by-fork
</pages-affected-by-fork>
<pages-affected-by-vfork>
  pages-affected-by-vfork
</pages-affected-by-vfork>
<pages-affected-by-rfork>
  pages-affected-by-rfork
</pages-affected-by-rfork>
<pages-freed>
  pages-freed
</pages-freed>
<pages-freed-by-deamon>
  pages-freed-by-deamon
</pages-freed-by-deamon>
<pages-freed-by-exiting-proc>
  pages-freed-by-exiting-proc
```


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```
</pages-freed-by-exiting-proc>
<pages-active>
  pages-active
</pages-active>
<pages-inactive>
  pages-inactive
</pages-inactive>
<pages-in-vm-cache>
  pages-in-vm-cache
</pages-in-vm-cache>
<pages-wired-down>
  pages-wired-down
</pages-wired-down>
<pages-free>
  pages-free
</pages-free>
<bytes-per-page>
  bytes-per-page
</bytes-per-page>
<swap-pages-used>
  swap-pages-used
</swap-pages-used>
<peak-swap-pages-used>
  peak-swap-pages-used
</peak-swap-pages-used>
<total-name-lookups>
  total-name-lookups
</total-name-lookups>
<positive-cache-hits>
  positive-cache-hits
</positive-cache-hits>
<negative-cache-hits>
  negative-cache-hits
</negative-cache-hits>
<pass2>
  pass2
</pass2>
<cache-deletions>
  cache-deletions
</cache-deletions>
<cache-falsehits>
  cache-falsehits
</cache-falsehits>
<toolong>
  toolong
</toolong>
</vmstat-sumstat>
</system-virtual-memory-information>
```

Description

<vmstat-times>

Usage

<system-virtual-memory-information>

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```
  <vmstat-times>
    <vmstat-times-reclaims>
      vmstat-times-reclaims
    </vmstat-times-reclaims>
    <vmstat-times-reclaims-total-time>
      vmstat-times-reclaims-total-time
    </vmstat-times-reclaims-total-time>
    <vmstat-times-average-time-to-reclaim>
      vmstat-times-average-time-to-reclaim
    </vmstat-times-average-time-to-reclaim>
    <vmstat-times-pageins>
      vmstat-times-pageins
    </vmstat-times-pageins>
    <vmstat-times-pageins-total-time>
      vmstat-times-pageins-total-time
    </vmstat-times-pageins-total-time>
    <vmstat-times-average-time-to-pageins>
      vmstat-times-average-time-to-pageins
    </vmstat-times-average-time-to-pageins>
  </vmstat-times>
</system-virtual-memory-information>
```

Description

<warning>

Usage

```
<warning>
  <source-daemon>
    source-daemon
  </source-daemon>
  <filename>
    filename
  </filename>
  <line-number>
    line-number
  </line-number>
  <column>
    column
  </column>
  <token>
    token
  </token>
  <edit-path>
    edit-path
  </edit-path>
  <statement>
    statement
  </statement>
  <message>
    message
  </message>
</warning>
```


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Description

<web-management-user>

Usage

```
<multi-routing-engine-results>
 <multi-routing-engine-item>
  <system-users-information>
   <web-management-users>
    <web-management-user>
     <user>
      user
     </user>
     <tty>
      tty
     </tty>
     <from>
      from
     </from>
     <login-time>
      login-time
     </login-time>
     <idle-time>
      idle-time
     </idle-time>
    </web-management-user>
   </web-management-users>
  </system-users-information>
 </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<web-management-user>

Usage

```
<system-users-information>
 <web-management-users>
  <web-management-user>
   <user>
    user
   </user>
   <tty>
    tty
   </tty>
   <from>
    from
   </from>
   <login-time>
    login-time
   </login-time>
   <idle-time>
    idle-time
   </idle-time>
  </web-management-user>
```

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```
  </web-management-users>
</system-users-information>
```

Description

<web-management-users>

Usage

```
<multi-routing-engine-results>
  <multi-routing-engine-item>
    <system-users-information>
      <web-management-users>
        <web-management-user>....</web-management-user>
      </web-management-users>
    </system-users-information>
  </multi-routing-engine-item>
</multi-routing-engine-results>
```

Description

<web-management-users>

Usage

```
<system-users-information>
  <web-management-users>
    <web-management-user>....</web-management-user>
  </web-management-users>
</system-users-information>
```

Description

<xnm:error>

Usage

```
<xnm:error>
  <parse>
    parse
  </parse>
  <source-daemon>
    source-daemon
  </source-daemon>
  <filename>
    filename
  </filename>
  <line-number>
    line-number
  </line-number>
  <column>
    column
  </column>
  <token>
    token
  </token>
```


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```
<edit-path>
  edit-path
</edit-path>
<statement>
  statement
</statement>
<message>
  message
</message>
<database-status-information>....</database-status-information>
<reason>....</reason>
</xnm:error>
```

Description

<xnm:warning>

Usage

```
<xnm:warning>
  <source-daemon>
    source-daemon
  </source-daemon>
  <filename>
    filename
  </filename>
  <line-number>
    line-number
  </line-number>
  <column>
    column
  </column>
  <token>
    token
  </token>
  <edit-path>
    edit-path
  </edit-path>
  <statement>
    statement
  </statement>
  <message>
    message
  </message>
  <reason>....</reason>
</xnm:warning>
```

Description

Summary of Task Response Response Tags

<task>

Usage

```
<task-timer-information>
```

```
  <task>
   <task-name>
    task-name
   </task-name>
   <task-timer>....</task-timer>
  </task>
</task-timer-information>
```

Description

<task-block>

Usage

```
<task-block-list>
  <task-block>
   <tb-name>
    tb-name
   </tb-name>
   <tb-size>
    tb-size
   </tb-size>
   <tb-alloc-size>
    tb-alloc-size
   </tb-alloc-size>
   <tb-terse-transient>
    tb-terse-transient
   </tb-terse-transient>
   <tb-terse-fullpage>
    tb-terse-fullpage
   </tb-terse-fullpage>
   <tb-terse-debug>
    tb-terse-debug
   </tb-terse-debug>
   <tb-alloc-blocks>
    tb-alloc-blocks
   </tb-alloc-blocks>
   <tb-alloc-bytes>
    tb-alloc-bytes
   </tb-alloc-bytes>
   <tb-max-alloc-blocks>
    tb-max-alloc-blocks
   </tb-max-alloc-blocks>
   <tb-max-alloc-bytes>
    tb-max-alloc-bytes
   </tb-max-alloc-bytes>
  </task-block>
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
```


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```
<task-memory-allocator-report>
 <task-block-list>
  <task-block>
   <tb-name>
    tb-name
   </tb-name>
   <tb-size>
    tb-size
   </tb-size>
   <tb-alloc-size>
    tb-alloc-size
   </tb-alloc-size>
   <tb-terse-transient>
    tb-terse-transient
   </tb-terse-transient>
   <tb-terse-fullpage>
    tb-terse-fullpage
   </tb-terse-fullpage>
   <tb-terse-debug>
    tb-terse-debug
   </tb-terse-debug>
   <tb-alloc-blocks>
    tb-alloc-blocks
   </tb-alloc-blocks>
   <tb-alloc-bytes>
    tb-alloc-bytes
   </tb-alloc-bytes>
   <tb-max-alloc-blocks>
    tb-max-alloc-blocks
   </tb-max-alloc-blocks>
   <tb-max-alloc-bytes>
    tb-max-alloc-bytes
   </tb-max-alloc-bytes>
  </task-block>
 </task-block-list>
</task-memory-allocator-report>
</task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
 <task-block>....</task-block>
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
```

```
    <task-block-list>
      <task-block>....</task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page>

Usage

```
<task-lite-page-list>
  <task-lite-page>
    <tlp-name>
      tlp-name
    </tlp-name>
    <tlp-alloc-pages>
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>
        <tlp-name>
          tlp-name
        </tlp-name>
        <tlp-alloc-pages>
          tlp-alloc-pages
        </tlp-alloc-pages>
        <tlp-alloc-bytes>
          tlp-alloc-bytes
        </tlp-alloc-bytes>
        <tlp-max-alloc-pages>
          tlp-max-alloc-pages
        </tlp-max-alloc-pages>
        <tlp-max-alloc-bytes>
          tlp-max-alloc-bytes
```


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```
        </tlp-max-alloc-bytes>
       </task-lite-page>
     </task-lite-page-list>
   </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page-list>

Usage

```
<task-lite-page-list>
  <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>....</task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
```

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```
  </task-malloc>
</task-malloc-list>
```

Description

<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
      </task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
```


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```
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
    task-memory-in-use-size
  </task-memory-in-use-size>
  <task-memory-in-use-avail>
    task-memory-in-use-avail
  </task-memory-in-use-avail>
  <task-memory-max-size>
    task-memory-max-size
  </task-memory-max-size>
  <task-memory-max-avail>
    task-memory-max-avail
  </task-memory-max-avail>
  <task-memory-max-when>
    task-memory-max-when
  </task-memory-max-when>
  <task-memory-free-size>
    task-memory-free-size
  </task-memory-free-size>
  <task-memory-overall-report>....</task-memory-overall-report>
  <task-memory-allocator-report>....</task-memory-allocator-report>
  <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
  <task-memory-dynamic-allocs>
    task-memory-dynamic-allocs
  </task-memory-dynamic-allocs>
  <task-memory-max-dynamic-allocs>
    task-memory-max-dynamic-allocs
```

```
  </task-memory-max-dynamic-allocs>
  <task-memory-bss-bytes>
    task-memory-bss-bytes
  </task-memory-bss-bytes>
  <task-memory-max-bss-bytes>
    task-memory-max-bss-bytes
  </task-memory-max-bss-bytes>
  <task-memory-page-data-bytes>
    task-memory-page-data-bytes
  </task-memory-page-data-bytes>
  <task-memory-max-page-data-bytes>
    task-memory-max-page-data-bytes
  </task-memory-max-page-data-bytes>
  <task-memory-dir-bytes>
    task-memory-dir-bytes
  </task-memory-dir-bytes>
  <task-memory-max-dir-bytes>
    task-memory-max-dir-bytes
  </task-memory-max-dir-bytes>
  <task-memory-total-bytes-in-use>
    task-memory-total-bytes-in-use
  </task-memory-total-bytes-in-use>
  <task-memory-total-bytes-percent>
    task-memory-total-bytes-percent
  </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
```


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```
        task-memory-total-bytes
      </task-memory-total-bytes>
      <task-memory-total-max-bytes>
        task-memory-total-max-bytes
      </task-memory-total-max-bytes>
      <task-memory-total-free-bytes>
        task-memory-total-free-bytes
      </task-memory-total-free-bytes>
    </task-memory-overall-report>
  </task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
  <tms-name>
    tms-name
  </tms-name>
  <tms-allocs>
    tms-allocs
  </tms-allocs>
  <tms-mallocs>
    tms-mallocs
  </tms-mallocs>
  <tms-alloc-bytes>
    tms-alloc-bytes
  </tms-alloc-bytes>
  <tms-max-allocs>
    tms-max-allocs
  </tms-max-allocs>
  <tms-max-bytes>
    tms-max-bytes
  </tms-max-bytes>
  <tms-free-bytes>
    tms-free-bytes
  </tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>
        <tms-name>
          tms-name
        </tms-name>
        <tms-allocs>
          tms-allocs
```

```
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
          tms-alloc-bytes
        </tms-alloc-bytes>
        <tms-max-allocs>
          tms-max-allocs
        </tms-max-allocs>
        <tms-max-bytes>
          tms-max-bytes
        </tms-max-bytes>
        <tms-free-bytes>
          tms-free-bytes
        </tms-free-bytes>
      </task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>....</task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
  <task-gres-state>
    task-gres-state
  </task-gres-state>
  <task-re-mode>
    task-re-mode
  </task-re-mode>
</task-replication-state>
```

Description Current state of task replication

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<task-size-block>

Usage

```
<task-size-block-list>
  <task-size-block>
    <tsb-size>
      tsb-size
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
```

```
            tsb-allocs
          </tsb-allocs>
          <tsb-mallocs>
            tsb-mallocs
          </tsb-mallocs>
          <tsb-alloc-bytes>
            tsb-alloc-bytes
          </tsb-alloc-bytes>
          <tsb-max-allocs>
            tsb-max-allocs
          </tsb-max-allocs>
          <tsb-max-bytes>
            tsb-max-bytes
          </tsb-max-bytes>
          <tsb-free-bytes>
            tsb-free-bytes
          </tsb-free-bytes>
        </task-size-block>
      </task-size-block-list>
    </task-memory-overall-report>
  </task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
  <task-size-block>....</task-size-block>
</task-size-block-list>
```

Description

<task-size-block-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>....</task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-timer>

Usage

```
<task-timer>
  <timer-name>
    timer-name
  </timer-name>
```


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```
  <timer-late>
    timer-late
  </timer-late>
  <timer-expires>
    timer-expires
  </timer-expires>
  <timer-jitter>
    timer-jitter
  </timer-jitter>
  <timer-interval>
    timer-interval
  </timer-interval>
  <timer-flags>
    timer-flags
  </timer-flags>
</task-timer>
```

Description

<task-timer>

Usage

```
<task-timer-information>
  <task>
    <task-timer>
      <timer-name>
        timer-name
      </timer-name>
      <timer-late>
        timer-late
      </timer-late>
      <timer-expires>
        timer-expires
      </timer-expires>
      <timer-jitter>
        timer-jitter
      </timer-jitter>
      <timer-interval>
        timer-interval
      </timer-interval>
      <timer-flags>
        timer-flags
      </timer-flags>
    </task-timer>
  </task>
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
```

```
</task-timer-information>
```

Description

<tracing-information>

Usage

```
<tracing-information>
  <flags>
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```

Description

Summary of LLDP Response Tags

<lldp>

Usage

```
<lldp>
  <lldp-interface-information>....</lldp-interface-information>
  <lldp-global-status>
    lldp-global-status
  </lldp-global-status>
  <lldp-advertisement-interval>
    lldp-advertisement-interval
  </lldp-advertisement-interval>
  <lldp-transmit-delay-interval>
    lldp-transmit-delay-interval
  </lldp-transmit-delay-interval>
  <lldp-hold-time-interval>
    lldp-hold-time-interval
  </lldp-hold-time-interval>
  <lldp-notification-interval>
    lldp-notification-interval
  </lldp-notification-interval>
  <ptopo-configuration-trap-interval>
    ptopo-configuration-trap-interval
  </ptopo-configuration-trap-interval>
  <ptopo-maximum-hold-time>
    ptopo-maximum-hold-time
  </ptopo-maximum-hold-time>
  <lldp-basic-tlv-supported>
    lldp-basic-tlv-supported
```


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```
  </lldp-basic-tlv-supported>
  <lldp-802-tlv-supported>
   lldp-802-tlv-supported
  </lldp-802-tlv-supported>
  <lldp-exported-vlan-information>....</lldp-exported-vlan-information>
</lldp>
```

Description

<lldp-exported-vlan-information>

Usage

```
<lldp>
  <lldp-exported-vlan-information>
    <lldp-vlan-interface-name>
      lldp-vlan-interface-name
    </lldp-vlan-interface-name>
    <lldp-vlan-tag>
      lldp-vlan-tag
    </lldp-vlan-tag>
    <lldp-vlan-name>
      lldp-vlan-name
    </lldp-vlan-name>
  </lldp-exported-vlan-information>
</lldp>
```

Description

<lldp-interface-information>

Usage

```
<lldp-interface-information>
  <lldp-interface-name>
    lldp-interface-name
  </lldp-interface-name>
  <lldp-interface-status>
    lldp-interface-status
  </lldp-interface-status>
  <lldp-interface-neighbor-count>
    lldp-interface-neighbor-count
  </lldp-interface-neighbor-count>
</lldp-interface-information>
```

Description

<lldp-interface-information>

Usage

```
<lldp>
  <lldp-interface-information>
    <lldp-interface-name>
      lldp-interface-name
    </lldp-interface-name>
```

```
    <lldp-interface-status>
      lldp-interface-status
    </lldp-interface-status>
    <lldp-interface-neighbor-count>
      lldp-interface-neighbor-count
    </lldp-interface-neighbor-count>
  </lldp-interface-information>
</lldp>
```

Description

<lldp-interface-statistics>

Usage

```
<lldp-interface-statistics>
  <lldp-statistics-interface-name>
    lldp-statistics-interface-name
  </lldp-statistics-interface-name>
  <lldp-receive-packet-count>
    lldp-receive-packet-count
  </lldp-receive-packet-count>
  <lldp-receive-packet-unknown-tlvs>
    lldp-receive-packet-unknown-tlvs
  </lldp-receive-packet-unknown-tlvs>
  <lldp-receive-packet-error-count>
    lldp-receive-packet-error-count
  </lldp-receive-packet-error-count>
  <lldp-receive-tlv-discard-count>
    lldp-receive-tlv-discard-count
  </lldp-receive-tlv-discard-count>
  <lldp-transmit-packet-count>
    lldp-transmit-packet-count
  </lldp-transmit-packet-count>
  <lldp-transmit-packet-error-count>
    lldp-transmit-packet-error-count
  </lldp-transmit-packet-error-count>
</lldp-interface-statistics>
```

Description Interface statistics

<lldp-interface-statistics>

Usage

```
<lldp-statistics>
  <lldp-interface-statistics>
    <lldp-statistics-interface-name>
      lldp-statistics-interface-name
    </lldp-statistics-interface-name>
    <lldp-receive-packet-count>
      lldp-receive-packet-count
    </lldp-receive-packet-count>
    <lldp-receive-packet-unknown-tlvs>
      lldp-receive-packet-unknown-tlvs
```


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```
    </lldp-receive-packet-unknown-tlvs>
    <lldp-receive-packet-error-count>
     lldp-receive-packet-error-count
    </lldp-receive-packet-error-count>
    <lldp-receive-tlv-discard-count>
     lldp-receive-tlv-discard-count
    </lldp-receive-tlv-discard-count>
    <lldp-transmit-packet-count>
     lldp-transmit-packet-count
    </lldp-transmit-packet-count>
    <lldp-transmit-packet-error-count>
     lldp-transmit-packet-error-count
    </lldp-transmit-packet-error-count>
   </lldp-interface-statistics>
  </lldp-statistics>
```

Description Interface statistics

<lldp-local-info>

Usage

```
<lldp-local-info>
 <lldp-local-interface-info>....</lldp-local-interface-info>
 <lldp-local-chassis-id>
  lldp-local-chassis-id
 </lldp-local-chassis-id>
 <lldp-local-system-name>
  lldp-local-system-name
 </lldp-local-system-name>
 <lldp-local-system-description>
  lldp-local-system-description
 </lldp-local-system-description>
 <lldp-local-system-capabilities-supported>
  lldp-local-system-capabilities-supported
 </lldp-local-system-capabilities-supported>
 <lldp-local-system-capabilities-enabled>
  lldp-local-system-capabilities-enabled
 </lldp-local-system-capabilities-enabled>
 <lldp-local-management-address-interface-name>
  lldp-local-management-address-interface-name
 </lldp-local-management-address-interface-name>
 <lldp-local-management-address-subtype>
  lldp-local-management-address-subtype
 </lldp-local-management-address-subtype>
 <lldp-local-management-address-address>
  lldp-local-management-address-address
 </lldp-local-management-address-address>
 <lldp-local-management-address-interface-number>
  lldp-local-management-address-interface-number
 </lldp-local-management-address-interface-number>
 <lldp-local-management-address-interface-number-subtype>
  lldp-local-management-address-interface-number-subtype
 </lldp-local-management-address-interface-number-subtype>
```

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```
</lldp-local-info>
```

Description

<lldp-local-interface-info>

Usage

```
<lldp-local-interface-info>
  <lldp-local-interface-name>
    lldp-local-interface-name
  </lldp-local-interface-name>
  <lldp-local-interface-id>
    lldp-local-interface-id
  </lldp-local-interface-id>
  <lldp-local-interface-description>
    lldp-local-interface-description
  </lldp-local-interface-description>
  <lldp-local-interface-status>
    lldp-local-interface-status
  </lldp-local-interface-status>
</lldp-local-interface-info>
```

Description

<lldp-local-interface-info>

Usage

```
<lldp-local-info>
  <lldp-local-interface-info>
    <lldp-local-interface-name>
      lldp-local-interface-name
    </lldp-local-interface-name>
    <lldp-local-interface-id>
      lldp-local-interface-id
    </lldp-local-interface-id>
    <lldp-local-interface-description>
      lldp-local-interface-description
    </lldp-local-interface-description>
    <lldp-local-interface-status>
      lldp-local-interface-status
    </lldp-local-interface-status>
  </lldp-local-interface-info>
</lldp-local-info>
```

Description

<lldp-neighbor-information>

Usage

```
<lldp-neighbor-information>
  <lldp-index>
    lldp-index
  </lldp-index>
```


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```
<lldp-ttl>
  lldp-ttl
</lldp-ttl>
<lldp-timemark>
  lldp-timemark
</lldp-timemark>
<lldp-age>
  lldp-age
</lldp-age>
<lldp-local-interface>
  lldp-local-interface
</lldp-local-interface>
<lldp-local-port-id>
  lldp-local-port-id
</lldp-local-port-id>
<lldp-remote-chassis-id-subtype>
  lldp-remote-chassis-id-subtype
</lldp-remote-chassis-id-subtype>
<lldp-remote-chassis-id>
  lldp-remote-chassis-id
</lldp-remote-chassis-id>
<lldp-remote-port-id-subtype>
  lldp-remote-port-id-subtype
</lldp-remote-port-id-subtype>
<lldp-remote-port-id>
  lldp-remote-port-id
</lldp-remote-port-id>
<lldp-remote-port-description>
  lldp-remote-port-description
</lldp-remote-port-description>
<lldp-remote-system-name>
  lldp-remote-system-name
</lldp-remote-system-name>
<lldp-system-description>....</lldp-system-description>
<lldp-remote-system-capabilities-supported>
  lldp-remote-system-capabilities-supported
</lldp-remote-system-capabilities-supported>
<lldp-remote-system-capabilities-enabled>
  lldp-remote-system-capabilities-enabled
</lldp-remote-system-capabilities-enabled>
<lldp-remote-inventory-network-policy>
  lldp-remote-inventory-network-policy
</lldp-remote-inventory-network-policy>
<lldp-remote-inventory-hardware-revision>
  lldp-remote-inventory-hardware-revision
</lldp-remote-inventory-hardware-revision>
<lldp-remote-inventory-firmware-revision>
  lldp-remote-inventory-firmware-revision
</lldp-remote-inventory-firmware-revision>
<lldp-remote-inventory-software-revision>
  lldp-remote-inventory-software-revision
</lldp-remote-inventory-software-revision>
<lldp-remote-inventory-serial-number>
  lldp-remote-inventory-serial-number
</lldp-remote-inventory-serial-number>
<lldp-remote-inventory-manufacturer-name>
```

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```
  lldp-remote-inventory-manufacturer-name
</lldp-remote-inventory-manufacturer-name>
<lldp-remote-inventory-model-name>
  lldp-remote-inventory-model-name
</lldp-remote-inventory-model-name>
<lldp-remote-inventory-asset-id>
  lldp-remote-inventory-asset-id
</lldp-remote-inventory-asset-id>
<lldp-remote-management-address-type>
  lldp-remote-management-address-type
</lldp-remote-management-address-type>
<lldp-remote-management-address>
  lldp-remote-management-address
</lldp-remote-management-address>
<lldp-remote-management-address-port-id>
  lldp-remote-management-address-port-id
</lldp-remote-management-address-port-id>
<lldp-remote-management-address-sub-type>
  lldp-remote-management-address-sub-type
</lldp-remote-management-address-sub-type>
<lldp-remote-management-address-interface-subtype>
  lldp-remote-management-address-interface-subtype
</lldp-remote-management-address-interface-subtype>
<lldp-remote-management-addr-oid>
  lldp-remote-management-addr-oid
</lldp-remote-management-addr-oid>
<lldp-remote-oui-802-3>
  lldp-remote-oui-802-3
</lldp-remote-oui-802-3>
<lldp-remote-oui-802-1>
  lldp-remote-oui-802-1
</lldp-remote-oui-802-1>
<lldp-remote-subtype>
  lldp-remote-subtype
</lldp-remote-subtype>
<lldp-remote-subtype-vlan>
  lldp-remote-subtype-vlan
</lldp-remote-subtype-vlan>
<lldp-remote-subtype-mac>
  lldp-remote-subtype-mac
</lldp-remote-subtype-mac>
<lldp-remote-subtype-lag>
  lldp-remote-subtype-lag
</lldp-remote-subtype-lag>
<lldp-remote-subtype-mtu>
  lldp-remote-subtype-mtu
</lldp-remote-subtype-mtu>
<lldp-remote-index>
  lldp-remote-index
</lldp-remote-index>
<lldp-remote-value>
  lldp-remote-value
</lldp-remote-value>
<lldp-remote-subtype-vlan-id>
  lldp-remote-subtype-vlan-id
</lldp-remote-subtype-vlan-id>
```


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```
<lldp-remote-subtype-vlan-name>
  lldp-remote-subtype-vlan-name
</lldp-remote-subtype-vlan-name>
<lldp-remote-subtype-mac-autonegotiation>
  lldp-remote-subtype-mac-autonegotiation
</lldp-remote-subtype-mac-autonegotiation>
<lldp-remote-subtype-mac-pmd>
  lldp-remote-subtype-mac-pmd
</lldp-remote-subtype-mac-pmd>
<lldp-remote-subtype-mac-mau>
  lldp-remote-subtype-mac-mau
</lldp-remote-subtype-mac-mau>
<lldp-remote-subtype-lag-status>
  lldp-remote-subtype-lag-status
</lldp-remote-subtype-lag-status>
<lldp-remote-subtype-lag-portid>
  lldp-remote-subtype-lag-portid
</lldp-remote-subtype-lag-portid>
<lldp-remote-subtype-mtu-size>
  lldp-remote-subtype-mtu-size
</lldp-remote-subtype-mtu-size>
<lldp-remote-unknown-tlv-type>
  lldp-remote-unknown-tlv-type
</lldp-remote-unknown-tlv-type>
<lldp-remote-unknown-tlv-info>
  lldp-remote-unknown-tlv-info
</lldp-remote-unknown-tlv-info>
</lldp-neighbor-information>
```

Description

<lldp-neighbor-information>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>
    <lldp-index>
      lldp-index
    </lldp-index>
    <lldp-ttl>
      lldp-ttl
    </lldp-ttl>
    <lldp-timemark>
      lldp-timemark
    </lldp-timemark>
    <lldp-age>
      lldp-age
    </lldp-age>
    <lldp-local-interface>
      lldp-local-interface
    </lldp-local-interface>
    <lldp-local-port-id>
      lldp-local-port-id
    </lldp-local-port-id>
    <lldp-remote-chassis-id-subtype>
```

```
  lldp-remote-chassis-id-subtype
</lldp-remote-chassis-id-subtype>
<lldp-remote-chassis-id>
  lldp-remote-chassis-id
</lldp-remote-chassis-id>
<lldp-remote-port-id-subtype>
  lldp-remote-port-id-subtype
</lldp-remote-port-id-subtype>
<lldp-remote-port-id>
  lldp-remote-port-id
</lldp-remote-port-id>
<lldp-remote-port-description>
  lldp-remote-port-description
</lldp-remote-port-description>
<lldp-remote-system-name>
  lldp-remote-system-name
</lldp-remote-system-name>
<lldp-system-description>....</lldp-system-description>
<lldp-remote-system-capabilities-supported>
  lldp-remote-system-capabilities-supported
</lldp-remote-system-capabilities-supported>
<lldp-remote-system-capabilities-enabled>
  lldp-remote-system-capabilities-enabled
</lldp-remote-system-capabilities-enabled>
<lldp-remote-inventory-network-policy>
  lldp-remote-inventory-network-policy
</lldp-remote-inventory-network-policy>
<lldp-remote-inventory-hardware-revision>
  lldp-remote-inventory-hardware-revision
</lldp-remote-inventory-hardware-revision>
<lldp-remote-inventory-firmware-revision>
  lldp-remote-inventory-firmware-revision
</lldp-remote-inventory-firmware-revision>
<lldp-remote-inventory-software-revision>
  lldp-remote-inventory-software-revision
</lldp-remote-inventory-software-revision>
<lldp-remote-inventory-serial-number>
  lldp-remote-inventory-serial-number
</lldp-remote-inventory-serial-number>
<lldp-remote-inventory-manufacturer-name>
  lldp-remote-inventory-manufacturer-name
</lldp-remote-inventory-manufacturer-name>
<lldp-remote-inventory-model-name>
  lldp-remote-inventory-model-name
</lldp-remote-inventory-model-name>
<lldp-remote-inventory-asset-id>
  lldp-remote-inventory-asset-id
</lldp-remote-inventory-asset-id>
<lldp-remote-management-address-type>
  lldp-remote-management-address-type
</lldp-remote-management-address-type>
<lldp-remote-management-address>
  lldp-remote-management-address
</lldp-remote-management-address>
<lldp-remote-management-address-port-id>
  lldp-remote-management-address-port-id
```


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```
</lldp-remote-management-address-port-id>
<lldp-remote-management-address-sub-type>
  lldp-remote-management-address-sub-type
</lldp-remote-management-address-sub-type>
<lldp-remote-management-address-interface-subtype>
  lldp-remote-management-address-interface-subtype
</lldp-remote-management-address-interface-subtype>
<lldp-remote-management-addr-oid>
  lldp-remote-management-addr-oid
</lldp-remote-management-addr-oid>
<lldp-remote-oui-802-3>
  lldp-remote-oui-802-3
</lldp-remote-oui-802-3>
<lldp-remote-oui-802-1>
  lldp-remote-oui-802-1
</lldp-remote-oui-802-1>
<lldp-remote-subtype>
  lldp-remote-subtype
</lldp-remote-subtype>
<lldp-remote-subtype-vlan>
  lldp-remote-subtype-vlan
</lldp-remote-subtype-vlan>
<lldp-remote-subtype-mac>
  lldp-remote-subtype-mac
</lldp-remote-subtype-mac>
<lldp-remote-subtype-lag>
  lldp-remote-subtype-lag
</lldp-remote-subtype-lag>
<lldp-remote-subtype-mtu>
  lldp-remote-subtype-mtu
</lldp-remote-subtype-mtu>
<lldp-remote-index>
  lldp-remote-index
</lldp-remote-index>
<lldp-remote-value>
  lldp-remote-value
</lldp-remote-value>
<lldp-remote-subtype-vlan-id>
  lldp-remote-subtype-vlan-id
</lldp-remote-subtype-vlan-id>
<lldp-remote-subtype-vlan-name>
  lldp-remote-subtype-vlan-name
</lldp-remote-subtype-vlan-name>
<lldp-remote-subtype-mac-autonegotiation>
  lldp-remote-subtype-mac-autonegotiation
</lldp-remote-subtype-mac-autonegotiation>
<lldp-remote-subtype-mac-pmd>
  lldp-remote-subtype-mac-pmd
</lldp-remote-subtype-mac-pmd>
<lldp-remote-subtype-mac-mau>
  lldp-remote-subtype-mac-mau
</lldp-remote-subtype-mac-mau>
<lldp-remote-subtype-lag-status>
  lldp-remote-subtype-lag-status
</lldp-remote-subtype-lag-status>
<lldp-remote-subtype-lag-portid>
```

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```
      lldp-remote-subtype-lag-portid
    </lldp-remote-subtype-lag-portid>
    <lldp-remote-subtype-mtu-size>
      lldp-remote-subtype-mtu-size
    </lldp-remote-subtype-mtu-size>
    <lldp-remote-unknown-tlv-type>
      lldp-remote-unknown-tlv-type
    </lldp-remote-unknown-tlv-type>
    <lldp-remote-unknown-tlv-info>
      lldp-remote-unknown-tlv-info
    </lldp-remote-unknown-tlv-info>
  </lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

<lldp-neighbors-information>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>....</lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

<lldp-remote-global-statistics>

Usage

```
<lldp-remote-global-statistics>
  <lldp-last-change-time>
    lldp-last-change-time
  </lldp-last-change-time>
  <lldp-inserts>
    lldp-inserts
  </lldp-inserts>
  <lldp-deletes>
    lldp-deletes
  </lldp-deletes>
  <lldp-drops>
    lldp-drops
  </lldp-drops>
  <lldp-ageouts>
    lldp-ageouts
  </lldp-ageouts>
</lldp-remote-global-statistics>
```

Description

<lldp-statistics>

Usage

```
<lldp-statistics>
  <lldp-interface-statistics>....</lldp-interface-statistics>
```


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```
</lldp-statistics>
```

Description

<lldp-system-description>

Usage

```
<lldp-neighbor-information>
  <lldp-system-description>
    <lldp-remote-system-description>
      lldp-remote-system-description
    </lldp-remote-system-description>
  </lldp-system-description>
</lldp-neighbor-information>
```

Description

<lldp-system-description>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>
    <lldp-system-description>
      <lldp-remote-system-description>
        lldp-remote-system-description
      </lldp-remote-system-description>
    </lldp-system-description>
  </lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

Summary of Local Policy Decision Function Response Tags

<aacl-detail-flows>

Usage

```
<lpdf-flows>
  <aacl-detail-flows>
    <five-tuple>
      five-tuple
    </five-tuple>
    <application>
      application
    </application>
    <flow-direction>
      flow-direction
    </flow-direction>
    <flow-offload-status>
      flow-offload-status
    </flow-offload-status>
    <flow-actions>
      flow-actions
```

```
    </flow-actions>
    <packets-in>
     packets-in
    </packets-in>
    <bytes-in>
     bytes-in
    </bytes-in>
   </aacl-detail-flows>
  </lpdf-flows>
```

Description Application aware access list detail flows

<aacl-flows>

Usage

```
<lpdf-flows>
 <aacl-flows>
  <five-tuple>
   five-tuple
  </five-tuple>
  <application>
   application
  </application>
  <flow-direction>
   flow-direction
  </flow-direction>
  <flow-offload-status>
   flow-offload-status
  </flow-offload-status>
  <flow-actions>
   flow-actions
  </flow-actions>
 </aacl-flows>
</lpdf-flows>
```

Description Application aware access list flows

<flow-header>

Usage

```
<lpdf-flows>
 <flow-header>
  <interface-name>
   interface-name
  </interface-name>
  <service-set-interface>
   service-set-interface
  </service-set-interface>
  <service-set-name>
   service-set-name
  </service-set-name>
  <current-number-flows>
```


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```
    current-number-flows
   </current-number-flows>
   <high-water-flows>
    high-water-flows
   </high-water-flows>
  </flow-header>
</lpdf-flows>
```

Description Flows header information

<flows>

Usage

```
<lpdf-flows>
  <flows>
   <protocol>
    protocol
   </protocol>
   <source-address>
    source-address
   </source-address>
   <source-port>
    source-port
   </source-port>
   <destination-address>
    destination-address
   </destination-address>
   <destination-port>
    destination-port
   </destination-port>
   <application>
    application
   </application>
   <application-group>
    application-group
   </application-group>
  </flows>
</lpdf-flows>
```

Description Flows

<lpdf-flows>

Usage

```
<lpdf-flows>
  <flow-header>....</flow-header>
  <flows>....</flows>
  <aacl-flows>....</aacl-flows>
  <aacl-detail-flows>....</aacl-detail-flows>
</lpdf-flows>
```

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Description LPDF flows

<lpdf-message>

Usage

```
<lpdf-message>
  <message>
    message
  </message>
</lpdf-message>
```

Description

<lpdf-statistics>

Usage

```
<lpdf-statistics>
  <statistics-header>....</statistics-header>
  <statistics>....</statistics>
</lpdf-statistics>
```

Description LPDF statistics

<no-lpdf-statistics>

Usage

```
<no-lpdf-statistics>
  <interface>
    interface
  </interface>
</no-lpdf-statistics>
```

Description

<statistics>

Usage

```
<lpdf-statistics>
  <statistics>
    <application-group>
      application-group
    </application-group>
    <application>
      application
    </application>
    <packets-in>
      packets-in
    </packets-in>
    <bytes-in>
      bytes-in
    </bytes-in>
    <packets-out>
```


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```
      packets-out
    </packets-out>
    <bytes-out>
      bytes-out
    </bytes-out>
  </statistics>
</lpdf-statistics>
```

Description Statistics

<statistics-header>

Usage

```
<lpdf-statistics>
  <statistics-header>
    <interface-name>
      interface-name
    </interface-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <service-set-interface>
      service-set-interface
    </service-set-interface>
  </statistics-header>
</lpdf-statistics>
```

Description

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CHAPTER 57

Operational Response Tag Elements Common to M, MX, T Series, and SRX Series

This chapter lists the Extensible Markup Language (XML) tag elements in the Junos XML application programming interface (API) that contain operational information. The Junos XML protocol and NETCONF servers return them in response to requests from client applications.

The tags listed in this chapter are common to devices belonging to the following platforms:

- M Series
- MX Series
- T Series
- SRX Series

The tags are divided into the following sections and listed in alphabetical order within each section.

- Summary of Connectivity Fault Management Response Tags on page 7159

Summary of Connectivity Fault Management Response Tags

<cfm-counters-route-socket-operations>

Usage

```
<cfm-counters-route-socket-operations>
<cfm-route-socket-message-counters>....</cfm-route-socket-message-counters>

</cfm-counters-route-socket-operations>
```

Description

<cfm-counters-route-socket-received>

Usage

```
<cfm-counters-route-socket-received>
<cfm-route-socket-message-counters>....</cfm-route-socket-message-counters>
```

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```
</cfm-counters-route-socket-received>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-entry>
  <cfm-cross-connect-sessions>
    <cfm-cross-connect-session>
      <cfm-session-defect-type>
        cfm-session-defect-type
      </cfm-session-defect-type>
      <cfm-session-defect-description>
        cfm-session-defect-description
      </cfm-session-defect-description>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
      <cfm-mep-identifier>
        cfm-mep-identifier
      </cfm-mep-identifier>
      <cfm-continuity-check-interval>
        cfm-continuity-check-interval
      </cfm-continuity-check-interval>
    </cfm-cross-connect-session>
  </cfm-cross-connect-sessions>
</cfm-entry>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
```


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```
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
      </cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
```

```
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
      </cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
      </cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
```


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```
</cfm-mep-statistics>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-cross-connect-sessions>
   <cfm-cross-connect-session>
    <cfm-session-defect-type>
     cfm-session-defect-type
    </cfm-session-defect-type>
    <cfm-session-defect-description>
     cfm-session-defect-description
    </cfm-session-defect-description>
    <cfm-level>
     cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
     cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-domain-name-format>
     cfm-maintenance-domain-name-format
    </cfm-maintenance-domain-name-format>
    <cfm-maintenance-association-name>
     cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-maintenance-association-name-format>
     cfm-maintenance-association-name-format
    </cfm-maintenance-association-name-format>
    <cfm-mep-identifier>
     cfm-mep-identifier
    </cfm-mep-identifier>
    <cfm-continuity-check-interval>
     cfm-continuity-check-interval
    </cfm-continuity-check-interval>
   </cfm-cross-connect-session>
  </cfm-cross-connect-sessions>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-cross-connect-sessions>
   <cfm-cross-connect-session>
    <cfm-session-defect-type>
     cfm-session-defect-type
```

```
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
      </cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-cross-connect-session>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
```


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```
            cfm-maintenance-association-name
          </cfm-maintenance-association-name>
          <cfm-maintenance-association-name-format>
            cfm-maintenance-association-name-format
          </cfm-maintenance-association-name-format>
          <cfm-mep-identifier>
            cfm-mep-identifier
          </cfm-mep-identifier>
          <cfm-continuity-check-interval>
            cfm-continuity-check-interval
          </cfm-continuity-check-interval>
        </cfm-cross-connect-session>
      </cfm-cross-connect-sessions>
    </cfm-entry>
  </cfm-iterator-statistics>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-entry>
  <cfm-cross-connect-sessions>
    <cfm-cross-connect-session-count>
      cfm-cross-connect-session-count
    </cfm-cross-connect-session-count>
    <cfm-cross-connect-session>....</cfm-cross-connect-session>
  </cfm-cross-connect-sessions>
</cfm-entry>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session-count>
        cfm-cross-connect-session-count
      </cfm-cross-connect-session-count>
      <cfm-cross-connect-session>....</cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-mep-database>
  <cfm-entry>
```

```
    <cfm-cross-connect-sessions>
     <cfm-cross-connect-session-count>
      cfm-cross-connect-session-count
     </cfm-cross-connect-session-count>
     <cfm-cross-connect-session>....</cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
   </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-cross-connect-sessions>
   <cfm-cross-connect-session-count>
    cfm-cross-connect-session-count
   </cfm-cross-connect-session-count>
   <cfm-cross-connect-session>....</cfm-cross-connect-session>
  </cfm-cross-connect-sessions>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-cross-connect-sessions>
   <cfm-cross-connect-session-count>
    cfm-cross-connect-session-count
   </cfm-cross-connect-session-count>
   <cfm-cross-connect-session>....</cfm-cross-connect-session>
  </cfm-cross-connect-sessions>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-cross-connect-sessions>
   <cfm-cross-connect-session-count>
    cfm-cross-connect-session-count
   </cfm-cross-connect-session-count>
   <cfm-cross-connect-session>....</cfm-cross-connect-session>
```


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```
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-cross-connect-sessions>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-cross-connect-sessions>
      <cfm-cross-connect-session-count>
        cfm-cross-connect-session-count
      </cfm-cross-connect-session-count>
      <cfm-cross-connect-session>....</cfm-cross-connect-session>
    </cfm-cross-connect-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-delay-statistics>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>....</cfm-entry>
</cfm-delay-statistics>
```

Description Information about ethernet delay statistics for one or more CFM sessions

<cfm-dfwd-pending-transactions>

Usage

```
<cfmd-internal-state>
  <cfm-dfwd-pending-transactions>
    <cfm-dfwd-transaction>....</cfm-dfwd-transaction>
  </cfm-dfwd-pending-transactions>
</cfmd-internal-state>
```

Description

<cfm-dfwd-policer-instance>

Usage

```
<cfmd-internal-state>
  <cfm-dfwd-policer-instance-info>
    <cfm-dfwd-policer-instance>
      <cfm-policer-instance-name>
        cfm-policer-instance-name
      </cfm-policer-instance-name>
```

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```
      <cfm-policer-name>
        cfm-policer-name
      </cfm-policer-name>
      <cfm-policer-instance-reference-count>
        cfm-policer-instance-reference-count
      </cfm-policer-instance-reference-count>
    </cfm-dfwd-policer-instance>
  </cfm-dfwd-policer-instance-info>
</cfmd-internal-state>
```

Description

<cfm-dfwd-policer-instance-info>

Usage

```
<cfmd-internal-state>
  <cfm-dfwd-policer-instance-info>
    <cfm-dfwd-policer-instance>....</cfm-dfwd-policer-instance>
  </cfm-dfwd-policer-instance-info>
</cfmd-internal-state>
```

Description

<cfm-dfwd-transaction>

Usage

```
<cfmd-internal-state>
  <cfm-dfwd-pending-transactions>
    <cfm-dfwd-transaction>
      <cfm-dfwd-transaction-id>
        cfm-dfwd-transaction-id
      </cfm-dfwd-transaction-id>
      <cfm-dfwd-nh-to-delete>
        cfm-dfwd-nh-to-delete
      </cfm-dfwd-nh-to-delete>
    </cfm-dfwd-transaction>
  </cfm-dfwd-pending-transactions>
</cfmd-internal-state>
```

Description

<cfm-entry>

Usage

```
<cfm-entry>
  <cfm-interface-entry>....</cfm-interface-entry>
  <cfm-interface-sessions>....</cfm-interface-sessions>
  <cfm-mep-database-session>....</cfm-mep-database-session>
<cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

  <cfm-mep-database-interface>....</cfm-mep-database-interface>
  <cfm-local-mep>....</cfm-local-mep>
  <cfm-local-mep-defects>....</cfm-local-mep-defects>
```


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```
 <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
 <cfm-remote-meps>....</cfm-remote-meps>
 <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
 <cfm-error-sessions>....</cfm-error-sessions>
 <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
 <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
 <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
 <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
<cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

<cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

 <cfm-client-session-id>
  cfm-client-session-id
 </cfm-client-session-id>
 <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
 <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
 <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
 <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
 <cfm-iter-info>....</cfm-iter-info>
 <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
 <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
 <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
</cfm-entry>
```

Description

<cfm-entry>

Usage

```
<cfm-interface>
 <cfm-entry>
   <cfm-interface-entry>....</cfm-interface-entry>
   <cfm-interface-sessions>....</cfm-interface-sessions>
   <cfm-mep-database-session>....</cfm-mep-database-session>
 <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

   <cfm-mep-database-interface>....</cfm-mep-database-interface>
   <cfm-local-mep>....</cfm-local-mep>
   <cfm-local-mep-defects>....</cfm-local-mep-defects>
   <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
   <cfm-remote-meps>....</cfm-remote-meps>
   <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
   <cfm-error-sessions>....</cfm-error-sessions>
   <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
   <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
   <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
   <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
<cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

<cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

   <cfm-client-session-id>
    cfm-client-session-id
   </cfm-client-session-id>
```

```
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-entry>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-entry>....</cfm-interface-entry>
    <cfm-interface-sessions>....</cfm-interface-sessions>
    <cfm-mep-database-session>....</cfm-mep-database-session>
 <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

    <cfm-mep-database-interface>....</cfm-mep-database-interface>
    <cfm-local-mep>....</cfm-local-mep>
    <cfm-local-mep-defects>....</cfm-local-mep-defects>
    <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
    <cfm-remote-meps>....</cfm-remote-meps>
    <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
    <cfm-error-sessions>....</cfm-error-sessions>
    <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
    <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
    <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
    <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
 <cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

 <cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

    <cfm-client-session-id>
      cfm-client-session-id
    </cfm-client-session-id>
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-mep-database>
```

Description

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<cfm-entry>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-entry>....</cfm-interface-entry>
    <cfm-interface-sessions>....</cfm-interface-sessions>
    <cfm-mep-database-session>....</cfm-mep-database-session>
 <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

    <cfm-mep-database-interface>....</cfm-mep-database-interface>
    <cfm-local-mep>....</cfm-local-mep>
    <cfm-local-mep-defects>....</cfm-local-mep-defects>
    <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
    <cfm-remote-meps>....</cfm-remote-meps>
    <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
    <cfm-error-sessions>....</cfm-error-sessions>
    <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
    <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
    <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
    <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
 <cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

 <cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

    <cfm-client-session-id>
      cfm-client-session-id
    </cfm-client-session-id>
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-entry>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-entry>....</cfm-interface-entry>
    <cfm-interface-sessions>....</cfm-interface-sessions>
    <cfm-mep-database-session>....</cfm-mep-database-session>
 <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

    <cfm-mep-database-interface>....</cfm-mep-database-interface>
    <cfm-local-mep>....</cfm-local-mep>
    <cfm-local-mep-defects>....</cfm-local-mep-defects>
```

```
    <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
    <cfm-remote-meps>....</cfm-remote-meps>
    <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
    <cfm-error-sessions>....</cfm-error-sessions>
    <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
    <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
    <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
    <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
  <cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

  <cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

    <cfm-client-session-id>
      cfm-client-session-id
    </cfm-client-session-id>
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-entry>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-entry>....</cfm-interface-entry>
    <cfm-interface-sessions>....</cfm-interface-sessions>
    <cfm-mep-database-session>....</cfm-mep-database-session>
  <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

    <cfm-mep-database-interface>....</cfm-mep-database-interface>
    <cfm-local-mep>....</cfm-local-mep>
    <cfm-local-mep-defects>....</cfm-local-mep-defects>
    <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
    <cfm-remote-meps>....</cfm-remote-meps>
    <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
    <cfm-error-sessions>....</cfm-error-sessions>
    <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
    <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
    <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
    <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
  <cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

  <cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

    <cfm-client-session-id>
      cfm-client-session-id
```


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```
    </cfm-client-session-id>
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-entry>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-entry>....</cfm-interface-entry>
    <cfm-interface-sessions>....</cfm-interface-sessions>
    <cfm-mep-database-session>....</cfm-mep-database-session>
 <cfm-mep-database-continuity-check>....</cfm-mep-database-continuity-check>

    <cfm-mep-database-interface>....</cfm-mep-database-interface>
    <cfm-local-mep>....</cfm-local-mep>
    <cfm-local-mep-defects>....</cfm-local-mep-defects>
    <cfm-local-mep-statistics>....</cfm-local-mep-statistics>
    <cfm-remote-meps>....</cfm-remote-meps>
    <cfm-cross-connect-sessions>....</cfm-cross-connect-sessions>
    <cfm-error-sessions>....</cfm-error-sessions>
    <cfm-mep-statistics-mep-summary>....</cfm-mep-statistics-mep-summary>
    <cfm-local-mep-packet-statistics>....</cfm-local-mep-packet-statistics>
    <cfm-remote-mep-brief-summary>....</cfm-remote-mep-brief-summary>
    <cfm-ethdm-delay-entry>....</cfm-ethdm-delay-entry>
 <cfm-ethdm-oneway-delay-summary>....</cfm-ethdm-oneway-delay-summary>

 <cfm-ethdm-twoway-delay-summary>....</cfm-ethdm-twoway-delay-summary>

    <cfm-client-session-id>
      cfm-client-session-id
    </cfm-client-session-id>
    <cfm-ethlm-loss-entry>....</cfm-ethlm-loss-entry>
    <cfm-ethlm-cir-loss-summary>....</cfm-ethlm-cir-loss-summary>
    <cfm-ethlm-eir-loss-summary>....</cfm-ethlm-eir-loss-summary>
    <cfm-iter-mep-summary>....</cfm-iter-mep-summary>
    <cfm-iter-info>....</cfm-iter-info>
    <cfm-iter-ethdm-entry>....</cfm-iter-ethdm-entry>
    <cfm-iter-ethlm-entry>....</cfm-iter-ethlm-entry>
    <cfm-iter-eth-sfl-entry>....</cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-error-session>

Usage

```
<cfm-entry>
  <cfm-error-sessions>
    <cfm-error-session>
      <cfm-session-defect-type>
        cfm-session-defect-type
      </cfm-session-defect-type>
      <cfm-session-defect-description>
        cfm-session-defect-description
      </cfm-session-defect-description>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
      <cfm-continuity-check-interval>
        cfm-continuity-check-interval
      </cfm-continuity-check-interval>
      <cfm-mep-identifier>
        cfm-mep-identifier
      </cfm-mep-identifier>
    </cfm-error-session>
  </cfm-error-sessions>
</cfm-entry>
```

Description

<cfm-error-session>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
```


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```
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
      </cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-error-session>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
```

```
            cfm-continuity-check-interval
          </cfm-continuity-check-interval>
          <cfm-mep-identifier>
            cfm-mep-identifier
          </cfm-mep-identifier>
        </cfm-error-session>
      </cfm-error-sessions>
    </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-error-session>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
      </cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

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<cfm-error-session>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
      </cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-error-session>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
```

```
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
      </cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-error-session>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session>
        <cfm-session-defect-type>
          cfm-session-defect-type
        </cfm-session-defect-type>
        <cfm-session-defect-description>
          cfm-session-defect-description
        </cfm-session-defect-description>
        <cfm-level>
          cfm-level
        </cfm-level>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-maintenance-domain-name-format>
          cfm-maintenance-domain-name-format
        </cfm-maintenance-domain-name-format>
        <cfm-maintenance-association-name>
          cfm-maintenance-association-name
        </cfm-maintenance-association-name>
        <cfm-maintenance-association-name-format>
          cfm-maintenance-association-name-format
```


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```
        </cfm-maintenance-association-name-format>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-mep-identifier>
          cfm-mep-identifier
        </cfm-mep-identifier>
      </cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-entry>
  <cfm-error-sessions>
    <cfm-error-session-count>
      cfm-error-session-count
    </cfm-error-session-count>
    <cfm-error-session>....</cfm-error-session>
  </cfm-error-sessions>
</cfm-entry>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session-count>
        cfm-error-session-count
      </cfm-error-session-count>
      <cfm-error-session>....</cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session-count>
        cfm-error-session-count
      </cfm-error-session-count>
```

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```
      <cfm-error-session>....</cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session-count>
        cfm-error-session-count
      </cfm-error-session-count>
      <cfm-error-session>....</cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session-count>
        cfm-error-session-count
      </cfm-error-session-count>
      <cfm-error-session>....</cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-error-sessions>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-error-sessions>
      <cfm-error-session-count>
        cfm-error-session-count
      </cfm-error-session-count>
      <cfm-error-session>....</cfm-error-session>
    </cfm-error-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```


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Description

<cfm-error-sessions>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-error-sessions>
   <cfm-error-session-count>
    cfm-error-session-count
   </cfm-error-session-count>
   <cfm-error-session>....</cfm-error-session>
  </cfm-error-sessions>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-entry>
 <cfm-ethdm-delay-entry>
  <cfm-ethdm-delay-entry-index>
   cfm-ethdm-delay-entry-index
  </cfm-ethdm-delay-entry-index>
  <cfm-ethdm-oneway-delay>
   cfm-ethdm-oneway-delay
  </cfm-ethdm-oneway-delay>
  <cfm-ethdm-twoway-delay>
   cfm-ethdm-twoway-delay
  </cfm-ethdm-twoway-delay>
 </cfm-ethdm-delay-entry>
</cfm-entry>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
    cfm-ethdm-delay-entry-index
   </cfm-ethdm-delay-entry-index>
   <cfm-ethdm-oneway-delay>
    cfm-ethdm-oneway-delay
   </cfm-ethdm-oneway-delay>
   <cfm-ethdm-twoway-delay>
    cfm-ethdm-twoway-delay
   </cfm-ethdm-twoway-delay>
  </cfm-ethdm-delay-entry>
 </cfm-entry>
```

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```
</cfm-interface>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
    cfm-ethdm-delay-entry-index
   </cfm-ethdm-delay-entry-index>
   <cfm-ethdm-oneway-delay>
    cfm-ethdm-oneway-delay
   </cfm-ethdm-oneway-delay>
   <cfm-ethdm-twoway-delay>
    cfm-ethdm-twoway-delay
   </cfm-ethdm-twoway-delay>
  </cfm-ethdm-delay-entry>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
    cfm-ethdm-delay-entry-index
   </cfm-ethdm-delay-entry-index>
   <cfm-ethdm-oneway-delay>
    cfm-ethdm-oneway-delay
   </cfm-ethdm-oneway-delay>
   <cfm-ethdm-twoway-delay>
    cfm-ethdm-twoway-delay
   </cfm-ethdm-twoway-delay>
  </cfm-ethdm-delay-entry>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
```


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```
      cfm-ethdm-delay-entry-index
     </cfm-ethdm-delay-entry-index>
     <cfm-ethdm-oneway-delay>
      cfm-ethdm-oneway-delay
     </cfm-ethdm-oneway-delay>
     <cfm-ethdm-twoway-delay>
      cfm-ethdm-twoway-delay
     </cfm-ethdm-twoway-delay>
    </cfm-ethdm-delay-entry>
   </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
    cfm-ethdm-delay-entry-index
   </cfm-ethdm-delay-entry-index>
   <cfm-ethdm-oneway-delay>
    cfm-ethdm-oneway-delay
   </cfm-ethdm-oneway-delay>
   <cfm-ethdm-twoway-delay>
    cfm-ethdm-twoway-delay
   </cfm-ethdm-twoway-delay>
  </cfm-ethdm-delay-entry>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-ethdm-delay-entry>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-ethdm-delay-entry>
   <cfm-ethdm-delay-entry-index>
    cfm-ethdm-delay-entry-index
   </cfm-ethdm-delay-entry-index>
   <cfm-ethdm-oneway-delay>
    cfm-ethdm-oneway-delay
   </cfm-ethdm-oneway-delay>
   <cfm-ethdm-twoway-delay>
    cfm-ethdm-twoway-delay
   </cfm-ethdm-twoway-delay>
  </cfm-ethdm-delay-entry>
 </cfm-entry>
</cfm-iterator-statistics>
```

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Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
<cfm-entry>
  <cfm-ethdm-oneway-delay-summary>
    <cfm-ethdm-average-oneway-delay>
      cfm-ethdm-average-oneway-delay
    </cfm-ethdm-average-oneway-delay>
    <cfm-ethdm-average-oneway-delay-variation>
      cfm-ethdm-average-oneway-delay-variation
    </cfm-ethdm-average-oneway-delay-variation>
    <cfm-ethdm-bestcase-oneway-delay>
      cfm-ethdm-bestcase-oneway-delay
    </cfm-ethdm-bestcase-oneway-delay>
    <cfm-ethdm-worstcase-oneway-delay>
      cfm-ethdm-worstcase-oneway-delay
    </cfm-ethdm-worstcase-oneway-delay>
  </cfm-ethdm-oneway-delay-summary>
</cfm-entry>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-ethdm-oneway-delay-summary>
      <cfm-ethdm-average-oneway-delay>
        cfm-ethdm-average-oneway-delay
      </cfm-ethdm-average-oneway-delay>
      <cfm-ethdm-average-oneway-delay-variation>
        cfm-ethdm-average-oneway-delay-variation
      </cfm-ethdm-average-oneway-delay-variation>
      <cfm-ethdm-bestcase-oneway-delay>
        cfm-ethdm-bestcase-oneway-delay
      </cfm-ethdm-bestcase-oneway-delay>
      <cfm-ethdm-worstcase-oneway-delay>
        cfm-ethdm-worstcase-oneway-delay
      </cfm-ethdm-worstcase-oneway-delay>
    </cfm-ethdm-oneway-delay-summary>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-ethdm-oneway-delay-summary>
```


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```
        <cfm-ethdm-average-oneway-delay>
          cfm-ethdm-average-oneway-delay
        </cfm-ethdm-average-oneway-delay>
        <cfm-ethdm-average-oneway-delay-variation>
          cfm-ethdm-average-oneway-delay-variation
        </cfm-ethdm-average-oneway-delay-variation>
        <cfm-ethdm-bestcase-oneway-delay>
          cfm-ethdm-bestcase-oneway-delay
        </cfm-ethdm-bestcase-oneway-delay>
        <cfm-ethdm-worstcase-oneway-delay>
          cfm-ethdm-worstcase-oneway-delay
        </cfm-ethdm-worstcase-oneway-delay>
      </cfm-ethdm-oneway-delay-summary>
    </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
  <cfm-mep-statistics>
    <cfm-entry>
      <cfm-ethdm-oneway-delay-summary>
        <cfm-ethdm-average-oneway-delay>
          cfm-ethdm-average-oneway-delay
        </cfm-ethdm-average-oneway-delay>
        <cfm-ethdm-average-oneway-delay-variation>
          cfm-ethdm-average-oneway-delay-variation
        </cfm-ethdm-average-oneway-delay-variation>
        <cfm-ethdm-bestcase-oneway-delay>
          cfm-ethdm-bestcase-oneway-delay
        </cfm-ethdm-bestcase-oneway-delay>
        <cfm-ethdm-worstcase-oneway-delay>
          cfm-ethdm-worstcase-oneway-delay
        </cfm-ethdm-worstcase-oneway-delay>
      </cfm-ethdm-oneway-delay-summary>
    </cfm-entry>
  </cfm-mep-statistics>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
  <cfm-delay-statistics>
    <cfm-entry>
      <cfm-ethdm-oneway-delay-summary>
        <cfm-ethdm-average-oneway-delay>
          cfm-ethdm-average-oneway-delay
        </cfm-ethdm-average-oneway-delay>
        <cfm-ethdm-average-oneway-delay-variation>
          cfm-ethdm-average-oneway-delay-variation
        </cfm-ethdm-average-oneway-delay-variation>
```

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```
        <cfm-ethdm-bestcase-oneway-delay>
          cfm-ethdm-bestcase-oneway-delay
        </cfm-ethdm-bestcase-oneway-delay>
        <cfm-ethdm-worstcase-oneway-delay>
          cfm-ethdm-worstcase-oneway-delay
        </cfm-ethdm-worstcase-oneway-delay>
      </cfm-ethdm-oneway-delay-summary>
    </cfm-entry>
  </cfm-delay-statistics>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-ethdm-oneway-delay-summary>
      <cfm-ethdm-average-oneway-delay>
        cfm-ethdm-average-oneway-delay
      </cfm-ethdm-average-oneway-delay>
      <cfm-ethdm-average-oneway-delay-variation>
        cfm-ethdm-average-oneway-delay-variation
      </cfm-ethdm-average-oneway-delay-variation>
      <cfm-ethdm-bestcase-oneway-delay>
        cfm-ethdm-bestcase-oneway-delay
      </cfm-ethdm-bestcase-oneway-delay>
      <cfm-ethdm-worstcase-oneway-delay>
        cfm-ethdm-worstcase-oneway-delay
      </cfm-ethdm-worstcase-oneway-delay>
    </cfm-ethdm-oneway-delay-summary>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-ethdm-oneway-delay-summary>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-ethdm-oneway-delay-summary>
      <cfm-ethdm-average-oneway-delay>
        cfm-ethdm-average-oneway-delay
      </cfm-ethdm-average-oneway-delay>
      <cfm-ethdm-average-oneway-delay-variation>
        cfm-ethdm-average-oneway-delay-variation
      </cfm-ethdm-average-oneway-delay-variation>
      <cfm-ethdm-bestcase-oneway-delay>
        cfm-ethdm-bestcase-oneway-delay
      </cfm-ethdm-bestcase-oneway-delay>
      <cfm-ethdm-worstcase-oneway-delay>
        cfm-ethdm-worstcase-oneway-delay
      </cfm-ethdm-worstcase-oneway-delay>
```


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```
    </cfm-ethdm-oneway-delay-summary>
   </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-entry>
 <cfm-ethdm-twoway-delay-summary>
  <cfm-ethdm-average-twoway-delay>
   cfm-ethdm-average-twoway-delay
  </cfm-ethdm-average-twoway-delay>
  <cfm-ethdm-average-twoway-delay-variation>
   cfm-ethdm-average-twoway-delay-variation
  </cfm-ethdm-average-twoway-delay-variation>
  <cfm-ethdm-bestcase-twoway-delay>
   cfm-ethdm-bestcase-twoway-delay
  </cfm-ethdm-bestcase-twoway-delay>
  <cfm-ethdm-worstcase-twoway-delay>
   cfm-ethdm-worstcase-twoway-delay
  </cfm-ethdm-worstcase-twoway-delay>
 </cfm-ethdm-twoway-delay-summary>
</cfm-entry>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-ethdm-twoway-delay-summary>
   <cfm-ethdm-average-twoway-delay>
    cfm-ethdm-average-twoway-delay
   </cfm-ethdm-average-twoway-delay>
   <cfm-ethdm-average-twoway-delay-variation>
    cfm-ethdm-average-twoway-delay-variation
   </cfm-ethdm-average-twoway-delay-variation>
   <cfm-ethdm-bestcase-twoway-delay>
    cfm-ethdm-bestcase-twoway-delay
   </cfm-ethdm-bestcase-twoway-delay>
   <cfm-ethdm-worstcase-twoway-delay>
    cfm-ethdm-worstcase-twoway-delay
   </cfm-ethdm-worstcase-twoway-delay>
  </cfm-ethdm-twoway-delay-summary>
 </cfm-entry>
</cfm-interface>
```

Description

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<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-ethdm-twoway-delay-summary>
   <cfm-ethdm-average-twoway-delay>
    cfm-ethdm-average-twoway-delay
   </cfm-ethdm-average-twoway-delay>
   <cfm-ethdm-average-twoway-delay-variation>
    cfm-ethdm-average-twoway-delay-variation
   </cfm-ethdm-average-twoway-delay-variation>
   <cfm-ethdm-bestcase-twoway-delay>
    cfm-ethdm-bestcase-twoway-delay
   </cfm-ethdm-bestcase-twoway-delay>
   <cfm-ethdm-worstcase-twoway-delay>
    cfm-ethdm-worstcase-twoway-delay
   </cfm-ethdm-worstcase-twoway-delay>
  </cfm-ethdm-twoway-delay-summary>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-ethdm-twoway-delay-summary>
   <cfm-ethdm-average-twoway-delay>
    cfm-ethdm-average-twoway-delay
   </cfm-ethdm-average-twoway-delay>
   <cfm-ethdm-average-twoway-delay-variation>
    cfm-ethdm-average-twoway-delay-variation
   </cfm-ethdm-average-twoway-delay-variation>
   <cfm-ethdm-bestcase-twoway-delay>
    cfm-ethdm-bestcase-twoway-delay
   </cfm-ethdm-bestcase-twoway-delay>
   <cfm-ethdm-worstcase-twoway-delay>
    cfm-ethdm-worstcase-twoway-delay
   </cfm-ethdm-worstcase-twoway-delay>
  </cfm-ethdm-twoway-delay-summary>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
```


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```
    <cfm-ethdm-twoway-delay-summary>
     <cfm-ethdm-average-twoway-delay>
      cfm-ethdm-average-twoway-delay
     </cfm-ethdm-average-twoway-delay>
     <cfm-ethdm-average-twoway-delay-variation>
      cfm-ethdm-average-twoway-delay-variation
     </cfm-ethdm-average-twoway-delay-variation>
     <cfm-ethdm-bestcase-twoway-delay>
      cfm-ethdm-bestcase-twoway-delay
     </cfm-ethdm-bestcase-twoway-delay>
     <cfm-ethdm-worstcase-twoway-delay>
      cfm-ethdm-worstcase-twoway-delay
     </cfm-ethdm-worstcase-twoway-delay>
    </cfm-ethdm-twoway-delay-summary>
   </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-ethdm-twoway-delay-summary>
   <cfm-ethdm-average-twoway-delay>
    cfm-ethdm-average-twoway-delay
   </cfm-ethdm-average-twoway-delay>
   <cfm-ethdm-average-twoway-delay-variation>
    cfm-ethdm-average-twoway-delay-variation
   </cfm-ethdm-average-twoway-delay-variation>
   <cfm-ethdm-bestcase-twoway-delay>
    cfm-ethdm-bestcase-twoway-delay
   </cfm-ethdm-bestcase-twoway-delay>
   <cfm-ethdm-worstcase-twoway-delay>
    cfm-ethdm-worstcase-twoway-delay
   </cfm-ethdm-worstcase-twoway-delay>
  </cfm-ethdm-twoway-delay-summary>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-ethdm-twoway-delay-summary>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-ethdm-twoway-delay-summary>
   <cfm-ethdm-average-twoway-delay>
    cfm-ethdm-average-twoway-delay
   </cfm-ethdm-average-twoway-delay>
   <cfm-ethdm-average-twoway-delay-variation>
    cfm-ethdm-average-twoway-delay-variation
```

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```
      </cfm-ethdm-average-twoway-delay-variation>
      <cfm-ethdm-bestcase-twoway-delay>
       cfm-ethdm-bestcase-twoway-delay
      </cfm-ethdm-bestcase-twoway-delay>
      <cfm-ethdm-worstcase-twoway-delay>
       cfm-ethdm-worstcase-twoway-delay
      </cfm-ethdm-worstcase-twoway-delay>
     </cfm-ethdm-twoway-delay-summary>
    </cfm-entry>
   </cfm-iterator-statistics>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-entry>
 <cfm-ethlm-cir-loss-summary>
  <cfm-ethlm-average-near-end-cir-loss>
   cfm-ethlm-average-near-end-cir-loss
  </cfm-ethlm-average-near-end-cir-loss>
  <cfm-ethlm-average-near-end-cir-loss-ratio>
   cfm-ethlm-average-near-end-cir-loss-ratio
  </cfm-ethlm-average-near-end-cir-loss-ratio>
  <cfm-ethlm-average-far-end-cir-loss>
   cfm-ethlm-average-far-end-cir-loss
  </cfm-ethlm-average-far-end-cir-loss>
  <cfm-ethlm-average-far-end-cir-loss-ratio>
   cfm-ethlm-average-far-end-cir-loss-ratio
  </cfm-ethlm-average-far-end-cir-loss-ratio>
  <cfm-ethlm-near-end-best-case-cir-loss>
   cfm-ethlm-near-end-best-case-cir-loss
  </cfm-ethlm-near-end-best-case-cir-loss>
  <cfm-ethlm-near-end-best-case-cir-loss-ratio>
   cfm-ethlm-near-end-best-case-cir-loss-ratio
  </cfm-ethlm-near-end-best-case-cir-loss-ratio>
  <cfm-ethlm-near-end-worst-case-cir-loss>
   cfm-ethlm-near-end-worst-case-cir-loss
  </cfm-ethlm-near-end-worst-case-cir-loss>
  <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
   cfm-ethlm-near-end-worst-case-cir-loss-ratio
  </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
  <cfm-ethlm-far-end-best-case-cir-loss>
   cfm-ethlm-far-end-best-case-cir-loss
  </cfm-ethlm-far-end-best-case-cir-loss>
  <cfm-ethlm-far-end-best-case-cir-loss-ratio>
   cfm-ethlm-far-end-best-case-cir-loss-ratio
  </cfm-ethlm-far-end-best-case-cir-loss-ratio>
  <cfm-ethlm-far-end-worst-case-cir-loss>
   cfm-ethlm-far-end-worst-case-cir-loss
  </cfm-ethlm-far-end-worst-case-cir-loss>
  <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
   cfm-ethlm-far-end-worst-case-cir-loss-ratio
  </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
 </cfm-ethlm-cir-loss-summary>
```


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```
</cfm-entry>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-ethlm-cir-loss-summary>
   <cfm-ethlm-average-near-end-cir-loss>
    cfm-ethlm-average-near-end-cir-loss
   </cfm-ethlm-average-near-end-cir-loss>
   <cfm-ethlm-average-near-end-cir-loss-ratio>
    cfm-ethlm-average-near-end-cir-loss-ratio
   </cfm-ethlm-average-near-end-cir-loss-ratio>
   <cfm-ethlm-average-far-end-cir-loss>
    cfm-ethlm-average-far-end-cir-loss
   </cfm-ethlm-average-far-end-cir-loss>
   <cfm-ethlm-average-far-end-cir-loss-ratio>
    cfm-ethlm-average-far-end-cir-loss-ratio
   </cfm-ethlm-average-far-end-cir-loss-ratio>
   <cfm-ethlm-near-end-best-case-cir-loss>
    cfm-ethlm-near-end-best-case-cir-loss
   </cfm-ethlm-near-end-best-case-cir-loss>
   <cfm-ethlm-near-end-best-case-cir-loss-ratio>
    cfm-ethlm-near-end-best-case-cir-loss-ratio
   </cfm-ethlm-near-end-best-case-cir-loss-ratio>
   <cfm-ethlm-near-end-worst-case-cir-loss>
    cfm-ethlm-near-end-worst-case-cir-loss
   </cfm-ethlm-near-end-worst-case-cir-loss>
   <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
    cfm-ethlm-near-end-worst-case-cir-loss-ratio
   </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
   <cfm-ethlm-far-end-best-case-cir-loss>
    cfm-ethlm-far-end-best-case-cir-loss
   </cfm-ethlm-far-end-best-case-cir-loss>
   <cfm-ethlm-far-end-best-case-cir-loss-ratio>
    cfm-ethlm-far-end-best-case-cir-loss-ratio
   </cfm-ethlm-far-end-best-case-cir-loss-ratio>
   <cfm-ethlm-far-end-worst-case-cir-loss>
    cfm-ethlm-far-end-worst-case-cir-loss
   </cfm-ethlm-far-end-worst-case-cir-loss>
   <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
    cfm-ethlm-far-end-worst-case-cir-loss-ratio
   </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
  </cfm-ethlm-cir-loss-summary>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-ethlm-cir-loss-summary>
   <cfm-ethlm-average-near-end-cir-loss>
    cfm-ethlm-average-near-end-cir-loss
   </cfm-ethlm-average-near-end-cir-loss>
   <cfm-ethlm-average-near-end-cir-loss-ratio>
    cfm-ethlm-average-near-end-cir-loss-ratio
   </cfm-ethlm-average-near-end-cir-loss-ratio>
   <cfm-ethlm-average-far-end-cir-loss>
    cfm-ethlm-average-far-end-cir-loss
   </cfm-ethlm-average-far-end-cir-loss>
   <cfm-ethlm-average-far-end-cir-loss-ratio>
    cfm-ethlm-average-far-end-cir-loss-ratio
   </cfm-ethlm-average-far-end-cir-loss-ratio>
   <cfm-ethlm-near-end-best-case-cir-loss>
    cfm-ethlm-near-end-best-case-cir-loss
   </cfm-ethlm-near-end-best-case-cir-loss>
   <cfm-ethlm-near-end-best-case-cir-loss-ratio>
    cfm-ethlm-near-end-best-case-cir-loss-ratio
   </cfm-ethlm-near-end-best-case-cir-loss-ratio>
   <cfm-ethlm-near-end-worst-case-cir-loss>
    cfm-ethlm-near-end-worst-case-cir-loss
   </cfm-ethlm-near-end-worst-case-cir-loss>
   <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
    cfm-ethlm-near-end-worst-case-cir-loss-ratio
   </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
   <cfm-ethlm-far-end-best-case-cir-loss>
    cfm-ethlm-far-end-best-case-cir-loss
   </cfm-ethlm-far-end-best-case-cir-loss>
   <cfm-ethlm-far-end-best-case-cir-loss-ratio>
    cfm-ethlm-far-end-best-case-cir-loss-ratio
   </cfm-ethlm-far-end-best-case-cir-loss-ratio>
   <cfm-ethlm-far-end-worst-case-cir-loss>
    cfm-ethlm-far-end-worst-case-cir-loss
   </cfm-ethlm-far-end-worst-case-cir-loss>
   <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
    cfm-ethlm-far-end-worst-case-cir-loss-ratio
   </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
  </cfm-ethlm-cir-loss-summary>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-ethlm-cir-loss-summary>
```


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```
      <cfm-ethlm-average-near-end-cir-loss>
        cfm-ethlm-average-near-end-cir-loss
      </cfm-ethlm-average-near-end-cir-loss>
      <cfm-ethlm-average-near-end-cir-loss-ratio>
        cfm-ethlm-average-near-end-cir-loss-ratio
      </cfm-ethlm-average-near-end-cir-loss-ratio>
      <cfm-ethlm-average-far-end-cir-loss>
        cfm-ethlm-average-far-end-cir-loss
      </cfm-ethlm-average-far-end-cir-loss>
      <cfm-ethlm-average-far-end-cir-loss-ratio>
        cfm-ethlm-average-far-end-cir-loss-ratio
      </cfm-ethlm-average-far-end-cir-loss-ratio>
      <cfm-ethlm-near-end-best-case-cir-loss>
        cfm-ethlm-near-end-best-case-cir-loss
      </cfm-ethlm-near-end-best-case-cir-loss>
      <cfm-ethlm-near-end-best-case-cir-loss-ratio>
        cfm-ethlm-near-end-best-case-cir-loss-ratio
      </cfm-ethlm-near-end-best-case-cir-loss-ratio>
      <cfm-ethlm-near-end-worst-case-cir-loss>
        cfm-ethlm-near-end-worst-case-cir-loss
      </cfm-ethlm-near-end-worst-case-cir-loss>
      <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
        cfm-ethlm-near-end-worst-case-cir-loss-ratio
      </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
      <cfm-ethlm-far-end-best-case-cir-loss>
        cfm-ethlm-far-end-best-case-cir-loss
      </cfm-ethlm-far-end-best-case-cir-loss>
      <cfm-ethlm-far-end-best-case-cir-loss-ratio>
        cfm-ethlm-far-end-best-case-cir-loss-ratio
      </cfm-ethlm-far-end-best-case-cir-loss-ratio>
      <cfm-ethlm-far-end-worst-case-cir-loss>
        cfm-ethlm-far-end-worst-case-cir-loss
      </cfm-ethlm-far-end-worst-case-cir-loss>
      <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
        cfm-ethlm-far-end-worst-case-cir-loss-ratio
      </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
    </cfm-ethlm-cir-loss-summary>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-ethlm-cir-loss-summary>
      <cfm-ethlm-average-near-end-cir-loss>
        cfm-ethlm-average-near-end-cir-loss
      </cfm-ethlm-average-near-end-cir-loss>
      <cfm-ethlm-average-near-end-cir-loss-ratio>
        cfm-ethlm-average-near-end-cir-loss-ratio
      </cfm-ethlm-average-near-end-cir-loss-ratio>
      <cfm-ethlm-average-far-end-cir-loss>
```

```
            cfm-ethlm-average-far-end-cir-loss
          </cfm-ethlm-average-far-end-cir-loss>
          <cfm-ethlm-average-far-end-cir-loss-ratio>
            cfm-ethlm-average-far-end-cir-loss-ratio
          </cfm-ethlm-average-far-end-cir-loss-ratio>
          <cfm-ethlm-near-end-best-case-cir-loss>
            cfm-ethlm-near-end-best-case-cir-loss
          </cfm-ethlm-near-end-best-case-cir-loss>
          <cfm-ethlm-near-end-best-case-cir-loss-ratio>
            cfm-ethlm-near-end-best-case-cir-loss-ratio
          </cfm-ethlm-near-end-best-case-cir-loss-ratio>
          <cfm-ethlm-near-end-worst-case-cir-loss>
            cfm-ethlm-near-end-worst-case-cir-loss
          </cfm-ethlm-near-end-worst-case-cir-loss>
          <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
            cfm-ethlm-near-end-worst-case-cir-loss-ratio
          </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
          <cfm-ethlm-far-end-best-case-cir-loss>
            cfm-ethlm-far-end-best-case-cir-loss
          </cfm-ethlm-far-end-best-case-cir-loss>
          <cfm-ethlm-far-end-best-case-cir-loss-ratio>
            cfm-ethlm-far-end-best-case-cir-loss-ratio
          </cfm-ethlm-far-end-best-case-cir-loss-ratio>
          <cfm-ethlm-far-end-worst-case-cir-loss>
            cfm-ethlm-far-end-worst-case-cir-loss
          </cfm-ethlm-far-end-worst-case-cir-loss>
          <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
            cfm-ethlm-far-end-worst-case-cir-loss-ratio
          </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
        </cfm-ethlm-cir-loss-summary>
      </cfm-entry>
    </cfm-delay-statistics>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
    <cfm-loss-statistics>
      <cfm-entry>
        <cfm-ethlm-cir-loss-summary>
          <cfm-ethlm-average-near-end-cir-loss>
            cfm-ethlm-average-near-end-cir-loss
          </cfm-ethlm-average-near-end-cir-loss>
          <cfm-ethlm-average-near-end-cir-loss-ratio>
            cfm-ethlm-average-near-end-cir-loss-ratio
          </cfm-ethlm-average-near-end-cir-loss-ratio>
          <cfm-ethlm-average-far-end-cir-loss>
            cfm-ethlm-average-far-end-cir-loss
          </cfm-ethlm-average-far-end-cir-loss>
          <cfm-ethlm-average-far-end-cir-loss-ratio>
            cfm-ethlm-average-far-end-cir-loss-ratio
          </cfm-ethlm-average-far-end-cir-loss-ratio>
          <cfm-ethlm-near-end-best-case-cir-loss>
            cfm-ethlm-near-end-best-case-cir-loss
```


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```
      </cfm-ethlm-near-end-best-case-cir-loss>
      <cfm-ethlm-near-end-best-case-cir-loss-ratio>
        cfm-ethlm-near-end-best-case-cir-loss-ratio
      </cfm-ethlm-near-end-best-case-cir-loss-ratio>
      <cfm-ethlm-near-end-worst-case-cir-loss>
        cfm-ethlm-near-end-worst-case-cir-loss
      </cfm-ethlm-near-end-worst-case-cir-loss>
      <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
        cfm-ethlm-near-end-worst-case-cir-loss-ratio
      </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
      <cfm-ethlm-far-end-best-case-cir-loss>
        cfm-ethlm-far-end-best-case-cir-loss
      </cfm-ethlm-far-end-best-case-cir-loss>
      <cfm-ethlm-far-end-best-case-cir-loss-ratio>
        cfm-ethlm-far-end-best-case-cir-loss-ratio
      </cfm-ethlm-far-end-best-case-cir-loss-ratio>
      <cfm-ethlm-far-end-worst-case-cir-loss>
        cfm-ethlm-far-end-worst-case-cir-loss
      </cfm-ethlm-far-end-worst-case-cir-loss>
      <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
        cfm-ethlm-far-end-worst-case-cir-loss-ratio
      </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
    </cfm-ethlm-cir-loss-summary>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-ethlm-cir-loss-summary>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-ethlm-cir-loss-summary>
      <cfm-ethlm-average-near-end-cir-loss>
        cfm-ethlm-average-near-end-cir-loss
      </cfm-ethlm-average-near-end-cir-loss>
      <cfm-ethlm-average-near-end-cir-loss-ratio>
        cfm-ethlm-average-near-end-cir-loss-ratio
      </cfm-ethlm-average-near-end-cir-loss-ratio>
      <cfm-ethlm-average-far-end-cir-loss>
        cfm-ethlm-average-far-end-cir-loss
      </cfm-ethlm-average-far-end-cir-loss>
      <cfm-ethlm-average-far-end-cir-loss-ratio>
        cfm-ethlm-average-far-end-cir-loss-ratio
      </cfm-ethlm-average-far-end-cir-loss-ratio>
      <cfm-ethlm-near-end-best-case-cir-loss>
        cfm-ethlm-near-end-best-case-cir-loss
      </cfm-ethlm-near-end-best-case-cir-loss>
      <cfm-ethlm-near-end-best-case-cir-loss-ratio>
        cfm-ethlm-near-end-best-case-cir-loss-ratio
      </cfm-ethlm-near-end-best-case-cir-loss-ratio>
      <cfm-ethlm-near-end-worst-case-cir-loss>
        cfm-ethlm-near-end-worst-case-cir-loss
      </cfm-ethlm-near-end-worst-case-cir-loss>
```

```
      <cfm-ethlm-near-end-worst-case-cir-loss-ratio>
        cfm-ethlm-near-end-worst-case-cir-loss-ratio
      </cfm-ethlm-near-end-worst-case-cir-loss-ratio>
      <cfm-ethlm-far-end-best-case-cir-loss>
        cfm-ethlm-far-end-best-case-cir-loss
      </cfm-ethlm-far-end-best-case-cir-loss>
      <cfm-ethlm-far-end-best-case-cir-loss-ratio>
        cfm-ethlm-far-end-best-case-cir-loss-ratio
      </cfm-ethlm-far-end-best-case-cir-loss-ratio>
      <cfm-ethlm-far-end-worst-case-cir-loss>
        cfm-ethlm-far-end-worst-case-cir-loss
      </cfm-ethlm-far-end-worst-case-cir-loss>
      <cfm-ethlm-far-end-worst-case-cir-loss-ratio>
        cfm-ethlm-far-end-worst-case-cir-loss-ratio
      </cfm-ethlm-far-end-worst-case-cir-loss-ratio>
    </cfm-ethlm-cir-loss-summary>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-entry>
  <cfm-ethlm-eir-loss-summary>
    <cfm-ethlm-average-near-end-eir-loss>
      cfm-ethlm-average-near-end-eir-loss
    </cfm-ethlm-average-near-end-eir-loss>
    <cfm-ethlm-average-near-end-eir-loss-ratio>
      cfm-ethlm-average-near-end-eir-loss-ratio
    </cfm-ethlm-average-near-end-eir-loss-ratio>
    <cfm-ethlm-average-far-end-eir-loss>
      cfm-ethlm-average-far-end-eir-loss
    </cfm-ethlm-average-far-end-eir-loss>
    <cfm-ethlm-average-far-end-eir-loss-ratio>
      cfm-ethlm-average-far-end-eir-loss-ratio
    </cfm-ethlm-average-far-end-eir-loss-ratio>
    <cfm-ethlm-near-end-best-case-eir-loss>
      cfm-ethlm-near-end-best-case-eir-loss
    </cfm-ethlm-near-end-best-case-eir-loss>
    <cfm-ethlm-near-end-best-case-eir-loss-ratio>
      cfm-ethlm-near-end-best-case-eir-loss-ratio
    </cfm-ethlm-near-end-best-case-eir-loss-ratio>
    <cfm-ethlm-near-end-worst-case-eir-loss>
      cfm-ethlm-near-end-worst-case-eir-loss
    </cfm-ethlm-near-end-worst-case-eir-loss>
    <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
      cfm-ethlm-near-end-worst-case-eir-loss-ratio
    </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
    <cfm-ethlm-far-end-best-case-eir-loss>
      cfm-ethlm-far-end-best-case-eir-loss
    </cfm-ethlm-far-end-best-case-eir-loss>
    <cfm-ethlm-far-end-best-case-eir-loss-ratio>
      cfm-ethlm-far-end-best-case-eir-loss-ratio
```


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```
    </cfm-ethlm-far-end-best-case-eir-loss-ratio>
    <cfm-ethlm-far-end-worst-case-eir-loss>
     cfm-ethlm-far-end-worst-case-eir-loss
    </cfm-ethlm-far-end-worst-case-eir-loss>
    <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
     cfm-ethlm-far-end-worst-case-eir-loss-ratio
    </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
   </cfm-ethlm-eir-loss-summary>
  </cfm-entry>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-ethlm-eir-loss-summary>
   <cfm-ethlm-average-near-end-eir-loss>
    cfm-ethlm-average-near-end-eir-loss
   </cfm-ethlm-average-near-end-eir-loss>
   <cfm-ethlm-average-near-end-eir-loss-ratio>
    cfm-ethlm-average-near-end-eir-loss-ratio
   </cfm-ethlm-average-near-end-eir-loss-ratio>
   <cfm-ethlm-average-far-end-eir-loss>
    cfm-ethlm-average-far-end-eir-loss
   </cfm-ethlm-average-far-end-eir-loss>
   <cfm-ethlm-average-far-end-eir-loss-ratio>
    cfm-ethlm-average-far-end-eir-loss-ratio
   </cfm-ethlm-average-far-end-eir-loss-ratio>
   <cfm-ethlm-near-end-best-case-eir-loss>
    cfm-ethlm-near-end-best-case-eir-loss
   </cfm-ethlm-near-end-best-case-eir-loss>
   <cfm-ethlm-near-end-best-case-eir-loss-ratio>
    cfm-ethlm-near-end-best-case-eir-loss-ratio
   </cfm-ethlm-near-end-best-case-eir-loss-ratio>
   <cfm-ethlm-near-end-worst-case-eir-loss>
    cfm-ethlm-near-end-worst-case-eir-loss
   </cfm-ethlm-near-end-worst-case-eir-loss>
   <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
    cfm-ethlm-near-end-worst-case-eir-loss-ratio
   </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
   <cfm-ethlm-far-end-best-case-eir-loss>
    cfm-ethlm-far-end-best-case-eir-loss
   </cfm-ethlm-far-end-best-case-eir-loss>
   <cfm-ethlm-far-end-best-case-eir-loss-ratio>
    cfm-ethlm-far-end-best-case-eir-loss-ratio
   </cfm-ethlm-far-end-best-case-eir-loss-ratio>
   <cfm-ethlm-far-end-worst-case-eir-loss>
    cfm-ethlm-far-end-worst-case-eir-loss
   </cfm-ethlm-far-end-worst-case-eir-loss>
   <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
    cfm-ethlm-far-end-worst-case-eir-loss-ratio
   </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
  </cfm-ethlm-eir-loss-summary>
```

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```
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-ethlm-eir-loss-summary>
   <cfm-ethlm-average-near-end-eir-loss>
    cfm-ethlm-average-near-end-eir-loss
   </cfm-ethlm-average-near-end-eir-loss>
   <cfm-ethlm-average-near-end-eir-loss-ratio>
    cfm-ethlm-average-near-end-eir-loss-ratio
   </cfm-ethlm-average-near-end-eir-loss-ratio>
   <cfm-ethlm-average-far-end-eir-loss>
    cfm-ethlm-average-far-end-eir-loss
   </cfm-ethlm-average-far-end-eir-loss>
   <cfm-ethlm-average-far-end-eir-loss-ratio>
    cfm-ethlm-average-far-end-eir-loss-ratio
   </cfm-ethlm-average-far-end-eir-loss-ratio>
   <cfm-ethlm-near-end-best-case-eir-loss>
    cfm-ethlm-near-end-best-case-eir-loss
   </cfm-ethlm-near-end-best-case-eir-loss>
   <cfm-ethlm-near-end-best-case-eir-loss-ratio>
    cfm-ethlm-near-end-best-case-eir-loss-ratio
   </cfm-ethlm-near-end-best-case-eir-loss-ratio>
   <cfm-ethlm-near-end-worst-case-eir-loss>
    cfm-ethlm-near-end-worst-case-eir-loss
   </cfm-ethlm-near-end-worst-case-eir-loss>
   <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
    cfm-ethlm-near-end-worst-case-eir-loss-ratio
   </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
   <cfm-ethlm-far-end-best-case-eir-loss>
    cfm-ethlm-far-end-best-case-eir-loss
   </cfm-ethlm-far-end-best-case-eir-loss>
   <cfm-ethlm-far-end-best-case-eir-loss-ratio>
    cfm-ethlm-far-end-best-case-eir-loss-ratio
   </cfm-ethlm-far-end-best-case-eir-loss-ratio>
   <cfm-ethlm-far-end-worst-case-eir-loss>
    cfm-ethlm-far-end-worst-case-eir-loss
   </cfm-ethlm-far-end-worst-case-eir-loss>
   <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
    cfm-ethlm-far-end-worst-case-eir-loss-ratio
   </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
  </cfm-ethlm-eir-loss-summary>
 </cfm-entry>
</cfm-mep-database>
```

Description

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<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-ethlm-eir-loss-summary>
   <cfm-ethlm-average-near-end-eir-loss>
    cfm-ethlm-average-near-end-eir-loss
   </cfm-ethlm-average-near-end-eir-loss>
   <cfm-ethlm-average-near-end-eir-loss-ratio>
    cfm-ethlm-average-near-end-eir-loss-ratio
   </cfm-ethlm-average-near-end-eir-loss-ratio>
   <cfm-ethlm-average-far-end-eir-loss>
    cfm-ethlm-average-far-end-eir-loss
   </cfm-ethlm-average-far-end-eir-loss>
   <cfm-ethlm-average-far-end-eir-loss-ratio>
    cfm-ethlm-average-far-end-eir-loss-ratio
   </cfm-ethlm-average-far-end-eir-loss-ratio>
   <cfm-ethlm-near-end-best-case-eir-loss>
    cfm-ethlm-near-end-best-case-eir-loss
   </cfm-ethlm-near-end-best-case-eir-loss>
   <cfm-ethlm-near-end-best-case-eir-loss-ratio>
    cfm-ethlm-near-end-best-case-eir-loss-ratio
   </cfm-ethlm-near-end-best-case-eir-loss-ratio>
   <cfm-ethlm-near-end-worst-case-eir-loss>
    cfm-ethlm-near-end-worst-case-eir-loss
   </cfm-ethlm-near-end-worst-case-eir-loss>
   <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
    cfm-ethlm-near-end-worst-case-eir-loss-ratio
   </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
   <cfm-ethlm-far-end-best-case-eir-loss>
    cfm-ethlm-far-end-best-case-eir-loss
   </cfm-ethlm-far-end-best-case-eir-loss>
   <cfm-ethlm-far-end-best-case-eir-loss-ratio>
    cfm-ethlm-far-end-best-case-eir-loss-ratio
   </cfm-ethlm-far-end-best-case-eir-loss-ratio>
   <cfm-ethlm-far-end-worst-case-eir-loss>
    cfm-ethlm-far-end-worst-case-eir-loss
   </cfm-ethlm-far-end-worst-case-eir-loss>
   <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
    cfm-ethlm-far-end-worst-case-eir-loss-ratio
   </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
  </cfm-ethlm-eir-loss-summary>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-ethlm-eir-loss-summary>
```

```
        <cfm-ethlm-average-near-end-eir-loss>
          cfm-ethlm-average-near-end-eir-loss
        </cfm-ethlm-average-near-end-eir-loss>
        <cfm-ethlm-average-near-end-eir-loss-ratio>
          cfm-ethlm-average-near-end-eir-loss-ratio
        </cfm-ethlm-average-near-end-eir-loss-ratio>
        <cfm-ethlm-average-far-end-eir-loss>
          cfm-ethlm-average-far-end-eir-loss
        </cfm-ethlm-average-far-end-eir-loss>
        <cfm-ethlm-average-far-end-eir-loss-ratio>
          cfm-ethlm-average-far-end-eir-loss-ratio
        </cfm-ethlm-average-far-end-eir-loss-ratio>
        <cfm-ethlm-near-end-best-case-eir-loss>
          cfm-ethlm-near-end-best-case-eir-loss
        </cfm-ethlm-near-end-best-case-eir-loss>
        <cfm-ethlm-near-end-best-case-eir-loss-ratio>
          cfm-ethlm-near-end-best-case-eir-loss-ratio
        </cfm-ethlm-near-end-best-case-eir-loss-ratio>
        <cfm-ethlm-near-end-worst-case-eir-loss>
          cfm-ethlm-near-end-worst-case-eir-loss
        </cfm-ethlm-near-end-worst-case-eir-loss>
        <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
          cfm-ethlm-near-end-worst-case-eir-loss-ratio
        </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
        <cfm-ethlm-far-end-best-case-eir-loss>
          cfm-ethlm-far-end-best-case-eir-loss
        </cfm-ethlm-far-end-best-case-eir-loss>
        <cfm-ethlm-far-end-best-case-eir-loss-ratio>
          cfm-ethlm-far-end-best-case-eir-loss-ratio
        </cfm-ethlm-far-end-best-case-eir-loss-ratio>
        <cfm-ethlm-far-end-worst-case-eir-loss>
          cfm-ethlm-far-end-worst-case-eir-loss
        </cfm-ethlm-far-end-worst-case-eir-loss>
        <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
          cfm-ethlm-far-end-worst-case-eir-loss-ratio
        </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
      </cfm-ethlm-eir-loss-summary>
    </cfm-entry>
  </cfm-delay-statistics>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
  <cfm-loss-statistics>
    <cfm-entry>
      <cfm-ethlm-eir-loss-summary>
        <cfm-ethlm-average-near-end-eir-loss>
          cfm-ethlm-average-near-end-eir-loss
        </cfm-ethlm-average-near-end-eir-loss>
        <cfm-ethlm-average-near-end-eir-loss-ratio>
          cfm-ethlm-average-near-end-eir-loss-ratio
        </cfm-ethlm-average-near-end-eir-loss-ratio>
        <cfm-ethlm-average-far-end-eir-loss>
```


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```
            cfm-ethlm-average-far-end-eir-loss
           </cfm-ethlm-average-far-end-eir-loss>
           <cfm-ethlm-average-far-end-eir-loss-ratio>
            cfm-ethlm-average-far-end-eir-loss-ratio
           </cfm-ethlm-average-far-end-eir-loss-ratio>
           <cfm-ethlm-near-end-best-case-eir-loss>
            cfm-ethlm-near-end-best-case-eir-loss
           </cfm-ethlm-near-end-best-case-eir-loss>
           <cfm-ethlm-near-end-best-case-eir-loss-ratio>
            cfm-ethlm-near-end-best-case-eir-loss-ratio
           </cfm-ethlm-near-end-best-case-eir-loss-ratio>
           <cfm-ethlm-near-end-worst-case-eir-loss>
            cfm-ethlm-near-end-worst-case-eir-loss
           </cfm-ethlm-near-end-worst-case-eir-loss>
           <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
            cfm-ethlm-near-end-worst-case-eir-loss-ratio
           </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
           <cfm-ethlm-far-end-best-case-eir-loss>
            cfm-ethlm-far-end-best-case-eir-loss
           </cfm-ethlm-far-end-best-case-eir-loss>
           <cfm-ethlm-far-end-best-case-eir-loss-ratio>
            cfm-ethlm-far-end-best-case-eir-loss-ratio
           </cfm-ethlm-far-end-best-case-eir-loss-ratio>
           <cfm-ethlm-far-end-worst-case-eir-loss>
            cfm-ethlm-far-end-worst-case-eir-loss
           </cfm-ethlm-far-end-worst-case-eir-loss>
           <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
            cfm-ethlm-far-end-worst-case-eir-loss-ratio
           </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
          </cfm-ethlm-eir-loss-summary>
         </cfm-entry>
        </cfm-loss-statistics>
```

Description

<cfm-ethlm-eir-loss-summary>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-ethlm-eir-loss-summary>
   <cfm-ethlm-average-near-end-eir-loss>
    cfm-ethlm-average-near-end-eir-loss
   </cfm-ethlm-average-near-end-eir-loss>
   <cfm-ethlm-average-near-end-eir-loss-ratio>
    cfm-ethlm-average-near-end-eir-loss-ratio
   </cfm-ethlm-average-near-end-eir-loss-ratio>
   <cfm-ethlm-average-far-end-eir-loss>
    cfm-ethlm-average-far-end-eir-loss
   </cfm-ethlm-average-far-end-eir-loss>
   <cfm-ethlm-average-far-end-eir-loss-ratio>
    cfm-ethlm-average-far-end-eir-loss-ratio
   </cfm-ethlm-average-far-end-eir-loss-ratio>
   <cfm-ethlm-near-end-best-case-eir-loss>
    cfm-ethlm-near-end-best-case-eir-loss
```

```
      </cfm-ethlm-near-end-best-case-eir-loss>
      <cfm-ethlm-near-end-best-case-eir-loss-ratio>
       cfm-ethlm-near-end-best-case-eir-loss-ratio
      </cfm-ethlm-near-end-best-case-eir-loss-ratio>
      <cfm-ethlm-near-end-worst-case-eir-loss>
       cfm-ethlm-near-end-worst-case-eir-loss
      </cfm-ethlm-near-end-worst-case-eir-loss>
      <cfm-ethlm-near-end-worst-case-eir-loss-ratio>
       cfm-ethlm-near-end-worst-case-eir-loss-ratio
      </cfm-ethlm-near-end-worst-case-eir-loss-ratio>
      <cfm-ethlm-far-end-best-case-eir-loss>
       cfm-ethlm-far-end-best-case-eir-loss
      </cfm-ethlm-far-end-best-case-eir-loss>
      <cfm-ethlm-far-end-best-case-eir-loss-ratio>
       cfm-ethlm-far-end-best-case-eir-loss-ratio
      </cfm-ethlm-far-end-best-case-eir-loss-ratio>
      <cfm-ethlm-far-end-worst-case-eir-loss>
       cfm-ethlm-far-end-worst-case-eir-loss
      </cfm-ethlm-far-end-worst-case-eir-loss>
      <cfm-ethlm-far-end-worst-case-eir-loss-ratio>
       cfm-ethlm-far-end-worst-case-eir-loss-ratio
      </cfm-ethlm-far-end-worst-case-eir-loss-ratio>
     </cfm-ethlm-eir-loss-summary>
    </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-entry>
 <cfm-ethlm-loss-entry>
  <cfm-ethlm-loss-entry-index>
   cfm-ethlm-loss-entry-index
  </cfm-ethlm-loss-entry-index>
  <cfm-ethlm-near-end-cir-frame-loss>
   cfm-ethlm-near-end-cir-frame-loss
  </cfm-ethlm-near-end-cir-frame-loss>
  <cfm-ethlm-near-end-total-cir-tx>
   cfm-ethlm-near-end-total-cir-tx
  </cfm-ethlm-near-end-total-cir-tx>
  <cfm-ethlm-far-end-cir-frame-loss>
   cfm-ethlm-far-end-cir-frame-loss
  </cfm-ethlm-far-end-cir-frame-loss>
  <cfm-ethlm-far-end-total-cir-tx>
   cfm-ethlm-far-end-total-cir-tx
  </cfm-ethlm-far-end-total-cir-tx>
  <cfm-ethlm-near-end-eir-frame-loss>
   cfm-ethlm-near-end-eir-frame-loss
  </cfm-ethlm-near-end-eir-frame-loss>
  <cfm-ethlm-near-end-total-eir-tx>
   cfm-ethlm-near-end-total-eir-tx
  </cfm-ethlm-near-end-total-eir-tx>
  <cfm-ethlm-far-end-eir-frame-loss>
```


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```
      cfm-ethlm-far-end-eir-frame-loss
    </cfm-ethlm-far-end-eir-frame-loss>
    <cfm-ethlm-far-end-total-eir-tx>
      cfm-ethlm-far-end-total-eir-tx
    </cfm-ethlm-far-end-total-eir-tx>
    <cfm-ethlm-near-end-cir-frame-loss-ratio>
      cfm-ethlm-near-end-cir-frame-loss-ratio
    </cfm-ethlm-near-end-cir-frame-loss-ratio>
    <cfm-ethlm-far-end-cir-frame-loss-ratio>
      cfm-ethlm-far-end-cir-frame-loss-ratio
    </cfm-ethlm-far-end-cir-frame-loss-ratio>
    <cfm-ethlm-near-end-eir-frame-loss-ratio>
      cfm-ethlm-near-end-eir-frame-loss-ratio
    </cfm-ethlm-near-end-eir-frame-loss-ratio>
    <cfm-ethlm-far-end-eir-frame-loss-ratio>
      cfm-ethlm-far-end-eir-frame-loss-ratio
    </cfm-ethlm-far-end-eir-frame-loss-ratio>
  </cfm-ethlm-loss-entry>
</cfm-entry>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-ethlm-loss-entry>
      <cfm-ethlm-loss-entry-index>
        cfm-ethlm-loss-entry-index
      </cfm-ethlm-loss-entry-index>
      <cfm-ethlm-near-end-cir-frame-loss>
        cfm-ethlm-near-end-cir-frame-loss
      </cfm-ethlm-near-end-cir-frame-loss>
      <cfm-ethlm-near-end-total-cir-tx>
        cfm-ethlm-near-end-total-cir-tx
      </cfm-ethlm-near-end-total-cir-tx>
      <cfm-ethlm-far-end-cir-frame-loss>
        cfm-ethlm-far-end-cir-frame-loss
      </cfm-ethlm-far-end-cir-frame-loss>
      <cfm-ethlm-far-end-total-cir-tx>
        cfm-ethlm-far-end-total-cir-tx
      </cfm-ethlm-far-end-total-cir-tx>
      <cfm-ethlm-near-end-eir-frame-loss>
        cfm-ethlm-near-end-eir-frame-loss
      </cfm-ethlm-near-end-eir-frame-loss>
      <cfm-ethlm-near-end-total-eir-tx>
        cfm-ethlm-near-end-total-eir-tx
      </cfm-ethlm-near-end-total-eir-tx>
      <cfm-ethlm-far-end-eir-frame-loss>
        cfm-ethlm-far-end-eir-frame-loss
      </cfm-ethlm-far-end-eir-frame-loss>
      <cfm-ethlm-far-end-total-eir-tx>
        cfm-ethlm-far-end-total-eir-tx
      </cfm-ethlm-far-end-total-eir-tx>
```

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```
        <cfm-ethlm-near-end-cir-frame-loss-ratio>
          cfm-ethlm-near-end-cir-frame-loss-ratio
        </cfm-ethlm-near-end-cir-frame-loss-ratio>
        <cfm-ethlm-far-end-cir-frame-loss-ratio>
          cfm-ethlm-far-end-cir-frame-loss-ratio
        </cfm-ethlm-far-end-cir-frame-loss-ratio>
        <cfm-ethlm-near-end-eir-frame-loss-ratio>
          cfm-ethlm-near-end-eir-frame-loss-ratio
        </cfm-ethlm-near-end-eir-frame-loss-ratio>
        <cfm-ethlm-far-end-eir-frame-loss-ratio>
          cfm-ethlm-far-end-eir-frame-loss-ratio
        </cfm-ethlm-far-end-eir-frame-loss-ratio>
      </cfm-ethlm-loss-entry>
    </cfm-entry>
  </cfm-interface>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-ethlm-loss-entry>
      <cfm-ethlm-loss-entry-index>
        cfm-ethlm-loss-entry-index
      </cfm-ethlm-loss-entry-index>
      <cfm-ethlm-near-end-cir-frame-loss>
        cfm-ethlm-near-end-cir-frame-loss
      </cfm-ethlm-near-end-cir-frame-loss>
      <cfm-ethlm-near-end-total-cir-tx>
        cfm-ethlm-near-end-total-cir-tx
      </cfm-ethlm-near-end-total-cir-tx>
      <cfm-ethlm-far-end-cir-frame-loss>
        cfm-ethlm-far-end-cir-frame-loss
      </cfm-ethlm-far-end-cir-frame-loss>
      <cfm-ethlm-far-end-total-cir-tx>
        cfm-ethlm-far-end-total-cir-tx
      </cfm-ethlm-far-end-total-cir-tx>
      <cfm-ethlm-near-end-eir-frame-loss>
        cfm-ethlm-near-end-eir-frame-loss
      </cfm-ethlm-near-end-eir-frame-loss>
      <cfm-ethlm-near-end-total-eir-tx>
        cfm-ethlm-near-end-total-eir-tx
      </cfm-ethlm-near-end-total-eir-tx>
      <cfm-ethlm-far-end-eir-frame-loss>
        cfm-ethlm-far-end-eir-frame-loss
      </cfm-ethlm-far-end-eir-frame-loss>
      <cfm-ethlm-far-end-total-eir-tx>
        cfm-ethlm-far-end-total-eir-tx
      </cfm-ethlm-far-end-total-eir-tx>
      <cfm-ethlm-near-end-cir-frame-loss-ratio>
        cfm-ethlm-near-end-cir-frame-loss-ratio
      </cfm-ethlm-near-end-cir-frame-loss-ratio>
      <cfm-ethlm-far-end-cir-frame-loss-ratio>
```


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```
        cfm-ethlm-far-end-cir-frame-loss-ratio
       </cfm-ethlm-far-end-cir-frame-loss-ratio>
       <cfm-ethlm-near-end-eir-frame-loss-ratio>
        cfm-ethlm-near-end-eir-frame-loss-ratio
       </cfm-ethlm-near-end-eir-frame-loss-ratio>
       <cfm-ethlm-far-end-eir-frame-loss-ratio>
        cfm-ethlm-far-end-eir-frame-loss-ratio
       </cfm-ethlm-far-end-eir-frame-loss-ratio>
      </cfm-ethlm-loss-entry>
     </cfm-entry>
    </cfm-mep-database>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-ethlm-loss-entry>
   <cfm-ethlm-loss-entry-index>
    cfm-ethlm-loss-entry-index
   </cfm-ethlm-loss-entry-index>
   <cfm-ethlm-near-end-cir-frame-loss>
    cfm-ethlm-near-end-cir-frame-loss
   </cfm-ethlm-near-end-cir-frame-loss>
   <cfm-ethlm-near-end-total-cir-tx>
    cfm-ethlm-near-end-total-cir-tx
   </cfm-ethlm-near-end-total-cir-tx>
   <cfm-ethlm-far-end-cir-frame-loss>
    cfm-ethlm-far-end-cir-frame-loss
   </cfm-ethlm-far-end-cir-frame-loss>
   <cfm-ethlm-far-end-total-cir-tx>
    cfm-ethlm-far-end-total-cir-tx
   </cfm-ethlm-far-end-total-cir-tx>
   <cfm-ethlm-near-end-eir-frame-loss>
    cfm-ethlm-near-end-eir-frame-loss
   </cfm-ethlm-near-end-eir-frame-loss>
   <cfm-ethlm-near-end-total-eir-tx>
    cfm-ethlm-near-end-total-eir-tx
   </cfm-ethlm-near-end-total-eir-tx>
   <cfm-ethlm-far-end-eir-frame-loss>
    cfm-ethlm-far-end-eir-frame-loss
   </cfm-ethlm-far-end-eir-frame-loss>
   <cfm-ethlm-far-end-total-eir-tx>
    cfm-ethlm-far-end-total-eir-tx
   </cfm-ethlm-far-end-total-eir-tx>
   <cfm-ethlm-near-end-cir-frame-loss-ratio>
    cfm-ethlm-near-end-cir-frame-loss-ratio
   </cfm-ethlm-near-end-cir-frame-loss-ratio>
   <cfm-ethlm-far-end-cir-frame-loss-ratio>
    cfm-ethlm-far-end-cir-frame-loss-ratio
   </cfm-ethlm-far-end-cir-frame-loss-ratio>
   <cfm-ethlm-near-end-eir-frame-loss-ratio>
    cfm-ethlm-near-end-eir-frame-loss-ratio
```

```
      </cfm-ethlm-near-end-eir-frame-loss-ratio>
      <cfm-ethlm-far-end-eir-frame-loss-ratio>
        cfm-ethlm-far-end-eir-frame-loss-ratio
      </cfm-ethlm-far-end-eir-frame-loss-ratio>
    </cfm-ethlm-loss-entry>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-ethlm-loss-entry>
      <cfm-ethlm-loss-entry-index>
        cfm-ethlm-loss-entry-index
      </cfm-ethlm-loss-entry-index>
      <cfm-ethlm-near-end-cir-frame-loss>
        cfm-ethlm-near-end-cir-frame-loss
      </cfm-ethlm-near-end-cir-frame-loss>
      <cfm-ethlm-near-end-total-cir-tx>
        cfm-ethlm-near-end-total-cir-tx
      </cfm-ethlm-near-end-total-cir-tx>
      <cfm-ethlm-far-end-cir-frame-loss>
        cfm-ethlm-far-end-cir-frame-loss
      </cfm-ethlm-far-end-cir-frame-loss>
      <cfm-ethlm-far-end-total-cir-tx>
        cfm-ethlm-far-end-total-cir-tx
      </cfm-ethlm-far-end-total-cir-tx>
      <cfm-ethlm-near-end-eir-frame-loss>
        cfm-ethlm-near-end-eir-frame-loss
      </cfm-ethlm-near-end-eir-frame-loss>
      <cfm-ethlm-near-end-total-eir-tx>
        cfm-ethlm-near-end-total-eir-tx
      </cfm-ethlm-near-end-total-eir-tx>
      <cfm-ethlm-far-end-eir-frame-loss>
        cfm-ethlm-far-end-eir-frame-loss
      </cfm-ethlm-far-end-eir-frame-loss>
      <cfm-ethlm-far-end-total-eir-tx>
        cfm-ethlm-far-end-total-eir-tx
      </cfm-ethlm-far-end-total-eir-tx>
      <cfm-ethlm-near-end-cir-frame-loss-ratio>
        cfm-ethlm-near-end-cir-frame-loss-ratio
      </cfm-ethlm-near-end-cir-frame-loss-ratio>
      <cfm-ethlm-far-end-cir-frame-loss-ratio>
        cfm-ethlm-far-end-cir-frame-loss-ratio
      </cfm-ethlm-far-end-cir-frame-loss-ratio>
      <cfm-ethlm-near-end-eir-frame-loss-ratio>
        cfm-ethlm-near-end-eir-frame-loss-ratio
      </cfm-ethlm-near-end-eir-frame-loss-ratio>
      <cfm-ethlm-far-end-eir-frame-loss-ratio>
        cfm-ethlm-far-end-eir-frame-loss-ratio
      </cfm-ethlm-far-end-eir-frame-loss-ratio>
```


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```
    </cfm-ethlm-loss-entry>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-ethlm-loss-entry>
      <cfm-ethlm-loss-entry-index>
        cfm-ethlm-loss-entry-index
      </cfm-ethlm-loss-entry-index>
      <cfm-ethlm-near-end-cir-frame-loss>
        cfm-ethlm-near-end-cir-frame-loss
      </cfm-ethlm-near-end-cir-frame-loss>
      <cfm-ethlm-near-end-total-cir-tx>
        cfm-ethlm-near-end-total-cir-tx
      </cfm-ethlm-near-end-total-cir-tx>
      <cfm-ethlm-far-end-cir-frame-loss>
        cfm-ethlm-far-end-cir-frame-loss
      </cfm-ethlm-far-end-cir-frame-loss>
      <cfm-ethlm-far-end-total-cir-tx>
        cfm-ethlm-far-end-total-cir-tx
      </cfm-ethlm-far-end-total-cir-tx>
      <cfm-ethlm-near-end-eir-frame-loss>
        cfm-ethlm-near-end-eir-frame-loss
      </cfm-ethlm-near-end-eir-frame-loss>
      <cfm-ethlm-near-end-total-eir-tx>
        cfm-ethlm-near-end-total-eir-tx
      </cfm-ethlm-near-end-total-eir-tx>
      <cfm-ethlm-far-end-eir-frame-loss>
        cfm-ethlm-far-end-eir-frame-loss
      </cfm-ethlm-far-end-eir-frame-loss>
      <cfm-ethlm-far-end-total-eir-tx>
        cfm-ethlm-far-end-total-eir-tx
      </cfm-ethlm-far-end-total-eir-tx>
      <cfm-ethlm-near-end-cir-frame-loss-ratio>
        cfm-ethlm-near-end-cir-frame-loss-ratio
      </cfm-ethlm-near-end-cir-frame-loss-ratio>
      <cfm-ethlm-far-end-cir-frame-loss-ratio>
        cfm-ethlm-far-end-cir-frame-loss-ratio
      </cfm-ethlm-far-end-cir-frame-loss-ratio>
      <cfm-ethlm-near-end-eir-frame-loss-ratio>
        cfm-ethlm-near-end-eir-frame-loss-ratio
      </cfm-ethlm-near-end-eir-frame-loss-ratio>
      <cfm-ethlm-far-end-eir-frame-loss-ratio>
        cfm-ethlm-far-end-eir-frame-loss-ratio
      </cfm-ethlm-far-end-eir-frame-loss-ratio>
    </cfm-ethlm-loss-entry>
  </cfm-entry>
</cfm-loss-statistics>
```

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Description

<cfm-ethlm-loss-entry>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-ethlm-loss-entry>
   <cfm-ethlm-loss-entry-index>
    cfm-ethlm-loss-entry-index
   </cfm-ethlm-loss-entry-index>
   <cfm-ethlm-near-end-cir-frame-loss>
    cfm-ethlm-near-end-cir-frame-loss
   </cfm-ethlm-near-end-cir-frame-loss>
   <cfm-ethlm-near-end-total-cir-tx>
    cfm-ethlm-near-end-total-cir-tx
   </cfm-ethlm-near-end-total-cir-tx>
   <cfm-ethlm-far-end-cir-frame-loss>
    cfm-ethlm-far-end-cir-frame-loss
   </cfm-ethlm-far-end-cir-frame-loss>
   <cfm-ethlm-far-end-total-cir-tx>
    cfm-ethlm-far-end-total-cir-tx
   </cfm-ethlm-far-end-total-cir-tx>
   <cfm-ethlm-near-end-eir-frame-loss>
    cfm-ethlm-near-end-eir-frame-loss
   </cfm-ethlm-near-end-eir-frame-loss>
   <cfm-ethlm-near-end-total-eir-tx>
    cfm-ethlm-near-end-total-eir-tx
   </cfm-ethlm-near-end-total-eir-tx>
   <cfm-ethlm-far-end-eir-frame-loss>
    cfm-ethlm-far-end-eir-frame-loss
   </cfm-ethlm-far-end-eir-frame-loss>
   <cfm-ethlm-far-end-total-eir-tx>
    cfm-ethlm-far-end-total-eir-tx
   </cfm-ethlm-far-end-total-eir-tx>
   <cfm-ethlm-near-end-cir-frame-loss-ratio>
    cfm-ethlm-near-end-cir-frame-loss-ratio
   </cfm-ethlm-near-end-cir-frame-loss-ratio>
   <cfm-ethlm-far-end-cir-frame-loss-ratio>
    cfm-ethlm-far-end-cir-frame-loss-ratio
   </cfm-ethlm-far-end-cir-frame-loss-ratio>
   <cfm-ethlm-near-end-eir-frame-loss-ratio>
    cfm-ethlm-near-end-eir-frame-loss-ratio
   </cfm-ethlm-near-end-eir-frame-loss-ratio>
   <cfm-ethlm-far-end-eir-frame-loss-ratio>
    cfm-ethlm-far-end-eir-frame-loss-ratio
   </cfm-ethlm-far-end-eir-frame-loss-ratio>
  </cfm-ethlm-loss-entry>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description

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<cfm-filter>

Usage

```
<cfm-filter>
  <cfm-filter-name>
    cfm-filter-name
  </cfm-filter-name>
  <cfm-filter-state>
    cfm-filter-state
  </cfm-filter-state>
  <cfm-filter-term-count>
    cfm-filter-term-count
  </cfm-filter-term-count>
  <cfm-filter-term-attachment>
    cfm-filter-term-attachment
  </cfm-filter-term-attachment>
</cfm-filter>
```

Description

<cfm-filter>

Usage

```
<cfm-firewall-filter-instance-information>
  <cfm-filter>
    <cfm-filter-name>
      cfm-filter-name
    </cfm-filter-name>
    <cfm-filter-state>
      cfm-filter-state
    </cfm-filter-state>
    <cfm-filter-term-count>
      cfm-filter-term-count
    </cfm-filter-term-count>
    <cfm-filter-term-attachment>
      cfm-filter-term-attachment
    </cfm-filter-term-attachment>
  </cfm-filter>
</cfm-firewall-filter-instance-information>
```

Description

<cfm-filter>

Usage

```
<cfm-firewall-filter-interface-information>
  <cfm-filter>
    <cfm-filter-name>
      cfm-filter-name
    </cfm-filter-name>
    <cfm-filter-state>
      cfm-filter-state
    </cfm-filter-state>
```

```
    <cfm-filter-term-count>
      cfm-filter-term-count
    </cfm-filter-term-count>
    <cfm-filter-term-attachment>
      cfm-filter-term-attachment
    </cfm-filter-term-attachment>
  </cfm-filter>
</cfm-firewall-filter-interface-information>
```

Description

<cfm-filter-term>

Usage

```
<cfm-filter-term>
  <cfm-filter-term-name>
    cfm-filter-term-name
  </cfm-filter-term-name>
  <cfm-filter-term-id>
    cfm-filter-term-id
  </cfm-filter-term-id>
  <cfm-filter-term-state>
    cfm-filter-term-state
  </cfm-filter-term-state>
  <cfm-filter-term-key>
    cfm-filter-term-key
  </cfm-filter-term-key>
  <cfm-filter-term-action>
    cfm-filter-term-action
  </cfm-filter-term-action>
  <cfm-filter-term-action-details>
    cfm-filter-term-action-details
  </cfm-filter-term-action-details>
  <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
  <cfm-policer-instance-name>
    cfm-policer-instance-name
  </cfm-policer-instance-name>
</cfm-filter-term>
```

Description

<cfm-filter-term>

Usage

```
<cfm-firewall-filter-instance-information>
  <cfm-filter-term>
    <cfm-filter-term-name>
      cfm-filter-term-name
    </cfm-filter-term-name>
    <cfm-filter-term-id>
      cfm-filter-term-id
    </cfm-filter-term-id>
    <cfm-filter-term-state>
      cfm-filter-term-state
```


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```
    </cfm-filter-term-state>
    <cfm-filter-term-key>
      cfm-filter-term-key
    </cfm-filter-term-key>
    <cfm-filter-term-action>
      cfm-filter-term-action
    </cfm-filter-term-action>
    <cfm-filter-term-action-details>
      cfm-filter-term-action-details
    </cfm-filter-term-action-details>
    <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
    <cfm-policer-instance-name>
      cfm-policer-instance-name
    </cfm-policer-instance-name>
  </cfm-filter-term>
</cfm-firewall-filter-instance-information>
```

Description

<cfm-filter-term>

Usage

```
<cfm-firewall-filter-interface-information>
  <cfm-filter-term>
    <cfm-filter-term-name>
      cfm-filter-term-name
    </cfm-filter-term-name>
    <cfm-filter-term-id>
      cfm-filter-term-id
    </cfm-filter-term-id>
    <cfm-filter-term-state>
      cfm-filter-term-state
    </cfm-filter-term-state>
    <cfm-filter-term-key>
      cfm-filter-term-key
    </cfm-filter-term-key>
    <cfm-filter-term-action>
      cfm-filter-term-action
    </cfm-filter-term-action>
    <cfm-filter-term-action-details>
      cfm-filter-term-action-details
    </cfm-filter-term-action-details>
    <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
    <cfm-policer-instance-name>
      cfm-policer-instance-name
    </cfm-policer-instance-name>
  </cfm-filter-term>
</cfm-firewall-filter-interface-information>
```

Description

<cfm-firewall-filter-instance-information>

Usage

```
<cfm-firewall-filter-instance-information>
  <cfm-instance-name>
    cfm-instance-name
  </cfm-instance-name>
  <cfm-filter>....</cfm-filter>
  <cfm-filter-term>....</cfm-filter-term>
</cfm-firewall-filter-instance-information>
```

Description

<cfm-firewall-filter-interface-information>

Usage

```
<cfm-firewall-filter-interface-information>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-instance-name>
    cfm-instance-name
  </cfm-instance-name>
  <cfm-filter>....</cfm-filter>
  <cfm-filter-term>....</cfm-filter-term>
</cfm-firewall-filter-interface-information>
```

Description

<cfm-flood-instance-information>

Usage

```
<cfm-flood-instance-information>
  <cfm-instance-name>
    cfm-instance-name
  </cfm-instance-name>
  <cfm-num-active-customer-endpoint-iffs>
    cfm-num-active-customer-endpoint-iffs
  </cfm-num-active-customer-endpoint-iffs>
  <cfm-num-active-vpn-endpoint-iffs>
    cfm-num-active-vpn-endpoint-iffs
  </cfm-num-active-vpn-endpoint-iffs>

<cfm-flood-maintenance-domain-level>....</cfm-flood-maintenance-domain-level>
  </cfm-flood-instance-information>
```

Description

<cfm-flood-interface-information>

Usage

```
<cfm-flood-interface-information>
```


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```
<cfm-interface-name>
  cfm-interface-name
</cfm-interface-name>
<cfm-instance-name>
  cfm-instance-name
</cfm-instance-name>

<cfm-flood-maintenance-domain-level>....</cfm-flood-maintenance-domain-level>
</cfm-flood-interface-information>
```

Description

<cfm-flood-maintenance-domain-level>

Usage

```
<cfm-flood-maintenance-domain-level>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-local-mep-direction>
    cfm-local-mep-direction
  </cfm-local-mep-direction>
  <cfm-filter-action>
    cfm-filter-action
  </cfm-filter-action>
  <cfm-nexthop-type>
    cfm-nexthop-type
  </cfm-nexthop-type>
  <cfm-nexthop-index>
    cfm-nexthop-index
  </cfm-nexthop-index>
  <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
</cfm-flood-maintenance-domain-level>
```

Description

<cfm-flood-maintenance-domain-level>

Usage

```
<cfm-flood-instance-information>
  <cfm-flood-maintenance-domain-level>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-local-mep-direction>
      cfm-local-mep-direction
    </cfm-local-mep-direction>
    <cfm-filter-action>
      cfm-filter-action
    </cfm-filter-action>
    <cfm-nexthop-type>
      cfm-nexthop-type
    </cfm-nexthop-type>
    <cfm-nexthop-index>
```

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```
      cfm-nexthop-index
    </cfm-nexthop-index>
    <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
  </cfm-flood-maintenance-domain-level>
</cfm-flood-instance-information>
```

Description

<cfm-flood-maintenance-domain-level>

Usage

```
<cfm-flood-interface-information>
  <cfm-flood-maintenance-domain-level>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-local-mep-direction>
      cfm-local-mep-direction
    </cfm-local-mep-direction>
    <cfm-filter-action>
      cfm-filter-action
    </cfm-filter-action>
    <cfm-nexthop-type>
      cfm-nexthop-type
    </cfm-nexthop-type>
    <cfm-nexthop-index>
      cfm-nexthop-index
    </cfm-nexthop-index>
    <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
  </cfm-flood-maintenance-domain-level>
</cfm-flood-interface-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-flood-nexthop-components>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-interface-type>
    cfm-interface-type
  </cfm-interface-type>
  <cfm-interface-nexthop-type>
    cfm-interface-nexthop-type
  </cfm-interface-nexthop-type>
  <cfm-interface-nexthop-index>
    cfm-interface-nexthop-index
  </cfm-interface-nexthop-index>
</cfm-flood-nexthop-components>
```

Description

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<cfm-flood-nexthop-components>

Usage

```
<cfm-flood-maintenance-domain-level>
  <cfm-flood-nexthop-components>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-interface-type>
      cfm-interface-type
    </cfm-interface-type>
    <cfm-interface-nexthop-type>
      cfm-interface-nexthop-type
    </cfm-interface-nexthop-type>
    <cfm-interface-nexthop-index>
      cfm-interface-nexthop-index
    </cfm-interface-nexthop-index>
  </cfm-flood-nexthop-components>
</cfm-flood-maintenance-domain-level>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-flood-instance-information>
  <cfm-flood-maintenance-domain-level>
    <cfm-flood-nexthop-components>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-type>
        cfm-interface-type
      </cfm-interface-type>
      <cfm-interface-nexthop-type>
        cfm-interface-nexthop-type
      </cfm-interface-nexthop-type>
      <cfm-interface-nexthop-index>
        cfm-interface-nexthop-index
      </cfm-interface-nexthop-index>
    </cfm-flood-nexthop-components>
  </cfm-flood-maintenance-domain-level>
</cfm-flood-instance-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-flood-interface-information>
  <cfm-flood-maintenance-domain-level>
    <cfm-flood-nexthop-components>
      <cfm-interface-name>
```

```
            cfm-interface-name
           </cfm-interface-name>
           <cfm-interface-type>
            cfm-interface-type
           </cfm-interface-type>
           <cfm-interface-nexthop-type>
            cfm-interface-nexthop-type
           </cfm-interface-nexthop-type>
           <cfm-interface-nexthop-index>
            cfm-interface-nexthop-index
           </cfm-interface-nexthop-index>
          </cfm-flood-nexthop-components>
         </cfm-flood-maintenance-domain-level>
        </cfm-flood-interface-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-route-maintenance-domain-level>
 <cfm-flood-nexthop-components>
  <cfm-interface-name>
   cfm-interface-name
  </cfm-interface-name>
  <cfm-interface-type>
   cfm-interface-type
  </cfm-interface-type>
  <cfm-interface-nexthop-type>
   cfm-interface-nexthop-type
  </cfm-interface-nexthop-type>
  <cfm-interface-nexthop-index>
   cfm-interface-nexthop-index
  </cfm-interface-nexthop-index>
 </cfm-flood-nexthop-components>
</cfm-route-maintenance-domain-level>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-transmit-interface-information>
 <cfm-route-maintenance-domain-level>
  <cfm-flood-nexthop-components>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-type>
    cfm-interface-type
   </cfm-interface-type>
   <cfm-interface-nexthop-type>
    cfm-interface-nexthop-type
   </cfm-interface-nexthop-type>
```


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```
      <cfm-interface-nexthop-index>
        cfm-interface-nexthop-index
      </cfm-interface-nexthop-index>
    </cfm-flood-nexthop-components>
  </cfm-route-maintenance-domain-level>
</cfm-transmit-interface-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-filter-term>
  <cfm-flood-nexthop-components>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-interface-type>
      cfm-interface-type
    </cfm-interface-type>
    <cfm-interface-nexthop-type>
      cfm-interface-nexthop-type
    </cfm-interface-nexthop-type>
    <cfm-interface-nexthop-index>
      cfm-interface-nexthop-index
    </cfm-interface-nexthop-index>
  </cfm-flood-nexthop-components>
</cfm-filter-term>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-firewall-filter-instance-information>
  <cfm-filter-term>
    <cfm-flood-nexthop-components>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-type>
        cfm-interface-type
      </cfm-interface-type>
      <cfm-interface-nexthop-type>
        cfm-interface-nexthop-type
      </cfm-interface-nexthop-type>
      <cfm-interface-nexthop-index>
        cfm-interface-nexthop-index
      </cfm-interface-nexthop-index>
    </cfm-flood-nexthop-components>
  </cfm-filter-term>
</cfm-firewall-filter-instance-information>
```

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Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-firewall-filter-interface-information>
 <cfm-filter-term>
  <cfm-flood-nexthop-components>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-type>
    cfm-interface-type
   </cfm-interface-type>
   <cfm-interface-nexthop-type>
    cfm-interface-nexthop-type
   </cfm-interface-nexthop-type>
   <cfm-interface-nexthop-index>
    cfm-interface-nexthop-index
   </cfm-interface-nexthop-index>
  </cfm-flood-nexthop-components>
 </cfm-filter-term>
</cfm-firewall-filter-interface-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-nexthop-information>
 <cfm-flood-nexthop-components>
  <cfm-interface-name>
   cfm-interface-name
  </cfm-interface-name>
  <cfm-interface-type>
   cfm-interface-type
  </cfm-interface-type>
  <cfm-interface-nexthop-type>
   cfm-interface-nexthop-type
  </cfm-interface-nexthop-type>
  <cfm-interface-nexthop-index>
   cfm-interface-nexthop-index
  </cfm-interface-nexthop-index>
 </cfm-flood-nexthop-components>
</cfm-nexthop-information>
```

Description

<cfm-flood-nexthop-components>

Usage

```
<cfm-route-information>
 <cfm-flood-nexthop-components>
  <cfm-interface-name>
```


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```
      cfm-interface-name
    </cfm-interface-name>
    <cfm-interface-type>
      cfm-interface-type
    </cfm-interface-type>
    <cfm-interface-nexthop-type>
      cfm-interface-nexthop-type
    </cfm-interface-nexthop-type>
    <cfm-interface-nexthop-index>
      cfm-interface-nexthop-index
    </cfm-interface-nexthop-index>
  </cfm-flood-nexthop-components>
</cfm-route-information>
```

Description

<cfm-instance-mip-information>

Usage

```
<cfm-instance-mip-information>
  <cfm-instance-name>
    cfm-instance-name
  </cfm-instance-name>
  <cfm-maintenance-domain-mhf>
    cfm-maintenance-domain-mhf
  </cfm-maintenance-domain-mhf>
  <cfm-maintenance-association-mhf>
    cfm-maintenance-association-mhf
  </cfm-maintenance-association-mhf>
  <cfm-default-maintenance-domain-mhf>
    cfm-default-maintenance-domain-mhf
  </cfm-default-maintenance-domain-mhf>
  <cfm-interface-mip-information>....</cfm-interface-mip-information>
</cfm-instance-mip-information>
```

Description

<cfm-instance-mip-information>

Usage

```
<cfm-mip-information>
  <cfm-instance-mip-information>
    <cfm-instance-name>
      cfm-instance-name
    </cfm-instance-name>
    <cfm-maintenance-domain-mhf>
      cfm-maintenance-domain-mhf
    </cfm-maintenance-domain-mhf>
    <cfm-maintenance-association-mhf>
      cfm-maintenance-association-mhf
    </cfm-maintenance-association-mhf>
    <cfm-default-maintenance-domain-mhf>
      cfm-default-maintenance-domain-mhf
    </cfm-default-maintenance-domain-mhf>
```

```
    <cfm-interface-mip-information>....</cfm-interface-mip-information>
  </cfm-instance-mip-information>
</cfm-mip-information>
```

Description

<cfm-interface>

Usage

```
<cfm-interface>
  <cfm-interface-snapshot>....</cfm-interface-snapshot>
  <cfm-entry>....</cfm-entry>
</cfm-interface>
```

Description Information about connectivity fault management for one or more interfaces

<cfm-interface-continuity-check>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-continuity-check>
        <cfm-continuity-check-status>
          cfm-continuity-check-status
        </cfm-continuity-check-status>
        <cfm-continuity-check-interval>
          cfm-continuity-check-interval
        </cfm-continuity-check-interval>
        <cfm-continuity-check-loss-threshold>
          cfm-continuity-check-loss-threshold
        </cfm-continuity-check-loss-threshold>
      </cfm-interface-continuity-check>
    </cfm-interface-session>
  </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-continuity-check>
          <cfm-continuity-check-status>
            cfm-continuity-check-status
          </cfm-continuity-check-status>
          <cfm-continuity-check-interval>
            cfm-continuity-check-interval
```


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```
        </cfm-continuity-check-interval>
        <cfm-continuity-check-loss-threshold>
          cfm-continuity-check-loss-threshold
        </cfm-continuity-check-loss-threshold>
      </cfm-interface-continuity-check>
    </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-continuity-check>
     <cfm-continuity-check-status>
      cfm-continuity-check-status
     </cfm-continuity-check-status>
     <cfm-continuity-check-interval>
      cfm-continuity-check-interval
     </cfm-continuity-check-interval>
     <cfm-continuity-check-loss-threshold>
      cfm-continuity-check-loss-threshold
     </cfm-continuity-check-loss-threshold>
    </cfm-interface-continuity-check>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-continuity-check>
     <cfm-continuity-check-status>
      cfm-continuity-check-status
     </cfm-continuity-check-status>
     <cfm-continuity-check-interval>
      cfm-continuity-check-interval
     </cfm-continuity-check-interval>
     <cfm-continuity-check-loss-threshold>
      cfm-continuity-check-loss-threshold
     </cfm-continuity-check-loss-threshold>
```

```
        </cfm-interface-continuity-check>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-continuity-check>
          <cfm-continuity-check-status>
            cfm-continuity-check-status
          </cfm-continuity-check-status>
          <cfm-continuity-check-interval>
            cfm-continuity-check-interval
          </cfm-continuity-check-interval>
          <cfm-continuity-check-loss-threshold>
            cfm-continuity-check-loss-threshold
          </cfm-continuity-check-loss-threshold>
        </cfm-interface-continuity-check>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-continuity-check>
          <cfm-continuity-check-status>
            cfm-continuity-check-status
          </cfm-continuity-check-status>
          <cfm-continuity-check-interval>
            cfm-continuity-check-interval
          </cfm-continuity-check-interval>
          <cfm-continuity-check-loss-threshold>
            cfm-continuity-check-loss-threshold
          </cfm-continuity-check-loss-threshold>
        </cfm-interface-continuity-check>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
```


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```
</cfm-loss-statistics>
```

Description

<cfm-interface-continuity-check>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-continuity-check>
     <cfm-continuity-check-status>
      cfm-continuity-check-status
     </cfm-continuity-check-status>
     <cfm-continuity-check-interval>
      cfm-continuity-check-interval
     </cfm-continuity-check-interval>
     <cfm-continuity-check-loss-threshold>
      cfm-continuity-check-loss-threshold
     </cfm-continuity-check-loss-threshold>
    </cfm-interface-continuity-check>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-entry>
 <cfm-interface-entry>
  <cfm-interface-name>
   cfm-interface-name
  </cfm-interface-name>
  <cfm-interface-status>
   cfm-interface-status
  </cfm-interface-status>
  <cfm-interface-link-status>
   cfm-interface-link-status
  </cfm-interface-link-status>
 </cfm-interface-entry>
</cfm-entry>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-interface>
 <cfm-entry>
```

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```
    <cfm-interface-entry>
     <cfm-interface-name>
      cfm-interface-name
     </cfm-interface-name>
     <cfm-interface-status>
      cfm-interface-status
     </cfm-interface-status>
     <cfm-interface-link-status>
      cfm-interface-link-status
     </cfm-interface-link-status>
    </cfm-interface-entry>
   </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-entry>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-status>
    cfm-interface-status
   </cfm-interface-status>
   <cfm-interface-link-status>
    cfm-interface-link-status
   </cfm-interface-link-status>
  </cfm-interface-entry>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-entry>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-status>
    cfm-interface-status
   </cfm-interface-status>
   <cfm-interface-link-status>
    cfm-interface-link-status
   </cfm-interface-link-status>
  </cfm-interface-entry>
 </cfm-entry>
```


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```
</cfm-mep-statistics>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-interface-entry>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-status>
    cfm-interface-status
   </cfm-interface-status>
   <cfm-interface-link-status>
    cfm-interface-link-status
   </cfm-interface-link-status>
  </cfm-interface-entry>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-interface-entry>
   <cfm-interface-name>
    cfm-interface-name
   </cfm-interface-name>
   <cfm-interface-status>
    cfm-interface-status
   </cfm-interface-status>
   <cfm-interface-link-status>
    cfm-interface-link-status
   </cfm-interface-link-status>
  </cfm-interface-entry>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-entry>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-entry>
   <cfm-interface-name>
```

```
            cfm-interface-name
           </cfm-interface-name>
           <cfm-interface-status>
            cfm-interface-status
           </cfm-interface-status>
           <cfm-interface-link-status>
            cfm-interface-link-status
           </cfm-interface-link-status>
          </cfm-interface-entry>
         </cfm-entry>
        </cfm-iterator-statistics>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-entry>
 <cfm-interface-sessions>
  <cfm-interface-session>
   <cfm-interface-local-mep-defects>
    <cfm-defect-remote-mep-no-ccm>
     cfm-defect-remote-mep-no-ccm
    </cfm-defect-remote-mep-no-ccm>
    <cfm-defect-error-ccm>
     cfm-defect-error-ccm
    </cfm-defect-error-ccm>
    <cfm-defect-cross-connect-ccm>
     cfm-defect-cross-connect-ccm
    </cfm-defect-cross-connect-ccm>
    <cfm-defect-rdi-in-some-mep>
     cfm-defect-rdi-in-some-mep
    </cfm-defect-rdi-in-some-mep>
    <cfm-defect-mac-status>
     cfm-defect-mac-status
    </cfm-defect-mac-status>
   </cfm-interface-local-mep-defects>
  </cfm-interface-session>
 </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-defects>
     <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
     </cfm-defect-remote-mep-no-ccm>
```


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```
            <cfm-defect-error-ccm>
              cfm-defect-error-ccm
            </cfm-defect-error-ccm>
            <cfm-defect-cross-connect-ccm>
              cfm-defect-cross-connect-ccm
            </cfm-defect-cross-connect-ccm>
            <cfm-defect-rdi-in-some-mep>
              cfm-defect-rdi-in-some-mep
            </cfm-defect-rdi-in-some-mep>
            <cfm-defect-mac-status>
              cfm-defect-mac-status
            </cfm-defect-mac-status>
          </cfm-interface-local-mep-defects>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
  </cfm-interface>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-defects>
          <cfm-defect-remote-mep-no-ccm>
            cfm-defect-remote-mep-no-ccm
          </cfm-defect-remote-mep-no-ccm>
          <cfm-defect-error-ccm>
            cfm-defect-error-ccm
          </cfm-defect-error-ccm>
          <cfm-defect-cross-connect-ccm>
            cfm-defect-cross-connect-ccm
          </cfm-defect-cross-connect-ccm>
          <cfm-defect-rdi-in-some-mep>
            cfm-defect-rdi-in-some-mep
          </cfm-defect-rdi-in-some-mep>
          <cfm-defect-mac-status>
            cfm-defect-mac-status
          </cfm-defect-mac-status>
        </cfm-interface-local-mep-defects>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-defects>
     <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
     </cfm-defect-remote-mep-no-ccm>
     <cfm-defect-error-ccm>
      cfm-defect-error-ccm
     </cfm-defect-error-ccm>
     <cfm-defect-cross-connect-ccm>
      cfm-defect-cross-connect-ccm
     </cfm-defect-cross-connect-ccm>
     <cfm-defect-rdi-in-some-mep>
      cfm-defect-rdi-in-some-mep
     </cfm-defect-rdi-in-some-mep>
     <cfm-defect-mac-status>
      cfm-defect-mac-status
     </cfm-defect-mac-status>
    </cfm-interface-local-mep-defects>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-defects>
     <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
     </cfm-defect-remote-mep-no-ccm>
     <cfm-defect-error-ccm>
      cfm-defect-error-ccm
     </cfm-defect-error-ccm>
     <cfm-defect-cross-connect-ccm>
      cfm-defect-cross-connect-ccm
     </cfm-defect-cross-connect-ccm>
     <cfm-defect-rdi-in-some-mep>
      cfm-defect-rdi-in-some-mep
     </cfm-defect-rdi-in-some-mep>
     <cfm-defect-mac-status>
      cfm-defect-mac-status
     </cfm-defect-mac-status>
```


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```
        </cfm-interface-local-mep-defects>
       </cfm-interface-session>
      </cfm-interface-sessions>
     </cfm-entry>
    </cfm-delay-statistics>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-defects>
     <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
     </cfm-defect-remote-mep-no-ccm>
     <cfm-defect-error-ccm>
      cfm-defect-error-ccm
     </cfm-defect-error-ccm>
     <cfm-defect-cross-connect-ccm>
      cfm-defect-cross-connect-ccm
     </cfm-defect-cross-connect-ccm>
     <cfm-defect-rdi-in-some-mep>
      cfm-defect-rdi-in-some-mep
     </cfm-defect-rdi-in-some-mep>
     <cfm-defect-mac-status>
      cfm-defect-mac-status
     </cfm-defect-mac-status>
    </cfm-interface-local-mep-defects>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-local-mep-defects>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-defects>
     <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
     </cfm-defect-remote-mep-no-ccm>
     <cfm-defect-error-ccm>
      cfm-defect-error-ccm
     </cfm-defect-error-ccm>
     <cfm-defect-cross-connect-ccm>
```

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```
            cfm-defect-cross-connect-ccm
           </cfm-defect-cross-connect-ccm>
           <cfm-defect-rdi-in-some-mep>
            cfm-defect-rdi-in-some-mep
           </cfm-defect-rdi-in-some-mep>
           <cfm-defect-mac-status>
            cfm-defect-mac-status
           </cfm-defect-mac-status>
          </cfm-interface-local-mep-defects>
         </cfm-interface-session>
        </cfm-interface-sessions>
       </cfm-entry>
      </cfm-iterator-statistics>
```

Description

<cfm-interface-local-mep-info>

Usage

```
<cfm-entry>
 <cfm-interface-sessions>
  <cfm-interface-session>
   <cfm-interface-local-mep-info>
    <cfm-local-mep-identifier>
     cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-local-mep-direction>
     cfm-local-mep-direction
    </cfm-local-mep-direction>
    <cfm-local-mep-mac-address>
     cfm-local-mep-mac-address
    </cfm-local-mep-mac-address>
    <cfm-local-mep-status>
     cfm-local-mep-status
    </cfm-local-mep-status>
   </cfm-interface-local-mep-info>
  </cfm-interface-session>
 </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-local-mep-info>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-info>
     <cfm-local-mep-identifier>
      cfm-local-mep-identifier
     </cfm-local-mep-identifier>
     <cfm-local-mep-direction>
```


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```
            cfm-local-mep-direction
           </cfm-local-mep-direction>
           <cfm-local-mep-mac-address>
            cfm-local-mep-mac-address
           </cfm-local-mep-mac-address>
           <cfm-local-mep-status>
            cfm-local-mep-status
           </cfm-local-mep-status>
          </cfm-interface-local-mep-info>
         </cfm-interface-session>
        </cfm-interface-sessions>
       </cfm-entry>
      </cfm-interface>
```

Description

<cfm-interface-local-mep-info>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-info>
     <cfm-local-mep-identifier>
      cfm-local-mep-identifier
     </cfm-local-mep-identifier>
     <cfm-local-mep-direction>
      cfm-local-mep-direction
     </cfm-local-mep-direction>
     <cfm-local-mep-mac-address>
      cfm-local-mep-mac-address
     </cfm-local-mep-mac-address>
     <cfm-local-mep-status>
      cfm-local-mep-status
     </cfm-local-mep-status>
    </cfm-interface-local-mep-info>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-local-mep-info>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-info>
     <cfm-local-mep-identifier>
      cfm-local-mep-identifier
```

```
            </cfm-local-mep-identifier>
            <cfm-local-mep-direction>
              cfm-local-mep-direction
            </cfm-local-mep-direction>
            <cfm-local-mep-mac-address>
              cfm-local-mep-mac-address
            </cfm-local-mep-mac-address>
            <cfm-local-mep-status>
              cfm-local-mep-status
            </cfm-local-mep-status>
          </cfm-interface-local-mep-info>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
  </cfm-mep-statistics>
```

Description

<cfm-interface-local-mep-info>

Usage

```
  <cfm-delay-statistics>
    <cfm-entry>
      <cfm-interface-sessions>
        <cfm-interface-session>
          <cfm-interface-local-mep-info>
            <cfm-local-mep-identifier>
              cfm-local-mep-identifier
            </cfm-local-mep-identifier>
            <cfm-local-mep-direction>
              cfm-local-mep-direction
            </cfm-local-mep-direction>
            <cfm-local-mep-mac-address>
              cfm-local-mep-mac-address
            </cfm-local-mep-mac-address>
            <cfm-local-mep-status>
              cfm-local-mep-status
            </cfm-local-mep-status>
          </cfm-interface-local-mep-info>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
  </cfm-delay-statistics>
```

Description

<cfm-interface-local-mep-info>

Usage

```
  <cfm-loss-statistics>
    <cfm-entry>
      <cfm-interface-sessions>
        <cfm-interface-session>
          <cfm-interface-local-mep-info>
```


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```
        <cfm-local-mep-identifier>
          cfm-local-mep-identifier
        </cfm-local-mep-identifier>
        <cfm-local-mep-direction>
          cfm-local-mep-direction
        </cfm-local-mep-direction>
        <cfm-local-mep-mac-address>
          cfm-local-mep-mac-address
        </cfm-local-mep-mac-address>
        <cfm-local-mep-status>
          cfm-local-mep-status
        </cfm-local-mep-status>
      </cfm-interface-local-mep-info>
    </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-local-mep-info>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-info>
     <cfm-local-mep-identifier>
      cfm-local-mep-identifier
     </cfm-local-mep-identifier>
     <cfm-local-mep-direction>
      cfm-local-mep-direction
     </cfm-local-mep-direction>
     <cfm-local-mep-mac-address>
      cfm-local-mep-mac-address
     </cfm-local-mep-mac-address>
     <cfm-local-mep-status>
      cfm-local-mep-status
     </cfm-local-mep-status>
    </cfm-interface-local-mep-info>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-entry>
 <cfm-interface-sessions>
  <cfm-interface-session>
```

```
<cfm-interface-local-mep-statistics>
  <cfm-total-ccm-sent>
    cfm-total-ccm-sent
  </cfm-total-ccm-sent>
  <cfm-out-of-sequence-ccm-received>
    cfm-out-of-sequence-ccm-received
  </cfm-out-of-sequence-ccm-received>
  <cfm-lbm-sent>
    cfm-lbm-sent
  </cfm-lbm-sent>
  <cfm-lbr-sent>
    cfm-lbr-sent
  </cfm-lbr-sent>
  <cfm-lbr-received>
    cfm-lbr-received
  </cfm-lbr-received>
  <cfm-lbr-received-out-of-order>
    cfm-lbr-received-out-of-order
  </cfm-lbr-received-out-of-order>
  <cfm-lbr-bad-msdu>
    cfm-lbr-bad-msdu
  </cfm-lbr-bad-msdu>
  <cfm-total-ltm-sent>
    cfm-total-ltm-sent
  </cfm-total-ltm-sent>
  <cfm-total-ltm-received>
    cfm-total-ltm-received
  </cfm-total-ltm-received>
  <cfm-total-ltr-sent>
    cfm-total-ltr-sent
  </cfm-total-ltr-sent>
  <cfm-total-ltr-received>
    cfm-total-ltr-received
  </cfm-total-ltr-received>
  <cfm-next-ltm-sequence-number>
    cfm-next-ltm-sequence-number
  </cfm-next-ltm-sequence-number>
  <cfm-onedm-sent>
    cfm-onedm-sent
  </cfm-onedm-sent>
  <cfm-onedm-received>
    cfm-onedm-received
  </cfm-onedm-received>
  <cfm-onedm-received-invalid>
    cfm-onedm-received-invalid
  </cfm-onedm-received-invalid>
  <cfm-onedm-received-outofsync>
    cfm-onedm-received-outofsync
  </cfm-onedm-received-outofsync>
  <cfm-dmm-sent>
    cfm-dmm-sent
  </cfm-dmm-sent>
  <cfm-dmm-received>
    cfm-dmm-received
  </cfm-dmm-received>
  <cfm-dmm-received-invalid>
```


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```
            cfm-dmm-received-invalid
          </cfm-dmm-received-invalid>
          <cfm-dmr-sent>
            cfm-dmr-sent
          </cfm-dmr-sent>
          <cfm-dmr-received>
            cfm-dmr-received
          </cfm-dmr-received>
          <cfm-dmr-received-invalid>
            cfm-dmr-received-invalid
          </cfm-dmr-received-invalid>
          <cfm-lmm-sent>
            cfm-lmm-sent
          </cfm-lmm-sent>
          <cfm-lmm-received>
            cfm-lmm-received
          </cfm-lmm-received>
          <cfm-lmm-received-invalid>
            cfm-lmm-received-invalid
          </cfm-lmm-received-invalid>
          <cfm-lmr-sent>
            cfm-lmr-sent
          </cfm-lmr-sent>
          <cfm-lmr-received>
            cfm-lmr-received
          </cfm-lmr-received>
          <cfm-lmr-received-invalid>
            cfm-lmr-received-invalid
          </cfm-lmr-received-invalid>
        </cfm-interface-local-mep-statistics>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-statistics>
          <cfm-total-ccm-sent>
            cfm-total-ccm-sent
          </cfm-total-ccm-sent>
          <cfm-out-of-sequence-ccm-received>
            cfm-out-of-sequence-ccm-received
          </cfm-out-of-sequence-ccm-received>
          <cfm-lbm-sent>
            cfm-lbm-sent
          </cfm-lbm-sent>
          <cfm-lbr-sent>
            cfm-lbr-sent
```

```
</cfm-lbr-sent>
<cfm-lbr-received>
  cfm-lbr-received
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
```


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```
                cfm-lmm-sent
               </cfm-lmm-sent>
               <cfm-lmm-received>
                cfm-lmm-received
               </cfm-lmm-received>
               <cfm-lmm-received-invalid>
                cfm-lmm-received-invalid
               </cfm-lmm-received-invalid>
               <cfm-lmr-sent>
                cfm-lmr-sent
               </cfm-lmr-sent>
               <cfm-lmr-received>
                cfm-lmr-received
               </cfm-lmr-received>
               <cfm-lmr-received-invalid>
                cfm-lmr-received-invalid
               </cfm-lmr-received-invalid>
              </cfm-interface-local-mep-statistics>
             </cfm-interface-session>
            </cfm-interface-sessions>
           </cfm-entry>
          </cfm-interface>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
          <cfm-mep-database>
           <cfm-entry>
            <cfm-interface-sessions>
             <cfm-interface-session>
              <cfm-interface-local-mep-statistics>
               <cfm-total-ccm-sent>
                cfm-total-ccm-sent
               </cfm-total-ccm-sent>
               <cfm-out-of-sequence-ccm-received>
                cfm-out-of-sequence-ccm-received
               </cfm-out-of-sequence-ccm-received>
               <cfm-lbm-sent>
                cfm-lbm-sent
               </cfm-lbm-sent>
               <cfm-lbr-sent>
                cfm-lbr-sent
               </cfm-lbr-sent>
               <cfm-lbr-received>
                cfm-lbr-received
               </cfm-lbr-received>
               <cfm-lbr-received-out-of-order>
                cfm-lbr-received-out-of-order
               </cfm-lbr-received-out-of-order>
               <cfm-lbr-bad-msdu>
                cfm-lbr-bad-msdu
               </cfm-lbr-bad-msdu>
               <cfm-total-ltm-sent>
```

```
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
  cfm-lmm-received
</cfm-lmm-received>
<cfm-lmm-received-invalid>
  cfm-lmm-received-invalid
</cfm-lmm-received-invalid>
<cfm-lmr-sent>
  cfm-lmr-sent
</cfm-lmr-sent>
```


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```
        <cfm-lmr-received>
          cfm-lmr-received
        </cfm-lmr-received>
        <cfm-lmr-received-invalid>
          cfm-lmr-received-invalid
        </cfm-lmr-received-invalid>
      </cfm-interface-local-mep-statistics>
    </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-statistics>
     <cfm-total-ccm-sent>
      cfm-total-ccm-sent
     </cfm-total-ccm-sent>
     <cfm-out-of-sequence-ccm-received>
      cfm-out-of-sequence-ccm-received
     </cfm-out-of-sequence-ccm-received>
     <cfm-lbm-sent>
      cfm-lbm-sent
     </cfm-lbm-sent>
     <cfm-lbr-sent>
      cfm-lbr-sent
     </cfm-lbr-sent>
     <cfm-lbr-received>
      cfm-lbr-received
     </cfm-lbr-received>
     <cfm-lbr-received-out-of-order>
      cfm-lbr-received-out-of-order
     </cfm-lbr-received-out-of-order>
     <cfm-lbr-bad-msdu>
      cfm-lbr-bad-msdu
     </cfm-lbr-bad-msdu>
     <cfm-total-ltm-sent>
      cfm-total-ltm-sent
     </cfm-total-ltm-sent>
     <cfm-total-ltm-received>
      cfm-total-ltm-received
     </cfm-total-ltm-received>
     <cfm-total-ltr-sent>
      cfm-total-ltr-sent
     </cfm-total-ltr-sent>
     <cfm-total-ltr-received>
      cfm-total-ltr-received
     </cfm-total-ltr-received>
```

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```
            <cfm-next-ltm-sequence-number>
              cfm-next-ltm-sequence-number
            </cfm-next-ltm-sequence-number>
            <cfm-onedm-sent>
              cfm-onedm-sent
            </cfm-onedm-sent>
            <cfm-onedm-received>
              cfm-onedm-received
            </cfm-onedm-received>
            <cfm-onedm-received-invalid>
              cfm-onedm-received-invalid
            </cfm-onedm-received-invalid>
            <cfm-onedm-received-outofsync>
              cfm-onedm-received-outofsync
            </cfm-onedm-received-outofsync>
            <cfm-dmm-sent>
              cfm-dmm-sent
            </cfm-dmm-sent>
            <cfm-dmm-received>
              cfm-dmm-received
            </cfm-dmm-received>
            <cfm-dmm-received-invalid>
              cfm-dmm-received-invalid
            </cfm-dmm-received-invalid>
            <cfm-dmr-sent>
              cfm-dmr-sent
            </cfm-dmr-sent>
            <cfm-dmr-received>
              cfm-dmr-received
            </cfm-dmr-received>
            <cfm-dmr-received-invalid>
              cfm-dmr-received-invalid
            </cfm-dmr-received-invalid>
            <cfm-lmm-sent>
              cfm-lmm-sent
            </cfm-lmm-sent>
            <cfm-lmm-received>
              cfm-lmm-received
            </cfm-lmm-received>
            <cfm-lmm-received-invalid>
              cfm-lmm-received-invalid
            </cfm-lmm-received-invalid>
            <cfm-lmr-sent>
              cfm-lmr-sent
            </cfm-lmr-sent>
            <cfm-lmr-received>
              cfm-lmr-received
            </cfm-lmr-received>
            <cfm-lmr-received-invalid>
              cfm-lmr-received-invalid
            </cfm-lmr-received-invalid>
          </cfm-interface-local-mep-statistics>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
```


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```
</cfm-mep-statistics>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-statistics>
     <cfm-total-ccm-sent>
      cfm-total-ccm-sent
     </cfm-total-ccm-sent>
     <cfm-out-of-sequence-ccm-received>
      cfm-out-of-sequence-ccm-received
     </cfm-out-of-sequence-ccm-received>
     <cfm-lbm-sent>
      cfm-lbm-sent
     </cfm-lbm-sent>
     <cfm-lbr-sent>
      cfm-lbr-sent
     </cfm-lbr-sent>
     <cfm-lbr-received>
      cfm-lbr-received
     </cfm-lbr-received>
     <cfm-lbr-received-out-of-order>
      cfm-lbr-received-out-of-order
     </cfm-lbr-received-out-of-order>
     <cfm-lbr-bad-msdu>
      cfm-lbr-bad-msdu
     </cfm-lbr-bad-msdu>
     <cfm-total-ltm-sent>
      cfm-total-ltm-sent
     </cfm-total-ltm-sent>
     <cfm-total-ltm-received>
      cfm-total-ltm-received
     </cfm-total-ltm-received>
     <cfm-total-ltr-sent>
      cfm-total-ltr-sent
     </cfm-total-ltr-sent>
     <cfm-total-ltr-received>
      cfm-total-ltr-received
     </cfm-total-ltr-received>
     <cfm-next-ltm-sequence-number>
      cfm-next-ltm-sequence-number
     </cfm-next-ltm-sequence-number>
     <cfm-onedm-sent>
      cfm-onedm-sent
     </cfm-onedm-sent>
     <cfm-onedm-received>
      cfm-onedm-received
     </cfm-onedm-received>
     <cfm-onedm-received-invalid>
```

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```
            cfm-onedm-received-invalid
          </cfm-onedm-received-invalid>
          <cfm-onedm-received-outofsync>
            cfm-onedm-received-outofsync
          </cfm-onedm-received-outofsync>
          <cfm-dmm-sent>
            cfm-dmm-sent
          </cfm-dmm-sent>
          <cfm-dmm-received>
            cfm-dmm-received
          </cfm-dmm-received>
          <cfm-dmm-received-invalid>
            cfm-dmm-received-invalid
          </cfm-dmm-received-invalid>
          <cfm-dmr-sent>
            cfm-dmr-sent
          </cfm-dmr-sent>
          <cfm-dmr-received>
            cfm-dmr-received
          </cfm-dmr-received>
          <cfm-dmr-received-invalid>
            cfm-dmr-received-invalid
          </cfm-dmr-received-invalid>
          <cfm-lmm-sent>
            cfm-lmm-sent
          </cfm-lmm-sent>
          <cfm-lmm-received>
            cfm-lmm-received
          </cfm-lmm-received>
          <cfm-lmm-received-invalid>
            cfm-lmm-received-invalid
          </cfm-lmm-received-invalid>
          <cfm-lmr-sent>
            cfm-lmr-sent
          </cfm-lmr-sent>
          <cfm-lmr-received>
            cfm-lmr-received
          </cfm-lmr-received>
          <cfm-lmr-received-invalid>
            cfm-lmr-received-invalid
          </cfm-lmr-received-invalid>
        </cfm-interface-local-mep-statistics>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
```


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```
<cfm-interface-session>
  <cfm-interface-local-mep-statistics>
    <cfm-total-ccm-sent>
      cfm-total-ccm-sent
    </cfm-total-ccm-sent>
    <cfm-out-of-sequence-ccm-received>
      cfm-out-of-sequence-ccm-received
    </cfm-out-of-sequence-ccm-received>
    <cfm-lbm-sent>
      cfm-lbm-sent
    </cfm-lbm-sent>
    <cfm-lbr-sent>
      cfm-lbr-sent
    </cfm-lbr-sent>
    <cfm-lbr-received>
      cfm-lbr-received
    </cfm-lbr-received>
    <cfm-lbr-received-out-of-order>
      cfm-lbr-received-out-of-order
    </cfm-lbr-received-out-of-order>
    <cfm-lbr-bad-msdu>
      cfm-lbr-bad-msdu
    </cfm-lbr-bad-msdu>
    <cfm-total-ltm-sent>
      cfm-total-ltm-sent
    </cfm-total-ltm-sent>
    <cfm-total-ltm-received>
      cfm-total-ltm-received
    </cfm-total-ltm-received>
    <cfm-total-ltr-sent>
      cfm-total-ltr-sent
    </cfm-total-ltr-sent>
    <cfm-total-ltr-received>
      cfm-total-ltr-received
    </cfm-total-ltr-received>
    <cfm-next-ltm-sequence-number>
      cfm-next-ltm-sequence-number
    </cfm-next-ltm-sequence-number>
    <cfm-onedm-sent>
      cfm-onedm-sent
    </cfm-onedm-sent>
    <cfm-onedm-received>
      cfm-onedm-received
    </cfm-onedm-received>
    <cfm-onedm-received-invalid>
      cfm-onedm-received-invalid
    </cfm-onedm-received-invalid>
    <cfm-onedm-received-outofsync>
      cfm-onedm-received-outofsync
    </cfm-onedm-received-outofsync>
    <cfm-dmm-sent>
      cfm-dmm-sent
    </cfm-dmm-sent>
    <cfm-dmm-received>
      cfm-dmm-received
    </cfm-dmm-received>
```

```
                <cfm-dmm-received-invalid>
                  cfm-dmm-received-invalid
                </cfm-dmm-received-invalid>
                <cfm-dmr-sent>
                  cfm-dmr-sent
                </cfm-dmr-sent>
                <cfm-dmr-received>
                  cfm-dmr-received
                </cfm-dmr-received>
                <cfm-dmr-received-invalid>
                  cfm-dmr-received-invalid
                </cfm-dmr-received-invalid>
                <cfm-lmm-sent>
                  cfm-lmm-sent
                </cfm-lmm-sent>
                <cfm-lmm-received>
                  cfm-lmm-received
                </cfm-lmm-received>
                <cfm-lmm-received-invalid>
                  cfm-lmm-received-invalid
                </cfm-lmm-received-invalid>
                <cfm-lmr-sent>
                  cfm-lmr-sent
                </cfm-lmr-sent>
                <cfm-lmr-received>
                  cfm-lmr-received
                </cfm-lmr-received>
                <cfm-lmr-received-invalid>
                  cfm-lmr-received-invalid
                </cfm-lmr-received-invalid>
              </cfm-interface-local-mep-statistics>
            </cfm-interface-session>
          </cfm-interface-sessions>
        </cfm-entry>
      </cfm-loss-statistics>
```

Description

<cfm-interface-local-mep-statistics>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-statistics>
          <cfm-total-ccm-sent>
            cfm-total-ccm-sent
          </cfm-total-ccm-sent>
          <cfm-out-of-sequence-ccm-received>
            cfm-out-of-sequence-ccm-received
          </cfm-out-of-sequence-ccm-received>
          <cfm-lbm-sent>
            cfm-lbm-sent
          </cfm-lbm-sent>
```


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```
<cfm-lbr-sent>
  cfm-lbr-sent
</cfm-lbr-sent>
<cfm-lbr-received>
  cfm-lbr-received
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
```

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```
                    </cfm-dmr-received-invalid>
                    <cfm-lmm-sent>
                      cfm-lmm-sent
                    </cfm-lmm-sent>
                    <cfm-lmm-received>
                      cfm-lmm-received
                    </cfm-lmm-received>
                    <cfm-lmm-received-invalid>
                      cfm-lmm-received-invalid
                    </cfm-lmm-received-invalid>
                    <cfm-lmr-sent>
                      cfm-lmr-sent
                    </cfm-lmr-sent>
                    <cfm-lmr-received>
                      cfm-lmr-received
                    </cfm-lmr-received>
                    <cfm-lmr-received-invalid>
                      cfm-lmr-received-invalid
                    </cfm-lmr-received-invalid>
                  </cfm-interface-local-mep-statistics>
                </cfm-interface-session>
              </cfm-interface-sessions>
            </cfm-entry>
          </cfm-iterator-statistics>
```

Description

<cfm-interface-local-mep-tlv-info>

Usage

```
          <cfm-entry>
            <cfm-interface-sessions>
              <cfm-interface-session>
                <cfm-interface-local-mep-tlv-info>
                  <cfm-local-mep-interface-status-tlv>
                    cfm-local-mep-interface-status-tlv
                  </cfm-local-mep-interface-status-tlv>
                  <cfm-local-mep-port-status-tlv>
                    cfm-local-mep-port-status-tlv
                  </cfm-local-mep-port-status-tlv>

        <cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

                  <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

                </cfm-interface-local-mep-tlv-info>
              </cfm-interface-session>
            </cfm-interface-sessions>
          </cfm-entry>
```

Description

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<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
          </cfm-local-mep-interface-status-tlv>
          <cfm-local-mep-port-status-tlv>
            cfm-local-mep-port-status-tlv
          </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

          <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
          </cfm-local-mep-interface-status-tlv>
          <cfm-local-mep-port-status-tlv>
            cfm-local-mep-port-status-tlv
          </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

          <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

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<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-interface-status-tlv>
      cfm-local-mep-interface-status-tlv
     </cfm-local-mep-interface-status-tlv>
     <cfm-local-mep-port-status-tlv>
      cfm-local-mep-port-status-tlv
     </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

      <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

    </cfm-interface-local-mep-tlv-info>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-interface-status-tlv>
      cfm-local-mep-interface-status-tlv
     </cfm-local-mep-interface-status-tlv>
     <cfm-local-mep-port-status-tlv>
      cfm-local-mep-port-status-tlv
     </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

      <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

    </cfm-interface-local-mep-tlv-info>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

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<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
          </cfm-local-mep-interface-status-tlv>
          <cfm-local-mep-port-status-tlv>
            cfm-local-mep-port-status-tlv
          </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

          <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-local-mep-tlv-info>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
          </cfm-local-mep-interface-status-tlv>
          <cfm-local-mep-port-status-tlv>
            cfm-local-mep-port-status-tlv
          </cfm-local-mep-port-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

          <cfm-local-mep-loss-threshold-tlv>....</cfm-local-mep-loss-threshold-tlv>

        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

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<cfm-interface-mip-information>

Usage

```
<cfm-interface-mip-information>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
    cfm-level
  </cfm-level>
</cfm-interface-mip-information>
```

Description

<cfm-interface-mip-information>

Usage

```
<cfm-instance-mip-information>
  <cfm-interface-mip-information>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-level>
      cfm-level
    </cfm-level>
  </cfm-interface-mip-information>
</cfm-instance-mip-information>
```

Description

<cfm-interface-mip-information>

Usage

```
<cfm-mip-information>
  <cfm-instance-mip-information>
    <cfm-interface-mip-information>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-level>
        cfm-level
      </cfm-level>
    </cfm-interface-mip-information>
  </cfm-instance-mip-information>
</cfm-mip-information>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-entry>
```


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```
 <cfm-interface-sessions>
  <cfm-interface-session>
   <cfm-interface-remote-meps>
    <cfm-remote-mep-count>
     cfm-remote-mep-count
    </cfm-remote-mep-count>
    <cfm-remote-mep>....</cfm-remote-mep>
   </cfm-interface-remote-meps>
  </cfm-interface-session>
 </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep-count>
      cfm-remote-mep-count
     </cfm-remote-mep-count>
     <cfm-remote-mep>....</cfm-remote-mep>
    </cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep-count>
      cfm-remote-mep-count
     </cfm-remote-mep-count>
     <cfm-remote-mep>....</cfm-remote-mep>
    </cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-database>
```

Description

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<cfm-interface-remote-meps>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep-count>
            cfm-remote-mep-count
          </cfm-remote-mep-count>
          <cfm-remote-mep>....</cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep-count>
            cfm-remote-mep-count
          </cfm-remote-mep-count>
          <cfm-remote-mep>....</cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep-count>
            cfm-remote-mep-count
          </cfm-remote-mep-count>
          <cfm-remote-mep>....</cfm-remote-mep>
        </cfm-interface-remote-meps>
```


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```
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-remote-meps>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep-count>
            cfm-remote-mep-count
          </cfm-remote-mep-count>
          <cfm-remote-mep>....</cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-session>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
      <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
      <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
      <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
      <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
      <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

      <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
    </cfm-interface-session>
  </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-session>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
```

```
      <cfm-interface-session>
        <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
        <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
        <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
        <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
        <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
       <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

        <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-session>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
        <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
        <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
        <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
        <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
       <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

        <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-session>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
        <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
        <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
        <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
        <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
       <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

        <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
      </cfm-interface-session>
```


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```
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-session>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
        <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
        <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
        <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
        <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
       <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

        <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-session>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
        <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
        <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
        <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
        <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
       <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

        <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

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<cfm-interface-session>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-session-identifier>....</cfm-interface-session-identifier>
    <cfm-interface-continuity-check>....</cfm-interface-continuity-check>
    <cfm-interface-local-mep-tlv-info>....</cfm-interface-local-mep-tlv-info>
    <cfm-interface-local-mep-info>....</cfm-interface-local-mep-info>
    <cfm-interface-local-mep-defects>....</cfm-interface-local-mep-defects>
   <cfm-interface-local-mep-statistics>....</cfm-interface-local-mep-statistics>

    <cfm-interface-remote-meps>....</cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-entry>
 <cfm-interface-sessions>
  <cfm-interface-session>
   <cfm-interface-session-identifier>
    <cfm-level>
     cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
     cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-domain-name-format>
     cfm-maintenance-domain-name-format
    </cfm-maintenance-domain-name-format>
    <cfm-maintenance-association-name>
     cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-maintenance-association-name-format>
     cfm-maintenance-association-name-format
    </cfm-maintenance-association-name-format>
   </cfm-interface-session-identifier>
  </cfm-interface-session>
 </cfm-interface-sessions>
</cfm-entry>
```

Description

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<cfm-interface-session-identifier>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-session-identifier>
     <cfm-level>
      cfm-level
     </cfm-level>
     <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
     </cfm-maintenance-domain-name>
     <cfm-maintenance-domain-name-format>
      cfm-maintenance-domain-name-format
     </cfm-maintenance-domain-name-format>
     <cfm-maintenance-association-name>
      cfm-maintenance-association-name
     </cfm-maintenance-association-name>
     <cfm-maintenance-association-name-format>
      cfm-maintenance-association-name-format
     </cfm-maintenance-association-name-format>
    </cfm-interface-session-identifier>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-session-identifier>
     <cfm-level>
      cfm-level
     </cfm-level>
     <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
     </cfm-maintenance-domain-name>
     <cfm-maintenance-domain-name-format>
      cfm-maintenance-domain-name-format
     </cfm-maintenance-domain-name-format>
     <cfm-maintenance-association-name>
      cfm-maintenance-association-name
     </cfm-maintenance-association-name>
     <cfm-maintenance-association-name-format>
      cfm-maintenance-association-name-format
     </cfm-maintenance-association-name-format>
```

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```
        </cfm-interface-session-identifier>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>
          <cfm-level>
            cfm-level
          </cfm-level>
          <cfm-maintenance-domain-name>
            cfm-maintenance-domain-name
          </cfm-maintenance-domain-name>
          <cfm-maintenance-domain-name-format>
            cfm-maintenance-domain-name-format
          </cfm-maintenance-domain-name-format>
          <cfm-maintenance-association-name>
            cfm-maintenance-association-name
          </cfm-maintenance-association-name>
          <cfm-maintenance-association-name-format>
            cfm-maintenance-association-name-format
          </cfm-maintenance-association-name-format>
        </cfm-interface-session-identifier>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-session-identifier>
          <cfm-level>
            cfm-level
          </cfm-level>
          <cfm-maintenance-domain-name>
            cfm-maintenance-domain-name
          </cfm-maintenance-domain-name>
          <cfm-maintenance-domain-name-format>
```


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```
            cfm-maintenance-domain-name-format
           </cfm-maintenance-domain-name-format>
           <cfm-maintenance-association-name>
            cfm-maintenance-association-name
           </cfm-maintenance-association-name>
           <cfm-maintenance-association-name-format>
            cfm-maintenance-association-name-format
           </cfm-maintenance-association-name-format>
          </cfm-interface-session-identifier>
         </cfm-interface-session>
        </cfm-interface-sessions>
       </cfm-entry>
      </cfm-delay-statistics>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-session-identifier>
     <cfm-level>
      cfm-level
     </cfm-level>
     <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
     </cfm-maintenance-domain-name>
     <cfm-maintenance-domain-name-format>
      cfm-maintenance-domain-name-format
     </cfm-maintenance-domain-name-format>
     <cfm-maintenance-association-name>
      cfm-maintenance-association-name
     </cfm-maintenance-association-name>
     <cfm-maintenance-association-name-format>
      cfm-maintenance-association-name-format
     </cfm-maintenance-association-name-format>
    </cfm-interface-session-identifier>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-session-identifier>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
```

```
        <cfm-interface-session-identifier>
          <cfm-level>
            cfm-level
          </cfm-level>
          <cfm-maintenance-domain-name>
            cfm-maintenance-domain-name
          </cfm-maintenance-domain-name>
          <cfm-maintenance-domain-name-format>
            cfm-maintenance-domain-name-format
          </cfm-maintenance-domain-name-format>
          <cfm-maintenance-association-name>
            cfm-maintenance-association-name
          </cfm-maintenance-association-name>
          <cfm-maintenance-association-name-format>
            cfm-maintenance-association-name-format
          </cfm-maintenance-association-name-format>
        </cfm-interface-session-identifier>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-session-snapshot>

Usage

```
<cfm-interface-snapshot>
  <cfm-interface-session-snapshot>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-mep-identifier>
      cfm-mep-identifier
    </cfm-mep-identifier>
    <cfm-remote-mep-count>
      cfm-remote-mep-count
    </cfm-remote-mep-count>
  </cfm-interface-session-snapshot>
</cfm-interface-snapshot>
```

Description

<cfm-interface-session-snapshot>

Usage

```
<cfm-interface>
  <cfm-interface-snapshot>
    <cfm-interface-session-snapshot>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-mep-identifier>
        cfm-mep-identifier
```


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```
      </cfm-mep-identifier>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
    </cfm-interface-session-snapshot>
  </cfm-interface-snapshot>
</cfm-interface>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>....</cfm-interface-session>
  </cfm-interface-sessions>
</cfm-entry>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
```

```
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-interface-sessions>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>....</cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-interface-snapshot>

Usage

```
<cfm-interface-snapshot>
  <cfm-interface-name>
```


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```
    cfm-interface-name
  </cfm-interface-name>
  <cfm-interface-link-status>
    cfm-interface-link-status
  </cfm-interface-link-status>
  <cfm-interface-status>
    cfm-interface-status
  </cfm-interface-status>
  <cfm-interface-session-snapshot>....</cfm-interface-session-snapshot>
</cfm-interface-snapshot>
```

Description

<cfm-interface-snapshot>

Usage

```
<cfm-interface>
  <cfm-interface-snapshot>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-interface-link-status>
      cfm-interface-link-status
    </cfm-interface-link-status>
    <cfm-interface-status>
      cfm-interface-status
    </cfm-interface-status>
    <cfm-interface-session-snapshot>....</cfm-interface-session-snapshot>
  </cfm-interface-snapshot>
</cfm-interface>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-entry>
  <cfm-iter-eth-sfl-entry>
    <sfl-measurement-packets-sent>
      sfl-measurement-packets-sent
    </sfl-measurement-packets-sent>
    <sfl-measurement-packets-skipped-for-threshold-hit>
      sfl-measurement-packets-skipped-for-threshold-hit
    </sfl-measurement-packets-skipped-for-threshold-hit>
    <sfl-measurement-packets-skipped-for-threshold-hit-window>
      sfl-measurement-packets-skipped-for-threshold-hit-window
    </sfl-measurement-packets-skipped-for-threshold-hit-window>
    <sfl-measurement-packets-received>
      sfl-measurement-packets-received
    </sfl-measurement-packets-received>
    <sfl-measurement-packets-out-of-sequence>
      sfl-measurement-packets-out-of-sequence
    </sfl-measurement-packets-out-of-sequence>
    <sfl-measurement-packets-fc-mismatch>
```

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```
      sfl-measurement-packets-fc-mismatch
    </sfl-measurement-packets-fc-mismatch>
    <sfl-measurement-cir-packets-sent>
      sfl-measurement-cir-packets-sent
    </sfl-measurement-cir-packets-sent>
    <sfl-measurement-eir-packets-sent>
      sfl-measurement-eir-packets-sent
    </sfl-measurement-eir-packets-sent>
    <sfl-measurement-cir-packets-received>
      sfl-measurement-cir-packets-received
    </sfl-measurement-cir-packets-received>
    <sfl-measurement-eir-packets-received>
      sfl-measurement-eir-packets-received
    </sfl-measurement-eir-packets-received>
    <sfl-measurement-cir-loss-count>
      sfl-measurement-cir-loss-count
    </sfl-measurement-cir-loss-count>
    <sfl-measurement-cir-loss-percent>
      sfl-measurement-cir-loss-percent
    </sfl-measurement-cir-loss-percent>
    <sfl-measurement-eir-loss-count>
      sfl-measurement-eir-loss-count
    </sfl-measurement-eir-loss-count>
    <sfl-measurement-eir-loss-percent>
      sfl-measurement-eir-loss-percent
    </sfl-measurement-eir-loss-percent>
    <sfl-measurement-loss-count>
      sfl-measurement-loss-count
    </sfl-measurement-loss-count>
    <sfl-measurement-loss-percent>
      sfl-measurement-loss-percent
    </sfl-measurement-loss-percent>
  </cfm-iter-eth-sfl-entry>
</cfm-entry>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-iter-eth-sfl-entry>
      <sfl-measurement-packets-sent>
        sfl-measurement-packets-sent
      </sfl-measurement-packets-sent>
      <sfl-measurement-packets-skipped-for-threshold-hit>
        sfl-measurement-packets-skipped-for-threshold-hit
      </sfl-measurement-packets-skipped-for-threshold-hit>
      <sfl-measurement-packets-skipped-for-threshold-hit-window>
        sfl-measurement-packets-skipped-for-threshold-hit-window
      </sfl-measurement-packets-skipped-for-threshold-hit-window>
      <sfl-measurement-packets-received>
        sfl-measurement-packets-received
      </sfl-measurement-packets-received>
```


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```
      <sfl-measurement-packets-out-of-sequence>
        sfl-measurement-packets-out-of-sequence
      </sfl-measurement-packets-out-of-sequence>
      <sfl-measurement-packets-fc-mismatch>
        sfl-measurement-packets-fc-mismatch
      </sfl-measurement-packets-fc-mismatch>
      <sfl-measurement-cir-packets-sent>
        sfl-measurement-cir-packets-sent
      </sfl-measurement-cir-packets-sent>
      <sfl-measurement-eir-packets-sent>
        sfl-measurement-eir-packets-sent
      </sfl-measurement-eir-packets-sent>
      <sfl-measurement-cir-packets-received>
        sfl-measurement-cir-packets-received
      </sfl-measurement-cir-packets-received>
      <sfl-measurement-eir-packets-received>
        sfl-measurement-eir-packets-received
      </sfl-measurement-eir-packets-received>
      <sfl-measurement-cir-loss-count>
        sfl-measurement-cir-loss-count
      </sfl-measurement-cir-loss-count>
      <sfl-measurement-cir-loss-percent>
        sfl-measurement-cir-loss-percent
      </sfl-measurement-cir-loss-percent>
      <sfl-measurement-eir-loss-count>
        sfl-measurement-eir-loss-count
      </sfl-measurement-eir-loss-count>
      <sfl-measurement-eir-loss-percent>
        sfl-measurement-eir-loss-percent
      </sfl-measurement-eir-loss-percent>
      <sfl-measurement-loss-count>
        sfl-measurement-loss-count
      </sfl-measurement-loss-count>
      <sfl-measurement-loss-percent>
        sfl-measurement-loss-percent
      </sfl-measurement-loss-percent>
    </cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-iter-eth-sfl-entry>
      <sfl-measurement-packets-sent>
        sfl-measurement-packets-sent
      </sfl-measurement-packets-sent>
      <sfl-measurement-packets-skipped-for-threshold-hit>
        sfl-measurement-packets-skipped-for-threshold-hit
      </sfl-measurement-packets-skipped-for-threshold-hit>
      <sfl-measurement-packets-skipped-for-threshold-hit-window>
```

```
                sfl-measurement-packets-skipped-for-threshold-hit-window
              </sfl-measurement-packets-skipped-for-threshold-hit-window>
              <sfl-measurement-packets-received>
                sfl-measurement-packets-received
              </sfl-measurement-packets-received>
              <sfl-measurement-packets-out-of-sequence>
                sfl-measurement-packets-out-of-sequence
              </sfl-measurement-packets-out-of-sequence>
              <sfl-measurement-packets-fc-mismatch>
                sfl-measurement-packets-fc-mismatch
              </sfl-measurement-packets-fc-mismatch>
              <sfl-measurement-cir-packets-sent>
                sfl-measurement-cir-packets-sent
              </sfl-measurement-cir-packets-sent>
              <sfl-measurement-eir-packets-sent>
                sfl-measurement-eir-packets-sent
              </sfl-measurement-eir-packets-sent>
              <sfl-measurement-cir-packets-received>
                sfl-measurement-cir-packets-received
              </sfl-measurement-cir-packets-received>
              <sfl-measurement-eir-packets-received>
                sfl-measurement-eir-packets-received
              </sfl-measurement-eir-packets-received>
              <sfl-measurement-cir-loss-count>
                sfl-measurement-cir-loss-count
              </sfl-measurement-cir-loss-count>
              <sfl-measurement-cir-loss-percent>
                sfl-measurement-cir-loss-percent
              </sfl-measurement-cir-loss-percent>
              <sfl-measurement-eir-loss-count>
                sfl-measurement-eir-loss-count
              </sfl-measurement-eir-loss-count>
              <sfl-measurement-eir-loss-percent>
                sfl-measurement-eir-loss-percent
              </sfl-measurement-eir-loss-percent>
              <sfl-measurement-loss-count>
                sfl-measurement-loss-count
              </sfl-measurement-loss-count>
              <sfl-measurement-loss-percent>
                sfl-measurement-loss-percent
              </sfl-measurement-loss-percent>
            </cfm-iter-eth-sfl-entry>
          </cfm-entry>
        </cfm-mep-database>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-iter-eth-sfl-entry>
      <sfl-measurement-packets-sent>
        sfl-measurement-packets-sent
```


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```
        </sfl-measurement-packets-sent>
        <sfl-measurement-packets-skipped-for-threshold-hit>
          sfl-measurement-packets-skipped-for-threshold-hit
        </sfl-measurement-packets-skipped-for-threshold-hit>
        <sfl-measurement-packets-skipped-for-threshold-hit-window>
          sfl-measurement-packets-skipped-for-threshold-hit-window
        </sfl-measurement-packets-skipped-for-threshold-hit-window>
        <sfl-measurement-packets-received>
          sfl-measurement-packets-received
        </sfl-measurement-packets-received>
        <sfl-measurement-packets-out-of-sequence>
          sfl-measurement-packets-out-of-sequence
        </sfl-measurement-packets-out-of-sequence>
        <sfl-measurement-packets-fc-mismatch>
          sfl-measurement-packets-fc-mismatch
        </sfl-measurement-packets-fc-mismatch>
        <sfl-measurement-cir-packets-sent>
          sfl-measurement-cir-packets-sent
        </sfl-measurement-cir-packets-sent>
        <sfl-measurement-eir-packets-sent>
          sfl-measurement-eir-packets-sent
        </sfl-measurement-eir-packets-sent>
        <sfl-measurement-cir-packets-received>
          sfl-measurement-cir-packets-received
        </sfl-measurement-cir-packets-received>
        <sfl-measurement-eir-packets-received>
          sfl-measurement-eir-packets-received
        </sfl-measurement-eir-packets-received>
        <sfl-measurement-cir-loss-count>
          sfl-measurement-cir-loss-count
        </sfl-measurement-cir-loss-count>
        <sfl-measurement-cir-loss-percent>
          sfl-measurement-cir-loss-percent
        </sfl-measurement-cir-loss-percent>
        <sfl-measurement-eir-loss-count>
          sfl-measurement-eir-loss-count
        </sfl-measurement-eir-loss-count>
        <sfl-measurement-eir-loss-percent>
          sfl-measurement-eir-loss-percent
        </sfl-measurement-eir-loss-percent>
        <sfl-measurement-loss-count>
          sfl-measurement-loss-count
        </sfl-measurement-loss-count>
        <sfl-measurement-loss-percent>
          sfl-measurement-loss-percent
        </sfl-measurement-loss-percent>
      </cfm-iter-eth-sfl-entry>
    </cfm-entry>
  </cfm-mep-statistics>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-iter-eth-sfl-entry>
   <sfl-measurement-packets-sent>
    sfl-measurement-packets-sent
   </sfl-measurement-packets-sent>
   <sfl-measurement-packets-skipped-for-threshold-hit>
    sfl-measurement-packets-skipped-for-threshold-hit
   </sfl-measurement-packets-skipped-for-threshold-hit>
   <sfl-measurement-packets-skipped-for-threshold-hit-window>
    sfl-measurement-packets-skipped-for-threshold-hit-window
   </sfl-measurement-packets-skipped-for-threshold-hit-window>
   <sfl-measurement-packets-received>
    sfl-measurement-packets-received
   </sfl-measurement-packets-received>
   <sfl-measurement-packets-out-of-sequence>
    sfl-measurement-packets-out-of-sequence
   </sfl-measurement-packets-out-of-sequence>
   <sfl-measurement-packets-fc-mismatch>
    sfl-measurement-packets-fc-mismatch
   </sfl-measurement-packets-fc-mismatch>
   <sfl-measurement-cir-packets-sent>
    sfl-measurement-cir-packets-sent
   </sfl-measurement-cir-packets-sent>
   <sfl-measurement-eir-packets-sent>
    sfl-measurement-eir-packets-sent
   </sfl-measurement-eir-packets-sent>
   <sfl-measurement-cir-packets-received>
    sfl-measurement-cir-packets-received
   </sfl-measurement-cir-packets-received>
   <sfl-measurement-eir-packets-received>
    sfl-measurement-eir-packets-received
   </sfl-measurement-eir-packets-received>
   <sfl-measurement-cir-loss-count>
    sfl-measurement-cir-loss-count
   </sfl-measurement-cir-loss-count>
   <sfl-measurement-cir-loss-percent>
    sfl-measurement-cir-loss-percent
   </sfl-measurement-cir-loss-percent>
   <sfl-measurement-eir-loss-count>
    sfl-measurement-eir-loss-count
   </sfl-measurement-eir-loss-count>
   <sfl-measurement-eir-loss-percent>
    sfl-measurement-eir-loss-percent
   </sfl-measurement-eir-loss-percent>
   <sfl-measurement-loss-count>
    sfl-measurement-loss-count
   </sfl-measurement-loss-count>
   <sfl-measurement-loss-percent>
    sfl-measurement-loss-percent
   </sfl-measurement-loss-percent>
  </cfm-iter-eth-sfl-entry>
```


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```
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-iter-eth-sfl-entry>
      <sfl-measurement-packets-sent>
        sfl-measurement-packets-sent
      </sfl-measurement-packets-sent>
      <sfl-measurement-packets-skipped-for-threshold-hit>
        sfl-measurement-packets-skipped-for-threshold-hit
      </sfl-measurement-packets-skipped-for-threshold-hit>
      <sfl-measurement-packets-skipped-for-threshold-hit-window>
        sfl-measurement-packets-skipped-for-threshold-hit-window
      </sfl-measurement-packets-skipped-for-threshold-hit-window>
      <sfl-measurement-packets-received>
        sfl-measurement-packets-received
      </sfl-measurement-packets-received>
      <sfl-measurement-packets-out-of-sequence>
        sfl-measurement-packets-out-of-sequence
      </sfl-measurement-packets-out-of-sequence>
      <sfl-measurement-packets-fc-mismatch>
        sfl-measurement-packets-fc-mismatch
      </sfl-measurement-packets-fc-mismatch>
      <sfl-measurement-cir-packets-sent>
        sfl-measurement-cir-packets-sent
      </sfl-measurement-cir-packets-sent>
      <sfl-measurement-eir-packets-sent>
        sfl-measurement-eir-packets-sent
      </sfl-measurement-eir-packets-sent>
      <sfl-measurement-cir-packets-received>
        sfl-measurement-cir-packets-received
      </sfl-measurement-cir-packets-received>
      <sfl-measurement-eir-packets-received>
        sfl-measurement-eir-packets-received
      </sfl-measurement-eir-packets-received>
      <sfl-measurement-cir-loss-count>
        sfl-measurement-cir-loss-count
      </sfl-measurement-cir-loss-count>
      <sfl-measurement-cir-loss-percent>
        sfl-measurement-cir-loss-percent
      </sfl-measurement-cir-loss-percent>
      <sfl-measurement-eir-loss-count>
        sfl-measurement-eir-loss-count
      </sfl-measurement-eir-loss-count>
      <sfl-measurement-eir-loss-percent>
        sfl-measurement-eir-loss-percent
      </sfl-measurement-eir-loss-percent>
      <sfl-measurement-loss-count>
        sfl-measurement-loss-count
```

```
      </sfl-measurement-loss-count>
      <sfl-measurement-loss-percent>
        sfl-measurement-loss-percent
      </sfl-measurement-loss-percent>
    </cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-iter-eth-sfl-entry>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-iter-eth-sfl-entry>
      <sfl-measurement-packets-sent>
        sfl-measurement-packets-sent
      </sfl-measurement-packets-sent>
      <sfl-measurement-packets-skipped-for-threshold-hit>
        sfl-measurement-packets-skipped-for-threshold-hit
      </sfl-measurement-packets-skipped-for-threshold-hit>
      <sfl-measurement-packets-skipped-for-threshold-hit-window>
        sfl-measurement-packets-skipped-for-threshold-hit-window
      </sfl-measurement-packets-skipped-for-threshold-hit-window>
      <sfl-measurement-packets-received>
        sfl-measurement-packets-received
      </sfl-measurement-packets-received>
      <sfl-measurement-packets-out-of-sequence>
        sfl-measurement-packets-out-of-sequence
      </sfl-measurement-packets-out-of-sequence>
      <sfl-measurement-packets-fc-mismatch>
        sfl-measurement-packets-fc-mismatch
      </sfl-measurement-packets-fc-mismatch>
      <sfl-measurement-cir-packets-sent>
        sfl-measurement-cir-packets-sent
      </sfl-measurement-cir-packets-sent>
      <sfl-measurement-eir-packets-sent>
        sfl-measurement-eir-packets-sent
      </sfl-measurement-eir-packets-sent>
      <sfl-measurement-cir-packets-received>
        sfl-measurement-cir-packets-received
      </sfl-measurement-cir-packets-received>
      <sfl-measurement-eir-packets-received>
        sfl-measurement-eir-packets-received
      </sfl-measurement-eir-packets-received>
      <sfl-measurement-cir-loss-count>
        sfl-measurement-cir-loss-count
      </sfl-measurement-cir-loss-count>
      <sfl-measurement-cir-loss-percent>
        sfl-measurement-cir-loss-percent
      </sfl-measurement-cir-loss-percent>
      <sfl-measurement-eir-loss-count>
        sfl-measurement-eir-loss-count
      </sfl-measurement-eir-loss-count>
```


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```
      <sfl-measurement-eir-loss-percent>
        sfl-measurement-eir-loss-percent
      </sfl-measurement-eir-loss-percent>
      <sfl-measurement-loss-count>
        sfl-measurement-loss-count
      </sfl-measurement-loss-count>
      <sfl-measurement-loss-percent>
        sfl-measurement-loss-percent
      </sfl-measurement-loss-percent>
    </cfm-iter-eth-sfl-entry>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-entry>
  <cfm-iter-ethdm-entry>
    <cfm-delay-weight>
      cfm-delay-weight
    </cfm-delay-weight>
    <cfm-delay-variation-weight>
      cfm-delay-variation-weight
    </cfm-delay-variation-weight>
    <cfm-dmm-sent>
      cfm-dmm-sent
    </cfm-dmm-sent>
    <cfm-dmm-skipped-for-threshold-hit>
      cfm-dmm-skipped-for-threshold-hit
    </cfm-dmm-skipped-for-threshold-hit>
    <cfm-dmm-skipped-for-threshold-hit-window>
      cfm-dmm-skipped-for-threshold-hit-window
    </cfm-dmm-skipped-for-threshold-hit-window>
    <cfm-dmr-received>
      cfm-dmr-received
    </cfm-dmr-received>
    <cfm-dmr-out-of-sequence>
      cfm-dmr-out-of-sequence
    </cfm-dmr-out-of-sequence>
    <cfm-dmr-fc-mismatch>
      cfm-dmr-fc-mismatch
    </cfm-dmr-fc-mismatch>
    <cfm-dmr-invalid-time-stamp>
      cfm-dmr-invalid-time-stamp
    </cfm-dmr-invalid-time-stamp>
    <cfm-average-twoway-delay>
      cfm-average-twoway-delay
    </cfm-average-twoway-delay>
    <cfm-average-twoway-delay-variation>
      cfm-average-twoway-delay-variation
    </cfm-average-twoway-delay-variation>
    <cfm-average-oneway-fwd-delay-variation>
      cfm-average-oneway-fwd-delay-variation
```

```
    </cfm-average-oneway-fwd-delay-variation>
    <cfm-average-oneway-bkwd-delay-variation>
     cfm-average-oneway-bkwd-delay-variation
    </cfm-average-oneway-bkwd-delay-variation>
    <cfm-weighted-average-twoway-delay>
     cfm-weighted-average-twoway-delay
    </cfm-weighted-average-twoway-delay>
    <cfm-weighted-average-twoway-delay-variation>
     cfm-weighted-average-twoway-delay-variation
    </cfm-weighted-average-twoway-delay-variation>
    <cfm-weighted-average-oneway-fwd-delay-variation>
     cfm-weighted-average-oneway-fwd-delay-variation
    </cfm-weighted-average-oneway-fwd-delay-variation>
    <cfm-weighted-average-oneway-bkwd-delay-variation>
     cfm-weighted-average-oneway-bkwd-delay-variation
    </cfm-weighted-average-oneway-bkwd-delay-variation>
   </cfm-iter-ethdm-entry>
</cfm-entry>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-iter-ethdm-entry>
   <cfm-delay-weight>
    cfm-delay-weight
   </cfm-delay-weight>
   <cfm-delay-variation-weight>
    cfm-delay-variation-weight
   </cfm-delay-variation-weight>
   <cfm-dmm-sent>
    cfm-dmm-sent
   </cfm-dmm-sent>
   <cfm-dmm-skipped-for-threshold-hit>
    cfm-dmm-skipped-for-threshold-hit
   </cfm-dmm-skipped-for-threshold-hit>
   <cfm-dmm-skipped-for-threshold-hit-window>
    cfm-dmm-skipped-for-threshold-hit-window
   </cfm-dmm-skipped-for-threshold-hit-window>
   <cfm-dmr-received>
    cfm-dmr-received
   </cfm-dmr-received>
   <cfm-dmr-out-of-sequence>
    cfm-dmr-out-of-sequence
   </cfm-dmr-out-of-sequence>
   <cfm-dmr-fc-mismatch>
    cfm-dmr-fc-mismatch
   </cfm-dmr-fc-mismatch>
   <cfm-dmr-invalid-time-stamp>
    cfm-dmr-invalid-time-stamp
   </cfm-dmr-invalid-time-stamp>
   <cfm-average-twoway-delay>
```


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```
      cfm-average-twoway-delay
     </cfm-average-twoway-delay>
     <cfm-average-twoway-delay-variation>
      cfm-average-twoway-delay-variation
     </cfm-average-twoway-delay-variation>
     <cfm-average-oneway-fwd-delay-variation>
      cfm-average-oneway-fwd-delay-variation
     </cfm-average-oneway-fwd-delay-variation>
     <cfm-average-oneway-bkwd-delay-variation>
      cfm-average-oneway-bkwd-delay-variation
     </cfm-average-oneway-bkwd-delay-variation>
     <cfm-weighted-average-twoway-delay>
      cfm-weighted-average-twoway-delay
     </cfm-weighted-average-twoway-delay>
     <cfm-weighted-average-twoway-delay-variation>
      cfm-weighted-average-twoway-delay-variation
     </cfm-weighted-average-twoway-delay-variation>
     <cfm-weighted-average-oneway-fwd-delay-variation>
      cfm-weighted-average-oneway-fwd-delay-variation
     </cfm-weighted-average-oneway-fwd-delay-variation>
     <cfm-weighted-average-oneway-bkwd-delay-variation>
      cfm-weighted-average-oneway-bkwd-delay-variation
     </cfm-weighted-average-oneway-bkwd-delay-variation>
    </cfm-iter-ethdm-entry>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-iter-ethdm-entry>
   <cfm-delay-weight>
    cfm-delay-weight
   </cfm-delay-weight>
   <cfm-delay-variation-weight>
    cfm-delay-variation-weight
   </cfm-delay-variation-weight>
   <cfm-dmm-sent>
    cfm-dmm-sent
   </cfm-dmm-sent>
   <cfm-dmm-skipped-for-threshold-hit>
    cfm-dmm-skipped-for-threshold-hit
   </cfm-dmm-skipped-for-threshold-hit>
   <cfm-dmm-skipped-for-threshold-hit-window>
    cfm-dmm-skipped-for-threshold-hit-window
   </cfm-dmm-skipped-for-threshold-hit-window>
   <cfm-dmr-received>
    cfm-dmr-received
   </cfm-dmr-received>
   <cfm-dmr-out-of-sequence>
    cfm-dmr-out-of-sequence
```

```
      </cfm-dmr-out-of-sequence>
      <cfm-dmr-fc-mismatch>
       cfm-dmr-fc-mismatch
      </cfm-dmr-fc-mismatch>
      <cfm-dmr-invalid-time-stamp>
       cfm-dmr-invalid-time-stamp
      </cfm-dmr-invalid-time-stamp>
      <cfm-average-twoway-delay>
       cfm-average-twoway-delay
      </cfm-average-twoway-delay>
      <cfm-average-twoway-delay-variation>
       cfm-average-twoway-delay-variation
      </cfm-average-twoway-delay-variation>
      <cfm-average-oneway-fwd-delay-variation>
       cfm-average-oneway-fwd-delay-variation
      </cfm-average-oneway-fwd-delay-variation>
      <cfm-average-oneway-bkwd-delay-variation>
       cfm-average-oneway-bkwd-delay-variation
      </cfm-average-oneway-bkwd-delay-variation>
      <cfm-weighted-average-twoway-delay>
       cfm-weighted-average-twoway-delay
      </cfm-weighted-average-twoway-delay>
      <cfm-weighted-average-twoway-delay-variation>
       cfm-weighted-average-twoway-delay-variation
      </cfm-weighted-average-twoway-delay-variation>
      <cfm-weighted-average-oneway-fwd-delay-variation>
       cfm-weighted-average-oneway-fwd-delay-variation
      </cfm-weighted-average-oneway-fwd-delay-variation>
      <cfm-weighted-average-oneway-bkwd-delay-variation>
       cfm-weighted-average-oneway-bkwd-delay-variation
      </cfm-weighted-average-oneway-bkwd-delay-variation>
     </cfm-iter-ethdm-entry>
    </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-iter-ethdm-entry>
   <cfm-delay-weight>
    cfm-delay-weight
   </cfm-delay-weight>
   <cfm-delay-variation-weight>
    cfm-delay-variation-weight
   </cfm-delay-variation-weight>
   <cfm-dmm-sent>
    cfm-dmm-sent
   </cfm-dmm-sent>
   <cfm-dmm-skipped-for-threshold-hit>
    cfm-dmm-skipped-for-threshold-hit
   </cfm-dmm-skipped-for-threshold-hit>
```


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```
        <cfm-dmm-skipped-for-threshold-hit-window>
          cfm-dmm-skipped-for-threshold-hit-window
        </cfm-dmm-skipped-for-threshold-hit-window>
        <cfm-dmr-received>
          cfm-dmr-received
        </cfm-dmr-received>
        <cfm-dmr-out-of-sequence>
          cfm-dmr-out-of-sequence
        </cfm-dmr-out-of-sequence>
        <cfm-dmr-fc-mismatch>
          cfm-dmr-fc-mismatch
        </cfm-dmr-fc-mismatch>
        <cfm-dmr-invalid-time-stamp>
          cfm-dmr-invalid-time-stamp
        </cfm-dmr-invalid-time-stamp>
        <cfm-average-twoway-delay>
          cfm-average-twoway-delay
        </cfm-average-twoway-delay>
        <cfm-average-twoway-delay-variation>
          cfm-average-twoway-delay-variation
        </cfm-average-twoway-delay-variation>
        <cfm-average-oneway-fwd-delay-variation>
          cfm-average-oneway-fwd-delay-variation
        </cfm-average-oneway-fwd-delay-variation>
        <cfm-average-oneway-bkwd-delay-variation>
          cfm-average-oneway-bkwd-delay-variation
        </cfm-average-oneway-bkwd-delay-variation>
        <cfm-weighted-average-twoway-delay>
          cfm-weighted-average-twoway-delay
        </cfm-weighted-average-twoway-delay>
        <cfm-weighted-average-twoway-delay-variation>
          cfm-weighted-average-twoway-delay-variation
        </cfm-weighted-average-twoway-delay-variation>
        <cfm-weighted-average-oneway-fwd-delay-variation>
          cfm-weighted-average-oneway-fwd-delay-variation
        </cfm-weighted-average-oneway-fwd-delay-variation>
        <cfm-weighted-average-oneway-bkwd-delay-variation>
          cfm-weighted-average-oneway-bkwd-delay-variation
        </cfm-weighted-average-oneway-bkwd-delay-variation>
      </cfm-iter-ethdm-entry>
    </cfm-entry>
  </cfm-mep-statistics>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-iter-ethdm-entry>
      <cfm-delay-weight>
        cfm-delay-weight
      </cfm-delay-weight>
      <cfm-delay-variation-weight>
```

```
            cfm-delay-variation-weight
          </cfm-delay-variation-weight>
          <cfm-dmm-sent>
            cfm-dmm-sent
          </cfm-dmm-sent>
          <cfm-dmm-skipped-for-threshold-hit>
            cfm-dmm-skipped-for-threshold-hit
          </cfm-dmm-skipped-for-threshold-hit>
          <cfm-dmm-skipped-for-threshold-hit-window>
            cfm-dmm-skipped-for-threshold-hit-window
          </cfm-dmm-skipped-for-threshold-hit-window>
          <cfm-dmr-received>
            cfm-dmr-received
          </cfm-dmr-received>
          <cfm-dmr-out-of-sequence>
            cfm-dmr-out-of-sequence
          </cfm-dmr-out-of-sequence>
          <cfm-dmr-fc-mismatch>
            cfm-dmr-fc-mismatch
          </cfm-dmr-fc-mismatch>
          <cfm-dmr-invalid-time-stamp>
            cfm-dmr-invalid-time-stamp
          </cfm-dmr-invalid-time-stamp>
          <cfm-average-twoway-delay>
            cfm-average-twoway-delay
          </cfm-average-twoway-delay>
          <cfm-average-twoway-delay-variation>
            cfm-average-twoway-delay-variation
          </cfm-average-twoway-delay-variation>
          <cfm-average-oneway-fwd-delay-variation>
            cfm-average-oneway-fwd-delay-variation
          </cfm-average-oneway-fwd-delay-variation>
          <cfm-average-oneway-bkwd-delay-variation>
            cfm-average-oneway-bkwd-delay-variation
          </cfm-average-oneway-bkwd-delay-variation>
          <cfm-weighted-average-twoway-delay>
            cfm-weighted-average-twoway-delay
          </cfm-weighted-average-twoway-delay>
          <cfm-weighted-average-twoway-delay-variation>
            cfm-weighted-average-twoway-delay-variation
          </cfm-weighted-average-twoway-delay-variation>
          <cfm-weighted-average-oneway-fwd-delay-variation>
            cfm-weighted-average-oneway-fwd-delay-variation
          </cfm-weighted-average-oneway-fwd-delay-variation>
          <cfm-weighted-average-oneway-bkwd-delay-variation>
            cfm-weighted-average-oneway-bkwd-delay-variation
          </cfm-weighted-average-oneway-bkwd-delay-variation>
        </cfm-iter-ethdm-entry>
      </cfm-entry>
    </cfm-delay-statistics>
```

Description

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<cfm-iter-ethdm-entry>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-iter-ethdm-entry>
   <cfm-delay-weight>
    cfm-delay-weight
   </cfm-delay-weight>
   <cfm-delay-variation-weight>
    cfm-delay-variation-weight
   </cfm-delay-variation-weight>
   <cfm-dmm-sent>
    cfm-dmm-sent
   </cfm-dmm-sent>
   <cfm-dmm-skipped-for-threshold-hit>
    cfm-dmm-skipped-for-threshold-hit
   </cfm-dmm-skipped-for-threshold-hit>
   <cfm-dmm-skipped-for-threshold-hit-window>
    cfm-dmm-skipped-for-threshold-hit-window
   </cfm-dmm-skipped-for-threshold-hit-window>
   <cfm-dmr-received>
    cfm-dmr-received
   </cfm-dmr-received>
   <cfm-dmr-out-of-sequence>
    cfm-dmr-out-of-sequence
   </cfm-dmr-out-of-sequence>
   <cfm-dmr-fc-mismatch>
    cfm-dmr-fc-mismatch
   </cfm-dmr-fc-mismatch>
   <cfm-dmr-invalid-time-stamp>
    cfm-dmr-invalid-time-stamp
   </cfm-dmr-invalid-time-stamp>
   <cfm-average-twoway-delay>
    cfm-average-twoway-delay
   </cfm-average-twoway-delay>
   <cfm-average-twoway-delay-variation>
    cfm-average-twoway-delay-variation
   </cfm-average-twoway-delay-variation>
   <cfm-average-oneway-fwd-delay-variation>
    cfm-average-oneway-fwd-delay-variation
   </cfm-average-oneway-fwd-delay-variation>
   <cfm-average-oneway-bkwd-delay-variation>
    cfm-average-oneway-bkwd-delay-variation
   </cfm-average-oneway-bkwd-delay-variation>
   <cfm-weighted-average-twoway-delay>
    cfm-weighted-average-twoway-delay
   </cfm-weighted-average-twoway-delay>
   <cfm-weighted-average-twoway-delay-variation>
    cfm-weighted-average-twoway-delay-variation
   </cfm-weighted-average-twoway-delay-variation>
   <cfm-weighted-average-oneway-fwd-delay-variation>
    cfm-weighted-average-oneway-fwd-delay-variation
   </cfm-weighted-average-oneway-fwd-delay-variation>
   <cfm-weighted-average-oneway-bkwd-delay-variation>
```

```
        cfm-weighted-average-oneway-bkwd-delay-variation
       </cfm-weighted-average-oneway-bkwd-delay-variation>
      </cfm-iter-ethdm-entry>
     </cfm-entry>
    </cfm-loss-statistics>
```

Description

<cfm-iter-ethdm-entry>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-iter-ethdm-entry>
   <cfm-delay-weight>
    cfm-delay-weight
   </cfm-delay-weight>
   <cfm-delay-variation-weight>
    cfm-delay-variation-weight
   </cfm-delay-variation-weight>
   <cfm-dmm-sent>
    cfm-dmm-sent
   </cfm-dmm-sent>
   <cfm-dmm-skipped-for-threshold-hit>
    cfm-dmm-skipped-for-threshold-hit
   </cfm-dmm-skipped-for-threshold-hit>
   <cfm-dmm-skipped-for-threshold-hit-window>
    cfm-dmm-skipped-for-threshold-hit-window
   </cfm-dmm-skipped-for-threshold-hit-window>
   <cfm-dmr-received>
    cfm-dmr-received
   </cfm-dmr-received>
   <cfm-dmr-out-of-sequence>
    cfm-dmr-out-of-sequence
   </cfm-dmr-out-of-sequence>
   <cfm-dmr-fc-mismatch>
    cfm-dmr-fc-mismatch
   </cfm-dmr-fc-mismatch>
   <cfm-dmr-invalid-time-stamp>
    cfm-dmr-invalid-time-stamp
   </cfm-dmr-invalid-time-stamp>
   <cfm-average-twoway-delay>
    cfm-average-twoway-delay
   </cfm-average-twoway-delay>
   <cfm-average-twoway-delay-variation>
    cfm-average-twoway-delay-variation
   </cfm-average-twoway-delay-variation>
   <cfm-average-oneway-fwd-delay-variation>
    cfm-average-oneway-fwd-delay-variation
   </cfm-average-oneway-fwd-delay-variation>
   <cfm-average-oneway-bkwd-delay-variation>
    cfm-average-oneway-bkwd-delay-variation
   </cfm-average-oneway-bkwd-delay-variation>
   <cfm-weighted-average-twoway-delay>
    cfm-weighted-average-twoway-delay
```


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```
      </cfm-weighted-average-twoway-delay>
      <cfm-weighted-average-twoway-delay-variation>
        cfm-weighted-average-twoway-delay-variation
      </cfm-weighted-average-twoway-delay-variation>
      <cfm-weighted-average-oneway-fwd-delay-variation>
        cfm-weighted-average-oneway-fwd-delay-variation
      </cfm-weighted-average-oneway-fwd-delay-variation>
      <cfm-weighted-average-oneway-bkwd-delay-variation>
        cfm-weighted-average-oneway-bkwd-delay-variation
      </cfm-weighted-average-oneway-bkwd-delay-variation>
    </cfm-iter-ethdm-entry>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-entry>
  <cfm-iter-ethlm-entry>
    <cfm-lmm-sent>
      cfm-lmm-sent
    </cfm-lmm-sent>
    <cfm-lmm-skipped-for-threshold-hit>
      cfm-lmm-skipped-for-threshold-hit
    </cfm-lmm-skipped-for-threshold-hit>
    <cfm-lmm-skipped-for-threshold-hit-window>
      cfm-lmm-skipped-for-threshold-hit-window
    </cfm-lmm-skipped-for-threshold-hit-window>
    <cfm-lmr-received>
      cfm-lmr-received
    </cfm-lmr-received>
    <cfm-lmr-out-of-seq>
      cfm-lmr-out-of-seq
    </cfm-lmr-out-of-seq>
    <cfm-lmr-fc-mismatch>
      cfm-lmr-fc-mismatch
    </cfm-lmr-fc-mismatch>
    <cfm-accu-tx-near-end-cir-loss-stats>
      cfm-accu-tx-near-end-cir-loss-stats
    </cfm-accu-tx-near-end-cir-loss-stats>
    <cfm-accu-tx-far-end-cir-loss-stats>
      cfm-accu-tx-far-end-cir-loss-stats
    </cfm-accu-tx-far-end-cir-loss-stats>
    <cfm-accu-tx-near-end-eir-loss-stats>
      cfm-accu-tx-near-end-eir-loss-stats
    </cfm-accu-tx-near-end-eir-loss-stats>
    <cfm-accu-tx-far-end-eir-loss-stats>
      cfm-accu-tx-far-end-eir-loss-stats
    </cfm-accu-tx-far-end-eir-loss-stats>
    <cfm-accu-loss-near-end-cir-loss-stats>
      cfm-accu-loss-near-end-cir-loss-stats
    </cfm-accu-loss-near-end-cir-loss-stats>
    <cfm-accu-loss-near-end-cir-loss-stats-percent>
```

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```
      cfm-accu-loss-near-end-cir-loss-stats-percent
    </cfm-accu-loss-near-end-cir-loss-stats-percent>
    <cfm-accu-loss-far-end-cir-loss-stats>
      cfm-accu-loss-far-end-cir-loss-stats
    </cfm-accu-loss-far-end-cir-loss-stats>
    <cfm-accu-loss-far-end-cir-loss-stats-percent>
      cfm-accu-loss-far-end-cir-loss-stats-percent
    </cfm-accu-loss-far-end-cir-loss-stats-percent>
    <cfm-accu-loss-near-end-eir-loss-stats>
      cfm-accu-loss-near-end-eir-loss-stats
    </cfm-accu-loss-near-end-eir-loss-stats>
    <cfm-accu-loss-near-end-eir-loss-stats-percent>
      cfm-accu-loss-near-end-eir-loss-stats-percent
    </cfm-accu-loss-near-end-eir-loss-stats-percent>
    <cfm-accu-loss-far-end-eir-loss-stats>
      cfm-accu-loss-far-end-eir-loss-stats
    </cfm-accu-loss-far-end-eir-loss-stats>
    <cfm-accu-loss-far-end-eir-loss-stats-percent>
      cfm-accu-loss-far-end-eir-loss-stats-percent
    </cfm-accu-loss-far-end-eir-loss-stats-percent>
    <cfm-last-measured-near-end-cir-loss-stats>
      cfm-last-measured-near-end-cir-loss-stats
    </cfm-last-measured-near-end-cir-loss-stats>
    <cfm-last-measured-far-end-cir-loss-stats>
      cfm-last-measured-far-end-cir-loss-stats
    </cfm-last-measured-far-end-cir-loss-stats>
    <cfm-last-measured-near-end-eir-loss-stats>
      cfm-last-measured-near-end-eir-loss-stats
    </cfm-last-measured-near-end-eir-loss-stats>
    <cfm-last-measured-far-end-eir-loss-stats>
      cfm-last-measured-far-end-eir-loss-stats
    </cfm-last-measured-far-end-eir-loss-stats>
  </cfm-iter-ethlm-entry>
</cfm-entry>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-iter-ethlm-entry>
      <cfm-lmm-sent>
        cfm-lmm-sent
      </cfm-lmm-sent>
      <cfm-lmm-skipped-for-threshold-hit>
        cfm-lmm-skipped-for-threshold-hit
      </cfm-lmm-skipped-for-threshold-hit>
      <cfm-lmm-skipped-for-threshold-hit-window>
        cfm-lmm-skipped-for-threshold-hit-window
      </cfm-lmm-skipped-for-threshold-hit-window>
      <cfm-lmr-received>
        cfm-lmr-received
      </cfm-lmr-received>
```


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```
    <cfm-lmr-out-of-seq>
      cfm-lmr-out-of-seq
    </cfm-lmr-out-of-seq>
    <cfm-lmr-fc-mismatch>
      cfm-lmr-fc-mismatch
    </cfm-lmr-fc-mismatch>
    <cfm-accu-tx-near-end-cir-loss-stats>
      cfm-accu-tx-near-end-cir-loss-stats
    </cfm-accu-tx-near-end-cir-loss-stats>
    <cfm-accu-tx-far-end-cir-loss-stats>
      cfm-accu-tx-far-end-cir-loss-stats
    </cfm-accu-tx-far-end-cir-loss-stats>
    <cfm-accu-tx-near-end-eir-loss-stats>
      cfm-accu-tx-near-end-eir-loss-stats
    </cfm-accu-tx-near-end-eir-loss-stats>
    <cfm-accu-tx-far-end-eir-loss-stats>
      cfm-accu-tx-far-end-eir-loss-stats
    </cfm-accu-tx-far-end-eir-loss-stats>
    <cfm-accu-loss-near-end-cir-loss-stats>
      cfm-accu-loss-near-end-cir-loss-stats
    </cfm-accu-loss-near-end-cir-loss-stats>
    <cfm-accu-loss-near-end-cir-loss-stats-percent>
      cfm-accu-loss-near-end-cir-loss-stats-percent
    </cfm-accu-loss-near-end-cir-loss-stats-percent>
    <cfm-accu-loss-far-end-cir-loss-stats>
      cfm-accu-loss-far-end-cir-loss-stats
    </cfm-accu-loss-far-end-cir-loss-stats>
    <cfm-accu-loss-far-end-cir-loss-stats-percent>
      cfm-accu-loss-far-end-cir-loss-stats-percent
    </cfm-accu-loss-far-end-cir-loss-stats-percent>
    <cfm-accu-loss-near-end-eir-loss-stats>
      cfm-accu-loss-near-end-eir-loss-stats
    </cfm-accu-loss-near-end-eir-loss-stats>
    <cfm-accu-loss-near-end-eir-loss-stats-percent>
      cfm-accu-loss-near-end-eir-loss-stats-percent
    </cfm-accu-loss-near-end-eir-loss-stats-percent>
    <cfm-accu-loss-far-end-eir-loss-stats>
      cfm-accu-loss-far-end-eir-loss-stats
    </cfm-accu-loss-far-end-eir-loss-stats>
    <cfm-accu-loss-far-end-eir-loss-stats-percent>
      cfm-accu-loss-far-end-eir-loss-stats-percent
    </cfm-accu-loss-far-end-eir-loss-stats-percent>
    <cfm-last-measured-near-end-cir-loss-stats>
      cfm-last-measured-near-end-cir-loss-stats
    </cfm-last-measured-near-end-cir-loss-stats>
    <cfm-last-measured-far-end-cir-loss-stats>
      cfm-last-measured-far-end-cir-loss-stats
    </cfm-last-measured-far-end-cir-loss-stats>
    <cfm-last-measured-near-end-eir-loss-stats>
      cfm-last-measured-near-end-eir-loss-stats
    </cfm-last-measured-near-end-eir-loss-stats>
    <cfm-last-measured-far-end-eir-loss-stats>
      cfm-last-measured-far-end-eir-loss-stats
    </cfm-last-measured-far-end-eir-loss-stats>
  </cfm-iter-ethlm-entry>
</cfm-entry>
```

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```
</cfm-interface>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-iter-ethlm-entry>
   <cfm-lmm-sent>
    cfm-lmm-sent
   </cfm-lmm-sent>
   <cfm-lmm-skipped-for-threshold-hit>
    cfm-lmm-skipped-for-threshold-hit
   </cfm-lmm-skipped-for-threshold-hit>
   <cfm-lmm-skipped-for-threshold-hit-window>
    cfm-lmm-skipped-for-threshold-hit-window
   </cfm-lmm-skipped-for-threshold-hit-window>
   <cfm-lmr-received>
    cfm-lmr-received
   </cfm-lmr-received>
   <cfm-lmr-out-of-seq>
    cfm-lmr-out-of-seq
   </cfm-lmr-out-of-seq>
   <cfm-lmr-fc-mismatch>
    cfm-lmr-fc-mismatch
   </cfm-lmr-fc-mismatch>
   <cfm-accu-tx-near-end-cir-loss-stats>
    cfm-accu-tx-near-end-cir-loss-stats
   </cfm-accu-tx-near-end-cir-loss-stats>
   <cfm-accu-tx-far-end-cir-loss-stats>
    cfm-accu-tx-far-end-cir-loss-stats
   </cfm-accu-tx-far-end-cir-loss-stats>
   <cfm-accu-tx-near-end-eir-loss-stats>
    cfm-accu-tx-near-end-eir-loss-stats
   </cfm-accu-tx-near-end-eir-loss-stats>
   <cfm-accu-tx-far-end-eir-loss-stats>
    cfm-accu-tx-far-end-eir-loss-stats
   </cfm-accu-tx-far-end-eir-loss-stats>
   <cfm-accu-loss-near-end-cir-loss-stats>
    cfm-accu-loss-near-end-cir-loss-stats
   </cfm-accu-loss-near-end-cir-loss-stats>
   <cfm-accu-loss-near-end-cir-loss-stats-percent>
    cfm-accu-loss-near-end-cir-loss-stats-percent
   </cfm-accu-loss-near-end-cir-loss-stats-percent>
   <cfm-accu-loss-far-end-cir-loss-stats>
    cfm-accu-loss-far-end-cir-loss-stats
   </cfm-accu-loss-far-end-cir-loss-stats>
   <cfm-accu-loss-far-end-cir-loss-stats-percent>
    cfm-accu-loss-far-end-cir-loss-stats-percent
   </cfm-accu-loss-far-end-cir-loss-stats-percent>
   <cfm-accu-loss-near-end-eir-loss-stats>
    cfm-accu-loss-near-end-eir-loss-stats
   </cfm-accu-loss-near-end-eir-loss-stats>
```


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```
      <cfm-accu-loss-near-end-eir-loss-stats-percent>
        cfm-accu-loss-near-end-eir-loss-stats-percent
      </cfm-accu-loss-near-end-eir-loss-stats-percent>
      <cfm-accu-loss-far-end-eir-loss-stats>
        cfm-accu-loss-far-end-eir-loss-stats
      </cfm-accu-loss-far-end-eir-loss-stats>
      <cfm-accu-loss-far-end-eir-loss-stats-percent>
        cfm-accu-loss-far-end-eir-loss-stats-percent
      </cfm-accu-loss-far-end-eir-loss-stats-percent>
      <cfm-last-measured-near-end-cir-loss-stats>
        cfm-last-measured-near-end-cir-loss-stats
      </cfm-last-measured-near-end-cir-loss-stats>
      <cfm-last-measured-far-end-cir-loss-stats>
        cfm-last-measured-far-end-cir-loss-stats
      </cfm-last-measured-far-end-cir-loss-stats>
      <cfm-last-measured-near-end-eir-loss-stats>
        cfm-last-measured-near-end-eir-loss-stats
      </cfm-last-measured-near-end-eir-loss-stats>
      <cfm-last-measured-far-end-eir-loss-stats>
        cfm-last-measured-far-end-eir-loss-stats
      </cfm-last-measured-far-end-eir-loss-stats>
    </cfm-iter-ethlm-entry>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-iter-ethlm-entry>
      <cfm-lmm-sent>
        cfm-lmm-sent
      </cfm-lmm-sent>
      <cfm-lmm-skipped-for-threshold-hit>
        cfm-lmm-skipped-for-threshold-hit
      </cfm-lmm-skipped-for-threshold-hit>
      <cfm-lmm-skipped-for-threshold-hit-window>
        cfm-lmm-skipped-for-threshold-hit-window
      </cfm-lmm-skipped-for-threshold-hit-window>
      <cfm-lmr-received>
        cfm-lmr-received
      </cfm-lmr-received>
      <cfm-lmr-out-of-seq>
        cfm-lmr-out-of-seq
      </cfm-lmr-out-of-seq>
      <cfm-lmr-fc-mismatch>
        cfm-lmr-fc-mismatch
      </cfm-lmr-fc-mismatch>
      <cfm-accu-tx-near-end-cir-loss-stats>
        cfm-accu-tx-near-end-cir-loss-stats
      </cfm-accu-tx-near-end-cir-loss-stats>
      <cfm-accu-tx-far-end-cir-loss-stats>
```

```
                cfm-accu-tx-far-end-cir-loss-stats
              </cfm-accu-tx-far-end-cir-loss-stats>
              <cfm-accu-tx-near-end-eir-loss-stats>
                cfm-accu-tx-near-end-eir-loss-stats
              </cfm-accu-tx-near-end-eir-loss-stats>
              <cfm-accu-tx-far-end-eir-loss-stats>
                cfm-accu-tx-far-end-eir-loss-stats
              </cfm-accu-tx-far-end-eir-loss-stats>
              <cfm-accu-loss-near-end-cir-loss-stats>
                cfm-accu-loss-near-end-cir-loss-stats
              </cfm-accu-loss-near-end-cir-loss-stats>
              <cfm-accu-loss-near-end-cir-loss-stats-percent>
                cfm-accu-loss-near-end-cir-loss-stats-percent
              </cfm-accu-loss-near-end-cir-loss-stats-percent>
              <cfm-accu-loss-far-end-cir-loss-stats>
                cfm-accu-loss-far-end-cir-loss-stats
              </cfm-accu-loss-far-end-cir-loss-stats>
              <cfm-accu-loss-far-end-cir-loss-stats-percent>
                cfm-accu-loss-far-end-cir-loss-stats-percent
              </cfm-accu-loss-far-end-cir-loss-stats-percent>
              <cfm-accu-loss-near-end-eir-loss-stats>
                cfm-accu-loss-near-end-eir-loss-stats
              </cfm-accu-loss-near-end-eir-loss-stats>
              <cfm-accu-loss-near-end-eir-loss-stats-percent>
                cfm-accu-loss-near-end-eir-loss-stats-percent
              </cfm-accu-loss-near-end-eir-loss-stats-percent>
              <cfm-accu-loss-far-end-eir-loss-stats>
                cfm-accu-loss-far-end-eir-loss-stats
              </cfm-accu-loss-far-end-eir-loss-stats>
              <cfm-accu-loss-far-end-eir-loss-stats-percent>
                cfm-accu-loss-far-end-eir-loss-stats-percent
              </cfm-accu-loss-far-end-eir-loss-stats-percent>
              <cfm-last-measured-near-end-cir-loss-stats>
                cfm-last-measured-near-end-cir-loss-stats
              </cfm-last-measured-near-end-cir-loss-stats>
              <cfm-last-measured-far-end-cir-loss-stats>
                cfm-last-measured-far-end-cir-loss-stats
              </cfm-last-measured-far-end-cir-loss-stats>
              <cfm-last-measured-near-end-eir-loss-stats>
                cfm-last-measured-near-end-eir-loss-stats
              </cfm-last-measured-near-end-eir-loss-stats>
              <cfm-last-measured-far-end-eir-loss-stats>
                cfm-last-measured-far-end-eir-loss-stats
              </cfm-last-measured-far-end-eir-loss-stats>
            </cfm-iter-ethlm-entry>
          </cfm-entry>
        </cfm-mep-statistics>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
```


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```
<cfm-iter-ethlm-entry>
  <cfm-lmm-sent>
    cfm-lmm-sent
  </cfm-lmm-sent>
  <cfm-lmm-skipped-for-threshold-hit>
    cfm-lmm-skipped-for-threshold-hit
  </cfm-lmm-skipped-for-threshold-hit>
  <cfm-lmm-skipped-for-threshold-hit-window>
    cfm-lmm-skipped-for-threshold-hit-window
  </cfm-lmm-skipped-for-threshold-hit-window>
  <cfm-lmr-received>
    cfm-lmr-received
  </cfm-lmr-received>
  <cfm-lmr-out-of-seq>
    cfm-lmr-out-of-seq
  </cfm-lmr-out-of-seq>
  <cfm-lmr-fc-mismatch>
    cfm-lmr-fc-mismatch
  </cfm-lmr-fc-mismatch>
  <cfm-accu-tx-near-end-cir-loss-stats>
    cfm-accu-tx-near-end-cir-loss-stats
  </cfm-accu-tx-near-end-cir-loss-stats>
  <cfm-accu-tx-far-end-cir-loss-stats>
    cfm-accu-tx-far-end-cir-loss-stats
  </cfm-accu-tx-far-end-cir-loss-stats>
  <cfm-accu-tx-near-end-eir-loss-stats>
    cfm-accu-tx-near-end-eir-loss-stats
  </cfm-accu-tx-near-end-eir-loss-stats>
  <cfm-accu-tx-far-end-eir-loss-stats>
    cfm-accu-tx-far-end-eir-loss-stats
  </cfm-accu-tx-far-end-eir-loss-stats>
  <cfm-accu-loss-near-end-cir-loss-stats>
    cfm-accu-loss-near-end-cir-loss-stats
  </cfm-accu-loss-near-end-cir-loss-stats>
  <cfm-accu-loss-near-end-cir-loss-stats-percent>
    cfm-accu-loss-near-end-cir-loss-stats-percent
  </cfm-accu-loss-near-end-cir-loss-stats-percent>
  <cfm-accu-loss-far-end-cir-loss-stats>
    cfm-accu-loss-far-end-cir-loss-stats
  </cfm-accu-loss-far-end-cir-loss-stats>
  <cfm-accu-loss-far-end-cir-loss-stats-percent>
    cfm-accu-loss-far-end-cir-loss-stats-percent
  </cfm-accu-loss-far-end-cir-loss-stats-percent>
  <cfm-accu-loss-near-end-eir-loss-stats>
    cfm-accu-loss-near-end-eir-loss-stats
  </cfm-accu-loss-near-end-eir-loss-stats>
  <cfm-accu-loss-near-end-eir-loss-stats-percent>
    cfm-accu-loss-near-end-eir-loss-stats-percent
  </cfm-accu-loss-near-end-eir-loss-stats-percent>
  <cfm-accu-loss-far-end-eir-loss-stats>
    cfm-accu-loss-far-end-eir-loss-stats
  </cfm-accu-loss-far-end-eir-loss-stats>
  <cfm-accu-loss-far-end-eir-loss-stats-percent>
    cfm-accu-loss-far-end-eir-loss-stats-percent
  </cfm-accu-loss-far-end-eir-loss-stats-percent>
  <cfm-last-measured-near-end-cir-loss-stats>
```

```
            cfm-last-measured-near-end-cir-loss-stats
           </cfm-last-measured-near-end-cir-loss-stats>
           <cfm-last-measured-far-end-cir-loss-stats>
            cfm-last-measured-far-end-cir-loss-stats
           </cfm-last-measured-far-end-cir-loss-stats>
           <cfm-last-measured-near-end-eir-loss-stats>
            cfm-last-measured-near-end-eir-loss-stats
           </cfm-last-measured-near-end-eir-loss-stats>
           <cfm-last-measured-far-end-eir-loss-stats>
            cfm-last-measured-far-end-eir-loss-stats
           </cfm-last-measured-far-end-eir-loss-stats>
          </cfm-iter-ethlm-entry>
         </cfm-entry>
        </cfm-delay-statistics>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-iter-ethlm-entry>
   <cfm-lmm-sent>
    cfm-lmm-sent
   </cfm-lmm-sent>
   <cfm-lmm-skipped-for-threshold-hit>
    cfm-lmm-skipped-for-threshold-hit
   </cfm-lmm-skipped-for-threshold-hit>
   <cfm-lmm-skipped-for-threshold-hit-window>
    cfm-lmm-skipped-for-threshold-hit-window
   </cfm-lmm-skipped-for-threshold-hit-window>
   <cfm-lmr-received>
    cfm-lmr-received
   </cfm-lmr-received>
   <cfm-lmr-out-of-seq>
    cfm-lmr-out-of-seq
   </cfm-lmr-out-of-seq>
   <cfm-lmr-fc-mismatch>
    cfm-lmr-fc-mismatch
   </cfm-lmr-fc-mismatch>
   <cfm-accu-tx-near-end-cir-loss-stats>
    cfm-accu-tx-near-end-cir-loss-stats
   </cfm-accu-tx-near-end-cir-loss-stats>
   <cfm-accu-tx-far-end-cir-loss-stats>
    cfm-accu-tx-far-end-cir-loss-stats
   </cfm-accu-tx-far-end-cir-loss-stats>
   <cfm-accu-tx-near-end-eir-loss-stats>
    cfm-accu-tx-near-end-eir-loss-stats
   </cfm-accu-tx-near-end-eir-loss-stats>
   <cfm-accu-tx-far-end-eir-loss-stats>
    cfm-accu-tx-far-end-eir-loss-stats
   </cfm-accu-tx-far-end-eir-loss-stats>
   <cfm-accu-loss-near-end-cir-loss-stats>
    cfm-accu-loss-near-end-cir-loss-stats
```


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```
      </cfm-accu-loss-near-end-cir-loss-stats>
      <cfm-accu-loss-near-end-cir-loss-stats-percent>
        cfm-accu-loss-near-end-cir-loss-stats-percent
      </cfm-accu-loss-near-end-cir-loss-stats-percent>
      <cfm-accu-loss-far-end-cir-loss-stats>
        cfm-accu-loss-far-end-cir-loss-stats
      </cfm-accu-loss-far-end-cir-loss-stats>
      <cfm-accu-loss-far-end-cir-loss-stats-percent>
        cfm-accu-loss-far-end-cir-loss-stats-percent
      </cfm-accu-loss-far-end-cir-loss-stats-percent>
      <cfm-accu-loss-near-end-eir-loss-stats>
        cfm-accu-loss-near-end-eir-loss-stats
      </cfm-accu-loss-near-end-eir-loss-stats>
      <cfm-accu-loss-near-end-eir-loss-stats-percent>
        cfm-accu-loss-near-end-eir-loss-stats-percent
      </cfm-accu-loss-near-end-eir-loss-stats-percent>
      <cfm-accu-loss-far-end-eir-loss-stats>
        cfm-accu-loss-far-end-eir-loss-stats
      </cfm-accu-loss-far-end-eir-loss-stats>
      <cfm-accu-loss-far-end-eir-loss-stats-percent>
        cfm-accu-loss-far-end-eir-loss-stats-percent
      </cfm-accu-loss-far-end-eir-loss-stats-percent>
      <cfm-last-measured-near-end-cir-loss-stats>
        cfm-last-measured-near-end-cir-loss-stats
      </cfm-last-measured-near-end-cir-loss-stats>
      <cfm-last-measured-far-end-cir-loss-stats>
        cfm-last-measured-far-end-cir-loss-stats
      </cfm-last-measured-far-end-cir-loss-stats>
      <cfm-last-measured-near-end-eir-loss-stats>
        cfm-last-measured-near-end-eir-loss-stats
      </cfm-last-measured-near-end-eir-loss-stats>
      <cfm-last-measured-far-end-eir-loss-stats>
        cfm-last-measured-far-end-eir-loss-stats
      </cfm-last-measured-far-end-eir-loss-stats>
    </cfm-iter-ethlm-entry>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-iter-ethlm-entry>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-iter-ethlm-entry>
      <cfm-lmm-sent>
        cfm-lmm-sent
      </cfm-lmm-sent>
      <cfm-lmm-skipped-for-threshold-hit>
        cfm-lmm-skipped-for-threshold-hit
      </cfm-lmm-skipped-for-threshold-hit>
      <cfm-lmm-skipped-for-threshold-hit-window>
        cfm-lmm-skipped-for-threshold-hit-window
      </cfm-lmm-skipped-for-threshold-hit-window>
```

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<cfm-lmr-received>
  cfm-lmr-received
</cfm-lmr-received>
<cfm-lmr-out-of-seq>
  cfm-lmr-out-of-seq
</cfm-lmr-out-of-seq>
<cfm-lmr-fc-mismatch>
  cfm-lmr-fc-mismatch
</cfm-lmr-fc-mismatch>
<cfm-accu-tx-near-end-cir-loss-stats>
  cfm-accu-tx-near-end-cir-loss-stats
</cfm-accu-tx-near-end-cir-loss-stats>
<cfm-accu-tx-far-end-cir-loss-stats>
  cfm-accu-tx-far-end-cir-loss-stats
</cfm-accu-tx-far-end-cir-loss-stats>
<cfm-accu-tx-near-end-eir-loss-stats>
  cfm-accu-tx-near-end-eir-loss-stats
</cfm-accu-tx-near-end-eir-loss-stats>
<cfm-accu-tx-far-end-eir-loss-stats>
  cfm-accu-tx-far-end-eir-loss-stats
</cfm-accu-tx-far-end-eir-loss-stats>
<cfm-accu-loss-near-end-cir-loss-stats>
  cfm-accu-loss-near-end-cir-loss-stats
</cfm-accu-loss-near-end-cir-loss-stats>
<cfm-accu-loss-near-end-cir-loss-stats-percent>
  cfm-accu-loss-near-end-cir-loss-stats-percent
</cfm-accu-loss-near-end-cir-loss-stats-percent>
<cfm-accu-loss-far-end-cir-loss-stats>
  cfm-accu-loss-far-end-cir-loss-stats
</cfm-accu-loss-far-end-cir-loss-stats>
<cfm-accu-loss-far-end-cir-loss-stats-percent>
  cfm-accu-loss-far-end-cir-loss-stats-percent
</cfm-accu-loss-far-end-cir-loss-stats-percent>
<cfm-accu-loss-near-end-eir-loss-stats>
  cfm-accu-loss-near-end-eir-loss-stats
</cfm-accu-loss-near-end-eir-loss-stats>
<cfm-accu-loss-near-end-eir-loss-stats-percent>
  cfm-accu-loss-near-end-eir-loss-stats-percent
</cfm-accu-loss-near-end-eir-loss-stats-percent>
<cfm-accu-loss-far-end-eir-loss-stats>
  cfm-accu-loss-far-end-eir-loss-stats
</cfm-accu-loss-far-end-eir-loss-stats>
<cfm-accu-loss-far-end-eir-loss-stats-percent>
  cfm-accu-loss-far-end-eir-loss-stats-percent
</cfm-accu-loss-far-end-eir-loss-stats-percent>
<cfm-last-measured-near-end-cir-loss-stats>
  cfm-last-measured-near-end-cir-loss-stats
</cfm-last-measured-near-end-cir-loss-stats>
<cfm-last-measured-far-end-cir-loss-stats>
  cfm-last-measured-far-end-cir-loss-stats
</cfm-last-measured-far-end-cir-loss-stats>
<cfm-last-measured-near-end-eir-loss-stats>
  cfm-last-measured-near-end-eir-loss-stats
</cfm-last-measured-near-end-eir-loss-stats>
<cfm-last-measured-far-end-eir-loss-stats>
  cfm-last-measured-far-end-eir-loss-stats

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```
      </cfm-last-measured-far-end-eir-loss-stats>
    </cfm-iter-ethlm-entry>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-iter-info>

Usage

```
<cfm-entry>
  <cfm-iter-info>
    <cfm-iterator-name>
      cfm-iterator-name
    </cfm-iterator-name>
    <cfm-iterator-identifier>
      cfm-iterator-identifier
    </cfm-iterator-identifier>
    <cfm-iterator-cycle-time>
      cfm-iterator-cycle-time
    </cfm-iterator-cycle-time>
    <cfm-iteration-period>
      cfm-iteration-period
    </cfm-iteration-period>
    <cfm-iterator-status>
      cfm-iterator-status
    </cfm-iterator-status>
    <cfm-iterator-forever-status>
      cfm-iterator-forever-status
    </cfm-iterator-forever-status>
    <cfm-iteration-current-count>
      cfm-iteration-current-count
    </cfm-iteration-current-count>
    <cfm-iteration-remaining-count>
      cfm-iteration-remaining-count
    </cfm-iteration-remaining-count>
    <cfm-iterator-counter-reset-time>
      cfm-iterator-counter-reset-time
    </cfm-iterator-counter-reset-time>
    <cfm-iterator-counter-reset-reason>
      cfm-iterator-counter-reset-reason
    </cfm-iterator-counter-reset-reason>
  </cfm-iter-info>
</cfm-entry>
```

Description

<cfm-iter-info>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-iter-info>
      <cfm-iterator-name>
```

```
      cfm-iterator-name
    </cfm-iterator-name>
    <cfm-iterator-identifier>
      cfm-iterator-identifier
    </cfm-iterator-identifier>
    <cfm-iterator-cycle-time>
      cfm-iterator-cycle-time
    </cfm-iterator-cycle-time>
    <cfm-iteration-period>
      cfm-iteration-period
    </cfm-iteration-period>
    <cfm-iterator-status>
      cfm-iterator-status
    </cfm-iterator-status>
    <cfm-iterator-forever-status>
      cfm-iterator-forever-status
    </cfm-iterator-forever-status>
    <cfm-iteration-current-count>
      cfm-iteration-current-count
    </cfm-iteration-current-count>
    <cfm-iteration-remaining-count>
      cfm-iteration-remaining-count
    </cfm-iteration-remaining-count>
    <cfm-iterator-counter-reset-time>
      cfm-iterator-counter-reset-time
    </cfm-iterator-counter-reset-time>
    <cfm-iterator-counter-reset-reason>
      cfm-iterator-counter-reset-reason
    </cfm-iterator-counter-reset-reason>
  </cfm-iter-info>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-iter-info>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-iter-info>
    <cfm-iterator-name>
      cfm-iterator-name
    </cfm-iterator-name>
    <cfm-iterator-identifier>
      cfm-iterator-identifier
    </cfm-iterator-identifier>
    <cfm-iterator-cycle-time>
      cfm-iterator-cycle-time
    </cfm-iterator-cycle-time>
    <cfm-iteration-period>
      cfm-iteration-period
    </cfm-iteration-period>
    <cfm-iterator-status>
      cfm-iterator-status
```


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```
      </cfm-iterator-status>
      <cfm-iterator-forever-status>
       cfm-iterator-forever-status
      </cfm-iterator-forever-status>
      <cfm-iteration-current-count>
       cfm-iteration-current-count
      </cfm-iteration-current-count>
      <cfm-iteration-remaining-count>
       cfm-iteration-remaining-count
      </cfm-iteration-remaining-count>
      <cfm-iterator-counter-reset-time>
       cfm-iterator-counter-reset-time
      </cfm-iterator-counter-reset-time>
      <cfm-iterator-counter-reset-reason>
       cfm-iterator-counter-reset-reason
      </cfm-iterator-counter-reset-reason>
     </cfm-iter-info>
    </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-iter-info>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-iter-info>
   <cfm-iterator-name>
    cfm-iterator-name
   </cfm-iterator-name>
   <cfm-iterator-identifier>
    cfm-iterator-identifier
   </cfm-iterator-identifier>
   <cfm-iterator-cycle-time>
    cfm-iterator-cycle-time
   </cfm-iterator-cycle-time>
   <cfm-iteration-period>
    cfm-iteration-period
   </cfm-iteration-period>
   <cfm-iterator-status>
    cfm-iterator-status
   </cfm-iterator-status>
   <cfm-iterator-forever-status>
    cfm-iterator-forever-status
   </cfm-iterator-forever-status>
   <cfm-iteration-current-count>
    cfm-iteration-current-count
   </cfm-iteration-current-count>
   <cfm-iteration-remaining-count>
    cfm-iteration-remaining-count
   </cfm-iteration-remaining-count>
   <cfm-iterator-counter-reset-time>
    cfm-iterator-counter-reset-time
   </cfm-iterator-counter-reset-time>
```

```
      <cfm-iterator-counter-reset-reason>
        cfm-iterator-counter-reset-reason
      </cfm-iterator-counter-reset-reason>
    </cfm-iter-info>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-iter-info>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-iter-info>
      <cfm-iterator-name>
        cfm-iterator-name
      </cfm-iterator-name>
      <cfm-iterator-identifier>
        cfm-iterator-identifier
      </cfm-iterator-identifier>
      <cfm-iterator-cycle-time>
        cfm-iterator-cycle-time
      </cfm-iterator-cycle-time>
      <cfm-iteration-period>
        cfm-iteration-period
      </cfm-iteration-period>
      <cfm-iterator-status>
        cfm-iterator-status
      </cfm-iterator-status>
      <cfm-iterator-forever-status>
        cfm-iterator-forever-status
      </cfm-iterator-forever-status>
      <cfm-iteration-current-count>
        cfm-iteration-current-count
      </cfm-iteration-current-count>
      <cfm-iteration-remaining-count>
        cfm-iteration-remaining-count
      </cfm-iteration-remaining-count>
      <cfm-iterator-counter-reset-time>
        cfm-iterator-counter-reset-time
      </cfm-iterator-counter-reset-time>
      <cfm-iterator-counter-reset-reason>
        cfm-iterator-counter-reset-reason
      </cfm-iterator-counter-reset-reason>
    </cfm-iter-info>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

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<cfm-iter-info>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-iter-info>
      <cfm-iterator-name>
        cfm-iterator-name
      </cfm-iterator-name>
      <cfm-iterator-identifier>
        cfm-iterator-identifier
      </cfm-iterator-identifier>
      <cfm-iterator-cycle-time>
        cfm-iterator-cycle-time
      </cfm-iterator-cycle-time>
      <cfm-iteration-period>
        cfm-iteration-period
      </cfm-iteration-period>
      <cfm-iterator-status>
        cfm-iterator-status
      </cfm-iterator-status>
      <cfm-iterator-forever-status>
        cfm-iterator-forever-status
      </cfm-iterator-forever-status>
      <cfm-iteration-current-count>
        cfm-iteration-current-count
      </cfm-iteration-current-count>
      <cfm-iteration-remaining-count>
        cfm-iteration-remaining-count
      </cfm-iteration-remaining-count>
      <cfm-iterator-counter-reset-time>
        cfm-iterator-counter-reset-time
      </cfm-iterator-counter-reset-time>
      <cfm-iterator-counter-reset-reason>
        cfm-iterator-counter-reset-reason
      </cfm-iterator-counter-reset-reason>
    </cfm-iter-info>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-iter-info>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-iter-info>
      <cfm-iterator-name>
        cfm-iterator-name
      </cfm-iterator-name>
      <cfm-iterator-identifier>
        cfm-iterator-identifier
      </cfm-iterator-identifier>
```

```
        <cfm-iterator-cycle-time>
          cfm-iterator-cycle-time
        </cfm-iterator-cycle-time>
        <cfm-iteration-period>
          cfm-iteration-period
        </cfm-iteration-period>
        <cfm-iterator-status>
          cfm-iterator-status
        </cfm-iterator-status>
        <cfm-iterator-forever-status>
          cfm-iterator-forever-status
        </cfm-iterator-forever-status>
        <cfm-iteration-current-count>
          cfm-iteration-current-count
        </cfm-iteration-current-count>
        <cfm-iteration-remaining-count>
          cfm-iteration-remaining-count
        </cfm-iteration-remaining-count>
        <cfm-iterator-counter-reset-time>
          cfm-iterator-counter-reset-time
        </cfm-iterator-counter-reset-time>
        <cfm-iterator-counter-reset-reason>
          cfm-iterator-counter-reset-reason
        </cfm-iterator-counter-reset-reason>
      </cfm-iter-info>
    </cfm-entry>
  </cfm-iterator-statistics>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-entry>
  <cfm-iter-mep-summary>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-association-name>
      cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-local-mep-identifier>
      cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-remote-mep-identifier>
      cfm-remote-mep-identifier
    </cfm-remote-mep-identifier>
    <cfm-remote-mep-mac-address>
      cfm-remote-mep-mac-address
    </cfm-remote-mep-mac-address>
    <cfm-iterator-error-status>
      cfm-iterator-error-status
```


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```
    </cfm-iterator-error-status>
   </cfm-iter-mep-summary>
</cfm-entry>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-iter-mep-summary>
   <cfm-level>
    cfm-level
   </cfm-level>
   <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
   </cfm-maintenance-domain-name>
   <cfm-maintenance-association-name>
    cfm-maintenance-association-name
   </cfm-maintenance-association-name>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-remote-mep-identifier>
    cfm-remote-mep-identifier
   </cfm-remote-mep-identifier>
   <cfm-remote-mep-mac-address>
    cfm-remote-mep-mac-address
   </cfm-remote-mep-mac-address>
   <cfm-iterator-error-status>
    cfm-iterator-error-status
   </cfm-iterator-error-status>
  </cfm-iter-mep-summary>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-iter-mep-summary>
   <cfm-level>
    cfm-level
   </cfm-level>
   <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
   </cfm-maintenance-domain-name>
   <cfm-maintenance-association-name>
    cfm-maintenance-association-name
   </cfm-maintenance-association-name>
```

```
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
      <cfm-iterator-error-status>
        cfm-iterator-error-status
      </cfm-iterator-error-status>
    </cfm-iter-mep-summary>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-iter-mep-summary>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
      <cfm-iterator-error-status>
        cfm-iterator-error-status
      </cfm-iterator-error-status>
    </cfm-iter-mep-summary>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

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<cfm-iter-mep-summary>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-iter-mep-summary>
   <cfm-level>
    cfm-level
   </cfm-level>
   <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
   </cfm-maintenance-domain-name>
   <cfm-maintenance-association-name>
    cfm-maintenance-association-name
   </cfm-maintenance-association-name>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-remote-mep-identifier>
    cfm-remote-mep-identifier
   </cfm-remote-mep-identifier>
   <cfm-remote-mep-mac-address>
    cfm-remote-mep-mac-address
   </cfm-remote-mep-mac-address>
   <cfm-iterator-error-status>
    cfm-iterator-error-status
   </cfm-iterator-error-status>
  </cfm-iter-mep-summary>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-iter-mep-summary>
   <cfm-level>
    cfm-level
   </cfm-level>
   <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
   </cfm-maintenance-domain-name>
   <cfm-maintenance-association-name>
    cfm-maintenance-association-name
   </cfm-maintenance-association-name>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-remote-mep-identifier>
    cfm-remote-mep-identifier
   </cfm-remote-mep-identifier>
```

```
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
      <cfm-iterator-error-status>
        cfm-iterator-error-status
      </cfm-iterator-error-status>
    </cfm-iter-mep-summary>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-iter-mep-summary>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-iter-mep-summary>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
      <cfm-iterator-error-status>
        cfm-iterator-error-status
      </cfm-iterator-error-status>
    </cfm-iter-mep-summary>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-iterator-statistics>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>....</cfm-entry>
</cfm-iterator-statistics>
```

Description Information about iterator statistics on a CFM session

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<cfm-linktrace-path-database>

Usage

```
<cfm-linktrace-path-database>
  <cfm-ltm-request-snapshot>....</cfm-ltm-request-snapshot>
  <cfm-ltr-reply-entry>....</cfm-ltr-reply-entry>
</cfm-linktrace-path-database>
```

Description

<cfm-local-mep>

Usage

```
<cfm-entry>
  <cfm-local-mep>
    <cfm-local-mep-identifier>
      cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-local-mep-direction>
      cfm-local-mep-direction
    </cfm-local-mep-direction>
    <cfm-local-mep-mac-address>
      cfm-local-mep-mac-address
    </cfm-local-mep-mac-address>
    <cfm-local-mep-auto-discovery>
      cfm-local-mep-auto-discovery
    </cfm-local-mep-auto-discovery>
    <cfm-local-mep-priority>
      cfm-local-mep-priority
    </cfm-local-mep-priority>
    <cfm-local-mep-port-status-tlv>
      cfm-local-mep-port-status-tlv
    </cfm-local-mep-port-status-tlv>
    <cfm-local-mep-interface-status-tlv>
      cfm-local-mep-interface-status-tlv
    </cfm-local-mep-interface-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

    <cfm-local-mep-status>
      cfm-local-mep-status
    </cfm-local-mep-status>
  </cfm-local-mep>
</cfm-entry>
```

Description

<cfm-local-mep>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-local-mep>
```

```
                <cfm-local-mep-identifier>
                  cfm-local-mep-identifier
                </cfm-local-mep-identifier>
                <cfm-local-mep-direction>
                  cfm-local-mep-direction
                </cfm-local-mep-direction>
                <cfm-local-mep-mac-address>
                  cfm-local-mep-mac-address
                </cfm-local-mep-mac-address>
                <cfm-local-mep-auto-discovery>
                  cfm-local-mep-auto-discovery
                </cfm-local-mep-auto-discovery>
                <cfm-local-mep-priority>
                  cfm-local-mep-priority
                </cfm-local-mep-priority>
                <cfm-local-mep-port-status-tlv>
                  cfm-local-mep-port-status-tlv
                </cfm-local-mep-port-status-tlv>
                <cfm-local-mep-interface-status-tlv>
                  cfm-local-mep-interface-status-tlv
                </cfm-local-mep-interface-status-tlv>

            <cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

                <cfm-local-mep-status>
                  cfm-local-mep-status
                </cfm-local-mep-status>
              </cfm-local-mep>
            </cfm-entry>
          </cfm-interface>
```

Description

<cfm-local-mep>

Usage

```
          <cfm-mep-database>
            <cfm-entry>
              <cfm-local-mep>
                <cfm-local-mep-identifier>
                  cfm-local-mep-identifier
                </cfm-local-mep-identifier>
                <cfm-local-mep-direction>
                  cfm-local-mep-direction
                </cfm-local-mep-direction>
                <cfm-local-mep-mac-address>
                  cfm-local-mep-mac-address
                </cfm-local-mep-mac-address>
                <cfm-local-mep-auto-discovery>
                  cfm-local-mep-auto-discovery
                </cfm-local-mep-auto-discovery>
                <cfm-local-mep-priority>
                  cfm-local-mep-priority
                </cfm-local-mep-priority>
                <cfm-local-mep-port-status-tlv>
```


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```
            cfm-local-mep-port-status-tlv
           </cfm-local-mep-port-status-tlv>
           <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
           </cfm-local-mep-interface-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

           <cfm-local-mep-status>
            cfm-local-mep-status
           </cfm-local-mep-status>
          </cfm-local-mep>
         </cfm-entry>
        </cfm-mep-database>
```

Description

<cfm-local-mep>

Usage

```
        <cfm-mep-statistics>
         <cfm-entry>
          <cfm-local-mep>
           <cfm-local-mep-identifier>
            cfm-local-mep-identifier
           </cfm-local-mep-identifier>
           <cfm-local-mep-direction>
            cfm-local-mep-direction
           </cfm-local-mep-direction>
           <cfm-local-mep-mac-address>
            cfm-local-mep-mac-address
           </cfm-local-mep-mac-address>
           <cfm-local-mep-auto-discovery>
            cfm-local-mep-auto-discovery
           </cfm-local-mep-auto-discovery>
           <cfm-local-mep-priority>
            cfm-local-mep-priority
           </cfm-local-mep-priority>
           <cfm-local-mep-port-status-tlv>
            cfm-local-mep-port-status-tlv
           </cfm-local-mep-port-status-tlv>
           <cfm-local-mep-interface-status-tlv>
            cfm-local-mep-interface-status-tlv
           </cfm-local-mep-interface-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

           <cfm-local-mep-status>
            cfm-local-mep-status
           </cfm-local-mep-status>
          </cfm-local-mep>
         </cfm-entry>
        </cfm-mep-statistics>
```

Description

<cfm-local-mep>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-local-mep>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-local-mep-direction>
    cfm-local-mep-direction
   </cfm-local-mep-direction>
   <cfm-local-mep-mac-address>
    cfm-local-mep-mac-address
   </cfm-local-mep-mac-address>
   <cfm-local-mep-auto-discovery>
    cfm-local-mep-auto-discovery
   </cfm-local-mep-auto-discovery>
   <cfm-local-mep-priority>
    cfm-local-mep-priority
   </cfm-local-mep-priority>
   <cfm-local-mep-port-status-tlv>
    cfm-local-mep-port-status-tlv
   </cfm-local-mep-port-status-tlv>
   <cfm-local-mep-interface-status-tlv>
    cfm-local-mep-interface-status-tlv
   </cfm-local-mep-interface-status-tlv>

<cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

   <cfm-local-mep-status>
    cfm-local-mep-status
   </cfm-local-mep-status>
  </cfm-local-mep>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-local-mep>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-local-mep>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-local-mep-direction>
    cfm-local-mep-direction
   </cfm-local-mep-direction>
   <cfm-local-mep-mac-address>
    cfm-local-mep-mac-address
```


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```
                    </cfm-local-mep-mac-address>
                    <cfm-local-mep-auto-discovery>
                      cfm-local-mep-auto-discovery
                    </cfm-local-mep-auto-discovery>
                    <cfm-local-mep-priority>
                      cfm-local-mep-priority
                    </cfm-local-mep-priority>
                    <cfm-local-mep-port-status-tlv>
                      cfm-local-mep-port-status-tlv
                    </cfm-local-mep-port-status-tlv>
                    <cfm-local-mep-interface-status-tlv>
                      cfm-local-mep-interface-status-tlv
                    </cfm-local-mep-interface-status-tlv>

                <cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>

                    <cfm-local-mep-status>
                      cfm-local-mep-status
                    </cfm-local-mep-status>
                  </cfm-local-mep>
                </cfm-entry>
              </cfm-loss-statistics>
```

Description

<cfm-local-mep>

Usage

```
              <cfm-iterator-statistics>
                <cfm-entry>
                  <cfm-local-mep>
                    <cfm-local-mep-identifier>
                      cfm-local-mep-identifier
                    </cfm-local-mep-identifier>
                    <cfm-local-mep-direction>
                      cfm-local-mep-direction
                    </cfm-local-mep-direction>
                    <cfm-local-mep-mac-address>
                      cfm-local-mep-mac-address
                    </cfm-local-mep-mac-address>
                    <cfm-local-mep-auto-discovery>
                      cfm-local-mep-auto-discovery
                    </cfm-local-mep-auto-discovery>
                    <cfm-local-mep-priority>
                      cfm-local-mep-priority
                    </cfm-local-mep-priority>
                    <cfm-local-mep-port-status-tlv>
                      cfm-local-mep-port-status-tlv
                    </cfm-local-mep-port-status-tlv>
                    <cfm-local-mep-interface-status-tlv>
                      cfm-local-mep-interface-status-tlv
                    </cfm-local-mep-interface-status-tlv>

                <cfm-local-mep-connection-protection-tlv>....</cfm-local-mep-connection-protection-tlv>
```

```
        <cfm-local-mep-status>
          cfm-local-mep-status
        </cfm-local-mep-status>
      </cfm-local-mep>
    </cfm-entry>
  </cfm-iterator-statistics>
```

Description

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-local-mep-connection-protection-tlv>
  <cfm-connection-protection-tlv-prefer-me>
    cfm-connection-protection-tlv-prefer-me
  </cfm-connection-protection-tlv-prefer-me>
  <cfm-connection-protection-tlv-protection-in-use>
    cfm-connection-protection-tlv-protection-in-use
  </cfm-connection-protection-tlv-protection-in-use>
  <cfm-connection-protection-tlv-frr-flag>
    cfm-connection-protection-tlv-frr-flag
  </cfm-connection-protection-tlv-frr-flag>
  <cfm-connection-protection-tlv-status>
    cfm-connection-protection-tlv-status
  </cfm-connection-protection-tlv-status>
</cfm-local-mep-connection-protection-tlv>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-local-mep-tlv-info>
        <cfm-local-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
          <cfm-connection-protection-tlv-status>
            cfm-connection-protection-tlv-status
          </cfm-connection-protection-tlv-status>
        </cfm-local-mep-connection-protection-tlv>
      </cfm-interface-local-mep-tlv-info>
    </cfm-interface-session>
  </cfm-interface-sessions>
```


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```
</cfm-entry>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-entry>
  <cfm-local-mep>
    <cfm-local-mep-connection-protection-tlv>
      <cfm-connection-protection-tlv-prefer-me>
        cfm-connection-protection-tlv-prefer-me
      </cfm-connection-protection-tlv-prefer-me>
      <cfm-connection-protection-tlv-protection-in-use>
        cfm-connection-protection-tlv-protection-in-use
      </cfm-connection-protection-tlv-protection-in-use>
      <cfm-connection-protection-tlv-frr-flag>
        cfm-connection-protection-tlv-frr-flag
      </cfm-connection-protection-tlv-frr-flag>
      <cfm-connection-protection-tlv-status>
        cfm-connection-protection-tlv-status
      </cfm-connection-protection-tlv-status>
    </cfm-local-mep-connection-protection-tlv>
  </cfm-local-mep>
</cfm-entry>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-connection-protection-tlv>
            <cfm-connection-protection-tlv-prefer-me>
              cfm-connection-protection-tlv-prefer-me
            </cfm-connection-protection-tlv-prefer-me>
            <cfm-connection-protection-tlv-protection-in-use>
              cfm-connection-protection-tlv-protection-in-use
            </cfm-connection-protection-tlv-protection-in-use>
            <cfm-connection-protection-tlv-frr-flag>
              cfm-connection-protection-tlv-frr-flag
            </cfm-connection-protection-tlv-frr-flag>
            <cfm-connection-protection-tlv-status>
              cfm-connection-protection-tlv-status
            </cfm-connection-protection-tlv-status>
          </cfm-local-mep-connection-protection-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
```

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```
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-interface>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-local-mep>
      <cfm-local-mep-connection-protection-tlv>
        <cfm-connection-protection-tlv-prefer-me>
          cfm-connection-protection-tlv-prefer-me
        </cfm-connection-protection-tlv-prefer-me>
        <cfm-connection-protection-tlv-protection-in-use>
          cfm-connection-protection-tlv-protection-in-use
        </cfm-connection-protection-tlv-protection-in-use>
        <cfm-connection-protection-tlv-frr-flag>
          cfm-connection-protection-tlv-frr-flag
        </cfm-connection-protection-tlv-frr-flag>
        <cfm-connection-protection-tlv-status>
          cfm-connection-protection-tlv-status
        </cfm-connection-protection-tlv-status>
      </cfm-local-mep-connection-protection-tlv>
    </cfm-local-mep>
  </cfm-entry>
</cfm-interface>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-connection-protection-tlv>
            <cfm-connection-protection-tlv-prefer-me>
              cfm-connection-protection-tlv-prefer-me
            </cfm-connection-protection-tlv-prefer-me>
            <cfm-connection-protection-tlv-protection-in-use>
              cfm-connection-protection-tlv-protection-in-use
            </cfm-connection-protection-tlv-protection-in-use>
            <cfm-connection-protection-tlv-frr-flag>
              cfm-connection-protection-tlv-frr-flag
            </cfm-connection-protection-tlv-frr-flag>
            <cfm-connection-protection-tlv-status>
              cfm-connection-protection-tlv-status
```


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```
            </cfm-connection-protection-tlv-status>
           </cfm-local-mep-connection-protection-tlv>
          </cfm-interface-local-mep-tlv-info>
         </cfm-interface-session>
        </cfm-interface-sessions>
       </cfm-entry>
      </cfm-mep-database>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-local-mep>
   <cfm-local-mep-connection-protection-tlv>
    <cfm-connection-protection-tlv-prefer-me>
     cfm-connection-protection-tlv-prefer-me
    </cfm-connection-protection-tlv-prefer-me>
    <cfm-connection-protection-tlv-protection-in-use>
     cfm-connection-protection-tlv-protection-in-use
    </cfm-connection-protection-tlv-protection-in-use>
    <cfm-connection-protection-tlv-frr-flag>
     cfm-connection-protection-tlv-frr-flag
    </cfm-connection-protection-tlv-frr-flag>
    <cfm-connection-protection-tlv-status>
     cfm-connection-protection-tlv-status
    </cfm-connection-protection-tlv-status>
   </cfm-local-mep-connection-protection-tlv>
  </cfm-local-mep>
 </cfm-entry>
</cfm-mep-database>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-connection-protection-tlv>
      <cfm-connection-protection-tlv-prefer-me>
       cfm-connection-protection-tlv-prefer-me
      </cfm-connection-protection-tlv-prefer-me>
      <cfm-connection-protection-tlv-protection-in-use>
       cfm-connection-protection-tlv-protection-in-use
      </cfm-connection-protection-tlv-protection-in-use>
      <cfm-connection-protection-tlv-frr-flag>
```

```
                cfm-connection-protection-tlv-frr-flag
               </cfm-connection-protection-tlv-frr-flag>
               <cfm-connection-protection-tlv-status>
                cfm-connection-protection-tlv-status
               </cfm-connection-protection-tlv-status>
              </cfm-local-mep-connection-protection-tlv>
             </cfm-interface-local-mep-tlv-info>
            </cfm-interface-session>
           </cfm-interface-sessions>
          </cfm-entry>
        </cfm-mep-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-local-mep>
   <cfm-local-mep-connection-protection-tlv>
    <cfm-connection-protection-tlv-prefer-me>
     cfm-connection-protection-tlv-prefer-me
    </cfm-connection-protection-tlv-prefer-me>
    <cfm-connection-protection-tlv-protection-in-use>
     cfm-connection-protection-tlv-protection-in-use
    </cfm-connection-protection-tlv-protection-in-use>
    <cfm-connection-protection-tlv-frr-flag>
     cfm-connection-protection-tlv-frr-flag
    </cfm-connection-protection-tlv-frr-flag>
    <cfm-connection-protection-tlv-status>
     cfm-connection-protection-tlv-status
    </cfm-connection-protection-tlv-status>
   </cfm-local-mep-connection-protection-tlv>
  </cfm-local-mep>
 </cfm-entry>
</cfm-mep-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-connection-protection-tlv>
      <cfm-connection-protection-tlv-prefer-me>
       cfm-connection-protection-tlv-prefer-me
      </cfm-connection-protection-tlv-prefer-me>
```


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```
            <cfm-connection-protection-tlv-protection-in-use>
              cfm-connection-protection-tlv-protection-in-use
            </cfm-connection-protection-tlv-protection-in-use>
            <cfm-connection-protection-tlv-frr-flag>
              cfm-connection-protection-tlv-frr-flag
            </cfm-connection-protection-tlv-frr-flag>
            <cfm-connection-protection-tlv-status>
              cfm-connection-protection-tlv-status
            </cfm-connection-protection-tlv-status>
          </cfm-local-mep-connection-protection-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-local-mep>
      <cfm-local-mep-connection-protection-tlv>
        <cfm-connection-protection-tlv-prefer-me>
          cfm-connection-protection-tlv-prefer-me
        </cfm-connection-protection-tlv-prefer-me>
        <cfm-connection-protection-tlv-protection-in-use>
          cfm-connection-protection-tlv-protection-in-use
        </cfm-connection-protection-tlv-protection-in-use>
        <cfm-connection-protection-tlv-frr-flag>
          cfm-connection-protection-tlv-frr-flag
        </cfm-connection-protection-tlv-frr-flag>
        <cfm-connection-protection-tlv-status>
          cfm-connection-protection-tlv-status
        </cfm-connection-protection-tlv-status>
      </cfm-local-mep-connection-protection-tlv>
    </cfm-local-mep>
  </cfm-entry>
</cfm-delay-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
```

```
            <cfm-local-mep-connection-protection-tlv>
              <cfm-connection-protection-tlv-prefer-me>
                cfm-connection-protection-tlv-prefer-me
              </cfm-connection-protection-tlv-prefer-me>
              <cfm-connection-protection-tlv-protection-in-use>
                cfm-connection-protection-tlv-protection-in-use
              </cfm-connection-protection-tlv-protection-in-use>
              <cfm-connection-protection-tlv-frr-flag>
                cfm-connection-protection-tlv-frr-flag
              </cfm-connection-protection-tlv-frr-flag>
              <cfm-connection-protection-tlv-status>
                cfm-connection-protection-tlv-status
              </cfm-connection-protection-tlv-status>
            </cfm-local-mep-connection-protection-tlv>
          </cfm-interface-local-mep-tlv-info>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
  </cfm-loss-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-local-mep>
      <cfm-local-mep-connection-protection-tlv>
        <cfm-connection-protection-tlv-prefer-me>
          cfm-connection-protection-tlv-prefer-me
        </cfm-connection-protection-tlv-prefer-me>
        <cfm-connection-protection-tlv-protection-in-use>
          cfm-connection-protection-tlv-protection-in-use
        </cfm-connection-protection-tlv-protection-in-use>
        <cfm-connection-protection-tlv-frr-flag>
          cfm-connection-protection-tlv-frr-flag
        </cfm-connection-protection-tlv-frr-flag>
        <cfm-connection-protection-tlv-status>
          cfm-connection-protection-tlv-status
        </cfm-connection-protection-tlv-status>
      </cfm-local-mep-connection-protection-tlv>
    </cfm-local-mep>
  </cfm-entry>
</cfm-loss-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-iterator-statistics>
```


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```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-local-mep-tlv-info>
        <cfm-local-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
          <cfm-connection-protection-tlv-status>
            cfm-connection-protection-tlv-status
          </cfm-connection-protection-tlv-status>
        </cfm-local-mep-connection-protection-tlv>
      </cfm-interface-local-mep-tlv-info>
    </cfm-interface-session>
  </cfm-interface-sessions>
</cfm-entry>
</cfm-iterator-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

<cfm-local-mep-connection-protection-tlv>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-local-mep>
      <cfm-local-mep-connection-protection-tlv>
        <cfm-connection-protection-tlv-prefer-me>
          cfm-connection-protection-tlv-prefer-me
        </cfm-connection-protection-tlv-prefer-me>
        <cfm-connection-protection-tlv-protection-in-use>
          cfm-connection-protection-tlv-protection-in-use
        </cfm-connection-protection-tlv-protection-in-use>
        <cfm-connection-protection-tlv-frr-flag>
          cfm-connection-protection-tlv-frr-flag
        </cfm-connection-protection-tlv-frr-flag>
        <cfm-connection-protection-tlv-status>
          cfm-connection-protection-tlv-status
        </cfm-connection-protection-tlv-status>
      </cfm-local-mep-connection-protection-tlv>
    </cfm-local-mep>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description Connection Protection TLV information in the last transmitted CCM from local MEP

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<cfm-local-mep-defects>

Usage

```
<cfm-entry>
  <cfm-local-mep-defects>
    <cfm-defect-remote-mep-no-ccm>
      cfm-defect-remote-mep-no-ccm
    </cfm-defect-remote-mep-no-ccm>
    <cfm-defect-error-ccm>
      cfm-defect-error-ccm
    </cfm-defect-error-ccm>
    <cfm-defect-cross-connect-ccm>
      cfm-defect-cross-connect-ccm
    </cfm-defect-cross-connect-ccm>
    <cfm-defect-rdi-in-some-mep>
      cfm-defect-rdi-in-some-mep
    </cfm-defect-rdi-in-some-mep>
    <cfm-defect-mac-status>
      cfm-defect-mac-status
    </cfm-defect-mac-status>
  </cfm-local-mep-defects>
</cfm-entry>
```

Description

<cfm-local-mep-defects>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-local-mep-defects>
      <cfm-defect-remote-mep-no-ccm>
        cfm-defect-remote-mep-no-ccm
      </cfm-defect-remote-mep-no-ccm>
      <cfm-defect-error-ccm>
        cfm-defect-error-ccm
      </cfm-defect-error-ccm>
      <cfm-defect-cross-connect-ccm>
        cfm-defect-cross-connect-ccm
      </cfm-defect-cross-connect-ccm>
      <cfm-defect-rdi-in-some-mep>
        cfm-defect-rdi-in-some-mep
      </cfm-defect-rdi-in-some-mep>
      <cfm-defect-mac-status>
        cfm-defect-mac-status
      </cfm-defect-mac-status>
    </cfm-local-mep-defects>
  </cfm-entry>
</cfm-interface>
```

Description

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<cfm-local-mep-defects>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-local-mep-defects>
   <cfm-defect-remote-mep-no-ccm>
    cfm-defect-remote-mep-no-ccm
   </cfm-defect-remote-mep-no-ccm>
   <cfm-defect-error-ccm>
    cfm-defect-error-ccm
   </cfm-defect-error-ccm>
   <cfm-defect-cross-connect-ccm>
    cfm-defect-cross-connect-ccm
   </cfm-defect-cross-connect-ccm>
   <cfm-defect-rdi-in-some-mep>
    cfm-defect-rdi-in-some-mep
   </cfm-defect-rdi-in-some-mep>
   <cfm-defect-mac-status>
    cfm-defect-mac-status
   </cfm-defect-mac-status>
  </cfm-local-mep-defects>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-local-mep-defects>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-local-mep-defects>
   <cfm-defect-remote-mep-no-ccm>
    cfm-defect-remote-mep-no-ccm
   </cfm-defect-remote-mep-no-ccm>
   <cfm-defect-error-ccm>
    cfm-defect-error-ccm
   </cfm-defect-error-ccm>
   <cfm-defect-cross-connect-ccm>
    cfm-defect-cross-connect-ccm
   </cfm-defect-cross-connect-ccm>
   <cfm-defect-rdi-in-some-mep>
    cfm-defect-rdi-in-some-mep
   </cfm-defect-rdi-in-some-mep>
   <cfm-defect-mac-status>
    cfm-defect-mac-status
   </cfm-defect-mac-status>
  </cfm-local-mep-defects>
 </cfm-entry>
</cfm-mep-statistics>
```

Description

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<cfm-local-mep-defects>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-local-mep-defects>
   <cfm-defect-remote-mep-no-ccm>
    cfm-defect-remote-mep-no-ccm
   </cfm-defect-remote-mep-no-ccm>
   <cfm-defect-error-ccm>
    cfm-defect-error-ccm
   </cfm-defect-error-ccm>
   <cfm-defect-cross-connect-ccm>
    cfm-defect-cross-connect-ccm
   </cfm-defect-cross-connect-ccm>
   <cfm-defect-rdi-in-some-mep>
    cfm-defect-rdi-in-some-mep
   </cfm-defect-rdi-in-some-mep>
   <cfm-defect-mac-status>
    cfm-defect-mac-status
   </cfm-defect-mac-status>
  </cfm-local-mep-defects>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-local-mep-defects>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-local-mep-defects>
   <cfm-defect-remote-mep-no-ccm>
    cfm-defect-remote-mep-no-ccm
   </cfm-defect-remote-mep-no-ccm>
   <cfm-defect-error-ccm>
    cfm-defect-error-ccm
   </cfm-defect-error-ccm>
   <cfm-defect-cross-connect-ccm>
    cfm-defect-cross-connect-ccm
   </cfm-defect-cross-connect-ccm>
   <cfm-defect-rdi-in-some-mep>
    cfm-defect-rdi-in-some-mep
   </cfm-defect-rdi-in-some-mep>
   <cfm-defect-mac-status>
    cfm-defect-mac-status
   </cfm-defect-mac-status>
  </cfm-local-mep-defects>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

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<cfm-local-mep-defects>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-local-mep-defects>
      <cfm-defect-remote-mep-no-ccm>
        cfm-defect-remote-mep-no-ccm
      </cfm-defect-remote-mep-no-ccm>
      <cfm-defect-error-ccm>
        cfm-defect-error-ccm
      </cfm-defect-error-ccm>
      <cfm-defect-cross-connect-ccm>
        cfm-defect-cross-connect-ccm
      </cfm-defect-cross-connect-ccm>
      <cfm-defect-rdi-in-some-mep>
        cfm-defect-rdi-in-some-mep
      </cfm-defect-rdi-in-some-mep>
      <cfm-defect-mac-status>
        cfm-defect-mac-status
      </cfm-defect-mac-status>
    </cfm-local-mep-defects>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-local-mep-loss-threshold-tlv>
  <cfm-loss-threshold-tlv-value>
    cfm-loss-threshold-tlv-value
  </cfm-loss-threshold-tlv-value>
  <cfm-loss-threshold-tlv-flag>
    cfm-loss-threshold-tlv-flag
  </cfm-loss-threshold-tlv-flag>
</cfm-local-mep-loss-threshold-tlv>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-local-mep-tlv-info>
        <cfm-local-mep-loss-threshold-tlv>
          <cfm-loss-threshold-tlv-value>
            cfm-loss-threshold-tlv-value
          </cfm-loss-threshold-tlv-value>
          <cfm-loss-threshold-tlv-flag>
```

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```
            cfm-loss-threshold-tlv-flag
           </cfm-loss-threshold-tlv-flag>
          </cfm-local-mep-loss-threshold-tlv>
         </cfm-interface-local-mep-tlv-info>
        </cfm-interface-session>
       </cfm-interface-sessions>
      </cfm-entry>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-loss-threshold-tlv>
      <cfm-loss-threshold-tlv-value>
       cfm-loss-threshold-tlv-value
      </cfm-loss-threshold-tlv-value>
      <cfm-loss-threshold-tlv-flag>
       cfm-loss-threshold-tlv-flag
      </cfm-loss-threshold-tlv-flag>
     </cfm-local-mep-loss-threshold-tlv>
    </cfm-interface-local-mep-tlv-info>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-interface>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-local-mep-tlv-info>
     <cfm-local-mep-loss-threshold-tlv>
      <cfm-loss-threshold-tlv-value>
       cfm-loss-threshold-tlv-value
      </cfm-loss-threshold-tlv-value>
      <cfm-loss-threshold-tlv-flag>
       cfm-loss-threshold-tlv-flag
      </cfm-loss-threshold-tlv-flag>
     </cfm-local-mep-loss-threshold-tlv>
    </cfm-interface-local-mep-tlv-info>
   </cfm-interface-session>
```


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```
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-loss-threshold-tlv>
            <cfm-loss-threshold-tlv-value>
              cfm-loss-threshold-tlv-value
            </cfm-loss-threshold-tlv-value>
            <cfm-loss-threshold-tlv-flag>
              cfm-loss-threshold-tlv-flag
            </cfm-loss-threshold-tlv-flag>
          </cfm-local-mep-loss-threshold-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-statistics>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-loss-threshold-tlv>
            <cfm-loss-threshold-tlv-value>
              cfm-loss-threshold-tlv-value
            </cfm-loss-threshold-tlv-value>
            <cfm-loss-threshold-tlv-flag>
              cfm-loss-threshold-tlv-flag
            </cfm-loss-threshold-tlv-flag>
          </cfm-local-mep-loss-threshold-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

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Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-loss-threshold-tlv>
            <cfm-loss-threshold-tlv-value>
              cfm-loss-threshold-tlv-value
            </cfm-loss-threshold-tlv-value>
            <cfm-loss-threshold-tlv-flag>
              cfm-loss-threshold-tlv-flag
            </cfm-loss-threshold-tlv-flag>
          </cfm-local-mep-loss-threshold-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

<cfm-local-mep-loss-threshold-tlv>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-local-mep-tlv-info>
          <cfm-local-mep-loss-threshold-tlv>
            <cfm-loss-threshold-tlv-value>
              cfm-loss-threshold-tlv-value
            </cfm-loss-threshold-tlv-value>
            <cfm-loss-threshold-tlv-flag>
              cfm-loss-threshold-tlv-flag
            </cfm-loss-threshold-tlv-flag>
          </cfm-local-mep-loss-threshold-tlv>
        </cfm-interface-local-mep-tlv-info>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description Loss Threshold TLV information in the last transmitted CCM from Local MEP

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<cfm-local-mep-packet-statistics>

Usage

```
<cfm-entry>
  <cfm-local-mep-packet-statistics>
    <cfm-total-ccm-sent>
      cfm-total-ccm-sent
    </cfm-total-ccm-sent>
    <cfm-out-of-sequence-ccm-received>
      cfm-out-of-sequence-ccm-received
    </cfm-out-of-sequence-ccm-received>
    <cfm-lbm-sent>
      cfm-lbm-sent
    </cfm-lbm-sent>
    <cfm-lbr-sent>
      cfm-lbr-sent
    </cfm-lbr-sent>
    <cfm-lbr-received>
      cfm-lbr-received
    </cfm-lbr-received>
    <cfm-lbr-received-out-of-order>
      cfm-lbr-received-out-of-order
    </cfm-lbr-received-out-of-order>
    <cfm-lbr-bad-msdu>
      cfm-lbr-bad-msdu
    </cfm-lbr-bad-msdu>
    <cfm-total-ltm-sent>
      cfm-total-ltm-sent
    </cfm-total-ltm-sent>
    <cfm-total-ltm-received>
      cfm-total-ltm-received
    </cfm-total-ltm-received>
    <cfm-total-ltr-sent>
      cfm-total-ltr-sent
    </cfm-total-ltr-sent>
    <cfm-total-ltr-received>
      cfm-total-ltr-received
    </cfm-total-ltr-received>
    <cfm-next-ltm-sequence-number>
      cfm-next-ltm-sequence-number
    </cfm-next-ltm-sequence-number>
    <cfm-onedm-sent>
      cfm-onedm-sent
    </cfm-onedm-sent>
    <cfm-onedm-received>
      cfm-onedm-received
    </cfm-onedm-received>
    <cfm-onedm-received-invalid>
      cfm-onedm-received-invalid
    </cfm-onedm-received-invalid>
    <cfm-onedm-received-outofsync>
      cfm-onedm-received-outofsync
    </cfm-onedm-received-outofsync>
    <cfm-dmm-sent>
      cfm-dmm-sent
```

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```
    </cfm-dmm-sent>
    <cfm-dmm-received>
      cfm-dmm-received
    </cfm-dmm-received>
    <cfm-dmm-received-invalid>
      cfm-dmm-received-invalid
    </cfm-dmm-received-invalid>
    <cfm-dmr-sent>
      cfm-dmr-sent
    </cfm-dmr-sent>
    <cfm-dmr-received>
      cfm-dmr-received
    </cfm-dmr-received>
    <cfm-dmr-received-invalid>
      cfm-dmr-received-invalid
    </cfm-dmr-received-invalid>
    <cfm-lmm-sent>
      cfm-lmm-sent
    </cfm-lmm-sent>
    <cfm-lmm-received>
      cfm-lmm-received
    </cfm-lmm-received>
    <cfm-lmm-received-invalid>
      cfm-lmm-received-invalid
    </cfm-lmm-received-invalid>
    <cfm-lmr-sent>
      cfm-lmr-sent
    </cfm-lmr-sent>
    <cfm-lmr-received>
      cfm-lmr-received
    </cfm-lmr-received>
    <cfm-lmr-received-invalid>
      cfm-lmr-received-invalid
    </cfm-lmr-received-invalid>
  </cfm-local-mep-packet-statistics>
</cfm-entry>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-local-mep-packet-statistics>
      <cfm-total-ccm-sent>
        cfm-total-ccm-sent
      </cfm-total-ccm-sent>
      <cfm-out-of-sequence-ccm-received>
        cfm-out-of-sequence-ccm-received
      </cfm-out-of-sequence-ccm-received>
      <cfm-lbm-sent>
        cfm-lbm-sent
      </cfm-lbm-sent>
      <cfm-lbr-sent>
```


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```
  cfm-lbr-sent
</cfm-lbr-sent>
<cfm-lbr-received>
  cfm-lbr-received
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
```

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```
        <cfm-lmm-sent>
          cfm-lmm-sent
        </cfm-lmm-sent>
        <cfm-lmm-received>
          cfm-lmm-received
        </cfm-lmm-received>
        <cfm-lmm-received-invalid>
          cfm-lmm-received-invalid
        </cfm-lmm-received-invalid>
        <cfm-lmr-sent>
          cfm-lmr-sent
        </cfm-lmr-sent>
        <cfm-lmr-received>
          cfm-lmr-received
        </cfm-lmr-received>
        <cfm-lmr-received-invalid>
          cfm-lmr-received-invalid
        </cfm-lmr-received-invalid>
      </cfm-local-mep-packet-statistics>
    </cfm-entry>
  </cfm-interface>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
  <cfm-mep-database>
    <cfm-entry>
      <cfm-local-mep-packet-statistics>
        <cfm-total-ccm-sent>
          cfm-total-ccm-sent
        </cfm-total-ccm-sent>
        <cfm-out-of-sequence-ccm-received>
          cfm-out-of-sequence-ccm-received
        </cfm-out-of-sequence-ccm-received>
        <cfm-lbm-sent>
          cfm-lbm-sent
        </cfm-lbm-sent>
        <cfm-lbr-sent>
          cfm-lbr-sent
        </cfm-lbr-sent>
        <cfm-lbr-received>
          cfm-lbr-received
        </cfm-lbr-received>
        <cfm-lbr-received-out-of-order>
          cfm-lbr-received-out-of-order
        </cfm-lbr-received-out-of-order>
        <cfm-lbr-bad-msdu>
          cfm-lbr-bad-msdu
        </cfm-lbr-bad-msdu>
        <cfm-total-ltm-sent>
          cfm-total-ltm-sent
        </cfm-total-ltm-sent>
        <cfm-total-ltm-received>
```


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```
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
  cfm-lmm-received
</cfm-lmm-received>
<cfm-lmm-received-invalid>
  cfm-lmm-received-invalid
</cfm-lmm-received-invalid>
<cfm-lmr-sent>
  cfm-lmr-sent
</cfm-lmr-sent>
<cfm-lmr-received>
  cfm-lmr-received
</cfm-lmr-received>
```

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```
      <cfm-lmr-received-invalid>
        cfm-lmr-received-invalid
      </cfm-lmr-received-invalid>
    </cfm-local-mep-packet-statistics>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-local-mep-packet-statistics>
      <cfm-total-ccm-sent>
        cfm-total-ccm-sent
      </cfm-total-ccm-sent>
      <cfm-out-of-sequence-ccm-received>
        cfm-out-of-sequence-ccm-received
      </cfm-out-of-sequence-ccm-received>
      <cfm-lbm-sent>
        cfm-lbm-sent
      </cfm-lbm-sent>
      <cfm-lbr-sent>
        cfm-lbr-sent
      </cfm-lbr-sent>
      <cfm-lbr-received>
        cfm-lbr-received
      </cfm-lbr-received>
      <cfm-lbr-received-out-of-order>
        cfm-lbr-received-out-of-order
      </cfm-lbr-received-out-of-order>
      <cfm-lbr-bad-msdu>
        cfm-lbr-bad-msdu
      </cfm-lbr-bad-msdu>
      <cfm-total-ltm-sent>
        cfm-total-ltm-sent
      </cfm-total-ltm-sent>
      <cfm-total-ltm-received>
        cfm-total-ltm-received
      </cfm-total-ltm-received>
      <cfm-total-ltr-sent>
        cfm-total-ltr-sent
      </cfm-total-ltr-sent>
      <cfm-total-ltr-received>
        cfm-total-ltr-received
      </cfm-total-ltr-received>
      <cfm-next-ltm-sequence-number>
        cfm-next-ltm-sequence-number
      </cfm-next-ltm-sequence-number>
      <cfm-onedm-sent>
        cfm-onedm-sent
      </cfm-onedm-sent>
      <cfm-onedm-received>
```


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```
      cfm-onedm-received
     </cfm-onedm-received>
     <cfm-onedm-received-invalid>
      cfm-onedm-received-invalid
     </cfm-onedm-received-invalid>
     <cfm-onedm-received-outofsync>
      cfm-onedm-received-outofsync
     </cfm-onedm-received-outofsync>
     <cfm-dmm-sent>
      cfm-dmm-sent
     </cfm-dmm-sent>
     <cfm-dmm-received>
      cfm-dmm-received
     </cfm-dmm-received>
     <cfm-dmm-received-invalid>
      cfm-dmm-received-invalid
     </cfm-dmm-received-invalid>
     <cfm-dmr-sent>
      cfm-dmr-sent
     </cfm-dmr-sent>
     <cfm-dmr-received>
      cfm-dmr-received
     </cfm-dmr-received>
     <cfm-dmr-received-invalid>
      cfm-dmr-received-invalid
     </cfm-dmr-received-invalid>
     <cfm-lmm-sent>
      cfm-lmm-sent
     </cfm-lmm-sent>
     <cfm-lmm-received>
      cfm-lmm-received
     </cfm-lmm-received>
     <cfm-lmm-received-invalid>
      cfm-lmm-received-invalid
     </cfm-lmm-received-invalid>
     <cfm-lmr-sent>
      cfm-lmr-sent
     </cfm-lmr-sent>
     <cfm-lmr-received>
      cfm-lmr-received
     </cfm-lmr-received>
     <cfm-lmr-received-invalid>
      cfm-lmr-received-invalid
     </cfm-lmr-received-invalid>
    </cfm-local-mep-packet-statistics>
   </cfm-entry>
  </cfm-mep-statistics>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
```

```
<cfm-local-mep-packet-statistics>
  <cfm-total-ccm-sent>
    cfm-total-ccm-sent
  </cfm-total-ccm-sent>
  <cfm-out-of-sequence-ccm-received>
    cfm-out-of-sequence-ccm-received
  </cfm-out-of-sequence-ccm-received>
  <cfm-lbm-sent>
    cfm-lbm-sent
  </cfm-lbm-sent>
  <cfm-lbr-sent>
    cfm-lbr-sent
  </cfm-lbr-sent>
  <cfm-lbr-received>
    cfm-lbr-received
  </cfm-lbr-received>
  <cfm-lbr-received-out-of-order>
    cfm-lbr-received-out-of-order
  </cfm-lbr-received-out-of-order>
  <cfm-lbr-bad-msdu>
    cfm-lbr-bad-msdu
  </cfm-lbr-bad-msdu>
  <cfm-total-ltm-sent>
    cfm-total-ltm-sent
  </cfm-total-ltm-sent>
  <cfm-total-ltm-received>
    cfm-total-ltm-received
  </cfm-total-ltm-received>
  <cfm-total-ltr-sent>
    cfm-total-ltr-sent
  </cfm-total-ltr-sent>
  <cfm-total-ltr-received>
    cfm-total-ltr-received
  </cfm-total-ltr-received>
  <cfm-next-ltm-sequence-number>
    cfm-next-ltm-sequence-number
  </cfm-next-ltm-sequence-number>
  <cfm-onedm-sent>
    cfm-onedm-sent
  </cfm-onedm-sent>
  <cfm-onedm-received>
    cfm-onedm-received
  </cfm-onedm-received>
  <cfm-onedm-received-invalid>
    cfm-onedm-received-invalid
  </cfm-onedm-received-invalid>
  <cfm-onedm-received-outofsync>
    cfm-onedm-received-outofsync
  </cfm-onedm-received-outofsync>
  <cfm-dmm-sent>
    cfm-dmm-sent
  </cfm-dmm-sent>
  <cfm-dmm-received>
    cfm-dmm-received
  </cfm-dmm-received>
  <cfm-dmm-received-invalid>
```


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```
            cfm-dmm-received-invalid
           </cfm-dmm-received-invalid>
           <cfm-dmr-sent>
            cfm-dmr-sent
           </cfm-dmr-sent>
           <cfm-dmr-received>
            cfm-dmr-received
           </cfm-dmr-received>
           <cfm-dmr-received-invalid>
            cfm-dmr-received-invalid
           </cfm-dmr-received-invalid>
           <cfm-lmm-sent>
            cfm-lmm-sent
           </cfm-lmm-sent>
           <cfm-lmm-received>
            cfm-lmm-received
           </cfm-lmm-received>
           <cfm-lmm-received-invalid>
            cfm-lmm-received-invalid
           </cfm-lmm-received-invalid>
           <cfm-lmr-sent>
            cfm-lmr-sent
           </cfm-lmr-sent>
           <cfm-lmr-received>
            cfm-lmr-received
           </cfm-lmr-received>
           <cfm-lmr-received-invalid>
            cfm-lmr-received-invalid
           </cfm-lmr-received-invalid>
          </cfm-local-mep-packet-statistics>
         </cfm-entry>
        </cfm-delay-statistics>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
        <cfm-loss-statistics>
         <cfm-entry>
          <cfm-local-mep-packet-statistics>
           <cfm-total-ccm-sent>
            cfm-total-ccm-sent
           </cfm-total-ccm-sent>
           <cfm-out-of-sequence-ccm-received>
            cfm-out-of-sequence-ccm-received
           </cfm-out-of-sequence-ccm-received>
           <cfm-lbm-sent>
            cfm-lbm-sent
           </cfm-lbm-sent>
           <cfm-lbr-sent>
            cfm-lbr-sent
           </cfm-lbr-sent>
           <cfm-lbr-received>
            cfm-lbr-received
```

```
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
```


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```
      cfm-lmm-received
     </cfm-lmm-received>
     <cfm-lmm-received-invalid>
      cfm-lmm-received-invalid
     </cfm-lmm-received-invalid>
     <cfm-lmr-sent>
      cfm-lmr-sent
     </cfm-lmr-sent>
     <cfm-lmr-received>
      cfm-lmr-received
     </cfm-lmr-received>
     <cfm-lmr-received-invalid>
      cfm-lmr-received-invalid
     </cfm-lmr-received-invalid>
    </cfm-local-mep-packet-statistics>
   </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-local-mep-packet-statistics>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-local-mep-packet-statistics>
   <cfm-total-ccm-sent>
    cfm-total-ccm-sent
   </cfm-total-ccm-sent>
   <cfm-out-of-sequence-ccm-received>
    cfm-out-of-sequence-ccm-received
   </cfm-out-of-sequence-ccm-received>
   <cfm-lbm-sent>
    cfm-lbm-sent
   </cfm-lbm-sent>
   <cfm-lbr-sent>
    cfm-lbr-sent
   </cfm-lbr-sent>
   <cfm-lbr-received>
    cfm-lbr-received
   </cfm-lbr-received>
   <cfm-lbr-received-out-of-order>
    cfm-lbr-received-out-of-order
   </cfm-lbr-received-out-of-order>
   <cfm-lbr-bad-msdu>
    cfm-lbr-bad-msdu
   </cfm-lbr-bad-msdu>
   <cfm-total-ltm-sent>
    cfm-total-ltm-sent
   </cfm-total-ltm-sent>
   <cfm-total-ltm-received>
    cfm-total-ltm-received
   </cfm-total-ltm-received>
   <cfm-total-ltr-sent>
    cfm-total-ltr-sent
```

```
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
  cfm-lmm-received
</cfm-lmm-received>
<cfm-lmm-received-invalid>
  cfm-lmm-received-invalid
</cfm-lmm-received-invalid>
<cfm-lmr-sent>
  cfm-lmr-sent
</cfm-lmr-sent>
<cfm-lmr-received>
  cfm-lmr-received
</cfm-lmr-received>
<cfm-lmr-received-invalid>
  cfm-lmr-received-invalid
</cfm-lmr-received-invalid>
</cfm-local-mep-packet-statistics>
```


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```
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-local-mep-statistics>

Usage

```
<cfm-entry>
  <cfm-local-mep-statistics>
    <cfm-total-ccm-sent>
      cfm-total-ccm-sent
    </cfm-total-ccm-sent>
    <cfm-out-of-sequence-ccm-received>
      cfm-out-of-sequence-ccm-received
    </cfm-out-of-sequence-ccm-received>
    <cfm-lbm-sent>
      cfm-lbm-sent
    </cfm-lbm-sent>
    <cfm-lbr-sent>
      cfm-lbr-sent
    </cfm-lbr-sent>
    <cfm-lbr-received>
      cfm-lbr-received
    </cfm-lbr-received>
    <cfm-lbr-received-out-of-order>
      cfm-lbr-received-out-of-order
    </cfm-lbr-received-out-of-order>
    <cfm-lbr-bad-msdu>
      cfm-lbr-bad-msdu
    </cfm-lbr-bad-msdu>
    <cfm-total-ltm-sent>
      cfm-total-ltm-sent
    </cfm-total-ltm-sent>
    <cfm-total-ltm-received>
      cfm-total-ltm-received
    </cfm-total-ltm-received>
    <cfm-total-ltr-sent>
      cfm-total-ltr-sent
    </cfm-total-ltr-sent>
    <cfm-total-ltr-received>
      cfm-total-ltr-received
    </cfm-total-ltr-received>
    <cfm-next-ltm-sequence-number>
      cfm-next-ltm-sequence-number
    </cfm-next-ltm-sequence-number>
    <cfm-onedm-sent>
      cfm-onedm-sent
    </cfm-onedm-sent>
    <cfm-onedm-received>
      cfm-onedm-received
    </cfm-onedm-received>
    <cfm-onedm-received-invalid>
      cfm-onedm-received-invalid
    </cfm-onedm-received-invalid>
```

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```
    <cfm-onedm-received-outofsync>
      cfm-onedm-received-outofsync
    </cfm-onedm-received-outofsync>
    <cfm-dmm-sent>
      cfm-dmm-sent
    </cfm-dmm-sent>
    <cfm-dmm-received>
      cfm-dmm-received
    </cfm-dmm-received>
    <cfm-dmm-received-invalid>
      cfm-dmm-received-invalid
    </cfm-dmm-received-invalid>
    <cfm-dmr-sent>
      cfm-dmr-sent
    </cfm-dmr-sent>
    <cfm-dmr-received>
      cfm-dmr-received
    </cfm-dmr-received>
    <cfm-dmr-received-invalid>
      cfm-dmr-received-invalid
    </cfm-dmr-received-invalid>
    <cfm-lmm-sent>
      cfm-lmm-sent
    </cfm-lmm-sent>
    <cfm-lmm-received>
      cfm-lmm-received
    </cfm-lmm-received>
    <cfm-lmm-received-invalid>
      cfm-lmm-received-invalid
    </cfm-lmm-received-invalid>
    <cfm-lmr-sent>
      cfm-lmr-sent
    </cfm-lmr-sent>
    <cfm-lmr-received>
      cfm-lmr-received
    </cfm-lmr-received>
    <cfm-lmr-received-invalid>
      cfm-lmr-received-invalid
    </cfm-lmr-received-invalid>
  </cfm-local-mep-statistics>
</cfm-entry>
```

Description

<cfm-local-mep-statistics>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-local-mep-statistics>
      <cfm-total-ccm-sent>
        cfm-total-ccm-sent
      </cfm-total-ccm-sent>
      <cfm-out-of-sequence-ccm-received>
        cfm-out-of-sequence-ccm-received
```


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```
</cfm-out-of-sequence-ccm-received>
<cfm-lbm-sent>
  cfm-lbm-sent
</cfm-lbm-sent>
<cfm-lbr-sent>
  cfm-lbr-sent
</cfm-lbr-sent>
<cfm-lbr-received>
  cfm-lbr-received
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
```

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```
            cfm-dmr-received
           </cfm-dmr-received>
           <cfm-dmr-received-invalid>
            cfm-dmr-received-invalid
           </cfm-dmr-received-invalid>
           <cfm-lmm-sent>
            cfm-lmm-sent
           </cfm-lmm-sent>
           <cfm-lmm-received>
            cfm-lmm-received
           </cfm-lmm-received>
           <cfm-lmm-received-invalid>
            cfm-lmm-received-invalid
           </cfm-lmm-received-invalid>
           <cfm-lmr-sent>
            cfm-lmr-sent
           </cfm-lmr-sent>
           <cfm-lmr-received>
            cfm-lmr-received
           </cfm-lmr-received>
           <cfm-lmr-received-invalid>
            cfm-lmr-received-invalid
           </cfm-lmr-received-invalid>
          </cfm-local-mep-statistics>
         </cfm-entry>
        </cfm-interface>
```

Description

<cfm-local-mep-statistics>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-local-mep-statistics>
   <cfm-total-ccm-sent>
    cfm-total-ccm-sent
   </cfm-total-ccm-sent>
   <cfm-out-of-sequence-ccm-received>
    cfm-out-of-sequence-ccm-received
   </cfm-out-of-sequence-ccm-received>
   <cfm-lbm-sent>
    cfm-lbm-sent
   </cfm-lbm-sent>
   <cfm-lbr-sent>
    cfm-lbr-sent
   </cfm-lbr-sent>
   <cfm-lbr-received>
    cfm-lbr-received
   </cfm-lbr-received>
   <cfm-lbr-received-out-of-order>
    cfm-lbr-received-out-of-order
   </cfm-lbr-received-out-of-order>
   <cfm-lbr-bad-msdu>
    cfm-lbr-bad-msdu
```


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```
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
  cfm-lmm-received
</cfm-lmm-received>
<cfm-lmm-received-invalid>
  cfm-lmm-received-invalid
</cfm-lmm-received-invalid>
<cfm-lmr-sent>
```

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```
            cfm-lmr-sent
           </cfm-lmr-sent>
           <cfm-lmr-received>
            cfm-lmr-received
           </cfm-lmr-received>
           <cfm-lmr-received-invalid>
            cfm-lmr-received-invalid
           </cfm-lmr-received-invalid>
          </cfm-local-mep-statistics>
         </cfm-entry>
        </cfm-mep-database>
```

Description

<cfm-local-mep-statistics>

Usage

```
        <cfm-mep-statistics>
         <cfm-entry>
          <cfm-local-mep-statistics>
           <cfm-total-ccm-sent>
            cfm-total-ccm-sent
           </cfm-total-ccm-sent>
           <cfm-out-of-sequence-ccm-received>
            cfm-out-of-sequence-ccm-received
           </cfm-out-of-sequence-ccm-received>
           <cfm-lbm-sent>
            cfm-lbm-sent
           </cfm-lbm-sent>
           <cfm-lbr-sent>
            cfm-lbr-sent
           </cfm-lbr-sent>
           <cfm-lbr-received>
            cfm-lbr-received
           </cfm-lbr-received>
           <cfm-lbr-received-out-of-order>
            cfm-lbr-received-out-of-order
           </cfm-lbr-received-out-of-order>
           <cfm-lbr-bad-msdu>
            cfm-lbr-bad-msdu
           </cfm-lbr-bad-msdu>
           <cfm-total-ltm-sent>
            cfm-total-ltm-sent
           </cfm-total-ltm-sent>
           <cfm-total-ltm-received>
            cfm-total-ltm-received
           </cfm-total-ltm-received>
           <cfm-total-ltr-sent>
            cfm-total-ltr-sent
           </cfm-total-ltr-sent>
           <cfm-total-ltr-received>
            cfm-total-ltr-received
           </cfm-total-ltr-received>
           <cfm-next-ltm-sequence-number>
            cfm-next-ltm-sequence-number
```


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```
      </cfm-next-ltm-sequence-number>
      <cfm-onedm-sent>
        cfm-onedm-sent
      </cfm-onedm-sent>
      <cfm-onedm-received>
        cfm-onedm-received
      </cfm-onedm-received>
      <cfm-onedm-received-invalid>
        cfm-onedm-received-invalid
      </cfm-onedm-received-invalid>
      <cfm-onedm-received-outofsync>
        cfm-onedm-received-outofsync
      </cfm-onedm-received-outofsync>
      <cfm-dmm-sent>
        cfm-dmm-sent
      </cfm-dmm-sent>
      <cfm-dmm-received>
        cfm-dmm-received
      </cfm-dmm-received>
      <cfm-dmm-received-invalid>
        cfm-dmm-received-invalid
      </cfm-dmm-received-invalid>
      <cfm-dmr-sent>
        cfm-dmr-sent
      </cfm-dmr-sent>
      <cfm-dmr-received>
        cfm-dmr-received
      </cfm-dmr-received>
      <cfm-dmr-received-invalid>
        cfm-dmr-received-invalid
      </cfm-dmr-received-invalid>
      <cfm-lmm-sent>
        cfm-lmm-sent
      </cfm-lmm-sent>
      <cfm-lmm-received>
        cfm-lmm-received
      </cfm-lmm-received>
      <cfm-lmm-received-invalid>
        cfm-lmm-received-invalid
      </cfm-lmm-received-invalid>
      <cfm-lmr-sent>
        cfm-lmr-sent
      </cfm-lmr-sent>
      <cfm-lmr-received>
        cfm-lmr-received
      </cfm-lmr-received>
      <cfm-lmr-received-invalid>
        cfm-lmr-received-invalid
      </cfm-lmr-received-invalid>
    </cfm-local-mep-statistics>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-local-mep-statistics>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-local-mep-statistics>
      <cfm-total-ccm-sent>
        cfm-total-ccm-sent
      </cfm-total-ccm-sent>
      <cfm-out-of-sequence-ccm-received>
        cfm-out-of-sequence-ccm-received
      </cfm-out-of-sequence-ccm-received>
      <cfm-lbm-sent>
        cfm-lbm-sent
      </cfm-lbm-sent>
      <cfm-lbr-sent>
        cfm-lbr-sent
      </cfm-lbr-sent>
      <cfm-lbr-received>
        cfm-lbr-received
      </cfm-lbr-received>
      <cfm-lbr-received-out-of-order>
        cfm-lbr-received-out-of-order
      </cfm-lbr-received-out-of-order>
      <cfm-lbr-bad-msdu>
        cfm-lbr-bad-msdu
      </cfm-lbr-bad-msdu>
      <cfm-total-ltm-sent>
        cfm-total-ltm-sent
      </cfm-total-ltm-sent>
      <cfm-total-ltm-received>
        cfm-total-ltm-received
      </cfm-total-ltm-received>
      <cfm-total-ltr-sent>
        cfm-total-ltr-sent
      </cfm-total-ltr-sent>
      <cfm-total-ltr-received>
        cfm-total-ltr-received
      </cfm-total-ltr-received>
      <cfm-next-ltm-sequence-number>
        cfm-next-ltm-sequence-number
      </cfm-next-ltm-sequence-number>
      <cfm-onedm-sent>
        cfm-onedm-sent
      </cfm-onedm-sent>
      <cfm-onedm-received>
        cfm-onedm-received
      </cfm-onedm-received>
      <cfm-onedm-received-invalid>
        cfm-onedm-received-invalid
      </cfm-onedm-received-invalid>
      <cfm-onedm-received-outofsync>
        cfm-onedm-received-outofsync
      </cfm-onedm-received-outofsync>
      <cfm-dmm-sent>
```


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```
          cfm-dmm-sent
        </cfm-dmm-sent>
        <cfm-dmm-received>
          cfm-dmm-received
        </cfm-dmm-received>
        <cfm-dmm-received-invalid>
          cfm-dmm-received-invalid
        </cfm-dmm-received-invalid>
        <cfm-dmr-sent>
          cfm-dmr-sent
        </cfm-dmr-sent>
        <cfm-dmr-received>
          cfm-dmr-received
        </cfm-dmr-received>
        <cfm-dmr-received-invalid>
          cfm-dmr-received-invalid
        </cfm-dmr-received-invalid>
        <cfm-lmm-sent>
          cfm-lmm-sent
        </cfm-lmm-sent>
        <cfm-lmm-received>
          cfm-lmm-received
        </cfm-lmm-received>
        <cfm-lmm-received-invalid>
          cfm-lmm-received-invalid
        </cfm-lmm-received-invalid>
        <cfm-lmr-sent>
          cfm-lmr-sent
        </cfm-lmr-sent>
        <cfm-lmr-received>
          cfm-lmr-received
        </cfm-lmr-received>
        <cfm-lmr-received-invalid>
          cfm-lmr-received-invalid
        </cfm-lmr-received-invalid>
      </cfm-local-mep-statistics>
    </cfm-entry>
  </cfm-delay-statistics>
```

Description

<cfm-local-mep-statistics>

Usage

```
  <cfm-loss-statistics>
    <cfm-entry>
      <cfm-local-mep-statistics>
        <cfm-total-ccm-sent>
          cfm-total-ccm-sent
        </cfm-total-ccm-sent>
        <cfm-out-of-sequence-ccm-received>
          cfm-out-of-sequence-ccm-received
        </cfm-out-of-sequence-ccm-received>
        <cfm-lbm-sent>
          cfm-lbm-sent
```

```
</cfm-lbm-sent>
<cfm-lbr-sent>
  cfm-lbr-sent
</cfm-lbr-sent>
<cfm-lbr-received>
  cfm-lbr-received
</cfm-lbr-received>
<cfm-lbr-received-out-of-order>
  cfm-lbr-received-out-of-order
</cfm-lbr-received-out-of-order>
<cfm-lbr-bad-msdu>
  cfm-lbr-bad-msdu
</cfm-lbr-bad-msdu>
<cfm-total-ltm-sent>
  cfm-total-ltm-sent
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
```


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```
      cfm-dmr-received-invalid
     </cfm-dmr-received-invalid>
     <cfm-lmm-sent>
      cfm-lmm-sent
     </cfm-lmm-sent>
     <cfm-lmm-received>
      cfm-lmm-received
     </cfm-lmm-received>
     <cfm-lmm-received-invalid>
      cfm-lmm-received-invalid
     </cfm-lmm-received-invalid>
     <cfm-lmr-sent>
      cfm-lmr-sent
     </cfm-lmr-sent>
     <cfm-lmr-received>
      cfm-lmr-received
     </cfm-lmr-received>
     <cfm-lmr-received-invalid>
      cfm-lmr-received-invalid
     </cfm-lmr-received-invalid>
    </cfm-local-mep-statistics>
   </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-local-mep-statistics>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-local-mep-statistics>
   <cfm-total-ccm-sent>
    cfm-total-ccm-sent
   </cfm-total-ccm-sent>
   <cfm-out-of-sequence-ccm-received>
    cfm-out-of-sequence-ccm-received
   </cfm-out-of-sequence-ccm-received>
   <cfm-lbm-sent>
    cfm-lbm-sent
   </cfm-lbm-sent>
   <cfm-lbr-sent>
    cfm-lbr-sent
   </cfm-lbr-sent>
   <cfm-lbr-received>
    cfm-lbr-received
   </cfm-lbr-received>
   <cfm-lbr-received-out-of-order>
    cfm-lbr-received-out-of-order
   </cfm-lbr-received-out-of-order>
   <cfm-lbr-bad-msdu>
    cfm-lbr-bad-msdu
   </cfm-lbr-bad-msdu>
   <cfm-total-ltm-sent>
    cfm-total-ltm-sent
```

```
</cfm-total-ltm-sent>
<cfm-total-ltm-received>
  cfm-total-ltm-received
</cfm-total-ltm-received>
<cfm-total-ltr-sent>
  cfm-total-ltr-sent
</cfm-total-ltr-sent>
<cfm-total-ltr-received>
  cfm-total-ltr-received
</cfm-total-ltr-received>
<cfm-next-ltm-sequence-number>
  cfm-next-ltm-sequence-number
</cfm-next-ltm-sequence-number>
<cfm-onedm-sent>
  cfm-onedm-sent
</cfm-onedm-sent>
<cfm-onedm-received>
  cfm-onedm-received
</cfm-onedm-received>
<cfm-onedm-received-invalid>
  cfm-onedm-received-invalid
</cfm-onedm-received-invalid>
<cfm-onedm-received-outofsync>
  cfm-onedm-received-outofsync
</cfm-onedm-received-outofsync>
<cfm-dmm-sent>
  cfm-dmm-sent
</cfm-dmm-sent>
<cfm-dmm-received>
  cfm-dmm-received
</cfm-dmm-received>
<cfm-dmm-received-invalid>
  cfm-dmm-received-invalid
</cfm-dmm-received-invalid>
<cfm-dmr-sent>
  cfm-dmr-sent
</cfm-dmr-sent>
<cfm-dmr-received>
  cfm-dmr-received
</cfm-dmr-received>
<cfm-dmr-received-invalid>
  cfm-dmr-received-invalid
</cfm-dmr-received-invalid>
<cfm-lmm-sent>
  cfm-lmm-sent
</cfm-lmm-sent>
<cfm-lmm-received>
  cfm-lmm-received
</cfm-lmm-received>
<cfm-lmm-received-invalid>
  cfm-lmm-received-invalid
</cfm-lmm-received-invalid>
<cfm-lmr-sent>
  cfm-lmr-sent
</cfm-lmr-sent>
<cfm-lmr-received>
```


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```
        cfm-lmr-received
      </cfm-lmr-received>
      <cfm-lmr-received-invalid>
        cfm-lmr-received-invalid
      </cfm-lmr-received-invalid>
    </cfm-local-mep-statistics>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-loss-statistics>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>....</cfm-entry>
</cfm-loss-statistics>
```

Description Information about ethernet loss statistics for one or more CFM sessions

<cfm-ltm-request-snapshot>

Usage

```
<cfm-ltm-request-snapshot>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
  </cfm-maintenance-domain-name>
  <cfm-maintenance-association-name>
    cfm-maintenance-association-name
  </cfm-maintenance-association-name>
  <cfm-local-mep-identifier>
    cfm-local-mep-identifier
  </cfm-local-mep-identifier>
  <cfm-ltm-target-mac-address>
    cfm-ltm-target-mac-address
  </cfm-ltm-target-mac-address>
</cfm-ltm-request-snapshot>
```

Description

<cfm-ltm-request-snapshot>

Usage

```
<cfm-linktrace-path-database>
  <cfm-ltm-request-snapshot>
    <cfm-interface-name>
```

```
    cfm-interface-name
   </cfm-interface-name>
   <cfm-level>
    cfm-level
   </cfm-level>
   <cfm-maintenance-domain-name>
    cfm-maintenance-domain-name
   </cfm-maintenance-domain-name>
   <cfm-maintenance-association-name>
    cfm-maintenance-association-name
   </cfm-maintenance-association-name>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-ltm-target-mac-address>
    cfm-ltm-target-mac-address
   </cfm-ltm-target-mac-address>
  </cfm-ltm-request-snapshot>
</cfm-linktrace-path-database>
```

Description

<cfm-ltr-reply-entry>

Usage

```
<cfm-ltr-reply-entry>
  <cfm-ltm-transaction-identifier>
   cfm-ltm-transaction-identifier
  </cfm-ltm-transaction-identifier>
  <cfm-ltr-request-hop-identifier>
   cfm-ltr-request-hop-identifier
  </cfm-ltr-request-hop-identifier>
  <cfm-ltr-reply-ttl>
   cfm-ltr-reply-ttl
  </cfm-ltr-reply-ttl>
  <cfm-ltr-mep-mip-mac-address>
   cfm-ltr-mep-mip-mac-address
  </cfm-ltr-mep-mip-mac-address>
  <cfm-ltr-next-hop-mac-address>
   cfm-ltr-next-hop-mac-address
  </cfm-ltr-next-hop-mac-address>
</cfm-ltr-reply-entry>
```

Description

<cfm-ltr-reply-entry>

Usage

```
<cfm-linktrace-path-database>
  <cfm-ltr-reply-entry>
   <cfm-ltm-transaction-identifier>
    cfm-ltm-transaction-identifier
   </cfm-ltm-transaction-identifier>
   <cfm-ltr-request-hop-identifier>
```


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```
      cfm-ltr-request-hop-identifier
    </cfm-ltr-request-hop-identifier>
    <cfm-ltr-reply-ttl>
      cfm-ltr-reply-ttl
    </cfm-ltr-reply-ttl>
    <cfm-ltr-mep-mip-mac-address>
      cfm-ltr-mep-mip-mac-address
    </cfm-ltr-mep-mip-mac-address>
    <cfm-ltr-next-hop-mac-address>
      cfm-ltr-next-hop-mac-address
    </cfm-ltr-next-hop-mac-address>
  </cfm-ltr-reply-entry>
</cfm-linktrace-path-database>
```

Description

<cfm-mep-database>

Usage

```
<cfm-mep-database>
  <cfm-entry>....</cfm-entry>
</cfm-mep-database>
```

Description Information about MEP database for one or more CFM sessions

<cfm-mep-database-continuity-check>

Usage

```
<cfm-entry>
  <cfm-mep-database-continuity-check>
    <cfm-continuity-check-status>
      cfm-continuity-check-status
    </cfm-continuity-check-status>
    <cfm-continuity-check-interval>
      cfm-continuity-check-interval
    </cfm-continuity-check-interval>
    <cfm-continuity-check-loss-threshold>
      cfm-continuity-check-loss-threshold
    </cfm-continuity-check-loss-threshold>
  </cfm-mep-database-continuity-check>
</cfm-entry>
```

Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-mep-database-continuity-check>
      <cfm-continuity-check-status>
        cfm-continuity-check-status
```

```
      </cfm-continuity-check-status>
      <cfm-continuity-check-interval>
       cfm-continuity-check-interval
      </cfm-continuity-check-interval>
      <cfm-continuity-check-loss-threshold>
       cfm-continuity-check-loss-threshold
      </cfm-continuity-check-loss-threshold>
     </cfm-mep-database-continuity-check>
    </cfm-entry>
   </cfm-interface>
```

Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-mep-database-continuity-check>
   <cfm-continuity-check-status>
    cfm-continuity-check-status
   </cfm-continuity-check-status>
   <cfm-continuity-check-interval>
    cfm-continuity-check-interval
   </cfm-continuity-check-interval>
   <cfm-continuity-check-loss-threshold>
    cfm-continuity-check-loss-threshold
   </cfm-continuity-check-loss-threshold>
  </cfm-mep-database-continuity-check>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-mep-database-continuity-check>
   <cfm-continuity-check-status>
    cfm-continuity-check-status
   </cfm-continuity-check-status>
   <cfm-continuity-check-interval>
    cfm-continuity-check-interval
   </cfm-continuity-check-interval>
   <cfm-continuity-check-loss-threshold>
    cfm-continuity-check-loss-threshold
   </cfm-continuity-check-loss-threshold>
  </cfm-mep-database-continuity-check>
 </cfm-entry>
</cfm-mep-statistics>
```


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Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-mep-database-continuity-check>
   <cfm-continuity-check-status>
    cfm-continuity-check-status
   </cfm-continuity-check-status>
   <cfm-continuity-check-interval>
    cfm-continuity-check-interval
   </cfm-continuity-check-interval>
   <cfm-continuity-check-loss-threshold>
    cfm-continuity-check-loss-threshold
   </cfm-continuity-check-loss-threshold>
  </cfm-mep-database-continuity-check>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-mep-database-continuity-check>
   <cfm-continuity-check-status>
    cfm-continuity-check-status
   </cfm-continuity-check-status>
   <cfm-continuity-check-interval>
    cfm-continuity-check-interval
   </cfm-continuity-check-interval>
   <cfm-continuity-check-loss-threshold>
    cfm-continuity-check-loss-threshold
   </cfm-continuity-check-loss-threshold>
  </cfm-mep-database-continuity-check>
 </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-mep-database-continuity-check>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
  <cfm-mep-database-continuity-check>
   <cfm-continuity-check-status>
    cfm-continuity-check-status
   </cfm-continuity-check-status>
   <cfm-continuity-check-interval>
```

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```
            cfm-continuity-check-interval
          </cfm-continuity-check-interval>
          <cfm-continuity-check-loss-threshold>
            cfm-continuity-check-loss-threshold
          </cfm-continuity-check-loss-threshold>
        </cfm-mep-database-continuity-check>
      </cfm-entry>
    </cfm-iterator-statistics>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-entry>
  <cfm-mep-database-interface>
    <cfm-interface-name>
      cfm-interface-name
    </cfm-interface-name>
    <cfm-interface-status>
      cfm-interface-status
    </cfm-interface-status>
    <cfm-interface-link-status>
      cfm-interface-link-status
    </cfm-interface-link-status>
  </cfm-mep-database-interface>
</cfm-entry>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-interface>
```

Description

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<cfm-mep-database-interface>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
```

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```
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-mep-database-interface>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-mep-database-interface>
      <cfm-interface-name>
        cfm-interface-name
      </cfm-interface-name>
      <cfm-interface-status>
        cfm-interface-status
      </cfm-interface-status>
      <cfm-interface-link-status>
        cfm-interface-link-status
      </cfm-interface-link-status>
    </cfm-mep-database-interface>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

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<cfm-mep-database-session>

Usage

```
<cfm-entry>
  <cfm-mep-database-session>
    <cfm-maintenance-domain-name>
      cfm-maintenance-domain-name
    </cfm-maintenance-domain-name>
    <cfm-maintenance-domain-name-format>
      cfm-maintenance-domain-name-format
    </cfm-maintenance-domain-name-format>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-maintenance-association-name>
      cfm-maintenance-association-name
    </cfm-maintenance-association-name>
    <cfm-maintenance-association-name-format>
      cfm-maintenance-association-name-format
    </cfm-maintenance-association-name-format>
  </cfm-mep-database-session>
</cfm-entry>
```

Description

<cfm-mep-database-session>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-interface>
```

Description

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<cfm-mep-database-session>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-mep-database-session>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

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<cfm-mep-database-session>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-mep-database-session>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

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<cfm-mep-database-session>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-mep-database-session>
      <cfm-maintenance-domain-name>
        cfm-maintenance-domain-name
      </cfm-maintenance-domain-name>
      <cfm-maintenance-domain-name-format>
        cfm-maintenance-domain-name-format
      </cfm-maintenance-domain-name-format>
      <cfm-level>
        cfm-level
      </cfm-level>
      <cfm-maintenance-association-name>
        cfm-maintenance-association-name
      </cfm-maintenance-association-name>
      <cfm-maintenance-association-name-format>
        cfm-maintenance-association-name-format
      </cfm-maintenance-association-name-format>
    </cfm-mep-database-session>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-mep-statistics>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>....</cfm-entry>
</cfm-mep-statistics>
```

Description Information about MEP statistics for one or more CFM sessions

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-entry>
  <cfm-mep-statistics-mep-summary>
    <cfm-local-mep-identifier>
      cfm-local-mep-identifier
    </cfm-local-mep-identifier>
    <cfm-local-mep-mac-address>
      cfm-local-mep-mac-address
    </cfm-local-mep-mac-address>
    <cfm-remote-mep-count>
      cfm-remote-mep-count
    </cfm-remote-mep-count>
  </cfm-mep-statistics-mep-summary>
</cfm-entry>
```


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Description

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-mep-statistics-mep-summary>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-local-mep-mac-address>
    cfm-local-mep-mac-address
   </cfm-local-mep-mac-address>
   <cfm-remote-mep-count>
    cfm-remote-mep-count
   </cfm-remote-mep-count>
  </cfm-mep-statistics-mep-summary>
 </cfm-entry>
</cfm-interface>
```

Description

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-mep-statistics-mep-summary>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-local-mep-mac-address>
    cfm-local-mep-mac-address
   </cfm-local-mep-mac-address>
   <cfm-remote-mep-count>
    cfm-remote-mep-count
   </cfm-remote-mep-count>
  </cfm-mep-statistics-mep-summary>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-mep-statistics-mep-summary>
   <cfm-local-mep-identifier>
    cfm-local-mep-identifier
   </cfm-local-mep-identifier>
   <cfm-local-mep-mac-address>
```

```
        cfm-local-mep-mac-address
      </cfm-local-mep-mac-address>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
    </cfm-mep-statistics-mep-summary>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-mep-statistics-mep-summary>
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-local-mep-mac-address>
        cfm-local-mep-mac-address
      </cfm-local-mep-mac-address>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
    </cfm-mep-statistics-mep-summary>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-mep-statistics-mep-summary>
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-local-mep-mac-address>
        cfm-local-mep-mac-address
      </cfm-local-mep-mac-address>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
    </cfm-mep-statistics-mep-summary>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

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<cfm-mep-statistics-mep-summary>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-mep-statistics-mep-summary>
      <cfm-local-mep-identifier>
        cfm-local-mep-identifier
      </cfm-local-mep-identifier>
      <cfm-local-mep-mac-address>
        cfm-local-mep-mac-address
      </cfm-local-mep-mac-address>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
    </cfm-mep-statistics-mep-summary>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-mip-information>

Usage

```
<cfm-mip-information>
  <cfm-instance-mip-information>....</cfm-instance-mip-information>
</cfm-mip-information>
```

Description

<cfm-nexthop-information>

Usage

```
<cfm-nexthop-information>
  <cfm-nexthop-index>
    cfm-nexthop-index
  </cfm-nexthop-index>
  <cfm-nexthop-type>
    cfm-nexthop-type
  </cfm-nexthop-type>
  <cfm-nexthop-last-operation>
    cfm-nexthop-last-operation
  </cfm-nexthop-last-operation>
  <cfm-nexthop-last-error>
    cfm-nexthop-last-error
  </cfm-nexthop-last-error>
  <cfm-nexthop-statistics>
    cfm-nexthop-statistics
  </cfm-nexthop-statistics>
  <cfm-nexthop-reference-count>
    cfm-nexthop-reference-count
  </cfm-nexthop-reference-count>
  <cfm-nexthop-owner>
```

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```
    cfm-nexthop-owner
  </cfm-nexthop-owner>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
</cfm-nexthop-information>
```

Description

<cfm-policer>

Usage

```
<cfm-policer>
  <cfm-legend>
    cfm-legend
  </cfm-legend>
  <cfm-policer-sessions>....</cfm-policer-sessions>
</cfm-policer>
```

Description

<cfm-policer-maintenance-association-entries>

Usage

```
<cfm-policer>
  <cfm-policer-sessions>
    <cfm-policer-session>
      <cfm-policer-maintenance-association-entries>

<cfm-policer-maintenance-association-entry>....</cfm-policer-maintenance-association-entry>

      </cfm-policer-maintenance-association-entries>
    </cfm-policer-session>
  </cfm-policer-sessions>
</cfm-policer>
```

Description

<cfm-policer-maintenance-association-entry>

Usage

```
<cfm-policer>
  <cfm-policer-sessions>
    <cfm-policer-session>
      <cfm-policer-maintenance-association-entries>
        <cfm-policer-maintenance-association-entry>
          <cfm-maintenance-association-name>
            cfm-maintenance-association-name
          </cfm-maintenance-association-name>
          <cfm-policer-name>
            cfm-policer-name
          </cfm-policer-name>
```


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```
            <cfm-policer-type>
              cfm-policer-type
            </cfm-policer-type>
            <cfm-policer-scope>
              cfm-policer-scope
            </cfm-policer-scope>
            <cfm-policer-drop-count>
              cfm-policer-drop-count
            </cfm-policer-drop-count>
          </cfm-policer-maintenance-association-entry>
        </cfm-policer-maintenance-association-entries>
      </cfm-policer-session>
    </cfm-policer-sessions>
  </cfm-policer>
```

Description

<cfm-policer-maintenance-domain-entry>

Usage

```
<cfm-policer>
  <cfm-policer-sessions>
    <cfm-policer-session>
      <cfm-policer-maintenance-domain-entry>
        <cfm-maintenance-domain-name>
          cfm-maintenance-domain-name
        </cfm-maintenance-domain-name>
        <cfm-level>
          cfm-level
        </cfm-level>
      </cfm-policer-maintenance-domain-entry>
    </cfm-policer-session>
  </cfm-policer-sessions>
</cfm-policer>
```

Description

<cfm-policer-session>

Usage

```
<cfm-policer>
  <cfm-policer-sessions>
    <cfm-policer-session>

<cfm-policer-maintenance-domain-entry>....</cfm-policer-maintenance-domain-entry>


<cfm-policer-maintenance-association-entries>....</cfm-policer-maintenance-association-entries>

    </cfm-policer-session>
  </cfm-policer-sessions>
</cfm-policer>
```

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Description

<cfm-policer-sessions>

Usage

```
<cfm-policer>
  <cfm-policer-sessions>
    <cfm-policer-session>....</cfm-policer-session>
  </cfm-policer-sessions>
</cfm-policer>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
      <cfm-interface-remote-meps>
        <cfm-remote-mep>
          <cfm-remote-mep-identifier>
            cfm-remote-mep-identifier
          </cfm-remote-mep-identifier>
          <cfm-remote-mep-state>
            cfm-remote-mep-state
          </cfm-remote-mep-state>
          <cfm-remote-mep-mac-address>
            cfm-remote-mep-mac-address
          </cfm-remote-mep-mac-address>
          <cfm-remote-mep-interface>
            cfm-remote-mep-interface
          </cfm-remote-mep-interface>
          <cfm-remote-mep-type>
            cfm-remote-mep-type
          </cfm-remote-mep-type>
          <cfm-remote-mep-loss-threshold>
            cfm-remote-mep-loss-threshold
          </cfm-remote-mep-loss-threshold>
          <cfm-remote-mep-rdi>
            cfm-remote-mep-rdi
          </cfm-remote-mep-rdi>
          <cfm-remote-mep-last-flapped>
            cfm-remote-mep-last-flapped
          </cfm-remote-mep-last-flapped>
          <cfm-remote-mep-last-dm-stats-cleared>
            cfm-remote-mep-last-dm-stats-cleared
          </cfm-remote-mep-last-dm-stats-cleared>
          <cfm-remote-mep-last-lm-stats-cleared>
            cfm-remote-mep-last-lm-stats-cleared
          </cfm-remote-mep-last-lm-stats-cleared>
          <cfm-remote-mep-continuity>
            cfm-remote-mep-continuity
          </cfm-remote-mep-continuity>
          <cfm-remote-mep-admin-enable-time>
```


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```
                    cfm-remote-mep-admin-enable-time
                  </cfm-remote-mep-admin-enable-time>
                  <cfm-remote-mep-oper-down-time>
                    cfm-remote-mep-oper-down-time
                  </cfm-remote-mep-oper-down-time>
                  <cfm-remote-mep-port-status-tlv>
                    cfm-remote-mep-port-status-tlv
                  </cfm-remote-mep-port-status-tlv>
                  <cfm-remote-mep-interface-status-tlv>
                    cfm-remote-mep-interface-status-tlv
                  </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
              </cfm-remote-mep>
            </cfm-interface-remote-meps>
          </cfm-interface-session>
        </cfm-interface-sessions>
      </cfm-entry>
```

Description

<cfm-remote-mep>

Usage

```
      <cfm-entry>
        <cfm-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-identifier>
              cfm-remote-mep-identifier
            </cfm-remote-mep-identifier>
            <cfm-remote-mep-state>
              cfm-remote-mep-state
            </cfm-remote-mep-state>
            <cfm-remote-mep-mac-address>
              cfm-remote-mep-mac-address
            </cfm-remote-mep-mac-address>
            <cfm-remote-mep-interface>
              cfm-remote-mep-interface
            </cfm-remote-mep-interface>
            <cfm-remote-mep-type>
              cfm-remote-mep-type
            </cfm-remote-mep-type>
            <cfm-remote-mep-loss-threshold>
              cfm-remote-mep-loss-threshold
            </cfm-remote-mep-loss-threshold>
            <cfm-remote-mep-rdi>
              cfm-remote-mep-rdi
            </cfm-remote-mep-rdi>
            <cfm-remote-mep-last-flapped>
              cfm-remote-mep-last-flapped
            </cfm-remote-mep-last-flapped>
            <cfm-remote-mep-last-dm-stats-cleared>
```

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```
            cfm-remote-mep-last-dm-stats-cleared
          </cfm-remote-mep-last-dm-stats-cleared>
          <cfm-remote-mep-last-lm-stats-cleared>
            cfm-remote-mep-last-lm-stats-cleared
          </cfm-remote-mep-last-lm-stats-cleared>
          <cfm-remote-mep-continuity>
            cfm-remote-mep-continuity
          </cfm-remote-mep-continuity>
          <cfm-remote-mep-admin-enable-time>
            cfm-remote-mep-admin-enable-time
          </cfm-remote-mep-admin-enable-time>
          <cfm-remote-mep-oper-down-time>
            cfm-remote-mep-oper-down-time
          </cfm-remote-mep-oper-down-time>
          <cfm-remote-mep-port-status-tlv>
            cfm-remote-mep-port-status-tlv
          </cfm-remote-mep-port-status-tlv>
          <cfm-remote-mep-interface-status-tlv>
            cfm-remote-mep-interface-status-tlv
          </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>

<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>

        </cfm-remote-mep>
      </cfm-remote-meps>
    </cfm-entry>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-identifier>
              cfm-remote-mep-identifier
            </cfm-remote-mep-identifier>
            <cfm-remote-mep-state>
              cfm-remote-mep-state
            </cfm-remote-mep-state>
            <cfm-remote-mep-mac-address>
              cfm-remote-mep-mac-address
            </cfm-remote-mep-mac-address>
            <cfm-remote-mep-interface>
              cfm-remote-mep-interface
            </cfm-remote-mep-interface>
            <cfm-remote-mep-type>
              cfm-remote-mep-type
            </cfm-remote-mep-type>
```


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```
                    <cfm-remote-mep-loss-threshold>
                      cfm-remote-mep-loss-threshold
                    </cfm-remote-mep-loss-threshold>
                    <cfm-remote-mep-rdi>
                      cfm-remote-mep-rdi
                    </cfm-remote-mep-rdi>
                    <cfm-remote-mep-last-flapped>
                      cfm-remote-mep-last-flapped
                    </cfm-remote-mep-last-flapped>
                    <cfm-remote-mep-last-dm-stats-cleared>
                      cfm-remote-mep-last-dm-stats-cleared
                    </cfm-remote-mep-last-dm-stats-cleared>
                    <cfm-remote-mep-last-lm-stats-cleared>
                      cfm-remote-mep-last-lm-stats-cleared
                    </cfm-remote-mep-last-lm-stats-cleared>
                    <cfm-remote-mep-continuity>
                      cfm-remote-mep-continuity
                    </cfm-remote-mep-continuity>
                    <cfm-remote-mep-admin-enable-time>
                      cfm-remote-mep-admin-enable-time
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

                <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


                <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                        </cfm-remote-mep>
                      </cfm-interface-remote-meps>
                    </cfm-interface-session>
                  </cfm-interface-sessions>
                </cfm-entry>
              </cfm-interface>
```

Description

<cfm-remote-mep>

Usage

```
              <cfm-interface>
                <cfm-entry>
                  <cfm-remote-meps>
                    <cfm-remote-mep>
                      <cfm-remote-mep-identifier>
                        cfm-remote-mep-identifier
                      </cfm-remote-mep-identifier>
                      <cfm-remote-mep-state>
```

```
                cfm-remote-mep-state
              </cfm-remote-mep-state>
              <cfm-remote-mep-mac-address>
                cfm-remote-mep-mac-address
              </cfm-remote-mep-mac-address>
              <cfm-remote-mep-interface>
                cfm-remote-mep-interface
              </cfm-remote-mep-interface>
              <cfm-remote-mep-type>
                cfm-remote-mep-type
              </cfm-remote-mep-type>
              <cfm-remote-mep-loss-threshold>
                cfm-remote-mep-loss-threshold
              </cfm-remote-mep-loss-threshold>
              <cfm-remote-mep-rdi>
                cfm-remote-mep-rdi
              </cfm-remote-mep-rdi>
              <cfm-remote-mep-last-flapped>
                cfm-remote-mep-last-flapped
              </cfm-remote-mep-last-flapped>
              <cfm-remote-mep-last-dm-stats-cleared>
                cfm-remote-mep-last-dm-stats-cleared
              </cfm-remote-mep-last-dm-stats-cleared>
              <cfm-remote-mep-last-lm-stats-cleared>
                cfm-remote-mep-last-lm-stats-cleared
              </cfm-remote-mep-last-lm-stats-cleared>
              <cfm-remote-mep-continuity>
                cfm-remote-mep-continuity
              </cfm-remote-mep-continuity>
              <cfm-remote-mep-admin-enable-time>
                cfm-remote-mep-admin-enable-time
              </cfm-remote-mep-admin-enable-time>
              <cfm-remote-mep-oper-down-time>
                cfm-remote-mep-oper-down-time
              </cfm-remote-mep-oper-down-time>
              <cfm-remote-mep-port-status-tlv>
                cfm-remote-mep-port-status-tlv
              </cfm-remote-mep-port-status-tlv>
              <cfm-remote-mep-interface-status-tlv>
                cfm-remote-mep-interface-status-tlv
              </cfm-remote-mep-interface-status-tlv>

            <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


            <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                  </cfm-remote-mep>
                </cfm-remote-meps>
              </cfm-entry>
            </cfm-interface>
```

Description

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<cfm-remote-mep>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-identifier>
       cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-state>
       cfm-remote-mep-state
      </cfm-remote-mep-state>
      <cfm-remote-mep-mac-address>
       cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
      <cfm-remote-mep-interface>
       cfm-remote-mep-interface
      </cfm-remote-mep-interface>
      <cfm-remote-mep-type>
       cfm-remote-mep-type
      </cfm-remote-mep-type>
      <cfm-remote-mep-loss-threshold>
       cfm-remote-mep-loss-threshold
      </cfm-remote-mep-loss-threshold>
      <cfm-remote-mep-rdi>
       cfm-remote-mep-rdi
      </cfm-remote-mep-rdi>
      <cfm-remote-mep-last-flapped>
       cfm-remote-mep-last-flapped
      </cfm-remote-mep-last-flapped>
      <cfm-remote-mep-last-dm-stats-cleared>
       cfm-remote-mep-last-dm-stats-cleared
      </cfm-remote-mep-last-dm-stats-cleared>
      <cfm-remote-mep-last-lm-stats-cleared>
       cfm-remote-mep-last-lm-stats-cleared
      </cfm-remote-mep-last-lm-stats-cleared>
      <cfm-remote-mep-continuity>
       cfm-remote-mep-continuity
      </cfm-remote-mep-continuity>
      <cfm-remote-mep-admin-enable-time>
       cfm-remote-mep-admin-enable-time
      </cfm-remote-mep-admin-enable-time>
      <cfm-remote-mep-oper-down-time>
       cfm-remote-mep-oper-down-time
      </cfm-remote-mep-oper-down-time>
      <cfm-remote-mep-port-status-tlv>
       cfm-remote-mep-port-status-tlv
      </cfm-remote-mep-port-status-tlv>
      <cfm-remote-mep-interface-status-tlv>
       cfm-remote-mep-interface-status-tlv
      </cfm-remote-mep-interface-status-tlv>
```

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```
<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>

<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
            </cfm-remote-mep>
          </cfm-interface-remote-meps>
        </cfm-interface-session>
      </cfm-interface-sessions>
    </cfm-entry>
  </cfm-mep-database>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-identifier>
          cfm-remote-mep-identifier
        </cfm-remote-mep-identifier>
        <cfm-remote-mep-state>
          cfm-remote-mep-state
        </cfm-remote-mep-state>
        <cfm-remote-mep-mac-address>
          cfm-remote-mep-mac-address
        </cfm-remote-mep-mac-address>
        <cfm-remote-mep-interface>
          cfm-remote-mep-interface
        </cfm-remote-mep-interface>
        <cfm-remote-mep-type>
          cfm-remote-mep-type
        </cfm-remote-mep-type>
        <cfm-remote-mep-loss-threshold>
          cfm-remote-mep-loss-threshold
        </cfm-remote-mep-loss-threshold>
        <cfm-remote-mep-rdi>
          cfm-remote-mep-rdi
        </cfm-remote-mep-rdi>
        <cfm-remote-mep-last-flapped>
          cfm-remote-mep-last-flapped
        </cfm-remote-mep-last-flapped>
        <cfm-remote-mep-last-dm-stats-cleared>
          cfm-remote-mep-last-dm-stats-cleared
        </cfm-remote-mep-last-dm-stats-cleared>
        <cfm-remote-mep-last-lm-stats-cleared>
          cfm-remote-mep-last-lm-stats-cleared
        </cfm-remote-mep-last-lm-stats-cleared>
        <cfm-remote-mep-continuity>
          cfm-remote-mep-continuity
        </cfm-remote-mep-continuity>
        <cfm-remote-mep-admin-enable-time>
          cfm-remote-mep-admin-enable-time
```


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```
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

                <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


                <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                      </cfm-remote-mep>
                    </cfm-remote-meps>
                  </cfm-entry>
                </cfm-mep-database>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-identifier>
              cfm-remote-mep-identifier
            </cfm-remote-mep-identifier>
            <cfm-remote-mep-state>
              cfm-remote-mep-state
            </cfm-remote-mep-state>
            <cfm-remote-mep-mac-address>
              cfm-remote-mep-mac-address
            </cfm-remote-mep-mac-address>
            <cfm-remote-mep-interface>
              cfm-remote-mep-interface
            </cfm-remote-mep-interface>
            <cfm-remote-mep-type>
              cfm-remote-mep-type
            </cfm-remote-mep-type>
            <cfm-remote-mep-loss-threshold>
              cfm-remote-mep-loss-threshold
            </cfm-remote-mep-loss-threshold>
            <cfm-remote-mep-rdi>
              cfm-remote-mep-rdi
            </cfm-remote-mep-rdi>
            <cfm-remote-mep-last-flapped>
              cfm-remote-mep-last-flapped
            </cfm-remote-mep-last-flapped>
```

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```
                    <cfm-remote-mep-last-dm-stats-cleared>
                      cfm-remote-mep-last-dm-stats-cleared
                    </cfm-remote-mep-last-dm-stats-cleared>
                    <cfm-remote-mep-last-lm-stats-cleared>
                      cfm-remote-mep-last-lm-stats-cleared
                    </cfm-remote-mep-last-lm-stats-cleared>
                    <cfm-remote-mep-continuity>
                      cfm-remote-mep-continuity
                    </cfm-remote-mep-continuity>
                    <cfm-remote-mep-admin-enable-time>
                      cfm-remote-mep-admin-enable-time
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                  </cfm-remote-mep>
                </cfm-interface-remote-meps>
              </cfm-interface-session>
            </cfm-interface-sessions>
          </cfm-entry>
        </cfm-mep-statistics>
```

Description

<cfm-remote-mep>

Usage

```
        <cfm-mep-statistics>
          <cfm-entry>
            <cfm-remote-meps>
              <cfm-remote-mep>
                <cfm-remote-mep-identifier>
                  cfm-remote-mep-identifier
                </cfm-remote-mep-identifier>
                <cfm-remote-mep-state>
                  cfm-remote-mep-state
                </cfm-remote-mep-state>
                <cfm-remote-mep-mac-address>
                  cfm-remote-mep-mac-address
                </cfm-remote-mep-mac-address>
                <cfm-remote-mep-interface>
                  cfm-remote-mep-interface
                </cfm-remote-mep-interface>
                <cfm-remote-mep-type>
```


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```
                cfm-remote-mep-type
              </cfm-remote-mep-type>
              <cfm-remote-mep-loss-threshold>
                cfm-remote-mep-loss-threshold
              </cfm-remote-mep-loss-threshold>
              <cfm-remote-mep-rdi>
                cfm-remote-mep-rdi
              </cfm-remote-mep-rdi>
              <cfm-remote-mep-last-flapped>
                cfm-remote-mep-last-flapped
              </cfm-remote-mep-last-flapped>
              <cfm-remote-mep-last-dm-stats-cleared>
                cfm-remote-mep-last-dm-stats-cleared
              </cfm-remote-mep-last-dm-stats-cleared>
              <cfm-remote-mep-last-lm-stats-cleared>
                cfm-remote-mep-last-lm-stats-cleared
              </cfm-remote-mep-last-lm-stats-cleared>
              <cfm-remote-mep-continuity>
                cfm-remote-mep-continuity
              </cfm-remote-mep-continuity>
              <cfm-remote-mep-admin-enable-time>
                cfm-remote-mep-admin-enable-time
              </cfm-remote-mep-admin-enable-time>
              <cfm-remote-mep-oper-down-time>
                cfm-remote-mep-oper-down-time
              </cfm-remote-mep-oper-down-time>
              <cfm-remote-mep-port-status-tlv>
                cfm-remote-mep-port-status-tlv
              </cfm-remote-mep-port-status-tlv>
              <cfm-remote-mep-interface-status-tlv>
                cfm-remote-mep-interface-status-tlv
              </cfm-remote-mep-interface-status-tlv>

            <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


            <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                  </cfm-remote-mep>
                </cfm-remote-meps>
              </cfm-entry>
            </cfm-mep-statistics>
```

Description

<cfm-remote-mep>

Usage

```
            <cfm-delay-statistics>
              <cfm-entry>
                <cfm-interface-sessions>
                  <cfm-interface-session>
                    <cfm-interface-remote-meps>
                      <cfm-remote-mep>
                        <cfm-remote-mep-identifier>
                          cfm-remote-mep-identifier
```

```
                    </cfm-remote-mep-identifier>
                    <cfm-remote-mep-state>
                      cfm-remote-mep-state
                    </cfm-remote-mep-state>
                    <cfm-remote-mep-mac-address>
                      cfm-remote-mep-mac-address
                    </cfm-remote-mep-mac-address>
                    <cfm-remote-mep-interface>
                      cfm-remote-mep-interface
                    </cfm-remote-mep-interface>
                    <cfm-remote-mep-type>
                      cfm-remote-mep-type
                    </cfm-remote-mep-type>
                    <cfm-remote-mep-loss-threshold>
                      cfm-remote-mep-loss-threshold
                    </cfm-remote-mep-loss-threshold>
                    <cfm-remote-mep-rdi>
                      cfm-remote-mep-rdi
                    </cfm-remote-mep-rdi>
                    <cfm-remote-mep-last-flapped>
                      cfm-remote-mep-last-flapped
                    </cfm-remote-mep-last-flapped>
                    <cfm-remote-mep-last-dm-stats-cleared>
                      cfm-remote-mep-last-dm-stats-cleared
                    </cfm-remote-mep-last-dm-stats-cleared>
                    <cfm-remote-mep-last-lm-stats-cleared>
                      cfm-remote-mep-last-lm-stats-cleared
                    </cfm-remote-mep-last-lm-stats-cleared>
                    <cfm-remote-mep-continuity>
                      cfm-remote-mep-continuity
                    </cfm-remote-mep-continuity>
                    <cfm-remote-mep-admin-enable-time>
                      cfm-remote-mep-admin-enable-time
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                  </cfm-remote-mep>
                </cfm-interface-remote-meps>
              </cfm-interface-session>
            </cfm-interface-sessions>
          </cfm-entry>
        </cfm-delay-statistics>
```


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Description

<cfm-remote-mep>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep>
    <cfm-remote-mep-identifier>
     cfm-remote-mep-identifier
    </cfm-remote-mep-identifier>
    <cfm-remote-mep-state>
     cfm-remote-mep-state
    </cfm-remote-mep-state>
    <cfm-remote-mep-mac-address>
     cfm-remote-mep-mac-address
    </cfm-remote-mep-mac-address>
    <cfm-remote-mep-interface>
     cfm-remote-mep-interface
    </cfm-remote-mep-interface>
    <cfm-remote-mep-type>
     cfm-remote-mep-type
    </cfm-remote-mep-type>
    <cfm-remote-mep-loss-threshold>
     cfm-remote-mep-loss-threshold
    </cfm-remote-mep-loss-threshold>
    <cfm-remote-mep-rdi>
     cfm-remote-mep-rdi
    </cfm-remote-mep-rdi>
    <cfm-remote-mep-last-flapped>
     cfm-remote-mep-last-flapped
    </cfm-remote-mep-last-flapped>
    <cfm-remote-mep-last-dm-stats-cleared>
     cfm-remote-mep-last-dm-stats-cleared
    </cfm-remote-mep-last-dm-stats-cleared>
    <cfm-remote-mep-last-lm-stats-cleared>
     cfm-remote-mep-last-lm-stats-cleared
    </cfm-remote-mep-last-lm-stats-cleared>
    <cfm-remote-mep-continuity>
     cfm-remote-mep-continuity
    </cfm-remote-mep-continuity>
    <cfm-remote-mep-admin-enable-time>
     cfm-remote-mep-admin-enable-time
    </cfm-remote-mep-admin-enable-time>
    <cfm-remote-mep-oper-down-time>
     cfm-remote-mep-oper-down-time
    </cfm-remote-mep-oper-down-time>
    <cfm-remote-mep-port-status-tlv>
     cfm-remote-mep-port-status-tlv
    </cfm-remote-mep-port-status-tlv>
    <cfm-remote-mep-interface-status-tlv>
     cfm-remote-mep-interface-status-tlv
    </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>
```

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```
<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
          </cfm-remote-mep>
        </cfm-remote-meps>
      </cfm-entry>
    </cfm-delay-statistics>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-identifier>
              cfm-remote-mep-identifier
            </cfm-remote-mep-identifier>
            <cfm-remote-mep-state>
              cfm-remote-mep-state
            </cfm-remote-mep-state>
            <cfm-remote-mep-mac-address>
              cfm-remote-mep-mac-address
            </cfm-remote-mep-mac-address>
            <cfm-remote-mep-interface>
              cfm-remote-mep-interface
            </cfm-remote-mep-interface>
            <cfm-remote-mep-type>
              cfm-remote-mep-type
            </cfm-remote-mep-type>
            <cfm-remote-mep-loss-threshold>
              cfm-remote-mep-loss-threshold
            </cfm-remote-mep-loss-threshold>
            <cfm-remote-mep-rdi>
              cfm-remote-mep-rdi
            </cfm-remote-mep-rdi>
            <cfm-remote-mep-last-flapped>
              cfm-remote-mep-last-flapped
            </cfm-remote-mep-last-flapped>
            <cfm-remote-mep-last-dm-stats-cleared>
              cfm-remote-mep-last-dm-stats-cleared
            </cfm-remote-mep-last-dm-stats-cleared>
            <cfm-remote-mep-last-lm-stats-cleared>
              cfm-remote-mep-last-lm-stats-cleared
            </cfm-remote-mep-last-lm-stats-cleared>
            <cfm-remote-mep-continuity>
              cfm-remote-mep-continuity
            </cfm-remote-mep-continuity>
            <cfm-remote-mep-admin-enable-time>
              cfm-remote-mep-admin-enable-time
            </cfm-remote-mep-admin-enable-time>
```


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```
                        <cfm-remote-mep-oper-down-time>
                          cfm-remote-mep-oper-down-time
                        </cfm-remote-mep-oper-down-time>
                        <cfm-remote-mep-port-status-tlv>
                          cfm-remote-mep-port-status-tlv
                        </cfm-remote-mep-port-status-tlv>
                        <cfm-remote-mep-interface-status-tlv>
                          cfm-remote-mep-interface-status-tlv
                        </cfm-remote-mep-interface-status-tlv>

                    <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


                    <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                          </cfm-remote-mep>
                        </cfm-interface-remote-meps>
                      </cfm-interface-session>
                    </cfm-interface-sessions>
                  </cfm-entry>
                </cfm-loss-statistics>
```

Description

<cfm-remote-mep>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-identifier>
          cfm-remote-mep-identifier
        </cfm-remote-mep-identifier>
        <cfm-remote-mep-state>
          cfm-remote-mep-state
        </cfm-remote-mep-state>
        <cfm-remote-mep-mac-address>
          cfm-remote-mep-mac-address
        </cfm-remote-mep-mac-address>
        <cfm-remote-mep-interface>
          cfm-remote-mep-interface
        </cfm-remote-mep-interface>
        <cfm-remote-mep-type>
          cfm-remote-mep-type
        </cfm-remote-mep-type>
        <cfm-remote-mep-loss-threshold>
          cfm-remote-mep-loss-threshold
        </cfm-remote-mep-loss-threshold>
        <cfm-remote-mep-rdi>
          cfm-remote-mep-rdi
        </cfm-remote-mep-rdi>
        <cfm-remote-mep-last-flapped>
          cfm-remote-mep-last-flapped
        </cfm-remote-mep-last-flapped>
        <cfm-remote-mep-last-dm-stats-cleared>
```

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```
                cfm-remote-mep-last-dm-stats-cleared
              </cfm-remote-mep-last-dm-stats-cleared>
              <cfm-remote-mep-last-lm-stats-cleared>
                cfm-remote-mep-last-lm-stats-cleared
              </cfm-remote-mep-last-lm-stats-cleared>
              <cfm-remote-mep-continuity>
                cfm-remote-mep-continuity
              </cfm-remote-mep-continuity>
              <cfm-remote-mep-admin-enable-time>
                cfm-remote-mep-admin-enable-time
              </cfm-remote-mep-admin-enable-time>
              <cfm-remote-mep-oper-down-time>
                cfm-remote-mep-oper-down-time
              </cfm-remote-mep-oper-down-time>
              <cfm-remote-mep-port-status-tlv>
                cfm-remote-mep-port-status-tlv
              </cfm-remote-mep-port-status-tlv>
              <cfm-remote-mep-interface-status-tlv>
                cfm-remote-mep-interface-status-tlv
              </cfm-remote-mep-interface-status-tlv>

<cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


<cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
            </cfm-remote-mep>
          </cfm-remote-meps>
        </cfm-entry>
      </cfm-loss-statistics>
```

Description

<cfm-remote-mep>

Usage

```
      <cfm-iterator-statistics>
        <cfm-entry>
          <cfm-interface-sessions>
            <cfm-interface-session>
              <cfm-interface-remote-meps>
                <cfm-remote-mep>
                  <cfm-remote-mep-identifier>
                    cfm-remote-mep-identifier
                  </cfm-remote-mep-identifier>
                  <cfm-remote-mep-state>
                    cfm-remote-mep-state
                  </cfm-remote-mep-state>
                  <cfm-remote-mep-mac-address>
                    cfm-remote-mep-mac-address
                  </cfm-remote-mep-mac-address>
                  <cfm-remote-mep-interface>
                    cfm-remote-mep-interface
                  </cfm-remote-mep-interface>
                  <cfm-remote-mep-type>
                    cfm-remote-mep-type
```


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```
                    </cfm-remote-mep-type>
                    <cfm-remote-mep-loss-threshold>
                      cfm-remote-mep-loss-threshold
                    </cfm-remote-mep-loss-threshold>
                    <cfm-remote-mep-rdi>
                      cfm-remote-mep-rdi
                    </cfm-remote-mep-rdi>
                    <cfm-remote-mep-last-flapped>
                      cfm-remote-mep-last-flapped
                    </cfm-remote-mep-last-flapped>
                    <cfm-remote-mep-last-dm-stats-cleared>
                      cfm-remote-mep-last-dm-stats-cleared
                    </cfm-remote-mep-last-dm-stats-cleared>
                    <cfm-remote-mep-last-lm-stats-cleared>
                      cfm-remote-mep-last-lm-stats-cleared
                    </cfm-remote-mep-last-lm-stats-cleared>
                    <cfm-remote-mep-continuity>
                      cfm-remote-mep-continuity
                    </cfm-remote-mep-continuity>
                    <cfm-remote-mep-admin-enable-time>
                      cfm-remote-mep-admin-enable-time
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

                  <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


                  <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                        </cfm-remote-mep>
                      </cfm-interface-remote-meps>
                    </cfm-interface-session>
                  </cfm-interface-sessions>
                </cfm-entry>
              </cfm-iterator-statistics>
```

Description

<cfm-remote-mep>

Usage

```
              <cfm-iterator-statistics>
                <cfm-entry>
                  <cfm-remote-meps>
                    <cfm-remote-mep>
                      <cfm-remote-mep-identifier>
                        cfm-remote-mep-identifier
                      </cfm-remote-mep-identifier>
```

```
                    <cfm-remote-mep-state>
                      cfm-remote-mep-state
                    </cfm-remote-mep-state>
                    <cfm-remote-mep-mac-address>
                      cfm-remote-mep-mac-address
                    </cfm-remote-mep-mac-address>
                    <cfm-remote-mep-interface>
                      cfm-remote-mep-interface
                    </cfm-remote-mep-interface>
                    <cfm-remote-mep-type>
                      cfm-remote-mep-type
                    </cfm-remote-mep-type>
                    <cfm-remote-mep-loss-threshold>
                      cfm-remote-mep-loss-threshold
                    </cfm-remote-mep-loss-threshold>
                    <cfm-remote-mep-rdi>
                      cfm-remote-mep-rdi
                    </cfm-remote-mep-rdi>
                    <cfm-remote-mep-last-flapped>
                      cfm-remote-mep-last-flapped
                    </cfm-remote-mep-last-flapped>
                    <cfm-remote-mep-last-dm-stats-cleared>
                      cfm-remote-mep-last-dm-stats-cleared
                    </cfm-remote-mep-last-dm-stats-cleared>
                    <cfm-remote-mep-last-lm-stats-cleared>
                      cfm-remote-mep-last-lm-stats-cleared
                    </cfm-remote-mep-last-lm-stats-cleared>
                    <cfm-remote-mep-continuity>
                      cfm-remote-mep-continuity
                    </cfm-remote-mep-continuity>
                    <cfm-remote-mep-admin-enable-time>
                      cfm-remote-mep-admin-enable-time
                    </cfm-remote-mep-admin-enable-time>
                    <cfm-remote-mep-oper-down-time>
                      cfm-remote-mep-oper-down-time
                    </cfm-remote-mep-oper-down-time>
                    <cfm-remote-mep-port-status-tlv>
                      cfm-remote-mep-port-status-tlv
                    </cfm-remote-mep-port-status-tlv>
                    <cfm-remote-mep-interface-status-tlv>
                      cfm-remote-mep-interface-status-tlv
                    </cfm-remote-mep-interface-status-tlv>

                <cfm-remote-mep-connection-protection-tlv>....</cfm-remote-mep-connection-protection-tlv>


                <cfm-remote-mep-loss-threshold-tlv>....</cfm-remote-mep-loss-threshold-tlv>
                      </cfm-remote-mep>
                    </cfm-remote-meps>
                  </cfm-entry>
                </cfm-iterator-statistics>
```

Description

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<cfm-remote-mep-ap>

Usage

```
<cfm-entry>
  <cfm-remote-meps>
    <cfm-remote-mep-ap>
      <cfm-action-profile-name>
        cfm-action-profile-name
      </cfm-action-profile-name>
      <cfm-ap-last-event>
        cfm-ap-last-event
      </cfm-ap-last-event>
      <cfm-ap-action-name>
        cfm-ap-action-name
      </cfm-ap-action-name>
      <cfm-ap-action-time>
        cfm-ap-action-time
      </cfm-ap-action-time>
      <cfm-ap-last-event-cleared-time>
        cfm-ap-last-event-cleared-time
      </cfm-ap-last-event-cleared-time>
    </cfm-remote-mep-ap>
  </cfm-remote-meps>
</cfm-entry>
```

Description

<cfm-remote-mep-ap>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-ap>
        <cfm-action-profile-name>
          cfm-action-profile-name
        </cfm-action-profile-name>
        <cfm-ap-last-event>
          cfm-ap-last-event
        </cfm-ap-last-event>
        <cfm-ap-action-name>
          cfm-ap-action-name
        </cfm-ap-action-name>
        <cfm-ap-action-time>
          cfm-ap-action-time
        </cfm-ap-action-time>
        <cfm-ap-last-event-cleared-time>
          cfm-ap-last-event-cleared-time
        </cfm-ap-last-event-cleared-time>
      </cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-interface>
```

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Description

<cfm-remote-mep-ap>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep-ap>
    <cfm-action-profile-name>
     cfm-action-profile-name
    </cfm-action-profile-name>
    <cfm-ap-last-event>
     cfm-ap-last-event
    </cfm-ap-last-event>
    <cfm-ap-action-name>
     cfm-ap-action-name
    </cfm-ap-action-name>
    <cfm-ap-action-time>
     cfm-ap-action-time
    </cfm-ap-action-time>
    <cfm-ap-last-event-cleared-time>
     cfm-ap-last-event-cleared-time
    </cfm-ap-last-event-cleared-time>
   </cfm-remote-mep-ap>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-remote-mep-ap>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep-ap>
    <cfm-action-profile-name>
     cfm-action-profile-name
    </cfm-action-profile-name>
    <cfm-ap-last-event>
     cfm-ap-last-event
    </cfm-ap-last-event>
    <cfm-ap-action-name>
     cfm-ap-action-name
    </cfm-ap-action-name>
    <cfm-ap-action-time>
     cfm-ap-action-time
    </cfm-ap-action-time>
    <cfm-ap-last-event-cleared-time>
     cfm-ap-last-event-cleared-time
    </cfm-ap-last-event-cleared-time>
   </cfm-remote-mep-ap>
  </cfm-remote-meps>
```


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```
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-remote-mep-ap>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep-ap>
    <cfm-action-profile-name>
     cfm-action-profile-name
    </cfm-action-profile-name>
    <cfm-ap-last-event>
     cfm-ap-last-event
    </cfm-ap-last-event>
    <cfm-ap-action-name>
     cfm-ap-action-name
    </cfm-ap-action-name>
    <cfm-ap-action-time>
     cfm-ap-action-time
    </cfm-ap-action-time>
    <cfm-ap-last-event-cleared-time>
     cfm-ap-last-event-cleared-time
    </cfm-ap-last-event-cleared-time>
   </cfm-remote-mep-ap>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-remote-mep-ap>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep-ap>
    <cfm-action-profile-name>
     cfm-action-profile-name
    </cfm-action-profile-name>
    <cfm-ap-last-event>
     cfm-ap-last-event
    </cfm-ap-last-event>
    <cfm-ap-action-name>
     cfm-ap-action-name
    </cfm-ap-action-name>
    <cfm-ap-action-time>
     cfm-ap-action-time
    </cfm-ap-action-time>
    <cfm-ap-last-event-cleared-time>
```

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```
            cfm-ap-last-event-cleared-time
          </cfm-ap-last-event-cleared-time>
        </cfm-remote-mep-ap>
      </cfm-remote-meps>
    </cfm-entry>
  </cfm-loss-statistics>
```

Description

<cfm-remote-mep-ap>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-ap>
        <cfm-action-profile-name>
          cfm-action-profile-name
        </cfm-action-profile-name>
        <cfm-ap-last-event>
          cfm-ap-last-event
        </cfm-ap-last-event>
        <cfm-ap-action-name>
          cfm-ap-action-name
        </cfm-ap-action-name>
        <cfm-ap-action-time>
          cfm-ap-action-time
        </cfm-ap-action-time>
        <cfm-ap-last-event-cleared-time>
          cfm-ap-last-event-cleared-time
        </cfm-ap-last-event-cleared-time>
      </cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-entry>
  <cfm-remote-mep-brief-summary>
    <cfm-remote-mep-identifier>
      cfm-remote-mep-identifier
    </cfm-remote-mep-identifier>
    <cfm-remote-mep-mac-address>
      cfm-remote-mep-mac-address
    </cfm-remote-mep-mac-address>
  </cfm-remote-mep-brief-summary>
</cfm-entry>
```

Description

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<cfm-remote-mep-brief-summary>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-mep-statistics>
```

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Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-remote-mep-brief-summary>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-remote-mep-brief-summary>
      <cfm-remote-mep-identifier>
        cfm-remote-mep-identifier
      </cfm-remote-mep-identifier>
      <cfm-remote-mep-mac-address>
        cfm-remote-mep-mac-address
      </cfm-remote-mep-mac-address>
    </cfm-remote-mep-brief-summary>
  </cfm-entry>
</cfm-iterator-statistics>
```


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Description

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-remote-mep-connection-protection-tlv>
 <cfm-connection-protection-tlv-prefer-me>
  cfm-connection-protection-tlv-prefer-me
 </cfm-connection-protection-tlv-prefer-me>
 <cfm-connection-protection-tlv-protection-in-use>
  cfm-connection-protection-tlv-protection-in-use
 </cfm-connection-protection-tlv-protection-in-use>
 <cfm-connection-protection-tlv-frr-flag>
  cfm-connection-protection-tlv-frr-flag
 </cfm-connection-protection-tlv-frr-flag>
</cfm-remote-mep-connection-protection-tlv>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-entry>
 <cfm-interface-sessions>
  <cfm-interface-session>
   <cfm-interface-remote-meps>
    <cfm-remote-mep>
     <cfm-remote-mep-connection-protection-tlv>
      <cfm-connection-protection-tlv-prefer-me>
       cfm-connection-protection-tlv-prefer-me
      </cfm-connection-protection-tlv-prefer-me>
      <cfm-connection-protection-tlv-protection-in-use>
       cfm-connection-protection-tlv-protection-in-use
      </cfm-connection-protection-tlv-protection-in-use>
      <cfm-connection-protection-tlv-frr-flag>
       cfm-connection-protection-tlv-frr-flag
      </cfm-connection-protection-tlv-frr-flag>
     </cfm-remote-mep-connection-protection-tlv>
    </cfm-remote-mep>
   </cfm-interface-remote-meps>
  </cfm-interface-session>
 </cfm-interface-sessions>
</cfm-entry>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-entry>
 <cfm-remote-meps>
  <cfm-remote-mep>
   <cfm-remote-mep-connection-protection-tlv>
```

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```
        <cfm-connection-protection-tlv-prefer-me>
          cfm-connection-protection-tlv-prefer-me
        </cfm-connection-protection-tlv-prefer-me>
        <cfm-connection-protection-tlv-protection-in-use>
          cfm-connection-protection-tlv-protection-in-use
        </cfm-connection-protection-tlv-protection-in-use>
        <cfm-connection-protection-tlv-frr-flag>
          cfm-connection-protection-tlv-frr-flag
        </cfm-connection-protection-tlv-frr-flag>
      </cfm-remote-mep-connection-protection-tlv>
    </cfm-remote-mep>
  </cfm-remote-meps>
</cfm-entry>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-connection-protection-tlv>
              <cfm-connection-protection-tlv-prefer-me>
                cfm-connection-protection-tlv-prefer-me
              </cfm-connection-protection-tlv-prefer-me>
              <cfm-connection-protection-tlv-protection-in-use>
                cfm-connection-protection-tlv-protection-in-use
              </cfm-connection-protection-tlv-protection-in-use>
              <cfm-connection-protection-tlv-frr-flag>
                cfm-connection-protection-tlv-frr-flag
              </cfm-connection-protection-tlv-frr-flag>
            </cfm-remote-mep-connection-protection-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-interface>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
```


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```
        <cfm-remote-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
        </cfm-remote-mep-connection-protection-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-interface>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-connection-protection-tlv>
              <cfm-connection-protection-tlv-prefer-me>
                cfm-connection-protection-tlv-prefer-me
              </cfm-connection-protection-tlv-prefer-me>
              <cfm-connection-protection-tlv-protection-in-use>
                cfm-connection-protection-tlv-protection-in-use
              </cfm-connection-protection-tlv-protection-in-use>
              <cfm-connection-protection-tlv-frr-flag>
                cfm-connection-protection-tlv-frr-flag
              </cfm-connection-protection-tlv-frr-flag>
            </cfm-remote-mep-connection-protection-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-mep-database>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-mep-database>
  <cfm-entry>
```

```
<cfm-remote-meps>
 <cfm-remote-mep>
  <cfm-remote-mep-connection-protection-tlv>
   <cfm-connection-protection-tlv-prefer-me>
    cfm-connection-protection-tlv-prefer-me
   </cfm-connection-protection-tlv-prefer-me>
   <cfm-connection-protection-tlv-protection-in-use>
    cfm-connection-protection-tlv-protection-in-use
   </cfm-connection-protection-tlv-protection-in-use>
   <cfm-connection-protection-tlv-frr-flag>
    cfm-connection-protection-tlv-frr-flag
   </cfm-connection-protection-tlv-frr-flag>
  </cfm-remote-mep-connection-protection-tlv>
 </cfm-remote-mep>
</cfm-remote-meps>
</cfm-entry>
</cfm-mep-database>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-connection-protection-tlv>
       <cfm-connection-protection-tlv-prefer-me>
        cfm-connection-protection-tlv-prefer-me
       </cfm-connection-protection-tlv-prefer-me>
       <cfm-connection-protection-tlv-protection-in-use>
        cfm-connection-protection-tlv-protection-in-use
       </cfm-connection-protection-tlv-protection-in-use>
       <cfm-connection-protection-tlv-frr-flag>
        cfm-connection-protection-tlv-frr-flag
       </cfm-connection-protection-tlv-frr-flag>
      </cfm-remote-mep-connection-protection-tlv>
     </cfm-remote-mep>
    </cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
</cfm-mep-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

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<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
        </cfm-remote-mep-connection-protection-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-mep-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-connection-protection-tlv>
              <cfm-connection-protection-tlv-prefer-me>
                cfm-connection-protection-tlv-prefer-me
              </cfm-connection-protection-tlv-prefer-me>
              <cfm-connection-protection-tlv-protection-in-use>
                cfm-connection-protection-tlv-protection-in-use
              </cfm-connection-protection-tlv-protection-in-use>
              <cfm-connection-protection-tlv-frr-flag>
                cfm-connection-protection-tlv-frr-flag
              </cfm-connection-protection-tlv-frr-flag>
            </cfm-remote-mep-connection-protection-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

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Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-delay-statistics>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep>
    <cfm-remote-mep-connection-protection-tlv>
     <cfm-connection-protection-tlv-prefer-me>
      cfm-connection-protection-tlv-prefer-me
     </cfm-connection-protection-tlv-prefer-me>
     <cfm-connection-protection-tlv-protection-in-use>
      cfm-connection-protection-tlv-protection-in-use
     </cfm-connection-protection-tlv-protection-in-use>
     <cfm-connection-protection-tlv-frr-flag>
      cfm-connection-protection-tlv-frr-flag
     </cfm-connection-protection-tlv-frr-flag>
    </cfm-remote-mep-connection-protection-tlv>
   </cfm-remote-mep>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-delay-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-loss-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-connection-protection-tlv>
       <cfm-connection-protection-tlv-prefer-me>
        cfm-connection-protection-tlv-prefer-me
       </cfm-connection-protection-tlv-prefer-me>
       <cfm-connection-protection-tlv-protection-in-use>
        cfm-connection-protection-tlv-protection-in-use
       </cfm-connection-protection-tlv-protection-in-use>
       <cfm-connection-protection-tlv-frr-flag>
        cfm-connection-protection-tlv-frr-flag
       </cfm-connection-protection-tlv-frr-flag>
      </cfm-remote-mep-connection-protection-tlv>
     </cfm-remote-mep>
    </cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
```


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```
</cfm-loss-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
        </cfm-remote-mep-connection-protection-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-loss-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-connection-protection-tlv>
              <cfm-connection-protection-tlv-prefer-me>
                cfm-connection-protection-tlv-prefer-me
              </cfm-connection-protection-tlv-prefer-me>
              <cfm-connection-protection-tlv-protection-in-use>
                cfm-connection-protection-tlv-protection-in-use
              </cfm-connection-protection-tlv-protection-in-use>
              <cfm-connection-protection-tlv-frr-flag>
                cfm-connection-protection-tlv-frr-flag
              </cfm-connection-protection-tlv-frr-flag>
            </cfm-remote-mep-connection-protection-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
```

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```
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-connection-protection-tlv>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-connection-protection-tlv>
          <cfm-connection-protection-tlv-prefer-me>
            cfm-connection-protection-tlv-prefer-me
          </cfm-connection-protection-tlv-prefer-me>
          <cfm-connection-protection-tlv-protection-in-use>
            cfm-connection-protection-tlv-protection-in-use
          </cfm-connection-protection-tlv-protection-in-use>
          <cfm-connection-protection-tlv-frr-flag>
            cfm-connection-protection-tlv-frr-flag
          </cfm-connection-protection-tlv-frr-flag>
        </cfm-remote-mep-connection-protection-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description Connection Protection TLV information in the last recieved CCM from Remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-remote-mep-loss-threshold-tlv>
  <cfm-loss-threshold-tlv-value>
    cfm-loss-threshold-tlv-value
  </cfm-loss-threshold-tlv-value>
  <cfm-loss-threshold-tlv-flag>
    cfm-loss-threshold-tlv-flag
  </cfm-loss-threshold-tlv-flag>
</cfm-remote-mep-loss-threshold-tlv>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-entry>
  <cfm-interface-sessions>
    <cfm-interface-session>
```


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```
      <cfm-interface-remote-meps>
       <cfm-remote-mep>
        <cfm-remote-mep-loss-threshold-tlv>
         <cfm-loss-threshold-tlv-value>
          cfm-loss-threshold-tlv-value
         </cfm-loss-threshold-tlv-value>
         <cfm-loss-threshold-tlv-flag>
          cfm-loss-threshold-tlv-flag
         </cfm-loss-threshold-tlv-flag>
        </cfm-remote-mep-loss-threshold-tlv>
       </cfm-remote-mep>
      </cfm-interface-remote-meps>
     </cfm-interface-session>
    </cfm-interface-sessions>
   </cfm-entry>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-entry>
 <cfm-remote-meps>
  <cfm-remote-mep>
   <cfm-remote-mep-loss-threshold-tlv>
    <cfm-loss-threshold-tlv-value>
     cfm-loss-threshold-tlv-value
    </cfm-loss-threshold-tlv-value>
    <cfm-loss-threshold-tlv-flag>
     cfm-loss-threshold-tlv-flag
    </cfm-loss-threshold-tlv-flag>
   </cfm-remote-mep-loss-threshold-tlv>
  </cfm-remote-mep>
 </cfm-remote-meps>
</cfm-entry>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-loss-threshold-tlv>
       <cfm-loss-threshold-tlv-value>
        cfm-loss-threshold-tlv-value
       </cfm-loss-threshold-tlv-value>
       <cfm-loss-threshold-tlv-flag>
```

```
                cfm-loss-threshold-tlv-flag
               </cfm-loss-threshold-tlv-flag>
              </cfm-remote-mep-loss-threshold-tlv>
             </cfm-remote-mep>
            </cfm-interface-remote-meps>
           </cfm-interface-session>
          </cfm-interface-sessions>
         </cfm-entry>
        </cfm-interface>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-interface>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep>
    <cfm-remote-mep-loss-threshold-tlv>
     <cfm-loss-threshold-tlv-value>
      cfm-loss-threshold-tlv-value
     </cfm-loss-threshold-tlv-value>
     <cfm-loss-threshold-tlv-flag>
      cfm-loss-threshold-tlv-flag
     </cfm-loss-threshold-tlv-flag>
    </cfm-remote-mep-loss-threshold-tlv>
   </cfm-remote-mep>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-interface>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-loss-threshold-tlv>
       <cfm-loss-threshold-tlv-value>
        cfm-loss-threshold-tlv-value
       </cfm-loss-threshold-tlv-value>
       <cfm-loss-threshold-tlv-flag>
        cfm-loss-threshold-tlv-flag
       </cfm-loss-threshold-tlv-flag>
      </cfm-remote-mep-loss-threshold-tlv>
     </cfm-remote-mep>
```


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```
        </cfm-interface-remote-meps>
       </cfm-interface-session>
      </cfm-interface-sessions>
     </cfm-entry>
    </cfm-mep-database>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-database>
 <cfm-entry>
  <cfm-remote-meps>
   <cfm-remote-mep>
    <cfm-remote-mep-loss-threshold-tlv>
     <cfm-loss-threshold-tlv-value>
      cfm-loss-threshold-tlv-value
     </cfm-loss-threshold-tlv-value>
     <cfm-loss-threshold-tlv-flag>
      cfm-loss-threshold-tlv-flag
     </cfm-loss-threshold-tlv-flag>
    </cfm-remote-mep-loss-threshold-tlv>
   </cfm-remote-mep>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-mep-database>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-statistics>
 <cfm-entry>
  <cfm-interface-sessions>
   <cfm-interface-session>
    <cfm-interface-remote-meps>
     <cfm-remote-mep>
      <cfm-remote-mep-loss-threshold-tlv>
       <cfm-loss-threshold-tlv-value>
        cfm-loss-threshold-tlv-value
       </cfm-loss-threshold-tlv-value>
       <cfm-loss-threshold-tlv-flag>
        cfm-loss-threshold-tlv-flag
       </cfm-loss-threshold-tlv-flag>
      </cfm-remote-mep-loss-threshold-tlv>
     </cfm-remote-mep>
    </cfm-interface-remote-meps>
   </cfm-interface-session>
  </cfm-interface-sessions>
 </cfm-entry>
```

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```
</cfm-mep-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-loss-threshold-tlv>
          <cfm-loss-threshold-tlv-value>
            cfm-loss-threshold-tlv-value
          </cfm-loss-threshold-tlv-value>
          <cfm-loss-threshold-tlv-flag>
            cfm-loss-threshold-tlv-flag
          </cfm-loss-threshold-tlv-flag>
        </cfm-remote-mep-loss-threshold-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-mep-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-loss-threshold-tlv>
              <cfm-loss-threshold-tlv-value>
                cfm-loss-threshold-tlv-value
              </cfm-loss-threshold-tlv-value>
              <cfm-loss-threshold-tlv-flag>
                cfm-loss-threshold-tlv-flag
              </cfm-loss-threshold-tlv-flag>
            </cfm-remote-mep-loss-threshold-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-delay-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

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<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep>
        <cfm-remote-mep-loss-threshold-tlv>
          <cfm-loss-threshold-tlv-value>
            cfm-loss-threshold-tlv-value
          </cfm-loss-threshold-tlv-value>
          <cfm-loss-threshold-tlv-flag>
            cfm-loss-threshold-tlv-flag
          </cfm-loss-threshold-tlv-flag>
        </cfm-remote-mep-loss-threshold-tlv>
      </cfm-remote-mep>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-delay-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-interface-sessions>
      <cfm-interface-session>
        <cfm-interface-remote-meps>
          <cfm-remote-mep>
            <cfm-remote-mep-loss-threshold-tlv>
              <cfm-loss-threshold-tlv-value>
                cfm-loss-threshold-tlv-value
              </cfm-loss-threshold-tlv-value>
              <cfm-loss-threshold-tlv-flag>
                cfm-loss-threshold-tlv-flag
              </cfm-loss-threshold-tlv-flag>
            </cfm-remote-mep-loss-threshold-tlv>
          </cfm-remote-mep>
        </cfm-interface-remote-meps>
      </cfm-interface-session>
    </cfm-interface-sessions>
  </cfm-entry>
</cfm-loss-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-loss-statistics>
```

```
<cfm-entry>
  <cfm-remote-meps>
    <cfm-remote-mep>
      <cfm-remote-mep-loss-threshold-tlv>
        <cfm-loss-threshold-tlv-value>
          cfm-loss-threshold-tlv-value
        </cfm-loss-threshold-tlv-value>
        <cfm-loss-threshold-tlv-flag>
          cfm-loss-threshold-tlv-flag
        </cfm-loss-threshold-tlv-flag>
      </cfm-remote-mep-loss-threshold-tlv>
    </cfm-remote-mep>
  </cfm-remote-meps>
 </cfm-entry>
</cfm-loss-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
   <cfm-interface-sessions>
     <cfm-interface-session>
       <cfm-interface-remote-meps>
         <cfm-remote-mep>
           <cfm-remote-mep-loss-threshold-tlv>
             <cfm-loss-threshold-tlv-value>
               cfm-loss-threshold-tlv-value
             </cfm-loss-threshold-tlv-value>
             <cfm-loss-threshold-tlv-flag>
               cfm-loss-threshold-tlv-flag
             </cfm-loss-threshold-tlv-flag>
           </cfm-remote-mep-loss-threshold-tlv>
         </cfm-remote-mep>
       </cfm-interface-remote-meps>
     </cfm-interface-session>
   </cfm-interface-sessions>
 </cfm-entry>
</cfm-iterator-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-mep-loss-threshold-tlv>

Usage

```
<cfm-iterator-statistics>
 <cfm-entry>
   <cfm-remote-meps>
     <cfm-remote-mep>
       <cfm-remote-mep-loss-threshold-tlv>
```


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```
            <cfm-loss-threshold-tlv-value>
              cfm-loss-threshold-tlv-value
            </cfm-loss-threshold-tlv-value>
            <cfm-loss-threshold-tlv-flag>
              cfm-loss-threshold-tlv-flag
            </cfm-loss-threshold-tlv-flag>
          </cfm-remote-mep-loss-threshold-tlv>
        </cfm-remote-mep>
      </cfm-remote-meps>
    </cfm-entry>
  </cfm-iterator-statistics>
```

Description Loss Threshold TLV information in the last Last received CCM from remote MEP

<cfm-remote-meps>

Usage

```
<cfm-entry>
  <cfm-remote-meps>
    <cfm-remote-mep-count>
      cfm-remote-mep-count
    </cfm-remote-mep-count>
    <cfm-remote-mep>....</cfm-remote-mep>
    <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
  </cfm-remote-meps>
</cfm-entry>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-interface>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-interface>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-mep-database>
  <cfm-entry>
    <cfm-remote-meps>
```

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```
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-mep-database>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-mep-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-mep-statistics>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-delay-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-delay-statistics>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-loss-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
```


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```
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-loss-statistics>
```

Description

<cfm-remote-meps>

Usage

```
<cfm-iterator-statistics>
  <cfm-entry>
    <cfm-remote-meps>
      <cfm-remote-mep-count>
        cfm-remote-mep-count
      </cfm-remote-mep-count>
      <cfm-remote-mep>....</cfm-remote-mep>
      <cfm-remote-mep-ap>....</cfm-remote-mep-ap>
    </cfm-remote-meps>
  </cfm-entry>
</cfm-iterator-statistics>
```

Description

<cfm-route-information>

Usage

```
<cfm-route-information>
  <cfm-route-prefix>
    cfm-route-prefix
  </cfm-route-prefix>
  <cfm-nexthop-index>
    cfm-nexthop-index
  </cfm-nexthop-index>
  <cfm-route-last-operation>
    cfm-route-last-operation
  </cfm-route-last-operation>
  <cfm-route-last-error>
    cfm-route-last-error
  </cfm-route-last-error>
  <cfm-route-statistics>
    cfm-route-statistics
  </cfm-route-statistics>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-route-table-index>
    cfm-route-table-index
  </cfm-route-table-index>
  <cfm-route-owner>
    cfm-route-owner
  </cfm-route-owner>
```

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```
  <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
</cfm-route-information>
```

Description

<cfm-route-maintenance-domain-level>

Usage

```
<cfm-route-maintenance-domain-level>
  <cfm-level>
    cfm-level
  </cfm-level>
  <cfm-local-mep-direction>
    cfm-local-mep-direction
  </cfm-local-mep-direction>
  <cfm-transmit-route-prefix>
    cfm-transmit-route-prefix
  </cfm-transmit-route-prefix>
  <cfm-nexthop-index>
    cfm-nexthop-index
  </cfm-nexthop-index>
  <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
</cfm-route-maintenance-domain-level>
```

Description

<cfm-route-maintenance-domain-level>

Usage

```
<cfm-transmit-interface-information>
  <cfm-route-maintenance-domain-level>
    <cfm-level>
      cfm-level
    </cfm-level>
    <cfm-local-mep-direction>
      cfm-local-mep-direction
    </cfm-local-mep-direction>
    <cfm-transmit-route-prefix>
      cfm-transmit-route-prefix
    </cfm-transmit-route-prefix>
    <cfm-nexthop-index>
      cfm-nexthop-index
    </cfm-nexthop-index>
    <cfm-flood-nexthop-components>....</cfm-flood-nexthop-components>
  </cfm-route-maintenance-domain-level>
</cfm-transmit-interface-information>
```

Description

<cfm-route-socket-message-counters>

Usage

```
<cfm-route-socket-message-counters>
```


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```
<cfm-route-socket-message-type>
  cfm-route-socket-message-type
</cfm-route-socket-message-type>
<cfm-route-socket-message-add>
  cfm-route-socket-message-add
</cfm-route-socket-message-add>
<cfm-route-socket-message-change>
  cfm-route-socket-message-change
</cfm-route-socket-message-change>
<cfm-route-socket-message-delete>
  cfm-route-socket-message-delete
</cfm-route-socket-message-delete>
</cfm-route-socket-message-counters>
```

Description

<cfm-route-socket-message-counters>

Usage

```
<cfm-counters-route-socket-operations>
  <cfm-route-socket-message-counters>
    <cfm-route-socket-message-type>
      cfm-route-socket-message-type
    </cfm-route-socket-message-type>
    <cfm-route-socket-message-add>
      cfm-route-socket-message-add
    </cfm-route-socket-message-add>
    <cfm-route-socket-message-change>
      cfm-route-socket-message-change
    </cfm-route-socket-message-change>
    <cfm-route-socket-message-delete>
      cfm-route-socket-message-delete
    </cfm-route-socket-message-delete>
  </cfm-route-socket-message-counters>
</cfm-counters-route-socket-operations>
```

Description

<cfm-route-socket-message-counters>

Usage

```
<cfm-counters-route-socket-received>
  <cfm-route-socket-message-counters>
    <cfm-route-socket-message-type>
      cfm-route-socket-message-type
    </cfm-route-socket-message-type>
    <cfm-route-socket-message-add>
      cfm-route-socket-message-add
    </cfm-route-socket-message-add>
    <cfm-route-socket-message-change>
      cfm-route-socket-message-change
    </cfm-route-socket-message-change>
    <cfm-route-socket-message-delete>
      cfm-route-socket-message-delete
```

```
      </cfm-route-socket-message-delete>
    </cfm-route-socket-message-counters>
  </cfm-counters-route-socket-received>
```

Description

<cfm-transmit-interface-information>

Usage

```
<cfm-transmit-interface-information>
  <cfm-interface-name>
    cfm-interface-name
  </cfm-interface-name>
  <cfm-instance-name>
    cfm-instance-name
  </cfm-instance-name>

<cfm-route-maintenance-domain-level>....</cfm-route-maintenance-domain-level>
  </cfm-transmit-interface-information>
```

Description

<cfmd-internal-state>

Usage

```
<cfmd-internal-state>
  <cfm-session-count>
    cfm-session-count
  </cfm-session-count>
  <cfm-session-created-count>
    cfm-session-created-count
  </cfm-session-created-count>
  <cfm-session-deleted-count>
    cfm-session-deleted-count
  </cfm-session-deleted-count>
  <cfm-session-freed-count>
    cfm-session-freed-count
  </cfm-session-freed-count>
  <cfm-vpls>
    cfm-vpls
  </cfm-vpls>
  <cfm-token-based-forwarding>
    cfm-token-based-forwarding
  </cfm-token-based-forwarding>
  <cfm-forwarding-table-filtering-simulation>
    cfm-forwarding-table-filtering-simulation
  </cfm-forwarding-table-filtering-simulation>
  <cfm-hardware-assist-flooding>
    cfm-hardware-assist-flooding
  </cfm-hardware-assist-flooding>
  <cfm-gres-flood-resynchronization>
    cfm-gres-flood-resynchronization
  </cfm-gres-flood-resynchronization>
  <cfm-shared-interface-filters>
```


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```
  cfm-shared-interface-filters
 </cfm-shared-interface-filters>
 <cfm-hw-timestamping>
  cfm-hw-timestamping
 </cfm-hw-timestamping>
 <cfm-mark-connection-protection-tlv>
  cfm-mark-connection-protection-tlv
 </cfm-mark-connection-protection-tlv>
 <cfm-ppmd-connection-state>
  cfm-ppmd-connection-state
 </cfm-ppmd-connection-state>
 <cfm-ppmd-flow-state>
  cfm-ppmd-flow-state
 </cfm-ppmd-flow-state>
 <cfm-ppmd-job-state>
  cfm-ppmd-job-state
 </cfm-ppmd-job-state>
 <cfm-ppmd-blocked-count>
  cfm-ppmd-blocked-count
 </cfm-ppmd-blocked-count>
 <cfm-dfwd-connection-state>
  cfm-dfwd-connection-state
 </cfm-dfwd-connection-state>
 <cfm-dfwd-reconnect-count>
  cfm-dfwd-reconnect-count
 </cfm-dfwd-reconnect-count>
 <cfm-dfwd-requests-sent>
  cfm-dfwd-requests-sent
 </cfm-dfwd-requests-sent>
 <cfm-dfwd-requests-accepted>
  cfm-dfwd-requests-accepted
 </cfm-dfwd-requests-accepted>
 <cfm-dfwd-requests-rejected>
  cfm-dfwd-requests-rejected
 </cfm-dfwd-requests-rejected>
 <cfm-dfwd-requests-lost>
  cfm-dfwd-requests-lost
 </cfm-dfwd-requests-lost>
 <cfm-dfwd-pending-transactions>....</cfm-dfwd-pending-transactions>
 <cfm-dfwd-policer-instance-info>....</cfm-dfwd-policer-instance-info>
</cfmd-internal-state>
```

Description

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CHAPTER 58

Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series

This chapter lists the Extensible Markup Language (XML) tag elements in the Junos XML application programming interface (API) that contain operational information. The Junos XML protocol and NETCONF servers return them in response to requests from client applications.

The tags listed in this chapter are common to devices belonging to the following platforms:

- EX Series
- QFX Series
- SRX Series

The tags are divided into the following sections and listed in alphabetical order within each section.

- Summary of Autoinstallation Response Tags on page 7405
- Summary of DHCP Response Tags on page 7407
- Summary of IGMP Snooping Response Tags on page 7422
- Summary of LLDP Response Tags on page 7503

Summary of Autoinstallation Response Tags

<autoinstallation-status-information>

Usage

```
<autoinstallation-status-information>
  <master-state>
    master-state
  </master-state>
  <last-configuration-filename>
    last-configuration-filename
  </last-configuration-filename>
  <last-configuration-server>
    last-configuration-server
  </last-configuration-server>
```

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```
<autoinstallation-status-interface-information>.....</autoinstallation-status-interface-information>

</autoinstallation-status-information>
```

Description Autoinstallation status

<autoinstallation-status-interface-address-information>

Usage

```
<autoinstallation-status-information>
 <autoinstallation-status-interface-information>
  <autoinstallation-status-interface-address-information>
   <protocol-name>
    protocol-name
   </protocol-name>
   <protocol-address>
    protocol-address
   </protocol-address>
  </autoinstallation-status-interface-address-information>
 </autoinstallation-status-interface-information>
</autoinstallation-status-information>
```

Description Autoinstallation status for address acquisition protocols on a particular interface

<autoinstallation-status-interface-information>

Usage

```
<autoinstallation-status-information>
 <autoinstallation-status-interface-information>
  <interface-name>
   interface-name
  </interface-name>
  <interface-state>
   interface-state
  </interface-state>
  <interface-acquired-address>
   interface-acquired-address
  </interface-acquired-address>
  <interface-acquired-hostname>
   interface-acquired-hostname
  </interface-acquired-hostname>
  <interface-acquired-hostname-source>
   interface-acquired-hostname-source
  </interface-acquired-hostname-source>
  <interface-acquired-configuration-filename>
   interface-acquired-configuration-filename
  </interface-acquired-configuration-filename>
  <interface-acquired-configuration-server>
   interface-acquired-configuration-server
  </interface-acquired-configuration-server>
```


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```
<autoinstallation-status-interface-address-information>…</autoinstallation-status-interface-address-information>

</autoinstallation-status-interface-information>
    </autoinstallation-status-information>
```

Description Autoinstallation status for a particular interface

Summary of DHCP Response Tags

<client-identifier>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>
    <client-identifier>
      <hex-data>
        hex-data
      </hex-data>
      <hex-data-line>
        hex-data-line
      </hex-data-line>
      <printable-data-line>
        printable-data-line
      </printable-data-line>
    </client-identifier>
  </dhcp-binding>
</dhcp-binding-information>
```

Description Identifier that the DHCP client provided for itself when it requested an address assignment

<dhcp-binding>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>
    <allocated-address>
      allocated-address
    </allocated-address>
    <mac-address>
      mac-address
    </mac-address>
    <dhcp-lease-binding-type>
      dhcp-lease-binding-type
    </dhcp-lease-binding-type>
    <lease-end-time>
      lease-end-time
    </lease-end-time>
    <lease-state>
      lease-state
    </lease-state>
```

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```
    <dhcp-option-table>....</dhcp-option-table>
    <address-pool-name>
      address-pool-name
    </address-pool-name>
    <interface-name>
      interface-name
    </interface-name>
    <bootp-relay-address>
      bootp-relay-address
    </bootp-relay-address>
    <dhcp-lease-information>....</dhcp-lease-information>
    <client-identifier>....</client-identifier>
  </dhcp-binding>
</dhcp-binding-information>
```

Description Information about the address assigned to a Dynamic Host Configuration Protocol client

<dhcp-binding-information>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>....</dhcp-binding>
</dhcp-binding-information>
```

Description Information about the address assigned to each of one or more Dynamic Host Configuration Protocol clients

<dhcp-client>

Usage

```
<dhcp-client-information>
  <dhcp-client>
    <logical-interface>
      logical-interface
    </logical-interface>
    <mac-address>
      mac-address
    </mac-address>
    <client-status>
      client-status
    </client-status>
    <vendor-identifier>
      vendor-identifier
    </vendor-identifier>
    <server-address>
      server-address
    </server-address>
    <address-obtained>
      address-obtained
    </address-obtained>
    <update-server>
      update-server
```


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```
    </update-server>
    <lease-obtained>
     lease-obtained
    </lease-obtained>
    <lease-expires>
     lease-expires
    </lease-expires>
    <dhcp-option-table>....</dhcp-option-table>
   </dhcp-client>
</dhcp-client-information>
```

Description Information about a DHCP client

<dhcp-client-information>

Usage

```
<dhcp-client-information>
  <dhcp-client>....</dhcp-client>
</dhcp-client-information>
```

Description Information about one or more Dynamic Host Configuration Protocol clients

<dhcp-client-statistics-information>

Usage

```
<dhcp-client-statistics-information>
  <dropped-client-packet-total>
   dropped-client-packet-total
  </dropped-client-packet-total>
  <dropped-client-packet-invalid-server-address>
   dropped-client-packet-invalid-server-address
  </dropped-client-packet-invalid-server-address>
  <dropped-client-packet-too-short>
   dropped-client-packet-too-short
  </dropped-client-packet-too-short>
  <dropped-client-packet-read-error>
   dropped-client-packet-read-error
  </dropped-client-packet-read-error>
  <dropped-client-packet-send-error>
   dropped-client-packet-send-error
  </dropped-client-packet-send-error>
  <message-client-table>....</message-client-table>
</dhcp-client-statistics-information>
```

Description Statistics from the Dynamic Host Configuration Protocol client

<dhcp-conflict>

Usage

```
<dhcp-conflict>
  <detection-time>
```

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```
    detection-time
   </detection-time>
   <detection-method>
    detection-method
   </detection-method>
   <conflict-address>
    conflict-address
   </conflict-address>
</dhcp-conflict>
```

Description Information about a Dynamic Host Configuration Protocol conflict. A conflict arises when an address assigned to DHCP client is already assigned to another entity (computer or interface, for example).

<dhcp-conflict>

Usage

```
<dhcp-conflict-information>
  <dhcp-conflict>
    <detection-time>
      detection-time
    </detection-time>
    <detection-method>
      detection-method
    </detection-method>
    <conflict-address>
      conflict-address
    </conflict-address>
  </dhcp-conflict>
</dhcp-conflict-information>
```

Description Information about a Dynamic Host Configuration Protocol conflict. A conflict arises when an address assigned to DHCP client is already assigned to another entity (computer or interface, for example).

<dhcp-conflict-information>

Usage

```
<dhcp-conflict-information>
  <dhcp-conflict>....</dhcp-conflict>
</dhcp-conflict-information>
```

Description Information about one or more Dynamic Host Configuration Protocol conflicts.

<dhcp-global-information>

Usage

```
<dhcp-global-information>
  <dhcp-lease-time-information>....</dhcp-lease-time-information>
  <dhcp-option-table>....</dhcp-option-table>
```


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```
<bootp-lease-length>
  bootp-lease-length
</bootp-lease-length>
<bootp-lease-cutoff>
  bootp-lease-cutoff
</bootp-lease-cutoff>
</dhcp-global-information>
```

Description Information about Dynamic Host Configuration Protocol settings that are configured for the global scope

<dhcp-helper-statistics>

Usage

```
<dhcp-helper-statistics>
<helper-statistics-service-information>....</helper-statistics-service-information>

</dhcp-helper-statistics>
```

Description Port forwarding helper statistics

<dhcp-lease-information>

Usage

```
<dhcp-lease-information>
  <dhcp-lease-type>
    dhcp-lease-type
  </dhcp-lease-type>
  <lease-start-time>
    lease-start-time
  </lease-start-time>
  <lease-end-time>
    lease-end-time
  </lease-end-time>
  <lease-state>
    lease-state
  </lease-state>
</dhcp-lease-information>
```

Description Information about an address assignment

<dhcp-lease-information>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>
    <dhcp-lease-information>
      <dhcp-lease-type>
        dhcp-lease-type
      </dhcp-lease-type>
      <lease-start-time>
```

```
        lease-start-time
       </lease-start-time>
       <lease-end-time>
        lease-end-time
       </lease-end-time>
       <lease-state>
        lease-state
       </lease-state>
      </dhcp-lease-information>
     </dhcp-binding>
    </dhcp-binding-information>
```

Description Information about an address assignment

<dhcp-lease-time-information>

Usage

```
<dhcp-lease-time-information>
 <default-lease-time>
  default-lease-time
 </default-lease-time>
 <minimum-lease-time>
  minimum-lease-time
 </minimum-lease-time>
 <maximum-lease-time>
  maximum-lease-time
 </maximum-lease-time>
</dhcp-lease-time-information>
```

Description Information about configured default, maximum, and minimum duration for address assignments

<dhcp-lease-time-information>

Usage

```
<dhcp-pool-information>
 <dhcp-pool>
  <dhcp-lease-time-information>
   <default-lease-time>
    default-lease-time
   </default-lease-time>
   <minimum-lease-time>
    minimum-lease-time
   </minimum-lease-time>
   <maximum-lease-time>
    maximum-lease-time
   </maximum-lease-time>
  </dhcp-lease-time-information>
 </dhcp-pool>
</dhcp-pool-information>
```


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Description Information about configured default, maximum, and minimum duration for address assignments

<dhcp-lease-time-information>

Usage

```
<dhcp-global-information>
  <dhcp-lease-time-information>
    <default-lease-time>
      default-lease-time
    </default-lease-time>
    <minimum-lease-time>
      minimum-lease-time
    </minimum-lease-time>
    <maximum-lease-time>
      maximum-lease-time
    </maximum-lease-time>
  </dhcp-lease-time-information>
</dhcp-global-information>
```

Description Information about configured default, maximum, and minimum duration for address assignments

<dhcp-option>

Usage

```
<dhcp-option>
  <dhcp-option-code>
    dhcp-option-code
  </dhcp-option-code>
  <dhcp-option-name>
    dhcp-option-name
  </dhcp-option-name>
  <dhcp-option-type>
    dhcp-option-type
  </dhcp-option-type>
  <dhcp-option-value>
    dhcp-option-value
  </dhcp-option-value>
</dhcp-option>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option>

Usage

```
<dhcp-option-table>
  <dhcp-option>
    <dhcp-option-code>
      dhcp-option-code
```

```
    </dhcp-option-code>
    <dhcp-option-name>
      dhcp-option-name
    </dhcp-option-name>
    <dhcp-option-type>
      dhcp-option-type
    </dhcp-option-type>
    <dhcp-option-value>
      dhcp-option-value
    </dhcp-option-value>
  </dhcp-option>
</dhcp-option-table>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>
    <dhcp-option-table>
      <dhcp-option>
        <dhcp-option-code>
          dhcp-option-code
        </dhcp-option-code>
        <dhcp-option-name>
          dhcp-option-name
        </dhcp-option-name>
        <dhcp-option-type>
          dhcp-option-type
        </dhcp-option-type>
        <dhcp-option-value>
          dhcp-option-value
        </dhcp-option-value>
      </dhcp-option>
    </dhcp-option-table>
  </dhcp-binding>
</dhcp-binding-information>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option>

Usage

```
<dhcp-pool-information>
  <dhcp-pool>
    <dhcp-option-table>
      <dhcp-option>
        <dhcp-option-code>
          dhcp-option-code
```


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```
        </dhcp-option-code>
        <dhcp-option-name>
          dhcp-option-name
        </dhcp-option-name>
        <dhcp-option-type>
          dhcp-option-type
        </dhcp-option-type>
        <dhcp-option-value>
          dhcp-option-value
        </dhcp-option-value>
      </dhcp-option>
    </dhcp-option-table>
  </dhcp-pool>
</dhcp-pool-information>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option>

Usage

```
<dhcp-global-information>
  <dhcp-option-table>
    <dhcp-option>
      <dhcp-option-code>
        dhcp-option-code
      </dhcp-option-code>
      <dhcp-option-name>
        dhcp-option-name
      </dhcp-option-name>
      <dhcp-option-type>
        dhcp-option-type
      </dhcp-option-type>
      <dhcp-option-value>
        dhcp-option-value
      </dhcp-option-value>
    </dhcp-option>
  </dhcp-option-table>
</dhcp-global-information>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option>

Usage

```
<dhcp-client-information>
  <dhcp-client>
    <dhcp-option-table>
      <dhcp-option>
        <dhcp-option-code>
          dhcp-option-code
```

```
        </dhcp-option-code>
        <dhcp-option-name>
          dhcp-option-name
        </dhcp-option-name>
        <dhcp-option-type>
          dhcp-option-type
        </dhcp-option-type>
        <dhcp-option-value>
          dhcp-option-value
        </dhcp-option-value>
      </dhcp-option>
    </dhcp-option-table>
  </dhcp-client>
</dhcp-client-information>
```

Description Information about a Dynamic Host Configuration Protocol option that is associated with the address assignment

<dhcp-option-table>

Usage

```
<dhcp-option-table>
  <dhcp-option>....</dhcp-option>
</dhcp-option-table>
```

Description Information about one or more Dynamic Host Configuration Protocol options that are associated with the address assignment

<dhcp-option-table>

Usage

```
<dhcp-binding-information>
  <dhcp-binding>
    <dhcp-option-table>
      <dhcp-option>....</dhcp-option>
    </dhcp-option-table>
  </dhcp-binding>
</dhcp-binding-information>
```

Description Information about one or more Dynamic Host Configuration Protocol options that are associated with the address assignment

<dhcp-option-table>

Usage

```
<dhcp-pool-information>
  <dhcp-pool>
    <dhcp-option-table>
      <dhcp-option>....</dhcp-option>
    </dhcp-option-table>
```


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```
  </dhcp-pool>
</dhcp-pool-information>
```

Description Information about one or more Dynamic Host Configuration Protocol options that are associated with the address assignment

<dhcp-option-table>

Usage

```
<dhcp-global-information>
  <dhcp-option-table>
    <dhcp-option>....</dhcp-option>
  </dhcp-option-table>
</dhcp-global-information>
```

Description Information about one or more Dynamic Host Configuration Protocol options that are associated with the address assignment

<dhcp-option-table>

Usage

```
<dhcp-client-information>
  <dhcp-client>
    <dhcp-option-table>
      <dhcp-option>....</dhcp-option>
    </dhcp-option-table>
  </dhcp-client>
</dhcp-client-information>
```

Description Information about one or more Dynamic Host Configuration Protocol options that are associated with the address assignment

<dhcp-pool>

Usage

```
<dhcp-pool-information>
  <dhcp-pool>
    <address-pool-name>
      address-pool-name
    </address-pool-name>
    <address-pool-low-address>
      address-pool-low-address
    </address-pool-low-address>
    <address-pool-high-address>
      address-pool-high-address
    </address-pool-high-address>
    <address-pool-excluded-address>
      address-pool-excluded-address
    </address-pool-excluded-address>
    <dhcp-lease-time-information>....</dhcp-lease-time-information>
```

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```
    <dhcp-option-table>....</dhcp-option-table>
    <address-count>
     address-count
    </address-count>
    <assigned-lease-count>
     assigned-lease-count
    </assigned-lease-count>
    <active-lease-count>
     active-lease-count
    </active-lease-count>
    <offered-lease-count>
     offered-lease-count
    </offered-lease-count>
    <expired-lease-count>
     expired-lease-count
    </expired-lease-count>
    <conflict-count>
     conflict-count
    </conflict-count>
    <exclusion-count>
     exclusion-count
    </exclusion-count>
  </dhcp-pool>
</dhcp-pool-information>
```

Description Information about a Dynamic Host Configuration Protocol address pool

<dhcp-pool-information>

Usage

```
<dhcp-pool-information>
  <dhcp-pool>....</dhcp-pool>
</dhcp-pool-information>
```

Description Information about one or more Dynamic Host Configuration Protocol address pools

<dhcp-statistics-information>

Usage

```
<dhcp-statistics-information>
  <dropped-packet-total>
   dropped-packet-total
  </dropped-packet-total>
  <dropped-packet-bad-hardware>
   dropped-packet-bad-hardware
  </dropped-packet-bad-hardware>
  <dropped-packet-bad-opcode>
   dropped-packet-bad-opcode
  </dropped-packet-bad-opcode>
  <dropped-packet-bad-options>
   dropped-packet-bad-options
  </dropped-packet-bad-options>
```


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```
<dropped-packet-invalid-server-address>
  dropped-packet-invalid-server-address
</dropped-packet-invalid-server-address>
<dropped-packet-no-addresses>
  dropped-packet-no-addresses
</dropped-packet-no-addresses>
<dropped-packet-no-interface>
  dropped-packet-no-interface
</dropped-packet-no-interface>
<dropped-packet-no-routing-instance>
  dropped-packet-no-routing-instance
</dropped-packet-no-routing-instance>
<dropped-packet-no-local-address>
  dropped-packet-no-local-address
</dropped-packet-no-local-address>
<dropped-packet-too-short>
  dropped-packet-too-short
</dropped-packet-too-short>
<dropped-packet-read-error>
  dropped-packet-read-error
</dropped-packet-read-error>
<dropped-packet-send-error>
  dropped-packet-send-error
</dropped-packet-send-error>
<message-table>....</message-table>
</dhcp-statistics-information>
```

Description Statistics from the Dynamic Host Configuration Protocol relay process

<helper-statistics>

Usage

```
<helper-statistics>
  <relay-information>....</relay-information>
</helper-statistics>
```

Description Port forwarding helper statistics

<helper-statistics-service-information>

Usage

```
<dhcp-helper-statistics>
  <helper-statistics-service-information>
    <service-name>
      service-name
    </service-name>
    <received-packets>
      received-packets
    </received-packets>
    <forwarded-packets>
      forwarded-packets
    </forwarded-packets>
```

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```
        <dropped-packets>
          dropped-packets
        </dropped-packets>
        <dropped-packets-no-interface>
          dropped-packets-no-interface
        </dropped-packets-no-interface>
        <dropped-packets-no-rtinst>
          dropped-packets-no-rtinst
        </dropped-packets-no-rtinst>
        <dropped-packets-badread>
          dropped-packets-badread
        </dropped-packets-badread>
        <dropped-packets-badsend>
          dropped-packets-badsend
        </dropped-packets-badsend>
        <dropped-packets-badaddr>
          dropped-packets-badaddr
        </dropped-packets-badaddr>
        <dropped-packets-no-localaddr>
          dropped-packets-no-localaddr
        </dropped-packets-no-localaddr>
        <dropped-packets-no-route>
          dropped-packets-no-route
        </dropped-packets-no-route>
      </helper-statistics-service-information>
    </dhcp-helper-statistics>
```

Description Port forwarding helper statistics for a particular service

<message>

Usage

```
    <dhcp-statistics-information>
      <message-table>
        <message>
          <message-name>
            message-name
          </message-name>
          <message-count>
            message-count
          </message-count>
        </message>
      </message-table>
    </dhcp-statistics-information>
```

Description Information about a DHCP or BOOTP message

<message-client>

Usage

```
    <dhcp-client-statistics-information>
      <message-client-table>
```


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```
    <message-client>
      <message-client-name>
        message-client-name
      </message-client-name>
      <message-client-count>
        message-client-count
      </message-client-count>
    </message-client>
  </message-client-table>
</dhcp-client-statistics-information>
```

Description Information about a DHCP or BOOTP message

<message-client-table>

Usage

```
<dhcp-client-statistics-information>
  <message-client-table>
    <message-client-direction>
      message-client-direction
    </message-client-direction>
    <message-client>....</message-client>
  </message-client-table>
</dhcp-client-statistics-information>
```

Description Information about one or more DHCP or bootstrap protocol (BOOTP) messages sent or received by the DHCP client

<message-table>

Usage

```
<dhcp-statistics-information>
  <message-table>
    <message-direction>
      message-direction
    </message-direction>
    <message>....</message>
  </message-table>
</dhcp-statistics-information>
```

Description Information about one or more DHCP or bootstrap protocol (BOOTP) messages sent or received by the DHCP relay process

<relay-information>

Usage

```
<helper-statistics>
  <relay-information>
    <bootp-received-packets>
      bootp-received-packets
```

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```
    </bootp-received-packets>
    <bootp-forwarded-packets>
     bootp-forwarded-packets
    </bootp-forwarded-packets>
    <bootp-dropped-packets>
     bootp-dropped-packets
    </bootp-dropped-packets>
    <bootp-dropped-packets-nointerface>
     bootp-dropped-packets-nointerface
    </bootp-dropped-packets-nointerface>
    <bootp-dropped-packets-nortinst>
     bootp-dropped-packets-nortinst
    </bootp-dropped-packets-nortinst>
    <bootp-dropped-packets-badread>
     bootp-dropped-packets-badread
    </bootp-dropped-packets-badread>
    <bootp-dropped-packets-badsend>
     bootp-dropped-packets-badsend
    </bootp-dropped-packets-badsend>
    <bootp-dropped-packets-badaddr>
     bootp-dropped-packets-badaddr
    </bootp-dropped-packets-badaddr>
    <bootp-dropped-packets-nolocaladdr>
     bootp-dropped-packets-nolocaladdr
    </bootp-dropped-packets-nolocaladdr>
    <bootp-dropped-packets-noroute>
     bootp-dropped-packets-noroute
    </bootp-dropped-packets-noroute>
   </relay-information>
</helper-statistics>
```

Description Port forwarding helper statistics for a DHCP relay service

Summary of IGMP Snooping Response Tags

<bridge-table-group-entry>

Usage

```
<bridge-table-group-entry>
  <vlan-id>
   vlan-id
  </vlan-id>
  <vlan-name>
   vlan-name
  </vlan-name>
  <destination>
   destination
  </destination>
  <forward-next-hop>....</forward-next-hop>
  <group-next-hop>....</group-next-hop>
  <inet-references>
   inet-references
  </inet-references>
  <bridge-table-sg-entry>....</bridge-table-sg-entry>
```


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```
</bridge-table-group-entry>
```

Description

<bridge-table-group-entry>

Usage

```
<igmp-snooping-table-bridge>
 <bridge-table-group-entry>
  <vlan-id>
   vlan-id
  </vlan-id>
  <vlan-name>
   vlan-name
  </vlan-name>
  <destination>
   destination
  </destination>
  <forward-next-hop>....</forward-next-hop>
  <group-next-hop>....</group-next-hop>
  <inet-references>
   inet-references
  </inet-references>
  <bridge-table-sg-entry>....</bridge-table-sg-entry>
 </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description

<bridge-table-group-entry>

Usage

```
<igmp-snooping-routing-information>
 <igmp-snooping-table-bridge>
  <bridge-table-group-entry>
   <vlan-id>
    vlan-id
   </vlan-id>
   <vlan-name>
    vlan-name
   </vlan-name>
   <destination>
    destination
   </destination>
   <forward-next-hop>....</forward-next-hop>
   <group-next-hop>....</group-next-hop>
   <inet-references>
    inet-references
   </inet-references>
   <bridge-table-sg-entry>....</bridge-table-sg-entry>
  </bridge-table-group-entry>
 </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

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Description

<bridge-table-sg-entry>

Usage

```
<bridge-table-sg-entry>
  <source>
    source
  </source>
  <next-hop>....</next-hop>
</bridge-table-sg-entry>
```

Description

<bridge-table-sg-entry>

Usage

```
<bridge-table-group-entry>
  <bridge-table-sg-entry>
    <source>
      source
    </source>
    <next-hop>....</next-hop>
  </bridge-table-sg-entry>
</bridge-table-group-entry>
```

Description

<bridge-table-sg-entry>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <bridge-table-sg-entry>
      <source>
        source
      </source>
      <next-hop>....</next-hop>
    </bridge-table-sg-entry>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description

<bridge-table-sg-entry>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <bridge-table-sg-entry>
        <source>
          source
```


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```
        </source>
        <next-hop>....</next-hop>
      </bridge-table-sg-entry>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description

<forward-next-hop>

Usage

```
<bridge-table-group-entry>
  <forward-next-hop>
    <next-hop>....</next-hop>
  </forward-next-hop>
</bridge-table-group-entry>
```

Description Forwarding next-hop

<forward-next-hop>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <forward-next-hop>
      <next-hop>....</next-hop>
    </forward-next-hop>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description Forwarding next-hop

<forward-next-hop>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <forward-next-hop>
        <next-hop>....</next-hop>
      </forward-next-hop>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description Forwarding next-hop

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<forward-next-hop>

Usage

```
<igmp-snooping-routing-information>
  <forward-next-hop>
    <next-hop>....</next-hop>
  </forward-next-hop>
</igmp-snooping-routing-information>
```

Description Forwarding next-hop

<group-next-hop>

Usage

```
<bridge-table-group-entry>
  <group-next-hop>
    <next-hop>....</next-hop>
  </group-next-hop>
</bridge-table-group-entry>
```

Description Downstream interfaces for this (*, g) group

<group-next-hop>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <group-next-hop>
      <next-hop>....</next-hop>
    </group-next-hop>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description Downstream interfaces for this (*, g) group

<group-next-hop>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <group-next-hop>
        <next-hop>....</next-hop>
      </group-next-hop>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description Downstream interfaces for this (*, g) group

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<igmp-group-interface>

Usage

```
<igmp-group-interface>
  <snooping-interface-name>
    snooping-interface-name
  </snooping-interface-name>
  <timeout>
    timeout
  </timeout>
  <snooping-interface-uptime>
    snooping-interface-uptime
  </snooping-interface-uptime>
  <last-reporter>
    last-reporter
  </last-reporter>
  <query-timer>
    query-timer
  </query-timer>
  <snooping-include-source-v3>
    snooping-include-source-v3
  </snooping-include-source-v3>
  <snooping-exclude-source-v3>
    snooping-exclude-source-v3
  </snooping-exclude-source-v3>
  <flags>
    flags
  </flags>
  <receiver-count>
    receiver-count
  </receiver-count>
</igmp-group-interface>
```

Description

<igmp-group-interface>

Usage

```
<igmp-snooping-group>
  <igmp-group-interface>
    <snooping-interface-name>
      snooping-interface-name
    </snooping-interface-name>
    <timeout>
      timeout
    </timeout>
    <snooping-interface-uptime>
      snooping-interface-uptime
    </snooping-interface-uptime>
    <last-reporter>
      last-reporter
    </last-reporter>
    <query-timer>
      query-timer
```

```
    </query-timer>
    <snooping-include-source-v3>
     snooping-include-source-v3
    </snooping-include-source-v3>
    <snooping-exclude-source-v3>
     snooping-exclude-source-v3
    </snooping-exclude-source-v3>
    <flags>
     flags
    </flags>
    <receiver-count>
     receiver-count
    </receiver-count>
   </igmp-group-interface>
</igmp-snooping-group>
```

Description

<igmp-group-interface>

Usage

```
<igmp-snooping-membership-information>
 <igmp-snooping-group-vlan>
  <igmp-snooping-group>
   <igmp-group-interface>
    <snooping-interface-name>
     snooping-interface-name
    </snooping-interface-name>
    <timeout>
     timeout
    </timeout>
    <snooping-interface-uptime>
     snooping-interface-uptime
    </snooping-interface-uptime>
    <last-reporter>
     last-reporter
    </last-reporter>
    <query-timer>
     query-timer
    </query-timer>
    <snooping-include-source-v3>
     snooping-include-source-v3
    </snooping-include-source-v3>
    <snooping-exclude-source-v3>
     snooping-exclude-source-v3
    </snooping-exclude-source-v3>
    <flags>
     flags
    </flags>
    <receiver-count>
     receiver-count
    </receiver-count>
   </igmp-group-interface>
  </igmp-snooping-group>
 </igmp-snooping-group-vlan>
```


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```
</igmp-snooping-membership-information>
```

Description

<igmp-group-interface>

Usage

```
<igmp-snooping-vlan>
 <igmp-snooping-group>
  <igmp-group-interface>
   <snooping-interface-name>
    snooping-interface-name
   </snooping-interface-name>
   <timeout>
    timeout
   </timeout>
   <snooping-interface-uptime>
    snooping-interface-uptime
   </snooping-interface-uptime>
   <last-reporter>
    last-reporter
   </last-reporter>
   <query-timer>
    query-timer
   </query-timer>
   <snooping-include-source-v3>
    snooping-include-source-v3
   </snooping-include-source-v3>
   <snooping-exclude-source-v3>
    snooping-exclude-source-v3
   </snooping-exclude-source-v3>
   <flags>
    flags
   </flags>
   <receiver-count>
    receiver-count
   </receiver-count>
  </igmp-group-interface>
 </igmp-snooping-group>
</igmp-snooping-vlan>
```

Description

<igmp-group-interface>

Usage

```
<igmp-snooping-vlan-information>
 <igmp-snooping-vlan>
  <igmp-snooping-group>
   <igmp-group-interface>
    <snooping-interface-name>
     snooping-interface-name
    </snooping-interface-name>
    <timeout>
```

```
            timeout
           </timeout>
           <snooping-interface-uptime>
            snooping-interface-uptime
           </snooping-interface-uptime>
           <last-reporter>
            last-reporter
           </last-reporter>
           <query-timer>
            query-timer
           </query-timer>
           <snooping-include-source-v3>
            snooping-include-source-v3
           </snooping-include-source-v3>
           <snooping-exclude-source-v3>
            snooping-exclude-source-v3
           </snooping-exclude-source-v3>
           <flags>
            flags
           </flags>
           <receiver-count>
            receiver-count
           </receiver-count>
          </igmp-group-interface>
        </igmp-snooping-group>
      </igmp-snooping-vlan>
    </igmp-snooping-vlan-information>
```

Description

<igmp-group-rxlan>

Usage

```
<igmp-group-rxlan>
  <snooping-rxlan-name>
   snooping-rxlan-name
  </snooping-rxlan-name>
  <snooping-rxlan-uptime>
   snooping-rxlan-uptime
  </snooping-rxlan-uptime>
</igmp-group-rxlan>
```

Description

<igmp-group-rxlan>

Usage

```
<igmp-snooping-group>
  <igmp-group-rxlan>
    <snooping-rxlan-name>
     snooping-rxlan-name
    </snooping-rxlan-name>
    <snooping-rxlan-uptime>
     snooping-rxlan-uptime
```


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```
    </snooping-rxlan-uptime>
   </igmp-group-rxlan>
</igmp-snooping-group>
```

Description

<igmp-group-rxlan>

Usage

```
<igmp-snooping-membership-information>
 <igmp-snooping-group-vlan>
  <igmp-snooping-group>
   <igmp-group-rxlan>
    <snooping-rxlan-name>
     snooping-rxlan-name
    </snooping-rxlan-name>
    <snooping-rxlan-uptime>
     snooping-rxlan-uptime
    </snooping-rxlan-uptime>
   </igmp-group-rxlan>
  </igmp-snooping-group>
 </igmp-snooping-group-vlan>
</igmp-snooping-membership-information>
```

Description

<igmp-group-rxlan>

Usage

```
<igmp-snooping-vlan>
 <igmp-snooping-group>
  <igmp-group-rxlan>
   <snooping-rxlan-name>
    snooping-rxlan-name
   </snooping-rxlan-name>
   <snooping-rxlan-uptime>
    snooping-rxlan-uptime
   </snooping-rxlan-uptime>
  </igmp-group-rxlan>
 </igmp-snooping-group>
</igmp-snooping-vlan>
```

Description

<igmp-group-rxlan>

Usage

```
<igmp-snooping-vlan-information>
 <igmp-snooping-vlan>
  <igmp-snooping-group>
   <igmp-group-rxlan>
    <snooping-rxlan-name>
     snooping-rxlan-name
```

```
        </snooping-rxlan-name>
        <snooping-rxlan-uptime>
          snooping-rxlan-uptime
        </snooping-rxlan-uptime>
      </igmp-group-rxlan>
    </igmp-snooping-group>
  </igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description

<igmp-snooping-global-stats>

Usage

```
<igmp-snooping-global-stats>
  <bad-length>
    bad-length
  </bad-length>
  <bad-checksum>
    bad-checksum
  </bad-checksum>
  <bad-interface>
    bad-interface
  </bad-interface>
  <not-local>
    not-local
  </not-local>
  <received-unknowns>
    received-unknowns
  </received-unknowns>
  <timed-out>
    timed-out
  </timed-out>
  <igmp-snooping-statistics>....</igmp-snooping-statistics>
</igmp-snooping-global-stats>
```

Description

<igmp-snooping-global-stats>

Usage

```
<igmp-snooping-statistics-information>
  <igmp-snooping-global-stats>
    <bad-length>
      bad-length
    </bad-length>
    <bad-checksum>
      bad-checksum
    </bad-checksum>
    <bad-interface>
      bad-interface
    </bad-interface>
    <not-local>
      not-local
```


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```
    </not-local>
    <received-unknowns>
     received-unknowns
    </received-unknowns>
    <timed-out>
     timed-out
    </timed-out>
    <igmp-snooping-statistics>....</igmp-snooping-statistics>
  </igmp-snooping-global-stats>
</igmp-snooping-statistics-information>
```

Description

<igmp-snooping-group>

Usage

```
<igmp-snooping-group>
  <destination>
   destination
  </destination>
  <source>
   source
  </source>
  <ttl>
   ttl
  </ttl>
  <router-count>
   router-count
  </router-count>
  <igmp-group-interface>....</igmp-group-interface>
  <igmp-group-rxlan>....</igmp-group-rxlan>
</igmp-snooping-group>
```

Description IGMP snooping state machine group

<igmp-snooping-group>

Usage

```
<igmp-snooping-membership-information>
  <igmp-snooping-group-vlan>
    <igmp-snooping-group>
      <destination>
       destination
      </destination>
      <source>
       source
      </source>
      <ttl>
       ttl
      </ttl>
      <router-count>
       router-count
      </router-count>
```

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```
      <igmp-group-interface>....</igmp-group-interface>
      <igmp-group-rxlan>....</igmp-group-rxlan>
     </igmp-snooping-group>
    </igmp-snooping-group-vlan>
</igmp-snooping-membership-information>
```

Description IGMP snooping state machine group

<igmp-snooping-group>

Usage

```
<igmp-snooping-vlan>
 <igmp-snooping-group>
  <destination>
   destination
  </destination>
  <source>
   source
  </source>
  <ttl>
   ttl
  </ttl>
  <router-count>
   router-count
  </router-count>
  <igmp-group-interface>....</igmp-group-interface>
  <igmp-group-rxlan>....</igmp-group-rxlan>
 </igmp-snooping-group>
</igmp-snooping-vlan>
```

Description IGMP snooping state machine group

<igmp-snooping-group>

Usage

```
<igmp-snooping-vlan-information>
 <igmp-snooping-vlan>
  <igmp-snooping-group>
   <destination>
    destination
   </destination>
   <source>
    source
   </source>
   <ttl>
    ttl
   </ttl>
   <router-count>
    router-count
   </router-count>
   <igmp-group-interface>....</igmp-group-interface>
   <igmp-group-rxlan>....</igmp-group-rxlan>
```


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```
    </igmp-snooping-group>
  </igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description IGMP snooping state machine group

<igmp-snooping-group-vlan>

Usage

```
<igmp-snooping-membership-information>
  <igmp-snooping-group-vlan>
    <vlan-index>
      vlan-index
    </vlan-index>
    <vlan-name>
      vlan-name
    </vlan-name>
    <vlan-tag>
      vlan-tag
    </vlan-tag>
    <igmp-vlan-router-interface>....</igmp-vlan-router-interface>
    <igmp-snooping-group>....</igmp-snooping-group>
  </igmp-snooping-group-vlan>
</igmp-snooping-membership-information>
```

Description

<igmp-snooping-membership-information>

Usage

```
<igmp-snooping-membership-information>
  <igmp-snooping-group-vlan>....</igmp-snooping-group-vlan>
</igmp-snooping-membership-information>
```

Description

<igmp-snooping-routing-information>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>....</igmp-snooping-table-bridge>
  <igmp-snooping-table-inet>....</igmp-snooping-table-inet>
  <forward-next-hop>....</forward-next-hop>
</igmp-snooping-routing-information>
```

Description

<igmp-snooping-statistics>

Usage

```
<igmp-snooping-statistics>
```

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```
<received-queries>
  received-queries
</received-queries>
<transmitted-queries>
  transmitted-queries
</transmitted-queries>
<bad-queries>
  bad-queries
</bad-queries>
<received-reports>
  received-reports
</received-reports>
<transmitted-reports>
  transmitted-reports
</transmitted-reports>
<bad-reports>
  bad-reports
</bad-reports>
<received-leaves>
  received-leaves
</received-leaves>
<transmitted-leaves>
  transmitted-leaves
</transmitted-leaves>
<bad-leaves>
  bad-leaves
</bad-leaves>
<received-others>
  received-others
</received-others>
<transmitted-others>
  transmitted-others
</transmitted-others>
<bad-others>
  bad-others
</bad-others>
</igmp-snooping-statistics>
```

Description

<igmp-snooping-statistics>

Usage

```
<igmp-snooping-global-stats>
  <igmp-snooping-statistics>
    <received-queries>
      received-queries
    </received-queries>
    <transmitted-queries>
      transmitted-queries
    </transmitted-queries>
    <bad-queries>
      bad-queries
    </bad-queries>
    <received-reports>
```


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```
      received-reports
    </received-reports>
    <transmitted-reports>
      transmitted-reports
    </transmitted-reports>
    <bad-reports>
      bad-reports
    </bad-reports>
    <received-leaves>
      received-leaves
    </received-leaves>
    <transmitted-leaves>
      transmitted-leaves
    </transmitted-leaves>
    <bad-leaves>
      bad-leaves
    </bad-leaves>
    <received-others>
      received-others
    </received-others>
    <transmitted-others>
      transmitted-others
    </transmitted-others>
    <bad-others>
      bad-others
    </bad-others>
  </igmp-snooping-statistics>
</igmp-snooping-global-stats>
```

Description

<igmp-snooping-statistics>

Usage

```
<igmp-snooping-statistics-information>
  <igmp-snooping-global-stats>
    <igmp-snooping-statistics>
      <received-queries>
        received-queries
      </received-queries>
      <transmitted-queries>
        transmitted-queries
      </transmitted-queries>
      <bad-queries>
        bad-queries
      </bad-queries>
      <received-reports>
        received-reports
      </received-reports>
      <transmitted-reports>
        transmitted-reports
      </transmitted-reports>
      <bad-reports>
        bad-reports
      </bad-reports>
```

```
      <received-leaves>
        received-leaves
      </received-leaves>
      <transmitted-leaves>
        transmitted-leaves
      </transmitted-leaves>
      <bad-leaves>
        bad-leaves
      </bad-leaves>
      <received-others>
        received-others
      </received-others>
      <transmitted-others>
        transmitted-others
      </transmitted-others>
      <bad-others>
        bad-others
      </bad-others>
    </igmp-snooping-statistics>
  </igmp-snooping-global-stats>
</igmp-snooping-statistics-information>
```

Description

<igmp-snooping-statistics-information>

Usage

```
<igmp-snooping-statistics-information>
  <igmp-snooping-global-stats>....</igmp-snooping-global-stats>
</igmp-snooping-statistics-information>
```

Description

<igmp-snooping-table-bridge>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-id>
    bridge-table-id
  </bridge-table-id>
  <bridge-table-group-entry>....</bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description

<igmp-snooping-table-bridge>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-id>
      bridge-table-id
    </bridge-table-id>
```


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```
    <bridge-table-group-entry>....</bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description

<igmp-snooping-table-inet>

Usage

```
<igmp-snooping-table-inet>
  <inet-table-id>
    inet-table-id
  </inet-table-id>
  <inet-table-route-entry>....</inet-table-route-entry>
</igmp-snooping-table-inet>
```

Description

<igmp-snooping-table-inet>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-inet>
    <inet-table-id>
      inet-table-id
    </inet-table-id>
    <inet-table-route-entry>....</inet-table-route-entry>
  </igmp-snooping-table-inet>
</igmp-snooping-routing-information>
```

Description

<igmp-snooping-vlan>

Usage

```
<igmp-snooping-vlan>
  <vlan-index>
    vlan-index
  </vlan-index>
  <vlan-name>
    vlan-name
  </vlan-name>
  <interface-count>
    interface-count
  </interface-count>
  <group-count>
    group-count
  </group-count>
  <mrouter-count>
    mrouter-count
  </mrouter-count>
  <reporter-count>
    reporter-count
```

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```
  </reporter-count>
  <rxlan-count>
   rxlan-count
  </rxlan-count>
  <vlan-tag>
   vlan-tag
  </vlan-tag>
  <data-forwarding-internal-vlan>
   data-forwarding-internal-vlan
  </data-forwarding-internal-vlan>
  <vlan-interface>
   vlan-interface
  </vlan-interface>
  <membership-timeout>
   membership-timeout
  </membership-timeout>
  <query-timeout>
   query-timeout
  </query-timeout>
  <igmp-snooping-vlan-member>....</igmp-snooping-vlan-member>
  <igmp-snooping-vlan-rxlan-member>....</igmp-snooping-vlan-rxlan-member>
  <igmp-snooping-group>....</igmp-snooping-group>
</igmp-snooping-vlan>
```

Description

<igmp-snooping-vlan>

Usage

```
<igmp-snooping-vlan-information>
  <igmp-snooping-vlan>
    <vlan-index>
     vlan-index
    </vlan-index>
    <vlan-name>
     vlan-name
    </vlan-name>
    <interface-count>
     interface-count
    </interface-count>
    <group-count>
     group-count
    </group-count>
    <mrouter-count>
     mrouter-count
    </mrouter-count>
    <reporter-count>
     reporter-count
    </reporter-count>
    <rxlan-count>
     rxlan-count
    </rxlan-count>
    <vlan-tag>
     vlan-tag
    </vlan-tag>
```


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```
    <data-forwarding-internal-vlan>
      data-forwarding-internal-vlan
    </data-forwarding-internal-vlan>
    <vlan-interface>
      vlan-interface
    </vlan-interface>
    <membership-timeout>
      membership-timeout
    </membership-timeout>
    <query-timeout>
      query-timeout
    </query-timeout>
    <igmp-snooping-vlan-member>....</igmp-snooping-vlan-member>
    <igmp-snooping-vlan-rxlan-member>....</igmp-snooping-vlan-rxlan-member>

    <igmp-snooping-group>....</igmp-snooping-group>
  </igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description

<igmp-snooping-vlan-information>

Usage

```
<igmp-snooping-vlan-information>
  <igmp-snooping-vlan>....</igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description

<igmp-snooping-vlan-member>

Usage

```
<igmp-snooping-vlan-member>
  <vmember-interface-name>
    vmember-interface-name
  </vmember-interface-name>
  <vmember-tagness>
    vmember-tagness
  </vmember-tagness>
  <vmember-group-count>
    vmember-group-count
  </vmember-group-count>
  <vmember-reporter-count>
    vmember-reporter-count
  </vmember-reporter-count>
  <vmember-is-mrouter>
    vmember-is-mrouter
  </vmember-is-mrouter>
</igmp-snooping-vlan-member>
```

Description

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<igmp-snooping-vlan-member>

Usage

```
<igmp-snooping-vlan>
  <igmp-snooping-vlan-member>
    <vmember-interface-name>
      vmember-interface-name
    </vmember-interface-name>
    <vmember-tagness>
      vmember-tagness
    </vmember-tagness>
    <vmember-group-count>
      vmember-group-count
    </vmember-group-count>
    <vmember-reporter-count>
      vmember-reporter-count
    </vmember-reporter-count>
    <vmember-is-mrouter>
      vmember-is-mrouter
    </vmember-is-mrouter>
  </igmp-snooping-vlan-member>
</igmp-snooping-vlan>
```

Description

<igmp-snooping-vlan-member>

Usage

```
<igmp-snooping-vlan-information>
  <igmp-snooping-vlan>
    <igmp-snooping-vlan-member>
      <vmember-interface-name>
        vmember-interface-name
      </vmember-interface-name>
      <vmember-tagness>
        vmember-tagness
      </vmember-tagness>
      <vmember-group-count>
        vmember-group-count
      </vmember-group-count>
      <vmember-reporter-count>
        vmember-reporter-count
      </vmember-reporter-count>
      <vmember-is-mrouter>
        vmember-is-mrouter
      </vmember-is-mrouter>
    </igmp-snooping-vlan-member>
  </igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description

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<igmp-snooping-vlan-rxlan-member>

Usage

```
<igmp-snooping-vlan-rxlan-member>
  <vmember-rxlan-name>
    vmember-rxlan-name
  </vmember-rxlan-name>
</igmp-snooping-vlan-rxlan-member>
```

Description

<igmp-snooping-vlan-rxlan-member>

Usage

```
<igmp-snooping-vlan>
  <igmp-snooping-vlan-rxlan-member>
    <vmember-rxlan-name>
      vmember-rxlan-name
    </vmember-rxlan-name>
  </igmp-snooping-vlan-rxlan-member>
</igmp-snooping-vlan>
```

Description

<igmp-snooping-vlan-rxlan-member>

Usage

```
<igmp-snooping-vlan-information>
  <igmp-snooping-vlan>
    <igmp-snooping-vlan-rxlan-member>
      <vmember-rxlan-name>
        vmember-rxlan-name
      </vmember-rxlan-name>
    </igmp-snooping-vlan-rxlan-member>
  </igmp-snooping-vlan>
</igmp-snooping-vlan-information>
```

Description

<igmp-vlan-router-interface>

Usage

```
<igmp-snooping-membership-information>
  <igmp-snooping-group-vlan>
    <igmp-vlan-router-interface>
      <mrouter-interface-name>
        mrouter-interface-name
      </mrouter-interface-name>
      <mrouter-interface-mode>
        mrouter-interface-mode
      </mrouter-interface-mode>
      <mrouter-interface-uptime>
```

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```
            mrouter-interface-uptime
           </mrouter-interface-uptime>
           <mrouter-interface-timeout>
            mrouter-interface-timeout
           </mrouter-interface-timeout>
          </igmp-vlan-router-interface>
         </igmp-snooping-group-vlan>
        </igmp-snooping-membership-information>
```

Description

<inet-table-route-entry>

Usage

```
<inet-table-route-entry>
 <inet-destination>
  inet-destination
 </inet-destination>
 <inet-source>
  inet-source
 </inet-source>
 <mcrt-next-hop-index>
  mcrt-next-hop-index
 </mcrt-next-hop-index>
 <mcrt-next-hop-entry>....</mcrt-next-hop-entry>
 <inet-table-sgv-entry>....</inet-table-sgv-entry>
</inet-table-route-entry>
```

Description

<inet-table-route-entry>

Usage

```
<igmp-snooping-table-inet>
 <inet-table-route-entry>
  <inet-destination>
   inet-destination
  </inet-destination>
  <inet-source>
   inet-source
  </inet-source>
  <mcrt-next-hop-index>
   mcrt-next-hop-index
  </mcrt-next-hop-index>
  <mcrt-next-hop-entry>....</mcrt-next-hop-entry>
  <inet-table-sgv-entry>....</inet-table-sgv-entry>
 </inet-table-route-entry>
</igmp-snooping-table-inet>
```

Description

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<inet-table-route-entry>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-inet>
    <inet-table-route-entry>
      <inet-destination>
        inet-destination
      </inet-destination>
      <inet-source>
        inet-source
      </inet-source>
      <mcrt-next-hop-index>
        mcrt-next-hop-index
      </mcrt-next-hop-index>
      <mcrt-next-hop-entry>....</mcrt-next-hop-entry>
      <inet-table-sgv-entry>....</inet-table-sgv-entry>
    </inet-table-route-entry>
  </igmp-snooping-table-inet>
</igmp-snooping-routing-information>
```

Description

<inet-table-sgv-entry>

Usage

```
<inet-table-sgv-entry>
  <sgv-interface-name>
    sgv-interface-name
  </sgv-interface-name>
  <sgv-vlan-name>
    sgv-vlan-name
  </sgv-vlan-name>
  <sgv-next-hop-index>
    sgv-next-hop-index
  </sgv-next-hop-index>
</inet-table-sgv-entry>
```

Description

<inet-table-sgv-entry>

Usage

```
<inet-table-route-entry>
  <inet-table-sgv-entry>
    <sgv-interface-name>
      sgv-interface-name
    </sgv-interface-name>
    <sgv-vlan-name>
      sgv-vlan-name
    </sgv-vlan-name>
    <sgv-next-hop-index>
      sgv-next-hop-index
```

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```
    </sgv-next-hop-index>
   </inet-table-sgv-entry>
</inet-table-route-entry>
```

Description

<inet-table-sgv-entry>

Usage

```
<igmp-snooping-table-inet>
 <inet-table-route-entry>
  <inet-table-sgv-entry>
   <sgv-interface-name>
    sgv-interface-name
   </sgv-interface-name>
   <sgv-vlan-name>
    sgv-vlan-name
   </sgv-vlan-name>
   <sgv-next-hop-index>
    sgv-next-hop-index
   </sgv-next-hop-index>
  </inet-table-sgv-entry>
 </inet-table-route-entry>
</igmp-snooping-table-inet>
```

Description

<inet-table-sgv-entry>

Usage

```
<igmp-snooping-routing-information>
 <igmp-snooping-table-inet>
  <inet-table-route-entry>
   <inet-table-sgv-entry>
    <sgv-interface-name>
     sgv-interface-name
    </sgv-interface-name>
    <sgv-vlan-name>
     sgv-vlan-name
    </sgv-vlan-name>
    <sgv-next-hop-index>
     sgv-next-hop-index
    </sgv-next-hop-index>
   </inet-table-sgv-entry>
  </inet-table-route-entry>
 </igmp-snooping-table-inet>
</igmp-snooping-routing-information>
```

Description

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<inet6-table-route-entry>

Usage

```
<inet6-table-route-entry>
  <inet6-destination>
    inet6-destination
  </inet6-destination>
  <inet6-source>
    inet6-source
  </inet6-source>
  <mld-mcrt-next-hop-index>
    mld-mcrt-next-hop-index
  </mld-mcrt-next-hop-index>
  <mld-mcrt-next-hop-entry>....</mld-mcrt-next-hop-entry>
  <inet6-table-sgv-entry>....</inet6-table-sgv-entry>
</inet6-table-route-entry>
```

Description

<inet6-table-route-entry>

Usage

```
<mld-snooping-table-inet6>
  <inet6-table-route-entry>
    <inet6-destination>
      inet6-destination
    </inet6-destination>
    <inet6-source>
      inet6-source
    </inet6-source>
    <mld-mcrt-next-hop-index>
      mld-mcrt-next-hop-index
    </mld-mcrt-next-hop-index>
    <mld-mcrt-next-hop-entry>....</mld-mcrt-next-hop-entry>
    <inet6-table-sgv-entry>....</inet6-table-sgv-entry>
  </inet6-table-route-entry>
</mld-snooping-table-inet6>
```

Description

<inet6-table-route-entry>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-inet6>
    <inet6-table-route-entry>
      <inet6-destination>
        inet6-destination
      </inet6-destination>
      <inet6-source>
        inet6-source
      </inet6-source>
      <mld-mcrt-next-hop-index>
```

```
        mld-mcrt-next-hop-index
      </mld-mcrt-next-hop-index>
      <mld-mcrt-next-hop-entry>....</mld-mcrt-next-hop-entry>
      <inet6-table-sgv-entry>....</inet6-table-sgv-entry>
    </inet6-table-route-entry>
  </mld-snooping-table-inet6>
</mld-snooping-routing-information>
```

Description

<inet6-table-sgv-entry>

Usage

```
<inet6-table-sgv-entry>
  <mld-sgv-interface-name>
    mld-sgv-interface-name
  </mld-sgv-interface-name>
  <mld-sgv-vlan-name>
    mld-sgv-vlan-name
  </mld-sgv-vlan-name>
  <mld-sgv-next-hop-index>
    mld-sgv-next-hop-index
  </mld-sgv-next-hop-index>
</inet6-table-sgv-entry>
```

Description

<inet6-table-sgv-entry>

Usage

```
<inet6-table-route-entry>
  <inet6-table-sgv-entry>
    <mld-sgv-interface-name>
      mld-sgv-interface-name
    </mld-sgv-interface-name>
    <mld-sgv-vlan-name>
      mld-sgv-vlan-name
    </mld-sgv-vlan-name>
    <mld-sgv-next-hop-index>
      mld-sgv-next-hop-index
    </mld-sgv-next-hop-index>
  </inet6-table-sgv-entry>
</inet6-table-route-entry>
```

Description

<inet6-table-sgv-entry>

Usage

```
<mld-snooping-table-inet6>
  <inet6-table-route-entry>
    <inet6-table-sgv-entry>
      <mld-sgv-interface-name>
```


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```
        mld-sgv-interface-name
       </mld-sgv-interface-name>
       <mld-sgv-vlan-name>
        mld-sgv-vlan-name
       </mld-sgv-vlan-name>
       <mld-sgv-next-hop-index>
        mld-sgv-next-hop-index
       </mld-sgv-next-hop-index>
      </inet6-table-sgv-entry>
     </inet6-table-route-entry>
    </mld-snooping-table-inet6>
```

Description

<inet6-table-sgv-entry>

Usage

```
<mld-snooping-routing-information>
 <mld-snooping-table-inet6>
  <inet6-table-route-entry>
   <inet6-table-sgv-entry>
    <mld-sgv-interface-name>
     mld-sgv-interface-name
    </mld-sgv-interface-name>
    <mld-sgv-vlan-name>
     mld-sgv-vlan-name
    </mld-sgv-vlan-name>
    <mld-sgv-next-hop-index>
     mld-sgv-next-hop-index
    </mld-sgv-next-hop-index>
   </inet6-table-sgv-entry>
  </inet6-table-route-entry>
 </mld-snooping-table-inet6>
</mld-snooping-routing-information>
```

Description

<mcrt-next-hop-entry>

Usage

```
<mcrt-next-hop-entry>
 <mcrt-nh-interface-index>
  mcrt-nh-interface-index
 </mcrt-nh-interface-index>
 <mcrt-nh-interface-name>
  mcrt-nh-interface-name
 </mcrt-nh-interface-name>
</mcrt-next-hop-entry>
```

Description

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<mcrt-next-hop-entry>

Usage

```
<inet-table-route-entry>
  <mcrt-next-hop-entry>
    <mcrt-nh-interface-index>
      mcrt-nh-interface-index
    </mcrt-nh-interface-index>
    <mcrt-nh-interface-name>
      mcrt-nh-interface-name
    </mcrt-nh-interface-name>
  </mcrt-next-hop-entry>
</inet-table-route-entry>
```

Description

<mcrt-next-hop-entry>

Usage

```
<igmp-snooping-table-inet>
  <inet-table-route-entry>
    <mcrt-next-hop-entry>
      <mcrt-nh-interface-index>
        mcrt-nh-interface-index
      </mcrt-nh-interface-index>
      <mcrt-nh-interface-name>
        mcrt-nh-interface-name
      </mcrt-nh-interface-name>
    </mcrt-next-hop-entry>
  </inet-table-route-entry>
</igmp-snooping-table-inet>
```

Description

<mcrt-next-hop-entry>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-inet>
    <inet-table-route-entry>
      <mcrt-next-hop-entry>
        <mcrt-nh-interface-index>
          mcrt-nh-interface-index
        </mcrt-nh-interface-index>
        <mcrt-nh-interface-name>
          mcrt-nh-interface-name
        </mcrt-nh-interface-name>
      </mcrt-next-hop-entry>
    </inet-table-route-entry>
  </igmp-snooping-table-inet>
</igmp-snooping-routing-information>
```


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Description

<mld-bridge-table-group-entry>

Usage

```
<mld-bridge-table-group-entry>
  <vlan-id>
    vlan-id
  </vlan-id>
  <vlan-name>
    vlan-name
  </vlan-name>
  <mld-destination>
    mld-destination
  </mld-destination>
  <mld-forward-next-hop>....</mld-forward-next-hop>
  <mld-group-next-hop>....</mld-group-next-hop>
  <inet6-references>
    inet6-references
  </inet6-references>
  <mld-bridge-table-sg-entry>....</mld-bridge-table-sg-entry>
</mld-bridge-table-group-entry>
```

Description

<mld-bridge-table-group-entry>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <vlan-id>
      vlan-id
    </vlan-id>
    <vlan-name>
      vlan-name
    </vlan-name>
    <mld-destination>
      mld-destination
    </mld-destination>
    <mld-forward-next-hop>....</mld-forward-next-hop>
    <mld-group-next-hop>....</mld-group-next-hop>
    <inet6-references>
      inet6-references
    </inet6-references>
    <mld-bridge-table-sg-entry>....</mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

<mld-bridge-table-group-entry>

Usage

```
<mld-snooping-routing-information>
```

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```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <vlan-id>
      vlan-id
    </vlan-id>
    <vlan-name>
      vlan-name
    </vlan-name>
    <mld-destination>
      mld-destination
    </mld-destination>
    <mld-forward-next-hop>....</mld-forward-next-hop>
    <mld-group-next-hop>....</mld-group-next-hop>
    <inet6-references>
      inet6-references
    </inet6-references>
    <mld-bridge-table-sg-entry>....</mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
 </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<mld-bridge-table-sg-entry>

Usage

```
<mld-bridge-table-sg-entry>
  <mld-source>
    mld-source
  </mld-source>
  <next-hop>....</next-hop>
</mld-bridge-table-sg-entry>
```

Description

<mld-bridge-table-sg-entry>

Usage

```
<mld-bridge-table-group-entry>
  <mld-bridge-table-sg-entry>
    <mld-source>
      mld-source
    </mld-source>
    <next-hop>....</next-hop>
  </mld-bridge-table-sg-entry>
</mld-bridge-table-group-entry>
```

Description

<mld-bridge-table-sg-entry>

Usage

```
<mld-snooping-table-bridge>
```


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```
<mld-bridge-table-group-entry>
 <mld-bridge-table-sg-entry>
  <mld-source>
   mld-source
  </mld-source>
  <next-hop>....</next-hop>
 </mld-bridge-table-sg-entry>
</mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

<mld-bridge-table-sg-entry>

Usage

```
<mld-snooping-routing-information>
 <mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
   <mld-bridge-table-sg-entry>
    <mld-source>
     mld-source
    </mld-source>
    <next-hop>....</next-hop>
   </mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
 </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<mld-forward-next-hop>

Usage

```
<mld-bridge-table-group-entry>
 <mld-forward-next-hop>
  <next-hop>....</next-hop>
 </mld-forward-next-hop>
</mld-bridge-table-group-entry>
```

Description Forwarding next-hop

<mld-forward-next-hop>

Usage

```
<mld-snooping-table-bridge>
 <mld-bridge-table-group-entry>
  <mld-forward-next-hop>
   <next-hop>....</next-hop>
  </mld-forward-next-hop>
 </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

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Description Forwarding next-hop

<mld-forward-next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-forward-next-hop>
        <next-hop>....</next-hop>
      </mld-forward-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description Forwarding next-hop

<mld-forward-next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-forward-next-hop>
    <next-hop>....</next-hop>
  </mld-forward-next-hop>
</mld-snooping-routing-information>
```

Description Forwarding next-hop

<mld-group-interface>

Usage

```
<mld-group-interface>
  <mld-snooping-interface-name>
    mld-snooping-interface-name
  </mld-snooping-interface-name>
  <mld-timeout>
    mld-timeout
  </mld-timeout>
  <mld-snooping-interface-uptime>
    mld-snooping-interface-uptime
  </mld-snooping-interface-uptime>
  <mld-last-reporter>
    mld-last-reporter
  </mld-last-reporter>
  <mld-query-timer>
    mld-query-timer
  </mld-query-timer>
  <mld-snooping-include-source-v2>
    mld-snooping-include-source-v2
  </mld-snooping-include-source-v2>
  <mld-snooping-exclude-source-v2>
    mld-snooping-exclude-source-v2
```


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```
  </mld-snooping-exclude-source-v2>
  <mld-flags>
   mld-flags
  </mld-flags>
  <mld-receiver-count>
   mld-receiver-count
  </mld-receiver-count>
</mld-group-interface>
```

Description

<mld-group-interface>

Usage

```
<mld-snooping-group>
  <mld-group-interface>
    <mld-snooping-interface-name>
     mld-snooping-interface-name
    </mld-snooping-interface-name>
    <mld-timeout>
     mld-timeout
    </mld-timeout>
    <mld-snooping-interface-uptime>
     mld-snooping-interface-uptime
    </mld-snooping-interface-uptime>
    <mld-last-reporter>
     mld-last-reporter
    </mld-last-reporter>
    <mld-query-timer>
     mld-query-timer
    </mld-query-timer>
    <mld-snooping-include-source-v2>
     mld-snooping-include-source-v2
    </mld-snooping-include-source-v2>
    <mld-snooping-exclude-source-v2>
     mld-snooping-exclude-source-v2
    </mld-snooping-exclude-source-v2>
    <mld-flags>
     mld-flags
    </mld-flags>
    <mld-receiver-count>
     mld-receiver-count
    </mld-receiver-count>
  </mld-group-interface>
</mld-snooping-group>
```

Description

<mld-group-interface>

Usage

```
<mld-snooping-membership-information>
  <mld-snooping-group-vlan>
    <mld-snooping-group>
```

```
<mld-group-interface>
  <mld-snooping-interface-name>
    mld-snooping-interface-name
  </mld-snooping-interface-name>
  <mld-timeout>
    mld-timeout
  </mld-timeout>
  <mld-snooping-interface-uptime>
    mld-snooping-interface-uptime
  </mld-snooping-interface-uptime>
  <mld-last-reporter>
    mld-last-reporter
  </mld-last-reporter>
  <mld-query-timer>
    mld-query-timer
  </mld-query-timer>
  <mld-snooping-include-source-v2>
    mld-snooping-include-source-v2
  </mld-snooping-include-source-v2>
  <mld-snooping-exclude-source-v2>
    mld-snooping-exclude-source-v2
  </mld-snooping-exclude-source-v2>
  <mld-flags>
    mld-flags
  </mld-flags>
  <mld-receiver-count>
    mld-receiver-count
  </mld-receiver-count>
 </mld-group-interface>
 </mld-snooping-group>
</mld-snooping-group-vlan>
</mld-snooping-membership-information>
```

Description

<mld-group-next-hop>

Usage

```
<mld-bridge-table-group-entry>
  <mld-group-next-hop>
    <next-hop>....</next-hop>
  </mld-group-next-hop>
</mld-bridge-table-group-entry>
```

Description Downstream interfaces for this (*, g) group

<mld-group-next-hop>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-group-next-hop>
      <next-hop>....</next-hop>
```


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```
    </mld-group-next-hop>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description Downstream interfaces for this (*, g) group

<mld-group-next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-group-next-hop>
        <next-hop>....</next-hop>
      </mld-group-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description Downstream interfaces for this (*, g) group

<mld-mcrt-next-hop-entry>

Usage

```
<mld-mcrt-next-hop-entry>
  <mld-mcrt-nh-interface-index>
    mld-mcrt-nh-interface-index
  </mld-mcrt-nh-interface-index>
  <mld-mcrt-nh-interface-name>
    mld-mcrt-nh-interface-name
  </mld-mcrt-nh-interface-name>
</mld-mcrt-next-hop-entry>
```

Description

<mld-mcrt-next-hop-entry>

Usage

```
<inet6-table-route-entry>
  <mld-mcrt-next-hop-entry>
    <mld-mcrt-nh-interface-index>
      mld-mcrt-nh-interface-index
    </mld-mcrt-nh-interface-index>
    <mld-mcrt-nh-interface-name>
      mld-mcrt-nh-interface-name
    </mld-mcrt-nh-interface-name>
  </mld-mcrt-next-hop-entry>
</inet6-table-route-entry>
```

Description

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<mld-mcrt-next-hop-entry>

Usage

```
<mld-snooping-table-inet6>
  <inet6-table-route-entry>
    <mld-mcrt-next-hop-entry>
      <mld-mcrt-nh-interface-index>
        mld-mcrt-nh-interface-index
      </mld-mcrt-nh-interface-index>
      <mld-mcrt-nh-interface-name>
        mld-mcrt-nh-interface-name
      </mld-mcrt-nh-interface-name>
    </mld-mcrt-next-hop-entry>
  </inet6-table-route-entry>
</mld-snooping-table-inet6>
```

Description

<mld-mcrt-next-hop-entry>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-inet6>
    <inet6-table-route-entry>
      <mld-mcrt-next-hop-entry>
        <mld-mcrt-nh-interface-index>
          mld-mcrt-nh-interface-index
        </mld-mcrt-nh-interface-index>
        <mld-mcrt-nh-interface-name>
          mld-mcrt-nh-interface-name
        </mld-mcrt-nh-interface-name>
      </mld-mcrt-next-hop-entry>
    </inet6-table-route-entry>
  </mld-snooping-table-inet6>
</mld-snooping-routing-information>
```

Description

<mld-snooping-global-statistics>

Usage

```
<mld-snooping-global-statistics>
  <bad-length>
    bad-length
  </bad-length>
  <bad-checksum>
    bad-checksum
  </bad-checksum>
  <bad-interface>
    bad-interface
  </bad-interface>
  <not-local>
    not-local
```


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```
  </not-local>
  <received-unknowns>
    received-unknowns
  </received-unknowns>
  <timed-out>
    timed-out
  </timed-out>
<mld-snooping-packet-type-statistics>....</mld-snooping-packet-type-statistics>

</mld-snooping-global-statistics>
```

Description

<mld-snooping-global-statistics>

Usage

```
<mld-snooping-statistics>
  <mld-snooping-global-statistics>
    <bad-length>
      bad-length
    </bad-length>
    <bad-checksum>
      bad-checksum
    </bad-checksum>
    <bad-interface>
      bad-interface
    </bad-interface>
    <not-local>
      not-local
    </not-local>
    <received-unknowns>
      received-unknowns
    </received-unknowns>
    <timed-out>
      timed-out
    </timed-out>
 <mld-snooping-packet-type-statistics>....</mld-snooping-packet-type-statistics>

  </mld-snooping-global-statistics>
</mld-snooping-statistics>
```

Description

<mld-snooping-group>

Usage

```
<mld-snooping-group>
  <mld-destination>
    mld-destination
  </mld-destination>
  <mld-source>
    mld-source
  </mld-source>
  <mld-ttl>
```

```
    mld-ttl
   </mld-ttl>
   <mld-router-count>
    mld-router-count
   </mld-router-count>
   <mld-group-interface>....</mld-group-interface>
</mld-snooping-group>
```

Description MLD snooping state machine group

<mld-snooping-group>

Usage

```
<mld-snooping-membership-information>
 <mld-snooping-group-vlan>
  <mld-snooping-group>
   <mld-destination>
    mld-destination
   </mld-destination>
   <mld-source>
    mld-source
   </mld-source>
   <mld-ttl>
    mld-ttl
   </mld-ttl>
   <mld-router-count>
    mld-router-count
   </mld-router-count>
   <mld-group-interface>....</mld-group-interface>
  </mld-snooping-group>
 </mld-snooping-group-vlan>
</mld-snooping-membership-information>
```

Description MLD snooping state machine group

<mld-snooping-group-vlan>

Usage

```
<mld-snooping-membership-information>
 <mld-snooping-group-vlan>
  <vlan-index>
   vlan-index
  </vlan-index>
  <vlan-name>
   vlan-name
  </vlan-name>
  <vlan-tag>
   vlan-tag
  </vlan-tag>
  <mld-vlan-router-interface>....</mld-vlan-router-interface>
  <mld-snooping-group>....</mld-snooping-group>
 </mld-snooping-group-vlan>
```


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```
</mld-snooping-membership-information>
```

Description

<mld-snooping-membership-information>

Usage

```
<mld-snooping-membership-information>
  <mld-snooping-group-vlan>....</mld-snooping-group-vlan>
</mld-snooping-membership-information>
```

Description

<mld-snooping-packet-type-statistics>

Usage

```
<mld-snooping-packet-type-statistics>
  <mld-received-queries>
    mld-received-queries
  </mld-received-queries>
  <mld-transmitted-queries>
    mld-transmitted-queries
  </mld-transmitted-queries>
  <mld-bad-queries>
    mld-bad-queries
  </mld-bad-queries>
  <mld-received-reports>
    mld-received-reports
  </mld-received-reports>
  <mld-transmitted-reports>
    mld-transmitted-reports
  </mld-transmitted-reports>
  <mld-bad-reports>
    mld-bad-reports
  </mld-bad-reports>
  <mld-received-leaves>
    mld-received-leaves
  </mld-received-leaves>
  <mld-transmitted-leaves>
    mld-transmitted-leaves
  </mld-transmitted-leaves>
  <mld-bad-leaves>
    mld-bad-leaves
  </mld-bad-leaves>
  <mld-received-others>
    mld-received-others
  </mld-received-others>
  <mld-transmitted-others>
    mld-transmitted-others
  </mld-transmitted-others>
  <mld-bad-others>
    mld-bad-others
  </mld-bad-others>
```

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```
</mld-snooping-packet-type-statistics>
```

Description

<mld-snooping-packet-type-statistics>

Usage

```
<mld-snooping-global-statistics>
 <mld-snooping-packet-type-statistics>
  <mld-received-queries>
   mld-received-queries
  </mld-received-queries>
  <mld-transmitted-queries>
   mld-transmitted-queries
  </mld-transmitted-queries>
  <mld-bad-queries>
   mld-bad-queries
  </mld-bad-queries>
  <mld-received-reports>
   mld-received-reports
  </mld-received-reports>
  <mld-transmitted-reports>
   mld-transmitted-reports
  </mld-transmitted-reports>
  <mld-bad-reports>
   mld-bad-reports
  </mld-bad-reports>
  <mld-received-leaves>
   mld-received-leaves
  </mld-received-leaves>
  <mld-transmitted-leaves>
   mld-transmitted-leaves
  </mld-transmitted-leaves>
  <mld-bad-leaves>
   mld-bad-leaves
  </mld-bad-leaves>
  <mld-received-others>
   mld-received-others
  </mld-received-others>
  <mld-transmitted-others>
   mld-transmitted-others
  </mld-transmitted-others>
  <mld-bad-others>
   mld-bad-others
  </mld-bad-others>
 </mld-snooping-packet-type-statistics>
</mld-snooping-global-statistics>
```

Description

<mld-snooping-packet-type-statistics>

Usage

```
<mld-snooping-statistics>
```


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```
<mld-snooping-global-statistics>
  <mld-snooping-packet-type-statistics>
    <mld-received-queries>
      mld-received-queries
    </mld-received-queries>
    <mld-transmitted-queries>
      mld-transmitted-queries
    </mld-transmitted-queries>
    <mld-bad-queries>
      mld-bad-queries
    </mld-bad-queries>
    <mld-received-reports>
      mld-received-reports
    </mld-received-reports>
    <mld-transmitted-reports>
      mld-transmitted-reports
    </mld-transmitted-reports>
    <mld-bad-reports>
      mld-bad-reports
    </mld-bad-reports>
    <mld-received-leaves>
      mld-received-leaves
    </mld-received-leaves>
    <mld-transmitted-leaves>
      mld-transmitted-leaves
    </mld-transmitted-leaves>
    <mld-bad-leaves>
      mld-bad-leaves
    </mld-bad-leaves>
    <mld-received-others>
      mld-received-others
    </mld-received-others>
    <mld-transmitted-others>
      mld-transmitted-others
    </mld-transmitted-others>
    <mld-bad-others>
      mld-bad-others
    </mld-bad-others>
  </mld-snooping-packet-type-statistics>
 </mld-snooping-global-statistics>
</mld-snooping-statistics>
```

Description

<mld-snooping-routing-information>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>....</mld-snooping-table-bridge>
  <mld-snooping-table-inet6>....</mld-snooping-table-inet6>
  <mld-forward-next-hop>....</mld-forward-next-hop>
</mld-snooping-routing-information>
```

Description

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<mld-snooping-statistics>

Usage

```
<mld-snooping-statistics>
  <mld-snooping-global-statistics>....</mld-snooping-global-statistics>
</mld-snooping-statistics>
```

Description

<mld-snooping-table-bridge>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-id>
    mld-bridge-table-id
  </mld-bridge-table-id>
  <mld-bridge-table-group-entry>....</mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

<mld-snooping-table-bridge>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-id>
      mld-bridge-table-id
    </mld-bridge-table-id>
    <mld-bridge-table-group-entry>....</mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<mld-snooping-table-inet6>

Usage

```
<mld-snooping-table-inet6>
  <inet6-table-id>
    inet6-table-id
  </inet6-table-id>
  <inet6-table-route-entry>....</inet6-table-route-entry>
</mld-snooping-table-inet6>
```

Description

<mld-snooping-table-inet6>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-inet6>
```


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```
    <inet6-table-id>
     inet6-table-id
    </inet6-table-id>
    <inet6-table-route-entry>....</inet6-table-route-entry>
   </mld-snooping-table-inet6>
</mld-snooping-routing-information>
```

Description

<mld-snooping-vlan>

Usage

```
<mld-snooping-vlan>
  <vlan-index>
   vlan-index
  </vlan-index>
  <vlan-name>
   vlan-name
  </vlan-name>
  <interface-count>
   interface-count
  </interface-count>
  <group-count>
   group-count
  </group-count>
  <mld-mrouter-count>
   mld-mrouter-count
  </mld-mrouter-count>
  <mld-reporter-count>
   mld-reporter-count
  </mld-reporter-count>
  <rxlan-count>
   rxlan-count
  </rxlan-count>
  <vlan-tag>
   vlan-tag
  </vlan-tag>
  <data-forwarding-internal-vlan>
   data-forwarding-internal-vlan
  </data-forwarding-internal-vlan>
  <vlan-interface>
   vlan-interface
  </vlan-interface>
  <membership-timeout>
   membership-timeout
  </membership-timeout>
  <query-timeout>
   query-timeout
  </query-timeout>
  <mld-snooping-vlan-member>....</mld-snooping-vlan-member>
</mld-snooping-vlan>
```

Description

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<mld-snooping-vlan>

Usage

```
<mld-snooping-vlan-information>
  <mld-snooping-vlan>
    <vlan-index>
      vlan-index
    </vlan-index>
    <vlan-name>
      vlan-name
    </vlan-name>
    <interface-count>
      interface-count
    </interface-count>
    <group-count>
      group-count
    </group-count>
    <mld-mrouter-count>
      mld-mrouter-count
    </mld-mrouter-count>
    <mld-reporter-count>
      mld-reporter-count
    </mld-reporter-count>
    <rxlan-count>
      rxlan-count
    </rxlan-count>
    <vlan-tag>
      vlan-tag
    </vlan-tag>
    <data-forwarding-internal-vlan>
      data-forwarding-internal-vlan
    </data-forwarding-internal-vlan>
    <vlan-interface>
      vlan-interface
    </vlan-interface>
    <membership-timeout>
      membership-timeout
    </membership-timeout>
    <query-timeout>
      query-timeout
    </query-timeout>
    <mld-snooping-vlan-member>....</mld-snooping-vlan-member>
  </mld-snooping-vlan>
</mld-snooping-vlan-information>
```

Description

<mld-snooping-vlan-information>

Usage

```
<mld-snooping-vlan-information>
  <mld-snooping-vlan>....</mld-snooping-vlan>
</mld-snooping-vlan-information>
```


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Description

<mld-snooping-vlan-member>

Usage

```
<mld-snooping-vlan-member>
  <vmember-interface-name>
    vmember-interface-name
  </vmember-interface-name>
  <vmember-tag>
    vmember-tag
  </vmember-tag>
  <vmember-group-count>
    vmember-group-count
  </vmember-group-count>
  <vmember-reporter-count>
    vmember-reporter-count
  </vmember-reporter-count>
  <vmember-is-mrouter>
    vmember-is-mrouter
  </vmember-is-mrouter>
</mld-snooping-vlan-member>
```

Description

<mld-snooping-vlan-member>

Usage

```
<mld-snooping-vlan>
  <mld-snooping-vlan-member>
    <vmember-interface-name>
      vmember-interface-name
    </vmember-interface-name>
    <vmember-tag>
      vmember-tag
    </vmember-tag>
    <vmember-group-count>
      vmember-group-count
    </vmember-group-count>
    <vmember-reporter-count>
      vmember-reporter-count
    </vmember-reporter-count>
    <vmember-is-mrouter>
      vmember-is-mrouter
    </vmember-is-mrouter>
  </mld-snooping-vlan-member>
</mld-snooping-vlan>
```

Description

<mld-snooping-vlan-member>

Usage

```
<mld-snooping-vlan-information>
```

```
<mld-snooping-vlan>
  <mld-snooping-vlan-member>
    <vmember-interface-name>
      vmember-interface-name
    </vmember-interface-name>
    <vmember-tag>
      vmember-tag
    </vmember-tag>
    <vmember-group-count>
      vmember-group-count
    </vmember-group-count>
    <vmember-reporter-count>
      vmember-reporter-count
    </vmember-reporter-count>
    <vmember-is-mrouter>
      vmember-is-mrouter
    </vmember-is-mrouter>
  </mld-snooping-vlan-member>
 </mld-snooping-vlan>
</mld-snooping-vlan-information>
```

Description

<mld-vlan-router-interface>

Usage

```
<mld-snooping-membership-information>
 <mld-snooping-group-vlan>
  <mld-vlan-router-interface>
    <mrouter-interface-name>
      mrouter-interface-name
    </mrouter-interface-name>
    <mrouter-interface-mode>
      mrouter-interface-mode
    </mrouter-interface-mode>
    <mrouter-interface-uptime>
      mrouter-interface-uptime
    </mrouter-interface-uptime>
    <mrouter-interface-timeout>
      mrouter-interface-timeout
    </mrouter-interface-timeout>
  </mld-vlan-router-interface>
 </mld-snooping-group-vlan>
</mld-snooping-membership-information>
```

Description

<next-hop>

Usage

```
<next-hop>
 <nh-index>
  nh-index
 </nh-index>
```


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```
  <next-hop-interface>....</next-hop-interface>
</next-hop>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<bridge-table-sg-entry>
  <next-hop>
    <nh-index>
      nh-index
    </nh-index>
    <next-hop-interface>....</next-hop-interface>
  </next-hop>
</bridge-table-sg-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<bridge-table-group-entry>
  <forward-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </forward-next-hop>
</bridge-table-group-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<bridge-table-group-entry>
  <group-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </group-next-hop>
</bridge-table-group-entry>
```

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Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<bridge-table-group-entry>
  <bridge-table-sg-entry>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </bridge-table-sg-entry>
</bridge-table-group-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <forward-next-hop>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </forward-next-hop>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <group-next-hop>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </group-next-hop>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```


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Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <bridge-table-sg-entry>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </bridge-table-sg-entry>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <forward-next-hop>
        <next-hop>
          <nh-index>
            nh-index
          </nh-index>
          <next-hop-interface>....</next-hop-interface>
        </next-hop>
      </forward-next-hop>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <group-next-hop>
        <next-hop>
          <nh-index>
            nh-index
          </nh-index>
          <next-hop-interface>....</next-hop-interface>
```

```
        </next-hop>
      </group-next-hop>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
    <bridge-table-group-entry>
      <bridge-table-sg-entry>
        <next-hop>
          <nh-index>
            nh-index
          </nh-index>
          <next-hop-interface>....</next-hop-interface>
        </next-hop>
      </bridge-table-sg-entry>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<igmp-snooping-routing-information>
  <forward-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </forward-next-hop>
</igmp-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-bridge-table-sg-entry>
  <next-hop>
    <nh-index>
      nh-index
```


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```
    </nh-index>
    <next-hop-interface>....</next-hop-interface>
  </next-hop>
</mld-bridge-table-sg-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-bridge-table-group-entry>
  <mld-forward-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </mld-forward-next-hop>
</mld-bridge-table-group-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-bridge-table-group-entry>
  <mld-group-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </mld-group-next-hop>
</mld-bridge-table-group-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-bridge-table-group-entry>
  <mld-bridge-table-sg-entry>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </mld-bridge-table-sg-entry>
```

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```
</mld-bridge-table-group-entry>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-forward-next-hop>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </mld-forward-next-hop>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-group-next-hop>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </mld-group-next-hop>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-bridge-table-sg-entry>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
```


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```
      </next-hop>
    </mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-forward-next-hop>
        <next-hop>
          <nh-index>
            nh-index
          </nh-index>
          <next-hop-interface>....</next-hop-interface>
        </next-hop>
      </mld-forward-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-group-next-hop>
        <next-hop>
          <nh-index>
            nh-index
          </nh-index>
          <next-hop-interface>....</next-hop-interface>
        </next-hop>
      </mld-group-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-routing-information>
```

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-bridge-table-sg-entry>
      <next-hop>
        <nh-index>
          nh-index
        </nh-index>
        <next-hop-interface>....</next-hop-interface>
      </next-hop>
    </mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
 </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop>

Usage

```
<mld-snooping-routing-information>
  <mld-forward-next-hop>
    <next-hop>
      <nh-index>
        nh-index
      </nh-index>
      <next-hop-interface>....</next-hop-interface>
    </next-hop>
  </mld-forward-next-hop>
</mld-snooping-routing-information>
```

Description Layer 2 multicast next-hop

<next-hop-interface>

Usage

```
<next-hop-interface>
  <nh-interface-index>
    nh-interface-index
  </nh-interface-index>
  <nh-interface-name>
    nh-interface-name
  </nh-interface-name>
</next-hop-interface>
```

Description

<next-hop-interface>

Usage

```
<next-hop>
  <next-hop-interface>
```


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```
    <nh-interface-index>
      nh-interface-index
    </nh-interface-index>
    <nh-interface-name>
      nh-interface-name
    </nh-interface-name>
  </next-hop-interface>
</next-hop>
```

Description

<next-hop-interface>

Usage

```
<bridge-table-sg-entry>
  <next-hop>
    <next-hop-interface>
      <nh-interface-index>
        nh-interface-index
      </nh-interface-index>
      <nh-interface-name>
        nh-interface-name
      </nh-interface-name>
    </next-hop-interface>
  </next-hop>
</bridge-table-sg-entry>
```

Description

<next-hop-interface>

Usage

```
<bridge-table-group-entry>
  <forward-next-hop>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
      </next-hop-interface>
    </next-hop>
  </forward-next-hop>
</bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<bridge-table-group-entry>
```

```
<group-next-hop>
 <next-hop>
  <next-hop-interface>
   <nh-interface-index>
    nh-interface-index
   </nh-interface-index>
   <nh-interface-name>
    nh-interface-name
   </nh-interface-name>
  </next-hop-interface>
 </next-hop>
</group-next-hop>
</bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<bridge-table-group-entry>
 <bridge-table-sg-entry>
  <next-hop>
   <next-hop-interface>
    <nh-interface-index>
     nh-interface-index
    </nh-interface-index>
    <nh-interface-name>
     nh-interface-name
    </nh-interface-name>
   </next-hop-interface>
  </next-hop>
 </bridge-table-sg-entry>
</bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-table-bridge>
 <bridge-table-group-entry>
  <forward-next-hop>
   <next-hop>
    <next-hop-interface>
     <nh-interface-index>
      nh-interface-index
     </nh-interface-index>
     <nh-interface-name>
      nh-interface-name
     </nh-interface-name>
    </next-hop-interface>
   </next-hop>
  </forward-next-hop>
 </bridge-table-group-entry>
```


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```
</igmp-snooping-table-bridge>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <group-next-hop>
      <next-hop>
        <next-hop-interface>
          <nh-interface-index>
            nh-interface-index
          </nh-interface-index>
          <nh-interface-name>
            nh-interface-name
          </nh-interface-name>
        </next-hop-interface>
      </next-hop>
    </group-next-hop>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-table-bridge>
  <bridge-table-group-entry>
    <bridge-table-sg-entry>
      <next-hop>
        <next-hop-interface>
          <nh-interface-index>
            nh-interface-index
          </nh-interface-index>
          <nh-interface-name>
            nh-interface-name
          </nh-interface-name>
        </next-hop-interface>
      </next-hop>
    </bridge-table-sg-entry>
  </bridge-table-group-entry>
</igmp-snooping-table-bridge>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-routing-information>
  <igmp-snooping-table-bridge>
```

```
    <bridge-table-group-entry>
     <forward-next-hop>
      <next-hop>
       <next-hop-interface>
        <nh-interface-index>
         nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
         nh-interface-name
        </nh-interface-name>
       </next-hop-interface>
      </next-hop>
     </forward-next-hop>
    </bridge-table-group-entry>
   </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-routing-information>
 <igmp-snooping-table-bridge>
  <bridge-table-group-entry>
   <group-next-hop>
    <next-hop>
     <next-hop-interface>
      <nh-interface-index>
       nh-interface-index
      </nh-interface-index>
      <nh-interface-name>
       nh-interface-name
      </nh-interface-name>
     </next-hop-interface>
    </next-hop>
   </group-next-hop>
  </bridge-table-group-entry>
 </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-routing-information>
 <igmp-snooping-table-bridge>
  <bridge-table-group-entry>
   <bridge-table-sg-entry>
    <next-hop>
     <next-hop-interface>
      <nh-interface-index>
       nh-interface-index
```


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```
            </nh-interface-index>
            <nh-interface-name>
              nh-interface-name
            </nh-interface-name>
          </next-hop-interface>
        </next-hop>
      </bridge-table-sg-entry>
    </bridge-table-group-entry>
  </igmp-snooping-table-bridge>
</igmp-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<igmp-snooping-routing-information>
  <forward-next-hop>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
      </next-hop-interface>
    </next-hop>
  </forward-next-hop>
</igmp-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<mld-bridge-table-sg-entry>
  <next-hop>
    <next-hop-interface>
      <nh-interface-index>
        nh-interface-index
      </nh-interface-index>
      <nh-interface-name>
        nh-interface-name
      </nh-interface-name>
    </next-hop-interface>
  </next-hop>
</mld-bridge-table-sg-entry>
```

Description

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<next-hop-interface>

Usage

```
<mld-bridge-table-group-entry>
  <mld-forward-next-hop>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
      </next-hop-interface>
    </next-hop>
  </mld-forward-next-hop>
</mld-bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<mld-bridge-table-group-entry>
  <mld-group-next-hop>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
      </next-hop-interface>
    </next-hop>
  </mld-group-next-hop>
</mld-bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<mld-bridge-table-group-entry>
  <mld-bridge-table-sg-entry>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
```


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```
      </next-hop-interface>
    </next-hop>
  </mld-bridge-table-sg-entry>
</mld-bridge-table-group-entry>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-forward-next-hop>
      <next-hop>
        <next-hop-interface>
          <nh-interface-index>
            nh-interface-index
          </nh-interface-index>
          <nh-interface-name>
            nh-interface-name
          </nh-interface-name>
        </next-hop-interface>
      </next-hop>
    </mld-forward-next-hop>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-group-next-hop>
      <next-hop>
        <next-hop-interface>
          <nh-interface-index>
            nh-interface-index
          </nh-interface-index>
          <nh-interface-name>
            nh-interface-name
          </nh-interface-name>
        </next-hop-interface>
      </next-hop>
    </mld-group-next-hop>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

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<next-hop-interface>

Usage

```
<mld-snooping-table-bridge>
  <mld-bridge-table-group-entry>
    <mld-bridge-table-sg-entry>
      <next-hop>
        <next-hop-interface>
          <nh-interface-index>
            nh-interface-index
          </nh-interface-index>
          <nh-interface-name>
            nh-interface-name
          </nh-interface-name>
        </next-hop-interface>
      </next-hop>
    </mld-bridge-table-sg-entry>
  </mld-bridge-table-group-entry>
</mld-snooping-table-bridge>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-forward-next-hop>
        <next-hop>
          <next-hop-interface>
            <nh-interface-index>
              nh-interface-index
            </nh-interface-index>
            <nh-interface-name>
              nh-interface-name
            </nh-interface-name>
          </next-hop-interface>
        </next-hop>
      </mld-forward-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-group-next-hop>
```


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```
        <next-hop>
          <next-hop-interface>
            <nh-interface-index>
              nh-interface-index
            </nh-interface-index>
            <nh-interface-name>
              nh-interface-name
            </nh-interface-name>
          </next-hop-interface>
        </next-hop>
      </mld-group-next-hop>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-routing-information>
  <mld-snooping-table-bridge>
    <mld-bridge-table-group-entry>
      <mld-bridge-table-sg-entry>
        <next-hop>
          <next-hop-interface>
            <nh-interface-index>
              nh-interface-index
            </nh-interface-index>
            <nh-interface-name>
              nh-interface-name
            </nh-interface-name>
          </next-hop-interface>
        </next-hop>
      </mld-bridge-table-sg-entry>
    </mld-bridge-table-group-entry>
  </mld-snooping-table-bridge>
</mld-snooping-routing-information>
```

Description

<next-hop-interface>

Usage

```
<mld-snooping-routing-information>
  <mld-forward-next-hop>
    <next-hop>
      <next-hop-interface>
        <nh-interface-index>
          nh-interface-index
        </nh-interface-index>
        <nh-interface-name>
          nh-interface-name
        </nh-interface-name>
```

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```
        </next-hop-interface>
      </next-hop>
    </mld-forward-next-hop>
  </mld-snooping-routing-information>
```

Description

<task>

Usage

```
<task-timer-information>
  <task>
    <task-name>
      task-name
    </task-name>
    <task-timer-priority>....</task-timer-priority>
    <task-timer-summary>....</task-timer-summary>
    <task-timer>....</task-timer>
  </task>
</task-timer-information>
```

Description

<task-account-information>

Usage

```
<task-accounting-information>
  <task-account-information>
</task-account-information>
</task-accounting-information>
```

Description

<task-account-status>

Usage

```
<task-accounting-information>
  <task-account-status>
</task-account-status>
</task-accounting-information>
```

Description

<task-accounting-information>

Usage

```
<task-accounting-information>
  <task-acc-task-name>
    task-acc-task-name
  </task-acc-task-name>
  <task-acc-status>
    task-acc-status
```


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```
  </task-acc-status>
  <task-acc-task-started>
    task-acc-task-started
  </task-acc-task-started>
  <task-acc-task-user-time>
    task-acc-task-user-time
  </task-acc-task-user-time>
  <task-acc-task-system-time>
    task-acc-task-system-time
  </task-acc-task-system-time>
  <task-acc-task-longest-run>
    task-acc-task-longest-run
  </task-acc-task-longest-run>
  <task-account-status>....</task-account-status>
  <task-account-information>....</task-account-information>
</task-accounting-information>
```

Description

<task-block>

Usage

```
<task-block-list>
  <task-block>
    <tb-name>
      tb-name
    </tb-name>
    <tb-size>
      tb-size
    </tb-size>
    <tb-alloc-size>
      tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
      tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
      tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
      tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
      tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
      tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
      tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
      tb-max-alloc-bytes
    </tb-max-alloc-bytes>
  </task-block>
```

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```
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-block-list>
   <task-block>
    <tb-name>
     tb-name
    </tb-name>
    <tb-size>
     tb-size
    </tb-size>
    <tb-alloc-size>
     tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
     tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
     tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
     tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
     tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
     tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
     tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
     tb-max-alloc-bytes
    </tb-max-alloc-bytes>
   </task-block>
  </task-block-list>
 </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
 <task-block>....</task-block>
```


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```
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>....</task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-io-information>

Usage

```
<task-io-information>
  <task-io-task-name>
    task-io-task-name
  </task-io-task-name>
  <task-io-read>
    task-io-read
  </task-io-read>
  <task-io-write>
    task-io-write
  </task-io-write>
  <task-io-received>
    task-io-received
  </task-io-received>
  <task-io-sent>
    task-io-sent
  </task-io-sent>
  <task-io-dropped>
    task-io-dropped
  </task-io-dropped>
</task-io-information>
```

Description

<task-jobs-background>

Usage

```
<task-jobs-information>
  <task-jobs-background>
</task-jobs-background>
</task-jobs-information>
```

Description

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<task-jobs-foreground>

Usage

```
<task-jobs-information>
  <task-jobs-foreground>
</task-jobs-foreground>
</task-jobs-information>
```

Description

<task-jobs-information>

Usage

```
<task-jobs-information>
  <task-jobs-fg-priority>
    task-jobs-fg-priority
  </task-jobs-fg-priority>
  <task-jobs-fg-task-name>
    task-jobs-fg-task-name
  </task-jobs-fg-task-name>
  <task-jobs-fg-wait>
    task-jobs-fg-wait
  </task-jobs-fg-wait>
  <task-jobs-fg-flags>
    task-jobs-fg-flags
  </task-jobs-fg-flags>
  <task-jobs-bg-priority>
    task-jobs-bg-priority
  </task-jobs-bg-priority>
  <task-jobs-bg-task-name>
    task-jobs-bg-task-name
  </task-jobs-bg-task-name>
  <task-jobs-bg-misses>
    task-jobs-bg-misses
  </task-jobs-bg-misses>
  <task-jobs-bg-runs>
    task-jobs-bg-runs
  </task-jobs-bg-runs>
  <task-jobs-bg-wait>
    task-jobs-bg-wait
  </task-jobs-bg-wait>
  <task-jobs-bg-flags>
    task-jobs-bg-flags
  </task-jobs-bg-flags>
  <task-jobs-foreground>....</task-jobs-foreground>
  <task-jobs-background>....</task-jobs-background>
</task-jobs-information>
```

Description

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<task-lite-page>

Usage

```
<task-lite-page-list>
  <task-lite-page>
    <tlp-name>
      tlp-name
    </tlp-name>
    <tlp-alloc-pages>
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>
        <tlp-name>
          tlp-name
        </tlp-name>
        <tlp-alloc-pages>
          tlp-alloc-pages
        </tlp-alloc-pages>
        <tlp-alloc-bytes>
          tlp-alloc-bytes
        </tlp-alloc-bytes>
        <tlp-max-alloc-pages>
          tlp-max-alloc-pages
        </tlp-max-alloc-pages>
        <tlp-max-alloc-bytes>
          tlp-max-alloc-bytes
        </tlp-max-alloc-bytes>
      </task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

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<task-lite-page-list>

Usage

```
<task-lite-page-list>
  <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>....</task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
  </task-malloc>
</task-malloc-list>
```

Description

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<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
      </task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

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Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
    task-memory-in-use-size
  </task-memory-in-use-size>
  <task-memory-in-use-avail>
    task-memory-in-use-avail
  </task-memory-in-use-avail>
  <task-memory-max-size>
    task-memory-max-size
  </task-memory-max-size>
  <task-memory-max-avail>
    task-memory-max-avail
  </task-memory-max-avail>
  <task-memory-max-when>
    task-memory-max-when
  </task-memory-max-when>
  <task-memory-free-size>
    task-memory-free-size
  </task-memory-free-size>
  <task-memory-overall-report>....</task-memory-overall-report>
  <task-memory-allocator-report>....</task-memory-allocator-report>
  <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
  <task-memory-dynamic-allocs>
    task-memory-dynamic-allocs
  </task-memory-dynamic-allocs>
  <task-memory-max-dynamic-allocs>
    task-memory-max-dynamic-allocs
  </task-memory-max-dynamic-allocs>
  <task-memory-bss-bytes>
    task-memory-bss-bytes
  </task-memory-bss-bytes>
  <task-memory-max-bss-bytes>
```


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```
    task-memory-max-bss-bytes
  </task-memory-max-bss-bytes>
  <task-memory-page-data-bytes>
    task-memory-page-data-bytes
  </task-memory-page-data-bytes>
  <task-memory-max-page-data-bytes>
    task-memory-max-page-data-bytes
  </task-memory-max-page-data-bytes>
  <task-memory-dir-bytes>
    task-memory-dir-bytes
  </task-memory-dir-bytes>
  <task-memory-max-dir-bytes>
    task-memory-max-dir-bytes
  </task-memory-max-dir-bytes>
  <task-memory-total-bytes-in-use>
    task-memory-total-bytes-in-use
  </task-memory-total-bytes-in-use>
  <task-memory-total-bytes-percent>
    task-memory-total-bytes-percent
  </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
```

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```
    <task-memory-total-free-bytes>
      task-memory-total-free-bytes
    </task-memory-total-free-bytes>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
  <tms-name>
    tms-name
  </tms-name>
  <tms-allocs>
    tms-allocs
  </tms-allocs>
  <tms-mallocs>
    tms-mallocs
  </tms-mallocs>
  <tms-alloc-bytes>
    tms-alloc-bytes
  </tms-alloc-bytes>
  <tms-max-allocs>
    tms-max-allocs
  </tms-max-allocs>
  <tms-max-bytes>
    tms-max-bytes
  </tms-max-bytes>
  <tms-free-bytes>
    tms-free-bytes
  </tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>
        <tms-name>
          tms-name
        </tms-name>
        <tms-allocs>
          tms-allocs
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
```


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```
            tms-alloc-bytes
           </tms-alloc-bytes>
           <tms-max-allocs>
            tms-max-allocs
           </tms-max-allocs>
           <tms-max-bytes>
            tms-max-bytes
           </tms-max-bytes>
           <tms-free-bytes>
            tms-free-bytes
           </tms-free-bytes>
          </task-memory-stats>
         </task-memory-stats-list>
        </task-memory-overall-report>
       </task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
 <task-memory-overall-report>
  <task-memory-stats-list>
   <task-memory-stats>....</task-memory-stats>
  </task-memory-stats-list>
 </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
 <task-gres-state>
  task-gres-state
 </task-gres-state>
 <task-re-mode>
  task-re-mode
 </task-re-mode>
</task-replication-state>
```

Description Current state of task replication

<task-size-block>

Usage

```
<task-size-block-list>
 <task-size-block>
  <tsb-size>
   tsb-size
```

```
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
          tsb-allocs
        </tsb-allocs>
        <tsb-mallocs>
          tsb-mallocs
        </tsb-mallocs>
        <tsb-alloc-bytes>
          tsb-alloc-bytes
        </tsb-alloc-bytes>
```


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```
        <tsb-max-allocs>
          tsb-max-allocs
        </tsb-max-allocs>
        <tsb-max-bytes>
          tsb-max-bytes
        </tsb-max-bytes>
        <tsb-free-bytes>
          tsb-free-bytes
        </tsb-free-bytes>
      </task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
  <task-size-block>....</task-size-block>
</task-size-block-list>
```

Description

<task-size-block-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>....</task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-statistics-information>

Usage

```
<task-statistics-information>
  <task-stat-event-name>
    task-stat-event-name
  </task-stat-event-name>
  <tast-stat-event-count>
    tast-stat-event-count
  </tast-stat-event-count>
</task-statistics-information>
```

Description

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<task-summary-information>

Usage

```
<task-summary-information>
  <task-summary-priority>
    task-summary-priority
  </task-summary-priority>
  <task-summary-task-name>
    task-summary-task-name
  </task-summary-task-name>
  <task-summary-protocol>
    task-summary-protocol
  </task-summary-protocol>
  <task-summary-port>
    task-summary-port
  </task-summary-port>
  <task-summary-socket>
    task-summary-socket
  </task-summary-socket>
  <task-summary-flags>
    task-summary-flags
  </task-summary-flags>
</task-summary-information>
```

Description

<task-timer>

Usage

```
<task-timer>
  <timer-name>
    timer-name
  </timer-name>
  <timer-late>
    timer-late
  </timer-late>
  <timer-expires>
    timer-expires
  </timer-expires>
  <timer-jitter>
    timer-jitter
  </timer-jitter>
  <timer-interval>
    timer-interval
  </timer-interval>
  <timer-flags>
    timer-flags
  </timer-flags>
</task-timer>
```

Description

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<task-timer>

Usage

```
<task-timer-information>
  <task>
    <task-timer>
      <timer-name>
        timer-name
      </timer-name>
      <timer-late>
        timer-late
      </timer-late>
      <timer-expires>
        timer-expires
      </timer-expires>
      <timer-jitter>
        timer-jitter
      </timer-jitter>
      <timer-interval>
        timer-interval
      </timer-interval>
      <timer-flags>
        timer-flags
      </timer-flags>
    </task-timer>
  </task>
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
</task-timer-information>
```

Description

<task-timer-priority>

Usage

```
<task-timer-priority>
  <task-timer-type>
    task-timer-type
  </task-timer-type>
</task-timer-priority>
```

Description

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<task-timer-priority>

Usage

```
<task-timer-information>
  <task>
    <task-timer-priority>
      <task-timer-type>
        task-timer-type
      </task-timer-type>
    </task-timer-priority>
  </task>
</task-timer-information>
```

Description

<task-timer-summary>

Usage

```
<task-timer-summary>
  <task-timer-leaf>
    task-timer-leaf
  </task-timer-leaf>
  <task-timer-parent>
    task-timer-parent
  </task-timer-parent>
  <task-timer-expired>
    task-timer-expired
  </task-timer-expired>
</task-timer-summary>
```

Description

<task-timer-summary>

Usage

```
<task-timer-information>
  <task>
    <task-timer-summary>
      <task-timer-leaf>
        task-timer-leaf
      </task-timer-leaf>
      <task-timer-parent>
        task-timer-parent
      </task-timer-parent>
      <task-timer-expired>
        task-timer-expired
      </task-timer-expired>
    </task-timer-summary>
  </task>
</task-timer-information>
```

Description

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<tracing-information>

Usage

```
<tracing-information>
  <flags>
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```

Description

Summary of LLDP Response Tags

<dcbx>

Usage

```
<dcbx>
  <dcbx-interface-information>....</dcbx-interface-information>
  <dcbx-neighbor-information>....</dcbx-neighbor-information>
  <dcbx-global-status>
    dcbx-global-status
  </dcbx-global-status>
  <dcbx-status-information>....</dcbx-status-information>
</dcbx>
```

Description

<dcbx-feature-application>

Usage

```
<dcbx-feature-application>
  <dcbx-feature-common>....</dcbx-feature-common>

<dcbx-feature-application-advertisement>....</dcbx-feature-application-advertisement>

</dcbx-feature-application>
```

Description

<dcbx-feature-application>

Usage

```
<dcbx-interface-information>
```

```
                <dcbx-feature-application>
                  <dcbx-feature-common>....</dcbx-feature-common>

              <dcbx-feature-application-advertisement>....</dcbx-feature-application-advertisement>

                </dcbx-feature-application>
              </dcbx-interface-information>
```

Description

<dcbx-feature-application>

Usage

```
              <dcbx>
                <dcbx-interface-information>
                  <dcbx-feature-application>
                    <dcbx-feature-common>....</dcbx-feature-common>

              <dcbx-feature-application-advertisement>....</dcbx-feature-application-advertisement>

                  </dcbx-feature-application>
                </dcbx-interface-information>
              </dcbx>
```

Description

<dcbx-feature-application-advertisement>

Usage

```
              <dcbx-feature-application-advertisement>
                <dcbx-feature-advertisement-type>
                  dcbx-feature-advertisement-type
                </dcbx-feature-advertisement-type>
                <dcbx-feature-flags>....</dcbx-feature-flags>
                <dcbx-feature-application-config>....</dcbx-feature-application-config>
              </dcbx-feature-application-advertisement>
```

Description

<dcbx-feature-application-advertisement>

Usage

```
              <dcbx-feature-application>
                <dcbx-feature-application-advertisement>
                  <dcbx-feature-advertisement-type>
                    dcbx-feature-advertisement-type
                  </dcbx-feature-advertisement-type>
                  <dcbx-feature-flags>....</dcbx-feature-flags>
                  <dcbx-feature-application-config>....</dcbx-feature-application-config>
                </dcbx-feature-application-advertisement>
              </dcbx-feature-application>
```


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Description

<dcbx-feature-application-advertisement>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-application>
    <dcbx-feature-application-advertisement>
      <dcbx-feature-advertisement-type>
        dcbx-feature-advertisement-type
      </dcbx-feature-advertisement-type>
      <dcbx-feature-flags>....</dcbx-feature-flags>
      <dcbx-feature-application-config>....</dcbx-feature-application-config>
    </dcbx-feature-application-advertisement>
  </dcbx-feature-application>
</dcbx-interface-information>
```

Description

<dcbx-feature-application-advertisement>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-application>
      <dcbx-feature-application-advertisement>
        <dcbx-feature-advertisement-type>
          dcbx-feature-advertisement-type
        </dcbx-feature-advertisement-type>
        <dcbx-feature-flags>....</dcbx-feature-flags>
        <dcbx-feature-application-config>....</dcbx-feature-application-config>
      </dcbx-feature-application-advertisement>
    </dcbx-feature-application>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-application-config>

Usage

```
<dcbx-feature-application-config>
  <dcbx-feature-application-name>
    dcbx-feature-application-name
  </dcbx-feature-application-name>
  <dcbx-feature-application-ether-type>
    dcbx-feature-application-ether-type
  </dcbx-feature-application-ether-type>
  <dcbx-feature-application-socket-number>
    dcbx-feature-application-socket-number
  </dcbx-feature-application-socket-number>
  <dcbx-feature-application-priority-map>
    dcbx-feature-application-priority-map
  </dcbx-feature-application-priority-map>
```

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```
    <dcbx-feature-application-status>
      dcbx-feature-application-status
    </dcbx-feature-application-status>
  </dcbx-feature-application-config>
```

Description

<dcbx-feature-application-config>

Usage

```
<dcbx-feature-application-advertisement>
  <dcbx-feature-application-config>
    <dcbx-feature-application-name>
      dcbx-feature-application-name
    </dcbx-feature-application-name>
    <dcbx-feature-application-ether-type>
      dcbx-feature-application-ether-type
    </dcbx-feature-application-ether-type>
    <dcbx-feature-application-socket-number>
      dcbx-feature-application-socket-number
    </dcbx-feature-application-socket-number>
    <dcbx-feature-application-priority-map>
      dcbx-feature-application-priority-map
    </dcbx-feature-application-priority-map>
    <dcbx-feature-application-status>
      dcbx-feature-application-status
    </dcbx-feature-application-status>
  </dcbx-feature-application-config>
</dcbx-feature-application-advertisement>
```

Description

<dcbx-feature-application-config>

Usage

```
<dcbx-feature-application>
  <dcbx-feature-application-advertisement>
    <dcbx-feature-application-config>
      <dcbx-feature-application-name>
        dcbx-feature-application-name
      </dcbx-feature-application-name>
      <dcbx-feature-application-ether-type>
        dcbx-feature-application-ether-type
      </dcbx-feature-application-ether-type>
      <dcbx-feature-application-socket-number>
        dcbx-feature-application-socket-number
      </dcbx-feature-application-socket-number>
      <dcbx-feature-application-priority-map>
        dcbx-feature-application-priority-map
      </dcbx-feature-application-priority-map>
      <dcbx-feature-application-status>
        dcbx-feature-application-status
      </dcbx-feature-application-status>
    </dcbx-feature-application-config>
```


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```
  </dcbx-feature-application-advertisement>
</dcbx-feature-application>
```

Description

<dcbx-feature-application-config>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-application>
    <dcbx-feature-application-advertisement>
      <dcbx-feature-application-config>
        <dcbx-feature-application-name>
          dcbx-feature-application-name
        </dcbx-feature-application-name>
        <dcbx-feature-application-ether-type>
          dcbx-feature-application-ether-type
        </dcbx-feature-application-ether-type>
        <dcbx-feature-application-socket-number>
          dcbx-feature-application-socket-number
        </dcbx-feature-application-socket-number>
        <dcbx-feature-application-priority-map>
          dcbx-feature-application-priority-map
        </dcbx-feature-application-priority-map>
        <dcbx-feature-application-status>
          dcbx-feature-application-status
        </dcbx-feature-application-status>
      </dcbx-feature-application-config>
    </dcbx-feature-application-advertisement>
  </dcbx-feature-application>
</dcbx-interface-information>
```

Description

<dcbx-feature-application-config>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-application>
      <dcbx-feature-application-advertisement>
        <dcbx-feature-application-config>
          <dcbx-feature-application-name>
            dcbx-feature-application-name
          </dcbx-feature-application-name>
          <dcbx-feature-application-ether-type>
            dcbx-feature-application-ether-type
          </dcbx-feature-application-ether-type>
          <dcbx-feature-application-socket-number>
            dcbx-feature-application-socket-number
          </dcbx-feature-application-socket-number>
          <dcbx-feature-application-priority-map>
            dcbx-feature-application-priority-map
          </dcbx-feature-application-priority-map>
```

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```
                <dcbx-feature-application-status>
                  dcbx-feature-application-status
                </dcbx-feature-application-status>
              </dcbx-feature-application-config>
            </dcbx-feature-application-advertisement>
          </dcbx-feature-application>
        </dcbx-interface-information>
      </dcbx>
```

Description

<dcbx-feature-common>

Usage

```
<dcbx-feature-common>
  <dcbx-feature-name>
    dcbx-feature-name
  </dcbx-feature-name>
  <dcbx-feature-protocol-state>
    dcbx-feature-protocol-state
  </dcbx-feature-protocol-state>
  <dcbx-feature-operation-state>
    dcbx-feature-operation-state
  </dcbx-feature-operation-state>
</dcbx-feature-common>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-feature-pfc>
  <dcbx-feature-common>
    <dcbx-feature-name>
      dcbx-feature-name
    </dcbx-feature-name>
    <dcbx-feature-protocol-state>
      dcbx-feature-protocol-state
    </dcbx-feature-protocol-state>
    <dcbx-feature-operation-state>
      dcbx-feature-operation-state
    </dcbx-feature-operation-state>
  </dcbx-feature-common>
</dcbx-feature-pfc>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-feature-application>
```


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```
<dcbx-feature-common>
  <dcbx-feature-name>
    dcbx-feature-name
  </dcbx-feature-name>
  <dcbx-feature-protocol-state>
    dcbx-feature-protocol-state
  </dcbx-feature-protocol-state>
  <dcbx-feature-operation-state>
    dcbx-feature-operation-state
  </dcbx-feature-operation-state>
</dcbx-feature-common>
</dcbx-feature-application>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-common>
    <dcbx-feature-name>
      dcbx-feature-name
    </dcbx-feature-name>
    <dcbx-feature-protocol-state>
      dcbx-feature-protocol-state
    </dcbx-feature-protocol-state>
    <dcbx-feature-operation-state>
      dcbx-feature-operation-state
    </dcbx-feature-operation-state>
  </dcbx-feature-common>
</dcbx-feature-ets>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-pfc>
    <dcbx-feature-common>
      <dcbx-feature-name>
        dcbx-feature-name
      </dcbx-feature-name>
      <dcbx-feature-protocol-state>
        dcbx-feature-protocol-state
      </dcbx-feature-protocol-state>
      <dcbx-feature-operation-state>
        dcbx-feature-operation-state
      </dcbx-feature-operation-state>
    </dcbx-feature-common>
  </dcbx-feature-pfc>
```

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```
</dcbx-interface-information>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-application>
    <dcbx-feature-common>
      <dcbx-feature-name>
        dcbx-feature-name
      </dcbx-feature-name>
      <dcbx-feature-protocol-state>
        dcbx-feature-protocol-state
      </dcbx-feature-protocol-state>
      <dcbx-feature-operation-state>
        dcbx-feature-operation-state
      </dcbx-feature-operation-state>
    </dcbx-feature-common>
  </dcbx-feature-application>
</dcbx-interface-information>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-common>
      <dcbx-feature-name>
        dcbx-feature-name
      </dcbx-feature-name>
      <dcbx-feature-protocol-state>
        dcbx-feature-protocol-state
      </dcbx-feature-protocol-state>
      <dcbx-feature-operation-state>
        dcbx-feature-operation-state
      </dcbx-feature-operation-state>
    </dcbx-feature-common>
  </dcbx-feature-ets>
</dcbx-interface-information>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx>
  <dcbx-interface-information>
```


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```
    <dcbx-feature-pfc>
     <dcbx-feature-common>
      <dcbx-feature-name>
       dcbx-feature-name
      </dcbx-feature-name>
      <dcbx-feature-protocol-state>
       dcbx-feature-protocol-state
      </dcbx-feature-protocol-state>
      <dcbx-feature-operation-state>
       dcbx-feature-operation-state
      </dcbx-feature-operation-state>
     </dcbx-feature-common>
    </dcbx-feature-pfc>
   </dcbx-interface-information>
</dcbx>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-application>
   <dcbx-feature-common>
    <dcbx-feature-name>
     dcbx-feature-name
    </dcbx-feature-name>
    <dcbx-feature-protocol-state>
     dcbx-feature-protocol-state
    </dcbx-feature-protocol-state>
    <dcbx-feature-operation-state>
     dcbx-feature-operation-state
    </dcbx-feature-operation-state>
   </dcbx-feature-common>
  </dcbx-feature-application>
 </dcbx-interface-information>
</dcbx>
```

Description Common header for a DCBX feature

<dcbx-feature-common>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-ets>
   <dcbx-feature-common>
    <dcbx-feature-name>
     dcbx-feature-name
    </dcbx-feature-name>
    <dcbx-feature-protocol-state>
```

```
            dcbx-feature-protocol-state
          </dcbx-feature-protocol-state>
          <dcbx-feature-operation-state>
            dcbx-feature-operation-state
          </dcbx-feature-operation-state>
        </dcbx-feature-common>
      </dcbx-feature-ets>
    </dcbx-interface-information>
  </dcbx>
```

Description Common header for a DCBX feature

<dcbx-feature-ets>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-common>....</dcbx-feature-common>
  <dcbx-feature-ets-advertisement>....</dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description

<dcbx-feature-ets>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-common>....</dcbx-feature-common>
    <dcbx-feature-ets-advertisement>....</dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
</dcbx-interface-information>
```

Description

<dcbx-feature-ets>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-ets>
      <dcbx-feature-common>....</dcbx-feature-common>
      <dcbx-feature-ets-advertisement>....</dcbx-feature-ets-advertisement>
    </dcbx-feature-ets>
  </dcbx-interface-information>
</dcbx>
```

Description

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<dcbx-feature-ets-advertisement>

Usage

```
<dcbx-feature-ets-advertisement>
  <dcbx-feature-advertisement-type>
    dcbx-feature-advertisement-type
  </dcbx-feature-advertisement-type>
  <dcbx-feature-flags>....</dcbx-feature-flags>
  <dcbx-feature-ets-max-no-tc>
    dcbx-feature-ets-max-no-tc
  </dcbx-feature-ets-max-no-tc>
  <dcbx-feature-ets-config-cp-pg>....</dcbx-feature-ets-config-cp-pg>
  <dcbx-feature-ets-config-pg-bw>....</dcbx-feature-ets-config-pg-bw>
</dcbx-feature-ets-advertisement>
```

Description

<dcbx-feature-ets-advertisement>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
    <dcbx-feature-advertisement-type>
      dcbx-feature-advertisement-type
    </dcbx-feature-advertisement-type>
    <dcbx-feature-flags>....</dcbx-feature-flags>
    <dcbx-feature-ets-max-no-tc>
      dcbx-feature-ets-max-no-tc
    </dcbx-feature-ets-max-no-tc>
    <dcbx-feature-ets-config-cp-pg>....</dcbx-feature-ets-config-cp-pg>
    <dcbx-feature-ets-config-pg-bw>....</dcbx-feature-ets-config-pg-bw>
  </dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description

<dcbx-feature-ets-advertisement>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-ets-advertisement>
      <dcbx-feature-advertisement-type>
        dcbx-feature-advertisement-type
      </dcbx-feature-advertisement-type>
      <dcbx-feature-flags>....</dcbx-feature-flags>
      <dcbx-feature-ets-max-no-tc>
        dcbx-feature-ets-max-no-tc
      </dcbx-feature-ets-max-no-tc>
      <dcbx-feature-ets-config-cp-pg>....</dcbx-feature-ets-config-cp-pg>
      <dcbx-feature-ets-config-pg-bw>....</dcbx-feature-ets-config-pg-bw>
    </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
```

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```
</dcbx-interface-information>
```

Description

<dcbx-feature-ets-advertisement>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-ets>
   <dcbx-feature-ets-advertisement>
    <dcbx-feature-advertisement-type>
     dcbx-feature-advertisement-type
    </dcbx-feature-advertisement-type>
    <dcbx-feature-flags>....</dcbx-feature-flags>
    <dcbx-feature-ets-max-no-tc>
     dcbx-feature-ets-max-no-tc
    </dcbx-feature-ets-max-no-tc>
    <dcbx-feature-ets-config-cp-pg>....</dcbx-feature-ets-config-cp-pg>
    <dcbx-feature-ets-config-pg-bw>....</dcbx-feature-ets-config-pg-bw>
   </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
 </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-ets-config-cp-pg>

Usage

```
<dcbx-feature-ets-advertisement>
 <dcbx-feature-ets-config-cp-pg>
  <dcbx-feature-ets-config-cp-pg-item>....</dcbx-feature-ets-config-cp-pg-item>

 </dcbx-feature-ets-config-cp-pg>
</dcbx-feature-ets-advertisement>
```

Description

<dcbx-feature-ets-config-cp-pg>

Usage

```
<dcbx-feature-ets>
 <dcbx-feature-ets-advertisement>
  <dcbx-feature-ets-config-cp-pg>
  <dcbx-feature-ets-config-cp-pg-item>....</dcbx-feature-ets-config-cp-pg-item>

  </dcbx-feature-ets-config-cp-pg>
 </dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description

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<dcbx-feature-ets-config-cp-pg>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-ets-advertisement>
      <dcbx-feature-ets-config-cp-pg>

<dcbx-feature-ets-config-cp-pg-item>....</dcbx-feature-ets-config-cp-pg-item>
      </dcbx-feature-ets-config-cp-pg>
    </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
</dcbx-interface-information>
```

Description

<dcbx-feature-ets-config-cp-pg>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-ets>
      <dcbx-feature-ets-advertisement>
        <dcbx-feature-ets-config-cp-pg>

<dcbx-feature-ets-config-cp-pg-item>....</dcbx-feature-ets-config-cp-pg-item>
        </dcbx-feature-ets-config-cp-pg>
      </dcbx-feature-ets-advertisement>
    </dcbx-feature-ets>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-ets-config-cp-pg-item>

Usage

```
<dcbx-feature-ets-advertisement>
  <dcbx-feature-ets-config-cp-pg>
    <dcbx-feature-ets-config-cp-pg-item>
      <dcbx-feature-ets-code-point>
        dcbx-feature-ets-code-point
      </dcbx-feature-ets-code-point>
      <dcbx-feature-ets-priority-group>
        dcbx-feature-ets-priority-group
      </dcbx-feature-ets-priority-group>
    </dcbx-feature-ets-config-cp-pg-item>
  </dcbx-feature-ets-config-cp-pg>
</dcbx-feature-ets-advertisement>
```

Description

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<dcbx-feature-ets-config-cp-pg-item>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
    <dcbx-feature-ets-config-cp-pg>
      <dcbx-feature-ets-config-cp-pg-item>
        <dcbx-feature-ets-code-point>
          dcbx-feature-ets-code-point
        </dcbx-feature-ets-code-point>
        <dcbx-feature-ets-priority-group>
          dcbx-feature-ets-priority-group
        </dcbx-feature-ets-priority-group>
      </dcbx-feature-ets-config-cp-pg-item>
    </dcbx-feature-ets-config-cp-pg>
  </dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description

<dcbx-feature-ets-config-cp-pg-item>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-ets-advertisement>
      <dcbx-feature-ets-config-cp-pg>
        <dcbx-feature-ets-config-cp-pg-item>
          <dcbx-feature-ets-code-point>
            dcbx-feature-ets-code-point
          </dcbx-feature-ets-code-point>
          <dcbx-feature-ets-priority-group>
            dcbx-feature-ets-priority-group
          </dcbx-feature-ets-priority-group>
        </dcbx-feature-ets-config-cp-pg-item>
      </dcbx-feature-ets-config-cp-pg>
    </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
</dcbx-interface-information>
```

Description

<dcbx-feature-ets-config-cp-pg-item>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-ets>
      <dcbx-feature-ets-advertisement>
        <dcbx-feature-ets-config-cp-pg>
          <dcbx-feature-ets-config-cp-pg-item>
            <dcbx-feature-ets-code-point>
              dcbx-feature-ets-code-point
```


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```
                    </dcbx-feature-ets-code-point>
                    <dcbx-feature-ets-priority-group>
                     dcbx-feature-ets-priority-group
                    </dcbx-feature-ets-priority-group>
                   </dcbx-feature-ets-config-cp-pg-item>
                  </dcbx-feature-ets-config-cp-pg>
                 </dcbx-feature-ets-advertisement>
                </dcbx-feature-ets>
               </dcbx-interface-information>
              </dcbx>
```

Description

<dcbx-feature-ets-config-pg-bw>

Usage

```
<dcbx-feature-ets-advertisement>
 <dcbx-feature-ets-config-pg-bw>
<dcbx-feature-ets-config-pg-bw-item>....</dcbx-feature-ets-config-pg-bw-item>

 </dcbx-feature-ets-config-pg-bw>
</dcbx-feature-ets-advertisement>
```

Description

<dcbx-feature-ets-config-pg-bw>

Usage

```
<dcbx-feature-ets>
 <dcbx-feature-ets-advertisement>
  <dcbx-feature-ets-config-pg-bw>

<dcbx-feature-ets-config-pg-bw-item>....</dcbx-feature-ets-config-pg-bw-item>
  </dcbx-feature-ets-config-pg-bw>
 </dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description

<dcbx-feature-ets-config-pg-bw>

Usage

```
<dcbx-interface-information>
 <dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
   <dcbx-feature-ets-config-pg-bw>

<dcbx-feature-ets-config-pg-bw-item>....</dcbx-feature-ets-config-pg-bw-item>
   </dcbx-feature-ets-config-pg-bw>
  </dcbx-feature-ets-advertisement>
 </dcbx-feature-ets>
</dcbx-interface-information>
```

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Description

<dcbx-feature-ets-config-pg-bw>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-ets>
      <dcbx-feature-ets-advertisement>
        <dcbx-feature-ets-config-pg-bw>

<dcbx-feature-ets-config-pg-bw-item>....</dcbx-feature-ets-config-pg-bw-item>
        </dcbx-feature-ets-config-pg-bw>
      </dcbx-feature-ets-advertisement>
    </dcbx-feature-ets>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-ets-config-pg-bw-item>

Usage

```
<dcbx-feature-ets-advertisement>
  <dcbx-feature-ets-config-pg-bw>
    <dcbx-feature-ets-config-pg-bw-item>
      <dcbx-feature-ets-priority-group>
        dcbx-feature-ets-priority-group
      </dcbx-feature-ets-priority-group>
      <dcbx-feature-ets-bw-percentage>
        dcbx-feature-ets-bw-percentage
      </dcbx-feature-ets-bw-percentage>
    </dcbx-feature-ets-config-pg-bw-item>
  </dcbx-feature-ets-config-pg-bw>
</dcbx-feature-ets-advertisement>
```

Description

<dcbx-feature-ets-config-pg-bw-item>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
    <dcbx-feature-ets-config-pg-bw>
      <dcbx-feature-ets-config-pg-bw-item>
        <dcbx-feature-ets-priority-group>
          dcbx-feature-ets-priority-group
        </dcbx-feature-ets-priority-group>
        <dcbx-feature-ets-bw-percentage>
          dcbx-feature-ets-bw-percentage
        </dcbx-feature-ets-bw-percentage>
      </dcbx-feature-ets-config-pg-bw-item>
    </dcbx-feature-ets-config-pg-bw>
  </dcbx-feature-ets-advertisement>
```


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```
</dcbx-feature-ets>
```

Description

<dcbx-feature-ets-config-pg-bw-item>

Usage

```
<dcbx-interface-information>
 <dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
   <dcbx-feature-ets-config-pg-bw>
    <dcbx-feature-ets-config-pg-bw-item>
     <dcbx-feature-ets-priority-group>
      dcbx-feature-ets-priority-group
     </dcbx-feature-ets-priority-group>
     <dcbx-feature-ets-bw-percentage>
      dcbx-feature-ets-bw-percentage
     </dcbx-feature-ets-bw-percentage>
    </dcbx-feature-ets-config-pg-bw-item>
   </dcbx-feature-ets-config-pg-bw>
  </dcbx-feature-ets-advertisement>
 </dcbx-feature-ets>
</dcbx-interface-information>
```

Description

<dcbx-feature-ets-config-pg-bw-item>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-ets>
   <dcbx-feature-ets-advertisement>
    <dcbx-feature-ets-config-pg-bw>
     <dcbx-feature-ets-config-pg-bw-item>
      <dcbx-feature-ets-priority-group>
       dcbx-feature-ets-priority-group
      </dcbx-feature-ets-priority-group>
      <dcbx-feature-ets-bw-percentage>
       dcbx-feature-ets-bw-percentage
      </dcbx-feature-ets-bw-percentage>
     </dcbx-feature-ets-config-pg-bw-item>
    </dcbx-feature-ets-config-pg-bw>
   </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
 </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-flags>

Usage

```
<dcbx-feature-flags>
  <dcbx-feature-flag-enable>
    dcbx-feature-flag-enable
  </dcbx-feature-flag-enable>
  <dcbx-feature-flag-willing>
    dcbx-feature-flag-willing
  </dcbx-feature-flag-willing>
  <dcbx-feature-flag-error>
    dcbx-feature-flag-error
  </dcbx-feature-flag-error>
</dcbx-feature-flags>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-pfc-advertisement>
  <dcbx-feature-flags>
    <dcbx-feature-flag-enable>
      dcbx-feature-flag-enable
    </dcbx-feature-flag-enable>
    <dcbx-feature-flag-willing>
      dcbx-feature-flag-willing
    </dcbx-feature-flag-willing>
    <dcbx-feature-flag-error>
      dcbx-feature-flag-error
    </dcbx-feature-flag-error>
  </dcbx-feature-flags>
</dcbx-feature-pfc-advertisement>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-pfc>
  <dcbx-feature-pfc-advertisement>
    <dcbx-feature-flags>
      <dcbx-feature-flag-enable>
        dcbx-feature-flag-enable
      </dcbx-feature-flag-enable>
      <dcbx-feature-flag-willing>
        dcbx-feature-flag-willing
      </dcbx-feature-flag-willing>
      <dcbx-feature-flag-error>
        dcbx-feature-flag-error
      </dcbx-feature-flag-error>
    </dcbx-feature-flags>
```


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```
  </dcbx-feature-pfc-advertisement>
</dcbx-feature-pfc>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-application-advertisement>
  <dcbx-feature-flags>
    <dcbx-feature-flag-enable>
      dcbx-feature-flag-enable
    </dcbx-feature-flag-enable>
    <dcbx-feature-flag-willing>
      dcbx-feature-flag-willing
    </dcbx-feature-flag-willing>
    <dcbx-feature-flag-error>
      dcbx-feature-flag-error
    </dcbx-feature-flag-error>
  </dcbx-feature-flags>
</dcbx-feature-application-advertisement>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-application>
  <dcbx-feature-application-advertisement>
    <dcbx-feature-flags>
      <dcbx-feature-flag-enable>
        dcbx-feature-flag-enable
      </dcbx-feature-flag-enable>
      <dcbx-feature-flag-willing>
        dcbx-feature-flag-willing
      </dcbx-feature-flag-willing>
      <dcbx-feature-flag-error>
        dcbx-feature-flag-error
      </dcbx-feature-flag-error>
    </dcbx-feature-flags>
  </dcbx-feature-application-advertisement>
</dcbx-feature-application>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-ets-advertisement>
  <dcbx-feature-flags>
    <dcbx-feature-flag-enable>
```

```
            dcbx-feature-flag-enable
          </dcbx-feature-flag-enable>
          <dcbx-feature-flag-willing>
            dcbx-feature-flag-willing
          </dcbx-feature-flag-willing>
          <dcbx-feature-flag-error>
            dcbx-feature-flag-error
          </dcbx-feature-flag-error>
        </dcbx-feature-flags>
      </dcbx-feature-ets-advertisement>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-feature-ets>
  <dcbx-feature-ets-advertisement>
    <dcbx-feature-flags>
      <dcbx-feature-flag-enable>
        dcbx-feature-flag-enable
      </dcbx-feature-flag-enable>
      <dcbx-feature-flag-willing>
        dcbx-feature-flag-willing
      </dcbx-feature-flag-willing>
      <dcbx-feature-flag-error>
        dcbx-feature-flag-error
      </dcbx-feature-flag-error>
    </dcbx-feature-flags>
  </dcbx-feature-ets-advertisement>
</dcbx-feature-ets>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-pfc>
    <dcbx-feature-pfc-advertisement>
      <dcbx-feature-flags>
        <dcbx-feature-flag-enable>
          dcbx-feature-flag-enable
        </dcbx-feature-flag-enable>
        <dcbx-feature-flag-willing>
          dcbx-feature-flag-willing
        </dcbx-feature-flag-willing>
        <dcbx-feature-flag-error>
          dcbx-feature-flag-error
        </dcbx-feature-flag-error>
      </dcbx-feature-flags>
    </dcbx-feature-pfc-advertisement>
```


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```
  </dcbx-feature-pfc>
</dcbx-interface-information>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-application>
    <dcbx-feature-application-advertisement>
      <dcbx-feature-flags>
        <dcbx-feature-flag-enable>
          dcbx-feature-flag-enable
        </dcbx-feature-flag-enable>
        <dcbx-feature-flag-willing>
          dcbx-feature-flag-willing
        </dcbx-feature-flag-willing>
        <dcbx-feature-flag-error>
          dcbx-feature-flag-error
        </dcbx-feature-flag-error>
      </dcbx-feature-flags>
    </dcbx-feature-application-advertisement>
  </dcbx-feature-application>
</dcbx-interface-information>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-ets>
    <dcbx-feature-ets-advertisement>
      <dcbx-feature-flags>
        <dcbx-feature-flag-enable>
          dcbx-feature-flag-enable
        </dcbx-feature-flag-enable>
        <dcbx-feature-flag-willing>
          dcbx-feature-flag-willing
        </dcbx-feature-flag-willing>
        <dcbx-feature-flag-error>
          dcbx-feature-flag-error
        </dcbx-feature-flag-error>
      </dcbx-feature-flags>
    </dcbx-feature-ets-advertisement>
  </dcbx-feature-ets>
</dcbx-interface-information>
```

Description Different common flags relevant to each DCBX feature

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<dcbx-feature-flags>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-pfc>
      <dcbx-feature-pfc-advertisement>
        <dcbx-feature-flags>
          <dcbx-feature-flag-enable>
            dcbx-feature-flag-enable
          </dcbx-feature-flag-enable>
          <dcbx-feature-flag-willing>
            dcbx-feature-flag-willing
          </dcbx-feature-flag-willing>
          <dcbx-feature-flag-error>
            dcbx-feature-flag-error
          </dcbx-feature-flag-error>
        </dcbx-feature-flags>
      </dcbx-feature-pfc-advertisement>
    </dcbx-feature-pfc>
  </dcbx-interface-information>
</dcbx>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-flags>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-application>
      <dcbx-feature-application-advertisement>
        <dcbx-feature-flags>
          <dcbx-feature-flag-enable>
            dcbx-feature-flag-enable
          </dcbx-feature-flag-enable>
          <dcbx-feature-flag-willing>
            dcbx-feature-flag-willing
          </dcbx-feature-flag-willing>
          <dcbx-feature-flag-error>
            dcbx-feature-flag-error
          </dcbx-feature-flag-error>
        </dcbx-feature-flags>
      </dcbx-feature-application-advertisement>
    </dcbx-feature-application>
  </dcbx-interface-information>
</dcbx>
```

Description Different common flags relevant to each DCBX feature

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<dcbx-feature-flags>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-feature-ets>
      <dcbx-feature-ets-advertisement>
        <dcbx-feature-flags>
          <dcbx-feature-flag-enable>
            dcbx-feature-flag-enable
          </dcbx-feature-flag-enable>
          <dcbx-feature-flag-willing>
            dcbx-feature-flag-willing
          </dcbx-feature-flag-willing>
          <dcbx-feature-flag-error>
            dcbx-feature-flag-error
          </dcbx-feature-flag-error>
        </dcbx-feature-flags>
      </dcbx-feature-ets-advertisement>
    </dcbx-feature-ets>
  </dcbx-interface-information>
</dcbx>
```

Description Different common flags relevant to each DCBX feature

<dcbx-feature-pfc>

Usage

```
<dcbx-feature-pfc>
  <dcbx-feature-common>....</dcbx-feature-common>
  <dcbx-feature-pfc-advertisement>....</dcbx-feature-pfc-advertisement>
</dcbx-feature-pfc>
```

Description

<dcbx-feature-pfc>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-pfc>
    <dcbx-feature-common>....</dcbx-feature-common>
    <dcbx-feature-pfc-advertisement>....</dcbx-feature-pfc-advertisement>
  </dcbx-feature-pfc>
</dcbx-interface-information>
```

Description

<dcbx-feature-pfc>

Usage

```
<dcbx>
  <dcbx-interface-information>
```

```
    <dcbx-feature-pfc>
      <dcbx-feature-common>....</dcbx-feature-common>
      <dcbx-feature-pfc-advertisement>....</dcbx-feature-pfc-advertisement>
    </dcbx-feature-pfc>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-pfc-advertisement>

Usage

```
<dcbx-feature-pfc-advertisement>
  <dcbx-feature-advertisement-type>
    dcbx-feature-advertisement-type
  </dcbx-feature-advertisement-type>
  <dcbx-feature-flags>....</dcbx-feature-flags>
  <dcbx-feature-pfc-max-no-tc>
    dcbx-feature-pfc-max-no-tc
  </dcbx-feature-pfc-max-no-tc>
  <dcbx-feature-pfc-config>....</dcbx-feature-pfc-config>
</dcbx-feature-pfc-advertisement>
```

Description

<dcbx-feature-pfc-advertisement>

Usage

```
<dcbx-feature-pfc>
  <dcbx-feature-pfc-advertisement>
    <dcbx-feature-advertisement-type>
      dcbx-feature-advertisement-type
    </dcbx-feature-advertisement-type>
    <dcbx-feature-flags>....</dcbx-feature-flags>
    <dcbx-feature-pfc-max-no-tc>
      dcbx-feature-pfc-max-no-tc
    </dcbx-feature-pfc-max-no-tc>
    <dcbx-feature-pfc-config>....</dcbx-feature-pfc-config>
  </dcbx-feature-pfc-advertisement>
</dcbx-feature-pfc>
```

Description

<dcbx-feature-pfc-advertisement>

Usage

```
<dcbx-interface-information>
  <dcbx-feature-pfc>
    <dcbx-feature-pfc-advertisement>
      <dcbx-feature-advertisement-type>
        dcbx-feature-advertisement-type
      </dcbx-feature-advertisement-type>
      <dcbx-feature-flags>....</dcbx-feature-flags>
```


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```
      <dcbx-feature-pfc-max-no-tc>
       dcbx-feature-pfc-max-no-tc
      </dcbx-feature-pfc-max-no-tc>
      <dcbx-feature-pfc-config>....</dcbx-feature-pfc-config>
     </dcbx-feature-pfc-advertisement>
    </dcbx-feature-pfc>
   </dcbx-interface-information>
```

Description

<dcbx-feature-pfc-advertisement>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-pfc>
   <dcbx-feature-pfc-advertisement>
    <dcbx-feature-advertisement-type>
     dcbx-feature-advertisement-type
    </dcbx-feature-advertisement-type>
    <dcbx-feature-flags>....</dcbx-feature-flags>
    <dcbx-feature-pfc-max-no-tc>
     dcbx-feature-pfc-max-no-tc
    </dcbx-feature-pfc-max-no-tc>
    <dcbx-feature-pfc-config>....</dcbx-feature-pfc-config>
   </dcbx-feature-pfc-advertisement>
  </dcbx-feature-pfc>
 </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-feature-pfc-config>

Usage

```
<dcbx-feature-pfc-config>
 <dcbx-feature-pfc-code-point>
  dcbx-feature-pfc-code-point
 </dcbx-feature-pfc-code-point>
 <dcbx-feature-pfc-state>
  dcbx-feature-pfc-state
 </dcbx-feature-pfc-state>
</dcbx-feature-pfc-config>
```

Description

<dcbx-feature-pfc-config>

Usage

```
<dcbx-feature-pfc-advertisement>
 <dcbx-feature-pfc-config>
  <dcbx-feature-pfc-code-point>
   dcbx-feature-pfc-code-point
```

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```
    </dcbx-feature-pfc-code-point>
    <dcbx-feature-pfc-state>
     dcbx-feature-pfc-state
    </dcbx-feature-pfc-state>
   </dcbx-feature-pfc-config>
</dcbx-feature-pfc-advertisement>
```

Description

<dcbx-feature-pfc-config>

Usage

```
<dcbx-feature-pfc>
 <dcbx-feature-pfc-advertisement>
  <dcbx-feature-pfc-config>
   <dcbx-feature-pfc-code-point>
    dcbx-feature-pfc-code-point
   </dcbx-feature-pfc-code-point>
   <dcbx-feature-pfc-state>
    dcbx-feature-pfc-state
   </dcbx-feature-pfc-state>
  </dcbx-feature-pfc-config>
 </dcbx-feature-pfc-advertisement>
</dcbx-feature-pfc>
```

Description

<dcbx-feature-pfc-config>

Usage

```
<dcbx-interface-information>
 <dcbx-feature-pfc>
  <dcbx-feature-pfc-advertisement>
   <dcbx-feature-pfc-config>
    <dcbx-feature-pfc-code-point>
     dcbx-feature-pfc-code-point
    </dcbx-feature-pfc-code-point>
    <dcbx-feature-pfc-state>
     dcbx-feature-pfc-state
    </dcbx-feature-pfc-state>
   </dcbx-feature-pfc-config>
  </dcbx-feature-pfc-advertisement>
 </dcbx-feature-pfc>
</dcbx-interface-information>
```

Description

<dcbx-feature-pfc-config>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-feature-pfc>
```


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```
      <dcbx-feature-pfc-advertisement>
       <dcbx-feature-pfc-config>
        <dcbx-feature-pfc-code-point>
         dcbx-feature-pfc-code-point
        </dcbx-feature-pfc-code-point>
        <dcbx-feature-pfc-state>
         dcbx-feature-pfc-state
        </dcbx-feature-pfc-state>
       </dcbx-feature-pfc-config>
      </dcbx-feature-pfc-advertisement>
     </dcbx-feature-pfc>
    </dcbx-interface-information>
   </dcbx>
```

Description

<dcbx-interface-information>

Usage

```
<dcbx-interface-information>
 <dcbx-status-information>....</dcbx-status-information>
 <dcbx-interface-name>
  dcbx-interface-name
 </dcbx-interface-name>
 <dcbx-neighbor-id>
  dcbx-neighbor-id
 </dcbx-neighbor-id>
 <dcbx-protocol-state>
  dcbx-protocol-state
 </dcbx-protocol-state>
 <dcbx-active-application-maps>
  dcbx-active-application-maps
 </dcbx-active-application-maps>
 <dcbx-protocol-control-adv>....</dcbx-protocol-control-adv>
 <dcbx-feature-pfc>....</dcbx-feature-pfc>
 <dcbx-feature-application>....</dcbx-feature-application>
 <dcbx-feature-ets>....</dcbx-feature-ets>
</dcbx-interface-information>
```

Description DCBX related information for interface

<dcbx-interface-information>

Usage

```
<dcbx>
 <dcbx-interface-information>
  <dcbx-status-information>....</dcbx-status-information>
  <dcbx-interface-name>
   dcbx-interface-name
  </dcbx-interface-name>
  <dcbx-neighbor-id>
   dcbx-neighbor-id
  </dcbx-neighbor-id>
```

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```
    <dcbx-protocol-state>
      dcbx-protocol-state
    </dcbx-protocol-state>
    <dcbx-active-application-maps>
      dcbx-active-application-maps
    </dcbx-active-application-maps>
    <dcbx-protocol-control-adv>....</dcbx-protocol-control-adv>
    <dcbx-feature-pfc>....</dcbx-feature-pfc>
    <dcbx-feature-application>....</dcbx-feature-application>
    <dcbx-feature-ets>....</dcbx-feature-ets>
  </dcbx-interface-information>
</dcbx>
```

Description DCBX related information for interface

<dcbx-neighbor-information>

Usage

```
<dcbx-neighbor-information>
  <dcbx-interface-name>
    dcbx-interface-name
  </dcbx-interface-name>
  <dcbx-parent-interface-name>
    dcbx-parent-interface-name
  </dcbx-parent-interface-name>
  <dcbx-feature-pfc-state>
    dcbx-feature-pfc-state
  </dcbx-feature-pfc-state>
  <dcbx-feature-application-state>
    dcbx-feature-application-state
  </dcbx-feature-application-state>
  <dcbx-feature-ets-state>
    dcbx-feature-ets-state
  </dcbx-feature-ets-state>
</dcbx-neighbor-information>
```

Description DCBX neighbor information for interface

<dcbx-neighbor-information>

Usage

```
<dcbx>
  <dcbx-neighbor-information>
    <dcbx-interface-name>
      dcbx-interface-name
    </dcbx-interface-name>
    <dcbx-parent-interface-name>
      dcbx-parent-interface-name
    </dcbx-parent-interface-name>
    <dcbx-feature-pfc-state>
      dcbx-feature-pfc-state
    </dcbx-feature-pfc-state>
```


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```
    <dcbx-feature-application-state>
     dcbx-feature-application-state
    </dcbx-feature-application-state>
    <dcbx-feature-ets-state>
     dcbx-feature-ets-state
    </dcbx-feature-ets-state>
  </dcbx-neighbor-information>
</dcbx>
```

Description DCBX neighbor information for interface

<dcbx-protocol-control-adv>

Usage

```
<dcbx-protocol-control-adv>
  <dcbx-feature-advertisement-type>
   dcbx-feature-advertisement-type
  </dcbx-feature-advertisement-type>
  <dcbx-protocol-control-info>....</dcbx-protocol-control-info>
</dcbx-protocol-control-adv>
```

Description

<dcbx-protocol-control-adv>

Usage

```
<dcbx-interface-information>
  <dcbx-protocol-control-adv>
    <dcbx-feature-advertisement-type>
     dcbx-feature-advertisement-type
    </dcbx-feature-advertisement-type>
    <dcbx-protocol-control-info>....</dcbx-protocol-control-info>
  </dcbx-protocol-control-adv>
</dcbx-interface-information>
```

Description

<dcbx-protocol-control-adv>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-protocol-control-adv>
      <dcbx-feature-advertisement-type>
       dcbx-feature-advertisement-type
      </dcbx-feature-advertisement-type>
      <dcbx-protocol-control-info>....</dcbx-protocol-control-info>
    </dcbx-protocol-control-adv>
  </dcbx-interface-information>
</dcbx>
```

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Description

<dcbx-protocol-control-info>

Usage

```
<dcbx-protocol-control-info>
  <dcbx-protocol-control-op-version>
    dcbx-protocol-control-op-version
  </dcbx-protocol-control-op-version>
  <dcbx-protocol-control-seq-number>
    dcbx-protocol-control-seq-number
  </dcbx-protocol-control-seq-number>
  <dcbx-protocol-control-ack-id>
    dcbx-protocol-control-ack-id
  </dcbx-protocol-control-ack-id>
</dcbx-protocol-control-info>
```

Description

<dcbx-protocol-control-info>

Usage

```
<dcbx-protocol-control-adv>
  <dcbx-protocol-control-info>
    <dcbx-protocol-control-op-version>
      dcbx-protocol-control-op-version
    </dcbx-protocol-control-op-version>
    <dcbx-protocol-control-seq-number>
      dcbx-protocol-control-seq-number
    </dcbx-protocol-control-seq-number>
    <dcbx-protocol-control-ack-id>
      dcbx-protocol-control-ack-id
    </dcbx-protocol-control-ack-id>
  </dcbx-protocol-control-info>
</dcbx-protocol-control-adv>
```

Description

<dcbx-protocol-control-info>

Usage

```
<dcbx-interface-information>
  <dcbx-protocol-control-adv>
    <dcbx-protocol-control-info>
      <dcbx-protocol-control-op-version>
        dcbx-protocol-control-op-version
      </dcbx-protocol-control-op-version>
      <dcbx-protocol-control-seq-number>
        dcbx-protocol-control-seq-number
      </dcbx-protocol-control-seq-number>
      <dcbx-protocol-control-ack-id>
        dcbx-protocol-control-ack-id
      </dcbx-protocol-control-ack-id>
    </dcbx-protocol-control-info>
```


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```
  </dcbx-protocol-control-adv>
</dcbx-interface-information>
```

Description

<dcbx-protocol-control-info>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-protocol-control-adv>
      <dcbx-protocol-control-info>
        <dcbx-protocol-control-op-version>
          dcbx-protocol-control-op-version
        </dcbx-protocol-control-op-version>
        <dcbx-protocol-control-seq-number>
          dcbx-protocol-control-seq-number
        </dcbx-protocol-control-seq-number>
        <dcbx-protocol-control-ack-id>
          dcbx-protocol-control-ack-id
        </dcbx-protocol-control-ack-id>
      </dcbx-protocol-control-info>
    </dcbx-protocol-control-adv>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-status-information>

Usage

```
<dcbx-status-information>
  <dcbx-interface-name>
    dcbx-interface-name
  </dcbx-interface-name>
  <dcbx-interface-status>
    dcbx-interface-status
  </dcbx-interface-status>
</dcbx-status-information>
```

Description

<dcbx-status-information>

Usage

```
<dcbx-interface-information>
  <dcbx-status-information>
    <dcbx-interface-name>
      dcbx-interface-name
    </dcbx-interface-name>
    <dcbx-interface-status>
      dcbx-interface-status
    </dcbx-interface-status>
```

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```
  </dcbx-status-information>
</dcbx-interface-information>
```

Description

<dcbx-status-information>

Usage

```
<dcbx>
  <dcbx-interface-information>
    <dcbx-status-information>
      <dcbx-interface-name>
        dcbx-interface-name
      </dcbx-interface-name>
      <dcbx-interface-status>
        dcbx-interface-status
      </dcbx-interface-status>
    </dcbx-status-information>
  </dcbx-interface-information>
</dcbx>
```

Description

<dcbx-status-information>

Usage

```
<dcbx>
  <dcbx-status-information>
    <dcbx-interface-name>
      dcbx-interface-name
    </dcbx-interface-name>
    <dcbx-interface-status>
      dcbx-interface-status
    </dcbx-interface-status>
  </dcbx-status-information>
</dcbx>
```

Description

<lldp>

Usage

```
<lldp>
  <lldp-interface-information>....</lldp-interface-information>
  <lldp-global-status>
    lldp-global-status
  </lldp-global-status>
  <lldp-advertisement-interval>
    lldp-advertisement-interval
  </lldp-advertisement-interval>
  <lldp-transmit-delay-interval>
    lldp-transmit-delay-interval
  </lldp-transmit-delay-interval>
```


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```
<lldp-hold-time-interval>
  lldp-hold-time-interval
</lldp-hold-time-interval>
<lldp-notification-interval>
  lldp-notification-interval
</lldp-notification-interval>
<ptopo-configuration-trap-interval>
  ptopo-configuration-trap-interval
</ptopo-configuration-trap-interval>
<ptopo-maximum-hold-time>
  ptopo-maximum-hold-time
</ptopo-maximum-hold-time>
<lldp-med-global-status>
  lldp-med-global-status
</lldp-med-global-status>
<lldp-med-fast-start-count>
  lldp-med-fast-start-count
</lldp-med-fast-start-count>
<lldp-basic-tlv-supported>
  lldp-basic-tlv-supported
</lldp-basic-tlv-supported>
<lldp-802-tlv-supported>
  lldp-802-tlv-supported
</lldp-802-tlv-supported>
<lldp-med-tlv-supported>
  lldp-med-tlv-supported
</lldp-med-tlv-supported>
<lldp-exported-vlan-information>....</lldp-exported-vlan-information>
</lldp>
```

Description

<lldp-exported-vlan-information>

Usage

```
<lldp>
  <lldp-exported-vlan-information>
    <lldp-vlan-interface-name>
      lldp-vlan-interface-name
    </lldp-vlan-interface-name>
    <lldp-vlan-parent-interface-name>
      lldp-vlan-parent-interface-name
    </lldp-vlan-parent-interface-name>
    <lldp-vlan-tag>
      lldp-vlan-tag
    </lldp-vlan-tag>
    <lldp-vlan-name>
      lldp-vlan-name
    </lldp-vlan-name>
  </lldp-exported-vlan-information>
</lldp>
```

Description

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<lldp-interface-information>

Usage

```
<lldp-interface-information>
  <lldp-interface-name>
    lldp-interface-name
  </lldp-interface-name>
  <lldp-parent-interface-name>
    lldp-parent-interface-name
  </lldp-parent-interface-name>
  <lldp-interface-status>
    lldp-interface-status
  </lldp-interface-status>
  <lldp-med-interface-status>
    lldp-med-interface-status
  </lldp-med-interface-status>
  <lldp-interface-neighbor-count>
    lldp-interface-neighbor-count
  </lldp-interface-neighbor-count>
</lldp-interface-information>
```

Description

<lldp-interface-information>

Usage

```
<lldp>
  <lldp-interface-information>
    <lldp-interface-name>
      lldp-interface-name
    </lldp-interface-name>
    <lldp-parent-interface-name>
      lldp-parent-interface-name
    </lldp-parent-interface-name>
    <lldp-interface-status>
      lldp-interface-status
    </lldp-interface-status>
    <lldp-med-interface-status>
      lldp-med-interface-status
    </lldp-med-interface-status>
    <lldp-interface-neighbor-count>
      lldp-interface-neighbor-count
    </lldp-interface-neighbor-count>
  </lldp-interface-information>
</lldp>
```

Description

<lldp-intf-stats>

Usage

```
<lldp-intf-stats>
  <lldp-intf-name>
```


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```
    lldp-intf-name
   </lldp-intf-name>
   <lldp-parent-intf-name>
    lldp-parent-intf-name
   </lldp-parent-intf-name>
   <lldp-rx-pkt-count>
    lldp-rx-pkt-count
   </lldp-rx-pkt-count>
   <lldp-rx-pkt-unknown-tlvs>
    lldp-rx-pkt-unknown-tlvs
   </lldp-rx-pkt-unknown-tlvs>
   <lldp-rx-pkt-err-count>
    lldp-rx-pkt-err-count
   </lldp-rx-pkt-err-count>
   <lldp-rx-tlv-discard-count>
    lldp-rx-tlv-discard-count
   </lldp-rx-tlv-discard-count>
   <lldp-tx-pkt-count>
    lldp-tx-pkt-count
   </lldp-tx-pkt-count>
   <lldp-tx-pkt-err-count>
    lldp-tx-pkt-err-count
   </lldp-tx-pkt-err-count>
  </lldp-intf-stats>
```

Description Interface statistics

<lldp-intf-stats>

Usage

```
<lldp-stats>
 <lldp-intf-stats>
  <lldp-intf-name>
   lldp-intf-name
  </lldp-intf-name>
  <lldp-parent-intf-name>
   lldp-parent-intf-name
  </lldp-parent-intf-name>
  <lldp-rx-pkt-count>
   lldp-rx-pkt-count
  </lldp-rx-pkt-count>
  <lldp-rx-pkt-unknown-tlvs>
   lldp-rx-pkt-unknown-tlvs
  </lldp-rx-pkt-unknown-tlvs>
  <lldp-rx-pkt-err-count>
   lldp-rx-pkt-err-count
  </lldp-rx-pkt-err-count>
  <lldp-rx-tlv-discard-count>
   lldp-rx-tlv-discard-count
  </lldp-rx-tlv-discard-count>
  <lldp-tx-pkt-count>
   lldp-tx-pkt-count
  </lldp-tx-pkt-count>
  <lldp-tx-pkt-err-count>
```

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```
        lldp-tx-pkt-err-count
      </lldp-tx-pkt-err-count>
    </lldp-intf-stats>
  </lldp-stats>
```

Description Interface statistics

<lldp-local-info>

Usage

```
<lldp-local-info>
  <lldp-local-interface-info>....</lldp-local-interface-info>
  <lldp-local-chassis-id>
    lldp-local-chassis-id
  </lldp-local-chassis-id>
  <lldp-local-system-name>
    lldp-local-system-name
  </lldp-local-system-name>
  <lldp-local-system-descr>
    lldp-local-system-descr
  </lldp-local-system-descr>
  <lldp-local-system-capabilities-supported>
    lldp-local-system-capabilities-supported
  </lldp-local-system-capabilities-supported>
  <lldp-local-system-capabilities-enabled>
    lldp-local-system-capabilities-enabled
  </lldp-local-system-capabilities-enabled>
  <lldp-local-port-description>
    lldp-local-port-description
  </lldp-local-port-description>
  <lldp-local-management-address>
    lldp-local-management-address
  </lldp-local-management-address>
  <lldp-local-management-address-type>
    lldp-local-management-address-type
  </lldp-local-management-address-type>
  <lldp-local-management-address-interface-id>
    lldp-local-management-address-interface-id
  </lldp-local-management-address-interface-id>
  <lldp-local-port-id-sub-type>
    lldp-local-port-id-sub-type
  </lldp-local-port-id-sub-type>
  <lldp-local-management-address-interface-sub-type>
    lldp-local-management-address-interface-sub-type
  </lldp-local-management-address-interface-sub-type>
</lldp-local-info>
```

Description

<lldp-local-interface-info>

Usage

```
<lldp-local-interface-info>
```


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```
<lldp-local-interface-name>
  lldp-local-interface-name
</lldp-local-interface-name>
<lldp-parent-local-interface-name>
  lldp-parent-local-interface-name
</lldp-parent-local-interface-name>
<lldp-local-interface-id>
  lldp-local-interface-id
</lldp-local-interface-id>
<lldp-local-interface-descr>
  lldp-local-interface-descr
</lldp-local-interface-descr>
<lldp-local-interface-status>
  lldp-local-interface-status
</lldp-local-interface-status>
<lldp-local-interface-tunneling>
  lldp-local-interface-tunneling
</lldp-local-interface-tunneling>
</lldp-local-interface-info>
```

Description

<lldp-local-interface-info>

Usage

```
<lldp-local-info>
  <lldp-local-interface-info>
    <lldp-local-interface-name>
      lldp-local-interface-name
    </lldp-local-interface-name>
    <lldp-parent-local-interface-name>
      lldp-parent-local-interface-name
    </lldp-parent-local-interface-name>
    <lldp-local-interface-id>
      lldp-local-interface-id
    </lldp-local-interface-id>
    <lldp-local-interface-descr>
      lldp-local-interface-descr
    </lldp-local-interface-descr>
    <lldp-local-interface-status>
      lldp-local-interface-status
    </lldp-local-interface-status>
    <lldp-local-interface-tunneling>
      lldp-local-interface-tunneling
    </lldp-local-interface-tunneling>
  </lldp-local-interface-info>
</lldp-local-info>
```

Description

<lldp-neighbor-information>

Usage

```
<lldp-neighbor-information>
```

<lldp-index>
  lldp-index
</lldp-index>
<lldp-ttl>
  lldp-ttl
</lldp-ttl>
<lldp-timemark>
  lldp-timemark
</lldp-timemark>
<lldp-age>
  lldp-age
</lldp-age>
<lldp-local-interface>
  lldp-local-interface
</lldp-local-interface>
<lldp-local-parent-interface-name>
  lldp-local-parent-interface-name
</lldp-local-parent-interface-name>
<lldp-local-port-id>
  lldp-local-port-id
</lldp-local-port-id>
<lldp-local-port-ageout-count>
  lldp-local-port-ageout-count
</lldp-local-port-ageout-count>
<lldp-remote-chassis-id-subtype>
  lldp-remote-chassis-id-subtype
</lldp-remote-chassis-id-subtype>
<lldp-remote-chassis-id>
  lldp-remote-chassis-id
</lldp-remote-chassis-id>
<lldp-remote-port-id-subtype>
  lldp-remote-port-id-subtype
</lldp-remote-port-id-subtype>
<lldp-remote-port-id>
  lldp-remote-port-id
</lldp-remote-port-id>
<lldp-remote-port-description>
  lldp-remote-port-description
</lldp-remote-port-description>
<lldp-remote-system-name>
  lldp-remote-system-name
</lldp-remote-system-name>
<lldp-system-description>....</lldp-system-description>
<lldp-remote-system-capabilities-supported>
  lldp-remote-system-capabilities-supported
</lldp-remote-system-capabilities-supported>
<lldp-remote-system-capabilities-enabled>
  lldp-remote-system-capabilities-enabled
</lldp-remote-system-capabilities-enabled>
<lldp-remote-inventory-network-policy>
  lldp-remote-inventory-network-policy
</lldp-remote-inventory-network-policy>
<lldp-remote-inventory-hardware-revision>
  lldp-remote-inventory-hardware-revision
</lldp-remote-inventory-hardware-revision>
<lldp-remote-inventory-firmware-revision>

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lldp-remote-inventory-firmware-revision
</lldp-remote-inventory-firmware-revision>
<lldp-remote-inventory-software-revision>
lldp-remote-inventory-software-revision
</lldp-remote-inventory-software-revision>
<lldp-remote-inventory-serial-number>
lldp-remote-inventory-serial-number
</lldp-remote-inventory-serial-number>
<lldp-remote-inventory-manufacturer-name>
lldp-remote-inventory-manufacturer-name
</lldp-remote-inventory-manufacturer-name>
<lldp-remote-inventory-model-name>
lldp-remote-inventory-model-name
</lldp-remote-inventory-model-name>
<lldp-remote-inventory-asset-id>
lldp-remote-inventory-asset-id
</lldp-remote-inventory-asset-id>
<lldp-remote-management-address-type>
lldp-remote-management-address-type
</lldp-remote-management-address-type>
<lldp-remote-management-address>
lldp-remote-management-address
</lldp-remote-management-address>
<lldp-remote-management-address-port-id>
lldp-remote-management-address-port-id
</lldp-remote-management-address-port-id>
<lldp-remote-management-address-sub-type>
lldp-remote-management-address-sub-type
</lldp-remote-management-address-sub-type>
<lldp-remote-management-address-interface-subtype>
lldp-remote-management-address-interface-subtype
</lldp-remote-management-address-interface-subtype>
<lldp-remote-management-addr-oid>
lldp-remote-management-addr-oid
</lldp-remote-management-addr-oid>
<lldp-remote-org-def-info-oui>
lldp-remote-org-def-info-oui
</lldp-remote-org-def-info-oui>
<lldp-remote-org-def-info-subtype>
lldp-remote-org-def-info-subtype
</lldp-remote-org-def-info-subtype>
<lldp-remote-org-def-info-index>
lldp-remote-org-def-info-index
</lldp-remote-org-def-info-index>
<lldp-remote-org-def-info>
lldp-remote-org-def-info
</lldp-remote-org-def-info>
<lldp-remote-unknown-tlv-type>
lldp-remote-unknown-tlv-type
</lldp-remote-unknown-tlv-type>
<lldp-remote-unknown-tlv-info>
lldp-remote-unknown-tlv-info
</lldp-remote-unknown-tlv-info>
<lldp-med-remote-system-class>
lldp-med-remote-system-class
</lldp-med-remote-system-class>

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```
    <lldp-med-remote-application-attributes>
      lldp-med-remote-application-attributes
    </lldp-med-remote-application-attributes>
  </lldp-neighbor-information>
```

Description

<lldp-neighbor-information>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>
    <lldp-index>
      lldp-index
    </lldp-index>
    <lldp-ttl>
      lldp-ttl
    </lldp-ttl>
    <lldp-timemark>
      lldp-timemark
    </lldp-timemark>
    <lldp-age>
      lldp-age
    </lldp-age>
    <lldp-local-interface>
      lldp-local-interface
    </lldp-local-interface>
    <lldp-local-parent-interface-name>
      lldp-local-parent-interface-name
    </lldp-local-parent-interface-name>
    <lldp-local-port-id>
      lldp-local-port-id
    </lldp-local-port-id>
    <lldp-local-port-ageout-count>
      lldp-local-port-ageout-count
    </lldp-local-port-ageout-count>
    <lldp-remote-chassis-id-subtype>
      lldp-remote-chassis-id-subtype
    </lldp-remote-chassis-id-subtype>
    <lldp-remote-chassis-id>
      lldp-remote-chassis-id
    </lldp-remote-chassis-id>
    <lldp-remote-port-id-subtype>
      lldp-remote-port-id-subtype
    </lldp-remote-port-id-subtype>
    <lldp-remote-port-id>
      lldp-remote-port-id
    </lldp-remote-port-id>
    <lldp-remote-port-description>
      lldp-remote-port-description
    </lldp-remote-port-description>
    <lldp-remote-system-name>
      lldp-remote-system-name
    </lldp-remote-system-name>
    <lldp-system-description>....</lldp-system-description>
```


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```
<lldp-remote-system-capabilities-supported>
  lldp-remote-system-capabilities-supported
</lldp-remote-system-capabilities-supported>
<lldp-remote-system-capabilities-enabled>
  lldp-remote-system-capabilities-enabled
</lldp-remote-system-capabilities-enabled>
<lldp-remote-inventory-network-policy>
  lldp-remote-inventory-network-policy
</lldp-remote-inventory-network-policy>
<lldp-remote-inventory-hardware-revision>
  lldp-remote-inventory-hardware-revision
</lldp-remote-inventory-hardware-revision>
<lldp-remote-inventory-firmware-revision>
  lldp-remote-inventory-firmware-revision
</lldp-remote-inventory-firmware-revision>
<lldp-remote-inventory-software-revision>
  lldp-remote-inventory-software-revision
</lldp-remote-inventory-software-revision>
<lldp-remote-inventory-serial-number>
  lldp-remote-inventory-serial-number
</lldp-remote-inventory-serial-number>
<lldp-remote-inventory-manufacturer-name>
  lldp-remote-inventory-manufacturer-name
</lldp-remote-inventory-manufacturer-name>
<lldp-remote-inventory-model-name>
  lldp-remote-inventory-model-name
</lldp-remote-inventory-model-name>
<lldp-remote-inventory-asset-id>
  lldp-remote-inventory-asset-id
</lldp-remote-inventory-asset-id>
<lldp-remote-management-address-type>
  lldp-remote-management-address-type
</lldp-remote-management-address-type>
<lldp-remote-management-address>
  lldp-remote-management-address
</lldp-remote-management-address>
<lldp-remote-management-address-port-id>
  lldp-remote-management-address-port-id
</lldp-remote-management-address-port-id>
<lldp-remote-management-address-sub-type>
  lldp-remote-management-address-sub-type
</lldp-remote-management-address-sub-type>
<lldp-remote-management-address-interface-subtype>
  lldp-remote-management-address-interface-subtype
</lldp-remote-management-address-interface-subtype>
<lldp-remote-management-addr-oid>
  lldp-remote-management-addr-oid
</lldp-remote-management-addr-oid>
<lldp-remote-org-def-info-oui>
  lldp-remote-org-def-info-oui
</lldp-remote-org-def-info-oui>
<lldp-remote-org-def-info-subtype>
  lldp-remote-org-def-info-subtype
</lldp-remote-org-def-info-subtype>
<lldp-remote-org-def-info-index>
  lldp-remote-org-def-info-index
```

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```
    </lldp-remote-org-def-info-index>
    <lldp-remote-org-def-info>
     lldp-remote-org-def-info
    </lldp-remote-org-def-info>
    <lldp-remote-unknown-tlv-type>
     lldp-remote-unknown-tlv-type
    </lldp-remote-unknown-tlv-type>
    <lldp-remote-unknown-tlv-info>
     lldp-remote-unknown-tlv-info
    </lldp-remote-unknown-tlv-info>
    <lldp-med-remote-system-class>
     lldp-med-remote-system-class
    </lldp-med-remote-system-class>
    <lldp-med-remote-application-attributes>
     lldp-med-remote-application-attributes
    </lldp-med-remote-application-attributes>
   </lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

<lldp-neighbors-information>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>....</lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

<lldp-remote-global-statistics>

Usage

```
<lldp-remote-global-statistics>
  <lldp-remote-global-stats>....</lldp-remote-global-stats>
</lldp-remote-global-statistics>
```

Description

<lldp-remote-global-stats>

Usage

```
<lldp-remote-global-stats>
  <lldp-last-change-time>
   lldp-last-change-time
  </lldp-last-change-time>
  <lldp-inserts>
   lldp-inserts
  </lldp-inserts>
  <lldp-deletes>
   lldp-deletes
  </lldp-deletes>
  <lldp-drops>
```


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```
    lldp-drops
   </lldp-drops>
   <lldp-ageouts>
    lldp-ageouts
   </lldp-ageouts>
  </lldp-remote-global-stats>
```

Description

<lldp-remote-global-stats>

Usage

```
<lldp-remote-global-statistics>
 <lldp-remote-global-stats>
  <lldp-last-change-time>
   lldp-last-change-time
  </lldp-last-change-time>
  <lldp-inserts>
   lldp-inserts
  </lldp-inserts>
  <lldp-deletes>
   lldp-deletes
  </lldp-deletes>
  <lldp-drops>
   lldp-drops
  </lldp-drops>
  <lldp-ageouts>
   lldp-ageouts
  </lldp-ageouts>
 </lldp-remote-global-stats>
</lldp-remote-global-statistics>
```

Description

<lldp-stats>

Usage

```
<lldp-stats>
 <lldp-intf-stats>....</lldp-intf-stats>
</lldp-stats>
```

Description

<lldp-system-description>

Usage

```
<lldp-neighbor-information>
 <lldp-system-description>
  <lldp-remote-system-description>
   lldp-remote-system-description
  </lldp-remote-system-description>
 </lldp-system-description>
```

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```
</lldp-neighbor-information>
```

Description

<lldp-system-description>

Usage

```
<lldp-neighbors-information>
  <lldp-neighbor-information>
    <lldp-system-description>
      <lldp-remote-system-description>
        lldp-remote-system-description
      </lldp-remote-system-description>
    </lldp-system-description>
  </lldp-neighbor-information>
</lldp-neighbors-information>
```

Description

<task>

Usage

```
<task-timer-information>
  <task>
    <task-name>
      task-name
    </task-name>
    <task-timer-priority>....</task-timer-priority>
    <task-timer-summary>....</task-timer-summary>
    <task-timer>....</task-timer>
  </task>
</task-timer-information>
```

Description

<task-account-information>

Usage

```
<task-accounting-information>
  <task-account-information>
</task-account-information>
</task-accounting-information>
```

Description

<task-account-status>

Usage

```
<task-accounting-information>
  <task-account-status>
</task-account-status>
```


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```
</task-accounting-information>
```

Description

<task-accounting-information>

Usage

```
<task-accounting-information>
  <task-acc-task-name>
    task-acc-task-name
  </task-acc-task-name>
  <task-acc-status>
    task-acc-status
  </task-acc-status>
  <task-acc-task-started>
    task-acc-task-started
  </task-acc-task-started>
  <task-acc-task-user-time>
    task-acc-task-user-time
  </task-acc-task-user-time>
  <task-acc-task-system-time>
    task-acc-task-system-time
  </task-acc-task-system-time>
  <task-acc-task-longest-run>
    task-acc-task-longest-run
  </task-acc-task-longest-run>
  <task-account-status>....</task-account-status>
  <task-account-information>....</task-account-information>
</task-accounting-information>
```

Description

<task-block>

Usage

```
<task-block-list>
  <task-block>
    <tb-name>
      tb-name
    </tb-name>
    <tb-size>
      tb-size
    </tb-size>
    <tb-alloc-size>
      tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
      tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
      tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
      tb-terse-debug
```

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```
    </tb-terse-debug>
    <tb-alloc-blocks>
     tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
     tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
     tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
     tb-max-alloc-bytes
    </tb-max-alloc-bytes>
   </task-block>
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-block-list>
   <task-block>
    <tb-name>
     tb-name
    </tb-name>
    <tb-size>
     tb-size
    </tb-size>
    <tb-alloc-size>
     tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
     tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
     tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
     tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
     tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
     tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
     tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
     tb-max-alloc-bytes
    </tb-max-alloc-bytes>
```


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```
      </task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
  <task-block>....</task-block>
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>....</task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-io-information>

Usage

```
<task-io-information>
  <task-io-task-name>
    task-io-task-name
  </task-io-task-name>
  <task-io-read>
    task-io-read
  </task-io-read>
  <task-io-write>
    task-io-write
  </task-io-write>
  <task-io-received>
    task-io-received
  </task-io-received>
  <task-io-sent>
    task-io-sent
  </task-io-sent>
  <task-io-dropped>
    task-io-dropped
  </task-io-dropped>
</task-io-information>
```

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Description

<task-jobs-background>

Usage

```
<task-jobs-information>
  <task-jobs-background>
</task-jobs-background>
</task-jobs-information>
```

Description

<task-jobs-foreground>

Usage

```
<task-jobs-information>
  <task-jobs-foreground>
</task-jobs-foreground>
</task-jobs-information>
```

Description

<task-jobs-information>

Usage

```
<task-jobs-information>
  <task-jobs-fg-priority>
    task-jobs-fg-priority
  </task-jobs-fg-priority>
  <task-jobs-fg-task-name>
    task-jobs-fg-task-name
  </task-jobs-fg-task-name>
  <task-jobs-fg-wait>
    task-jobs-fg-wait
  </task-jobs-fg-wait>
  <task-jobs-fg-flags>
    task-jobs-fg-flags
  </task-jobs-fg-flags>
  <task-jobs-bg-priority>
    task-jobs-bg-priority
  </task-jobs-bg-priority>
  <task-jobs-bg-task-name>
    task-jobs-bg-task-name
  </task-jobs-bg-task-name>
  <task-jobs-bg-misses>
    task-jobs-bg-misses
  </task-jobs-bg-misses>
  <task-jobs-bg-runs>
    task-jobs-bg-runs
  </task-jobs-bg-runs>
  <task-jobs-bg-wait>
    task-jobs-bg-wait
  </task-jobs-bg-wait>
  <task-jobs-bg-flags>
```


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```
    task-jobs-bg-flags
  </task-jobs-bg-flags>
  <task-jobs-foreground>....</task-jobs-foreground>
  <task-jobs-background>....</task-jobs-background>
</task-jobs-information>
```

Description

<task-lite-page>

Usage

```
<task-lite-page-list>
  <task-lite-page>
    <tlp-name>
      tlp-name
    </tlp-name>
    <tlp-alloc-pages>
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>
        <tlp-name>
          tlp-name
        </tlp-name>
        <tlp-alloc-pages>
          tlp-alloc-pages
        </tlp-alloc-pages>
        <tlp-alloc-bytes>
          tlp-alloc-bytes
        </tlp-alloc-bytes>
        <tlp-max-alloc-pages>
          tlp-max-alloc-pages
        </tlp-max-alloc-pages>
        <tlp-max-alloc-bytes>
          tlp-max-alloc-bytes
```

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```
        </tlp-max-alloc-bytes>
       </task-lite-page>
     </task-lite-page-list>
   </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page-list>

Usage

```
<task-lite-page-list>
  <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-lite-page-list>
      <task-lite-page>....</task-lite-page>
    </task-lite-page-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
```


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```
  </task-malloc>
</task-malloc-list>
```

Description

<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
      </task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
```

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```
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
    task-memory-in-use-size
  </task-memory-in-use-size>
  <task-memory-in-use-avail>
    task-memory-in-use-avail
  </task-memory-in-use-avail>
  <task-memory-max-size>
    task-memory-max-size
  </task-memory-max-size>
  <task-memory-max-avail>
    task-memory-max-avail
  </task-memory-max-avail>
  <task-memory-max-when>
    task-memory-max-when
  </task-memory-max-when>
  <task-memory-free-size>
    task-memory-free-size
  </task-memory-free-size>
  <task-memory-overall-report>....</task-memory-overall-report>
  <task-memory-allocator-report>....</task-memory-allocator-report>
  <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
  <task-memory-dynamic-allocs>
    task-memory-dynamic-allocs
  </task-memory-dynamic-allocs>
  <task-memory-max-dynamic-allocs>
    task-memory-max-dynamic-allocs
```


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```
  </task-memory-max-dynamic-allocs>
  <task-memory-bss-bytes>
    task-memory-bss-bytes
  </task-memory-bss-bytes>
  <task-memory-max-bss-bytes>
    task-memory-max-bss-bytes
  </task-memory-max-bss-bytes>
  <task-memory-page-data-bytes>
    task-memory-page-data-bytes
  </task-memory-page-data-bytes>
  <task-memory-max-page-data-bytes>
    task-memory-max-page-data-bytes
  </task-memory-max-page-data-bytes>
  <task-memory-dir-bytes>
    task-memory-dir-bytes
  </task-memory-dir-bytes>
  <task-memory-max-dir-bytes>
    task-memory-max-dir-bytes
  </task-memory-max-dir-bytes>
  <task-memory-total-bytes-in-use>
    task-memory-total-bytes-in-use
  </task-memory-total-bytes-in-use>
  <task-memory-total-bytes-percent>
    task-memory-total-bytes-percent
  </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
```

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```
            task-memory-total-bytes
           </task-memory-total-bytes>
           <task-memory-total-max-bytes>
            task-memory-total-max-bytes
           </task-memory-total-max-bytes>
           <task-memory-total-free-bytes>
            task-memory-total-free-bytes
           </task-memory-total-free-bytes>
          </task-memory-overall-report>
         </task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
 <tms-name>
  tms-name
 </tms-name>
 <tms-allocs>
  tms-allocs
 </tms-allocs>
 <tms-mallocs>
  tms-mallocs
 </tms-mallocs>
 <tms-alloc-bytes>
  tms-alloc-bytes
 </tms-alloc-bytes>
 <tms-max-allocs>
  tms-max-allocs
 </tms-max-allocs>
 <tms-max-bytes>
  tms-max-bytes
 </tms-max-bytes>
 <tms-free-bytes>
  tms-free-bytes
 </tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
 <task-memory-overall-report>
  <task-memory-stats-list>
   <task-memory-stats>
    <tms-name>
     tms-name
    </tms-name>
    <tms-allocs>
     tms-allocs
```


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```
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
          tms-alloc-bytes
        </tms-alloc-bytes>
        <tms-max-allocs>
          tms-max-allocs
        </tms-max-allocs>
        <tms-max-bytes>
          tms-max-bytes
        </tms-max-bytes>
        <tms-free-bytes>
          tms-free-bytes
        </tms-free-bytes>
      </task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>....</task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
  <task-gres-state>
    task-gres-state
  </task-gres-state>
  <task-re-mode>
    task-re-mode
  </task-re-mode>
</task-replication-state>
```

Description Current state of task replication

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<task-size-block>

Usage

```
<task-size-block-list>
  <task-size-block>
    <tsb-size>
      tsb-size
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
```


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```
        tsb-allocs
      </tsb-allocs>
      <tsb-mallocs>
        tsb-mallocs
      </tsb-mallocs>
      <tsb-alloc-bytes>
        tsb-alloc-bytes
      </tsb-alloc-bytes>
      <tsb-max-allocs>
        tsb-max-allocs
      </tsb-max-allocs>
      <tsb-max-bytes>
        tsb-max-bytes
      </tsb-max-bytes>
      <tsb-free-bytes>
        tsb-free-bytes
      </tsb-free-bytes>
    </task-size-block>
  </task-size-block-list>
 </task-memory-overall-report>
</task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
 <task-size-block>....</task-size-block>
</task-size-block-list>
```

Description

<task-size-block-list>

Usage

```
<task-memory-information>
 <task-memory-overall-report>
  <task-size-block-list>
   <task-size-block>....</task-size-block>
  </task-size-block-list>
 </task-memory-overall-report>
</task-memory-information>
```

Description

<task-statistics-information>

Usage

```
<task-statistics-information>
 <task-stat-event-name>
  task-stat-event-name
 </task-stat-event-name>
```

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```
<tast-stat-event-count>
  tast-stat-event-count
</tast-stat-event-count>
</task-statistics-information>
```

Description

<task-summary-information>

Usage

```
<task-summary-information>
  <task-summary-priority>
    task-summary-priority
  </task-summary-priority>
  <task-summary-task-name>
    task-summary-task-name
  </task-summary-task-name>
  <task-summary-protocol>
    task-summary-protocol
  </task-summary-protocol>
  <task-summary-port>
    task-summary-port
  </task-summary-port>
  <task-summary-socket>
    task-summary-socket
  </task-summary-socket>
  <task-summary-flags>
    task-summary-flags
  </task-summary-flags>
</task-summary-information>
```

Description

<task-timer>

Usage

```
<task-timer>
  <timer-name>
    timer-name
  </timer-name>
  <timer-late>
    timer-late
  </timer-late>
  <timer-expires>
    timer-expires
  </timer-expires>
  <timer-jitter>
    timer-jitter
  </timer-jitter>
  <timer-interval>
    timer-interval
  </timer-interval>
  <timer-flags>
    timer-flags
```


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```
  </timer-flags>
</task-timer>
```

Description

<task-timer>

Usage

```
<task-timer-information>
  <task>
    <task-timer>
      <timer-name>
        timer-name
      </timer-name>
      <timer-late>
        timer-late
      </timer-late>
      <timer-expires>
        timer-expires
      </timer-expires>
      <timer-jitter>
        timer-jitter
      </timer-jitter>
      <timer-interval>
        timer-interval
      </timer-interval>
      <timer-flags>
        timer-flags
      </timer-flags>
    </task-timer>
  </task>
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
</task-timer-information>
```

Description

<task-timer-priority>

Usage

```
<task-timer-priority>
  <task-timer-type>
    task-timer-type
  </task-timer-type>
</task-timer-priority>
```

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Description

<task-timer-priority>

Usage

```
<task-timer-information>
  <task>
    <task-timer-priority>
      <task-timer-type>
        task-timer-type
      </task-timer-type>
    </task-timer-priority>
  </task>
</task-timer-information>
```

Description

<task-timer-summary>

Usage

```
<task-timer-summary>
  <task-timer-leaf>
    task-timer-leaf
  </task-timer-leaf>
  <task-timer-parent>
    task-timer-parent
  </task-timer-parent>
  <task-timer-expired>
    task-timer-expired
  </task-timer-expired>
</task-timer-summary>
```

Description

<task-timer-summary>

Usage

```
<task-timer-information>
  <task>
    <task-timer-summary>
      <task-timer-leaf>
        task-timer-leaf
      </task-timer-leaf>
      <task-timer-parent>
        task-timer-parent
      </task-timer-parent>
      <task-timer-expired>
        task-timer-expired
      </task-timer-expired>
    </task-timer-summary>
  </task>
</task-timer-information>
```


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Description

<tracing-information>

Usage

```
<tracing-information>
  <flags>
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```

Description

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CHAPTER 59

Operational Response Tag Elements Specific to SRX Series

This chapter lists the Extensible Markup Language (XML) tag elements in the Junos XML application programming interface (API) that contain operational information. The Junos XML protocol and NETCONF servers return them in response to requests from client applications.

The tags listed in this chapter are specific to devices belonging to the following platforms:

- SRX Series

The tags are divided into the following sections and listed in alphabetical order within each section.

- Summary of Autorecovery Response Tags on page 7566
- Summary of Download Manager Response Tags on page 7569
- Summary of Allowed System Services and Protocols Response Tags on page 7572
- Summary of ALG Response Tags on page 7577
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- Summary of DS-Lite Response Tags on page 7662
- Summary of Dynamic VPN Response Tags on page 7664
- Summary of End-to-End Debug Response Tags on page 7668
- Summary of ESW Response Tags on page 7670
- Summary of sFlow Response Tags on page 7797
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- Summary of GPRS Tunneling Protocol Response Tags on page 7818
- Summary of IDS Response Tags on page 7835
- Summary of IPSec Response Tags on page 7839
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- Summary of Logical Systems Response Tags on page 7999
- Summary of DNS Proxy Response Response Tags on page 7999
- Summary of NAT Response Tags on page 8002
- Summary of Junos OS Reports Response Tags on page 8026
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- Summary of WXOS Protocol Response Tags on page 8278
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Summary of Autorecovery Response Tags

<autorecovery>

Usage

```
<autorecovery>
  <autorecovery-state>....</autorecovery-state>
</autorecovery>
```

Description Autorecovery information

<autorecovery-state>

Usage

```
<autorecovery>
  <autorecovery-state>
    <entity-name>
      entity-name
    </entity-name>
```


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```
    <recovery-info>
      recovery-info
    </recovery-info>
    <integrity-check>
      integrity-check
    </integrity-check>
    <action-status>
      action-status
    </action-status>
    <autorecovery-state-bsd-label>....</autorecovery-state-bsd-label>
    <autorecovery-state-config>....</autorecovery-state-config>
    <autorecovery-state-license>....</autorecovery-state-license>
  </autorecovery-state>
</autorecovery>
```

Description Autorecovery state information

<autorecovery-state-bsd-label>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-bsd-label>
      <bsd-label-status>....</bsd-label-status>
    </autorecovery-state-bsd-label>
  </autorecovery-state>
</autorecovery>
```

Description Autorecovery information for BSD Labels

<autorecovery-state-config>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-config>
      <config-status>....</config-status>
    </autorecovery-state-config>
  </autorecovery-state>
</autorecovery>
```

Description Autorecovery information for rescue configuration

<autorecovery-state-license>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-license>
      <license-status>....</license-status>
    </autorecovery-state-license>
```

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```
  </autorecovery-state>
</autorecovery>
```

Description Autorecovery information for licenses

<bsd-label-status>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-bsd-label>
      <bsd-label-status>
        <entity-name>
          entity-name
        </entity-name>
        <recovery-info>
          recovery-info
        </recovery-info>
        <integrity-check>
          integrity-check
        </integrity-check>
        <action-status>
          action-status
        </action-status>
      </bsd-label-status>
    </autorecovery-state-bsd-label>
  </autorecovery-state>
</autorecovery>
```

Description Status of one BSD Label

<config-status>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-config>
      <config-status>
        <entity-name>
          entity-name
        </entity-name>
        <recovery-info>
          recovery-info
        </recovery-info>
        <integrity-check>
          integrity-check
        </integrity-check>
        <action-status>
          action-status
        </action-status>
      </config-status>
    </autorecovery-state-config>
```


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```
  </autorecovery-state>
</autorecovery>
```

Description Status of rescue configuration

<license-status>

Usage

```
<autorecovery>
  <autorecovery-state>
    <autorecovery-state-license>
      <license-status>
        <entity-name>
          entity-name
        </entity-name>
        <recovery-info>
          recovery-info
        </recovery-info>
        <integrity-check>
          integrity-check
        </integrity-check>
        <action-status>
          action-status
        </action-status>
      </license-status>
    </autorecovery-state-license>
  </autorecovery-state>
</autorecovery>
```

Description Status of one license key

Summary of Download Manager Response Tags

<download-info-brief>

Usage

```
<download-information>
  <download-info-brief>
    <download-id>
      download-id
    </download-id>
    <status>
      status
    </status>
    <start-time>
      start-time
    </start-time>
    <progress>
      progress
    </progress>
    <download-url>
      download-url
```

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```
      </download-url>
     </download-info-brief>
    </download-information>
```

Description Download status information

<download-info-detail>

Usage

```
<download-information>
 <download-info-detail>
  <download-id>
   download-id
  </download-id>
  <status>
   status
  </status>
  <progress>
   progress
  </progress>
  <download-url>
   download-url
  </download-url>
  <local-path>
   local-path
  </local-path>
  <max-rate>
   max-rate
  </max-rate>
  <creation-time>
   creation-time
  </creation-time>
  <scheduled-time>
   scheduled-time
  </scheduled-time>
  <start-time>
   start-time
  </start-time>
  <retry-time>
   retry-time
  </retry-time>
  <retries-left>
   retries-left
  </retries-left>
  <completion-time>
   completion-time
  </completion-time>
  <error-count>
   error-count
  </error-count>
  <error-message>
   error-message
  </error-message>
 </download-info-detail>
```


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```
</download-information>
```

Description Detailed download status information

<download-information>

Usage

```
<download-information>
  <status>
    status
  </status>
  <progress>
    progress
  </progress>
  <download-id>
    download-id
  </download-id>
  <download-url>
    download-url
  </download-url>
  <local-path>
    local-path
  </local-path>
  <max-rate>
    max-rate
  </max-rate>
  <creation-time>
    creation-time
  </creation-time>
  <scheduled-time>
    scheduled-time
  </scheduled-time>
  <start-time>
    start-time
  </start-time>
  <retry-time>
    retry-time
  </retry-time>
  <retries-left>
    retries-left
  </retries-left>
  <completion-time>
    completion-time
  </completion-time>
  <error-count>
    error-count
  </error-count>
  <error-message>
    error-message
  </error-message>
  <download-info-brief>....</download-info-brief>
  <download-info-detail>....</download-info-detail>
</download-information>
```

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Description

Summary of Allowed System Services and Protocols Response Tags

<allowed-host-inbound-traffic>

Usage

```
<allowed-host-inbound-traffic>
  <inbound-all-protocols>
    inbound-all-protocols
  </inbound-all-protocols>
  <inbound-any-service>
    inbound-any-service
  </inbound-any-service>
  <inbound-bootp>
    inbound-bootp
  </inbound-bootp>
  <inbound-bfd>
    inbound-bfd
  </inbound-bfd>
  <inbound-bgp>
    inbound-bgp
  </inbound-bgp>
  <inbound-dns>
    inbound-dns
  </inbound-dns>
  <inbound-dvmrp>
    inbound-dvmrp
  </inbound-dvmrp>
  <inbound-igmp>
    inbound-igmp
  </inbound-igmp>
  <inbound-ldp>
    inbound-ldp
  </inbound-ldp>
  <inbound-msdp>
    inbound-msdp
  </inbound-msdp>
  <inbound-nhrp>
    inbound-nhrp
  </inbound-nhrp>
  <inbound-ospf>
    inbound-ospf
  </inbound-ospf>
  <inbound-ospf3>
    inbound-ospf3
  </inbound-ospf3>
  <inbound-pgm>
    inbound-pgm
  </inbound-pgm>
  <inbound-pim>
    inbound-pim
  </inbound-pim>
  <inbound-rip>
    inbound-rip
```


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```
</inbound-rip>
<inbound-ripng>
  inbound-ripng
</inbound-ripng>
<inbound-router-discovery>
  inbound-router-discovery
</inbound-router-discovery>
<inbound-rsvp>
  inbound-rsvp
</inbound-rsvp>
<inbound-sap>
  inbound-sap
</inbound-sap>
<inbound-vrrp>
  inbound-vrrp
</inbound-vrrp>
<inbound-all-services>
  inbound-all-services
</inbound-all-services>
<inbound-dhcp>
  inbound-dhcp
</inbound-dhcp>
<inbound-finger>
  inbound-finger
</inbound-finger>
<inbound-ftp>
  inbound-ftp
</inbound-ftp>
<inbound-tftp>
  inbound-tftp
</inbound-tftp>
<ident-reset>
  ident-reset
</ident-reset>
<inbound-http>
  inbound-http
</inbound-http>
<inbound-https>
  inbound-https
</inbound-https>
<inbound-ike>
  inbound-ike
</inbound-ike>
<inbound-netconf>
  inbound-netconf
</inbound-netconf>
<inbound-ping>
  inbound-ping
</inbound-ping>
<inbound-reverse-telnet>
  inbound-reverse-telnet
</inbound-reverse-telnet>
<inbound-reverse-ssh>
  inbound-reverse-ssh
</inbound-reverse-ssh>
<inbound-rlogin>
```

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```
  inbound-rlogin
 </inbound-rlogin>
 <inbound-rpm>
  inbound-rpm
 </inbound-rpm>
 <inbound-rsh>
  inbound-rsh
 </inbound-rsh>
 <inbound-snmp>
  inbound-snmp
 </inbound-snmp>
 <inbound-snmp-trap>
  inbound-snmp-trap
 </inbound-snmp-trap>
 <inbound-ssh>
  inbound-ssh
 </inbound-ssh>
 <inbound-telnet>
  inbound-telnet
 </inbound-telnet>
 <inbound-traceroute>
  inbound-traceroute
 </inbound-traceroute>
 <inbound-xnm-clear-text>
  inbound-xnm-clear-text
 </inbound-xnm-clear-text>
 <inbound-xnm-ssl>
  inbound-xnm-ssl
 </inbound-xnm-ssl>
 <inbound-lsping>
  inbound-lsping
 </inbound-lsping>
 <inbound-ntp>
  inbound-ntp
 </inbound-ntp>
 <inbound-sip>
  inbound-sip
 </inbound-sip>
 <inbound-dhcpv6>
  inbound-dhcpv6
 </inbound-dhcpv6>
 <inbound-r2cp>
  inbound-r2cp
 </inbound-r2cp>
</allowed-host-inbound-traffic>
```

Description List of allowed system services and protocols

<security-error-flow-statistics>

Usage

```
<security-error-flow-statistics>
 <flow-error-policy-denied>
  flow-error-policy-denied
```


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```
</flow-error-policy-denied>
<flow-error-no-gate-parent>
  flow-error-no-gate-parent
</flow-error-no-gate-parent>
<flow-error-syn-protection>
  flow-error-syn-protection
</flow-error-syn-protection>
<flow-error-incoming-nat>
  flow-error-incoming-nat
</flow-error-incoming-nat>
<flow-error-no-tunnel>
  flow-error-no-tunnel
</flow-error-no-tunnel>
<flow-error-no-more-session>
  flow-error-no-more-session
</flow-error-no-more-session>
<flow-error-invalid-zone>
  flow-error-invalid-zone
</flow-error-invalid-zone>
<flow-error-user-authentication>
  flow-error-user-authentication
</flow-error-user-authentication>
<flow-error-multiple-auth>
  flow-error-multiple-auth
</flow-error-multiple-auth>
<flow-error-multiple-incoming-nat>
  flow-error-multiple-incoming-nat
</flow-error-multiple-incoming-nat>
<flow-error-address-spoofing>
  flow-error-address-spoofing
</flow-error-address-spoofing>
<flow-error-null-zone>
  flow-error-null-zone
</flow-error-null-zone>
<flow-error-no-nat-gate>
  flow-error-no-nat-gate
</flow-error-no-nat-gate>
<flow-error-no-minor-session>
  flow-error-no-minor-session
</flow-error-no-minor-session>
<flow-error-no-session-gate>
  flow-error-no-session-gate
</flow-error-no-session-gate>
<flow-error-seq-outside-window>
  flow-error-seq-outside-window
</flow-error-seq-outside-window>
<flow-error-no-route-present>
  flow-error-no-route-present
</flow-error-no-route-present>
<flow-error-authentication-failed>
  flow-error-authentication-failed
</flow-error-authentication-failed>
<flow-error-security-association-missing>
  flow-error-security-association-missing
</flow-error-security-association-missing>
<flow-error-no-sa-for-spi>
```

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```
                flow-error-no-sa-for-spi
              </flow-error-no-sa-for-spi>
              <flow-error-no-interest-self-packet>
                flow-error-no-interest-self-packet
              </flow-error-no-interest-self-packet>
            </security-error-flow-statistics>
```

Description Flow error statistics for the interface

<security-input-flow-statistics>

Usage

```
            <security-input-flow-statistics>
              <flow-input-self-packets>
                flow-input-self-packets
              </flow-input-self-packets>
              <flow-input-icmp-packets>
                flow-input-icmp-packets
              </flow-input-icmp-packets>
              <flow-input-vpn-packets>
                flow-input-vpn-packets
              </flow-input-vpn-packets>
              <flow-input-multicast-packets>
                flow-input-multicast-packets
              </flow-input-multicast-packets>
              <flow-input-policy-bytes>
                flow-input-policy-bytes
              </flow-input-policy-bytes>
              <flow-input-connections>
                flow-input-connections
              </flow-input-connections>
            </security-input-flow-statistics>
```

Description Flow input statistics for the interface

<security-output-flow-statistics>

Usage

```
            <security-output-flow-statistics>
              <flow-output-multicast-packets>
                flow-output-multicast-packets
              </flow-output-multicast-packets>
              <flow-output-policy-bytes>
                flow-output-policy-bytes
              </flow-output-policy-bytes>
            </security-output-flow-statistics>
```

Description Flow output statistics for the interface

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Summary of ALG Response Tags

<alg-configuration>

Usage

```
<alg-configuration>
  <alg-configuration-activate-dns>
    alg-configuration-activate-dns
  </alg-configuration-activate-dns>
  <alg-configuration-activate-ftp>
    alg-configuration-activate-ftp
  </alg-configuration-activate-ftp>
  <alg-configuration-activate-h323>
    alg-configuration-activate-h323
  </alg-configuration-activate-h323>
  <alg-configuration-activate-mgcp>
    alg-configuration-activate-mgcp
  </alg-configuration-activate-mgcp>
  <alg-configuration-activate-msrpc>
    alg-configuration-activate-msrpc
  </alg-configuration-activate-msrpc>
  <alg-configuration-activate-real>
    alg-configuration-activate-real
  </alg-configuration-activate-real>
  <alg-configuration-activate-rsh>
    alg-configuration-activate-rsh
  </alg-configuration-activate-rsh>
  <alg-configuration-activate-rtsp>
    alg-configuration-activate-rtsp
  </alg-configuration-activate-rtsp>
  <alg-configuration-activate-sccp>
    alg-configuration-activate-sccp
  </alg-configuration-activate-sccp>
  <alg-configuration-activate-sip>
    alg-configuration-activate-sip
  </alg-configuration-activate-sip>
  <alg-configuration-activate-sql>
    alg-configuration-activate-sql
  </alg-configuration-activate-sql>
  <alg-configuration-activate-sunrpc>
    alg-configuration-activate-sunrpc
  </alg-configuration-activate-sunrpc>
  <alg-configuration-activate-talk>
    alg-configuration-activate-talk
  </alg-configuration-activate-talk>
  <alg-configuration-activate-tftp>
    alg-configuration-activate-tftp
  </alg-configuration-activate-tftp>
  <alg-configuration-activate-pptp>
    alg-configuration-activate-pptp
  </alg-configuration-activate-pptp>
  <alg-configuration-dns-max-message-length>
    alg-configuration-dns-max-message-length
  </alg-configuration-dns-max-message-length>
  <alg-configuration-ftp-ftps-extension>
```

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```
  alg-configuration-ftp-ftps-extension
</alg-configuration-ftp-ftps-extension>
<alg-configuration-ftp-line-break-extension>
  alg-configuration-ftp-line-break-extension
</alg-configuration-ftp-line-break-extension>
<alg-configuration-ftp-allow-mismatch-ip-address>
  alg-configuration-ftp-allow-mismatch-ip-address
</alg-configuration-ftp-allow-mismatch-ip-address>
<alg-configuration-h323-endpoint-registration-timeout>
  alg-configuration-h323-endpoint-registration-timeout
</alg-configuration-h323-endpoint-registration-timeout>
<alg-configuration-h323-media-source-port-any>
  alg-configuration-h323-media-source-port-any
</alg-configuration-h323-media-source-port-any>
<alg-configuration-h323-app-scrn-unknown-msg-nat>
  alg-configuration-h323-app-scrn-unknown-msg-nat
</alg-configuration-h323-app-scrn-unknown-msg-nat>
<alg-configuration-h323-app-scrn-unknown-msg-route>
  alg-configuration-h323-app-scrn-unknown-msg-route
</alg-configuration-h323-app-scrn-unknown-msg-route>
<alg-configuration-h323-app-scrn-msg-flood-gatekeeper-threshold>
  alg-configuration-h323-app-scrn-msg-flood-gatekeeper-threshold
</alg-configuration-h323-app-scrn-msg-flood-gatekeeper-threshold>
<alg-configuration-h323-dscp-codepoint>
  alg-configuration-h323-dscp-codepoint
</alg-configuration-h323-dscp-codepoint>
<alg-configuration-mgcp-inactive-media-timeout>
  alg-configuration-mgcp-inactive-media-timeout
</alg-configuration-mgcp-inactive-media-timeout>
<alg-configuration-mgcp-transaction-timeout>
  alg-configuration-mgcp-transaction-timeout
</alg-configuration-mgcp-transaction-timeout>
<alg-configuration-mgcp-max-call-duration>
  alg-configuration-mgcp-max-call-duration
</alg-configuration-mgcp-max-call-duration>
<alg-configuration-mgcp-app-scrn-unknown-msg-nat>
  alg-configuration-mgcp-app-scrn-unknown-msg-nat
</alg-configuration-mgcp-app-scrn-unknown-msg-nat>
<alg-configuration-mgcp-app-scrn-unknown-msg-route>
  alg-configuration-mgcp-app-scrn-unknown-msg-route
</alg-configuration-mgcp-app-scrn-unknown-msg-route>
<alg-configuration-mgcp-app-scrn-msg-flood-threshold>
  alg-configuration-mgcp-app-scrn-msg-flood-threshold
</alg-configuration-mgcp-app-scrn-msg-flood-threshold>
<alg-configuration-mgcp-app-scrn-con-flood-threshold>
  alg-configuration-mgcp-app-scrn-con-flood-threshold
</alg-configuration-mgcp-app-scrn-con-flood-threshold>
<alg-configuration-mgcp-dscp-codepoint>
  alg-configuration-mgcp-dscp-codepoint
</alg-configuration-mgcp-dscp-codepoint>
<alg-configuration-sccp-inactive-media-timeout>
  alg-configuration-sccp-inactive-media-timeout
</alg-configuration-sccp-inactive-media-timeout>
<alg-configuration-sccp-app-scrn-unknown-msg-nat>
  alg-configuration-sccp-app-scrn-unknown-msg-nat
</alg-configuration-sccp-app-scrn-unknown-msg-nat>
```


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```
<alg-configuration-sccp-app-scrn-unknown-msg-route>
  alg-configuration-sccp-app-scrn-unknown-msg-route
</alg-configuration-sccp-app-scrn-unknown-msg-route>
<alg-configuration-sccp-app-scrn-call-flood-threshold>
  alg-configuration-sccp-app-scrn-call-flood-threshold
</alg-configuration-sccp-app-scrn-call-flood-threshold>
<alg-configuration-sccp-dscp-codepoint>
  alg-configuration-sccp-dscp-codepoint
</alg-configuration-sccp-dscp-codepoint>
<alg-configuration-sip-inactive-media-timeout>
  alg-configuration-sip-inactive-media-timeout
</alg-configuration-sip-inactive-media-timeout>
<alg-configuration-sip-max-call-duration>
  alg-configuration-sip-max-call-duration
</alg-configuration-sip-max-call-duration>
<alg-configuration-sip-t1-interval>
  alg-configuration-sip-t1-interval
</alg-configuration-sip-t1-interval>
<alg-configuration-sip-t4-interval>
  alg-configuration-sip-t4-interval
</alg-configuration-sip-t4-interval>
<alg-configuration-sip-c-timeout>
  alg-configuration-sip-c-timeout
</alg-configuration-sip-c-timeout>
<alg-configuration-sip-dscp-codepoint>
  alg-configuration-sip-dscp-codepoint
</alg-configuration-sip-dscp-codepoint>
<alg-configuration-sip-app-scrn-unknown-msg-nat>
  alg-configuration-sip-app-scrn-unknown-msg-nat
</alg-configuration-sip-app-scrn-unknown-msg-nat>
<alg-configuration-sip-app-scrn-unknown-msg-route>
  alg-configuration-sip-app-scrn-unknown-msg-route
</alg-configuration-sip-app-scrn-unknown-msg-route>
<alg-configuration-sip-app-scrn-prt-deny-timeout>
  alg-configuration-sip-app-scrn-prt-deny-timeout
</alg-configuration-sip-app-scrn-prt-deny-timeout>
<alg-configuration-sip-app-scrn-prt-deny-dest-ip-entry>
  alg-configuration-sip-app-scrn-prt-deny-dest-ip-entry
</alg-configuration-sip-app-scrn-prt-deny-dest-ip-entry>
</alg-configuration>
```

Description

<alg-h323-counters>

Usage

```
<alg-h323-counters>
  <alg-h323-counters-pkt-rcvd>
    alg-h323-counters-pkt-rcvd
  </alg-h323-counters-pkt-rcvd>
  <alg-h323-counters-pkt-drpd>
    alg-h323-counters-pkt-drpd
  </alg-h323-counters-pkt-drpd>
  <alg-h323-counters-ras-msg-rcvd>
    alg-h323-counters-ras-msg-rcvd
```

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```
</alg-h323-counters-ras-msg-rcvd>
<alg-h323-counters-q931-msg-rcvd>
  alg-h323-counters-q931-msg-rcvd
</alg-h323-counters-q931-msg-rcvd>
<alg-h323-counters-h245-msg-rcvd>
  alg-h323-counters-h245-msg-rcvd
</alg-h323-counters-h245-msg-rcvd>
<alg-h323-counters-num-calls>
  alg-h323-counters-num-calls
</alg-h323-counters-num-calls>
<alg-h323-counters-num-active-calls>
  alg-h323-counters-num-active-calls
</alg-h323-counters-num-active-calls>
<alg-h323-counters-num-dscp-marked>
  alg-h323-counters-num-dscp-marked
</alg-h323-counters-num-dscp-marked>
<alg-h323-counters-err-decode>
  alg-h323-counters-err-decode
</alg-h323-counters-err-decode>
<alg-h323-counters-err-msg-flood-drpd>
  alg-h323-counters-err-msg-flood-drpd
</alg-h323-counters-err-msg-flood-drpd>
<alg-h323-counters-err-nat>
  alg-h323-counters-err-nat
</alg-h323-counters-err-nat>
<alg-h323-counters-err-rm>
  alg-h323-counters-err-rm
</alg-h323-counters-err-rm>
<alg-h323-counters-err-dscp>
  alg-h323-counters-err-dscp
</alg-h323-counters-err-dscp>
<alg-h323-counters-msg-rrq>
  alg-h323-counters-msg-rrq
</alg-h323-counters-msg-rrq>
<alg-h323-counters-msg-rcf>
  alg-h323-counters-msg-rcf
</alg-h323-counters-msg-rcf>
<alg-h323-counters-msg-arq>
  alg-h323-counters-msg-arq
</alg-h323-counters-msg-arq>
<alg-h323-counters-msg-acf>
  alg-h323-counters-msg-acf
</alg-h323-counters-msg-acf>
<alg-h323-counters-msg-urq>
  alg-h323-counters-msg-urq
</alg-h323-counters-msg-urq>
<alg-h323-counters-msg-ucf>
  alg-h323-counters-msg-ucf
</alg-h323-counters-msg-ucf>
<alg-h323-counters-msg-drq>
  alg-h323-counters-msg-drq
</alg-h323-counters-msg-drq>
<alg-h323-counters-msg-oth-ras>
  alg-h323-counters-msg-oth-ras
</alg-h323-counters-msg-oth-ras>
<alg-h323-counters-msg-setup>
```


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```
  alg-h323-counters-msg-setup
 </alg-h323-counters-msg-setup>
 <alg-h323-counters-msg-alert>
  alg-h323-counters-msg-alert
 </alg-h323-counters-msg-alert>
 <alg-h323-counters-msg-connect>
  alg-h323-counters-msg-connect
 </alg-h323-counters-msg-connect>
 <alg-h323-counters-msg-callprod>
  alg-h323-counters-msg-callprod
 </alg-h323-counters-msg-callprod>
 <alg-h323-counters-msg-info>
  alg-h323-counters-msg-info
 </alg-h323-counters-msg-info>
 <alg-h323-counters-msg-relcmpl>
  alg-h323-counters-msg-relcmpl
 </alg-h323-counters-msg-relcmpl>
 <alg-h323-counters-msg-facility>
  alg-h323-counters-msg-facility
 </alg-h323-counters-msg-facility>
 <alg-h323-counters-msg-empty>
  alg-h323-counters-msg-empty
 </alg-h323-counters-msg-empty>
 <alg-h323-counters-msg-olc>
  alg-h323-counters-msg-olc
 </alg-h323-counters-msg-olc>
 <alg-h323-counters-msg-olc-ack>
  alg-h323-counters-msg-olc-ack
 </alg-h323-counters-msg-olc-ack>
 <alg-h323-counters-msg-oth-h245>
  alg-h323-counters-msg-oth-h245
 </alg-h323-counters-msg-oth-h245>
</alg-h323-counters>
```

Description

<alg-ike-esp-clear>

Usage

```
<alg-ike-esp-clear>
 <alg-ike-esp-clear-count>
  alg-ike-esp-clear-count
 </alg-ike-esp-clear-count>
</alg-ike-esp-clear>
```

Description Information about cleared IKE-ESP ALG state

<alg-ike-esp-show>

Usage

```
<alg-ike-esp-show>
 <ike-esp-cookies>....</ike-esp-cookies>
```

```
</alg-ike-esp-show>
```

Description

<alg-ike-esp-show-summary>

Usage

```
<alg-ike-esp-show-summary>
  <alg-ike-esp-use-count>
    alg-ike-esp-use-count
  </alg-ike-esp-use-count>
  <alg-ike-esp-total-count>
    alg-ike-esp-total-count
  </alg-ike-esp-total-count>
</alg-ike-esp-show-summary>
```

Description IKE-ESP ALG summary

<alg-mgcp-call-connections-data>

Usage

```
<alg-mgcp-call-information>
  <alg-mgcp-call-data>
    <alg-mgcp-call-connections-data>
      <alg-mgcp-call-connection-id>
        alg-mgcp-call-connection-id
      </alg-mgcp-call-connection-id>
      <alg-mgcp-call-local-sdp-o>
        alg-mgcp-call-local-sdp-o
      </alg-mgcp-call-local-sdp-o>
      <alg-mgcp-call-local-sdp-x-o>
        alg-mgcp-call-local-sdp-x-o
      </alg-mgcp-call-local-sdp-x-o>
      <alg-mgcp-call-local-sdp-m-lines>....</alg-mgcp-call-local-sdp-m-lines>
      <alg-mgcp-call-remote-sdp-o>
        alg-mgcp-call-remote-sdp-o
      </alg-mgcp-call-remote-sdp-o>
      <alg-mgcp-call-remote-sdp-x-o>
        alg-mgcp-call-remote-sdp-x-o
      </alg-mgcp-call-remote-sdp-x-o>
     <alg-mgcp-call-remote-sdp-m-lines>....</alg-mgcp-call-remote-sdp-m-lines>

    </alg-mgcp-call-connections-data>
  </alg-mgcp-call-data>
</alg-mgcp-call-information>
```

Description

<alg-mgcp-call-data>

Usage

```
<alg-mgcp-call-information>
```


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```
<alg-mgcp-call-data>
  <alg-mgcp-call-ep>
    alg-mgcp-call-ep
  </alg-mgcp-call-ep>
  <alg-mgcp-call-ep-gw>
    alg-mgcp-call-ep-gw
  </alg-mgcp-call-ep-gw>
  <alg-mgcp-call-zone>
    alg-mgcp-call-zone
  </alg-mgcp-call-zone>
  <alg-mgcp-call-call-id>
    alg-mgcp-call-call-id
  </alg-mgcp-call-call-id>
  <alg-mgcp-call-resmgr-group>
    alg-mgcp-call-resmgr-group
  </alg-mgcp-call-resmgr-group>
  <alg-mgcp-call-call-duration>
    alg-mgcp-call-call-duration
  </alg-mgcp-call-call-duration>
  <alg-mgcp-call-connections-data>....</alg-mgcp-call-connections-data>
</alg-mgcp-call-data>
</alg-mgcp-call-information>
```

Description

<alg-mgcp-call-information>

Usage

```
<alg-mgcp-call-information>
  <alg-mgcp-call-data>....</alg-mgcp-call-data>
</alg-mgcp-call-information>
```

Description Information about the Media Gateway Control Protocol (MGCP) application-level gateway (ALG) calls

<alg-mgcp-call-local-sdp-m-lines>

Usage

```
<alg-mgcp-call-information>
  <alg-mgcp-call-data>
    <alg-mgcp-call-connections-data>
      <alg-mgcp-call-local-sdp-m-lines>
        <alg-mgcp-call-local-sdp-c-ip>
          alg-mgcp-call-local-sdp-c-ip
        </alg-mgcp-call-local-sdp-c-ip>
        <alg-mgcp-call-local-sdp-c-port>
          alg-mgcp-call-local-sdp-c-port
        </alg-mgcp-call-local-sdp-c-port>
        <alg-mgcp-call-local-sdp-c-x-ip>
          alg-mgcp-call-local-sdp-c-x-ip
        </alg-mgcp-call-local-sdp-c-x-ip>
        <alg-mgcp-call-local-sdp-c-x-port>
          alg-mgcp-call-local-sdp-c-x-port
```

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```
        </alg-mgcp-call-local-sdp-c-x-port>
       </alg-mgcp-call-local-sdp-m-lines>
      </alg-mgcp-call-connections-data>
     </alg-mgcp-call-data>
    </alg-mgcp-call-information>
```

Description

<alg-mgcp-call-remote-sdp-m-lines>

Usage

```
<alg-mgcp-call-information>
 <alg-mgcp-call-data>
  <alg-mgcp-call-connections-data>
   <alg-mgcp-call-remote-sdp-m-lines>
    <alg-mgcp-call-remote-sdp-c-ip>
     alg-mgcp-call-remote-sdp-c-ip
    </alg-mgcp-call-remote-sdp-c-ip>
    <alg-mgcp-call-remote-sdp-c-port>
     alg-mgcp-call-remote-sdp-c-port
    </alg-mgcp-call-remote-sdp-c-port>
    <alg-mgcp-call-remote-sdp-c-x-ip>
     alg-mgcp-call-remote-sdp-c-x-ip
    </alg-mgcp-call-remote-sdp-c-x-ip>
    <alg-mgcp-call-remote-sdp-c-x-port>
     alg-mgcp-call-remote-sdp-c-x-port
    </alg-mgcp-call-remote-sdp-c-x-port>
   </alg-mgcp-call-remote-sdp-m-lines>
  </alg-mgcp-call-connections-data>
 </alg-mgcp-call-data>
</alg-mgcp-call-information>
```

Description

<alg-mgcp-counter-information>

Usage

```
<alg-mgcp-counter-information>
 <alg-mgcp-counters-packets-received>
  alg-mgcp-counters-packets-received
 </alg-mgcp-counters-packets-received>
 <alg-mgcp-counters-packets-dropped>
  alg-mgcp-counters-packets-dropped
 </alg-mgcp-counters-packets-dropped>
 <alg-mgcp-counters-message-received>
  alg-mgcp-counters-message-received
 </alg-mgcp-counters-message-received>
 <alg-mgcp-counters-connections>
  alg-mgcp-counters-connections
 </alg-mgcp-counters-connections>
 <alg-mgcp-counters-active-connections>
  alg-mgcp-counters-active-connections
 </alg-mgcp-counters-active-connections>
 <alg-mgcp-counters-calls>
```


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```
  alg-mgcp-counters-calls
</alg-mgcp-counters-calls>
<alg-mgcp-counters-active-calls>
  alg-mgcp-counters-active-calls
</alg-mgcp-counters-active-calls>
<alg-mgcp-counters-transactions>
  alg-mgcp-counters-transactions
</alg-mgcp-counters-transactions>
<alg-mgcp-counters-active-transactions>
  alg-mgcp-counters-active-transactions
</alg-mgcp-counters-active-transactions>
<alg-mgcp-counters-retransmissions>
  alg-mgcp-counters-retransmissions
</alg-mgcp-counters-retransmissions>
<alg-mgcp-counters-active-endpoints>
  alg-mgcp-counters-active-endpoints
</alg-mgcp-counters-active-endpoints>
<alg-mgcp-counters-dscp-marked>
  alg-mgcp-counters-dscp-marked
</alg-mgcp-counters-dscp-marked>
<alg-mgcp-counters-unknown-method>
  alg-mgcp-counters-unknown-method
</alg-mgcp-counters-unknown-method>
<alg-mgcp-counters-decoding-errors>
  alg-mgcp-counters-decoding-errors
</alg-mgcp-counters-decoding-errors>
<alg-mgcp-counters-transaction-errors>
  alg-mgcp-counters-transaction-errors
</alg-mgcp-counters-transaction-errors>
<alg-mgcp-counters-call-errors>
  alg-mgcp-counters-call-errors
</alg-mgcp-counters-call-errors>
<alg-mgcp-counters-connection-errors>
  alg-mgcp-counters-connection-errors
</alg-mgcp-counters-connection-errors>
<alg-mgcp-counters-connection-flood-drop>
  alg-mgcp-counters-connection-flood-drop
</alg-mgcp-counters-connection-flood-drop>
<alg-mgcp-counters-message-flood-drop>
  alg-mgcp-counters-message-flood-drop
</alg-mgcp-counters-message-flood-drop>
<alg-mgcp-counters-ip-resolution-errors>
  alg-mgcp-counters-ip-resolution-errors
</alg-mgcp-counters-ip-resolution-errors>
<alg-mgcp-counters-nat-errors>
  alg-mgcp-counters-nat-errors
</alg-mgcp-counters-nat-errors>
<alg-mgcp-counters-resource-mgr-errors>
  alg-mgcp-counters-resource-mgr-errors
</alg-mgcp-counters-resource-mgr-errors>
<alg-mgcp-counters-dscp-errors>
  alg-mgcp-counters-dscp-errors
</alg-mgcp-counters-dscp-errors>
<alg-mgcp-counters-crcx-packets>
  alg-mgcp-counters-crcx-packets
</alg-mgcp-counters-crcx-packets>
```

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```
<alg-mgcp-counters-mdcx-packets>
  alg-mgcp-counters-mdcx-packets
</alg-mgcp-counters-mdcx-packets>
<alg-mgcp-counters-dlcx-packets>
  alg-mgcp-counters-dlcx-packets
</alg-mgcp-counters-dlcx-packets>
<alg-mgcp-counters-auep-packets>
  alg-mgcp-counters-auep-packets
</alg-mgcp-counters-auep-packets>
<alg-mgcp-counters-aucx-packets>
  alg-mgcp-counters-aucx-packets
</alg-mgcp-counters-aucx-packets>
<alg-mgcp-counters-ntfy-packets>
  alg-mgcp-counters-ntfy-packets
</alg-mgcp-counters-ntfy-packets>
<alg-mgcp-counters-rsip-packets>
  alg-mgcp-counters-rsip-packets
</alg-mgcp-counters-rsip-packets>
<alg-mgcp-counters-epcf-packets>
  alg-mgcp-counters-epcf-packets
</alg-mgcp-counters-epcf-packets>
<alg-mgcp-counters-rqnt-packets>
  alg-mgcp-counters-rqnt-packets
</alg-mgcp-counters-rqnt-packets>
<alg-mgcp-counters-000-199-packets>
  alg-mgcp-counters-000-199-packets
</alg-mgcp-counters-000-199-packets>
<alg-mgcp-counters-200-299-packets>
  alg-mgcp-counters-200-299-packets
</alg-mgcp-counters-200-299-packets>
<alg-mgcp-counters-300-999-packets>
  alg-mgcp-counters-300-999-packets
</alg-mgcp-counters-300-999-packets>
</alg-mgcp-counter-information>
```

Description

<alg-mgcp-endpoint-information>

Usage

```
<alg-mgcp-endpoint-information>
  <alg-mgcp-endpoints-data>....</alg-mgcp-endpoints-data>
</alg-mgcp-endpoint-information>
```

Description

<alg-mgcp-endpoints-data>

Usage

```
<alg-mgcp-endpoint-information>
  <alg-mgcp-endpoints-data>
    <alg-mgcp-endpoints-gateway>
      alg-mgcp-endpoints-gateway
    </alg-mgcp-endpoints-gateway>
```


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```
    <alg-mgcp-endpoints-zone>
      alg-mgcp-endpoints-zone
    </alg-mgcp-endpoints-zone>
    <alg-mgcp-gw-ip>
      alg-mgcp-gw-ip
    </alg-mgcp-gw-ip>
    <alg-mgcp-gw-x-ip>
      alg-mgcp-gw-x-ip
    </alg-mgcp-gw-x-ip>
    <alg-mgcp-endpoints-name>
      alg-mgcp-endpoints-name
    </alg-mgcp-endpoints-name>
    <alg-mgcp-endpoints-transaction-num>
      alg-mgcp-endpoints-transaction-num
    </alg-mgcp-endpoints-transaction-num>
    <alg-mgcp-endpoints-call-num>
      alg-mgcp-endpoints-call-num
    </alg-mgcp-endpoints-call-num>
    <alg-mgcp-endpoints-ntfy-ip>
      alg-mgcp-endpoints-ntfy-ip
    </alg-mgcp-endpoints-ntfy-ip>
    <alg-mgcp-endpoints-ntfy-port>
      alg-mgcp-endpoints-ntfy-port
    </alg-mgcp-endpoints-ntfy-port>
    <alg-mgcp-endpoints-ntfy-x-ip>
      alg-mgcp-endpoints-ntfy-x-ip
    </alg-mgcp-endpoints-ntfy-x-ip>
    <alg-mgcp-endpoints-ntfy-x-port>
      alg-mgcp-endpoints-ntfy-x-port
    </alg-mgcp-endpoints-ntfy-x-port>
  </alg-mgcp-endpoints-data>
</alg-mgcp-endpoint-information>
```

Description

<alg-msrpc-map>

Usage

```
<alg-msrpc-map>
  <alg-msrpc-map-data>....</alg-msrpc-map-data>
</alg-msrpc-map>
```

Description

<alg-msrpc-map-data>

Usage

```
<alg-msrpc-map>
  <alg-msrpc-map-data>
    <alg-msrpc-map-data-ip>
      alg-msrpc-map-data-ip
    </alg-msrpc-map-data-ip>
    <alg-msrpc-map-data-port>
      alg-msrpc-map-data-port
```

```
    </alg-msrpc-map-data-port>
    <alg-msrpc-map-data-protocol>
      alg-msrpc-map-data-protocol
    </alg-msrpc-map-data-protocol>
    <alg-msrpc-map-data-uuid>
      alg-msrpc-map-data-uuid
    </alg-msrpc-map-data-uuid>
  </alg-msrpc-map-data>
</alg-msrpc-map>
```

Description

<alg-msrpc-uuid2oid>

Usage

```
<alg-msrpc-uuid2oid>
  <alg-msrpc-uuid2oid-data>....</alg-msrpc-uuid2oid-data>
</alg-msrpc-uuid2oid>
```

Description

<alg-msrpc-uuid2oid-data>

Usage

```
<alg-msrpc-uuid2oid>
  <alg-msrpc-uuid2oid-data>
    <alg-msrpc-uuid2oid-data-uuid>
      alg-msrpc-uuid2oid-data-uuid
    </alg-msrpc-uuid2oid-data-uuid>
    <alg-msrpc-uuid2oid-data-oid>
      alg-msrpc-uuid2oid-data-oid
    </alg-msrpc-uuid2oid-data-oid>
  </alg-msrpc-uuid2oid-data>
</alg-msrpc-uuid2oid>
```

Description

<alg-sccp-call-channel-data>

Usage

```
<alg-sccp-call-information>
  <alg-sccp-call-data>
    <alg-sccp-call-channel-data>
      <alg-sccp-media-receive-channel-ip-address>
        alg-sccp-media-receive-channel-ip-address
      </alg-sccp-media-receive-channel-ip-address>
      <alg-sccp-media-receive-channel-port>
        alg-sccp-media-receive-channel-port
      </alg-sccp-media-receive-channel-port>
      <alg-sccp-media-receive-channel-translated-ip-address>
        alg-sccp-media-receive-channel-translated-ip-address
      </alg-sccp-media-receive-channel-translated-ip-address>
      <alg-sccp-media-receive-channel-translated-port>
```


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```
  alg-sccp-media-receive-channel-translated-port
</alg-sccp-media-receive-channel-translated-port>
<alg-sccp-media-receive-channel-pass-through-party-id>
  alg-sccp-media-receive-channel-pass-through-party-id
</alg-sccp-media-receive-channel-pass-through-party-id>
<alg-sccp-media-receive-channel-resource-id>
  alg-sccp-media-receive-channel-resource-id
</alg-sccp-media-receive-channel-resource-id>
<alg-sccp-media-transmit-channel-ip-address>
  alg-sccp-media-transmit-channel-ip-address
</alg-sccp-media-transmit-channel-ip-address>
<alg-sccp-media-transmit-channel-port>
  alg-sccp-media-transmit-channel-port
</alg-sccp-media-transmit-channel-port>
<alg-sccp-media-transmit-channel-translated-ip-address>
  alg-sccp-media-transmit-channel-translated-ip-address
</alg-sccp-media-transmit-channel-translated-ip-address>
<alg-sccp-media-transmit-channel-translated-port>
  alg-sccp-media-transmit-channel-translated-port
</alg-sccp-media-transmit-channel-translated-port>
<alg-sccp-media-transmit-channel-pass-through-party-id>
  alg-sccp-media-transmit-channel-pass-through-party-id
</alg-sccp-media-transmit-channel-pass-through-party-id>
<alg-sccp-media-transmit-channel-resource-id>
  alg-sccp-media-transmit-channel-resource-id
</alg-sccp-media-transmit-channel-resource-id>
<alg-sccp-multimedia-receive-channel-ip-address>
  alg-sccp-multimedia-receive-channel-ip-address
</alg-sccp-multimedia-receive-channel-ip-address>
<alg-sccp-multimedia-receive-channel-port>
  alg-sccp-multimedia-receive-channel-port
</alg-sccp-multimedia-receive-channel-port>
<alg-sccp-multimedia-receive-channel-translated-ip-address>
  alg-sccp-multimedia-receive-channel-translated-ip-address
</alg-sccp-multimedia-receive-channel-translated-ip-address>
<alg-sccp-multimedia-receive-channel-translated-port>
  alg-sccp-multimedia-receive-channel-translated-port
</alg-sccp-multimedia-receive-channel-translated-port>
<alg-sccp-multimedia-receive-channel-pass-through-party-id>
  alg-sccp-multimedia-receive-channel-pass-through-party-id
</alg-sccp-multimedia-receive-channel-pass-through-party-id>
<alg-sccp-multimedia-receive-channel-resource-id>
  alg-sccp-multimedia-receive-channel-resource-id
</alg-sccp-multimedia-receive-channel-resource-id>
<alg-sccp-multimedia-transmit-channel-ip-address>
  alg-sccp-multimedia-transmit-channel-ip-address
</alg-sccp-multimedia-transmit-channel-ip-address>
<alg-sccp-multimedia-transmit-channel-port>
  alg-sccp-multimedia-transmit-channel-port
</alg-sccp-multimedia-transmit-channel-port>
<alg-sccp-multimedia-transmit-channel-translated-ip-address>
  alg-sccp-multimedia-transmit-channel-translated-ip-address
</alg-sccp-multimedia-transmit-channel-translated-ip-address>
<alg-sccp-multimedia-transmit-channel-translated-port>
  alg-sccp-multimedia-transmit-channel-translated-port
</alg-sccp-multimedia-transmit-channel-translated-port>
```

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```
        <alg-sccp-multimedia-transmit-channel-pass-through-party-id>
          alg-sccp-multimedia-transmit-channel-pass-through-party-id
        </alg-sccp-multimedia-transmit-channel-pass-through-party-id>
        <alg-sccp-multimedia-transmit-channel-resource-id>
          alg-sccp-multimedia-transmit-channel-resource-id
        </alg-sccp-multimedia-transmit-channel-resource-id>
      </alg-sccp-call-channel-data>
    </alg-sccp-call-data>
  </alg-sccp-call-information>
```

Description Channel information for the SCCP call

<alg-sccp-call-data>

Usage

```
<alg-sccp-call-information>
  <alg-sccp-call-data>
    <alg-sccp-call-client-ip-address>
      alg-sccp-call-client-ip-address
    </alg-sccp-call-client-ip-address>
    <alg-sccp-call-client-zone-name>
      alg-sccp-call-client-zone-name
    </alg-sccp-call-client-zone-name>
    <alg-sccp-call-client-zone-id>
      alg-sccp-call-client-zone-id
    </alg-sccp-call-client-zone-id>
    <alg-sccp-call-manager-ip-address>
      alg-sccp-call-manager-ip-address
    </alg-sccp-call-manager-ip-address>
    <alg-sccp-call-conference-id>
      alg-sccp-call-conference-id
    </alg-sccp-call-conference-id>
    <alg-sccp-call-resource-manager-group-id>
      alg-sccp-call-resource-manager-group-id
    </alg-sccp-call-resource-manager-group-id>
    <alg-sccp-call-channel-data>....</alg-sccp-call-channel-data>
  </alg-sccp-call-data>
</alg-sccp-call-information>
```

Description Information about an SCCP call

<alg-sccp-call-information>

Usage

```
<alg-sccp-call-information>
  <alg-sccp-call-data>....</alg-sccp-call-data>
  <alg-sccp-calls-num-active-calls>
    alg-sccp-calls-num-active-calls
  </alg-sccp-calls-num-active-calls>
</alg-sccp-call-information>
```


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Description Information about one or more Skinny Client Control Protocol (SCCP) calls

<alg-sccp-counters>

Usage

```
<alg-sccp-counters>
  <alg-sccp-counters-active-client-sessions>
    alg-sccp-counters-active-client-sessions
  </alg-sccp-counters-active-client-sessions>
  <alg-sccp-counters-packets-dropped>
    alg-sccp-counters-packets-dropped
  </alg-sccp-counters-packets-dropped>
  <alg-sccp-counters-decode-errors>
    alg-sccp-counters-decode-errors
  </alg-sccp-counters-decode-errors>
  <alg-sccp-counters-protocol-errors>
    alg-sccp-counters-protocol-errors
  </alg-sccp-counters-protocol-errors>
  <alg-sccp-counters-nat-errors>
    alg-sccp-counters-nat-errors
  </alg-sccp-counters-nat-errors>
  <alg-sccp-counters-policy-not-found>
    alg-sccp-counters-policy-not-found
  </alg-sccp-counters-policy-not-found>
  <alg-sccp-counters-unknown-pdus>
    alg-sccp-counters-unknown-pdus
  </alg-sccp-counters-unknown-pdus>
  <alg-sccp-counters-maximum-calls-exceeded>
    alg-sccp-counters-maximum-calls-exceeded
  </alg-sccp-counters-maximum-calls-exceeded>
  <alg-sccp-counters-maximum-call-rate-exceeded>
    alg-sccp-counters-maximum-call-rate-exceeded
  </alg-sccp-counters-maximum-call-rate-exceeded>
  <alg-sccp-counters-init-errors>
    alg-sccp-counters-init-errors
  </alg-sccp-counters-init-errors>
  <alg-sccp-counters-internal-errors>
    alg-sccp-counters-internal-errors
  </alg-sccp-counters-internal-errors>
  <alg-sccp-counters-unspecified-errors>
    alg-sccp-counters-unspecified-errors
  </alg-sccp-counters-unspecified-errors>
  <alg-sccp-counters-no-active-calls>
    alg-sccp-counters-no-active-calls
  </alg-sccp-counters-no-active-calls>
  <alg-sccp-counters-no-active-sessions>
    alg-sccp-counters-no-active-sessions
  </alg-sccp-counters-no-active-sessions>
  <alg-sccp-counters-cookie-create-errors>
    alg-sccp-counters-cookie-create-errors
  </alg-sccp-counters-cookie-create-errors>
  <alg-sccp-counters-bad-nat-cookie>
    alg-sccp-counters-bad-nat-cookie
  </alg-sccp-counters-bad-nat-cookie>
  <alg-sccp-counters-nat-cookie-not-found>
```

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```
    alg-sccp-counters-nat-cookie-not-found
  </alg-sccp-counters-nat-cookie-not-found>
  <alg-sccp-counters-dscp-marked-errors>
    alg-sccp-counters-dscp-marked-errors
  </alg-sccp-counters-dscp-marked-errors>
  <alg-sccp-counters-active-calls>
    alg-sccp-counters-active-calls
  </alg-sccp-counters-active-calls>
  <alg-sccp-counters-total-calls>
    alg-sccp-counters-total-calls
  </alg-sccp-counters-total-calls>
  <alg-sccp-counters-packets-received>
    alg-sccp-counters-packets-received
  </alg-sccp-counters-packets-received>
  <alg-sccp-counters-pdus-processed>
    alg-sccp-counters-pdus-processed
  </alg-sccp-counters-pdus-processed>
  <alg-sccp-counters-current-call-rate>
    alg-sccp-counters-current-call-rate
  </alg-sccp-counters-current-call-rate>
  <alg-sccp-counters-dscp-marked>
    alg-sccp-counters-dscp-marked
  </alg-sccp-counters-dscp-marked>
</alg-sccp-counters>
```

Description Skinny Client Control Protocol (SCCP) Application Layer Gateway (ALG) counters representing runtime information

<alg-sip-call-information>

Usage

```
<alg-sip-call-information>
  <alg-sip-calls-total-num-calls>
    alg-sip-calls-total-num-calls
  </alg-sip-calls-total-num-calls>
  <alg-sip-calls-data>....</alg-sip-calls-data>
</alg-sip-call-information>
```

Description

<alg-sip-calls-data>

Usage

```
<alg-sip-call-information>
  <alg-sip-calls-data>
    <alg-sip-calls-call-id>
      alg-sip-calls-call-id
    </alg-sip-calls-call-id>
    <alg-sip-calls-method>
      alg-sip-calls-method
    </alg-sip-calls-method>
    <alg-sip-calls-state>
      alg-sip-calls-state
```


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```
    </alg-sip-calls-state>
    <alg-sip-calls-rm-group-id>
      alg-sip-calls-rm-group-id
    </alg-sip-calls-rm-group-id>
  </alg-sip-calls-data>
</alg-sip-call-information>
```

Description

<alg-sip-counter-information>

Usage

```
<alg-sip-counter-information>
  <alg-sip-counters-data>....</alg-sip-counters-data>
  <alg-sip-counters-total-packet-in>
    alg-sip-counters-total-packet-in
  </alg-sip-counters-total-packet-in>
  <alg-sip-counters-pkt-drop-on-error>
    alg-sip-counters-pkt-drop-on-error
  </alg-sip-counters-pkt-drop-on-error>
  <alg-sip-counters-call-error>
    alg-sip-counters-call-error
  </alg-sip-counters-call-error>
  <alg-sip-counters-ip-resolve-error>
    alg-sip-counters-ip-resolve-error
  </alg-sip-counters-ip-resolve-error>
  <alg-sip-counters-nat-error>
    alg-sip-counters-nat-error
  </alg-sip-counters-nat-error>
  <alg-sip-counters-resmgr-error>
    alg-sip-counters-resmgr-error
  </alg-sip-counters-resmgr-error>
  <alg-sip-counters-rr-hdr-exceeded-max>
    alg-sip-counters-rr-hdr-exceeded-max
  </alg-sip-counters-rr-hdr-exceeded-max>
  <alg-sip-counters-contact-hdr-exceeded-max>
    alg-sip-counters-contact-hdr-exceeded-max
  </alg-sip-counters-contact-hdr-exceeded-max>
  <alg-sip-counters-call-drop-to-limit>
    alg-sip-counters-call-drop-to-limit
  </alg-sip-counters-call-drop-to-limit>
  <alg-sip-counters-sip-stack-error>
    alg-sip-counters-sip-stack-error
  </alg-sip-counters-sip-stack-error>
  <alg-sip-counters-sip-decode-error>
    alg-sip-counters-sip-decode-error
  </alg-sip-counters-sip-decode-error>
  <alg-sip-counters-unknown-method-error>
    alg-sip-counters-unknown-method-error
  </alg-sip-counters-unknown-method-error>
  <alg-sip-counters-dscp-marked>
    alg-sip-counters-dscp-marked
  </alg-sip-counters-dscp-marked>
  <alg-sip-counters-dscp-marked-error>
    alg-sip-counters-dscp-marked-error
```

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```
</alg-sip-counters-dscp-marked-error>
<alg-sip-counters-ha-packet-out>
  alg-sip-counters-ha-packet-out
</alg-sip-counters-ha-packet-out>
<alg-sip-counters-ha-packet-in>
  alg-sip-counters-ha-packet-in
</alg-sip-counters-ha-packet-in>
<alg-sip-counters-ha-buffer-alloc-error>
  alg-sip-counters-ha-buffer-alloc-error
</alg-sip-counters-ha-buffer-alloc-error>
<alg-sip-counters-ha-transmit-error>
  alg-sip-counters-ha-transmit-error
</alg-sip-counters-ha-transmit-error>
<alg-sip-counters-ha-send-proc-error>
  alg-sip-counters-ha-send-proc-error
</alg-sip-counters-ha-send-proc-error>
<alg-sip-counters-ha-receive-proc-error>
  alg-sip-counters-ha-receive-proc-error
</alg-sip-counters-ha-receive-proc-error>
<alg-sip-counters-ha-receive-inv-len-error>
  alg-sip-counters-ha-receive-inv-len-error
</alg-sip-counters-ha-receive-inv-len-error>
<alg-sip-counters-ha-receive-call-proc-error>
  alg-sip-counters-ha-receive-call-proc-error
</alg-sip-counters-ha-receive-call-proc-error>
<alg-sip-counters-ha-receive-call-alloc-error>
  alg-sip-counters-ha-receive-call-alloc-error
</alg-sip-counters-ha-receive-call-alloc-error>
<alg-sip-counters-ha-receive-call-reg-error>
  alg-sip-counters-ha-receive-call-reg-error
</alg-sip-counters-ha-receive-call-reg-error>
<alg-sip-counters-ha-receive-invalid-status-error>
  alg-sip-counters-ha-receive-invalid-status-error
</alg-sip-counters-ha-receive-invalid-status-error>
</alg-sip-counter-information>
```

Description

<alg-sip-counters-data>

Usage

```
<alg-sip-counter-information>
  <alg-sip-counters-data>
    <alg-sip-counters-tbl-method>
      alg-sip-counters-tbl-method
    </alg-sip-counters-tbl-method>
    <alg-sip-counters-tbl-transmit>
      alg-sip-counters-tbl-transmit
    </alg-sip-counters-tbl-transmit>
    <alg-sip-counters-tbl-retransmit>
      alg-sip-counters-tbl-retransmit
    </alg-sip-counters-tbl-retransmit>
    <alg-sip-counters-tbl-transmit-1xx>
      alg-sip-counters-tbl-transmit-1xx
    </alg-sip-counters-tbl-transmit-1xx>
```


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```
<alg-sip-counters-tbl-retransmit-1xx>
  alg-sip-counters-tbl-retransmit-1xx
</alg-sip-counters-tbl-retransmit-1xx>
<alg-sip-counters-tbl-transmit-2xx>
  alg-sip-counters-tbl-transmit-2xx
</alg-sip-counters-tbl-transmit-2xx>
<alg-sip-counters-tbl-retransmit-2xx>
  alg-sip-counters-tbl-retransmit-2xx
</alg-sip-counters-tbl-retransmit-2xx>
<alg-sip-counters-tbl-transmit-3xx>
  alg-sip-counters-tbl-transmit-3xx
</alg-sip-counters-tbl-transmit-3xx>
<alg-sip-counters-tbl-retransmit-3xx>
  alg-sip-counters-tbl-retransmit-3xx
</alg-sip-counters-tbl-retransmit-3xx>
<alg-sip-counters-tbl-transmit-4xx>
  alg-sip-counters-tbl-transmit-4xx
</alg-sip-counters-tbl-transmit-4xx>
<alg-sip-counters-tbl-retransmit-4xx>
  alg-sip-counters-tbl-retransmit-4xx
</alg-sip-counters-tbl-retransmit-4xx>
<alg-sip-counters-tbl-transmit-5xx>
  alg-sip-counters-tbl-transmit-5xx
</alg-sip-counters-tbl-transmit-5xx>
<alg-sip-counters-tbl-retransmit-5xx>
  alg-sip-counters-tbl-retransmit-5xx
</alg-sip-counters-tbl-retransmit-5xx>
<alg-sip-counters-tbl-transmit-6xx>
  alg-sip-counters-tbl-transmit-6xx
</alg-sip-counters-tbl-transmit-6xx>
<alg-sip-counters-tbl-retransmit-6xx>
  alg-sip-counters-tbl-retransmit-6xx
</alg-sip-counters-tbl-retransmit-6xx>
</alg-sip-counters-data>
</alg-sip-counter-information>
```

Description

<alg-sip-rate>

Usage

```
<alg-sip-rate>
  <alg-sip-rate-last-msg-time>
    alg-sip-rate-last-msg-time
  </alg-sip-rate-last-msg-time>
  <alg-sip-rate-num_message>
    alg-sip-rate-num_message
  </alg-sip-rate-num_message>
  <alg-sip-rate-msg-time-taken>
    alg-sip-rate-msg-time-taken
  </alg-sip-rate-msg-time-taken>
  <alg-sip-rate-msg-rate>
    alg-sip-rate-msg-rate
  </alg-sip-rate-msg-rate>
```

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```
</alg-sip-rate>
```

Description

<alg-status>

Usage

```
<alg-status>
  <alg-dns-status>
    alg-dns-status
  </alg-dns-status>
  <alg-ftp-status>
    alg-ftp-status
  </alg-ftp-status>
  <alg-h323-status>
    alg-h323-status
  </alg-h323-status>
  <alg-mgcp-status>
    alg-mgcp-status
  </alg-mgcp-status>
  <alg-msrpc-status>
    alg-msrpc-status
  </alg-msrpc-status>
  <alg-pptp-status>
    alg-pptp-status
  </alg-pptp-status>
  <alg-rsh-status>
    alg-rsh-status
  </alg-rsh-status>
  <alg-rtsp-status>
    alg-rtsp-status
  </alg-rtsp-status>
  <alg-sccp-status>
    alg-sccp-status
  </alg-sccp-status>
  <alg-sip-status>
    alg-sip-status
  </alg-sip-status>
  <alg-sql-status>
    alg-sql-status
  </alg-sql-status>
  <alg-sunrpc-status>
    alg-sunrpc-status
  </alg-sunrpc-status>
  <alg-talk-status>
    alg-talk-status
  </alg-talk-status>
  <alg-tftp-status>
    alg-tftp-status
  </alg-tftp-status>
  <alg-ike-esp-nat-status>
    alg-ike-esp-nat-status
  </alg-ike-esp-nat-status>
</alg-status>
```


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Description

<alg-sunrpc-map>

Usage

```
<alg-sunrpc-map>
  <alg-sunrpc-map-data>....</alg-sunrpc-map-data>
</alg-sunrpc-map>
```

Description

<alg-sunrpc-map-data>

Usage

```
<alg-sunrpc-map>
  <alg-sunrpc-map-data>
    <alg-sunrpc-map-data-ip>
      alg-sunrpc-map-data-ip
    </alg-sunrpc-map-data-ip>
    <alg-sunrpc-map-data-port>
      alg-sunrpc-map-data-port
    </alg-sunrpc-map-data-port>
    <alg-sunrpc-map-data-protocol>
      alg-sunrpc-map-data-protocol
    </alg-sunrpc-map-data-protocol>
    <alg-sunrpc-map-data-program>
      alg-sunrpc-map-data-program
    </alg-sunrpc-map-data-program>
  </alg-sunrpc-map-data>
</alg-sunrpc-map>
```

Description

<ike-esp-cookies>

Usage

```
<alg-ike-esp-show>
  <ike-esp-cookies>
    <ike-esp-icookie>
      ike-esp-icookie
    </ike-esp-icookie>
    <ike-esp-rcookie>
      ike-esp-rcookie
    </ike-esp-rcookie>
    <ike-esp-session>
      ike-esp-session
    </ike-esp-session>
    <ike-esp-state>
      ike-esp-state
    </ike-esp-state>
    <ike-esp-age>
      ike-esp-age
    </ike-esp-age>
  </ike-esp-cookies>
```

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```
</alg-ike-esp-show>
```

Description

Summary of AVT Response Tags

<avt-counter-statistics>

Usage

```
<avt-counters>
  <avt-counter-statistics>
    <name>
      name
    </name>
    <value>
      value
    </value>
  </avt-counter-statistics>
</avt-counters>
```

Description

<avt-counters>

Usage

```
<avt-counters>
  <avt-counter-statistics>....</avt-counter-statistics>
</avt-counters>
```

Description

Summary of Data Link Switching Response Tags

<dlsw-capabilities>

Usage

```
<dlsw-capabilities>
  <peer-address>
    peer-address
  </peer-address>
  <vendor-id>
    vendor-id
  </vendor-id>
  <version-number>
    version-number
  </version-number>
  <initial-pacing-window-size>
    initial-pacing-window-size
  </initial-pacing-window-size>
  <version-string>
    version-string
  </version-string>
```


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```
  <dlsw-capability-strings>....</dlsw-capability-strings>
  <version-string-multi>....</version-string-multi>
</dlsw-capabilities>
```

Description

<dlsw-capabilities>

Usage

```
<dlsw-capabilities-list>
  <dlsw-capabilities>
    <peer-address>
      peer-address
    </peer-address>
    <vendor-id>
      vendor-id
    </vendor-id>
    <version-number>
      version-number
    </version-number>
    <initial-pacing-window-size>
      initial-pacing-window-size
    </initial-pacing-window-size>
    <version-string>
      version-string
    </version-string>
    <dlsw-capability-strings>....</dlsw-capability-strings>
    <version-string-multi>....</version-string-multi>
  </dlsw-capabilities>
</dlsw-capabilities-list>
```

Description

<dlsw-capabilities-list>

Usage

```
<dlsw-capabilities-list>
  <dlsw-capabilities>....</dlsw-capabilities>
</dlsw-capabilities-list>
```

Description

<dlsw-capability-strings>

Usage

```
<dlsw-capabilities>
  <dlsw-capability-strings>
</dlsw-capability-strings>
</dlsw-capabilities>
```

Description

<dlsw-capability-strings>

Usage

```
<dlsw-capabilities-list>
  <dlsw-capabilities>
    <dlsw-capability-strings>
 </dlsw-capability-strings>
  </dlsw-capabilities>
</dlsw-capabilities-list>
```

Description

<dlsw-circuit>

Usage

```
<dlsw-circuit>
  <local-address>
    local-address
  </local-address>
  <lsap>
    lsap
  </lsap>
  <remote-address>
    remote-address
  </remote-address>
  <dsap>
    dsap
  </dsap>
  <circuit-state>
    circuit-state
  </circuit-state>
  <peer-address>
    peer-address
  </peer-address>
  <circuit-id>
    circuit-id
  </circuit-id>
  <circuit-uptime>
    circuit-uptime
  </circuit-uptime>
  <current-state-time>
    current-state-time
  </current-state-time>
  <max-btu-size>
    max-btu-size
  </max-btu-size>
  <circuit-priority>
    circuit-priority
  </circuit-priority>
  <dlsw-circuit-statistics>....</dlsw-circuit-statistics>
</dlsw-circuit>
```

Description

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<dlsw-circuit>

Usage

```
<dlsw-circuit-list>
  <dlsw-circuit>
    <local-address>
      local-address
    </local-address>
    <lsap>
      lsap
    </lsap>
    <remote-address>
      remote-address
    </remote-address>
    <dsap>
      dsap
    </dsap>
    <circuit-state>
      circuit-state
    </circuit-state>
    <peer-address>
      peer-address
    </peer-address>
    <circuit-id>
      circuit-id
    </circuit-id>
    <circuit-uptime>
      circuit-uptime
    </circuit-uptime>
    <current-state-time>
      current-state-time
    </current-state-time>
    <max-btu-size>
      max-btu-size
    </max-btu-size>
    <circuit-priority>
      circuit-priority
    </circuit-priority>
    <dlsw-circuit-statistics>....</dlsw-circuit-statistics>
  </dlsw-circuit>
</dlsw-circuit-list>
```

Description

<dlsw-circuit-list>

Usage

```
<dlsw-circuit-list>
  <dlsw-circuit>....</dlsw-circuit>
</dlsw-circuit-list>
```

Description

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<dlsw-circuit-statistics>

Usage

```
<dlsw-circuit-statistics>
  <iframes-received>
    iframes-received
  </iframes-received>
  <iframes-sent>
    iframes-sent
  </iframes-sent>
  <ibytes-received>
    ibytes-received
  </ibytes-received>
  <ibytes-sent>
    ibytes-sent
  </ibytes-sent>
  <iframes-rejected>
    iframes-rejected
  </iframes-rejected>
  <ibytes-rejected>
    ibytes-rejected
  </ibytes-rejected>
  <iframes-retransmitted>
    iframes-retransmitted
  </iframes-retransmitted>
  <ibytes-retransmitted>
    ibytes-retransmitted
  </ibytes-retransmitted>
  <reject-sent>
    reject-sent
  </reject-sent>
  <reject-received>
    reject-received
  </reject-received>
  <xid-sent>
    xid-sent
  </xid-sent>
  <xid-received>
    xid-received
  </xid-received>
</dlsw-circuit-statistics>
```

Description DLSw circuit statistics

<dlsw-circuit-statistics>

Usage

```
<dlsw-circuit>
  <dlsw-circuit-statistics>
    <iframes-received>
      iframes-received
    </iframes-received>
    <iframes-sent>
```


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```
      iframes-sent
    </iframes-sent>
    <ibytes-received>
      ibytes-received
    </ibytes-received>
    <ibytes-sent>
      ibytes-sent
    </ibytes-sent>
    <iframes-rejected>
      iframes-rejected
    </iframes-rejected>
    <ibytes-rejected>
      ibytes-rejected
    </ibytes-rejected>
    <iframes-retransmitted>
      iframes-retransmitted
    </iframes-retransmitted>
    <ibytes-retransmitted>
      ibytes-retransmitted
    </ibytes-retransmitted>
    <reject-sent>
      reject-sent
    </reject-sent>
    <reject-received>
      reject-received
    </reject-received>
    <xid-sent>
      xid-sent
    </xid-sent>
    <xid-received>
      xid-received
    </xid-received>
  </dlsw-circuit-statistics>
</dlsw-circuit>
```

Description DLSw circuit statistics

<dlsw-circuit-statistics>

Usage

```
<dlsw-circuit-list>
  <dlsw-circuit>
    <dlsw-circuit-statistics>
      <iframes-received>
        iframes-received
      </iframes-received>
      <iframes-sent>
        iframes-sent
      </iframes-sent>
      <ibytes-received>
        ibytes-received
      </ibytes-received>
      <ibytes-sent>
        ibytes-sent
```

```
      </ibytes-sent>
      <iframes-rejected>
        iframes-rejected
      </iframes-rejected>
      <ibytes-rejected>
        ibytes-rejected
      </ibytes-rejected>
      <iframes-retransmitted>
        iframes-retransmitted
      </iframes-retransmitted>
      <ibytes-retransmitted>
        ibytes-retransmitted
      </ibytes-retransmitted>
      <reject-sent>
        reject-sent
      </reject-sent>
      <reject-received>
        reject-received
      </reject-received>
      <xid-sent>
        xid-sent
      </xid-sent>
      <xid-received>
        xid-received
      </xid-received>
    </dlsw-circuit-statistics>
  </dlsw-circuit>
</dlsw-circuit-list>
```

Description DLSw circuit statistics

<dlsw-peer>

Usage

```
<dlsw-peer>
  <peer-address>
    peer-address
  </peer-address>
  <peer-state>
    peer-state
  </peer-state>
  <peer-circuits>
    peer-circuits
  </peer-circuits>
  <local-address>
    local-address
  </local-address>
  <peer-uptime>
    peer-uptime
  </peer-uptime>
  <initial-receive-pacing>
    initial-receive-pacing
  </initial-receive-pacing>
  <connection-idle-timeout>
```


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```
  connection-idle-timeout
 </connection-idle-timeout>
 <dlsw-peer-statistics>....</dlsw-peer-statistics>
 <tos-value>
  tos-value
 </tos-value>
 <destination-sna-interface>
  destination-sna-interface
 </destination-sna-interface>
 <peer-cost>
  peer-cost
 </peer-cost>
 <peer-circuit-weight>
  peer-circuit-weight
 </peer-circuit-weight>
 <load-balance>
  load-balance
 </load-balance>
</dlsw-peer>
```

Description

<dlsw-peer>

Usage

```
<dlsw-peer-list>
 <dlsw-peer>
  <peer-address>
   peer-address
  </peer-address>
  <peer-state>
   peer-state
  </peer-state>
  <peer-circuits>
   peer-circuits
  </peer-circuits>
  <local-address>
   local-address
  </local-address>
  <peer-uptime>
   peer-uptime
  </peer-uptime>
  <initial-receive-pacing>
   initial-receive-pacing
  </initial-receive-pacing>
  <connection-idle-timeout>
   connection-idle-timeout
  </connection-idle-timeout>
  <dlsw-peer-statistics>....</dlsw-peer-statistics>
  <tos-value>
   tos-value
  </tos-value>
  <destination-sna-interface>
   destination-sna-interface
  </destination-sna-interface>
```

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```
    <peer-cost>
      peer-cost
    </peer-cost>
    <peer-circuit-weight>
      peer-circuit-weight
    </peer-circuit-weight>
    <load-balance>
      load-balance
    </load-balance>
  </dlsw-peer>
</dlsw-peer-list>
```

Description

<dlsw-peer-list>

Usage

```
<dlsw-peer-list>
  <dlsw-peer>....</dlsw-peer>
</dlsw-peer-list>
```

Description

<dlsw-peer-statistics>

Usage

```
<dlsw-peer-statistics>
  <packets-received>
    packets-received
  </packets-received>
  <packets-sent>
    packets-sent
  </packets-sent>
  <bytes-received>
    bytes-received
  </bytes-received>
  <bytes-sent>
    bytes-sent
  </bytes-sent>
  <control-packets-received>
    control-packets-received
  </control-packets-received>
  <control-packets-sent>
    control-packets-sent
  </control-packets-sent>
  <canureach-ex-received>
    canureach-ex-received
  </canureach-ex-received>
  <canureach-ex-sent>
    canureach-ex-sent
  </canureach-ex-sent>
  <icanreach-ex-received>
    icanreach-ex-received
  </icanreach-ex-received>
```


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```
<icanreach-ex-sent>
  icanreach-ex-sent
</icanreach-ex-sent>
</dlsw-peer-statistics>
```

Description DLSw Peer Statistics

<dlsw-peer-statistics>

Usage

```
<dlsw-peer>
  <dlsw-peer-statistics>
    <packets-received>
      packets-received
    </packets-received>
    <packets-sent>
      packets-sent
    </packets-sent>
    <bytes-received>
      bytes-received
    </bytes-received>
    <bytes-sent>
      bytes-sent
    </bytes-sent>
    <control-packets-received>
      control-packets-received
    </control-packets-received>
    <control-packets-sent>
      control-packets-sent
    </control-packets-sent>
    <canureach-ex-received>
      canureach-ex-received
    </canureach-ex-received>
    <canureach-ex-sent>
      canureach-ex-sent
    </canureach-ex-sent>
    <icanreach-ex-received>
      icanreach-ex-received
    </icanreach-ex-received>
    <icanreach-ex-sent>
      icanreach-ex-sent
    </icanreach-ex-sent>
  </dlsw-peer-statistics>
</dlsw-peer>
```

Description DLSw Peer Statistics

<dlsw-peer-statistics>

Usage

```
<dlsw-peer-list>
  <dlsw-peer>
```

```
<dlsw-peer-statistics>
  <packets-received>
    packets-received
  </packets-received>
  <packets-sent>
    packets-sent
  </packets-sent>
  <bytes-received>
    bytes-received
  </bytes-received>
  <bytes-sent>
    bytes-sent
  </bytes-sent>
  <control-packets-received>
    control-packets-received
  </control-packets-received>
  <control-packets-sent>
    control-packets-sent
  </control-packets-sent>
  <canureach-ex-received>
    canureach-ex-received
  </canureach-ex-received>
  <canureach-ex-sent>
    canureach-ex-sent
  </canureach-ex-sent>
  <icanreach-ex-received>
    icanreach-ex-received
  </icanreach-ex-received>
  <icanreach-ex-sent>
    icanreach-ex-sent
  </icanreach-ex-sent>
</dlsw-peer-statistics>
</dlsw-peer>
</dlsw-peer-list>
```

Description DLSw Peer Statistics

<dlsw-reachability>

Usage

```
<dlsw-reachability>
  <mac-index>
    mac-index
  </mac-index>
  <mac-address>
    mac-address
  </mac-address>
  <mac-location>
    mac-location
  </mac-location>
  <remote-dlsw-address>
    remote-dlsw-address
  </remote-dlsw-address>
  <dlsw-peer-interface>
```


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```
    dlsw-peer-interface
  </dlsw-peer-interface>
</dlsw-reachability>
```

Description

<dlsw-reachability>

Usage

```
<dlsw-reachability-list>
  <dlsw-reachability>
    <mac-index>
      mac-index
    </mac-index>
    <mac-address>
      mac-address
    </mac-address>
    <mac-location>
      mac-location
    </mac-location>
    <remote-dlsw-address>
      remote-dlsw-address
    </remote-dlsw-address>
    <dlsw-peer-interface>
      dlsw-peer-interface
    </dlsw-peer-interface>
  </dlsw-reachability>
</dlsw-reachability-list>
```

Description

<dlsw-reachability-list>

Usage

```
<dlsw-reachability-list>
  <dlsw-reachability>....</dlsw-reachability>
</dlsw-reachability-list>
```

Description

<dlsw-version>

Usage

```
  <dlsw-version>
</dlsw-version>
```

Description

<llc2>

Usage

```
<llc2>
```

```
<interface>
  interface
</interface>
<track-peer>
  track-peer
</track-peer>
<track-destination>
  track-destination
</track-destination>
<track-interface>
  track-interface
</track-interface>
<unit>
  unit
</unit>
<group>
  group
</group>
<interface-state>
  interface-state
</interface-state>
<state>
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
```


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```
  </ifl-index>
  <advertise-interval>
   advertise-interval
  </advertise-interval>
  <advertise-timer>
   advertise-timer
  </advertise-timer>
  <preempt>
   preempt
  </preempt>
  <master-router-uptime>
   master-router-uptime
  </master-router-uptime>
  <tracking>
   tracking
  </tracking>
  <interface-ads-sent>
   interface-ads-sent
  </interface-ads-sent>
  <interface-ads-received>
   interface-ads-received
  </interface-ads-received>
  <interface-bad-ttl-value-received>
   interface-bad-ttl-value-received
  </interface-bad-ttl-value-received>
  <interface-bad-version-received>
   interface-bad-version-received
  </interface-bad-version-received>
  <interface-bad-pdu-type-received>
   interface-bad-pdu-type-received
  </interface-bad-pdu-type-received>
  <interface-bad-checksum-received>
   interface-bad-checksum-received
  </interface-bad-checksum-received>
</llc2>
```

Description

<llc2>

Usage

```
<llc2-redundancy-track-interface>
 <llc2>
  <interface>
   interface
  </interface>
  <track-peer>
   track-peer
  </track-peer>
  <track-destination>
   track-destination
  </track-destination>
  <track-interface>
   track-interface
  </track-interface>
```

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```
<unit>
  unit
</unit>
<group>
  group
</group>
<interface-state>
  interface-state
</interface-state>
<state>
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
```


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```
    </master-router-uptime>
    <tracking>
      tracking
    </tracking>
    <interface-ads-sent>
      interface-ads-sent
    </interface-ads-sent>
    <interface-ads-received>
      interface-ads-received
    </interface-ads-received>
    <interface-bad-ttl-value-received>
      interface-bad-ttl-value-received
    </interface-bad-ttl-value-received>
    <interface-bad-version-received>
      interface-bad-version-received
    </interface-bad-version-received>
    <interface-bad-pdu-type-received>
      interface-bad-pdu-type-received
    </interface-bad-pdu-type-received>
    <interface-bad-checksum-received>
      interface-bad-checksum-received
    </interface-bad-checksum-received>
  </llc2>
</llc2-redundancy-track-interface>
```

Description

<llc2>

Usage

```
<llc2-redundancy-track-interface-list>
  <llc2-redundancy-track-interface>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
        track-peer
      </track-peer>
      <track-destination>
        track-destination
      </track-destination>
      <track-interface>
        track-interface
      </track-interface>
      <unit>
        unit
      </unit>
      <group>
        group
      </group>
      <interface-state>
        interface-state
      </interface-state>
      <state>
```

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```
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<tracking>
  tracking
</tracking>
<interface-ads-sent>
  interface-ads-sent
</interface-ads-sent>
<interface-ads-received>
  interface-ads-received
</interface-ads-received>
```


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```
      <interface-bad-ttl-value-received>
       interface-bad-ttl-value-received
      </interface-bad-ttl-value-received>
      <interface-bad-version-received>
       interface-bad-version-received
      </interface-bad-version-received>
      <interface-bad-pdu-type-received>
       interface-bad-pdu-type-received
      </interface-bad-pdu-type-received>
      <interface-bad-checksum-received>
       interface-bad-checksum-received
      </interface-bad-checksum-received>
     </llc2>
    </llc2-redundancy-track-interface>
   </llc2-redundancy-track-interface-list>
```

Description

<llc2>

Usage

```
<llc2-redundancy-track-dlsw-peer>
 <llc2>
  <interface>
   interface
  </interface>
  <track-peer>
   track-peer
  </track-peer>
  <track-destination>
   track-destination
  </track-destination>
  <track-interface>
   track-interface
  </track-interface>
  <unit>
   unit
  </unit>
  <group>
   group
  </group>
  <interface-state>
   interface-state
  </interface-state>
  <state>
   state
  </state>
  <track-interface-state>
   track-interface-state
  </track-interface-state>
  <track-interface-cost>
   track-interface-cost
  </track-interface-cost>
  <track-peer-state>
   track-peer-state
```

```
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<tracking>
  tracking
</tracking>
<interface-ads-sent>
  interface-ads-sent
</interface-ads-sent>
<interface-ads-received>
  interface-ads-received
</interface-ads-received>
<interface-bad-ttl-value-received>
  interface-bad-ttl-value-received
</interface-bad-ttl-value-received>
<interface-bad-version-received>
  interface-bad-version-received
</interface-bad-version-received>
<interface-bad-pdu-type-received>
  interface-bad-pdu-type-received
</interface-bad-pdu-type-received>
<interface-bad-checksum-received>
```


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```
      interface-bad-checksum-received
    </interface-bad-checksum-received>
  </llc2>
</llc2-redundancy-track-dlsw-peer>
```

Description

<llc2>

Usage

```
<llc2-redundancy-track-dlsw-peer-list>
  <llc2-redundancy-track-dlsw-peer>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
        track-peer
      </track-peer>
      <track-destination>
        track-destination
      </track-destination>
      <track-interface>
        track-interface
      </track-interface>
      <unit>
        unit
      </unit>
      <group>
        group
      </group>
      <interface-state>
        interface-state
      </interface-state>
      <state>
        state
      </state>
      <track-interface-state>
        track-interface-state
      </track-interface-state>
      <track-interface-cost>
        track-interface-cost
      </track-interface-cost>
      <track-peer-state>
        track-peer-state
      </track-peer-state>
      <track-peer-cost>
        track-peer-cost
      </track-peer-cost>
      <track-destination-state>
        track-destination-state
      </track-destination-state>
      <track-destination-cost>
        track-destination-cost
      </track-destination-cost>
```

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```
        <group-configured-priority>
          group-configured-priority
        </group-configured-priority>
        <group-run-priority>
          group-run-priority
        </group-run-priority>
        <local-mac>
          local-mac
        </local-mac>
        <remote-mac>
          remote-mac
        </remote-mac>
        <ifl-index>
          ifl-index
        </ifl-index>
        <advertise-interval>
          advertise-interval
        </advertise-interval>
        <advertise-timer>
          advertise-timer
        </advertise-timer>
        <preempt>
          preempt
        </preempt>
        <master-router-uptime>
          master-router-uptime
        </master-router-uptime>
        <tracking>
          tracking
        </tracking>
        <interface-ads-sent>
          interface-ads-sent
        </interface-ads-sent>
        <interface-ads-received>
          interface-ads-received
        </interface-ads-received>
        <interface-bad-ttl-value-received>
          interface-bad-ttl-value-received
        </interface-bad-ttl-value-received>
        <interface-bad-version-received>
          interface-bad-version-received
        </interface-bad-version-received>
        <interface-bad-pdu-type-received>
          interface-bad-pdu-type-received
        </interface-bad-pdu-type-received>
        <interface-bad-checksum-received>
          interface-bad-checksum-received
        </interface-bad-checksum-received>
      </llc2>
    </llc2-redundancy-track-dlsw-peer>
  </llc2-redundancy-track-dlsw-peer-list>
```

Description

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<llc2>

Usage

```
<llc2-redundancy-track-dlsw-destination>
 <llc2>
  <interface>
   interface
  </interface>
  <track-peer>
   track-peer
  </track-peer>
  <track-destination>
   track-destination
  </track-destination>
  <track-interface>
   track-interface
  </track-interface>
  <unit>
   unit
  </unit>
  <group>
   group
  </group>
  <interface-state>
   interface-state
  </interface-state>
  <state>
   state
  </state>
  <track-interface-state>
   track-interface-state
  </track-interface-state>
  <track-interface-cost>
   track-interface-cost
  </track-interface-cost>
  <track-peer-state>
   track-peer-state
  </track-peer-state>
  <track-peer-cost>
   track-peer-cost
  </track-peer-cost>
  <track-destination-state>
   track-destination-state
  </track-destination-state>
  <track-destination-cost>
   track-destination-cost
  </track-destination-cost>
  <group-configured-priority>
   group-configured-priority
  </group-configured-priority>
  <group-run-priority>
   group-run-priority
  </group-run-priority>
  <local-mac>
   local-mac
```

```
    </local-mac>
    <remote-mac>
      remote-mac
    </remote-mac>
    <ifl-index>
      ifl-index
    </ifl-index>
    <advertise-interval>
      advertise-interval
    </advertise-interval>
    <advertise-timer>
      advertise-timer
    </advertise-timer>
    <preempt>
      preempt
    </preempt>
    <master-router-uptime>
      master-router-uptime
    </master-router-uptime>
    <tracking>
      tracking
    </tracking>
    <interface-ads-sent>
      interface-ads-sent
    </interface-ads-sent>
    <interface-ads-received>
      interface-ads-received
    </interface-ads-received>
    <interface-bad-ttl-value-received>
      interface-bad-ttl-value-received
    </interface-bad-ttl-value-received>
    <interface-bad-version-received>
      interface-bad-version-received
    </interface-bad-version-received>
    <interface-bad-pdu-type-received>
      interface-bad-pdu-type-received
    </interface-bad-pdu-type-received>
    <interface-bad-checksum-received>
      interface-bad-checksum-received
    </interface-bad-checksum-received>
  </llc2>
</llc2-redundancy-track-dlsw-destination>
```

Description

<llc2>

Usage

```
<llc2-redundancy-track-dlsw-destination-list>
  <llc2-redundancy-track-dlsw-destination>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
```


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```
  track-peer
</track-peer>
<track-destination>
  track-destination
</track-destination>
<track-interface>
  track-interface
</track-interface>
<unit>
  unit
</unit>
<group>
  group
</group>
<interface-state>
  interface-state
</interface-state>
<state>
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
```

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```
        <advertise-timer>
          advertise-timer
        </advertise-timer>
        <preempt>
          preempt
        </preempt>
        <master-router-uptime>
          master-router-uptime
        </master-router-uptime>
        <tracking>
          tracking
        </tracking>
        <interface-ads-sent>
          interface-ads-sent
        </interface-ads-sent>
        <interface-ads-received>
          interface-ads-received
        </interface-ads-received>
        <interface-bad-ttl-value-received>
          interface-bad-ttl-value-received
        </interface-bad-ttl-value-received>
        <interface-bad-version-received>
          interface-bad-version-received
        </interface-bad-version-received>
        <interface-bad-pdu-type-received>
          interface-bad-pdu-type-received
        </interface-bad-pdu-type-received>
        <interface-bad-checksum-received>
          interface-bad-checksum-received
        </interface-bad-checksum-received>
      </llc2>
    </llc2-redundancy-track-dlsw-destination>
  </llc2-redundancy-track-dlsw-destination-list>
```

Description

<llc2>

Usage

```
<llc2-redundancy-mac-translation>
  <llc2>
    <interface>
      interface
    </interface>
    <track-peer>
      track-peer
    </track-peer>
    <track-destination>
      track-destination
    </track-destination>
    <track-interface>
      track-interface
    </track-interface>
    <unit>
      unit
```


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```
</unit>
<group>
  group
</group>
<interface-state>
  interface-state
</interface-state>
<state>
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<tracking>
```

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```
      tracking
    </tracking>
    <interface-ads-sent>
      interface-ads-sent
    </interface-ads-sent>
    <interface-ads-received>
      interface-ads-received
    </interface-ads-received>
    <interface-bad-ttl-value-received>
      interface-bad-ttl-value-received
    </interface-bad-ttl-value-received>
    <interface-bad-version-received>
      interface-bad-version-received
    </interface-bad-version-received>
    <interface-bad-pdu-type-received>
      interface-bad-pdu-type-received
    </interface-bad-pdu-type-received>
    <interface-bad-checksum-received>
      interface-bad-checksum-received
    </interface-bad-checksum-received>
  </llc2>
</llc2-redundancy-mac-translation>
```

Description

<llc2>

Usage

```
<llc2-redundancy-mac-translation-list>
  <llc2-redundancy-mac-translation>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
        track-peer
      </track-peer>
      <track-destination>
        track-destination
      </track-destination>
      <track-interface>
        track-interface
      </track-interface>
      <unit>
        unit
      </unit>
      <group>
        group
      </group>
      <interface-state>
        interface-state
      </interface-state>
      <state>
        state
      </state>
```


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```
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<tracking>
  tracking
</tracking>
<interface-ads-sent>
  interface-ads-sent
</interface-ads-sent>
<interface-ads-received>
  interface-ads-received
</interface-ads-received>
<interface-bad-ttl-value-received>
  interface-bad-ttl-value-received
```

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```
      </interface-bad-ttl-value-received>
      <interface-bad-version-received>
       interface-bad-version-received
      </interface-bad-version-received>
      <interface-bad-pdu-type-received>
       interface-bad-pdu-type-received
      </interface-bad-pdu-type-received>
      <interface-bad-checksum-received>
       interface-bad-checksum-received
      </interface-bad-checksum-received>
     </llc2>
    </llc2-redundancy-mac-translation>
</llc2-redundancy-mac-translation-list>
```

Description

<llc2>

Usage

```
<llc2-redundancy>
 <llc2>
  <interface>
   interface
  </interface>
  <track-peer>
   track-peer
  </track-peer>
  <track-destination>
   track-destination
  </track-destination>
  <track-interface>
   track-interface
  </track-interface>
  <unit>
   unit
  </unit>
  <group>
   group
  </group>
  <interface-state>
   interface-state
  </interface-state>
  <state>
   state
  </state>
  <track-interface-state>
   track-interface-state
  </track-interface-state>
  <track-interface-cost>
   track-interface-cost
  </track-interface-cost>
  <track-peer-state>
   track-peer-state
  </track-peer-state>
  <track-peer-cost>
```


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```
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
<advertise-timer>
  advertise-timer
</advertise-timer>
<preempt>
  preempt
</preempt>
<master-router-uptime>
  master-router-uptime
</master-router-uptime>
<tracking>
  tracking
</tracking>
<interface-ads-sent>
  interface-ads-sent
</interface-ads-sent>
<interface-ads-received>
  interface-ads-received
</interface-ads-received>
<interface-bad-ttl-value-received>
  interface-bad-ttl-value-received
</interface-bad-ttl-value-received>
<interface-bad-version-received>
  interface-bad-version-received
</interface-bad-version-received>
<interface-bad-pdu-type-received>
  interface-bad-pdu-type-received
</interface-bad-pdu-type-received>
<interface-bad-checksum-received>
  interface-bad-checksum-received
</interface-bad-checksum-received>
```

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```
  </llc2>
</llc2-redundancy>
```

Description

<llc2>

Usage

```
<llc2-redundancy-list>
  <llc2-redundancy>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
        track-peer
      </track-peer>
      <track-destination>
        track-destination
      </track-destination>
      <track-interface>
        track-interface
      </track-interface>
      <unit>
        unit
      </unit>
      <group>
        group
      </group>
      <interface-state>
        interface-state
      </interface-state>
      <state>
        state
      </state>
      <track-interface-state>
        track-interface-state
      </track-interface-state>
      <track-interface-cost>
        track-interface-cost
      </track-interface-cost>
      <track-peer-state>
        track-peer-state
      </track-peer-state>
      <track-peer-cost>
        track-peer-cost
      </track-peer-cost>
      <track-destination-state>
        track-destination-state
      </track-destination-state>
      <track-destination-cost>
        track-destination-cost
      </track-destination-cost>
      <group-configured-priority>
        group-configured-priority
```


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```
        </group-configured-priority>
        <group-run-priority>
          group-run-priority
        </group-run-priority>
        <local-mac>
          local-mac
        </local-mac>
        <remote-mac>
          remote-mac
        </remote-mac>
        <ifl-index>
          ifl-index
        </ifl-index>
        <advertise-interval>
          advertise-interval
        </advertise-interval>
        <advertise-timer>
          advertise-timer
        </advertise-timer>
        <preempt>
          preempt
        </preempt>
        <master-router-uptime>
          master-router-uptime
        </master-router-uptime>
        <tracking>
          tracking
        </tracking>
        <interface-ads-sent>
          interface-ads-sent
        </interface-ads-sent>
        <interface-ads-received>
          interface-ads-received
        </interface-ads-received>
        <interface-bad-ttl-value-received>
          interface-bad-ttl-value-received
        </interface-bad-ttl-value-received>
        <interface-bad-version-received>
          interface-bad-version-received
        </interface-bad-version-received>
        <interface-bad-pdu-type-received>
          interface-bad-pdu-type-received
        </interface-bad-pdu-type-received>
        <interface-bad-checksum-received>
          interface-bad-checksum-received
        </interface-bad-checksum-received>
      </llc2>
    </llc2-redundancy>
  </llc2-redundancy-list>
```

Description

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<llc2>

Usage

```
<llc2-redundancy-interface-statistics>
  <llc2>
    <interface>
      interface
    </interface>
    <track-peer>
      track-peer
    </track-peer>
    <track-destination>
      track-destination
    </track-destination>
    <track-interface>
      track-interface
    </track-interface>
    <unit>
      unit
    </unit>
    <group>
      group
    </group>
    <interface-state>
      interface-state
    </interface-state>
    <state>
      state
    </state>
    <track-interface-state>
      track-interface-state
    </track-interface-state>
    <track-interface-cost>
      track-interface-cost
    </track-interface-cost>
    <track-peer-state>
      track-peer-state
    </track-peer-state>
    <track-peer-cost>
      track-peer-cost
    </track-peer-cost>
    <track-destination-state>
      track-destination-state
    </track-destination-state>
    <track-destination-cost>
      track-destination-cost
    </track-destination-cost>
    <group-configured-priority>
      group-configured-priority
    </group-configured-priority>
    <group-run-priority>
      group-run-priority
    </group-run-priority>
    <local-mac>
      local-mac
```


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```
    </local-mac>
    <remote-mac>
      remote-mac
    </remote-mac>
    <ifl-index>
      ifl-index
    </ifl-index>
    <advertise-interval>
      advertise-interval
    </advertise-interval>
    <advertise-timer>
      advertise-timer
    </advertise-timer>
    <preempt>
      preempt
    </preempt>
    <master-router-uptime>
      master-router-uptime
    </master-router-uptime>
    <tracking>
      tracking
    </tracking>
    <interface-ads-sent>
      interface-ads-sent
    </interface-ads-sent>
    <interface-ads-received>
      interface-ads-received
    </interface-ads-received>
    <interface-bad-ttl-value-received>
      interface-bad-ttl-value-received
    </interface-bad-ttl-value-received>
    <interface-bad-version-received>
      interface-bad-version-received
    </interface-bad-version-received>
    <interface-bad-pdu-type-received>
      interface-bad-pdu-type-received
    </interface-bad-pdu-type-received>
    <interface-bad-checksum-received>
      interface-bad-checksum-received
    </interface-bad-checksum-received>
  </llc2>
</llc2-redundancy-interface-statistics>
```

Description

<llc2>

Usage

```
<llc2-redundancy-interface-statistics-list>
  <llc2-redundancy-interface-statistics>
    <llc2>
      <interface>
        interface
      </interface>
      <track-peer>
```

```
  track-peer
</track-peer>
<track-destination>
  track-destination
</track-destination>
<track-interface>
  track-interface
</track-interface>
<unit>
  unit
</unit>
<group>
  group
</group>
<interface-state>
  interface-state
</interface-state>
<state>
  state
</state>
<track-interface-state>
  track-interface-state
</track-interface-state>
<track-interface-cost>
  track-interface-cost
</track-interface-cost>
<track-peer-state>
  track-peer-state
</track-peer-state>
<track-peer-cost>
  track-peer-cost
</track-peer-cost>
<track-destination-state>
  track-destination-state
</track-destination-state>
<track-destination-cost>
  track-destination-cost
</track-destination-cost>
<group-configured-priority>
  group-configured-priority
</group-configured-priority>
<group-run-priority>
  group-run-priority
</group-run-priority>
<local-mac>
  local-mac
</local-mac>
<remote-mac>
  remote-mac
</remote-mac>
<ifl-index>
  ifl-index
</ifl-index>
<advertise-interval>
  advertise-interval
</advertise-interval>
```


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```
      <advertise-timer>
        advertise-timer
      </advertise-timer>
      <preempt>
        preempt
      </preempt>
      <master-router-uptime>
        master-router-uptime
      </master-router-uptime>
      <tracking>
        tracking
      </tracking>
      <interface-ads-sent>
        interface-ads-sent
      </interface-ads-sent>
      <interface-ads-received>
        interface-ads-received
      </interface-ads-received>
      <interface-bad-ttl-value-received>
        interface-bad-ttl-value-received
      </interface-bad-ttl-value-received>
      <interface-bad-version-received>
        interface-bad-version-received
      </interface-bad-version-received>
      <interface-bad-pdu-type-received>
        interface-bad-pdu-type-received
      </interface-bad-pdu-type-received>
      <interface-bad-checksum-received>
        interface-bad-checksum-received
      </interface-bad-checksum-received>
    </llc2>
  </llc2-redundancy-interface-statistics>
</llc2-redundancy-interface-statistics-list>
```

Description

<llc2-redundancy>

Usage

```
<llc2-redundancy>
  <llc2>....</llc2>
</llc2-redundancy>
```

Description

<llc2-redundancy>

Usage

```
<llc2-redundancy-list>
  <llc2-redundancy>
    <llc2>....</llc2>
  </llc2-redundancy>
</llc2-redundancy-list>
```

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Description

<llc2-redundancy-interface-statistics>

Usage

```
<llc2-redundancy-interface-statistics>
  <llc2>....</llc2>
</llc2-redundancy-interface-statistics>
```

Description

<llc2-redundancy-interface-statistics>

Usage

```
<llc2-redundancy-interface-statistics-list>
  <llc2-redundancy-interface-statistics>
    <llc2>....</llc2>
  </llc2-redundancy-interface-statistics>
</llc2-redundancy-interface-statistics-list>
```

Description

<llc2-redundancy-interface-statistics-list>

Usage

```
<llc2-redundancy-interface-statistics-list>
  <llc2-redundancy-interface-statistics>....</llc2-redundancy-interface-statistics>

</llc2-redundancy-interface-statistics-list>
```

Description

<llc2-redundancy-list>

Usage

```
<llc2-redundancy-list>
  <llc2-redundancy>....</llc2-redundancy>
</llc2-redundancy-list>
```

Description

<llc2-redundancy-mac-translation>

Usage

```
<llc2-redundancy-mac-translation>
  <llc2>....</llc2>
</llc2-redundancy-mac-translation>
```

Description

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<llc2-redundancy-mac-translation>

Usage

```
<llc2-redundancy-mac-translation-list>
  <llc2-redundancy-mac-translation>
    <llc2>....</llc2>
  </llc2-redundancy-mac-translation>
</llc2-redundancy-mac-translation-list>
```

Description

<llc2-redundancy-mac-translation-list>

Usage

```
<llc2-redundancy-mac-translation-list>
  <llc2-redundancy-mac-translation>....</llc2-redundancy-mac-translation>
</llc2-redundancy-mac-translation-list>
```

Description

<llc2-redundancy-track-dlsw-destination>

Usage

```
<llc2-redundancy-track-dlsw-destination>
  <llc2>....</llc2>
</llc2-redundancy-track-dlsw-destination>
```

Description

<llc2-redundancy-track-dlsw-destination>

Usage

```
<llc2-redundancy-track-dlsw-destination-list>
  <llc2-redundancy-track-dlsw-destination>
    <llc2>....</llc2>
  </llc2-redundancy-track-dlsw-destination>
</llc2-redundancy-track-dlsw-destination-list>
```

Description

<llc2-redundancy-track-dlsw-destination-list>

Usage

```
<llc2-redundancy-track-dlsw-destination-list>

<llc2-redundancy-track-dlsw-destination>....</llc2-redundancy-track-dlsw-destination>

</llc2-redundancy-track-dlsw-destination-list>
```

Description

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<llc2-redundancy-track-dlsw-peer>

Usage

```
<llc2-redundancy-track-dlsw-peer>
  <llc2>....</llc2>
</llc2-redundancy-track-dlsw-peer>
```

Description

<llc2-redundancy-track-dlsw-peer>

Usage

```
<llc2-redundancy-track-dlsw-peer-list>
  <llc2-redundancy-track-dlsw-peer>
    <llc2>....</llc2>
  </llc2-redundancy-track-dlsw-peer>
</llc2-redundancy-track-dlsw-peer-list>
```

Description

<llc2-redundancy-track-dlsw-peer-list>

Usage

```
<llc2-redundancy-track-dlsw-peer-list>
  <llc2-redundancy-track-dlsw-peer>....</llc2-redundancy-track-dlsw-peer>
</llc2-redundancy-track-dlsw-peer-list>
```

Description

<llc2-redundancy-track-interface>

Usage

```
<llc2-redundancy-track-interface>
  <llc2>....</llc2>
</llc2-redundancy-track-interface>
```

Description

<llc2-redundancy-track-interface>

Usage

```
<llc2-redundancy-track-interface-list>
  <llc2-redundancy-track-interface>
    <llc2>....</llc2>
  </llc2-redundancy-track-interface>
</llc2-redundancy-track-interface-list>
```

Description

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<llc2-redundancy-track-interface-list>

Usage

```
<llc2-redundancy-track-interface-list>
  <llc2-redundancy-track-interface>....</llc2-redundancy-track-interface>
</llc2-redundancy-track-interface-list>
```

Description

<version-string-multi>

Usage

```
<dlsw-capabilities>
  <version-string-multi>
</version-string-multi>
</dlsw-capabilities>
```

Description

<version-string-multi>

Usage

```
<dlsw-capabilities-list>
  <dlsw-capabilities>
    <version-string-multi>
 </version-string-multi>
  </dlsw-capabilities>
</dlsw-capabilities-list>
```

Description

Summary of 802.1X Process Response Tags

<authentication-whitelist-information>

Usage

```
<authentication-whitelist-information>
  <authentication-whitelist-mac>....</authentication-whitelist-mac>

<authentication-whitelist-mac-bypassed-users>....</authentication-whitelist-mac-bypassed-users>

</authentication-whitelist-information>
```

Description

<authentication-whitelist-mac>

Usage

```
<authentication-whitelist-information>
  <authentication-whitelist-mac>
    <authentication-whitelist-mac-address>
```

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```
            authentication-whitelist-mac-address
          </authentication-whitelist-mac-address>
          <authentication-whitelist-mac-prefix>
            authentication-whitelist-mac-prefix
          </authentication-whitelist-mac-prefix>
          <authentication-whitelist-mac-vlan-assignment>
            authentication-whitelist-mac-vlan-assignment
          </authentication-whitelist-mac-vlan-assignment>
          <authentication-whitelist-mac-interface>
            authentication-whitelist-mac-interface
          </authentication-whitelist-mac-interface>
        </authentication-whitelist-mac>
      </authentication-whitelist-information>
```

Description Information about configured white-list MAC addresses

<authentication-whitelist-mac-bypassed-users>

Usage

```
<authentication-whitelist-information>
  <authentication-whitelist-mac-bypassed-users>
    <authentication-whitelist-mac-bypass>
      authentication-whitelist-mac-bypass
    </authentication-whitelist-mac-bypass>
    <authentication-whitelist-mac-bypass-vlan>
      authentication-whitelist-mac-bypass-vlan
    </authentication-whitelist-mac-bypass-vlan>
    <authentication-whitelist-mac-bypass-interface>
      authentication-whitelist-mac-bypass-interface
    </authentication-whitelist-mac-bypass-interface>
  </authentication-whitelist-mac-bypassed-users>
</authentication-whitelist-information>
```

Description List of users who bypassed authentication

<cp-interface>

Usage

```
<cp-interface-information>
  <cp-interface>
    <cp-interface-name>
      cp-interface-name
    </cp-interface-name>
    <cp-user-name>
      cp-user-name
    </cp-user-name>
    <cp-fallen-back>
      cp-fallen-back
    </cp-fallen-back>
    <cp-user-mac-address>
      cp-user-mac-address
    </cp-user-mac-address>
```


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```
    <cp-state>
      cp-state
    </cp-state>
    <cp-administrative-mode>
      cp-administrative-mode
    </cp-administrative-mode>
    <cp-number-of-retries>
      cp-number-of-retries
    </cp-number-of-retries>
    <cp-quiet-period>
      cp-quiet-period
    </cp-quiet-period>
    <cp-configured-session-lifespan>
      cp-configured-session-lifespan
    </cp-configured-session-lifespan>
    <cp-server-timeout>
      cp-server-timeout
    </cp-server-timeout>
    <cp-number-of-connected-supplicants>
      cp-number-of-connected-supplicants
    </cp-number-of-connected-supplicants>
    <cp-supplicant-list>....</cp-supplicant-list>
  </cp-interface>
</cp-interface-information>
```

Description

<cp-interface-information>

Usage

```
<cp-interface-information>
  <cp-interface>....</cp-interface>
</cp-interface-information>
```

Description

<cp-supplicant>

Usage

```
<cp-interface-information>
  <cp-interface>
    <cp-supplicant-list>
      <cp-supplicant>
        <cp-supplicant-name>
          cp-supplicant-name
        </cp-supplicant-name>
        <cp-supplicant-mac-address>
          cp-supplicant-mac-address
        </cp-supplicant-mac-address>
        <cp-supplicant-state>
          cp-supplicant-state
        </cp-supplicant-state>
        <cp-dynamic-filter>
          cp-dynamic-filter
```

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```
        </cp-dynamic-filter>
        <cp-dynamic-session-lifespan>
          cp-dynamic-session-lifespan
        </cp-dynamic-session-lifespan>
        <cp-session-expiration-time>
          cp-session-expiration-time
        </cp-session-expiration-time>
      </cp-supplicant>
    </cp-supplicant-list>
  </cp-interface>
</cp-interface-information>
```

Description

<cp-supplicant-list>

Usage

```
<cp-interface-information>
  <cp-interface>
    <cp-supplicant-list>
      <cp-supplicant>....</cp-supplicant>
    </cp-supplicant-list>
  </cp-interface>
</cp-interface-information>
```

Description

<dot1x-authentication-failed-users>

Usage

```
<dot1x-interface-information>
  <dot1x-authentication-failed-users>
    <authentication-failed-interface>
      authentication-failed-interface
    </authentication-failed-interface>
    <authentication-failed-mac-addr>
      authentication-failed-mac-addr
    </authentication-failed-mac-addr>
    <authentication-failed-user>
      authentication-failed-user
    </authentication-failed-user>
    <authentication-failed-count>
      authentication-failed-count
    </authentication-failed-count>
  </dot1x-authentication-failed-users>
</dot1x-interface-information>
```

Description List of users who failed authentication

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<dot1x-firewall-interface>

Usage

```
<dot1x-interface-information>
  <dot1x-firewall-interface>
    <filter-name>
      filter-name
    </filter-name>
    <counter-name>
      counter-name
    </counter-name>
    <policer-name>
      policer-name
    </policer-name>
    <bytes>
      bytes
    </bytes>
    <packets>
      packets
    </packets>
    <packet-count>
      packet-count
    </packet-count>
  </dot1x-firewall-interface>
</dot1x-interface-information>
```

Description

<dot1x-interface-information>

Usage

```
<dot1x-interface-information>
  <interface>....</interface>
  <dot1x-static-mac-address>....</dot1x-static-mac-address>
  <dot1x-authentication-failed-users>....</dot1x-authentication-failed-users>
  <dot1x-interface-statistics>....</dot1x-interface-statistics>
  <dot1x-staticmac-bypassed-users>....</dot1x-staticmac-bypassed-users>
  <dot1x-firewall-interface>....</dot1x-firewall-interface>
</dot1x-interface-information>
```

Description

<dot1x-interface-statistics>

Usage

```
<dot1x-interface-information>
  <dot1x-interface-statistics>
    <eapol-interface-name>
      eapol-interface-name
    </eapol-interface-name>
    <eapol-total-received-frames>
      eapol-total-received-frames
    </eapol-total-received-frames>
```

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```
<eapol-start-frames>
  eapol-start-frames
</eapol-start-frames>
<eapol-logoff-frames>
  eapol-logoff-frames
</eapol-logoff-frames>
<eapol-response-id-frames>
  eapol-response-id-frames
</eapol-response-id-frames>
<eapol-response-frames>
  eapol-response-frames
</eapol-response-frames>
<eapol-invalid-frames>
  eapol-invalid-frames
</eapol-invalid-frames>
<eapol-length-error-frames>
  eapol-length-error-frames
</eapol-length-error-frames>
<eapol-lastframe-version>
  eapol-lastframe-version
</eapol-lastframe-version>
<eapol-lastframe-macaddress>
  eapol-lastframe-macaddress
</eapol-lastframe-macaddress>
<eapol-total-transmitted-packets>
  eapol-total-transmitted-packets
</eapol-total-transmitted-packets>
<eapol-request-id-frames>
  eapol-request-id-frames
</eapol-request-id-frames>
<eapol-request-frames>
  eapol-request-frames
</eapol-request-frames>
</dot1x-interface-statistics>
</dot1x-interface-information>
```

Description Display interface statistics

<dot1x-static-mac-address>

Usage

```
<dot1x-interface-information>
 <dot1x-static-mac-address>
  <static-mac-address>
   static-mac-address
  </static-mac-address>
  <static-mac-prefix>
   static-mac-prefix
  </static-mac-prefix>
  <static-mac-vlan-assignment>
   static-mac-vlan-assignment
  </static-mac-vlan-assignment>
  <static-mac-interface>
   static-mac-interface
```


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```
    </static-mac-interface>
  </dot1x-static-mac-address>
</dot1x-interface-information>
```

Description Information about configured static MAC addresses

<dot1x-staticmac-bypassed-users>

Usage

```
<dot1x-interface-information>
  <dot1x-staticmac-bypassed-users>
    <static-mac-bypass>
      static-mac-bypass
    </static-mac-bypass>
    <static-mac-bypass-vlan>
      static-mac-bypass-vlan
    </static-mac-bypass-vlan>
    <static-mac-bypass-interface>
      static-mac-bypass-interface
    </static-mac-bypass-interface>
  </dot1x-staticmac-bypassed-users>
</dot1x-interface-information>
```

Description List of users who bypassed authentication

<interface>

Usage

```
<dot1x-interface-information>
  <interface>
    <interface-name>
      interface-name
    </interface-name>
    <user-name>
      user-name
    </user-name>
    <user-mac-address>
      user-mac-address
    </user-mac-address>
    <role>
      role
    </role>
    <state>
      state
    </state>
    <administrative-state>
      administrative-state
    </administrative-state>
    <administrative-mode>
      administrative-mode
    </administrative-mode>
    <number-of-retries>
```

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```
      number-of-retries
    </number-of-retries>
    <quiet-period>
      quiet-period
    </quiet-period>
    <transmit-period>
      transmit-period
    </transmit-period>
    <mac-radius>
      mac-radius
    </mac-radius>
    <mac-radius-strict>
      mac-radius-strict
    </mac-radius-strict>
    <reauthentication>
      reauthentication
    </reauthentication>
    <reauthentication-interval>
      reauthentication-interval
    </reauthentication-interval>
    <supplicant-timeout>
      supplicant-timeout
    </supplicant-timeout>
    <server-timeout>
      server-timeout
    </server-timeout>
    <max-eapol-request>
      max-eapol-request
    </max-eapol-request>
    <frame-control>
      frame-control
    </frame-control>
    <guest-vlan>
      guest-vlan
    </guest-vlan>
    <number-of-connected-supplicants>
      number-of-connected-supplicants
    </number-of-connected-supplicants>
    <supplicant-list>....</supplicant-list>
  </interface>
</dot1x-interface-information>
```

Description

<supplicant>

Usage

```
<dot1x-interface-information>
  <interface>
    <supplicant-list>
      <supplicant>
        <supplicant-name>
          supplicant-name
        </supplicant-name>
        <supplicant-mac-address>
```


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```
        supplicant-mac-address
      </supplicant-mac-address>
      <supplicant-state>
        supplicant-state
      </supplicant-state>
      <backend-administrative-state>
        backend-administrative-state
      </backend-administrative-state>
      <authentication-method>
        authentication-method
      </authentication-method>
      <vlan>
        vlan
      </vlan>
      <dynamic-filter>
        dynamic-filter
      </dynamic-filter>
      <session-reauthentication-interval>
        session-reauthentication-interval
      </session-reauthentication-interval>
      <reauthentication-due>
        reauthentication-due
      </reauthentication-due>
    </supplicant>
  </supplicant-list>
 </interface>
</dot1x-interface-information>
```

Description

<supplicant-list>

Usage

```
<dot1x-interface-information>
 <interface>
  <supplicant-list>
   <supplicant>....</supplicant>
  </supplicant-list>
 </interface>
</dot1x-interface-information>
```

Description

<task>

Usage

```
<task-timer-information>
 <task>
  <task-name>
   task-name
  </task-name>
  <task-timer-priority>....</task-timer-priority>
  <task-timer-summary>....</task-timer-summary>
  <task-timer>....</task-timer>
```

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```
  </task>
</task-timer-information>
```

Description

<task-account-information>

Usage

```
<task-accounting-information>
  <task-account-information>
</task-account-information>
</task-accounting-information>
```

Description

<task-account-status>

Usage

```
<task-accounting-information>
  <task-account-status>
</task-account-status>
</task-accounting-information>
```

Description

<task-accounting-information>

Usage

```
<task-accounting-information>
  <task-acc-task-name>
    task-acc-task-name
  </task-acc-task-name>
  <task-acc-status>
    task-acc-status
  </task-acc-status>
  <task-acc-task-started>
    task-acc-task-started
  </task-acc-task-started>
  <task-acc-task-user-time>
    task-acc-task-user-time
  </task-acc-task-user-time>
  <task-acc-task-system-time>
    task-acc-task-system-time
  </task-acc-task-system-time>
  <task-acc-task-longest-run>
    task-acc-task-longest-run
  </task-acc-task-longest-run>
  <task-account-status>....</task-account-status>
  <task-account-information>....</task-account-information>
</task-accounting-information>
```

Description

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<task-block>

Usage

```
<task-block-list>
  <task-block>
    <tb-name>
      tb-name
    </tb-name>
    <tb-size>
      tb-size
    </tb-size>
    <tb-alloc-size>
      tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
      tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
      tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
      tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
      tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
      tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
      tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
      tb-max-alloc-bytes
    </tb-max-alloc-bytes>
  </task-block>
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>
        <tb-name>
          tb-name
        </tb-name>
        <tb-size>
          tb-size
        </tb-size>
        <tb-alloc-size>
```

```
            tb-alloc-size
           </tb-alloc-size>
           <tb-terse-transient>
            tb-terse-transient
           </tb-terse-transient>
           <tb-terse-fullpage>
            tb-terse-fullpage
           </tb-terse-fullpage>
           <tb-terse-debug>
            tb-terse-debug
           </tb-terse-debug>
           <tb-alloc-blocks>
            tb-alloc-blocks
           </tb-alloc-blocks>
           <tb-alloc-bytes>
            tb-alloc-bytes
           </tb-alloc-bytes>
           <tb-max-alloc-blocks>
            tb-max-alloc-blocks
           </tb-max-alloc-blocks>
           <tb-max-alloc-bytes>
            tb-max-alloc-bytes
           </tb-max-alloc-bytes>
          </task-block>
        </task-block-list>
      </task-memory-allocator-report>
    </task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
  <task-block>....</task-block>
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>....</task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

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<task-io-information>

Usage

```
<task-io-information>
  <task-io-task-name>
    task-io-task-name
  </task-io-task-name>
  <task-io-read>
    task-io-read
  </task-io-read>
  <task-io-write>
    task-io-write
  </task-io-write>
  <task-io-received>
    task-io-received
  </task-io-received>
  <task-io-sent>
    task-io-sent
  </task-io-sent>
  <task-io-dropped>
    task-io-dropped
  </task-io-dropped>
</task-io-information>
```

Description

<task-jobs-background>

Usage

```
<task-jobs-information>
  <task-jobs-background>
</task-jobs-background>
</task-jobs-information>
```

Description

<task-jobs-foreground>

Usage

```
<task-jobs-information>
  <task-jobs-foreground>
</task-jobs-foreground>
</task-jobs-information>
```

Description

<task-jobs-information>

Usage

```
<task-jobs-information>
  <task-jobs-fg-priority>
    task-jobs-fg-priority
```

```
  </task-jobs-fg-priority>
  <task-jobs-fg-task-name>
    task-jobs-fg-task-name
  </task-jobs-fg-task-name>
  <task-jobs-fg-wait>
    task-jobs-fg-wait
  </task-jobs-fg-wait>
  <task-jobs-fg-flags>
    task-jobs-fg-flags
  </task-jobs-fg-flags>
  <task-jobs-bg-priority>
    task-jobs-bg-priority
  </task-jobs-bg-priority>
  <task-jobs-bg-task-name>
    task-jobs-bg-task-name
  </task-jobs-bg-task-name>
  <task-jobs-bg-misses>
    task-jobs-bg-misses
  </task-jobs-bg-misses>
  <task-jobs-bg-runs>
    task-jobs-bg-runs
  </task-jobs-bg-runs>
  <task-jobs-bg-wait>
    task-jobs-bg-wait
  </task-jobs-bg-wait>
  <task-jobs-bg-flags>
    task-jobs-bg-flags
  </task-jobs-bg-flags>
  <task-jobs-foreground>....</task-jobs-foreground>
  <task-jobs-background>....</task-jobs-background>
</task-jobs-information>
```

Description

<task-lite-page>

Usage

```
<task-lite-page-list>
  <task-lite-page>
    <tlp-name>
      tlp-name
    </tlp-name>
    <tlp-alloc-pages>
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
```


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```
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-lite-page-list>
   <task-lite-page>
    <tlp-name>
     tlp-name
    </tlp-name>
    <tlp-alloc-pages>
     tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
     tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
     tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
     tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
   </task-lite-page>
  </task-lite-page-list>
 </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page-list>

Usage

```
<task-lite-page-list>
 <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page-list>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-lite-page-list>
   <task-lite-page>....</task-lite-page>
  </task-lite-page-list>
 </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
  </task-malloc>
</task-malloc-list>
```

Description

<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
```


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```
      </task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
```

```
    task-memory-in-use-size
  </task-memory-in-use-size>
  <task-memory-in-use-avail>
    task-memory-in-use-avail
  </task-memory-in-use-avail>
  <task-memory-max-size>
    task-memory-max-size
  </task-memory-max-size>
  <task-memory-max-avail>
    task-memory-max-avail
  </task-memory-max-avail>
  <task-memory-max-when>
    task-memory-max-when
  </task-memory-max-when>
  <task-memory-free-size>
    task-memory-free-size
  </task-memory-free-size>
  <task-memory-overall-report>....</task-memory-overall-report>
  <task-memory-allocator-report>....</task-memory-allocator-report>
  <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
  <task-memory-dynamic-allocs>
    task-memory-dynamic-allocs
  </task-memory-dynamic-allocs>
  <task-memory-max-dynamic-allocs>
    task-memory-max-dynamic-allocs
  </task-memory-max-dynamic-allocs>
  <task-memory-bss-bytes>
    task-memory-bss-bytes
  </task-memory-bss-bytes>
  <task-memory-max-bss-bytes>
    task-memory-max-bss-bytes
  </task-memory-max-bss-bytes>
  <task-memory-page-data-bytes>
    task-memory-page-data-bytes
  </task-memory-page-data-bytes>
  <task-memory-max-page-data-bytes>
    task-memory-max-page-data-bytes
  </task-memory-max-page-data-bytes>
  <task-memory-dir-bytes>
    task-memory-dir-bytes
  </task-memory-dir-bytes>
  <task-memory-max-dir-bytes>
    task-memory-max-dir-bytes
  </task-memory-max-dir-bytes>
  <task-memory-total-bytes-in-use>
    task-memory-total-bytes-in-use
  </task-memory-total-bytes-in-use>
  <task-memory-total-bytes-percent>
    task-memory-total-bytes-percent
  </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

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<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
    <task-memory-total-free-bytes>
      task-memory-total-free-bytes
    </task-memory-total-free-bytes>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
  <tms-name>
    tms-name
  </tms-name>
  <tms-allocs>
    tms-allocs
  </tms-allocs>
  <tms-mallocs>
    tms-mallocs
  </tms-mallocs>
  <tms-alloc-bytes>
    tms-alloc-bytes
```

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```
  </tms-alloc-bytes>
  <tms-max-allocs>
   tms-max-allocs
  </tms-max-allocs>
  <tms-max-bytes>
   tms-max-bytes
  </tms-max-bytes>
  <tms-free-bytes>
   tms-free-bytes
  </tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>
        <tms-name>
          tms-name
        </tms-name>
        <tms-allocs>
          tms-allocs
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
          tms-alloc-bytes
        </tms-alloc-bytes>
        <tms-max-allocs>
          tms-max-allocs
        </tms-max-allocs>
        <tms-max-bytes>
          tms-max-bytes
        </tms-max-bytes>
        <tms-free-bytes>
          tms-free-bytes
        </tms-free-bytes>
      </task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
```


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```
    <task-memory-stats-list>
      <task-memory-stats>....</task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
  <task-gres-state>
    task-gres-state
  </task-gres-state>
  <task-re-mode>
    task-re-mode
  </task-re-mode>
</task-replication-state>
```

Description Current state of task replication

<task-size-block>

Usage

```
<task-size-block-list>
  <task-size-block>
    <tsb-size>
      tsb-size
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
```

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```
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
          tsb-allocs
        </tsb-allocs>
        <tsb-mallocs>
          tsb-mallocs
        </tsb-mallocs>
        <tsb-alloc-bytes>
          tsb-alloc-bytes
        </tsb-alloc-bytes>
        <tsb-max-allocs>
          tsb-max-allocs
        </tsb-max-allocs>
        <tsb-max-bytes>
          tsb-max-bytes
        </tsb-max-bytes>
        <tsb-free-bytes>
          tsb-free-bytes
        </tsb-free-bytes>
      </task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
  <task-size-block>....</task-size-block>
</task-size-block-list>
```


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Description

<task-size-block-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>....</task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-statistics-information>

Usage

```
<task-statistics-information>
  <task-stat-event-name>
    task-stat-event-name
  </task-stat-event-name>
  <tast-stat-event-count>
    tast-stat-event-count
  </tast-stat-event-count>
</task-statistics-information>
```

Description

<task-summary-information>

Usage

```
<task-summary-information>
  <task-summary-priority>
    task-summary-priority
  </task-summary-priority>
  <task-summary-task-name>
    task-summary-task-name
  </task-summary-task-name>
  <task-summary-protocol>
    task-summary-protocol
  </task-summary-protocol>
  <task-summary-port>
    task-summary-port
  </task-summary-port>
  <task-summary-socket>
    task-summary-socket
  </task-summary-socket>
  <task-summary-flags>
    task-summary-flags
  </task-summary-flags>
</task-summary-information>
```

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Description

<task-timer>

Usage

```
<task-timer>
  <timer-name>
    timer-name
  </timer-name>
  <timer-late>
    timer-late
  </timer-late>
  <timer-expires>
    timer-expires
  </timer-expires>
  <timer-jitter>
    timer-jitter
  </timer-jitter>
  <timer-interval>
    timer-interval
  </timer-interval>
  <timer-flags>
    timer-flags
  </timer-flags>
</task-timer>
```

Description

<task-timer>

Usage

```
<task-timer-information>
  <task>
    <task-timer>
      <timer-name>
        timer-name
      </timer-name>
      <timer-late>
        timer-late
      </timer-late>
      <timer-expires>
        timer-expires
      </timer-expires>
      <timer-jitter>
        timer-jitter
      </timer-jitter>
      <timer-interval>
        timer-interval
      </timer-interval>
      <timer-flags>
        timer-flags
      </timer-flags>
    </task-timer>
  </task>
```


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```
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
</task-timer-information>
```

Description

<task-timer-priority>

Usage

```
<task-timer-priority>
  <task-timer-type>
    task-timer-type
  </task-timer-type>
</task-timer-priority>
```

Description

<task-timer-priority>

Usage

```
<task-timer-information>
  <task>
    <task-timer-priority>
      <task-timer-type>
        task-timer-type
      </task-timer-type>
    </task-timer-priority>
  </task>
</task-timer-information>
```

Description

<task-timer-summary>

Usage

```
<task-timer-summary>
  <task-timer-leaf>
    task-timer-leaf
  </task-timer-leaf>
  <task-timer-parent>
    task-timer-parent
  </task-timer-parent>
  <task-timer-expired>
    task-timer-expired
  </task-timer-expired>
```

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```
</task-timer-summary>
```

Description

<task-timer-summary>

Usage

```
<task-timer-information>
  <task>
    <task-timer-summary>
      <task-timer-leaf>
        task-timer-leaf
      </task-timer-leaf>
      <task-timer-parent>
        task-timer-parent
      </task-timer-parent>
      <task-timer-expired>
        task-timer-expired
      </task-timer-expired>
    </task-timer-summary>
  </task>
</task-timer-information>
```

Description

<tracing-information>

Usage

```
<tracing-information>
  <flags>
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```

Description

Summary of DS-Lite Response Tags

<ds-lite-softwire-sc>

Usage

```
<ds-lite-softwire-sc-all-information>
  <ds-lite-softwire-sc>
    <ds-lite-softwire-sc-name>
```


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```
    ds-lite-softwire-sc-name
   </ds-lite-softwire-sc-name>
   <ds-lite-softwire-sc-address>
    ds-lite-softwire-sc-address
   </ds-lite-softwire-sc-address>
   <ds-lite-softwire-sc-status>
    ds-lite-softwire-sc-status
   </ds-lite-softwire-sc-status>
   <ds-lite-softwire-sc-si-num>
    ds-lite-softwire-sc-si-num
   </ds-lite-softwire-sc-si-num>
  </ds-lite-softwire-sc>
</ds-lite-softwire-sc-all-information>
```

Description

<ds-lite-softwire-sc-all-information>

Usage

```
<ds-lite-softwire-sc-all-information>
  <ds-lite-softwire-sc>....</ds-lite-softwire-sc>
</ds-lite-softwire-sc-all-information>
```

Description

<ds-lite-softwire-sc-detail-information>

Usage

```
<ds-lite-softwire-sc-detail-information>
  <ds-lite-softwire-sc-pre>....</ds-lite-softwire-sc-pre>
  <ds-lite-softwire-si>....</ds-lite-softwire-si>
  <ds-lite-softwire-sc-si-num>
    ds-lite-softwire-sc-si-num
  </ds-lite-softwire-sc-si-num>
</ds-lite-softwire-sc-detail-information>
```

Description Information about specified SC

<ds-lite-softwire-sc-pre>

Usage

```
<ds-lite-softwire-sc-detail-information>
  <ds-lite-softwire-sc-pre>
    <ds-lite-softwire-sc-name>
      ds-lite-softwire-sc-name
    </ds-lite-softwire-sc-name>
    <ds-lite-softwire-sc-status>
      ds-lite-softwire-sc-status
    </ds-lite-softwire-sc-status>
    <ds-lite-softwire-sc-address>
      ds-lite-softwire-sc-address
    </ds-lite-softwire-sc-address>
```

```
                <ds-lite-softwire-sc-lsys-name>
                  ds-lite-softwire-sc-lsys-name
                </ds-lite-softwire-sc-lsys-name>
                <ds-lite-softwire-sc-zone>
                  ds-lite-softwire-sc-zone
                </ds-lite-softwire-sc-zone>
                <ds-lite-softwire-sc-vr-id>
                  ds-lite-softwire-sc-vr-id
                </ds-lite-softwire-sc-vr-id>
              </ds-lite-softwire-sc-pre>
            </ds-lite-softwire-sc-detail-information>
```

Description Brief information about specified SC

<ds-lite-softwire-si>

Usage

```
<ds-lite-softwire-sc-detail-information>
  <ds-lite-softwire-si>
    <ds-lite-softwire-si-address>
      ds-lite-softwire-si-address
    </ds-lite-softwire-si-address>
    <ds-lite-softwire-si-status>
      ds-lite-softwire-si-status
    </ds-lite-softwire-si-status>
    <ds-lite-softwire-si-spu>
      ds-lite-softwire-si-spu
    </ds-lite-softwire-si-spu>
  </ds-lite-softwire-si>
</ds-lite-softwire-sc-detail-information>
```

Description Information about SI

Summary of Dynamic VPN Response Tags

<clear-all-dvpn-user-connection-information>

Usage

```
<clear-all-dvpn-user-connection-information>
  <cleared-user-connection-count>
    cleared-user-connection-count
  </cleared-user-connection-count>
</clear-all-dvpn-user-connection-information>
```

Description Information about cleared user connection information

<clear-dvpn-user-connection-errors>

Usage

```
<clear-dvpn-user-connection-errors>
```


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```
<cleared-user-connection-for-user-errors>
  cleared-user-connection-for-user-errors
</cleared-user-connection-for-user-errors>
</clear-dvpn-user-connection-errors>
```

Description Errors for clearing user connection information for specified user

<clear-dvpn-user-connection-information>

Usage

```
<clear-dvpn-user-connection-information>
  <cleared-user-connection-for-user>
    cleared-user-connection-for-user
  </cleared-user-connection-for-user>
</clear-dvpn-user-connection-information>
```

Description Information about cleared user connection information for specified user

<client-version>

Usage

```
<dvpn-client-version>
  <client-version>
    <dvpn-client-version-number>
      dvpn-client-version-number
    </dvpn-client-version-number>
  </client-version>
</dvpn-client-version>
```

Description Information about the dynamic vpn client version

<dvpn-client-version>

Usage

```
<dvpn-client-version>
  <client-version>....</client-version>
</dvpn-client-version>
```

Description Information about dynamic-vpn client version

<dvpn-connection>

Usage

```
<dvpn-connection>
  <dvpn-remote-ip-detail>
    dvpn-remote-ip-detail
  </dvpn-remote-ip-detail>
  <dvpn-ipsec-vpn>
    dvpn-ipsec-vpn
```

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```
</dvpn-ipsec-vpn>
<dvpn-ike-gateway>
  dvpn-ike-gateway
</dvpn-ike-gateway>
<dvpn-ike-id-detail>
  dvpn-ike-id-detail
</dvpn-ike-id-detail>
<dvpn-ike-rekey-detail>
  dvpn-ike-rekey-detail
</dvpn-ike-rekey-detail>
<dvpn-ipsec-rekey-detail>
  dvpn-ipsec-rekey-detail
</dvpn-ipsec-rekey-detail>
<dvpn-status-detail>
  dvpn-status-detail
</dvpn-status-detail>
</dvpn-connection>
```

Description User connection information

<dvpn-connection>

Usage

```
<dvpn-users-information>
  <dvpn-user-conn-info>
    <dvpn-connection>
      <dvpn-remote-ip-detail>
        dvpn-remote-ip-detail
      </dvpn-remote-ip-detail>
      <dvpn-ipsec-vpn>
        dvpn-ipsec-vpn
      </dvpn-ipsec-vpn>
      <dvpn-ike-gateway>
        dvpn-ike-gateway
      </dvpn-ike-gateway>
      <dvpn-ike-id-detail>
        dvpn-ike-id-detail
      </dvpn-ike-id-detail>
      <dvpn-ike-rekey-detail>
        dvpn-ike-rekey-detail
      </dvpn-ike-rekey-detail>
      <dvpn-ipsec-rekey-detail>
        dvpn-ipsec-rekey-detail
      </dvpn-ipsec-rekey-detail>
      <dvpn-status-detail>
        dvpn-status-detail
      </dvpn-status-detail>
    </dvpn-connection>
  </dvpn-user-conn-info>
</dvpn-users-information>
```

Description User connection information

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<dvpn-user-conn-info>

Usage

```
<dvpn-users-information>
  <dvpn-user-conn-info>
    <dvpn-user>
      dvpn-user
    </dvpn-user>
    <dvpn-remote-ip>
      dvpn-remote-ip
    </dvpn-remote-ip>
    <dvpn-ike-id>
      dvpn-ike-id
    </dvpn-ike-id>
    <dvpn-ike-rekey>
      dvpn-ike-rekey
    </dvpn-ike-rekey>
    <dvpn-ipsec-rekey>
      dvpn-ipsec-rekey
    </dvpn-ipsec-rekey>
    <dvpn-client-config-name>
      dvpn-client-config-name
    </dvpn-client-config-name>
    <dvpn-status>
      dvpn-status
    </dvpn-status>
    <dvpn-connection-established-time>
      dvpn-connection-established-time
    </dvpn-connection-established-time>
    <dvpn-connected-tunnels-count>
      dvpn-connected-tunnels-count
    </dvpn-connected-tunnels-count>
    <dvpn-connection>....</dvpn-connection>
  </dvpn-user-conn-info>
</dvpn-users-information>
```

Description Information on a dvpn user connection

<dvpn-users-information>

Usage

```
<dvpn-users-information>
  <dvpn-user-conn-info>....</dvpn-user-conn-info>
</dvpn-users-information>
```

Description Information about dynamic-vpn users

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Summary of End-to-End Debug Response Tags

<eedebug-all-action-profile>

Usage

```
<eedebug-all-action-profile>
  <filter-name>
    filter-name
  </filter-name>
  <filter-index>
    filter-index
  </filter-index>
  <eedebug-action-profile-name>
    eedebug-action-profile-name
  </eedebug-action-profile-name>
  <eedebug-action-profile>
    eedebug-action-profile
  </eedebug-action-profile>
</eedebug-all-action-profile>
```

Description

<eedebug-all-counters>

Usage

```
<eedebug-all-counters>
  <filter-name>
    filter-name
  </filter-name>
  <filter-index>
    filter-index
  </filter-index>
  <eedebug-counter-value>
    eedebug-counter-value
  </eedebug-counter-value>
  <eedebug-counter-name>
    eedebug-counter-name
  </eedebug-counter-name>
  <eedebug-cid>
    eedebug-cid
  </eedebug-cid>
  <eedebug-fpc>
    eedebug-fpc
  </eedebug-fpc>
  <eedebug-pic>
    eedebug-pic
  </eedebug-pic>
</eedebug-all-counters>
```

Description

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<eedebug-all-events>

Usage

```
<eedebug-all-events>
  <eedebug-event>
    eedebug-event
  </eedebug-event>
  <chassis-id>
    chassis-id
  </chassis-id>
  <fpc-id>
    fpc-id
  </fpc-id>
  <pic-id>
    pic-id
  </pic-id>
  <eedebug-pfe>....</eedebug-pfe>
</eedebug-all-events>
```

Description

<eedebug-capture-output>

Usage

```
<eedebug-capture-output>
  <eedebug-capture-output-blob>
    eedebug-capture-output-blob
  </eedebug-capture-output-blob>
</eedebug-capture-output>
```

Description

<eedebug-pfe>

Usage

```
<eedebug-all-events>
  <eedebug-pfe>
    <chassis-id>
      chassis-id
    </chassis-id>
    <fpc-id>
      fpc-id
    </fpc-id>
    <pic-id>
      pic-id
    </pic-id>
  </eedebug-pfe>
</eedebug-all-events>
```

Description

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<eedebug-reload-result>

Usage

```
<eedebug-reload-result>
  <eedebug-reload-status>
    eedebug-reload-status
  </eedebug-reload-status>
</eedebug-reload-result>
```

Description

<eedebug-trace-sort>

Usage

```
<eedebug-trace-sort>
  <eedebug-trace-sort-blob>
    eedebug-trace-sort-blob
  </eedebug-trace-sort-blob>
</eedebug-trace-sort>
```

Description

<request-eedebug-capture-start-result>

Usage

```
<request-eedebug-capture-start-result>
  <eedebug-capture-start-status>
    eedebug-capture-start-status
  </eedebug-capture-start-status>
</request-eedebug-capture-start-result>
```

Description

<request-eedebug-capture-stop-result>

Usage

```
<request-eedebug-capture-stop-result>
  <eedebug-capture-stop-status>
    eedebug-capture-stop-status
  </eedebug-capture-stop-status>
</request-eedebug-capture-stop-result>
```

Description

Summary of ESW Response Tags

<age-statistics>

Usage

```
<age-statistics>
  <total-aging-message>
```


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```
    total-aging-message
  </total-aging-message>
  <immediate-aging>
    immediate-aging
  </immediate-aging>
  <mac-address-seen>
    mac-address-seen
  </mac-address-seen>
  <mac-address-not-seen>
    mac-address-not-seen
  </mac-address-not-seen>
  <age-message-with-error>
    age-message-with-error
  </age-message-with-error>
  <age-message-with-invalid-vlan>
    age-message-with-invalid-vlan
  </age-message-with-invalid-vlan>
  <age-message-with-unfound-entry>
    age-message-with-unfound-entry
  </age-message-with-unfound-entry>
  <age-message-for-static-entry>
    age-message-for-static-entry
  </age-message-for-static-entry>
</age-statistics>
```

Description

<age-statistics>

Usage

```
<ethernet-switching-statistics>
  <ethernet-switching-aging-stats>
    <age-statistics>
      <total-aging-message>
        total-aging-message
      </total-aging-message>
      <immediate-aging>
        immediate-aging
      </immediate-aging>
      <mac-address-seen>
        mac-address-seen
      </mac-address-seen>
      <mac-address-not-seen>
        mac-address-not-seen
      </mac-address-not-seen>
      <age-message-with-error>
        age-message-with-error
      </age-message-with-error>
      <age-message-with-invalid-vlan>
        age-message-with-invalid-vlan
      </age-message-with-invalid-vlan>
      <age-message-with-unfound-entry>
        age-message-with-unfound-entry
      </age-message-with-unfound-entry>
      <age-message-for-static-entry>
```

```
            age-message-for-static-entry
          </age-message-for-static-entry>
        </age-statistics>
      </ethernet-switching-aging-stats>
    </ethernet-switching-statistics>
```

Description

<analyzer>

Usage

```
<analyzer>
  <analyzer-information>....</analyzer-information>
</analyzer>
```

Description

<analyzer-egress-interface-list>

Usage

```
<analyzer-egress-interface-list>
  <analyzer-egress-interface-name>
    analyzer-egress-interface-name
  </analyzer-egress-interface-name>
</analyzer-egress-interface-list>
```

Description

<analyzer-egress-interface-list>

Usage

```
<analyzer>
  <analyzer-information>
    <analyzer-egress-interface-list>
      <analyzer-egress-interface-name>
        analyzer-egress-interface-name
      </analyzer-egress-interface-name>
    </analyzer-egress-interface-list>
  </analyzer-information>
</analyzer>
```

Description

<analyzer-egress-vlan-list>

Usage

```
<analyzer-egress-vlan-list>
  <analyzer-egress-vlan-name>
    analyzer-egress-vlan-name
  </analyzer-egress-vlan-name>
</analyzer-egress-vlan-list>
```


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Description

<analyzer-egress-vlan-list>

Usage

```
<analyzer>
  <analyzer-information>
    <analyzer-egress-vlan-list>
      <analyzer-egress-vlan-name>
        analyzer-egress-vlan-name
      </analyzer-egress-vlan-name>
    </analyzer-egress-vlan-list>
  </analyzer-information>
</analyzer>
```

Description

<analyzer-information>

Usage

```
<analyzer>
  <analyzer-information>
    <analyzer-name>
      analyzer-name
    </analyzer-name>
    <analyzer-mirror-ratio>
      analyzer-mirror-ratio
    </analyzer-mirror-ratio>
    <analyzer-loss-priority>
      analyzer-loss-priority
    </analyzer-loss-priority>
    <analyzer-ingress-interface-list>....</analyzer-ingress-interface-list>
    <analyzer-egress-interface-list>....</analyzer-egress-interface-list>
    <analyzer-ingress-vlan-list>....</analyzer-ingress-vlan-list>
    <analyzer-egress-vlan-list>....</analyzer-egress-vlan-list>
    <analyzer-monitor>....</analyzer-monitor>
  </analyzer-information>
</analyzer>
```

Description

<analyzer-ingress-interface-list>

Usage

```
<analyzer-ingress-interface-list>
  <analyzer-ingress-interface-name>
    analyzer-ingress-interface-name
  </analyzer-ingress-interface-name>
</analyzer-ingress-interface-list>
```

Description

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<analyzer-ingress-interface-list>

Usage

```
<analyzer>
  <analyzer-information>
    <analyzer-ingress-interface-list>
      <analyzer-ingress-interface-name>
        analyzer-ingress-interface-name
      </analyzer-ingress-interface-name>
    </analyzer-ingress-interface-list>
  </analyzer-information>
</analyzer>
```

Description

<analyzer-ingress-vlan-list>

Usage

```
<analyzer-ingress-vlan-list>
  <analyzer-ingress-vlan-name>
    analyzer-ingress-vlan-name
  </analyzer-ingress-vlan-name>
</analyzer-ingress-vlan-list>
```

Description

<analyzer-ingress-vlan-list>

Usage

```
<analyzer>
  <analyzer-information>
    <analyzer-ingress-vlan-list>
      <analyzer-ingress-vlan-name>
        analyzer-ingress-vlan-name
      </analyzer-ingress-vlan-name>
    </analyzer-ingress-vlan-list>
  </analyzer-information>
</analyzer>
```

Description

<analyzer-monitor>

Usage

```
<analyzer-monitor>
  <analyzer-monitor-port>
    analyzer-monitor-port
  </analyzer-monitor-port>
  <analyzer-monitor-vlan>
    analyzer-monitor-vlan
  </analyzer-monitor-vlan>
```


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```
</analyzer-monitor>
```

Description

<analyzer-monitor>

Usage

```
<analyzer>
 <analyzer-information>
  <analyzer-monitor>
   <analyzer-monitor-port>
    analyzer-monitor-port
   </analyzer-monitor-port>
   <analyzer-monitor-vlan>
    analyzer-monitor-vlan
   </analyzer-monitor-vlan>
  </analyzer-monitor>
 </analyzer-information>
</analyzer>
```

Description

<arp-inspection>

Usage

```
<arp-inspection>
 <arp-inspection-statistics>....</arp-inspection-statistics>
</arp-inspection>
```

Description

<arp-inspection-statistics>

Usage

```
<arp-inspection>
 <arp-inspection-statistics>
  <arp-inspection-statistics-entry>....</arp-inspection-statistics-entry>
 </arp-inspection-statistics>
</arp-inspection>
```

Description

<arp-inspection-statistics-entry>

Usage

```
<arp-inspection>
 <arp-inspection-statistics>
  <arp-inspection-statistics-entry>
   <arp-interface>
    arp-interface
   </arp-interface>
   <arp-packet-count>
```

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```
        arp-packet-count
       </arp-packet-count>
       <arp-packet-pass>
        arp-packet-pass
       </arp-packet-pass>
       <arp-packet-fail>
        arp-packet-fail
       </arp-packet-fail>
      </arp-inspection-statistics-entry>
    </arp-inspection-statistics>
  </arp-inspection>
```

Description

<cist-bridge-parameters>

Usage

```
<cist-bridge-parameters>
  <cist-id>
   cist-id
  </cist-id>
  <root-bridge>....</root-bridge>
  <root-port>
   root-port
  </root-port>
  <root-cost>
   root-cost
  </root-cost>
  <regional-root-bridge>....</regional-root-bridge>
  <internal-root-cost>
   internal-root-cost
  </internal-root-cost>
  <hello-time-learned>
   hello-time-learned
  </hello-time-learned>
  <max-age-learned>
   max-age-learned
  </max-age-learned>
  <forward-delay-learned>
   forward-delay-learned
  </forward-delay-learned>
  <message-age>
   message-age
  </message-age>
  <hop-count>
   hop-count
  </hop-count>
  <time-since-last-topology-change>
   time-since-last-topology-change
  </time-since-last-topology-change>
  <topology-change-count>
   topology-change-count
  </topology-change-count>
  <topology-change-initiator>
   topology-change-initiator
```


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```
</topology-change-initiator>
<topology-change-last-received-from>
  topology-change-last-received-from
</topology-change-last-received-from>
<extended-system-id>
  extended-system-id
</extended-system-id>
<internal-instance-id>
  internal-instance-id
</internal-instance-id>
<this-bridge>....</this-bridge>
<hello-time-configured>
  hello-time-configured
</hello-time-configured>
<max-age-configured>
  max-age-configured
</max-age-configured>
<forward-delay-configured>
  forward-delay-configured
</forward-delay-configured>
<maximum-hop-count-configured>
  maximum-hop-count-configured
</maximum-hop-count-configured>
<path-cost-method>
  path-cost-method
</path-cost-method>
</cist-bridge-parameters>
```

Description STP bridge parameters for common and internal spanning tree

<cist-bridge-parameters>

Usage

```
<stp-bridge>
  <cist-bridge-parameters>
    <cist-id>
      cist-id
    </cist-id>
    <root-bridge>....</root-bridge>
    <root-port>
      root-port
    </root-port>
    <root-cost>
      root-cost
    </root-cost>
    <regional-root-bridge>....</regional-root-bridge>
    <internal-root-cost>
      internal-root-cost
    </internal-root-cost>
    <hello-time-learned>
      hello-time-learned
    </hello-time-learned>
    <max-age-learned>
      max-age-learned
```

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```
    </max-age-learned>
    <forward-delay-learned>
      forward-delay-learned
    </forward-delay-learned>
    <message-age>
      message-age
    </message-age>
    <hop-count>
      hop-count
    </hop-count>
    <time-since-last-topology-change>
      time-since-last-topology-change
    </time-since-last-topology-change>
    <topology-change-count>
      topology-change-count
    </topology-change-count>
    <topology-change-initiator>
      topology-change-initiator
    </topology-change-initiator>
    <topology-change-last-received-from>
      topology-change-last-received-from
    </topology-change-last-received-from>
    <extended-system-id>
      extended-system-id
    </extended-system-id>
    <internal-instance-id>
      internal-instance-id
    </internal-instance-id>
    <this-bridge>....</this-bridge>
    <hello-time-configured>
      hello-time-configured
    </hello-time-configured>
    <max-age-configured>
      max-age-configured
    </max-age-configured>
    <forward-delay-configured>
      forward-delay-configured
    </forward-delay-configured>
    <maximum-hop-count-configured>
      maximum-hop-count-configured
    </maximum-hop-count-configured>
    <path-cost-method>
      path-cost-method
    </path-cost-method>
  </cist-bridge-parameters>
</stp-bridge>
```

Description STP bridge parameters for common and internal spanning tree

<customer-vlan-range>

Usage

```
<customer-vlan-range-list>
  <customer-vlan-range>
```


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```
    <customer-vlan-range-start>
     customer-vlan-range-start
    </customer-vlan-range-start>
    <customer-vlan-range-end>
     customer-vlan-range-end
    </customer-vlan-range-end>
   </customer-vlan-range>
</customer-vlan-range-list>
```

Description

<customer-vlan-range-list>

Usage

```
<customer-vlan-range-list>
  <customer-vlan-range>....</customer-vlan-range>
</customer-vlan-range-list>
```

Description

<dhcp-snooping>

Usage

```
<dhcp-snooping>
  <dhcp-snooping-information>....</dhcp-snooping-information>
  <dhcp-snooping-statistics>....</dhcp-snooping-statistics>
</dhcp-snooping>
```

Description

<dhcp-snooping-information>

Usage

```
<dhcp-snooping>
  <dhcp-snooping-information>
    <dhcp-mac>
     dhcp-mac
    </dhcp-mac>
    <dhcp-ip>
     dhcp-ip
    </dhcp-ip>
    <dhcp-lease>
     dhcp-lease
    </dhcp-lease>
    <dhcp-type>
     dhcp-type
    </dhcp-type>
    <dhcp-vlan>
     dhcp-vlan
    </dhcp-vlan>
    <dhcp-interface>
     dhcp-interface
    </dhcp-interface>
```

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```
  </dhcp-snooping-information>
</dhcp-snooping>
```

Description

<dhcp-snooping-statistics>

Usage

```
<dhcp-snooping>
  <dhcp-snooping-statistics>
    <successful-transfers>
      successful-transfers
    </successful-transfers>
    <failed-transfers>
      failed-transfers
    </failed-transfers>
    <successful-reads>
      successful-reads
    </successful-reads>
    <failed-reads>
      failed-reads
    </failed-reads>
    <successful-writes>
      successful-writes
    </successful-writes>
    <failed-writes>
      failed-writes
    </failed-writes>
  </dhcp-snooping-statistics>
</dhcp-snooping>
```

Description

<edge-control-protocol-interface-statistics>

Usage

```
<edge-virtual-bridging-information>
  <edge-control-protocol-statistics>
    <edge-control-protocol-interface-statistics>
      <interface-name>
        interface-name
      </interface-name>
      <input-ecp-packets>
        input-ecp-packets
      </input-ecp-packets>
      <output-ecp-packets>
        output-ecp-packets
      </output-ecp-packets>
    </edge-control-protocol-interface-statistics>
  </edge-control-protocol-statistics>
</edge-virtual-bridging-information>
```

Description

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<edge-control-protocol-statistics>

Usage

```
<edge-virtual-bridging-information>
  <edge-control-protocol-statistics>

<edge-control-protocol-interface-statistics>....</edge-control-protocol-interface-statistics>

  </edge-control-protocol-statistics>
</edge-virtual-bridging-information>
```

Description

<edge-virtual-bridging-firewall-information>

Usage

```
<edge-virtual-bridging-information>
  <edge-virtual-bridging-firewall-information>
    <filter-name>
      filter-name
    </filter-name>
    <counter-name>
      counter-name
    </counter-name>
    <policer-name>
      policer-name
    </policer-name>
    <bytes>
      bytes
    </bytes>
    <packets>
      packets
    </packets>
  </edge-virtual-bridging-firewall-information>
</edge-virtual-bridging-information>
```

Description

<edge-virtual-bridging-information>

Usage

```
<edge-virtual-bridging-information>

<edge-virtual-bridging-interface-information>....</edge-virtual-bridging-interface-information>

  <edge-control-protocol-statistics>....</edge-control-protocol-statistics>

<edge-virtual-bridging-interface-vsi-profiles-information>...</edge-virtual-bridging-interface-vsi-profiles-information>

<edge-virtual-bridging-firewall-information>....</edge-virtual-bridging-firewall-information>
```

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```
</edge-virtual-bridging-information>
```

Description

<edge-virtual-bridging-interface-information>

Usage

```
<edge-virtual-bridging-information>
 <edge-virtual-bridging-interface-information>
  <interface-name>
   interface-name
  </interface-name>
  <forwarding-mode>
   forwarding-mode
  </forwarding-mode>
  <rte>
   rte
  </rte>
  <number-of-vsi>
   number-of-vsi
  </number-of-vsi>
  <ecp>
   ecp
  </ecp>
  <vdp>
   vdp
  </vdp>
  <protocol-rte>
   protocol-rte
  </protocol-rte>
  <vsi-profiles-information>....</vsi-profiles-information>
 </edge-virtual-bridging-interface-information>
</edge-virtual-bridging-information>
```

Description

<edge-virtual-bridging-interface-vsi-profiles-information>

Usage

```
<edge-virtual-bridging-information>
 <edge-virtual-bridging-interface-vsi-profiles-information>
  <interface-name>
   interface-name
  </interface-name>
  <vsi-profiles-information>....</vsi-profiles-information>
 </edge-virtual-bridging-interface-vsi-profiles-information>
</edge-virtual-bridging-information>
```

Description

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<erp-interface-entry>

Usage

```
<erp-interface-entry>
  <erp-interface-name>
    erp-interface-name
  </erp-interface-name>
  <forward-state>
    forward-state
  </forward-state>
  <rpl-end>
    rpl-end
  </rpl-end>
  <sf-flag>
    sf-flag
  </sf-flag>
  <erp-interface-state>
    erp-interface-state
  </erp-interface-state>
</erp-interface-entry>
```

Description Information about Ethernet Ring port of a Ethernet Ring Protection group

<erp-interface-entry>

Usage

```
<erp-interface-information>
  <ethernet-ring-pg>
    <erp-interfaces>
      <erp-interface-entry>
        <erp-interface-name>
          erp-interface-name
        </erp-interface-name>
        <forward-state>
          forward-state
        </forward-state>
        <rpl-end>
          rpl-end
        </rpl-end>
        <sf-flag>
          sf-flag
        </sf-flag>
        <erp-interface-state>
          erp-interface-state
        </erp-interface-state>
      </erp-interface-entry>
    </erp-interfaces>
  </ethernet-ring-pg>
</erp-interface-information>
```

Description Information about Ethernet Ring port of a Ethernet Ring Protection group

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<erp-interface-information>

Usage

```
<erp-interface-information>
  <ethernet-ring-pg>....</ethernet-ring-pg>
</erp-interface-information>
```

Description Information about ring ports for one or more ethernet ring protection groups

<erp-interface-statistics>

Usage

```
<erp-protection-group-statistics>
  <erp-protection-group-instance>
    <erp-interface-statistics>
      <erp-interface-statistics-entry>....</erp-interface-statistics-entry>
    </erp-interface-statistics>
  </erp-protection-group-instance>
</erp-protection-group-statistics>
```

Description

<erp-interface-statistics>

Usage

```
<erp-protection-group-interface-statistics>
  <erp-interface-statistics>
    <erp-interface-statistics-entry>....</erp-interface-statistics-entry>
  </erp-interface-statistics>
</erp-protection-group-interface-statistics>
```

Description

<erp-interface-statistics-entry>

Usage

```
<erp-interface-statistics-entry>
  <protection-group-name>
    protection-group-name
  </protection-group-name>
  <erp-interface-name>
    erp-interface-name
  </erp-interface-name>
  <raps-event-sent>
    raps-event-sent
  </raps-event-sent>
  <raps-event-received>
    raps-event-received
  </raps-event-received>
</erp-interface-statistics-entry>
```


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Description ERP interface statistics

<erp-interface-statistics-entry>

Usage

```
<erp-protection-group-statistics>
  <erp-protection-group-instance>
    <erp-interface-statistics>
      <erp-interface-statistics-entry>
        <protection-group-name>
          protection-group-name
        </protection-group-name>
        <erp-interface-name>
          erp-interface-name
        </erp-interface-name>
        <raps-event-sent>
          raps-event-sent
        </raps-event-sent>
        <raps-event-received>
          raps-event-received
        </raps-event-received>
      </erp-interface-statistics-entry>
    </erp-interface-statistics>
  </erp-protection-group-instance>
</erp-protection-group-statistics>
```

Description ERP interface statistics

<erp-interface-statistics-entry>

Usage

```
<erp-protection-group-interface-statistics>
  <erp-interface-statistics>
    <erp-interface-statistics-entry>
      <protection-group-name>
        protection-group-name
      </protection-group-name>
      <erp-interface-name>
        erp-interface-name
      </erp-interface-name>
      <raps-event-sent>
        raps-event-sent
      </raps-event-sent>
      <raps-event-received>
        raps-event-received
      </raps-event-received>
    </erp-interface-statistics-entry>
  </erp-interface-statistics>
</erp-protection-group-interface-statistics>
```

Description ERP interface statistics

<erp-interfaces>

Usage

```
<erp-interface-information>
  <ethernet-ring-pg>
    <erp-interfaces>
      <erp-interface-entry>....</erp-interface-entry>
    </erp-interfaces>
  </ethernet-ring-pg>
</erp-interface-information>
```

Description Information about ring ports

<erp-pg-configuration>

Usage

```
<erp-pg-configuration>
  <erp-protection-group>....</erp-protection-group>
</erp-pg-configuration>
```

Description Ethernet ring configuration for one or more ethernet ring instances

<erp-protection-group>

Usage

```
<erp-pg-configuration>
  <erp-protection-group>
    <erp-pg-name>
      erp-pg-name
    </erp-pg-name>
    <erp-pg-east-interface-name>
      erp-pg-east-interface-name
    </erp-pg-east-interface-name>
    <erp-pg-west-interface-name>
      erp-pg-west-interface-name
    </erp-pg-west-interface-name>
    <erp-pg-restore-interval>
      erp-pg-restore-interval
    </erp-pg-restore-interval>
    <erp-pg-guard-interval>
      erp-pg-guard-interval
    </erp-pg-guard-interval>
    <erp-pg-node-id>
      erp-pg-node-id
    </erp-pg-node-id>
    <erp-pg-ctrl-channel-vlan>
      erp-pg-ctrl-channel-vlan
    </erp-pg-ctrl-channel-vlan>
    <erp-pg-is-physical-ring>
      erp-pg-is-physical-ring
    </erp-pg-is-physical-ring>
    <erp-pg-data-channel-vlans>
```


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```
      erp-pg-data-channel-vlans
    </erp-pg-data-channel-vlans>
  </erp-protection-group>
</erp-pg-configuration>
```

Description

<erp-protection-group-instance>

Usage

```
<erp-protection-group-statistics>
  <erp-protection-group-instance>
    <protection-group-name>
      protection-group-name
    </protection-group-name>
    <raps-local-sf>
      raps-local-sf
    </raps-local-sf>
    <raps-remote-sf>
      raps-remote-sf
    </raps-remote-sf>
    <raps-nr>
      raps-nr
    </raps-nr>
    <raps-nr-rb>
      raps-nr-rb
    </raps-nr-rb>
    <erp-interface-statistics>....</erp-interface-statistics>
  </erp-protection-group-instance>
</erp-protection-group-statistics>
```

Description

<erp-protection-group-interface-statistics>

Usage

```
<erp-protection-group-interface-statistics>
  <erp-interface-statistics>....</erp-interface-statistics>
</erp-protection-group-interface-statistics>
```

Description Statistics information about ERP interfaces

<erp-protection-group-statistics>

Usage

```
<erp-protection-group-statistics>
  <erp-protection-group-instance>....</erp-protection-group-instance>
</erp-protection-group-statistics>
```

Description Statistics information about ERP instance

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<erp-raps>

Usage

```
<erp-raps-information>
  <erp-raps>
    <erp-raps-entry>....</erp-raps-entry>
  </erp-raps>
</erp-raps-information>
```

Description

<erp-raps-entry>

Usage

```
<erp-raps-entry>
  <protection-group-name>
    protection-group-name
  </protection-group-name>
  <aps-state>
    aps-state
  </aps-state>
  <aps-event>
    aps-event
  </aps-event>
  <rpl-owner>
    rpl-owner
  </rpl-owner>
  <wtr-timer>
    wtr-timer
  </wtr-timer>
  <guard-timer>
    guard-timer
  </guard-timer>
  <operation-state>
    operation-state
  </operation-state>
</erp-raps-entry>
```

Description Information about Ethernet Ring Automatic Protection Switching state machine of a protection group

<erp-raps-entry>

Usage

```
<erp-raps-information>
  <erp-raps>
    <erp-raps-entry>
      <protection-group-name>
        protection-group-name
      </protection-group-name>
      <aps-state>
        aps-state
```


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```
    </aps-state>
    <aps-event>
      aps-event
    </aps-event>
    <rpl-owner>
      rpl-owner
    </rpl-owner>
    <wtr-timer>
      wtr-timer
    </wtr-timer>
    <guard-timer>
      guard-timer
    </guard-timer>
    <operation-state>
      operation-state
    </operation-state>
  </erp-raps-entry>
 </erp-raps>
</erp-raps-information>
```

Description Information about Ethernet Ring Automatic Protection Switching state machine of a protection group

<erp-raps-information>

Usage

```
<erp-raps-information>
  <erp-raps>....</erp-raps>
</erp-raps-information>
```

Description Information about RAPS state machine of one or more ethernet rings

<erp-rpdu-entry>

Usage

```
<erp-rpdu-entry>
  <protection-group-name>
    protection-group-name
  </protection-group-name>
  <request-state>
    request-state
  </request-state>
  <dnf-flag>
    dnf-flag
  </dnf-flag>
  <rb-flag>
    rb-flag
  </rb-flag>
  <originator>
    originator
  </originator>
  <remote-node-id>
```

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```
    remote-node-id
   </remote-node-id>
  </erp-rpdu-entry>
```

Description Information about Ethernet Ring RAPS PDU of a Ethernet Ring Protection group

<erp-rpdu-entry>

Usage

```
<erp-rpdu-information>
 <erp-rpdus>
  <erp-rpdu-entry>
   <protection-group-name>
    protection-group-name
   </protection-group-name>
   <request-state>
    request-state
   </request-state>
   <dnf-flag>
    dnf-flag
   </dnf-flag>
   <rb-flag>
    rb-flag
   </rb-flag>
   <originator>
    originator
   </originator>
   <remote-node-id>
    remote-node-id
   </remote-node-id>
  </erp-rpdu-entry>
 </erp-rpdus>
</erp-rpdu-information>
```

Description Information about Ethernet Ring RAPS PDU of a Ethernet Ring Protection group

<erp-rpdu-information>

Usage

```
<erp-rpdu-information>
 <erp-rpdus>....</erp-rpdus>
</erp-rpdu-information>
```

Description Information about one or more ethernet rings

<erp-rpdus>

Usage

```
<erp-rpdu-information>
 <erp-rpdus>
  <erp-rpdu-entry>....</erp-rpdu-entry>
```


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```
  </erp-rpdus>
</erp-rpdu-information>
```

Description

<erp-statistics>

Usage

```
<erp-statistics-information>
  <erp-statistics>
    <erp-statistics-entry>....</erp-statistics-entry>
  </erp-statistics>
</erp-statistics-information>
```

Description Ethernet ring statistics

<erp-statistics-entry>

Usage

```
<erp-statistics-entry>
  <protection-group-name>
    protection-group-name
  </protection-group-name>
  <raps-local-sf>
    raps-local-sf
  </raps-local-sf>
  <raps-remote-sf>
    raps-remote-sf
  </raps-remote-sf>
  <raps-nr>
    raps-nr
  </raps-nr>
  <raps-nr-rb>
    raps-nr-rb
  </raps-nr-rb>
</erp-statistics-entry>
```

Description Ethernet Ring protection group statistics

<erp-statistics-entry>

Usage

```
<erp-statistics-information>
  <erp-statistics>
    <erp-statistics-entry>
      <protection-group-name>
        protection-group-name
      </protection-group-name>
      <raps-local-sf>
        raps-local-sf
      </raps-local-sf>
```

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```
        <raps-remote-sf>
          raps-remote-sf
        </raps-remote-sf>
        <raps-nr>
          raps-nr
        </raps-nr>
        <raps-nr-rb>
          raps-nr-rb
        </raps-nr-rb>
      </erp-statistics-entry>
    </erp-statistics>
  </erp-statistics-information>
```

Description Ethernet Ring protection group statistics

<erp-statistics-information>

Usage

```
<erp-statistics-information>
  <erp-statistics>....</erp-statistics>
</erp-statistics-information>
```

Description Ethernet Ring protection group statistics of one or more protection groups

<ethernet-ring-pg>

Usage

```
<erp-interface-information>
  <ethernet-ring-pg>
    <erp-protection-group-name>
      erp-protection-group-name
    </erp-protection-group-name>
    <erp-interfaces>....</erp-interfaces>
  </ethernet-ring-pg>
</erp-interface-information>
```

Description

<ethernet-switching-aging-stats>

Usage

```
<ethernet-switching-statistics>
  <ethernet-switching-aging-stats>
    <age-statistics>....</age-statistics>
  </ethernet-switching-aging-stats>
</ethernet-switching-statistics>
```

Description

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<ethernet-switching-learning-stats>

Usage

```
<ethernet-switching-learning-stats>
  <mac-stats-rcvd-total>
    mac-stats-rcvd-total
  </mac-stats-rcvd-total>
  <mac-stats-rcvd-local>
    mac-stats-rcvd-local
  </mac-stats-rcvd-local>
  <mac-stats-rcvd-transit>
    mac-stats-rcvd-transit
  </mac-stats-rcvd-transit>
  <mac-stats-error>
    mac-stats-error
  </mac-stats-error>
  <mac-stats-forced-update>
    mac-stats-forced-update
  </mac-stats-forced-update>
  <mac-statistics>....</mac-statistics>
</ethernet-switching-learning-stats>
```

Description

<ethernet-switching-learning-stats>

Usage

```
<ethernet-switching-statistics>
  <ethernet-switching-learning-stats>
    <mac-stats-rcvd-total>
      mac-stats-rcvd-total
    </mac-stats-rcvd-total>
    <mac-stats-rcvd-local>
      mac-stats-rcvd-local
    </mac-stats-rcvd-local>
    <mac-stats-rcvd-transit>
      mac-stats-rcvd-transit
    </mac-stats-rcvd-transit>
    <mac-stats-error>
      mac-stats-error
    </mac-stats-error>
    <mac-stats-forced-update>
      mac-stats-forced-update
    </mac-stats-forced-update>
    <mac-statistics>....</mac-statistics>
  </ethernet-switching-learning-stats>
</ethernet-switching-statistics>
```

Description

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<ethernet-switching-mac-notification-information>

Usage

```
<ethernet-switching-mac-notification-information>
  <mac-notification-status>
    mac-notification-status
  </mac-notification-status>
  <mac-notification-interval>
    mac-notification-interval
  </mac-notification-interval>
  <mac-notification-sent>
    mac-notification-sent
  </mac-notification-sent>
  <mac-notification-max-tablesize>
    mac-notification-max-tablesize
  </mac-notification-max-tablesize>
</ethernet-switching-mac-notification-information>
```

Description

<ethernet-switching-next-hop-information>

Usage

```
<ethernet-switching-next-hop-information>
  <nh-information>
    nh-information
  </nh-information>
  <ethernet-switching-next-hops>....</ethernet-switching-next-hops>
</ethernet-switching-next-hop-information>
```

Description

<ethernet-switching-next-hops>

Usage

```
<ethernet-switching-next-hops>
  <nh-type>
    nh-type
  </nh-type>
  <direct-nh-index>
    direct-nh-index
  </direct-nh-index>
  <indirect-nh-index>
    indirect-nh-index
  </indirect-nh-index>
  <nh-index>
    nh-index
  </nh-index>
  <nh-8021q-tag>
    nh-8021q-tag
  </nh-8021q-tag>
  <nh-status>
    nh-status
```


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```
  </nh-status>
  <nh-reference-count>
    nh-reference-count
  </nh-reference-count>
  <nh-flags>
    nh-flags
  </nh-flags>
  <nh-list-type>
    nh-list-type
  </nh-list-type>
  <nh-fdb-entry-count>
    nh-fdb-entry-count
  </nh-fdb-entry-count>
  <nh-tagged-interface-count>
    nh-tagged-interface-count
  </nh-tagged-interface-count>
  <nh-untagged-interface-count>
    nh-untagged-interface-count
  </nh-untagged-interface-count>
  <nh-fdb-count>
    nh-fdb-count
  </nh-fdb-count>
  <nh-hw-token>
    nh-hw-token
  </nh-hw-token>
  <nh-interface-list>....</nh-interface-list>
  <nh-detail-interface-list>....</nh-detail-interface-list>
  <nh-fdb-entry>....</nh-fdb-entry>
</ethernet-switching-next-hops>
```

Description

<ethernet-switching-next-hops>

Usage

```
<ethernet-switching-next-hop-information>
  <ethernet-switching-next-hops>
    <nh-type>
      nh-type
    </nh-type>
    <direct-nh-index>
      direct-nh-index
    </direct-nh-index>
    <indirect-nh-index>
      indirect-nh-index
    </indirect-nh-index>
    <nh-index>
      nh-index
    </nh-index>
    <nh-8021q-tag>
      nh-8021q-tag
    </nh-8021q-tag>
    <nh-status>
      nh-status
    </nh-status>
```

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```
    <nh-reference-count>
      nh-reference-count
    </nh-reference-count>
    <nh-flags>
      nh-flags
    </nh-flags>
    <nh-list-type>
      nh-list-type
    </nh-list-type>
    <nh-fdb-entry-count>
      nh-fdb-entry-count
    </nh-fdb-entry-count>
    <nh-tagged-interface-count>
      nh-tagged-interface-count
    </nh-tagged-interface-count>
    <nh-untagged-interface-count>
      nh-untagged-interface-count
    </nh-untagged-interface-count>
    <nh-fdb-count>
      nh-fdb-count
    </nh-fdb-count>
    <nh-hw-token>
      nh-hw-token
    </nh-hw-token>
    <nh-interface-list>....</nh-interface-list>
    <nh-detail-interface-list>....</nh-detail-interface-list>
    <nh-fdb-entry>....</nh-fdb-entry>
  </ethernet-switching-next-hops>
</ethernet-switching-next-hop-information>
```

Description

<ethernet-switching-persistent-information>

Usage

```
<ethernet-switching-persistent-information>
  <persistent-mac-vlan>
    persistent-mac-vlan
  </persistent-mac-vlan>
  <persistent-mac-address>
    persistent-mac-address
  </persistent-mac-address>
  <persistent-mac-interface>
    persistent-mac-interface
  </persistent-mac-interface>
  <persistent-entry-type>
    persistent-entry-type
  </persistent-entry-type>
</ethernet-switching-persistent-information>
```

Description

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<ethernet-switching-statistics>

Usage

```
<ethernet-switching-statistics>
  <ethernet-switching-learning-stats>....</ethernet-switching-learning-stats>
  <ethernet-switching-aging-stats>....</ethernet-switching-aging-stats>
</ethernet-switching-statistics>
```

Description

<ethernet-switching-table>

Usage

```
<ethernet-switching-table>
  <mac-table-name>
    mac-table-name
  </mac-table-name>
  <mac-table-count>
    mac-table-count
  </mac-table-count>
  <mac-table-learned>
    mac-table-learned
  </mac-table-learned>
  <mac-table-persistent>
    mac-table-persistent
  </mac-table-persistent>
  <mac-table-entry>....</mac-table-entry>
</ethernet-switching-table>
```

Description

<ethernet-switching-table>

Usage

```
<ethernet-switching-table-information>
  <ethernet-switching-table>
    <mac-table-name>
      mac-table-name
    </mac-table-name>
    <mac-table-count>
      mac-table-count
    </mac-table-count>
    <mac-table-learned>
      mac-table-learned
    </mac-table-learned>
    <mac-table-persistent>
      mac-table-persistent
    </mac-table-persistent>
    <mac-table-entry>....</mac-table-entry>
  </ethernet-switching-table>
</ethernet-switching-table-information>
```

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Description

<ethernet-switching-table-information>

Usage

```
<ethernet-switching-table-information>
  <ethernet-switching-table>....</ethernet-switching-table>
</ethernet-switching-table-information>
```

Description

<fdb-log-entry>

Usage

```
<fdb-log-entry>
  <fdb-log-string>
    fdb-log-string
  </fdb-log-string>
</fdb-log-entry>
```

Description

<fdb-log-entry>

Usage

```
<fdb-log-info>
  <fdb-log-entry>
    <fdb-log-string>
      fdb-log-string
    </fdb-log-string>
  </fdb-log-entry>
</fdb-log-info>
```

Description

<fdb-log-info>

Usage

```
<fdb-log-info>
  <fdb-log-entry>....</fdb-log-entry>
</fdb-log-info>
```

Description

<fip-snooping-enode-entry>

Usage

```
<fip-snooping-enode-entry>
  <enode-mac>
    enode-mac
  </enode-mac>
  <enode-vlan>
```


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```
  enode-vlan
 </enode-vlan>
 <enode-configuration-timer>
  enode-configuration-timer
 </enode-configuration-timer>
 <enode-running-timer>
  enode-running-timer
 </enode-running-timer>
 <enode-interface>
  enode-interface
 </enode-interface>
 <fip-snooping-session-entry>....</fip-snooping-session-entry>
</fip-snooping-enode-entry>
```

Description

<fip-snooping-enode-entry>

Usage

```
<fip-snooping-enode-information>
 <fip-snooping-enode-entry>
  <enode-mac>
   enode-mac
  </enode-mac>
  <enode-vlan>
   enode-vlan
  </enode-vlan>
  <enode-configuration-timer>
   enode-configuration-timer
  </enode-configuration-timer>
  <enode-running-timer>
   enode-running-timer
  </enode-running-timer>
  <enode-interface>
   enode-interface
  </enode-interface>
  <fip-snooping-session-entry>....</fip-snooping-session-entry>
 </fip-snooping-enode-entry>
</fip-snooping-enode-information>
```

Description

<fip-snooping-enode-information>

Usage

```
<fip-snooping-enode-information>
 <fip-snooping-enode-entry>....</fip-snooping-enode-entry>
</fip-snooping-enode-information>
```

Description

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<fip-snooping-fcdsession-entry>

Usage

```
<fip-snooping-fcdsession-entry>
  <fip-fcdsession-enode-mac>
    fip-fcdsession-enode-mac
  </fip-fcdsession-enode-mac>
  <fip-fcdsession-vnport-mac>
    fip-fcdsession-vnport-mac
  </fip-fcdsession-vnport-mac>
  <fip-fcdsession-classid>
    fip-fcdsession-classid
  </fip-fcdsession-classid>
</fip-snooping-fcdsession-entry>
```

Description

<fip-snooping-fcdsession-entry>

Usage

```
<fip-snooping-fcdvlan-entry>
  <fip-snooping-fcdsession-entry>
    <fip-fcdsession-enode-mac>
      fip-fcdsession-enode-mac
    </fip-fcdsession-enode-mac>
    <fip-fcdsession-vnport-mac>
      fip-fcdsession-vnport-mac
    </fip-fcdsession-vnport-mac>
    <fip-fcdsession-classid>
      fip-fcdsession-classid
    </fip-fcdsession-classid>
  </fip-snooping-fcdsession-entry>
</fip-snooping-fcdvlan-entry>
```

Description

<fip-snooping-fcdsession-entry>

Usage

```
<fip-snooping-fcdstate-information>
  <fip-snooping-fcdvlan-entry>
    <fip-snooping-fcdsession-entry>
      <fip-fcdsession-enode-mac>
        fip-fcdsession-enode-mac
      </fip-fcdsession-enode-mac>
      <fip-fcdsession-vnport-mac>
        fip-fcdsession-vnport-mac
      </fip-fcdsession-vnport-mac>
      <fip-fcdsession-classid>
        fip-fcdsession-classid
      </fip-fcdsession-classid>
    </fip-snooping-fcdsession-entry>
  </fip-snooping-fcdvlan-entry>
```


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```
</fip-snooping-fcdstate-information>
```

Description

<fip-snooping-fcdstate-information>

Usage

```
<fip-snooping-fcdstate-information>
  <fip-snooping-fcdvlan-entry>....</fip-snooping-fcdvlan-entry>
</fip-snooping-fcdstate-information>
```

Description

<fip-snooping-fcdvlan-entry>

Usage

```
<fip-snooping-fcdvlan-entry>
  <fip-fcdvlan-hw-token>
    fip-fcdvlan-hw-token
  </fip-fcdvlan-hw-token>
  <fip-fcdvlan-fc-map>
    fip-fcdvlan-fc-map
  </fip-fcdvlan-fc-map>
  <fip-fcdvlan-fcfmac>
    fip-fcdvlan-fcfmac
  </fip-fcdvlan-fcfmac>
  <fip-fcdvlan-applied>
    fip-fcdvlan-applied
  </fip-fcdvlan-applied>
  <fip-snooping-fcdsession-entry>....</fip-snooping-fcdsession-entry>
</fip-snooping-fcdvlan-entry>
```

Description

<fip-snooping-fcdvlan-entry>

Usage

```
<fip-snooping-fcdstate-information>
  <fip-snooping-fcdvlan-entry>
    <fip-fcdvlan-hw-token>
      fip-fcdvlan-hw-token
    </fip-fcdvlan-hw-token>
    <fip-fcdvlan-fc-map>
      fip-fcdvlan-fc-map
    </fip-fcdvlan-fc-map>
    <fip-fcdvlan-fcfmac>
      fip-fcdvlan-fcfmac
    </fip-fcdvlan-fcfmac>
    <fip-fcdvlan-applied>
      fip-fcdvlan-applied
    </fip-fcdvlan-applied>
    <fip-snooping-fcdsession-entry>....</fip-snooping-fcdsession-entry>
  </fip-snooping-fcdvlan-entry>
```

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```
</fip-snooping-fcdstate-information>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-fcf-enode-entry>
  <fcf-enode-mac>
    fcf-enode-mac
  </fcf-enode-mac>
  <fcf-enode-configuration-timer>
    fcf-enode-configuration-timer
  </fcf-enode-configuration-timer>
  <fcf-enode-running-timer>
    fcf-enode-running-timer
  </fcf-enode-running-timer>
  <fcf-enode-interface>
    fcf-enode-interface
  </fcf-enode-interface>
  <fip-snooping-session-entry>....</fip-snooping-session-entry>
</fip-snooping-fcf-enode-entry>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-fcf-entry>
  <fip-snooping-fcf-enode-entry>
    <fcf-enode-mac>
      fcf-enode-mac
    </fcf-enode-mac>
    <fcf-enode-configuration-timer>
      fcf-enode-configuration-timer
    </fcf-enode-configuration-timer>
    <fcf-enode-running-timer>
      fcf-enode-running-timer
    </fcf-enode-running-timer>
    <fcf-enode-interface>
      fcf-enode-interface
    </fcf-enode-interface>
    <fip-snooping-session-entry>....</fip-snooping-session-entry>
  </fip-snooping-fcf-enode-entry>
</fip-snooping-fcf-entry>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-vlan-fcf-entry>
  <fip-snooping-fcf-enode-entry>
```


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```
    <fcf-enode-mac>
      fcf-enode-mac
    </fcf-enode-mac>
    <fcf-enode-configuration-timer>
      fcf-enode-configuration-timer
    </fcf-enode-configuration-timer>
    <fcf-enode-running-timer>
      fcf-enode-running-timer
    </fcf-enode-running-timer>
    <fcf-enode-interface>
      fcf-enode-interface
    </fcf-enode-interface>
    <fip-snooping-session-entry>....</fip-snooping-session-entry>
  </fip-snooping-fcf-enode-entry>
</fip-snooping-vlan-fcf-entry>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-vlan-entry>
  <fip-snooping-vlan-fcf-entry>
    <fip-snooping-fcf-enode-entry>
      <fcf-enode-mac>
        fcf-enode-mac
      </fcf-enode-mac>
      <fcf-enode-configuration-timer>
        fcf-enode-configuration-timer
      </fcf-enode-configuration-timer>
      <fcf-enode-running-timer>
        fcf-enode-running-timer
      </fcf-enode-running-timer>
      <fcf-enode-interface>
        fcf-enode-interface
      </fcf-enode-interface>
      <fip-snooping-session-entry>....</fip-snooping-session-entry>
    </fip-snooping-fcf-enode-entry>
  </fip-snooping-vlan-fcf-entry>
</fip-snooping-vlan-entry>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-statistics>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <fip-snooping-fcf-enode-entry>
        <fcf-enode-mac>
          fcf-enode-mac
        </fcf-enode-mac>
        <fcf-enode-configuration-timer>
```

```
                fcf-enode-configuration-timer
              </fcf-enode-configuration-timer>
              <fcf-enode-running-timer>
                fcf-enode-running-timer
              </fcf-enode-running-timer>
              <fcf-enode-interface>
                fcf-enode-interface
              </fcf-enode-interface>
              <fip-snooping-session-entry>....</fip-snooping-session-entry>
            </fip-snooping-fcf-enode-entry>
          </fip-snooping-vlan-fcf-entry>
        </fip-snooping-vlan-entry>
      </fip-snooping-statistics>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-fcf-information>
  <fip-snooping-fcf-entry>
    <fip-snooping-fcf-enode-entry>
      <fcf-enode-mac>
        fcf-enode-mac
      </fcf-enode-mac>
      <fcf-enode-configuration-timer>
        fcf-enode-configuration-timer
      </fcf-enode-configuration-timer>
      <fcf-enode-running-timer>
        fcf-enode-running-timer
      </fcf-enode-running-timer>
      <fcf-enode-interface>
        fcf-enode-interface
      </fcf-enode-interface>
      <fip-snooping-session-entry>....</fip-snooping-session-entry>
    </fip-snooping-fcf-enode-entry>
  </fip-snooping-fcf-entry>
</fip-snooping-fcf-information>
```

Description

<fip-snooping-fcf-enode-entry>

Usage

```
<fip-snooping-information>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <fip-snooping-fcf-enode-entry>
        <fcf-enode-mac>
          fcf-enode-mac
        </fcf-enode-mac>
        <fcf-enode-configuration-timer>
          fcf-enode-configuration-timer
        </fcf-enode-configuration-timer>
```


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```
        <fcf-enode-running-timer>
          fcf-enode-running-timer
        </fcf-enode-running-timer>
        <fcf-enode-interface>
          fcf-enode-interface
        </fcf-enode-interface>
        <fip-snooping-session-entry>....</fip-snooping-session-entry>
      </fip-snooping-fcf-enode-entry>
    </fip-snooping-vlan-fcf-entry>
  </fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-fcf-entry>

Usage

```
<fip-snooping-fcf-entry>
  <fcf-mac>
    fcf-mac
  </fcf-mac>
  <fcf-vlan>
    fcf-vlan
  </fcf-vlan>
  <fcf-session>
    fcf-session
  </fcf-session>
  <fcf-configuration-timer>
    fcf-configuration-timer
  </fcf-configuration-timer>
  <fcf-running-timer>
    fcf-running-timer
  </fcf-running-timer>
  <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
</fip-snooping-fcf-entry>
```

Description

<fip-snooping-fcf-entry>

Usage

```
<fip-snooping-fcf-information>
  <fip-snooping-fcf-entry>
    <fcf-mac>
      fcf-mac
    </fcf-mac>
    <fcf-vlan>
      fcf-vlan
    </fcf-vlan>
    <fcf-session>
      fcf-session
    </fcf-session>
    <fcf-configuration-timer>
      fcf-configuration-timer
```

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```
    </fcf-configuration-timer>
    <fcf-running-timer>
      fcf-running-timer
    </fcf-running-timer>
    <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
  </fip-snooping-fcf-entry>
</fip-snooping-fcf-information>
```

Description

<fip-snooping-fcf-information>

Usage

```
<fip-snooping-fcf-information>
  <fip-snooping-fcf-entry>....</fip-snooping-fcf-entry>
</fip-snooping-fcf-information>
```

Description

<fip-snooping-information>

Usage

```
<fip-snooping-information>
  <fip-snooping-vlan-entry>....</fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-session-entry>
  <session-fcf-mac>
    session-fcf-mac
  </session-fcf-mac>
  <session-vnport-mac>
    session-vnport-mac
  </session-vnport-mac>
  <session-vnport-timer>
    session-vnport-timer
  </session-vnport-timer>
</fip-snooping-session-entry>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-fcf-enode-entry>
  <fip-snooping-session-entry>
    <session-fcf-mac>
      session-fcf-mac
```


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```
    </session-fcf-mac>
    <session-vnport-mac>
      session-vnport-mac
    </session-vnport-mac>
    <session-vnport-timer>
      session-vnport-timer
    </session-vnport-timer>
  </fip-snooping-session-entry>
</fip-snooping-fcf-enode-entry>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-enode-entry>
  <fip-snooping-session-entry>
    <session-fcf-mac>
      session-fcf-mac
    </session-fcf-mac>
    <session-vnport-mac>
      session-vnport-mac
    </session-vnport-mac>
    <session-vnport-timer>
      session-vnport-timer
    </session-vnport-timer>
  </fip-snooping-session-entry>
</fip-snooping-enode-entry>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-fcf-entry>
  <fip-snooping-fcf-enode-entry>
    <fip-snooping-session-entry>
      <session-fcf-mac>
        session-fcf-mac
      </session-fcf-mac>
      <session-vnport-mac>
        session-vnport-mac
      </session-vnport-mac>
      <session-vnport-timer>
        session-vnport-timer
      </session-vnport-timer>
    </fip-snooping-session-entry>
  </fip-snooping-fcf-enode-entry>
</fip-snooping-fcf-entry>
```

Description

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<fip-snooping-session-entry>

Usage

```
<fip-snooping-vlan-fcf-entry>
  <fip-snooping-fcf-enode-entry>
    <fip-snooping-session-entry>
      <session-fcf-mac>
        session-fcf-mac
      </session-fcf-mac>
      <session-vnport-mac>
        session-vnport-mac
      </session-vnport-mac>
      <session-vnport-timer>
        session-vnport-timer
      </session-vnport-timer>
    </fip-snooping-session-entry>
  </fip-snooping-fcf-enode-entry>
</fip-snooping-vlan-fcf-entry>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-vlan-entry>
  <fip-snooping-vlan-fcf-entry>
    <fip-snooping-fcf-enode-entry>
      <fip-snooping-session-entry>
        <session-fcf-mac>
          session-fcf-mac
        </session-fcf-mac>
        <session-vnport-mac>
          session-vnport-mac
        </session-vnport-mac>
        <session-vnport-timer>
          session-vnport-timer
        </session-vnport-timer>
      </fip-snooping-session-entry>
    </fip-snooping-fcf-enode-entry>
  </fip-snooping-vlan-fcf-entry>
</fip-snooping-vlan-entry>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-statistics>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <fip-snooping-fcf-enode-entry>
        <fip-snooping-session-entry>
          <session-fcf-mac>
```


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```
                session-fcf-mac
               </session-fcf-mac>
               <session-vnport-mac>
                session-vnport-mac
               </session-vnport-mac>
               <session-vnport-timer>
                session-vnport-timer
               </session-vnport-timer>
              </fip-snooping-session-entry>
             </fip-snooping-fcf-enode-entry>
            </fip-snooping-vlan-fcf-entry>
           </fip-snooping-vlan-entry>
          </fip-snooping-statistics>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-enode-information>
 <fip-snooping-enode-entry>
  <fip-snooping-session-entry>
   <session-fcf-mac>
    session-fcf-mac
   </session-fcf-mac>
   <session-vnport-mac>
    session-vnport-mac
   </session-vnport-mac>
   <session-vnport-timer>
    session-vnport-timer
   </session-vnport-timer>
  </fip-snooping-session-entry>
 </fip-snooping-enode-entry>
</fip-snooping-enode-information>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-fcf-information>
 <fip-snooping-fcf-entry>
  <fip-snooping-fcf-enode-entry>
   <fip-snooping-session-entry>
    <session-fcf-mac>
     session-fcf-mac
    </session-fcf-mac>
    <session-vnport-mac>
     session-vnport-mac
    </session-vnport-mac>
    <session-vnport-timer>
     session-vnport-timer
    </session-vnport-timer>
   </fip-snooping-session-entry>
```

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```
    </fip-snooping-fcf-enode-entry>
  </fip-snooping-fcf-entry>
</fip-snooping-fcf-information>
```

Description

<fip-snooping-session-entry>

Usage

```
<fip-snooping-information>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <fip-snooping-fcf-enode-entry>
        <fip-snooping-session-entry>
          <session-fcf-mac>
            session-fcf-mac
          </session-fcf-mac>
          <session-vnport-mac>
            session-vnport-mac
          </session-vnport-mac>
          <session-vnport-timer>
            session-vnport-timer
          </session-vnport-timer>
        </fip-snooping-session-entry>
      </fip-snooping-fcf-enode-entry>
    </fip-snooping-vlan-fcf-entry>
  </fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-statistics>

Usage

```
<fip-snooping-statistics>
  <fip-snooping-vlan-entry>....</fip-snooping-vlan-entry>
</fip-snooping-statistics>
```

Description

<fip-snooping-vlan-entry>

Usage

```
<fip-snooping-vlan-entry>
  <fip-vlan-name>
    fip-vlan-name
  </fip-vlan-name>
  <fip-vlan-fc-map>
    fip-vlan-fc-map
  </fip-vlan-fc-map>
  <fip-snooping-vlan-statistics>....</fip-snooping-vlan-statistics>
  <fip-snooping-vlan-fcf-entry>....</fip-snooping-vlan-fcf-entry>
```


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```
</fip-snooping-vlan-entry>
```

Description

<fip-snooping-vlan-entry>

Usage

```
<fip-snooping-statistics>
 <fip-snooping-vlan-entry>
  <fip-vlan-name>
   fip-vlan-name
  </fip-vlan-name>
  <fip-vlan-fc-map>
   fip-vlan-fc-map
  </fip-vlan-fc-map>
  <fip-snooping-vlan-statistics>....</fip-snooping-vlan-statistics>
  <fip-snooping-vlan-fcf-entry>....</fip-snooping-vlan-fcf-entry>
 </fip-snooping-vlan-entry>
</fip-snooping-statistics>
```

Description

<fip-snooping-vlan-entry>

Usage

```
<fip-snooping-information>
 <fip-snooping-vlan-entry>
  <fip-vlan-name>
   fip-vlan-name
  </fip-vlan-name>
  <fip-vlan-fc-map>
   fip-vlan-fc-map
  </fip-vlan-fc-map>
  <fip-snooping-vlan-statistics>....</fip-snooping-vlan-statistics>
  <fip-snooping-vlan-fcf-entry>....</fip-snooping-vlan-fcf-entry>
 </fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-vlan-fcf-entry>

Usage

```
<fip-snooping-vlan-fcf-entry>
 <vlan-fcf-mac>
  vlan-fcf-mac
 </vlan-fcf-mac>
 <vlan-fcf-session>
  vlan-fcf-session
 </vlan-fcf-session>
 <vlan-fcf-configuration-timer>
  vlan-fcf-configuration-timer
 </vlan-fcf-configuration-timer>
```

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```
  <vlan-fcf-running-timer>
   vlan-fcf-running-timer
  </vlan-fcf-running-timer>
  <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
</fip-snooping-vlan-fcf-entry>
```

Description

<fip-snooping-vlan-fcf-entry>

Usage

```
<fip-snooping-vlan-entry>
  <fip-snooping-vlan-fcf-entry>
    <vlan-fcf-mac>
     vlan-fcf-mac
    </vlan-fcf-mac>
    <vlan-fcf-session>
     vlan-fcf-session
    </vlan-fcf-session>
    <vlan-fcf-configuration-timer>
     vlan-fcf-configuration-timer
    </vlan-fcf-configuration-timer>
    <vlan-fcf-running-timer>
     vlan-fcf-running-timer
    </vlan-fcf-running-timer>
    <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
  </fip-snooping-vlan-fcf-entry>
</fip-snooping-vlan-entry>
```

Description

<fip-snooping-vlan-fcf-entry>

Usage

```
<fip-snooping-statistics>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <vlan-fcf-mac>
       vlan-fcf-mac
      </vlan-fcf-mac>
      <vlan-fcf-session>
       vlan-fcf-session
      </vlan-fcf-session>
      <vlan-fcf-configuration-timer>
       vlan-fcf-configuration-timer
      </vlan-fcf-configuration-timer>
      <vlan-fcf-running-timer>
       vlan-fcf-running-timer
      </vlan-fcf-running-timer>
      <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
    </fip-snooping-vlan-fcf-entry>
  </fip-snooping-vlan-entry>
</fip-snooping-statistics>
```


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Description

<fip-snooping-vlan-fcf-entry>

Usage

```
<fip-snooping-information>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-fcf-entry>
      <vlan-fcf-mac>
        vlan-fcf-mac
      </vlan-fcf-mac>
      <vlan-fcf-session>
        vlan-fcf-session
      </vlan-fcf-session>
      <vlan-fcf-configuration-timer>
        vlan-fcf-configuration-timer
      </vlan-fcf-configuration-timer>
      <vlan-fcf-running-timer>
        vlan-fcf-running-timer
      </vlan-fcf-running-timer>
      <fip-snooping-fcf-enode-entry>....</fip-snooping-fcf-enode-entry>
    </fip-snooping-vlan-fcf-entry>
  </fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-vlan-statistics>

Usage

```
<fip-snooping-vlan-statistics>
  <fcf-mda-count>
    fcf-mda-count
  </fcf-mda-count>
  <fcf-uda-count>
    fcf-uda-count
  </fcf-uda-count>
  <fcf-flogi-acc-count>
    fcf-flogi-acc-count
  </fcf-flogi-acc-count>
  <fcf-flogi-rjt-count>
    fcf-flogi-rjt-count
  </fcf-flogi-rjt-count>
  <fcf-fdisc-acc-count>
    fcf-fdisc-acc-count
  </fcf-fdisc-acc-count>
  <fcf-fdisc-rjt-count>
    fcf-fdisc-rjt-count
  </fcf-fdisc-rjt-count>
  <fcf-logo-acc-count>
    fcf-logo-acc-count
  </fcf-logo-acc-count>
  <fcf-logo-rjt-count>
    fcf-logo-rjt-count
  </fcf-logo-rjt-count>
```

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```
<fcf-cvl-count>
  fcf-cvl-count
</fcf-cvl-count>
<enode-mds-count>
  enode-mds-count
</enode-mds-count>
<enode-uds-count>
  enode-uds-count
</enode-uds-count>
<enode-flogi-count>
  enode-flogi-count
</enode-flogi-count>
<enode-fdisc-count>
  enode-fdisc-count
</enode-fdisc-count>
<enode-logo-count>
  enode-logo-count
</enode-logo-count>
<enode-ka-count>
  enode-ka-count
</enode-ka-count>
<enode-vnport-ka-count>
  enode-vnport-ka-count
</enode-vnport-ka-count>
</fip-snooping-vlan-statistics>
```

Description

<fip-snooping-vlan-statistics>

Usage

```
<fip-snooping-vlan-entry>
  <fip-snooping-vlan-statistics>
    <fcf-mda-count>
      fcf-mda-count
    </fcf-mda-count>
    <fcf-uda-count>
      fcf-uda-count
    </fcf-uda-count>
    <fcf-flogi-acc-count>
      fcf-flogi-acc-count
    </fcf-flogi-acc-count>
    <fcf-flogi-rjt-count>
      fcf-flogi-rjt-count
    </fcf-flogi-rjt-count>
    <fcf-fdisc-acc-count>
      fcf-fdisc-acc-count
    </fcf-fdisc-acc-count>
    <fcf-fdisc-rjt-count>
      fcf-fdisc-rjt-count
    </fcf-fdisc-rjt-count>
    <fcf-logo-acc-count>
      fcf-logo-acc-count
    </fcf-logo-acc-count>
    <fcf-logo-rjt-count>
```


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```
      fcf-logo-rjt-count
    </fcf-logo-rjt-count>
    <fcf-cvl-count>
      fcf-cvl-count
    </fcf-cvl-count>
    <enode-mds-count>
      enode-mds-count
    </enode-mds-count>
    <enode-uds-count>
      enode-uds-count
    </enode-uds-count>
    <enode-flogi-count>
      enode-flogi-count
    </enode-flogi-count>
    <enode-fdisc-count>
      enode-fdisc-count
    </enode-fdisc-count>
    <enode-logo-count>
      enode-logo-count
    </enode-logo-count>
    <enode-ka-count>
      enode-ka-count
    </enode-ka-count>
    <enode-vnport-ka-count>
      enode-vnport-ka-count
    </enode-vnport-ka-count>
  </fip-snooping-vlan-statistics>
</fip-snooping-vlan-entry>
```

Description

<fip-snooping-vlan-statistics>

Usage

```
<fip-snooping-statistics>
  <fip-snooping-vlan-entry>
    <fip-snooping-vlan-statistics>
      <fcf-mda-count>
        fcf-mda-count
      </fcf-mda-count>
      <fcf-uda-count>
        fcf-uda-count
      </fcf-uda-count>
      <fcf-flogi-acc-count>
        fcf-flogi-acc-count
      </fcf-flogi-acc-count>
      <fcf-flogi-rjt-count>
        fcf-flogi-rjt-count
      </fcf-flogi-rjt-count>
      <fcf-fdisc-acc-count>
        fcf-fdisc-acc-count
      </fcf-fdisc-acc-count>
      <fcf-fdisc-rjt-count>
        fcf-fdisc-rjt-count
      </fcf-fdisc-rjt-count>
```

```
                <fcf-logo-acc-count>
                  fcf-logo-acc-count
                </fcf-logo-acc-count>
                <fcf-logo-rjt-count>
                  fcf-logo-rjt-count
                </fcf-logo-rjt-count>
                <fcf-cvl-count>
                  fcf-cvl-count
                </fcf-cvl-count>
                <enode-mds-count>
                  enode-mds-count
                </enode-mds-count>
                <enode-uds-count>
                  enode-uds-count
                </enode-uds-count>
                <enode-flogi-count>
                  enode-flogi-count
                </enode-flogi-count>
                <enode-fdisc-count>
                  enode-fdisc-count
                </enode-fdisc-count>
                <enode-logo-count>
                  enode-logo-count
                </enode-logo-count>
                <enode-ka-count>
                  enode-ka-count
                </enode-ka-count>
                <enode-vnport-ka-count>
                  enode-vnport-ka-count
                </enode-vnport-ka-count>
              </fip-snooping-vlan-statistics>
            </fip-snooping-vlan-entry>
          </fip-snooping-statistics>
```

Description

<fip-snooping-vlan-statistics>

Usage

```
          <fip-snooping-information>
            <fip-snooping-vlan-entry>
              <fip-snooping-vlan-statistics>
                <fcf-mda-count>
                  fcf-mda-count
                </fcf-mda-count>
                <fcf-uda-count>
                  fcf-uda-count
                </fcf-uda-count>
                <fcf-flogi-acc-count>
                  fcf-flogi-acc-count
                </fcf-flogi-acc-count>
                <fcf-flogi-rjt-count>
                  fcf-flogi-rjt-count
                </fcf-flogi-rjt-count>
                <fcf-fdisc-acc-count>
```


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```
      fcf-fdisc-acc-count
    </fcf-fdisc-acc-count>
    <fcf-fdisc-rjt-count>
      fcf-fdisc-rjt-count
    </fcf-fdisc-rjt-count>
    <fcf-logo-acc-count>
      fcf-logo-acc-count
    </fcf-logo-acc-count>
    <fcf-logo-rjt-count>
      fcf-logo-rjt-count
    </fcf-logo-rjt-count>
    <fcf-cvl-count>
      fcf-cvl-count
    </fcf-cvl-count>
    <enode-mds-count>
      enode-mds-count
    </enode-mds-count>
    <enode-uds-count>
      enode-uds-count
    </enode-uds-count>
    <enode-flogi-count>
      enode-flogi-count
    </enode-flogi-count>
    <enode-fdisc-count>
      enode-fdisc-count
    </enode-fdisc-count>
    <enode-logo-count>
      enode-logo-count
    </enode-logo-count>
    <enode-ka-count>
      enode-ka-count
    </enode-ka-count>
    <enode-vnport-ka-count>
      enode-vnport-ka-count
    </enode-vnport-ka-count>
  </fip-snooping-vlan-statistics>
 </fip-snooping-vlan-entry>
</fip-snooping-information>
```

Description

<fip-snooping-vlandiscovery-enode>

Usage

```
<fip-snooping-vlandiscovery-enode>
 <enode-mac>
  enode-mac
 </enode-mac>
 <fip-snooping-vlandiscovery-interface-name>
  fip-snooping-vlandiscovery-interface-name
 </fip-snooping-vlandiscovery-interface-name>
 <num-vlans>
  num-vlans
 </num-vlans>
 <fcdref-count>
```

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```
    fcdref-count
   </fcdref-count>
   <unsolicitated-notification-count>
    unsolicitated-notification-count
   </unsolicitated-notification-count>
   <notification-count>
    notification-count
   </notification-count>
   <request-count>
    request-count
   </request-count>
   <vlan-list>
    vlan-list
   </vlan-list>
  </fip-snooping-vlandiscovery-enode>
```

Description

<fip-snooping-vlandiscovery-enode>

Usage

```
<fip-snooping-vlandiscovery-enodes>
  <fip-snooping-vlandiscovery-enode>
    <enode-mac>
      enode-mac
    </enode-mac>
    <fip-snooping-vlandiscovery-interface-name>
      fip-snooping-vlandiscovery-interface-name
    </fip-snooping-vlandiscovery-interface-name>
    <num-vlans>
      num-vlans
    </num-vlans>
    <fcdref-count>
      fcdref-count
    </fcdref-count>
    <unsolicitated-notification-count>
      unsolicitated-notification-count
    </unsolicitated-notification-count>
    <notification-count>
      notification-count
    </notification-count>
    <request-count>
      request-count
    </request-count>
    <vlan-list>
      vlan-list
    </vlan-list>
  </fip-snooping-vlandiscovery-enode>
</fip-snooping-vlandiscovery-enodes>
```

Description

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<fip-snooping-vlandiscovery-enodes>

Usage

```
<fip-snooping-vlandiscovery-enodes>
  <fip-snooping-vlandiscovery-enode>....</fip-snooping-vlandiscovery-enode>
</fip-snooping-vlandiscovery-enodes>
```

Description Information about VLAN discovery Enodes information

<fip-snooping-vlandiscovery-interface>

Usage

```
<fip-snooping-vlandiscovery-interface>
  <fip-snooping-vlandiscovery-interface-name>
    fip-snooping-vlandiscovery-interface-name
  </fip-snooping-vlandiscovery-interface-name>
  <enode-count>
    enode-count
  </enode-count>
  <enode-list>
    enode-list
  </enode-list>
</fip-snooping-vlandiscovery-interface>
```

Description

<fip-snooping-vlandiscovery-interface>

Usage

```
<fip-snooping-vlandiscovery-interfaces>
  <fip-snooping-vlandiscovery-interface>
    <fip-snooping-vlandiscovery-interface-name>
      fip-snooping-vlandiscovery-interface-name
    </fip-snooping-vlandiscovery-interface-name>
    <enode-count>
      enode-count
    </enode-count>
    <enode-list>
      enode-list
    </enode-list>
  </fip-snooping-vlandiscovery-interface>
</fip-snooping-vlandiscovery-interfaces>
```

Description

<fip-snooping-vlandiscovery-interfaces>

Usage

```
<fip-snooping-vlandiscovery-interfaces>
<fip-snooping-vlandiscovery-interface>....</fip-snooping-vlandiscovery-interface>
```

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```
</fip-snooping-vlandiscovery-interfaces>
```

Description Information about VLAN discovery interfaces information

<fip-snooping-vlandiscovery-statistics>

Usage

```
<fip-snooping-vlandiscovery-statistics>
  <request-count>
    request-count
  </request-count>
  <notification-count>
    notification-count
  </notification-count>
  <unsolicitated-notification-count>
    unsolicitated-notification-count
  </unsolicitated-notification-count>
</fip-snooping-vlandiscovery-statistics>
```

Description

<fip-snooping-vlandiscovery-statistics>

Usage

```
<fip-snooping-vlandiscovery-statistics-information>
  <fip-snooping-vlandiscovery-statistics>
    <request-count>
      request-count
    </request-count>
    <notification-count>
      notification-count
    </notification-count>
    <unsolicitated-notification-count>
      unsolicitated-notification-count
    </unsolicitated-notification-count>
  </fip-snooping-vlandiscovery-statistics>
</fip-snooping-vlandiscovery-statistics-information>
```

Description

<fip-snooping-vlandiscovery-statistics-information>

Usage

```
<fip-snooping-vlandiscovery-statistics-information>
<fip-snooping-vlandiscovery-statistics>....</fip-snooping-vlandiscovery-statistics>

</fip-snooping-vlandiscovery-statistics-information>
```

Description

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<gvrp>

Usage

```
<gvrp>
  <gvrp-timers>....</gvrp-timers>
  <gvrp-information>....</gvrp-information>
  <gvrp-statistics>....</gvrp-statistics>
</gvrp>
```

Description

<gvrp-information>

Usage

```
<gvrp>
  <gvrp-information>
    <gvrp-status>
      gvrp-status
    </gvrp-status>
    <gvrp-dynamic-vlan>
      gvrp-dynamic-vlan
    </gvrp-dynamic-vlan>
    <gvrp-maximum-vlan>
      gvrp-maximum-vlan
    </gvrp-maximum-vlan>
    <gvrp-join-timer>
      gvrp-join-timer
    </gvrp-join-timer>
    <gvrp-leave-timer>
      gvrp-leave-timer
    </gvrp-leave-timer>
    <gvrp-leaveall-timer>
      gvrp-leaveall-timer
    </gvrp-leaveall-timer>
    <gvrp-interface-information>....</gvrp-interface-information>
  </gvrp-information>
</gvrp>
```

Description

<gvrp-interface-information>

Usage

```
<gvrp>
  <gvrp-information>
    <gvrp-interface-information>
      <gvrp-interface-name>
        gvrp-interface-name
      </gvrp-interface-name>
      <gvrp-interface-status>
        gvrp-interface-status
      </gvrp-interface-status>
    </gvrp-interface-information>
```

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```
  </gvrp-information>
</gvrp>
```

Description

<gvrp-statistics>

Usage

```
<gvrp>
  <gvrp-statistics>
    <join-empty-received>
      join-empty-received
    </join-empty-received>
    <join-in-received>
      join-in-received
    </join-in-received>
    <empty-received>
      empty-received
    </empty-received>
    <leave-in-received>
      leave-in-received
    </leave-in-received>
    <leave-empty-received>
      leave-empty-received
    </leave-empty-received>
    <leave-all-received>
      leave-all-received
    </leave-all-received>
    <join-empty-transmit>
      join-empty-transmit
    </join-empty-transmit>
    <join-in-transmit>
      join-in-transmit
    </join-in-transmit>
    <empty-transmit>
      empty-transmit
    </empty-transmit>
    <leave-in-transmit>
      leave-in-transmit
    </leave-in-transmit>
    <leave-empty-transmit>
      leave-empty-transmit
    </leave-empty-transmit>
    <leave-all-transmit>
      leave-all-transmit
    </leave-all-transmit>
  </gvrp-statistics>
</gvrp>
```

Description

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<gvrp-timers>

Usage

```
<gvrp>
  <gvrp-timers>
    <join-timer>
      join-timer
    </join-timer>
    <leave-timer>
      leave-timer
    </leave-timer>
    <leaveall-timer>
      leaveall-timer
    </leaveall-timer>
  </gvrp-timers>
</gvrp>
```

Description

<interface>

Usage

```
<interface>
  <interface-name>
    interface-name
  </interface-name>
  <interface-id>
    interface-id
  </interface-id>
  <interface-port-mode>
    interface-port-mode
  </interface-port-mode>
  <interface-mac-count>
    interface-mac-count
  </interface-mac-count>
  <interface-native-vlan-name>
    interface-native-vlan-name
  </interface-native-vlan-name>
  <interface-mac-learning-mode>
    interface-mac-learning-mode
  </interface-mac-learning-mode>
  <interface-reflective-relay-mode>
    interface-reflective-relay-mode
  </interface-reflective-relay-mode>
  <interface-error>
    interface-error
  </interface-error>
  <interface-ether-type>
    interface-ether-type
  </interface-ether-type>
  <interface-vlan-member-list>....</interface-vlan-member-list>
  <interface-state>
    interface-state
  </interface-state>
```

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```
</interface>
```

Description

<interface>

Usage

```
<switching-interface-information>
 <interface>
  <interface-name>
   interface-name
  </interface-name>
  <interface-id>
   interface-id
  </interface-id>
  <interface-port-mode>
   interface-port-mode
  </interface-port-mode>
  <interface-mac-count>
   interface-mac-count
  </interface-mac-count>
  <interface-native-vlan-name>
   interface-native-vlan-name
  </interface-native-vlan-name>
  <interface-mac-learning-mode>
   interface-mac-learning-mode
  </interface-mac-learning-mode>
  <interface-reflective-relay-mode>
   interface-reflective-relay-mode
  </interface-reflective-relay-mode>
  <interface-error>
   interface-error
  </interface-error>
  <interface-ether-type>
   interface-ether-type
  </interface-ether-type>
  <interface-vlan-member-list>....</interface-vlan-member-list>
  <interface-state>
   interface-state
  </interface-state>
 </interface>
</switching-interface-information>
```

Description

<interface-vlan-member>

Usage

```
<interface>
 <interface-vlan-member-list>
  <interface-vlan-member>
   <interface-vlan-name>
    interface-vlan-name
   </interface-vlan-name>
```


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```
        <interface-vlan-dot1q-tunneling>
          interface-vlan-dot1q-tunneling
        </interface-vlan-dot1q-tunneling>
        <interface-mapping-operation>
          interface-mapping-operation
        </interface-mapping-operation>
        <interface-mapping-tag>
          interface-mapping-tag
        </interface-mapping-tag>
        <interface-vlan-member-tagness>
          interface-vlan-member-tagness
        </interface-vlan-member-tagness>
        <interface-vlan-member-tagid>
          interface-vlan-member-tagid
        </interface-vlan-member-tagid>
        <interface-vlan-mac>
          interface-vlan-mac
        </interface-vlan-mac>
        <interface-msti-id>
          interface-msti-id
        </interface-msti-id>
        <blocking-status>
          blocking-status
        </blocking-status>
        <port-error-disable-time>
          port-error-disable-time
        </port-error-disable-time>
      </interface-vlan-member>
    </interface-vlan-member-list>
  </interface>
```

Description

<interface-vlan-member>

Usage

```
<switching-interface-information>
  <interface>
    <interface-vlan-member-list>
      <interface-vlan-member>
        <interface-vlan-name>
          interface-vlan-name
        </interface-vlan-name>
        <interface-vlan-dot1q-tunneling>
          interface-vlan-dot1q-tunneling
        </interface-vlan-dot1q-tunneling>
        <interface-mapping-operation>
          interface-mapping-operation
        </interface-mapping-operation>
        <interface-mapping-tag>
          interface-mapping-tag
        </interface-mapping-tag>
        <interface-vlan-member-tagness>
          interface-vlan-member-tagness
        </interface-vlan-member-tagness>
```

```
        <interface-vlan-member-tagid>
          interface-vlan-member-tagid
        </interface-vlan-member-tagid>
        <interface-vlan-mac>
          interface-vlan-mac
        </interface-vlan-mac>
        <interface-msti-id>
          interface-msti-id
        </interface-msti-id>
        <blocking-status>
          blocking-status
        </blocking-status>
        <port-error-disable-time>
          port-error-disable-time
        </port-error-disable-time>
      </interface-vlan-member>
    </interface-vlan-member-list>
  </interface>
</switching-interface-information>
```

Description

<interface-vlan-member-list>

Usage

```
<interface>
  <interface-vlan-member-list>
    <interface-protocol-mode>
      interface-protocol-mode
    </interface-protocol-mode>
    <interface-vlan-member>....</interface-vlan-member>
  </interface-vlan-member-list>
</interface>
```

Description

<interface-vlan-member-list>

Usage

```
<switching-interface-information>
  <interface>
    <interface-vlan-member-list>
      <interface-protocol-mode>
        interface-protocol-mode
      </interface-protocol-mode>
      <interface-vlan-member>....</interface-vlan-member>
    </interface-vlan-member-list>
  </interface>
</switching-interface-information>
```

Description

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<ip-source-guard>

Usage

```
<ip-source-guard>
  <ip-source-guard-information>....</ip-source-guard-information>
</ip-source-guard>
```

Description

<ip-source-guard-information>

Usage

```
<ip-source-guard>
  <ip-source-guard-information>
    <ipsg-vlan>
      ipsg-vlan
    </ipsg-vlan>
    <ipsg-vlan-tag>
      ipsg-vlan-tag
    </ipsg-vlan-tag>
    <ipsg-interface>
      ipsg-interface
    </ipsg-interface>
    <ipsg-mac>
      ipsg-mac
    </ipsg-mac>
    <ipsg-ip>
      ipsg-ip
    </ipsg-ip>
  </ip-source-guard-information>
</ip-source-guard>
```

Description

<krt-queue-all-entry>

Usage

```
<krt-queue-all-entry>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-entry-type>
    krt-queue-entry-type
  </krt-queue-entry-type>
</krt-queue-all-entry>
```

Description

<krt-queue-analyzer-information>

Usage

```
<krt-queue-analyzer-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-analyzer-name>
```

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```
    krt-queue-analyzer-name
  </krt-queue-analyzer-name>
</krt-queue-analyzer-information>
```

Description

<krt-queue-dhcp-information>

Usage

```
<krt-queue-dhcp-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-dhcp-mac>
    krt-queue-dhcp-mac
  </krt-queue-dhcp-mac>
  <krt-queue-dhcp-ip>
    krt-queue-dhcp-ip
  </krt-queue-dhcp-ip>
  <krt-queue-dhcp-lease>
    krt-queue-dhcp-lease
  </krt-queue-dhcp-lease>
  <krt-queue-dhcp-type>
    krt-queue-dhcp-type
  </krt-queue-dhcp-type>
  <krt-queue-dhcp-vlan-name>
    krt-queue-dhcp-vlan-name
  </krt-queue-dhcp-vlan-name>
  <krt-queue-dhcp-interface-name>
    krt-queue-dhcp-interface-name
  </krt-queue-dhcp-interface-name>
</krt-queue-dhcp-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-entry>
  <krt-queue-deferred>
    krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
    krt-queue-operation
  </krt-queue-operation>
  <krt-queue-last-error>
    krt-queue-last-error
  </krt-queue-last-error>
</krt-queue-entry>
```

Description

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<krt-queue-entry>

Usage

```
<krt-queue-all-entry>
  <krt-queue-entry>
    <krt-queue-deferred>
      krt-queue-deferred
    </krt-queue-deferred>
    <krt-queue-operation>
      krt-queue-operation
    </krt-queue-operation>
    <krt-queue-last-error>
      krt-queue-last-error
    </krt-queue-last-error>
  </krt-queue-entry>
</krt-queue-all-entry>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-dhcp-information>
  <krt-queue-entry>
    <krt-queue-deferred>
      krt-queue-deferred
    </krt-queue-deferred>
    <krt-queue-operation>
      krt-queue-operation
    </krt-queue-operation>
    <krt-queue-last-error>
      krt-queue-last-error
    </krt-queue-last-error>
  </krt-queue-entry>
</krt-queue-dhcp-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-vlan-information>
  <krt-queue-entry>
    <krt-queue-deferred>
      krt-queue-deferred
    </krt-queue-deferred>
    <krt-queue-operation>
      krt-queue-operation
    </krt-queue-operation>
    <krt-queue-last-error>
      krt-queue-last-error
    </krt-queue-last-error>
  </krt-queue-entry>
```

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```
</krt-queue-vlan-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-analyzer-information>
 <krt-queue-entry>
  <krt-queue-deferred>
   krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
   krt-queue-operation
  </krt-queue-operation>
  <krt-queue-last-error>
   krt-queue-last-error
  </krt-queue-last-error>
 </krt-queue-entry>
</krt-queue-analyzer-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-nh-information>
 <krt-queue-entry>
  <krt-queue-deferred>
   krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
   krt-queue-operation
  </krt-queue-operation>
  <krt-queue-last-error>
   krt-queue-last-error
  </krt-queue-last-error>
 </krt-queue-entry>
</krt-queue-nh-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-fdb-information>
 <krt-queue-entry>
  <krt-queue-deferred>
   krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
   krt-queue-operation
  </krt-queue-operation>
```


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```
    <krt-queue-last-error>
     krt-queue-last-error
    </krt-queue-last-error>
   </krt-queue-entry>
</krt-queue-fdb-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-vclass-information>
 <krt-queue-entry>
  <krt-queue-deferred>
   krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
   krt-queue-operation
  </krt-queue-operation>
  <krt-queue-last-error>
   krt-queue-last-error
  </krt-queue-last-error>
 </krt-queue-entry>
</krt-queue-vclass-information>
```

Description

<krt-queue-entry>

Usage

```
<krt-queue-msti-information>
 <krt-queue-entry>
  <krt-queue-deferred>
   krt-queue-deferred
  </krt-queue-deferred>
  <krt-queue-operation>
   krt-queue-operation
  </krt-queue-operation>
  <krt-queue-last-error>
   krt-queue-last-error
  </krt-queue-last-error>
 </krt-queue-entry>
</krt-queue-msti-information>
```

Description

<krt-queue-fdb-information>

Usage

```
<krt-queue-fdb-information>
 <krt-queue-entry>....</krt-queue-entry>
 <krt-queue-fdb-vlan-index>
  krt-queue-fdb-vlan-index
```

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```
</krt-queue-fdb-vlan-index>
<krt-queue-fdb-mac>
  krt-queue-fdb-mac
</krt-queue-fdb-mac>
<krt-queue-fdb-vlan-name>
  krt-queue-fdb-vlan-name
</krt-queue-fdb-vlan-name>
<krt-queue-fdb-nh-index>
  krt-queue-fdb-nh-index
</krt-queue-fdb-nh-index>
</krt-queue-fdb-information>
```

Description

<krt-queue-msti-information>

Usage

```
<krt-queue-msti-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-msti-context-id>
    krt-queue-msti-context-id
  </krt-queue-msti-context-id>
  <krt-queue-msti-interface-index>
    krt-queue-msti-interface-index
  </krt-queue-msti-interface-index>
  <krt-queue-msti-state>
    krt-queue-msti-state
  </krt-queue-msti-state>
</krt-queue-msti-information>
```

Description

<krt-queue-nh-information>

Usage

```
<krt-queue-nh-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-nh-index>
    krt-queue-nh-index
  </krt-queue-nh-index>
  <krt-queue-nh-type>
    krt-queue-nh-type
  </krt-queue-nh-type>
  <krt-queue-nh-local-index>
    krt-queue-nh-local-index
  </krt-queue-nh-local-index>
</krt-queue-nh-information>
```

Description

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<krt-queue-vclass-information>

Usage

```
<krt-queue-vclass-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-vclass-vlan>
    krt-queue-vclass-vlan
  </krt-queue-vclass-vlan>
  <krt-queue-vclass-oldvlan>
    krt-queue-vclass-oldvlan
  </krt-queue-vclass-oldvlan>
</krt-queue-vclass-information>
```

Description

<krt-queue-vlan-information>

Usage

```
<krt-queue-vlan-information>
  <krt-queue-entry>....</krt-queue-entry>
  <krt-queue-vlan-name>
    krt-queue-vlan-name
  </krt-queue-vlan-name>
</krt-queue-vlan-information>
```

Description

<l3-nexthop>

Usage

```
<l3-nexthop>
  <l3-nexthop-index>
    l3-nexthop-index
  </l3-nexthop-index>
  <l3nh-interface>
    l3nh-interface
  </l3nh-interface>
  <l3nh-mac>
    l3nh-mac
  </l3nh-mac>
  <l3nh-l2nh>
    l3nh-l2nh
  </l3nh-l2nh>
</l3-nexthop>
```

Description

<l3-nexthop>

Usage

```
<l3-nexthop-information>
  <l3-nexthop>
```

```
    <l3-nexthop-index>
      l3-nexthop-index
    </l3-nexthop-index>
    <l3nh-interface>
      l3nh-interface
    </l3nh-interface>
    <l3nh-mac>
      l3nh-mac
    </l3nh-mac>
    <l3nh-l2nh>
      l3nh-l2nh
    </l3nh-l2nh>
  </l3-nexthop>
</l3-nexthop-information>
```

Description

<l3-nexthop-information>

Usage

```
<l3-nexthop-information>
  <l3-nexthop>....</l3-nexthop>
</l3-nexthop-information>
```

Description

<layer2-protocol-tunneling-interface-entry>

Usage

```
<layer2-protocol-tunneling-interface-information>
  <layer2-protocol-tunneling-interface-entry>
    <l2pt-interface>
      l2pt-interface
    </l2pt-interface>
    <l2pt-operation>
      l2pt-operation
    </l2pt-operation>
    <l2pt-state>
      l2pt-state
    </l2pt-state>
    <l2pt-state-description>
      l2pt-state-description
    </l2pt-state-description>
  </layer2-protocol-tunneling-interface-entry>
</layer2-protocol-tunneling-interface-information>
```

Description

<layer2-protocol-tunneling-interface-information>

Usage

```
<layer2-protocol-tunneling-interface-information>
```


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<layer2-protocol-tunneling-interface-entry>....</layer2-protocol-tunneling-interface-entry>

</layer2-protocol-tunneling-interface-information>

Description

<layer2-protocol-tunneling-statistics>

Usage

<layer2-protocol-tunneling-statistics>

<layer2-protocol-tunneling-statistics-entry>....</layer2-protocol-tunneling-statistics-entry>

</layer2-protocol-tunneling-statistics>

Description

<layer2-protocol-tunneling-statistics-entry>

Usage

```
<layer2-protocol-tunneling-statistics>
  <layer2-protocol-tunneling-statistics-entry>
    <l2pt-statistics-vlan>
      l2pt-statistics-vlan
    </l2pt-statistics-vlan>
    <l2pt-statistics-interface>
      l2pt-statistics-interface
    </l2pt-statistics-interface>
    <l2pt-statistics-protocol>
      l2pt-statistics-protocol
    </l2pt-statistics-protocol>
    <l2pt-statistics-operation>
      l2pt-statistics-operation
    </l2pt-statistics-operation>
    <l2pt-statistics-packets>
      l2pt-statistics-packets
    </l2pt-statistics-packets>
    <l2pt-statistics-drops>
      l2pt-statistics-drops
    </l2pt-statistics-drops>
    <l2pt-statistics-shutdowns>
      l2pt-statistics-shutdowns
    </l2pt-statistics-shutdowns>
  </layer2-protocol-tunneling-statistics-entry>
</layer2-protocol-tunneling-statistics>
```

Description

<layer2-protocol-tunneling-vlan-entry>

Usage

```
<layer2-protocol-tunneling-vlan-information>
  <layer2-protocol-tunneling-vlan-entry>
```

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```
<l2pt-vlan>
  l2pt-vlan
</l2pt-vlan>
<l2pt-protocol>
  l2pt-protocol
</l2pt-protocol>
<l2pt-drop-threshold>
  l2pt-drop-threshold
</l2pt-drop-threshold>
<l2pt-shutdown-threshold>
  l2pt-shutdown-threshold
</l2pt-shutdown-threshold>
</layer2-protocol-tunneling-vlan-entry>
</layer2-protocol-tunneling-vlan-information>
```

Description

<layer2-protocol-tunneling-vlan-information>

Usage

```
<layer2-protocol-tunneling-vlan-information>
<layer2-protocol-tunneling-vlan-entry>....</layer2-protocol-tunneling-vlan-entry>

</layer2-protocol-tunneling-vlan-information>
```

Description

<mac-based-vlan-member-list>

Usage

```
<mac-based-vlan-member-list>
  <mac-based-vlan-member>
    mac-based-vlan-member
  </mac-based-vlan-member>
</mac-based-vlan-member-list>
```

Description

<mac-interfaces-list>

Usage

```
<mac-interfaces-list>
  <mac-interfaces>
    mac-interfaces
  </mac-interfaces>
  <mac-tags>
    mac-tags
  </mac-tags>
</mac-interfaces-list>
```

Description

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<mac-interfaces-list>

Usage

```
<mac-table-entry>
  <mac-interfaces-list>
    <mac-interfaces>
      mac-interfaces
    </mac-interfaces>
    <mac-tags>
      mac-tags
    </mac-tags>
  </mac-interfaces-list>
</mac-table-entry>
```

Description

<mac-interfaces-list>

Usage

```
<ethernet-switching-table>
  <mac-table-entry>
    <mac-interfaces-list>
      <mac-interfaces>
        mac-interfaces
      </mac-interfaces>
      <mac-tags>
        mac-tags
      </mac-tags>
    </mac-interfaces-list>
  </mac-table-entry>
</ethernet-switching-table>
```

Description

<mac-interfaces-list>

Usage

```
<ethernet-switching-table-information>
  <ethernet-switching-table>
    <mac-table-entry>
      <mac-interfaces-list>
        <mac-interfaces>
          mac-interfaces
        </mac-interfaces>
        <mac-tags>
          mac-tags
        </mac-tags>
      </mac-interfaces-list>
    </mac-table-entry>
  </ethernet-switching-table>
</ethernet-switching-table-information>
```

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Description

<mac-statistics>

Usage

```
<mac-statistics>
  <learning-interface>
    learning-interface
  </learning-interface>
  <received-local>
    received-local
  </received-local>
  <received-transit>
    received-transit
  </received-transit>
  <received-error>
    received-error
  </received-error>
  <invalid-vlan>
    invalid-vlan
  </invalid-vlan>
  <invalid-mac>
    invalid-mac
  </invalid-mac>
  <security-violation>
    security-violation
  </security-violation>
  <interface-down>
    interface-down
  </interface-down>
  <not-member>
    not-member
  </not-member>
  <interface-limit-exceeded>
    interface-limit-exceeded
  </interface-limit-exceeded>
  <mac-move-limit-exceeded>
    mac-move-limit-exceeded
  </mac-move-limit-exceeded>
  <vlan-limit-exceeded>
    vlan-limit-exceeded
  </vlan-limit-exceeded>
  <invalid-vlan-index>
    invalid-vlan-index
  </invalid-vlan-index>
  <interface-not-learning>
    interface-not-learning
  </interface-not-learning>
  <no-nexthop>
    no-nexthop
  </no-nexthop>
  <interface-no-learning>
    interface-no-learning
  </interface-no-learning>
  <others>
    others
```


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```
  </others>
</mac-statistics>
```

Description MAC learning statistics

<mac-statistics>

Usage

```
<ethernet-switching-learning-stats>
  <mac-statistics>
    <learning-interface>
      learning-interface
    </learning-interface>
    <received-local>
      received-local
    </received-local>
    <received-transit>
      received-transit
    </received-transit>
    <received-error>
      received-error
    </received-error>
    <invalid-vlan>
      invalid-vlan
    </invalid-vlan>
    <invalid-mac>
      invalid-mac
    </invalid-mac>
    <security-violation>
      security-violation
    </security-violation>
    <interface-down>
      interface-down
    </interface-down>
    <not-member>
      not-member
    </not-member>
    <interface-limit-exceeded>
      interface-limit-exceeded
    </interface-limit-exceeded>
    <mac-move-limit-exceeded>
      mac-move-limit-exceeded
    </mac-move-limit-exceeded>
    <vlan-limit-exceeded>
      vlan-limit-exceeded
    </vlan-limit-exceeded>
    <invalid-vlan-index>
      invalid-vlan-index
    </invalid-vlan-index>
    <interface-not-learning>
      interface-not-learning
    </interface-not-learning>
    <no-nexthop>
      no-nexthop
```

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```
    </no-nexthop>
    <interface-no-learning>
      interface-no-learning
    </interface-no-learning>
    <others>
      others
    </others>
  </mac-statistics>
</ethernet-switching-learning-stats>
```

Description MAC learning statistics

<mac-statistics>

Usage

```
<ethernet-switching-statistics>
  <ethernet-switching-learning-stats>
    <mac-statistics>
      <learning-interface>
        learning-interface
      </learning-interface>
      <received-local>
        received-local
      </received-local>
      <received-transit>
        received-transit
      </received-transit>
      <received-error>
        received-error
      </received-error>
      <invalid-vlan>
        invalid-vlan
      </invalid-vlan>
      <invalid-mac>
        invalid-mac
      </invalid-mac>
      <security-violation>
        security-violation
      </security-violation>
      <interface-down>
        interface-down
      </interface-down>
      <not-member>
        not-member
      </not-member>
      <interface-limit-exceeded>
        interface-limit-exceeded
      </interface-limit-exceeded>
      <mac-move-limit-exceeded>
        mac-move-limit-exceeded
      </mac-move-limit-exceeded>
      <vlan-limit-exceeded>
        vlan-limit-exceeded
      </vlan-limit-exceeded>
```


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```
      <invalid-vlan-index>
        invalid-vlan-index
      </invalid-vlan-index>
      <interface-not-learning>
        interface-not-learning
      </interface-not-learning>
      <no-nexthop>
        no-nexthop
      </no-nexthop>
      <interface-no-learning>
        interface-no-learning
      </interface-no-learning>
      <others>
        others
      </others>
    </mac-statistics>
  </ethernet-switching-learning-stats>
</ethernet-switching-statistics>
```

Description MAC learning statistics

<mac-table-entry>

Usage

```
<mac-table-entry>
  <mac-vlan>
    mac-vlan
  </mac-vlan>
  <mac-vlan-tag>
    mac-vlan-tag
  </mac-vlan-tag>
  <mac-address>
    mac-address
  </mac-address>
  <mac-interface>
    mac-interface
  </mac-interface>
  <mac-type>
    mac-type
  </mac-type>
  <mac-action>
    mac-action
  </mac-action>
  <mac-age>
    mac-age
  </mac-age>
  <mac-interfaces-list>....</mac-interfaces-list>
  <mac-entry-flags>
    mac-entry-flags
  </mac-entry-flags>
  <mac-learned-time>
    mac-learned-time
  </mac-learned-time>
  <mac-nexthop>
```

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```
  mac-nexthop
 </mac-nexthop>
 <mac-table-total-count>
  mac-table-total-count
 </mac-table-total-count>
 <mac-table-unknown-unicast-count>
  mac-table-unknown-unicast-count
 </mac-table-unknown-unicast-count>
 <mac-table-dot1x-count>
  mac-table-dot1x-count
 </mac-table-dot1x-count>
 <mac-table-dynamic-count>
  mac-table-dynamic-count
 </mac-table-dynamic-count>
 <mac-table-static-count>
  mac-table-static-count
 </mac-table-static-count>
 <mac-table-flood-count>
  mac-table-flood-count
 </mac-table-flood-count>
 <mac-table-derived-count>
  mac-table-derived-count
 </mac-table-derived-count>
 <mac-table-incomplete-count>
  mac-table-incomplete-count
 </mac-table-incomplete-count>
 <mac-table-recieve-count>
  mac-table-recieve-count
 </mac-table-recieve-count>
 <mac-table-persistent-count>
  mac-table-persistent-count
 </mac-table-persistent-count>
</mac-table-entry>
```

Description MAC table

<mac-table-entry>

Usage

```
<ethernet-switching-table>
 <mac-table-entry>
  <mac-vlan>
   mac-vlan
  </mac-vlan>
  <mac-vlan-tag>
   mac-vlan-tag
  </mac-vlan-tag>
  <mac-address>
   mac-address
  </mac-address>
  <mac-interface>
   mac-interface
  </mac-interface>
  <mac-type>
```


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```
        mac-type
      </mac-type>
      <mac-action>
        mac-action
      </mac-action>
      <mac-age>
        mac-age
      </mac-age>
      <mac-interfaces-list>....</mac-interfaces-list>
      <mac-entry-flags>
        mac-entry-flags
      </mac-entry-flags>
      <mac-learned-time>
        mac-learned-time
      </mac-learned-time>
      <mac-nexthop>
        mac-nexthop
      </mac-nexthop>
      <mac-table-total-count>
        mac-table-total-count
      </mac-table-total-count>
      <mac-table-unknown-unicast-count>
        mac-table-unknown-unicast-count
      </mac-table-unknown-unicast-count>
      <mac-table-dot1x-count>
        mac-table-dot1x-count
      </mac-table-dot1x-count>
      <mac-table-dynamic-count>
        mac-table-dynamic-count
      </mac-table-dynamic-count>
      <mac-table-static-count>
        mac-table-static-count
      </mac-table-static-count>
      <mac-table-flood-count>
        mac-table-flood-count
      </mac-table-flood-count>
      <mac-table-derived-count>
        mac-table-derived-count
      </mac-table-derived-count>
      <mac-table-incomplete-count>
        mac-table-incomplete-count
      </mac-table-incomplete-count>
      <mac-table-recieve-count>
        mac-table-recieve-count
      </mac-table-recieve-count>
      <mac-table-persistent-count>
        mac-table-persistent-count
      </mac-table-persistent-count>
    </mac-table-entry>
  </ethernet-switching-table>
```

Description MAC table

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<mac-table-entry>

Usage

```
<ethernet-switching-table-information>
  <ethernet-switching-table>
    <mac-table-entry>
      <mac-vlan>
        mac-vlan
      </mac-vlan>
      <mac-vlan-tag>
        mac-vlan-tag
      </mac-vlan-tag>
      <mac-address>
        mac-address
      </mac-address>
      <mac-interface>
        mac-interface
      </mac-interface>
      <mac-type>
        mac-type
      </mac-type>
      <mac-action>
        mac-action
      </mac-action>
      <mac-age>
        mac-age
      </mac-age>
      <mac-interfaces-list>....</mac-interfaces-list>
      <mac-entry-flags>
        mac-entry-flags
      </mac-entry-flags>
      <mac-learned-time>
        mac-learned-time
      </mac-learned-time>
      <mac-nexthop>
        mac-nexthop
      </mac-nexthop>
      <mac-table-total-count>
        mac-table-total-count
      </mac-table-total-count>
      <mac-table-unknown-unicast-count>
        mac-table-unknown-unicast-count
      </mac-table-unknown-unicast-count>
      <mac-table-dot1x-count>
        mac-table-dot1x-count
      </mac-table-dot1x-count>
      <mac-table-dynamic-count>
        mac-table-dynamic-count
      </mac-table-dynamic-count>
      <mac-table-static-count>
        mac-table-static-count
      </mac-table-static-count>
      <mac-table-flood-count>
        mac-table-flood-count
      </mac-table-flood-count>
```


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```
      <mac-table-derived-count>
        mac-table-derived-count
      </mac-table-derived-count>
      <mac-table-incomplete-count>
        mac-table-incomplete-count
      </mac-table-incomplete-count>
      <mac-table-recieve-count>
        mac-table-recieve-count
      </mac-table-recieve-count>
      <mac-table-persistent-count>
        mac-table-persistent-count
      </mac-table-persistent-count>
    </mac-table-entry>
  </ethernet-switching-table>
</ethernet-switching-table-information>
```

Description MAC table

<mac-vlan-list>

Usage

```
<vsi-profiles-information>
  <mac-vlan-list>
    <mac>
      mac
    </mac>
    <vlan>
      vlan
    </vlan>
  </mac-vlan-list>
</vsi-profiles-information>
```

Description

<mac-vlan-list>

Usage

```
<edge-virtual-bridging-information>
  <edge-virtual-bridging-interface-information>
    <vsi-profiles-information>
      <mac-vlan-list>
        <mac>
          mac
        </mac>
        <vlan>
          vlan
        </vlan>
      </mac-vlan-list>
    </vsi-profiles-information>
  </edge-virtual-bridging-interface-information>
</edge-virtual-bridging-information>
```

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Description

<mac-vlan-list>

Usage

```
<edge-virtual-bridging-information>
  <edge-virtual-bridging-interface-vsi-profiles-information>
    <vsi-profiles-information>
      <mac-vlan-list>
        <mac>
          mac
        </mac>
        <vlan>
          vlan
        </vlan>
      </mac-vlan-list>
    </vsi-profiles-information>
  </edge-virtual-bridging-interface-vsi-profiles-information>
</edge-virtual-bridging-information>
```

Description

<msti-bridge-parameters>

Usage

```
<msti-bridge-parameters>
  <msti-id>
    msti-id
  </msti-id>
  <msti-regional-root-bridge>....</msti-regional-root-bridge>
  <root-port>
    root-port
  </root-port>
  <root-cost>
    root-cost
  </root-cost>
  <hello-time-learned>
    hello-time-learned
  </hello-time-learned>
  <max-age-learned>
    max-age-learned
  </max-age-learned>
  <forward-delay-learned>
    forward-delay-learned
  </forward-delay-learned>
  <maximum-hop-count-configured>
    maximum-hop-count-configured
  </maximum-hop-count-configured>
  <hop-count>
    hop-count
  </hop-count>
  <time-since-last-tc>....</time-since-last-tc>
  <topology-change-count>
    topology-change-count
  </topology-change-count>
```


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```
<topology-change-initiator>
  topology-change-initiator
</topology-change-initiator>
<topology-change-last-received-from>
  topology-change-last-received-from
</topology-change-last-received-from>
<extended-system-id>
  extended-system-id
</extended-system-id>
<internal-instance-id>
  internal-instance-id
</internal-instance-id>
<this-bridge>....</this-bridge>
<hello-time-configured>
  hello-time-configured
</hello-time-configured>
<max-age-configured>
  max-age-configured
</max-age-configured>
<forward-delay-configured>
  forward-delay-configured
</forward-delay-configured>
<time-since-last-topology-change>
  time-since-last-topology-change
</time-since-last-topology-change>
<path-cost-method>
  path-cost-method
</path-cost-method>
</msti-bridge-parameters>
```

Description STP bridge parameters for multiple spanning tree instances

<msti-bridge-parameters>

Usage

```
<stp-bridge>
  <msti-bridge-parameters>
    <msti-id>
      msti-id
    </msti-id>
    <msti-regional-root-bridge>....</msti-regional-root-bridge>
    <root-port>
      root-port
    </root-port>
    <root-cost>
      root-cost
    </root-cost>
    <hello-time-learned>
      hello-time-learned
    </hello-time-learned>
    <max-age-learned>
      max-age-learned
    </max-age-learned>
    <forward-delay-learned>
```

```
      forward-delay-learned
    </forward-delay-learned>
    <maximum-hop-count-configured>
      maximum-hop-count-configured
    </maximum-hop-count-configured>
    <hop-count>
      hop-count
    </hop-count>
    <time-since-last-tc>....</time-since-last-tc>
    <topology-change-count>
      topology-change-count
    </topology-change-count>
    <topology-change-initiator>
      topology-change-initiator
    </topology-change-initiator>
    <topology-change-last-received-from>
      topology-change-last-received-from
    </topology-change-last-received-from>
    <extended-system-id>
      extended-system-id
    </extended-system-id>
    <internal-instance-id>
      internal-instance-id
    </internal-instance-id>
    <this-bridge>....</this-bridge>
    <hello-time-configured>
      hello-time-configured
    </hello-time-configured>
    <max-age-configured>
      max-age-configured
    </max-age-configured>
    <forward-delay-configured>
      forward-delay-configured
    </forward-delay-configured>
    <time-since-last-topology-change>
      time-since-last-topology-change
    </time-since-last-topology-change>
    <path-cost-method>
      path-cost-method
    </path-cost-method>
  </msti-bridge-parameters>
</stp-bridge>
```

Description STP bridge parameters for multiple spanning tree instances

<msti-regional-root-bridge>

Usage

```
<msti-bridge-parameters>
  <msti-regional-root-bridge>
    <bridge-priority>
      bridge-priority
    </bridge-priority>
    <bridge-mac>
```


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```
      bridge-mac
    </bridge-mac>
  </msti-regional-root-bridge>
</msti-bridge-parameters>
```

Description MSTI regional root identifier

<msti-regional-root-bridge>

Usage

```
<stp-bridge>
  <msti-bridge-parameters>
    <msti-regional-root-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
      <bridge-mac>
        bridge-mac
      </bridge-mac>
    </msti-regional-root-bridge>
  </msti-bridge-parameters>
</stp-bridge>
```

Description MSTI regional root identifier

<mstp-configuration>

Usage

```
<mstp-configuration>
  <context-id>
    context-id
  </context-id>
  <mstp-name>
    mstp-name
  </mstp-name>
  <mstp-revision>
    mstp-revision
  </mstp-revision>
  <mstp-configuration-digest>
    mstp-configuration-digest
  </mstp-configuration-digest>
  <vlan-map>....</vlan-map>
</mstp-configuration>
```

Description MSTP information

<mvrp>

Usage

```
<mvrp>
  <mvrp-information>....</mvrp-information>
```

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```
  <mvrp-vlans>....</mvrp-vlans>
  <mvrp-dynamic-vlan-information>....</mvrp-dynamic-vlan-information>
  <mvrp-statistics>....</mvrp-statistics>
</mvrp>
```

Description

<mvrp-dynamic-vlan-information>

Usage

```
<mvrp>
  <mvrp-dynamic-vlan-information>
    <mvrp-vmember-vlanname>
      mvrp-vmember-vlanname
    </mvrp-vmember-vlanname>
    <mvrp-dynamic-vmembers>....</mvrp-dynamic-vmembers>
  </mvrp-dynamic-vlan-information>
</mvrp>
```

Description

<mvrp-dynamic-vmember-information>

Usage

```
<mvrp>
  <mvrp-vlans>
    <mvrp-dynamic-vmember-information>
      <mvrp-vmember-name>
        mvrp-vmember-name
      </mvrp-vmember-name>
    </mvrp-dynamic-vmember-information>
  </mvrp-vlans>
</mvrp>
```

Description

<mvrp-dynamic-vmembers>

Usage

```
<mvrp>
  <mvrp-dynamic-vlan-information>
    <mvrp-dynamic-vmembers>
      <mvrp-vmember-interface>
        mvrp-vmember-interface
      </mvrp-vmember-interface>
    </mvrp-dynamic-vmembers>
  </mvrp-dynamic-vlan-information>
</mvrp>
```

Description

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<mvrp-information>

Usage

```
<mvrp>
  <mvrp-information>
    <mvrp-status>
      mvrp-status
    </mvrp-status>
    <mvrp-dynamic-vlan>
      mvrp-dynamic-vlan
    </mvrp-dynamic-vlan>
    <mvrp-intf-timers>....</mvrp-intf-timers>
    <mvrp-interface-information>....</mvrp-interface-information>
  </mvrp-information>
</mvrp>
```

Description

<mvrp-interface-information>

Usage

```
<mvrp>
  <mvrp-information>
    <mvrp-interface-information>
      <mvrp-interface-name>
        mvrp-interface-name
      </mvrp-interface-name>
      <mvrp-interface-status>
        mvrp-interface-status
      </mvrp-interface-status>
      <mvrp-interface-reg-ctrl>
        mvrp-interface-reg-ctrl
      </mvrp-interface-reg-ctrl>
    </mvrp-interface-information>
  </mvrp-information>
</mvrp>
```

Description

<mvrp-intf-timers>

Usage

```
<mvrp>
  <mvrp-information>
    <mvrp-intf-timers>
      <mvrp-tmr-intf>
        mvrp-tmr-intf
      </mvrp-tmr-intf>
      <mvrp-tmr-join>
        mvrp-tmr-join
      </mvrp-tmr-join>
      <mvrp-tmr-leave>
        mvrp-tmr-leave
```

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```
      </mvrp-tmr-leave>
      <mvrp-tmr-leaveall>
       mvrp-tmr-leaveall
      </mvrp-tmr-leaveall>
     </mvrp-intf-timers>
    </mvrp-information>
</mvrp>
```

Description

<mvrp-statistics>

Usage

```
<mvrp>
 <mvrp-statistics>
  <mvrp-statistics-interface-name>
   mvrp-statistics-interface-name
  </mvrp-statistics-interface-name>
  <mrpdu-received>
   mrpdu-received
  </mrpdu-received>
  <mrp-invalid-received>
   mrp-invalid-received
  </mrp-invalid-received>
  <mrp-new-received>
   mrp-new-received
  </mrp-new-received>
  <mrp-join-empty-received>
   mrp-join-empty-received
  </mrp-join-empty-received>
  <mrp-join-in-received>
   mrp-join-in-received
  </mrp-join-in-received>
  <mrp-empty-received>
   mrp-empty-received
  </mrp-empty-received>
  <mrp-in-received>
   mrp-in-received
  </mrp-in-received>
  <mrp-leave-received>
   mrp-leave-received
  </mrp-leave-received>
  <mrp-leaveall-received>
   mrp-leaveall-received
  </mrp-leaveall-received>
  <mrpdu-transmit>
   mrpdu-transmit
  </mrpdu-transmit>
  <mrpdu-tx-fail>
   mrpdu-tx-fail
  </mrpdu-tx-fail>
  <mrp-new-transmit>
   mrp-new-transmit
  </mrp-new-transmit>
  <mrp-join-empty-transmit>
```


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```
    mrp-join-empty-transmit
   </mrp-join-empty-transmit>
   <mrp-join-in-transmit>
    mrp-join-in-transmit
   </mrp-join-in-transmit>
   <mrp-empty-transmit>
    mrp-empty-transmit
   </mrp-empty-transmit>
   <mrp-in-transmit>
    mrp-in-transmit
   </mrp-in-transmit>
   <mrp-leave-transmit>
    mrp-leave-transmit
   </mrp-leave-transmit>
   <mrp-leaveall-transmit>
    mrp-leaveall-transmit
   </mrp-leaveall-transmit>
  </mvrp-statistics>
 </mvrp>
```

Description

<mvrp-vlans>

Usage

```
<mvrp>
 <mvrp-vlans>
  <mvrp-vlan-id>
   mvrp-vlan-id
  </mvrp-vlan-id>

<mvrp-dynamic-vmember-information>....</mvrp-dynamic-vmember-information>
 </mvrp-vlans>
</mvrp>
```

Description

<nh-detail-interface-list>

Usage

```
<nh-detail-interface-list>
 <nh-detail-next-hop-index>
  nh-detail-next-hop-index
 </nh-detail-next-hop-index>
 <nh-detail-interface-name>
  nh-detail-interface-name
 </nh-detail-interface-name>
 <nh-detail-tag-string>
  nh-detail-tag-string
 </nh-detail-tag-string>
</nh-detail-interface-list>
```

Description

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<nh-detail-interface-list>

Usage

```
<ethernet-switching-next-hops>
  <nh-detail-interface-list>
    <nh-detail-next-hop-index>
      nh-detail-next-hop-index
    </nh-detail-next-hop-index>
    <nh-detail-interface-name>
      nh-detail-interface-name
    </nh-detail-interface-name>
    <nh-detail-tag-string>
      nh-detail-tag-string
    </nh-detail-tag-string>
  </nh-detail-interface-list>
</ethernet-switching-next-hops>
```

Description

<nh-detail-interface-list>

Usage

```
<ethernet-switching-next-hop-information>
  <ethernet-switching-next-hops>
    <nh-detail-interface-list>
      <nh-detail-next-hop-index>
        nh-detail-next-hop-index
      </nh-detail-next-hop-index>
      <nh-detail-interface-name>
        nh-detail-interface-name
      </nh-detail-interface-name>
      <nh-detail-tag-string>
        nh-detail-tag-string
      </nh-detail-tag-string>
    </nh-detail-interface-list>
  </ethernet-switching-next-hops>
</ethernet-switching-next-hop-information>
```

Description

<nh-fdb-entry>

Usage

```
<nh-fdb-entry>
  <nh-mac-vlan>
    nh-mac-vlan
  </nh-mac-vlan>
  <nh-mac-address>
    nh-mac-address
  </nh-mac-address>
</nh-fdb-entry>
```


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Description

<nh-fdb-entry>

Usage

```
<ethernet-switching-next-hops>
  <nh-fdb-entry>
    <nh-mac-vlan>
      nh-mac-vlan
    </nh-mac-vlan>
    <nh-mac-address>
      nh-mac-address
    </nh-mac-address>
  </nh-fdb-entry>
</ethernet-switching-next-hops>
```

Description

<nh-fdb-entry>

Usage

```
<ethernet-switching-next-hop-information>
  <ethernet-switching-next-hops>
    <nh-fdb-entry>
      <nh-mac-vlan>
        nh-mac-vlan
      </nh-mac-vlan>
      <nh-mac-address>
        nh-mac-address
      </nh-mac-address>
    </nh-fdb-entry>
  </ethernet-switching-next-hops>
</ethernet-switching-next-hop-information>
```

Description

<nh-interface-list>

Usage

```
<nh-interface-list>
  <nh-interface-name>
    nh-interface-name
  </nh-interface-name>
</nh-interface-list>
```

Description

<nh-interface-list>

Usage

```
<ethernet-switching-next-hops>
  <nh-interface-list>
    <nh-interface-name>
```

```
      nh-interface-name
    </nh-interface-name>
  </nh-interface-list>
</ethernet-switching-next-hops>
```

Description

<nh-interface-list>

Usage

```
<ethernet-switching-next-hop-information>
  <ethernet-switching-next-hops>
    <nh-interface-list>
      <nh-interface-name>
        nh-interface-name
      </nh-interface-name>
    </nh-interface-list>
  </ethernet-switching-next-hops>
</ethernet-switching-next-hop-information>
```

Description

<policy-vlan-member-list>

Usage

```
<policy-vlan-member-list>
  <policy-vlan-member>
    policy-vlan-member
  </policy-vlan-member>
</policy-vlan-member-list>
```

Description

<private-vlan-community-list>

Usage

```
<private-vlan-community-list>
  <community-vlan>
    community-vlan
  </community-vlan>
</private-vlan-community-list>
```

Description

<private-vlan-isolated-list>

Usage

```
<private-vlan-isolated-list>
  <isolated-vlan>
    isolated-vlan
  </isolated-vlan>
```


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```
</private-vlan-isolated-list>
```

Description

<private-vlan-secondary-list>

Usage

```
<private-vlan-secondary-list>
  <secondary-vlan>
    secondary-vlan
  </secondary-vlan>
</private-vlan-secondary-list>
```

Description

<push-vlan-member-list>

Usage

```
<push-vlan-member-list>
  <push-vlan-member>
    push-vlan-member
  </push-vlan-member>
</push-vlan-member-list>
```

Description

<regional-root-bridge>

Usage

```
<cist-bridge-parameters>
  <regional-root-bridge>
    <bridge-priority>
      bridge-priority
    </bridge-priority>
    <bridge-mac>
      bridge-mac
    </bridge-mac>
  </regional-root-bridge>
</cist-bridge-parameters>
```

Description CIST regional root bridge identifier

<regional-root-bridge>

Usage

```
<stp-bridge>
  <cist-bridge-parameters>
    <regional-root-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
```

```
      <bridge-mac>
        bridge-mac
      </bridge-mac>
    </regional-root-bridge>
  </cist-bridge-parameters>
</stp-bridge>
```

Description CIST regional root bridge identifier

<root-bridge>

Usage

```
<cist-bridge-parameters>
  <root-bridge>
    <bridge-priority>
      bridge-priority
    </bridge-priority>
    <bridge-mac>
      bridge-mac
    </bridge-mac>
  </root-bridge>
</cist-bridge-parameters>
```

Description Root bridge identifier

<root-bridge>

Usage

```
<vst-bridge-parameters>
  <root-bridge>
    <bridge-priority>
      bridge-priority
    </bridge-priority>
    <bridge-mac>
      bridge-mac
    </bridge-mac>
  </root-bridge>
</vst-bridge-parameters>
```

Description Root bridge identifier

<root-bridge>

Usage

```
<stp-bridge>
  <cist-bridge-parameters>
    <root-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
      <bridge-mac>
```


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```
      bridge-mac
     </bridge-mac>
    </root-bridge>
   </cist-bridge-parameters>
</stp-bridge>
```

Description Root bridge identifier

<root-bridge>

Usage

```
<stp-bridge>
 <vst-bridge-parameters>
  <root-bridge>
   <bridge-priority>
    bridge-priority
   </bridge-priority>
   <bridge-mac>
    bridge-mac
   </bridge-mac>
  </root-bridge>
 </vst-bridge-parameters>
</stp-bridge>
```

Description Root bridge identifier

<rtg>

Usage

```
<rtg>
 <rtg-information>....</rtg-information>
 <rtg-information-pergrp>....</rtg-information-pergrp>
 <rtg-information-pergrp-err>....</rtg-information-pergrp-err>
</rtg>
```

Description

<rtg-information>

Usage

```
<rtg>
 <rtg-information>
  <rtg-group-name>
   rtg-group-name
  </rtg-group-name>
  <rtg-first-interface-name>
   rtg-first-interface-name
  </rtg-first-interface-name>
  <rtg-second-interface-name>
   rtg-second-interface-name
  </rtg-second-interface-name>
```

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```
    <rtg-first-interface-state>
      rtg-first-interface-state
    </rtg-first-interface-state>
    <rtg-second-interface-state>
      rtg-second-interface-state
    </rtg-second-interface-state>
    <rtg-first-interface-timeoflastflap>
      rtg-first-interface-timeoflastflap
    </rtg-first-interface-timeoflastflap>
    <rtg-second-interface-timeoflastflap>
      rtg-second-interface-timeoflastflap
    </rtg-second-interface-timeoflastflap>
    <rtg-first-interface-flaps>
      rtg-first-interface-flaps
    </rtg-first-interface-flaps>
    <rtg-second-interface-flaps>
      rtg-second-interface-flaps
    </rtg-second-interface-flaps>
    <rtg-first-interface-bandwidth>
      rtg-first-interface-bandwidth
    </rtg-first-interface-bandwidth>
    <rtg-second-interface-bandwidth>
      rtg-second-interface-bandwidth
    </rtg-second-interface-bandwidth>
  </rtg-information>
</rtg>
```

Description

<rtg-information-pergrp>

Usage

```
<rtg>
  <rtg-information-pergrp>
    <rtg-first-interface-name>
      rtg-first-interface-name
    </rtg-first-interface-name>
    <rtg-first-interface-state>
      rtg-first-interface-state
    </rtg-first-interface-state>
    <rtg-first-interface-bandwidth>
      rtg-first-interface-bandwidth
    </rtg-first-interface-bandwidth>
    <rtg-first-interface-timeoflastflap>
      rtg-first-interface-timeoflastflap
    </rtg-first-interface-timeoflastflap>
    <rtg-first-interface-flaps>
      rtg-first-interface-flaps
    </rtg-first-interface-flaps>
    <rtg-second-interface-name>
      rtg-second-interface-name
    </rtg-second-interface-name>
    <rtg-second-interface-state>
      rtg-second-interface-state
    </rtg-second-interface-state>
```


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```
    <rtg-second-interface-timeoflastflap>
      rtg-second-interface-timeoflastflap
    </rtg-second-interface-timeoflastflap>
    <rtg-second-interface-flaps>
      rtg-second-interface-flaps
    </rtg-second-interface-flaps>
    <rtg-second-interface-bandwidth>
      rtg-second-interface-bandwidth
    </rtg-second-interface-bandwidth>
    <rtg-group-description>
      rtg-group-description
    </rtg-group-description>
  </rtg-information-pergrp>
</rtg>
```

Description

<rtg-information-pergrp-err>

Usage

```
<rtg>
  <rtg-information-pergrp-err>
    <rtg-group-name>
      rtg-group-name
    </rtg-group-name>
  </rtg-information-pergrp-err>
</rtg>
```

Description

<stp-bridge>

Usage

```
<stp-bridge>
  <context-id>
    context-id
  </context-id>
  <protocol>
    protocol
  </protocol>
  <cist-bridge-parameters>....</cist-bridge-parameters>
  <msti-bridge-parameters>....</msti-bridge-parameters>
  <vst-bridge-parameters>....</vst-bridge-parameters>
</stp-bridge>
```

Description Information about STP bridge parameters

<stp-context-statistics-information>

Usage

```
<stp-context-statistics-information>
  <message-type>
```

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```
    message-type
  </message-type>
  <total-bpdus-sent>
    total-bpdus-sent
  </total-bpdus-sent>
  <total-bpdus-received>
    total-bpdus-received
  </total-bpdus-received>
  <vstp-statistics>....</vstp-statistics>
  <bpdus-sent-5seconds>
    bpdus-sent-5seconds
  </bpdus-sent-5seconds>
  <bpdus-received-5seconds>
    bpdus-received-5seconds
  </bpdus-received-5seconds>
</stp-context-statistics-information>
```

Description Spanning Tree Protocol statistics

<stp-instance>

Usage

```
<stp-interface-information>
  <stp-instance>
    <instance-id>
      instance-id
    </instance-id>
    <vlan-id>
      vlan-id
    </vlan-id>
    <stp-interfaces>....</stp-interfaces>
  </stp-instance>
</stp-interface-information>
```

Description

<stp-interface-entry>

Usage

```
<stp-interface-entry>
  <interface-name>
    interface-name
  </interface-name>
  <port-priority>
    port-priority
  </port-priority>
  <port-number>
    port-number
  </port-number>
  <designated-port-priority>
    designated-port-priority
  </designated-port-priority>
  <designated-port-number>
```


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```
  designated-port-number
 </designated-port-number>
 <port-cost>
  port-cost
 </port-cost>
 <port-state>
  port-state
 </port-state>
 <designated-bridge-priority>
  designated-bridge-priority
 </designated-bridge-priority>
 <designated-bridge-mac>
  designated-bridge-mac
 </designated-bridge-mac>
 <port-role>
  port-role
 </port-role>
 <link-type>
  link-type
 </link-type>
 <port-migrated-protocol>
  port-migrated-protocol
 </port-migrated-protocol>
 <boundary-port>
  boundary-port
 </boundary-port>
 <edge-delay-while-expiry-count>
  edge-delay-while-expiry-count
 </edge-delay-while-expiry-count>
 <rcvd-info-while-expiry-count>
  rcvd-info-while-expiry-count
 </rcvd-info-while-expiry-count>
</stp-interface-entry>
```

Description Information about Spanning Tree Protocol interface

<stp-interface-entry>

Usage

```
<stp-interface-information>
 <stp-instance>
  <stp-interfaces>
   <stp-interface-entry>
    <interface-name>
     interface-name
    </interface-name>
    <port-priority>
     port-priority
    </port-priority>
    <port-number>
     port-number
    </port-number>
    <designated-port-priority>
     designated-port-priority
```

```
</designated-port-priority>
<designated-port-number>
  designated-port-number
</designated-port-number>
<port-cost>
  port-cost
</port-cost>
<port-state>
  port-state
</port-state>
<designated-bridge-priority>
  designated-bridge-priority
</designated-bridge-priority>
<designated-bridge-mac>
  designated-bridge-mac
</designated-bridge-mac>
<port-role>
  port-role
</port-role>
<link-type>
  link-type
</link-type>
<port-migrated-protocol>
  port-migrated-protocol
</port-migrated-protocol>
<boundary-port>
  boundary-port
</boundary-port>
<edge-delay-while-expiry-count>
  edge-delay-while-expiry-count
</edge-delay-while-expiry-count>
<rcvd-info-while-expiry-count>
  rcvd-info-while-expiry-count
</rcvd-info-while-expiry-count>
</stp-interface-entry>
</stp-interfaces>
</stp-instance>
</stp-interface-information>
```

Description Information about Spanning Tree Protocol interface

<stp-interface-information>

Usage

```
<stp-interface-information>
  <stp-instance>....</stp-instance>
</stp-interface-information>
```

Description Information about STP interfaces or instances

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<stp-interface-statistics>

Usage

```
<stp-interface-statistics>
  <stp-interface-statistics-entry>....</stp-interface-statistics-entry>
  <vstp-interface-statistics>....</vstp-interface-statistics>
</stp-interface-statistics>
```

Description STP interface statistics

<stp-interface-statistics-entry>

Usage

```
<stp-interface-statistics-entry>
  <interface-name>
    interface-name
  </interface-name>
  <total-bpdus-sent>
    total-bpdus-sent
  </total-bpdus-sent>
  <total-bpdus-received>
    total-bpdus-received
  </total-bpdus-received>
  <next-bpdu-time>
    next-bpdu-time
  </next-bpdu-time>
</stp-interface-statistics-entry>
```

Description STP interface statistics

<stp-interface-statistics-entry>

Usage

```
<stp-interface-statistics>
  <stp-interface-statistics-entry>
    <interface-name>
      interface-name
    </interface-name>
    <total-bpdus-sent>
      total-bpdus-sent
    </total-bpdus-sent>
    <total-bpdus-received>
      total-bpdus-received
    </total-bpdus-received>
    <next-bpdu-time>
      next-bpdu-time
    </next-bpdu-time>
  </stp-interface-statistics-entry>
</stp-interface-statistics>
```

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Description STP interface statistics

<stp-interface-statistics-entry>

Usage

```
<stp-interface-statistics>
  <vstp-interface-statistics>
    <stp-interface-statistics-entry>
      <interface-name>
        interface-name
      </interface-name>
      <total-bpdus-sent>
        total-bpdus-sent
      </total-bpdus-sent>
      <total-bpdus-received>
        total-bpdus-received
      </total-bpdus-received>
      <next-bpdu-time>
        next-bpdu-time
      </next-bpdu-time>
    </stp-interface-statistics-entry>
  </vstp-interface-statistics>
</stp-interface-statistics>
```

Description STP interface statistics

<stp-interface-statistics-entry>

Usage

```
<stp-vlan-interface-statistics>
  <stp-interface-statistics-entry>
    <interface-name>
      interface-name
    </interface-name>
    <total-bpdus-sent>
      total-bpdus-sent
    </total-bpdus-sent>
    <total-bpdus-received>
      total-bpdus-received
    </total-bpdus-received>
    <next-bpdu-time>
      next-bpdu-time
    </next-bpdu-time>
  </stp-interface-statistics-entry>
</stp-vlan-interface-statistics>
```

Description STP interface statistics

<stp-interfaces>

Usage

```
<stp-interface-information>
```


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```
  <stp-instance>
    <stp-interfaces>
      <stp-interface-entry>....</stp-interface-entry>
    </stp-interfaces>
  </stp-instance>
</stp-interface-information>
```

Description Information about STP interfaces

<stp-kernel-table>

Usage

```
<stp-kernel-table>
  <stp-kernel-table-entry>....</stp-kernel-table-entry>
</stp-kernel-table>
```

Description STP kernel table information

<stp-kernel-table-entry>

Usage

```
<stp-kernel-table>
  <stp-kernel-table-entry>
    <stp-index>
      stp-index
    </stp-index>
    <kernel-if-name>
      kernel-if-name
    </kernel-if-name>
    <kernel-stp-instance>
      kernel-stp-instance
    </kernel-stp-instance>
    <kernel-state>
      kernel-state
    </kernel-state>
    <kernel-action>
      kernel-action
    </kernel-action>
    <epoch>
      epoch
    </epoch>
    <hardware-learning>
      hardware-learning
    </hardware-learning>
  </stp-kernel-table-entry>
</stp-kernel-table>
```

Description

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<stp-vlan-interface-statistics>

Usage

```
<stp-vlan-interface-statistics>
  <stp-interface-statistics-entry>....</stp-interface-statistics-entry>
</stp-vlan-interface-statistics>
```

Description Statistics information about VLAN STP interfaces

<swap-vlan-member-list>

Usage

```
<swap-vlan-member-list>
  <swap-vlan-member>
    swap-vlan-member
  </swap-vlan-member>
</swap-vlan-member-list>
```

Description

<switching-interface-information>

Usage

```
<switching-interface-information>
  <interface>....</interface>
</switching-interface-information>
```

Description Operational information about Ethernet-switching interfaces

<tagged-vlan-member-list>

Usage

```
<tagged-vlan-member-list>
  <tagged-vlan-member>
    tagged-vlan-member
  </tagged-vlan-member>
</tagged-vlan-member-list>
```

Description

<task>

Usage

```
<task-timer-information>
  <task>
    <task-name>
      task-name
    </task-name>
    <task-timer-priority>....</task-timer-priority>
    <task-timer-summary>....</task-timer-summary>
```


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```
    <task-timer>....</task-timer>
  </task>
</task-timer-information>
```

Description

<task-account-information>

Usage

```
<task-accounting-information>
  <task-account-information>
</task-account-information>
</task-accounting-information>
```

Description

<task-account-status>

Usage

```
<task-accounting-information>
  <task-account-status>
</task-account-status>
</task-accounting-information>
```

Description

<task-accounting-information>

Usage

```
<task-accounting-information>
  <task-acc-task-name>
    task-acc-task-name
  </task-acc-task-name>
  <task-acc-status>
    task-acc-status
  </task-acc-status>
  <task-acc-task-started>
    task-acc-task-started
  </task-acc-task-started>
  <task-acc-task-user-time>
    task-acc-task-user-time
  </task-acc-task-user-time>
  <task-acc-task-system-time>
    task-acc-task-system-time
  </task-acc-task-system-time>
  <task-acc-task-longest-run>
    task-acc-task-longest-run
  </task-acc-task-longest-run>
  <task-account-status>....</task-account-status>
  <task-account-information>....</task-account-information>
</task-accounting-information>
```

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Description

<task-block>

Usage

```
<task-block-list>
  <task-block>
    <tb-name>
      tb-name
    </tb-name>
    <tb-size>
      tb-size
    </tb-size>
    <tb-alloc-size>
      tb-alloc-size
    </tb-alloc-size>
    <tb-terse-transient>
      tb-terse-transient
    </tb-terse-transient>
    <tb-terse-fullpage>
      tb-terse-fullpage
    </tb-terse-fullpage>
    <tb-terse-debug>
      tb-terse-debug
    </tb-terse-debug>
    <tb-alloc-blocks>
      tb-alloc-blocks
    </tb-alloc-blocks>
    <tb-alloc-bytes>
      tb-alloc-bytes
    </tb-alloc-bytes>
    <tb-max-alloc-blocks>
      tb-max-alloc-blocks
    </tb-max-alloc-blocks>
    <tb-max-alloc-bytes>
      tb-max-alloc-bytes
    </tb-max-alloc-bytes>
  </task-block>
</task-block-list>
```

Description

<task-block>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>
        <tb-name>
          tb-name
        </tb-name>
        <tb-size>
          tb-size
        </tb-size>
```


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```
        <tb-alloc-size>
          tb-alloc-size
        </tb-alloc-size>
        <tb-terse-transient>
          tb-terse-transient
        </tb-terse-transient>
        <tb-terse-fullpage>
          tb-terse-fullpage
        </tb-terse-fullpage>
        <tb-terse-debug>
          tb-terse-debug
        </tb-terse-debug>
        <tb-alloc-blocks>
          tb-alloc-blocks
        </tb-alloc-blocks>
        <tb-alloc-bytes>
          tb-alloc-bytes
        </tb-alloc-bytes>
        <tb-max-alloc-blocks>
          tb-max-alloc-blocks
        </tb-max-alloc-blocks>
        <tb-max-alloc-bytes>
          tb-max-alloc-bytes
        </tb-max-alloc-bytes>
      </task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-block-list>

Usage

```
<task-block-list>
  <task-block>....</task-block>
</task-block-list>
```

Description

<task-block-list>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>
      <task-block>....</task-block>
    </task-block-list>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-io-information>

Usage

```
<task-io-information>
  <task-io-task-name>
    task-io-task-name
  </task-io-task-name>
  <task-io-read>
    task-io-read
  </task-io-read>
  <task-io-write>
    task-io-write
  </task-io-write>
  <task-io-received>
    task-io-received
  </task-io-received>
  <task-io-sent>
    task-io-sent
  </task-io-sent>
  <task-io-dropped>
    task-io-dropped
  </task-io-dropped>
</task-io-information>
```

Description

<task-jobs-background>

Usage

```
<task-jobs-information>
  <task-jobs-background>
</task-jobs-background>
</task-jobs-information>
```

Description

<task-jobs-foreground>

Usage

```
<task-jobs-information>
  <task-jobs-foreground>
</task-jobs-foreground>
</task-jobs-information>
```

Description

<task-jobs-information>

Usage

```
<task-jobs-information>
  <task-jobs-fg-priority>
    task-jobs-fg-priority
```


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```
  </task-jobs-fg-priority>
  <task-jobs-fg-task-name>
    task-jobs-fg-task-name
  </task-jobs-fg-task-name>
  <task-jobs-fg-wait>
    task-jobs-fg-wait
  </task-jobs-fg-wait>
  <task-jobs-fg-flags>
    task-jobs-fg-flags
  </task-jobs-fg-flags>
  <task-jobs-bg-priority>
    task-jobs-bg-priority
  </task-jobs-bg-priority>
  <task-jobs-bg-task-name>
    task-jobs-bg-task-name
  </task-jobs-bg-task-name>
  <task-jobs-bg-misses>
    task-jobs-bg-misses
  </task-jobs-bg-misses>
  <task-jobs-bg-runs>
    task-jobs-bg-runs
  </task-jobs-bg-runs>
  <task-jobs-bg-wait>
    task-jobs-bg-wait
  </task-jobs-bg-wait>
  <task-jobs-bg-flags>
    task-jobs-bg-flags
  </task-jobs-bg-flags>
  <task-jobs-foreground>....</task-jobs-foreground>
  <task-jobs-background>....</task-jobs-background>
</task-jobs-information>
```

Description

<task-lite-page>

Usage

```
<task-lite-page-list>
  <task-lite-page>
    <tlp-name>
      tlp-name
    </tlp-name>
    <tlp-alloc-pages>
      tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
      tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
      tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
      tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
  </task-lite-page>
```

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```
</task-lite-page-list>
```

Description

<task-lite-page>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-lite-page-list>
   <task-lite-page>
    <tlp-name>
     tlp-name
    </tlp-name>
    <tlp-alloc-pages>
     tlp-alloc-pages
    </tlp-alloc-pages>
    <tlp-alloc-bytes>
     tlp-alloc-bytes
    </tlp-alloc-bytes>
    <tlp-max-alloc-pages>
     tlp-max-alloc-pages
    </tlp-max-alloc-pages>
    <tlp-max-alloc-bytes>
     tlp-max-alloc-bytes
    </tlp-max-alloc-bytes>
   </task-lite-page>
  </task-lite-page-list>
 </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-lite-page-list>

Usage

```
<task-lite-page-list>
 <task-lite-page>....</task-lite-page>
</task-lite-page-list>
```

Description

<task-lite-page-list>

Usage

```
<task-memory-information>
 <task-memory-allocator-report>
  <task-lite-page-list>
   <task-lite-page>....</task-lite-page>
  </task-lite-page-list>
 </task-memory-allocator-report>
</task-memory-information>
```


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Description

<task-malloc>

Usage

```
<task-malloc-list>
  <task-malloc>
    <tm-name>
      tm-name
    </tm-name>
    <tm-allocs>
      tm-allocs
    </tm-allocs>
    <tm-alloc-bytes>
      tm-alloc-bytes
    </tm-alloc-bytes>
    <tm-max-allocs>
      tm-max-allocs
    </tm-max-allocs>
    <tm-max-alloc-bytes>
      tm-max-alloc-bytes
    </tm-max-alloc-bytes>
    <tm-function-calls>
      tm-function-calls
    </tm-function-calls>
  </task-malloc>
</task-malloc-list>
```

Description

<task-malloc>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>
        <tm-name>
          tm-name
        </tm-name>
        <tm-allocs>
          tm-allocs
        </tm-allocs>
        <tm-alloc-bytes>
          tm-alloc-bytes
        </tm-alloc-bytes>
        <tm-max-allocs>
          tm-max-allocs
        </tm-max-allocs>
        <tm-max-alloc-bytes>
          tm-max-alloc-bytes
        </tm-max-alloc-bytes>
        <tm-function-calls>
          tm-function-calls
        </tm-function-calls>
```

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```
    </task-malloc>
   </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-malloc-list>

Usage

```
<task-malloc-list>
  <task-malloc>....</task-malloc>
</task-malloc-list>
```

Description

<task-malloc-list>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>
      <task-malloc>....</task-malloc>
    </task-malloc-list>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-allocator-report>

Usage

```
<task-memory-information>
  <task-memory-allocator-report>
    <task-block-list>....</task-block-list>
    <task-lite-page-list>....</task-lite-page-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-allocator-report>
</task-memory-information>
```

Description

<task-memory-information>

Usage

```
<task-memory-information>
  <task-memory-in-use-size>
```


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```
  task-memory-in-use-size
 </task-memory-in-use-size>
 <task-memory-in-use-avail>
  task-memory-in-use-avail
 </task-memory-in-use-avail>
 <task-memory-max-size>
  task-memory-max-size
 </task-memory-max-size>
 <task-memory-max-avail>
  task-memory-max-avail
 </task-memory-max-avail>
 <task-memory-max-when>
  task-memory-max-when
 </task-memory-max-when>
 <task-memory-free-size>
  task-memory-free-size
 </task-memory-free-size>
 <task-memory-overall-report>....</task-memory-overall-report>
 <task-memory-allocator-report>....</task-memory-allocator-report>
 <task-memory-malloc-usage-report>....</task-memory-malloc-usage-report>
 <task-memory-dynamic-allocs>
  task-memory-dynamic-allocs
 </task-memory-dynamic-allocs>
 <task-memory-max-dynamic-allocs>
  task-memory-max-dynamic-allocs
 </task-memory-max-dynamic-allocs>
 <task-memory-bss-bytes>
  task-memory-bss-bytes
 </task-memory-bss-bytes>
 <task-memory-max-bss-bytes>
  task-memory-max-bss-bytes
 </task-memory-max-bss-bytes>
 <task-memory-page-data-bytes>
  task-memory-page-data-bytes
 </task-memory-page-data-bytes>
 <task-memory-max-page-data-bytes>
  task-memory-max-page-data-bytes
 </task-memory-max-page-data-bytes>
 <task-memory-dir-bytes>
  task-memory-dir-bytes
 </task-memory-dir-bytes>
 <task-memory-max-dir-bytes>
  task-memory-max-dir-bytes
 </task-memory-max-dir-bytes>
 <task-memory-total-bytes-in-use>
  task-memory-total-bytes-in-use
 </task-memory-total-bytes-in-use>
 <task-memory-total-bytes-percent>
  task-memory-total-bytes-percent
 </task-memory-total-bytes-percent>
</task-memory-information>
```

Description

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<task-memory-malloc-usage-report>

Usage

```
<task-memory-information>
  <task-memory-malloc-usage-report>
    <task-malloc-list>....</task-malloc-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
  </task-memory-malloc-usage-report>
</task-memory-information>
```

Description

<task-memory-overall-report>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>....</task-size-block-list>
    <task-memory-stats-list>....</task-memory-stats-list>
    <task-memory-total-bytes>
      task-memory-total-bytes
    </task-memory-total-bytes>
    <task-memory-total-max-bytes>
      task-memory-total-max-bytes
    </task-memory-total-max-bytes>
    <task-memory-total-free-bytes>
      task-memory-total-free-bytes
    </task-memory-total-free-bytes>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats>

Usage

```
<task-memory-stats>
  <tms-name>
    tms-name
  </tms-name>
  <tms-allocs>
    tms-allocs
  </tms-allocs>
  <tms-mallocs>
    tms-mallocs
  </tms-mallocs>
  <tms-alloc-bytes>
    tms-alloc-bytes
```


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```
  </tms-alloc-bytes>
  <tms-max-allocs>
   tms-max-allocs
  </tms-max-allocs>
  <tms-max-bytes>
   tms-max-bytes
  </tms-max-bytes>
  <tms-free-bytes>
   tms-free-bytes
  </tms-free-bytes>
</task-memory-stats>
```

Description

<task-memory-stats>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-memory-stats-list>
      <task-memory-stats>
        <tms-name>
          tms-name
        </tms-name>
        <tms-allocs>
          tms-allocs
        </tms-allocs>
        <tms-mallocs>
          tms-mallocs
        </tms-mallocs>
        <tms-alloc-bytes>
          tms-alloc-bytes
        </tms-alloc-bytes>
        <tms-max-allocs>
          tms-max-allocs
        </tms-max-allocs>
        <tms-max-bytes>
          tms-max-bytes
        </tms-max-bytes>
        <tms-free-bytes>
          tms-free-bytes
        </tms-free-bytes>
      </task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-memory-stats-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
```

```
    <task-memory-stats-list>
      <task-memory-stats>....</task-memory-stats>
    </task-memory-stats-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-replication-state>

Usage

```
<task-replication-state>
  <task-gres-state>
    task-gres-state
  </task-gres-state>
  <task-re-mode>
    task-re-mode
  </task-re-mode>
</task-replication-state>
```

Description Current state of task replication

<task-size-block>

Usage

```
<task-size-block-list>
  <task-size-block>
    <tsb-size>
      tsb-size
    </tsb-size>
    <tsb-terse-transient>
      tsb-terse-transient
    </tsb-terse-transient>
    <tsb-terse-fullpage>
      tsb-terse-fullpage
    </tsb-terse-fullpage>
    <tsb-allocs>
      tsb-allocs
    </tsb-allocs>
    <tsb-mallocs>
      tsb-mallocs
    </tsb-mallocs>
    <tsb-alloc-bytes>
      tsb-alloc-bytes
    </tsb-alloc-bytes>
    <tsb-max-allocs>
      tsb-max-allocs
    </tsb-max-allocs>
    <tsb-max-bytes>
      tsb-max-bytes
    </tsb-max-bytes>
    <tsb-free-bytes>
      tsb-free-bytes
```


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```
    </tsb-free-bytes>
  </task-size-block>
</task-size-block-list>
```

Description

<task-size-block>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>
        <tsb-size>
          tsb-size
        </tsb-size>
        <tsb-terse-transient>
          tsb-terse-transient
        </tsb-terse-transient>
        <tsb-terse-fullpage>
          tsb-terse-fullpage
        </tsb-terse-fullpage>
        <tsb-allocs>
          tsb-allocs
        </tsb-allocs>
        <tsb-mallocs>
          tsb-mallocs
        </tsb-mallocs>
        <tsb-alloc-bytes>
          tsb-alloc-bytes
        </tsb-alloc-bytes>
        <tsb-max-allocs>
          tsb-max-allocs
        </tsb-max-allocs>
        <tsb-max-bytes>
          tsb-max-bytes
        </tsb-max-bytes>
        <tsb-free-bytes>
          tsb-free-bytes
        </tsb-free-bytes>
      </task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-size-block-list>

Usage

```
<task-size-block-list>
  <task-size-block>....</task-size-block>
</task-size-block-list>
```

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Description

<task-size-block-list>

Usage

```
<task-memory-information>
  <task-memory-overall-report>
    <task-size-block-list>
      <task-size-block>....</task-size-block>
    </task-size-block-list>
  </task-memory-overall-report>
</task-memory-information>
```

Description

<task-statistics-information>

Usage

```
<task-statistics-information>
  <task-stat-event-name>
    task-stat-event-name
  </task-stat-event-name>
  <tast-stat-event-count>
    tast-stat-event-count
  </tast-stat-event-count>
</task-statistics-information>
```

Description

<task-summary-information>

Usage

```
<task-summary-information>
  <task-summary-priority>
    task-summary-priority
  </task-summary-priority>
  <task-summary-task-name>
    task-summary-task-name
  </task-summary-task-name>
  <task-summary-protocol>
    task-summary-protocol
  </task-summary-protocol>
  <task-summary-port>
    task-summary-port
  </task-summary-port>
  <task-summary-socket>
    task-summary-socket
  </task-summary-socket>
  <task-summary-flags>
    task-summary-flags
  </task-summary-flags>
</task-summary-information>
```


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Description

<task-timer>

Usage

```
<task-timer>
  <timer-name>
    timer-name
  </timer-name>
  <timer-late>
    timer-late
  </timer-late>
  <timer-expires>
    timer-expires
  </timer-expires>
  <timer-jitter>
    timer-jitter
  </timer-jitter>
  <timer-interval>
    timer-interval
  </timer-interval>
  <timer-flags>
    timer-flags
  </timer-flags>
</task-timer>
```

Description

<task-timer>

Usage

```
<task-timer-information>
  <task>
    <task-timer>
      <timer-name>
        timer-name
      </timer-name>
      <timer-late>
        timer-late
      </timer-late>
      <timer-expires>
        timer-expires
      </timer-expires>
      <timer-jitter>
        timer-jitter
      </timer-jitter>
      <timer-interval>
        timer-interval
      </timer-interval>
      <timer-flags>
        timer-flags
      </timer-flags>
    </task-timer>
  </task>
```

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```
</task-timer-information>
```

Description

<task-timer-information>

Usage

```
<task-timer-information>
  <task>....</task>
</task-timer-information>
```

Description

<task-timer-priority>

Usage

```
<task-timer-priority>
  <task-timer-type>
    task-timer-type
  </task-timer-type>
</task-timer-priority>
```

Description

<task-timer-priority>

Usage

```
<task-timer-information>
  <task>
    <task-timer-priority>
      <task-timer-type>
        task-timer-type
      </task-timer-type>
    </task-timer-priority>
  </task>
</task-timer-information>
```

Description

<task-timer-summary>

Usage

```
<task-timer-summary>
  <task-timer-leaf>
    task-timer-leaf
  </task-timer-leaf>
  <task-timer-parent>
    task-timer-parent
  </task-timer-parent>
  <task-timer-expired>
    task-timer-expired
  </task-timer-expired>
```


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```
</task-timer-summary>
```

Description

<task-timer-summary>

Usage

```
<task-timer-information>
 <task>
  <task-timer-summary>
   <task-timer-leaf>
    task-timer-leaf
   </task-timer-leaf>
   <task-timer-parent>
    task-timer-parent
   </task-timer-parent>
   <task-timer-expired>
    task-timer-expired
   </task-timer-expired>
  </task-timer-summary>
 </task>
</task-timer-information>
```

Description

<this-bridge>

Usage

```
<cist-bridge-parameters>
 <this-bridge>
  <bridge-priority>
   bridge-priority
  </bridge-priority>
  <bridge-mac>
   bridge-mac
  </bridge-mac>
 </this-bridge>
</cist-bridge-parameters>
```

Description ID of bridge

<this-bridge>

Usage

```
<vst-bridge-parameters>
 <this-bridge>
  <bridge-priority>
   bridge-priority
  </bridge-priority>
  <bridge-mac>
   bridge-mac
  </bridge-mac>
```

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```
  </this-bridge>
</vst-bridge-parameters>
```

Description ID of bridge

<this-bridge>

Usage

```
<msti-bridge-parameters>
  <this-bridge>
    <bridge-priority>
      bridge-priority
    </bridge-priority>
    <bridge-mac>
      bridge-mac
    </bridge-mac>
  </this-bridge>
</msti-bridge-parameters>
```

Description ID of bridge

<this-bridge>

Usage

```
<stp-bridge>
  <cist-bridge-parameters>
    <this-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
      <bridge-mac>
        bridge-mac
      </bridge-mac>
    </this-bridge>
  </cist-bridge-parameters>
</stp-bridge>
```

Description ID of bridge

<this-bridge>

Usage

```
<stp-bridge>
  <msti-bridge-parameters>
    <this-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
      <bridge-mac>
        bridge-mac
      </bridge-mac>
```


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```
    </this-bridge>
  </msti-bridge-parameters>
</stp-bridge>
```

Description ID of bridge

<this-bridge>

Usage

```
<stp-bridge>
  <vst-bridge-parameters>
    <this-bridge>
      <bridge-priority>
        bridge-priority
      </bridge-priority>
      <bridge-mac>
        bridge-mac
      </bridge-mac>
    </this-bridge>
  </vst-bridge-parameters>
</stp-bridge>
```

Description ID of bridge

<time-since-last-tc>

Usage

```
<msti-bridge-parameters>
  <time-since-last-tc>
</time-since-last-tc>
</msti-bridge-parameters>
```

Description

<time-since-last-tc>

Usage

```
<stp-bridge>
  <msti-bridge-parameters>
    <time-since-last-tc>
 </time-since-last-tc>
  </msti-bridge-parameters>
</stp-bridge>
```

Description

<tracing-information>

Usage

```
<tracing-information>
  <flags>
```

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```
    flags
  </flags>
  <filename>
    filename
  </filename>
  <filesize>
    filesize
  </filesize>
  <filelimit>
    filelimit
  </filelimit>
</tracing-information>
```

Description

<untagged-vlan-member-list>

Usage

```
<untagged-vlan-member-list>
  <untagged-vlan-member>
    untagged-vlan-member
  </untagged-vlan-member>
</untagged-vlan-member-list>
```

Description

<vlan-information>

Usage

```
<vlan-information>
  <vlan-summary>....</vlan-summary>
  <vlan-terse>
    vlan-terse
  </vlan-terse>
  <vlan>
    vlan
  </vlan>
</vlan-information>
```

Description Operational VLAN information

<vlan-map>

Usage

```
<mstp-configuration>
  <vlan-map>
    <vlan-map-entry>....</vlan-map-entry>
  </vlan-map>
</mstp-configuration>
```

Description

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<vlan-map-entry>

Usage

```
<mstp-configuration>
  <vlan-map>
    <vlan-map-entry>
      <msti-id>
        msti-id
      </msti-id>
      <vlan-string>
        vlan-string
      </vlan-string>
    </vlan-map-entry>
  </vlan-map>
</mstp-configuration>
```

Description

<vlan-mapping-list>

Usage

```
<vlan-mapping-list>
  <vlan-mapping-rule>....</vlan-mapping-rule>
</vlan-mapping-list>
```

Description

<vlan-mapping-rule>

Usage

```
<vlan-mapping-list>
  <vlan-mapping-rule>
    <vlan-mapping-interface>
      vlan-mapping-interface
    </vlan-mapping-interface>
    <vlan-mapping-tag>
      vlan-mapping-tag
    </vlan-mapping-tag>
    <vlan-mapping-operation>
      vlan-mapping-operation
    </vlan-mapping-operation>
  </vlan-mapping-rule>
</vlan-mapping-list>
```

Description

<vlan-mapping-summary>

Usage

```
<vlan-mapping-summary>
  <vlan-push-members-count>
    vlan-push-members-count
```

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```
  </vlan-push-members-count>
  <vlan-push-members-upcount>
   vlan-push-members-upcount
  </vlan-push-members-upcount>
  <vlan-policy-members-count>
   vlan-policy-members-count
  </vlan-policy-members-count>
  <vlan-policy-members-upcount>
   vlan-policy-members-upcount
  </vlan-policy-members-upcount>
  <vlan-swap-members-count>
   vlan-swap-members-count
  </vlan-swap-members-count>
  <vlan-swap-members-upcount>
   vlan-swap-members-upcount
  </vlan-swap-members-upcount>
</vlan-mapping-summary>
```

Description

<vlan-member>

Usage

```
<vlan-member-list>
  <vlan-member>
    <vlan-member-interface>
     vlan-member-interface
    </vlan-member-interface>
    <vlan-member-tagness>
     vlan-member-tagness
    </vlan-member-tagness>
    <vlan-member-port-mode>
     vlan-member-port-mode
    </vlan-member-port-mode>
    <vlan-member-pvlan-trunk-mode>
     vlan-member-pvlan-trunk-mode
    </vlan-member-pvlan-trunk-mode>
    <vlan-membership-type>
     vlan-membership-type
    </vlan-membership-type>
    <vlan-protocol-mac-address>
     vlan-protocol-mac-address
    </vlan-protocol-mac-address>
    <vlan-mac-member-tagness>
     vlan-mac-member-tagness
    </vlan-mac-member-tagness>
  </vlan-member>
</vlan-member-list>
```

Description

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<vlan-member-list>

Usage

```
<vlan-member-list>
  <vlan-member>....</vlan-member>
</vlan-member-list>
```

Description

<vlan-summary>

Usage

```
<vlan-information>
  <vlan-summary>
    <vlan-total-count>
      vlan-total-count
    </vlan-total-count>
    <vlan-configured-count>
      vlan-configured-count
    </vlan-configured-count>
    <vlan-dynamic-count>
      vlan-dynamic-count
    </vlan-dynamic-count>
    <vlan-internal-count>
      vlan-internal-count
    </vlan-internal-count>
    <vlan-temporary-count>
      vlan-temporary-count
    </vlan-temporary-count>
    <vlan-dot1q-total-count>
      vlan-dot1q-total-count
    </vlan-dot1q-total-count>
    <vlan-dot1q-tagged-count>
      vlan-dot1q-tagged-count
    </vlan-dot1q-tagged-count>
    <vlan-dot1q-untagged-count>
      vlan-dot1q-untagged-count
    </vlan-dot1q-untagged-count>
    <vlan-dot1q-private-primary-count>
      vlan-dot1q-private-primary-count
    </vlan-dot1q-private-primary-count>
    <vlan-dot1q-private-community-count>
      vlan-dot1q-private-community-count
    </vlan-dot1q-private-community-count>
    <vlan-dot1q-private-isolated-count>
      vlan-dot1q-private-isolated-count
    </vlan-dot1q-private-isolated-count>
    <vlan-dot1q-tunneled-count>
      vlan-dot1q-tunneled-count
    </vlan-dot1q-tunneled-count>
    <vlan-dot1q-tunneled-private-primary-count>
      vlan-dot1q-tunneled-private-primary-count
    </vlan-dot1q-tunneled-private-primary-count>
    <vlan-dot1q-tunneled-private-community-count>
```

```
    vlan-dot1q-tunneled-private-community-count
   </vlan-dot1q-tunneled-private-community-count>
   <vlan-dot1q-tunneled-private-isolated-count>
    vlan-dot1q-tunneled-private-isolated-count
   </vlan-dot1q-tunneled-private-isolated-count>
   <vlan-dynamic-dot1x-count>
    vlan-dynamic-dot1x-count
   </vlan-dynamic-dot1x-count>
   <vlan-dynamic-mvrp-count>
    vlan-dynamic-mvrp-count
   </vlan-dynamic-mvrp-count>
  </vlan-summary>
</vlan-information>
```

Description

<vsi-profiles-information>

Usage

```
<vsi-profiles-information>
  <vsi-manager>
   vsi-manager
  </vsi-manager>
  <vsi-type>
   vsi-type
  </vsi-type>
  <vsi-version>
   vsi-version
  </vsi-version>
  <vsi-mode>
   vsi-mode
  </vsi-mode>
  <vsi-instance>
   vsi-instance
  </vsi-instance>
  <mac-vlan-list>....</mac-vlan-list>
</vsi-profiles-information>
```

Description

<vsi-profiles-information>

Usage

```
<edge-virtual-bridging-information>
  <edge-virtual-bridging-interface-information>
    <vsi-profiles-information>
      <vsi-manager>
       vsi-manager
      </vsi-manager>
      <vsi-type>
       vsi-type
      </vsi-type>
      <vsi-version>
       vsi-version
```


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```
    </vsi-version>
    <vsi-mode>
     vsi-mode
    </vsi-mode>
    <vsi-instance>
     vsi-instance
    </vsi-instance>
    <mac-vlan-list>....</mac-vlan-list>
   </vsi-profiles-information>
  </edge-virtual-bridging-interface-information>
</edge-virtual-bridging-information>
```

Description

<vsi-profiles-information>

Usage

```
<edge-virtual-bridging-information>
 <edge-virtual-bridging-interface-vsi-profiles-information>
  <vsi-profiles-information>
   <vsi-manager>
    vsi-manager
   </vsi-manager>
   <vsi-type>
    vsi-type
   </vsi-type>
   <vsi-version>
    vsi-version
   </vsi-version>
   <vsi-mode>
    vsi-mode
   </vsi-mode>
   <vsi-instance>
    vsi-instance
   </vsi-instance>
   <mac-vlan-list>....</mac-vlan-list>
  </vsi-profiles-information>
 </edge-virtual-bridging-interface-vsi-profiles-information>
</edge-virtual-bridging-information>
```

Description

<vst-bridge-parameters>

Usage

```
<vst-bridge-parameters>
 <vlan-id>
  vlan-id
 </vlan-id>
 <root-bridge>....</root-bridge>
 <root-port>
  root-port
 </root-port>
 <root-cost>
```

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```
  root-cost
 </root-cost>
 <hello-time-learned>
  hello-time-learned
 </hello-time-learned>
 <max-age-learned>
  max-age-learned
 </max-age-learned>
 <forward-delay-learned>
  forward-delay-learned
 </forward-delay-learned>
 <message-age>
  message-age
 </message-age>
 <time-since-last-topology-change>
  time-since-last-topology-change
 </time-since-last-topology-change>
 <topology-change-count>
  topology-change-count
 </topology-change-count>
 <topology-change-initiator>
  topology-change-initiator
 </topology-change-initiator>
 <topology-change-last-received-from>
  topology-change-last-received-from
 </topology-change-last-received-from>
 <extended-system-id>
  extended-system-id
 </extended-system-id>
 <internal-instance-id>
  internal-instance-id
 </internal-instance-id>
 <this-bridge>....</this-bridge>
 <hello-time-configured>
  hello-time-configured
 </hello-time-configured>
 <max-age-configured>
  max-age-configured
 </max-age-configured>
 <forward-delay-configured>
  forward-delay-configured
 </forward-delay-configured>
 <path-cost-method>
  path-cost-method
 </path-cost-method>
</vst-bridge-parameters>
```

Description STP bridge parameters for VLAN Spanning Tree

<vst-bridge-parameters>

Usage

```
<stp-bridge>
 <vst-bridge-parameters>
```


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```
    <vlan-id>
      vlan-id
    </vlan-id>
    <root-bridge>....</root-bridge>
    <root-port>
      root-port
    </root-port>
    <root-cost>
      root-cost
    </root-cost>
    <hello-time-learned>
      hello-time-learned
    </hello-time-learned>
    <max-age-learned>
      max-age-learned
    </max-age-learned>
    <forward-delay-learned>
      forward-delay-learned
    </forward-delay-learned>
    <message-age>
      message-age
    </message-age>
    <time-since-last-topology-change>
      time-since-last-topology-change
    </time-since-last-topology-change>
    <topology-change-count>
      topology-change-count
    </topology-change-count>
    <topology-change-initiator>
      topology-change-initiator
    </topology-change-initiator>
    <topology-change-last-received-from>
      topology-change-last-received-from
    </topology-change-last-received-from>
    <extended-system-id>
      extended-system-id
    </extended-system-id>
    <internal-instance-id>
      internal-instance-id
    </internal-instance-id>
    <this-bridge>....</this-bridge>
    <hello-time-configured>
      hello-time-configured
    </hello-time-configured>
    <max-age-configured>
      max-age-configured
    </max-age-configured>
    <forward-delay-configured>
      forward-delay-configured
    </forward-delay-configured>
    <path-cost-method>
      path-cost-method
    </path-cost-method>
  </vst-bridge-parameters>
</stp-bridge>
```

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Description STP bridge parameters for VLAN Spanning Tree

<vstp-interface-statistics>

Usage

```
<stp-interface-statistics>
  <vstp-interface-statistics>
    <vlan-id>
      vlan-id
    </vlan-id>
    <stp-interface-statistics-entry>....</stp-interface-statistics-entry>
  </vstp-interface-statistics>
</stp-interface-statistics>
```

Description Statistics information about one or more VLAN STP interfaces

<vstp-statistics>

Usage

```
<vstp-statistics>
  <vlan-id>
    vlan-id
  </vlan-id>
  <message-type>
    message-type
  </message-type>
  <total-bpdus-sent>
    total-bpdus-sent
  </total-bpdus-sent>
  <total-bpdus-received>
    total-bpdus-received
  </total-bpdus-received>
  <bpdus-sent-5seconds>
    bpdus-sent-5seconds
  </bpdus-sent-5seconds>
  <bpdus-received-5seconds>
    bpdus-received-5seconds
  </bpdus-received-5seconds>
</vstp-statistics>
```

Description VLAN Spanning Tree Protocol statistics

<vstp-statistics>

Usage

```
<stp-context-statistics-information>
  <vstp-statistics>
    <vlan-id>
      vlan-id
    </vlan-id>
    <message-type>
      message-type
```


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```
    </message-type>
    <total-bpdus-sent>
      total-bpdus-sent
    </total-bpdus-sent>
    <total-bpdus-received>
      total-bpdus-received
    </total-bpdus-received>
    <bpdus-sent-5seconds>
      bpdus-sent-5seconds
    </bpdus-sent-5seconds>
    <bpdus-received-5seconds>
      bpdus-received-5seconds
    </bpdus-received-5seconds>
  </vstp-statistics>
</stp-context-statistics-information>
```

Description VLAN Spanning Tree Protocol statistics

Summary of sFlow Response Tags

<clear-flow-ipaction-information>

Usage

```
<clear-flow-ipaction-information>
  <cleared-flow-ipaction-count>
    cleared-flow-ipaction-count
  </cleared-flow-ipaction-count>
</clear-flow-ipaction-information>
```

Description Information about cleared ip-action entries

<clear-flow-session-information>

Usage

```
<clear-flow-session-information>
  <cleared-flow-session-count>
    cleared-flow-session-count
  </cleared-flow-session-count>
</clear-flow-session-information>
```

Description Information about cleared sessions

<flow-application-session-summary-information>

Usage

```
<flow-application-session-summary-information>
  <fpc>
    fpc
  </fpc>
  <pic>
```

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```
      pic
    </pic>
    <active-app-sessions>
      active-app-sessions
    </active-app-sessions>
  </flow-application-session-summary-information>
```

Description Summary information for application session

<flow-forwarding-mode>

Usage

```
<flow-status-all>
  <flow-forwarding-mode>
    <flow-forwarding-mode-inet>
      flow-forwarding-mode-inet
    </flow-forwarding-mode-inet>
    <flow-forwarding-mode-inet-reboot-status>
      flow-forwarding-mode-inet-reboot-status
    </flow-forwarding-mode-inet-reboot-status>
    <flow-forwarding-mode-inet6>
      flow-forwarding-mode-inet6
    </flow-forwarding-mode-inet6>
    <flow-forwarding-mode-inet6-reboot-status>
      flow-forwarding-mode-inet6-reboot-status
    </flow-forwarding-mode-inet6-reboot-status>
    <flow-forwarding-mode-mpls>
      flow-forwarding-mode-mpls
    </flow-forwarding-mode-mpls>
    <flow-forwarding-mode-mpls-reboot-status>
      flow-forwarding-mode-mpls-reboot-status
    </flow-forwarding-mode-mpls-reboot-status>
    <flow-forwarding-mode-iso>
      flow-forwarding-mode-iso
    </flow-forwarding-mode-iso>
  </flow-forwarding-mode>
</flow-status-all>
```

Description Forwarding mode

<flow-gate-information>

Usage

```
<flow-gate-information>
  <flow-gate-fpc-pic-id>
    flow-gate-fpc-pic-id
  </flow-gate-fpc-pic-id>
  <gate>....</gate>
  <displayed-gate-valid>
    displayed-gate-valid
  </displayed-gate-valid>
  <displayed-gate-pending>
```


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```
    displayed-gate-pending
  </displayed-gate-pending>
  <displayed-gate-invalidated>
    displayed-gate-invalidated
  </displayed-gate-invalidated>
  <displayed-gate-other>
    displayed-gate-other
  </displayed-gate-other>
  <displayed-gate-count>
    displayed-gate-count
  </displayed-gate-count>
  <displayed-gate-max>
    displayed-gate-max
  </displayed-gate-max>
</flow-gate-information>
```

Description

<flow-information>

Usage

```
<flow-information>
  <direction>
    direction
  </direction>
  <interface-name>
    interface-name
  </interface-name>
  <source-address>
    source-address
  </source-address>
  <source-port>
    source-port
  </source-port>
  <destination-address>
    destination-address
  </destination-address>
  <destination-port>
    destination-port
  </destination-port>
  <protocol>
    protocol
  </protocol>
  <session-token>
    session-token
  </session-token>
  <route>
    route
  </route>
  <gateway>
    gateway
  </gateway>
  <tunnel-information>
    tunnel-information
  </tunnel-information>
```

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```
<path-mtu>
  path-mtu
</path-mtu>
<flag>
  flag
</flag>
<seq-ack-diff>
  seq-ack-diff
</seq-ack-diff>
<port-sequence>
  port-sequence
</port-sequence>
<cookie>
  cookie
</cookie>
<fin-sequence>
  fin-sequence
</fin-sequence>
<fin-state>
  fin-state
</fin-state>
<pkt-cnt>
  pkt-cnt
</pkt-cnt>
<byte-cnt>
  byte-cnt
</byte-cnt>
</flow-information>
```

Description Information about one or more flows

<flow-information>

Usage

```
<flow-session-information>
  <flow-session>
    <flow-information>
      <direction>
        direction
      </direction>
      <interface-name>
        interface-name
      </interface-name>
      <source-address>
        source-address
      </source-address>
      <source-port>
        source-port
      </source-port>
      <destination-address>
        destination-address
      </destination-address>
      <destination-port>
        destination-port
```


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```
</destination-port>
<protocol>
  protocol
</protocol>
<session-token>
  session-token
</session-token>
<route>
  route
</route>
<gateway>
  gateway
</gateway>
<tunnel-information>
  tunnel-information
</tunnel-information>
<path-mtu>
  path-mtu
</path-mtu>
<flag>
  flag
</flag>
<seq-ack-diff>
  seq-ack-diff
</seq-ack-diff>
<port-sequence>
  port-sequence
</port-sequence>
<cookie>
  cookie
</cookie>
<fin-sequence>
  fin-sequence
</fin-sequence>
<fin-state>
  fin-state
</fin-state>
<pkt-cnt>
  pkt-cnt
</pkt-cnt>
<byte-cnt>
  byte-cnt
</byte-cnt>
</flow-information>
</flow-session>
</flow-session-information>
```

Description Information about one or more flows

<flow-ipaction-entry>

Usage

```
<flow-ipaction-information>
  <flow-ipaction-entry>
```

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```
<source-address>
  source-address
</source-address>
<source-port>
  source-port
</source-port>
<destination-address>
  destination-address
</destination-address>
<protocol>
  protocol
</protocol>
<destination-port>
  destination-port
</destination-port>
<ip-action-timeout>
  ip-action-timeout
</ip-action-timeout>
<from-zone>
  from-zone
</from-zone>
<ip-action>
  ip-action
</ip-action>
<logical-system>
  logical-system
</logical-system>
</flow-ipaction-entry>
</flow-ipaction-information>
```

Description Information about ip-action entry

<flow-ipaction-information>

Usage

```
<flow-ipaction-information>
  <flow-ipaction-entry>....</flow-ipaction-entry>
  <ip-action-count>
    ip-action-count
  </ip-action-count>
</flow-ipaction-information>
```

Description Information about ip-action table

<flow-ipaction-v6-entry>

Usage

```
<flow-ipaction-v6-information>
  <flow-ipaction-v6-entry>
    <source-address>
      source-address
    </source-address>
```


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```
<source-port>
  source-port
</source-port>
<destination-address>
  destination-address
</destination-address>
<destination-port>
  destination-port
</destination-port>
<protocol>
  protocol
</protocol>
<ip-action-timeout>
  ip-action-timeout
</ip-action-timeout>
<from-zone>
  from-zone
</from-zone>
<ip-action>
  ip-action
</ip-action>
<logical-system>
  logical-system
</logical-system>
</flow-ipaction-v6-entry>
</flow-ipaction-v6-information>
```

Description Information about ip-action entry

<flow-ipaction-v6-information>

Usage

```
<flow-ipaction-v6-information>
  <flow-ipaction-v6-entry>....</flow-ipaction-v6-entry>
  <ip-action-count>
    ip-action-count
  </ip-action-count>
</flow-ipaction-v6-information>
```

Description Information about ip-action table

<flow-session>

Usage

```
<flow-session-information>
  <flow-session>
    <session-identifier>
      session-identifier
    </session-identifier>
    <session-flag>
      session-flag
    </session-flag>
```

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```
<session-state>
  session-state
</session-state>
<sess-state>
  sess-state
</sess-state>
<logical-system>
  logical-system
</logical-system>
<policy>
  policy
</policy>
<application-name>
  application-name
</application-name>
<application-value>
  application-value
</application-value>
<nat-source-pool-name>
  nat-source-pool-name
</nat-source-pool-name>
<dynamic-application-name>
  dynamic-application-name
</dynamic-application-name>
<dynamic-nested-application-name>
  dynamic-nested-application-name
</dynamic-nested-application-name>
<encryption-traffic-name>
  encryption-traffic-name
</encryption-traffic-name>
<application-firewall-rule-set-name>
  application-firewall-rule-set-name
</application-firewall-rule-set-name>
<application-firewall-rule-name>
  application-firewall-rule-name
</application-firewall-rule-name>
<application-traffic-control-rule-set-name>
  application-traffic-control-rule-set-name
</application-traffic-control-rule-set-name>
<application-traffic-control-rule-name>
  application-traffic-control-rule-name
</application-traffic-control-rule-name>
<application-traffic-control-fc>
  application-traffic-control-fc
</application-traffic-control-fc>
<application-traffic-control-fc-queue-num>
  application-traffic-control-fc-queue-num
</application-traffic-control-fc-queue-num>
<application-traffic-control-dscp>
  application-traffic-control-dscp
</application-traffic-control-dscp>
<application-traffic-control-loss>
  application-traffic-control-loss
</application-traffic-control-loss>
<application-traffic-control-rl-c2s>
  application-traffic-control-rl-c2s
```


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```
</application-traffic-control-rl-c2s>
<application-traffic-control-rl-c2s-bdl>
  application-traffic-control-rl-c2s-bdl
</application-traffic-control-rl-c2s-bdl>
<application-traffic-control-rl-c2s-bsl>
  application-traffic-control-rl-c2s-bsl
</application-traffic-control-rl-c2s-bsl>
<application-traffic-control-rl-s2c>
  application-traffic-control-rl-s2c
</application-traffic-control-rl-s2c>
<application-traffic-control-rl-s2c-bdl>
  application-traffic-control-rl-s2c-bdl
</application-traffic-control-rl-s2c-bdl>
<application-traffic-control-rl-s2c-bsl>
  application-traffic-control-rl-s2c-bsl
</application-traffic-control-rl-s2c-bsl>
<timeout>
  timeout
</timeout>
<configured-timeout>
  configured-timeout
</configured-timeout>
<status>
  status
</status>
<wan-acceleration>
  wan-acceleration
</wan-acceleration>
<start-time>
  start-time
</start-time>
<duration>
  duration
</duration>
<session-mask>
  session-mask
</session-mask>
<app-name>
  app-name
</app-name>
<app-status>
  app-status
</app-status>
<app-action>
  app-action
</app-action>
<module-name>
  module-name
</module-name>
<internal-module-identifier>
  internal-module-identifier
</internal-module-identifier>
<resource-manager-information>....</resource-manager-information>
<flow-information>....</flow-information>
<session-spu-id>
  session-spu-id
```

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```
    </session-spu-id>
  </flow-session>
</flow-session-information>
```

Description Information about one or more session wings

<flow-session-information>

Usage

```
<flow-session-information>
  <flow-fpc-pic-id>
    flow-fpc-pic-id
  </flow-fpc-pic-id>
  <flow-session>....</flow-session>
  <displayed-session-valid>
    displayed-session-valid
  </displayed-session-valid>
  <displayed-session-pending>
    displayed-session-pending
  </displayed-session-pending>
  <displayed-session-invalidated>
    displayed-session-invalidated
  </displayed-session-invalidated>
  <displayed-session-other>
    displayed-session-other
  </displayed-session-other>
  <displayed-session-count>
    displayed-session-count
  </displayed-session-count>
  <max-session-count>
    max-session-count
  </max-session-count>
  <max-inet6-session-count>
    max-inet6-session-count
  </max-inet6-session-count>
</flow-session-information>
```

Description Information about a flow session

<flow-session-summary-information>

Usage

```
<flow-session-summary-information>
  <summary-family-header>
    summary-family-header
  </summary-family-header>
  <active-unicast-sessions>
    active-unicast-sessions
  </active-unicast-sessions>
  <active-multicast-sessions>
    active-multicast-sessions
  </active-multicast-sessions>
```


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```
<active-services-offload-sessions>
  active-services-offload-sessions
</active-services-offload-sessions>
<failed-sessions>
  failed-sessions
</failed-sessions>
<active-sessions>
  active-sessions
</active-sessions>
<active-session-valid>
  active-session-valid
</active-session-valid>
<active-session-pending>
  active-session-pending
</active-session-pending>
<active-session-invalidated>
  active-session-invalidated
</active-session-invalidated>
<active-session-other>
  active-session-other
</active-session-other>
<max-sessions>
  max-sessions
</max-sessions>
</flow-session-summary-information>
```

Description Summary information for flow sessions

<flow-statistics-all>

Usage

```
<flow-statistics-all>
  <flow-spu-id>
    flow-spu-id
  </flow-spu-id>
  <flow-session-count-valid>
    flow-session-count-valid
  </flow-session-count-valid>
  <flow-session-allocated-total>
    flow-session-allocated-total
  </flow-session-allocated-total>
  <flow-session-failed-total>
    flow-session-failed-total
  </flow-session-failed-total>
  <flow-pkt-count-fwd>
    flow-pkt-count-fwd
  </flow-pkt-count-fwd>
  <flow-pkt-count-drop>
    flow-pkt-count-drop
  </flow-pkt-count-drop>
  <flow-frag-count-fwd>
    flow-frag-count-fwd
  </flow-frag-count-fwd>
  <flow-session-valid-system>
```

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```
    flow-session-valid-system
  </flow-session-valid-system>
</flow-statistics-all>
```

Description Display security flow statistics

<flow-status-all>

Usage

```
<flow-status-all>
  <flow-forwarding-mode>....</flow-forwarding-mode>
  <flow-tcp-options>....</flow-tcp-options>
  <flow-trace-option>....</flow-trace-option>
</flow-status-all>
```

Description Display security flow execution status

<flow-tcp-options>

Usage

```
<flow-status-all>
  <flow-tcp-options>
    <flow-tcp-sequence-check>
      flow-tcp-sequence-check
    </flow-tcp-sequence-check>
    <flow-tcp-mss>
      flow-tcp-mss
    </flow-tcp-mss>
  </flow-tcp-options>
</flow-status-all>
```

Description

<flow-trace-option>

Usage

```
<flow-status-all>
  <flow-trace-option>
    <flow-trace-status>
      flow-trace-status
    </flow-trace-status>
    <flow-trace-options>
      flow-trace-options
    </flow-trace-options>
  </flow-trace-option>
</flow-status-all>
```

Description

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<gate>

Usage

```
<flow-gate-information>
  <gate>
    <protocol>
      protocol
    </protocol>
    <application-value>
      application-value
    </application-value>
    <application-name>
      application-name
    </application-name>
    <age>
      age
    </age>
    <flags>
      flags
    </flags>
    <zone>
      zone
    </zone>
    <logical-system>
      logical-system
    </logical-system>
    <parent-id>
      parent-id
    </parent-id>
    <reference-count>
      reference-count
    </reference-count>
    <resource>
      resource
    </resource>
    <nat-source-pool-name>
      nat-source-pool-name
    </nat-source-pool-name>
    <hole>....</hole>
    <translated-hole>....</translated-hole>
  </gate>
</flow-gate-information>
```

Description

<hole>

Usage

```
<flow-gate-information>
  <gate>
    <hole>
      <source-address-start>
        source-address-start
      </source-address-start>
```

```
        <source-address-end>
          source-address-end
        </source-address-end>
        <source-port-start>
          source-port-start
        </source-port-start>
        <source-port-end>
          source-port-end
        </source-port-end>
        <destination-address-start>
          destination-address-start
        </destination-address-start>
        <destination-address-end>
          destination-address-end
        </destination-address-end>
        <destination-port-start>
          destination-port-start
        </destination-port-start>
        <destination-port-end>
          destination-port-end
        </destination-port-end>
      </hole>
    </gate>
  </flow-gate-information>
```

Description

<resource-manager-information>

Usage

```
<resource-manager-information>
  <client-name>
    client-name
  </client-name>
  <group-identifier>
    group-identifier
  </group-identifier>
  <resource-identifier>
    resource-identifier
  </resource-identifier>
</resource-manager-information>
```

Description Information about the resource manager

<resource-manager-information>

Usage

```
<flow-session-information>
  <flow-session>
    <resource-manager-information>
      <client-name>
        client-name
      </client-name>
```


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```
      <group-identifier>
        group-identifier
      </group-identifier>
      <resource-identifier>
        resource-identifier
      </resource-identifier>
    </resource-manager-information>
  </flow-session>
</flow-session-information>
```

Description Information about the resource manager

<total-active-sessions>

Usage

```
<total-active-sessions>
  <total-sessions>
    total-sessions
  </total-sessions>
</total-active-sessions>
```

Description Total active sessions

<translated-hole>

Usage

```
<flow-gate-information>
  <gate>
    <translated-hole>
      <source-address>
        source-address
      </source-address>
      <source-port>
        source-port
      </source-port>
      <destination-address>
        destination-address
      </destination-address>
      <destination-port>
        destination-port
      </destination-port>
    </translated-hole>
  </gate>
</flow-gate-information>
```

Description

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Summary of Firewall Authentication Response Tags

<firewall-authentication-history-details>

Usage

```
<firewall-authentication-history-details>
  <fwauth-history-info>....</fwauth-history-info>
  <fwauth-history-logical-system>....</fwauth-history-logical-system>
  <fwauth-history-table>....</fwauth-history-table>
</firewall-authentication-history-details>
```

Description History of firewall user authentication

<firewall-authentication-history-specific>

Usage

```
<firewall-authentication-history-specific>
  <user-history-info>....</user-history-info>
</firewall-authentication-history-specific>
```

Description Historical authentication details of a specific firewall user

<firewall-authentication-status>

Usage

```
<firewall-authentication-status>
  <running>
    running
  </running>
</firewall-authentication-status>
```

Description Status of firewall authentication service

<firewall-authentication-table-details>

Usage

```
<firewall-authentication-table-details>
  <fwauth-table-info>....</fwauth-table-info>
  <fwauth-user-logical-system>....</fwauth-user-logical-system>
  <fwauth-users-table>....</fwauth-users-table>
</firewall-authentication-table-details>
```

Description Information about firewall users

<firewall-authentication-users-specific>

Usage

```
<firewall-authentication-users-specific>
```


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```
  <user-info>....</user-info>
</firewall-authentication-users-specific>
```

Description Authentication details of a specific firewall user

<fwauth-entry>

Usage

```
<firewall-authentication-table-details>
  <fwauth-users-table>
    <fwauth-entry>
      <auth-id>
        auth-id
      </auth-id>
      <src-ip>
        src-ip
      </src-ip>
      <src-zone>
        src-zone
      </src-zone>
      <dst-zone>
        dst-zone
      </dst-zone>
      <access-profile>
        access-profile
      </access-profile>
      <age>
        age
      </age>
      <status>
        status
      </status>
      <user-name>
        user-name
      </user-name>
    </fwauth-entry>
  </fwauth-users-table>
</firewall-authentication-table-details>
```

Description Current firewall user authentication information

<fwauth-history>

Usage

```
<firewall-authentication-history-details>
  <fwauth-history-table>
    <fwauth-history>
      <auth-id>
        auth-id
      </auth-id>
      <src-ip>
        src-ip
```

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```
      </src-ip>
      <start-date>
        start-date
      </start-date>
      <start-time>
        start-time
      </start-time>
      <duration>
        duration
      </duration>
      <status>
        status
      </status>
      <user-name>
        user-name
      </user-name>
    </fwauth-history>
  </fwauth-history-table>
</firewall-authentication-history-details>
```

Description History of firewall user authentication

<fwauth-history-info>

Usage

```
<firewall-authentication-history-details>
  <fwauth-history-info>
    <fwauth-total-authentications>
      fwauth-total-authentications
    </fwauth-total-authentications>
  </fwauth-history-info>
</firewall-authentication-history-details>
```

Description Historical information about firewall authentication

<fwauth-history-logical-system>

Usage

```
<firewall-authentication-history-details>
  <fwauth-history-logical-system>
    <history-logical-name>
      history-logical-name
    </history-logical-name>
  </fwauth-history-logical-system>
</firewall-authentication-history-details>
```

Description Logical system

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<fwauth-history-table>

Usage

```
<firewall-authentication-history-details>
  <fwauth-history-table>
    <fwauth-history>....</fwauth-history>
  </fwauth-history-table>
</firewall-authentication-history-details>
```

Description

<fwauth-table-info>

Usage

```
<firewall-authentication-table-details>
  <fwauth-table-info>
    <fwauth-total-users>
      fwauth-total-users
    </fwauth-total-users>
  </fwauth-table-info>
</firewall-authentication-table-details>
```

Description Information about firewall authentication table

<fwauth-user-logical-system>

Usage

```
<firewall-authentication-table-details>
  <fwauth-user-logical-system>
    <user-logical-name>
      user-logical-name
    </user-logical-name>
  </fwauth-user-logical-system>
</firewall-authentication-table-details>
```

Description Logical system

<fwauth-users-table>

Usage

```
<firewall-authentication-table-details>
  <fwauth-users-table>
    <fwauth-entry>....</fwauth-entry>
  </fwauth-users-table>
</firewall-authentication-table-details>
```

Description

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<user-history-info>

Usage

```
<firewall-authentication-history-specific>
  <user-history-info>
    <user-name>
      user-name
    </user-name>
    <src-ip>
      src-ip
    </src-ip>
    <status>
      status
    </status>
    <method>
      method
    </method>
    <start-date>
      start-date
    </start-date>
    <start-time>
      start-time
    </start-time>
    <duration>
      duration
    </duration>
    <lsys-name>
      lsys-name
    </lsys-name>
    <src-zone>
      src-zone
    </src-zone>
    <dst-zone>
      dst-zone
    </dst-zone>
    <policy-name>
      policy-name
    </policy-name>
    <access-profile>
      access-profile
    </access-profile>
    <sent-bytes>
      sent-bytes
    </sent-bytes>
    <recd-bytes>
      recd-bytes
    </recd-bytes>
    <client-groups>
      client-groups
    </client-groups>
  </user-history-info>
</firewall-authentication-history-specific>
```

Description One Authentication history entry of the firewall user

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<user-info>

Usage

```
<firewall-authentication-users-specific>
 <user-info>
  <user-name>
   user-name
  </user-name>
  <src-ip>
   src-ip
  </src-ip>
  <status>
   status
  </status>
  <method>
   method
  </method>
  <age>
   age
  </age>
  <access-time-remaining>
   access-time-remaining
  </access-time-remaining>
  <lsys-name>
   lsys-name
  </lsys-name>
  <src-zone>
   src-zone
  </src-zone>
  <dst-zone>
   dst-zone
  </dst-zone>
  <policy-name>
   policy-name
  </policy-name>
  <access-profile>
   access-profile
  </access-profile>
  <sess-ref-cnt>
   sess-ref-cnt
  </sess-ref-cnt>
  <intf-name>
   intf-name
  </intf-name>
  <sent-bytes>
   sent-bytes
  </sent-bytes>
  <recd-bytes>
   recd-bytes
  </recd-bytes>
  <client-groups>
   client-groups
  </client-groups>
 </user-info>
```

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```
</firewall-authentication-users-specific>
```

Description One Authentication entry of the firewall user

Summary of GPRS Tunneling Protocol Response Tags

<apn-list>

Usage

```
<gtp-show-configuration>
  <apn-list>
    <pattern>
      pattern
    </pattern>
    <imsi-prefix>
      imsi-prefix
    </imsi-prefix>
    <action>
      action
    </action>
    <selection>
      selection
    </selection>
  </apn-list>
</gtp-show-configuration>
```

Description

<clear-counter>

Usage

```
<gtp-clear-counter>
  <clear-counter>
    <clear-counter-status>
      clear-counter-status
    </clear-counter-status>
  </clear-counter>
</gtp-clear-counter>
```

Description

<clear-tunnel>

Usage

```
<gtp-clear-tunnel>
  <clear-tunnel>
    <clear-tunnel-status>
      clear-tunnel-status
    </clear-tunnel-status>
  </clear-tunnel>
</gtp-clear-tunnel>
```


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Description

<error>

Usage

```
<gtp-show-counters>
  <error>
    <total>
      total
    </total>
    <exception>
      exception
    </exception>
    <gate-fail>
      gate-fail
    </gate-fail>
    <version-0>
      version-0
    </version-0>
    <version-1>
      version-1
    </version-1>
    <version-2>
      version-2
    </version-2>
    <version-prime>
      version-prime
    </version-prime>
    <gtp-header>
      gtp-header
    </gtp-header>
    <length>
      length
    </length>
    <missing-ie>
      missing-ie
    </missing-ie>
    <non-digit>
      non-digit
    </non-digit>
    <tid-not-0>
      tid-not-0
    </tid-not-0>
    <tid-0>
      tid-0
    </tid-0>
    <imsi>
      imsi
    </imsi>
    <charging-id>
      charging-id
    </charging-id>
    <tid-control>
      tid-control
    </tid-control>
    <tid-data>
```

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```
  tid-data
</tid-data>
<source-ip>
  source-ip
</source-ip>
<destination-ip>
  destination-ip
</destination-ip>
<control-ip>
  control-ip
</control-ip>
<data-ip>
  data-ip
</data-ip>
<end-user-ip>
  end-user-ip
</end-user-ip>
<sequence>
  sequence
</sequence>
<gtp-in-gtp>
  gtp-in-gtp
</gtp-in-gtp>
<ie-order>
  ie-order
</ie-order>
<ggsn-ip>
  ggsn-ip
</ggsn-ip>
<transport>
  transport
</transport>
<duplicate-ie>
  duplicate-ie
</duplicate-ie>
<ie-length>
  ie-length
</ie-length>
<short-message>
  short-message
</short-message>
<long-message>
  long-message
</long-message>
<message-v0>
  message-v0
</message-v0>
<message-v1>
  message-v1
</message-v1>
<message-v2>
  message-v2
</message-v2>
<message-type>
  message-type
</message-type>
```


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```
<ie-type>
  ie-type
</ie-type>
<apn>
  apn
</apn>
<failed-tunnel-0>
  failed-tunnel-0
</failed-tunnel-0>
<failed-control-tunnel>
  failed-control-tunnel
</failed-control-tunnel>
<failed-user-tunnel>
  failed-user-tunnel
</failed-user-tunnel>
<no-tunnel-0>
  no-tunnel-0
</no-tunnel-0>
<no-control-tunnel>
  no-control-tunnel
</no-control-tunnel>
<no-user-tunnel>
  no-user-tunnel
</no-user-tunnel>
<no-request>
  no-request
</no-request>
<failed-gsn>
  failed-gsn
</failed-gsn>
<tunnel-limit>
  tunnel-limit
</tunnel-limit>
<rate-limit>
  rate-limit
</rate-limit>
<queue-fail>
  queue-fail
</queue-fail>
<not-unique-tid>
  not-unique-tid
</not-unique-tid>
<missing-tid>
  missing-tid
</missing-tid>
<ebi-not-0>
  ebi-not-0
</ebi-not-0>
<ebi-not-exist>
  ebi-not-exist
</ebi-not-exist>
<bearer-ie>
  bearer-ie
</bearer-ie>
<failed-request>
  failed-request
```

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```
    </failed-request>
    <unexpect-ie>
     unexpect-ie
    </unexpect-ie>
    <response-not-match>
     response-not-match
    </response-not-match>
    <response-retransmit>
     response-retransmit
    </response-retransmit>
    <failed-path>
     failed-path
    </failed-path>
    <gsn-not-exist>
     gsn-not-exist
    </gsn-not-exist>
    <invalid-tunnel>
     invalid-tunnel
    </invalid-tunnel>
    <mismatch-state>
     mismatch-state
    </mismatch-state>
    <failed-request-cookie>
     failed-request-cookie
    </failed-request-cookie>
   </error>
</gtp-show-counters>
```

Description

<gtp-clear-counter>

Usage

```
<gtp-clear-counter>
  <clear-counter>....</clear-counter>
</gtp-clear-counter>
```

Description

<gtp-clear-tunnel>

Usage

```
<gtp-clear-tunnel>
  <clear-tunnel>....</clear-tunnel>
</gtp-clear-tunnel>
```

Description

<gtp-information>

Usage

```
<gtp-information>
  <tunnel-information>....</tunnel-information>
```


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```
</gtp-information>
```

Description

<gtp-show-configuration>

Usage

```
<gtp-show-configuration>
  <profile-summary>....</profile-summary>
  <profile-detail>....</profile-detail>
  <apn-list>....</apn-list>
</gtp-show-configuration>
```

Description

<gtp-show-counters>

Usage

```
<gtp-show-counters>
  <packet>....</packet>
  <ha>....</ha>
  <request>....</request>
  <error>....</error>
  <tunnel>....</tunnel>
  <message>....</message>
</gtp-show-counters>
```

Description

<ha>

Usage

```
<gtp-show-counters>
  <ha>
    <v0-create-send-success>
      v0-create-send-success
    </v0-create-send-success>
    <v0-create-send-fail>
      v0-create-send-fail
    </v0-create-send-fail>
    <v0-create-receive-success>
      v0-create-receive-success
    </v0-create-receive-success>
    <v0-create-receive-fail>
      v0-create-receive-fail
    </v0-create-receive-fail>
    <v0-update-send-success>
      v0-update-send-success
    </v0-update-send-success>
    <v0-update-send-fail>
      v0-update-send-fail
    </v0-update-send-fail>
    <v0-update-receive-success>
```

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```
  v0-update-receive-success
</v0-update-receive-success>
<v0-update-receive-fail>
  v0-update-receive-fail
</v0-update-receive-fail>
<v0-delete-send-success>
  v0-delete-send-success
</v0-delete-send-success>
<v0-delete-send-fail>
  v0-delete-send-fail
</v0-delete-send-fail>
<v0-delete-receive-success>
  v0-delete-receive-success
</v0-delete-receive-success>
<v0-delete-receive-fail>
  v0-delete-receive-fail
</v0-delete-receive-fail>
<v1-create-send-success>
  v1-create-send-success
</v1-create-send-success>
<v1-create-send-fail>
  v1-create-send-fail
</v1-create-send-fail>
<v1-create-receive-success>
  v1-create-receive-success
</v1-create-receive-success>
<v1-create-receive-fail>
  v1-create-receive-fail
</v1-create-receive-fail>
<v1-update-send-success>
  v1-update-send-success
</v1-update-send-success>
<v1-update-send-fail>
  v1-update-send-fail
</v1-update-send-fail>
<v1-update-receive-success>
  v1-update-receive-success
</v1-update-receive-success>
<v1-update-receive-fail>
  v1-update-receive-fail
</v1-update-receive-fail>
<v1-delete-send-success>
  v1-delete-send-success
</v1-delete-send-success>
<v1-delete-send-fail>
  v1-delete-send-fail
</v1-delete-send-fail>
<v1-delete-receive-success>
  v1-delete-receive-success
</v1-delete-receive-success>
<v1-delete-receive-fail>
  v1-delete-receive-fail
</v1-delete-receive-fail>
<v2-create-send-success>
  v2-create-send-success
</v2-create-send-success>
```


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```
    <v2-create-send-fail>
      v2-create-send-fail
    </v2-create-send-fail>
    <v2-create-receive-success>
      v2-create-receive-success
    </v2-create-receive-success>
    <v2-create-receive-fail>
      v2-create-receive-fail
    </v2-create-receive-fail>
    <v2-update-send-success>
      v2-update-send-success
    </v2-update-send-success>
    <v2-update-send-fail>
      v2-update-send-fail
    </v2-update-send-fail>
    <v2-update-receive-success>
      v2-update-receive-success
    </v2-update-receive-success>
    <v2-update-receive-fail>
      v2-update-receive-fail
    </v2-update-receive-fail>
    <v2-delete-send-success>
      v2-delete-send-success
    </v2-delete-send-success>
    <v2-delete-send-fail>
      v2-delete-send-fail
    </v2-delete-send-fail>
    <v2-delete-receive-success>
      v2-delete-receive-success
    </v2-delete-receive-success>
    <v2-delete-receive-fail>
      v2-delete-receive-fail
    </v2-delete-receive-fail>
  </ha>
</gtp-show-counters>
```

Description

<message>

Usage

```
<gtp-show-counters>
  <message>
    <v0-create-pdp-request>
      v0-create-pdp-request
    </v0-create-pdp-request>
    <v0-create-pdp-response>
      v0-create-pdp-response
    </v0-create-pdp-response>
    <v0-update-pdp-request>
      v0-update-pdp-request
    </v0-update-pdp-request>
    <v0-update-pdp-response>
      v0-update-pdp-response
    </v0-update-pdp-response>
```

```
<v0-delete-pdp-request>
  v0-delete-pdp-request
</v0-delete-pdp-request>
<v0-delete-pdp-response>
  v0-delete-pdp-response
</v0-delete-pdp-response>
<v0-create-aa-pdp-request>
  v0-create-aa-pdp-request
</v0-create-aa-pdp-request>
<v0-create-aa-pdp-response>
  v0-create-aa-pdp-response
</v0-create-aa-pdp-response>
<v0-delete-aa-pdp-request>
  v0-delete-aa-pdp-request
</v0-delete-aa-pdp-request>
<v0-delete-aa-pdp-response>
  v0-delete-aa-pdp-response
</v0-delete-aa-pdp-response>
<v0-others>
  v0-others
</v0-others>
<v1-create-pdp-request>
  v1-create-pdp-request
</v1-create-pdp-request>
<v1-create-pdp-response>
  v1-create-pdp-response
</v1-create-pdp-response>
<v1-update-pdp-request>
  v1-update-pdp-request
</v1-update-pdp-request>
<v1-update-pdp-response>
  v1-update-pdp-response
</v1-update-pdp-response>
<v1-delete-pdp-request>
  v1-delete-pdp-request
</v1-delete-pdp-request>
<v1-delete-pdp-response>
  v1-delete-pdp-response
</v1-delete-pdp-response>
<v1-others>
  v1-others
</v1-others>
<v2-create-session-request>
  v2-create-session-request
</v2-create-session-request>
<v2-create-session-response>
  v2-create-session-response
</v2-create-session-response>
<v2-delete-session-request>
  v2-delete-session-request
</v2-delete-session-request>
<v2-delete-session-response>
  v2-delete-session-response
</v2-delete-session-response>
<v2-create-bearer-request>
  v2-create-bearer-request
```


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```
    </v2-create-bearer-request>
    <v2-create-bearer-response>
      v2-create-bearer-response
    </v2-create-bearer-response>
    <v2-modify-bearer-request>
      v2-modify-bearer-request
    </v2-modify-bearer-request>
    <v2-modify-bearer-response>
      v2-modify-bearer-response
    </v2-modify-bearer-response>
    <v2-delete-bearer-request>
      v2-delete-bearer-request
    </v2-delete-bearer-request>
    <v2-delete-bearer-response>
      v2-delete-bearer-response
    </v2-delete-bearer-response>
    <v2-others>
      v2-others
    </v2-others>
  </message>
</gtp-show-counters>
```

Description

<packet>

Usage

```
<gtp-show-counters>
  <packet>
    <received>
      received
    </received>
    <pass>
      pass
    </pass>
    <drop>
      drop
    </drop>
  </packet>
</gtp-show-counters>
```

Description

<profile-detail>

Usage

```
<gtp-show-configuration>
  <profile-detail>
    <index>
      index
    </index>
    <minimum-length>
      minimum-length
    </minimum-length>
```

```
<maximum-length>
  maximum-length
</maximum-length>
<timeout>
  timeout
</timeout>
<message-rate-limit>
  message-rate-limit
</message-rate-limit>
<remove-r6>
  remove-r6
</remove-r6>
<remove-r7>
  remove-r7
</remove-r7>
<remove-r8>
  remove-r8
</remove-r8>
<remove-r9>
  remove-r9
</remove-r9>
<remove-ie-number>
  remove-ie-number
</remove-ie-number>
<deny-nested>
  deny-nested
</deny-nested>
<validated>
  validated
</validated>
<restart-path>
  restart-path
</restart-path>
<log-forwarded>
  log-forwarded
</log-forwarded>
<log-state-invalid>
  log-state-invalid
</log-state-invalid>
<log-prohibited>
  log-prohibited
</log-prohibited>
<log-rate-limited>
  log-rate-limited
</log-rate-limited>
<log-frequency-number>
  log-frequency-number
</log-frequency-number>
<aa-create-pdp>
  aa-create-pdp
</aa-create-pdp>
<aa-delete-pdp>
  aa-delete-pdp
</aa-delete-pdp>
<bearer-resource>
  bearer-resource
```


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```
</bearer-resource>
<change-notification>
  change-notification
</change-notification>
<config-transfer>
  config-transfer
</config-transfer>
<context>
  context
</context>
<create-bearer>
  create-bearer
</create-bearer>
<create-data-forwarding>
  create-data-forwarding
</create-data-forwarding>
<create-pdp>
  create-pdp
</create-pdp>
<create-session>
  create-session
</create-session>
<create-tunnel-forwarding>
  create-tunnel-forwarding
</create-tunnel-forwarding>
<cs-paging>
  cs-paging
</cs-paging>
<data-record>
  data-record
</data-record>
<delete-bearer>
  delete-bearer
</delete-bearer>
<delete-command>
  delete-command
</delete-command>
<delete-data-forwarding>
  delete-data-forwarding
</delete-data-forwarding>
<delete-pdn>
  delete-pdn
</delete-pdn>
<delete-pdp>
  delete-pdp
</delete-pdp>
<delete-session>
  delete-session
</delete-session>
<detach>
  detach
</detach>
<downlink-notification>
  downlink-notification
</downlink-notification>
<echo>
```

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```
  echo
</echo>
<error-indication>
  error-indication
</error-indication>
<failure-report>
  failure-report
</failure-report>
<fwd-access>
  fwd-access
</fwd-access>
<fwd-relocation>
  fwd-relocation
</fwd-relocation>
<fwd-srns-context>
  fwd-srns-context
</fwd-srns-context>
<g-pdu>
  g-pdu
</g-pdu>
<identification>
  identification
</identification>
<mbms-sess-start>
  mbms-sess-start
</mbms-sess-start>
<mbms-sess-stop>
  mbms-sess-stop
</mbms-sess-stop>
<mbms-sess-update>
  mbms-sess-update
</mbms-sess-update>
<modify-bearer>
  modify-bearer
</modify-bearer>
<modify-command>
  modify-command
</modify-command>
<node-alive>
  node-alive
</node-alive>
<note-ms-present>
  note-ms-present
</note-ms-present>
<pdu-notification>
  pdu-notification
</pdu-notification>
<ran-info>
  ran-info
</ran-info>
<redirection>
  redirection
</redirection>
<release-access>
  release-access
</release-access>
```


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```
    <relocation-cancel>
      relocation-cancel
    </relocation-cancel>
    <resume>
      resume
    </resume>
    <send-route>
      send-route
    </send-route>
    <sgsn-context>
      sgsn-context
    </sgsn-context>
    <stop-paging>
      stop-paging
    </stop-paging>
    <supported-extension>
      supported-extension
    </supported-extension>
    <suspend>
      suspend
    </suspend>
    <trace-session>
      trace-session
    </trace-session>
    <update-bearer>
      update-bearer
    </update-bearer>
    <update-pdn>
      update-pdn
    </update-pdn>
    <update-pdp>
      update-pdp
    </update-pdp>
    <ver-not-supported>
      ver-not-supported
    </ver-not-supported>
  </profile-detail>
</gtp-show-configuration>
```

Description

<profile-summary>

Usage

```
<gtp-show-configuration>
  <profile-summary>
    <profile-list>
      profile-list
    </profile-list>
    <license-re>
      license-re
    </license-re>
    <license-spu>
      license-spu
    </license-spu>
```

```
  </profile-summary>
</gtp-show-configuration>
```

Description

<request>

Usage

```
<gtp-show-counters>
  <request>
    <allocate-v1-cookie>
      allocate-v1-cookie
    </allocate-v1-cookie>
    <free-v1-cookie>
      free-v1-cookie
    </free-v1-cookie>
    <fail-v1-cookie>
      fail-v1-cookie
    </fail-v1-cookie>
    <allocate-v2-cookie>
      allocate-v2-cookie
    </allocate-v2-cookie>
    <free-v2-cookie>
      free-v2-cookie
    </free-v2-cookie>
    <fail-v2-cookie>
      fail-v2-cookie
    </fail-v2-cookie>
    <v1-create-req-retrans>
      v1-create-req-retrans
    </v1-create-req-retrans>
    <v1-create-rsp-retrans>
      v1-create-rsp-retrans
    </v1-create-rsp-retrans>
    <v1-update-req-retrans>
      v1-update-req-retrans
    </v1-update-req-retrans>
    <v1-update-rsp-retrans>
      v1-update-rsp-retrans
    </v1-update-rsp-retrans>
    <v1-delete-req-retrans>
      v1-delete-req-retrans
    </v1-delete-req-retrans>
    <v1-delete-rsp-retrans>
      v1-delete-rsp-retrans
    </v1-delete-rsp-retrans>
    <v1-update-req-ggsn>
      v1-update-req-ggsn
    </v1-update-req-ggsn>
    <v1-update-rsp-ggsn>
      v1-update-rsp-ggsn
    </v1-update-rsp-ggsn>
    <alloc-skip-active>
      alloc-skip-active
    </alloc-skip-active>
```


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```
  </request>
</gtp-show-counters>
```

Description

<tunnel>

Usage

```
<gtp-show-counters>
  <tunnel>
    <active>
      active
    </active>
    <half>
      half
    </half>
    <dying>
      dying
    </dying>
  </tunnel>
</gtp-show-counters>
```

Description

<tunnel-information>

Usage

```
<gtp-information>
  <tunnel-information>
    <chassis-total>
      chassis-total
    </chassis-total>
    <spu-total>
      spu-total
    </spu-total>
    <fpc-slot>
      fpc-slot
    </fpc-slot>
    <pic-slot>
      pic-slot
    </pic-slot>
    <tunnel-index>
      tunnel-index
    </tunnel-index>
    <tunnel-version>
      tunnel-version
    </tunnel-version>
    <tunnel-sapi>
      tunnel-sapi
    </tunnel-sapi>
    <tunnel-timeout>
      tunnel-timeout
    </tunnel-timeout>
    <tunnel-sgsn-control-ip>
```

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```
  tunnel-sgsn-control-ip
</tunnel-sgsn-control-ip>
<tunnel-sgsn-user-ip>
  tunnel-sgsn-user-ip
</tunnel-sgsn-user-ip>
<tunnel-ggsn-control-ip>
  tunnel-ggsn-control-ip
</tunnel-ggsn-control-ip>
<tunnel-ggsn-user-ip>
  tunnel-ggsn-user-ip
</tunnel-ggsn-user-ip>
<tunnel-sgsn-control-id>
  tunnel-sgsn-control-id
</tunnel-sgsn-control-id>
<tunnel-sgsn-user-id>
  tunnel-sgsn-user-id
</tunnel-sgsn-user-id>
<tunnel-high-control-id>
  tunnel-high-control-id
</tunnel-high-control-id>
<tunnel-low-user-id>
  tunnel-low-user-id
</tunnel-low-user-id>
<tunnel-direction>
  tunnel-direction
</tunnel-direction>
<tunnel-bearer_id>
  tunnel-bearer_id
</tunnel-bearer_id>
<tunnel-default-bearer_id>
  tunnel-default-bearer_id
</tunnel-default-bearer_id>
<tunnel-sgw-control-ip>
  tunnel-sgw-control-ip
</tunnel-sgw-control-ip>
<tunnel-sgw-user-ip>
  tunnel-sgw-user-ip
</tunnel-sgw-user-ip>
<tunnel-peer-control-ip>
  tunnel-peer-control-ip
</tunnel-peer-control-ip>
<tunnel-peer-user-ip>
  tunnel-peer-user-ip
</tunnel-peer-user-ip>
<tunnel-sgw-control-id>
  tunnel-sgw-control-id
</tunnel-sgw-control-id>
<tunnel-sgw-user-id>
  tunnel-sgw-user-id
</tunnel-sgw-user-id>
<tunnel-peer-control-id>
  tunnel-peer-control-id
</tunnel-peer-control-id>
<tunnel-peer-user-id>
  tunnel-peer-user-id
</tunnel-peer-user-id>
```


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```
  </tunnel-information>
</gtp-information>
```

Description

Summary of IDS Response Tags

<clear-ids-statistics-information>

Usage

```
<clear-ids-statistics-information>
  <clear-ids-statistics-status>....</clear-ids-statistics-status>
</clear-ids-statistics-information>
```

Description

<clear-ids-statistics-status>

Usage

```
<clear-ids-statistics-information>
  <clear-ids-statistics-status>
    <ids-clear-status>
      ids-clear-status
    </ids-clear-status>
  </clear-ids-statistics-status>
</clear-ids-statistics-information>
```

Description

<ids-logical-system>

Usage

```
<ids-logical-system>
  <name>
    name
  </name>
</ids-logical-system>
```

Description Logical system

<ids-logical-system>

Usage

```
<show-ids-statistics-information>
  <ids-logical-system>
    <name>
      name
    </name>
  </ids-logical-system>
</show-ids-statistics-information>
```

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Description Logical system

<ids-logical-system>

Usage

```
<show-ids-status>
  <ids-logical-system>
    <name>
      name
    </name>
  </ids-logical-system>
</show-ids-status>
```

Description Logical system

<ids-statistics>

Usage

```
<show-ids-statistics-information>
  <ids-statistics>
    <ids-statistics-icmp-flood>
      ids-statistics-icmp-flood
    </ids-statistics-icmp-flood>
    <ids-statistics-udp-flood>
      ids-statistics-udp-flood
    </ids-statistics-udp-flood>
    <ids-statistics-winnuke>
      ids-statistics-winnuke
    </ids-statistics-winnuke>
    <ids-statistics-port-scan>
      ids-statistics-port-scan
    </ids-statistics-port-scan>
    <ids-statistics-address-sweep>
      ids-statistics-address-sweep
    </ids-statistics-address-sweep>
    <ids-statistics-tcp-sweep>
      ids-statistics-tcp-sweep
    </ids-statistics-tcp-sweep>
    <ids-statistics-udp-sweep>
      ids-statistics-udp-sweep
    </ids-statistics-udp-sweep>
    <ids-statistics-tear-drop>
      ids-statistics-tear-drop
    </ids-statistics-tear-drop>
    <ids-statistics-syn-flood>
      ids-statistics-syn-flood
    </ids-statistics-syn-flood>
    <ids-statistics-ip-spoofing>
      ids-statistics-ip-spoofing
    </ids-statistics-ip-spoofing>
    <ids-statistics-ping-of-death>
      ids-statistics-ping-of-death
    </ids-statistics-ping-of-death>
```


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```
<ids-statistics-ip-option-src-route>
  ids-statistics-ip-option-src-route
</ids-statistics-ip-option-src-route>
<ids-statistics-land>
  ids-statistics-land
</ids-statistics-land>
<ids-statistics-syn-fragment>
  ids-statistics-syn-fragment
</ids-statistics-syn-fragment>
<ids-statistics-tcp-no-flag>
  ids-statistics-tcp-no-flag
</ids-statistics-tcp-no-flag>
<ids-statistics-unknown-protocol>
  ids-statistics-unknown-protocol
</ids-statistics-unknown-protocol>
<ids-statistics-ip-option-bad>
  ids-statistics-ip-option-bad
</ids-statistics-ip-option-bad>
<ids-statistics-ip-option-record-route>
  ids-statistics-ip-option-record-route
</ids-statistics-ip-option-record-route>
<ids-statistics-ip-option-timestamp>
  ids-statistics-ip-option-timestamp
</ids-statistics-ip-option-timestamp>
<ids-statistics-ip-option-security>
  ids-statistics-ip-option-security
</ids-statistics-ip-option-security>
<ids-statistics-ip-option-loose-src-route>
  ids-statistics-ip-option-loose-src-route
</ids-statistics-ip-option-loose-src-route>
<ids-statistics-ip-option-strict-src-route>
  ids-statistics-ip-option-strict-src-route
</ids-statistics-ip-option-strict-src-route>
<ids-statistics-ip-option-stream>
  ids-statistics-ip-option-stream
</ids-statistics-ip-option-stream>
<ids-statistics-icmp-fragment>
  ids-statistics-icmp-fragment
</ids-statistics-icmp-fragment>
<ids-statistics-icmp-large-pkt>
  ids-statistics-icmp-large-pkt
</ids-statistics-icmp-large-pkt>
<ids-statistics-syn-fin>
  ids-statistics-syn-fin
</ids-statistics-syn-fin>
<ids-statistics-fin-no-ack>
  ids-statistics-fin-no-ack
</ids-statistics-fin-no-ack>
<ids-statistics-src-session-limit>
  ids-statistics-src-session-limit
</ids-statistics-src-session-limit>
<ids-statistics-syn-ack-ack-proxy>
  ids-statistics-syn-ack-ack-proxy
</ids-statistics-syn-ack-ack-proxy>
<ids-statistics-block-fragment>
  ids-statistics-block-fragment
```

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```
    </ids-statistics-block-fragment>
    <ids-statistics-dst-session-limit>
      ids-statistics-dst-session-limit
    </ids-statistics-dst-session-limit>
  </ids-statistics>
</show-ids-statistics-information>
```

Description

<ids-status>

Usage

```
<show-ids-status>
  <ids-status>
    <ids-status-name>
      ids-status-name
    </ids-status-name>
    <ids-status-value>
      ids-status-value
    </ids-status-value>
  </ids-status>
</show-ids-status>
```

Description

<ids-white-list>

Usage

```
<show-ids-status>
  <ids-white-list>
    <white-list-name>
      white-list-name
    </white-list-name>
    <ids-address>
      ids-address
    </ids-address>
  </ids-white-list>
</show-ids-status>
```

Description

<show-ids-statistics-information>

Usage

```
<show-ids-statistics-information>
  <ids-logical-system>....</ids-logical-system>
  <ids-statistics>....</ids-statistics>
</show-ids-statistics-information>
```

Description

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<show-ids-status>

Usage

```
<show-ids-status>
  <ids-logical-system>....</ids-logical-system>
  <ids-description>
    ids-description
  </ids-description>
  <ids-status>....</ids-status>
  <ids-white-list>....</ids-white-list>
</show-ids-status>
```

Description

Summary of IPSec Response Tags

<ah-statistics>

Usage

```
<ipsec-service-set-statistics>
  <ipsec-statistics>
    <ah-statistics>
      <ah-input-bytes>
        ah-input-bytes
      </ah-input-bytes>
      <ah-output-bytes>
        ah-output-bytes
      </ah-output-bytes>
      <ah-input-packets>
        ah-input-packets
      </ah-input-packets>
      <ah-output-packets>
        ah-output-packets
      </ah-output-packets>
    </ah-statistics>
  </ipsec-statistics>
</ipsec-service-set-statistics>
```

Description

<ah-statistics>

Usage

```
<ipsec-total-statistics>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <ah-statistics>
        <ah-input-bytes>
          ah-input-bytes
        </ah-input-bytes>
        <ah-output-bytes>
          ah-output-bytes
        </ah-output-bytes>
```

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```
        <ah-input-packets>
          ah-input-packets
        </ah-input-packets>
        <ah-output-packets>
          ah-output-packets
        </ah-output-packets>
      </ah-statistics>
    </ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics>
```

Description

<ah-statistics>

Usage

```
<ipsec-total-statistics-information>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <ah-statistics>
        <ah-input-bytes>
          ah-input-bytes
        </ah-input-bytes>
        <ah-output-bytes>
          ah-output-bytes
        </ah-output-bytes>
        <ah-input-packets>
          ah-input-packets
        </ah-input-packets>
        <ah-output-packets>
          ah-output-packets
        </ah-output-packets>
      </ah-statistics>
    </ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics-information>
```

Description

<ah-statistics>

Usage

```
<usp-ipsec-total-statistics-information>
  <ah-statistics>
    <ah-input-bytes>
      ah-input-bytes
    </ah-input-bytes>
    <ah-output-bytes>
      ah-output-bytes
    </ah-output-bytes>
    <ah-input-packets>
      ah-input-packets
    </ah-input-packets>
    <ah-output-packets>
```


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```
      ah-output-packets
    </ah-output-packets>
  </ah-statistics>
</usp-ipsec-total-statistics-information>
```

Description

<error-statistics>

Usage

```
<ipsec-service-set-statistics>
  <ipsec-statistics>
    <error-statistics>
      <ah-authentication-failures>
        ah-authentication-failures
      </ah-authentication-failures>
      <replay-errors>
        replay-errors
      </replay-errors>
      <esp-authentication-failures>
        esp-authentication-failures
      </esp-authentication-failures>
      <esp-decryption-failures>
        esp-decryption-failures
      </esp-decryption-failures>
      <replay-pkts>
        replay-pkts
      </replay-pkts>
      <replay-before-window-drops>
        replay-before-window-drops
      </replay-before-window-drops>
      <bad-headers>
        bad-headers
      </bad-headers>
      <bad-trailers>
        bad-trailers
      </bad-trailers>
      <flow-errors>
        flow-errors
      </flow-errors>
      <no-sa-errors>
        no-sa-errors
      </no-sa-errors>
      <ip-integrity-errors>
        ip-integrity-errors
      </ip-integrity-errors>
      <exceeds-tunnel-mtu>
        exceeds-tunnel-mtu
      </exceeds-tunnel-mtu>
      <rule-lookup-fail>
        rule-lookup-fail
      </rule-lookup-fail>
      <misc-errors>
        misc-errors
      </misc-errors>
```

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```
    </error-statistics>
  </ipsec-statistics>
</ipsec-service-set-statistics>
```

Description

<error-statistics>

Usage

```
<ipsec-total-statistics>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <error-statistics>
        <ah-authentication-failures>
          ah-authentication-failures
        </ah-authentication-failures>
        <replay-errors>
          replay-errors
        </replay-errors>
        <esp-authentication-failures>
          esp-authentication-failures
        </esp-authentication-failures>
        <esp-decryption-failures>
          esp-decryption-failures
        </esp-decryption-failures>
        <replay-pkts>
          replay-pkts
        </replay-pkts>
        <replay-before-window-drops>
          replay-before-window-drops
        </replay-before-window-drops>
        <bad-headers>
          bad-headers
        </bad-headers>
        <bad-trailers>
          bad-trailers
        </bad-trailers>
        <flow-errors>
          flow-errors
        </flow-errors>
        <no-sa-errors>
          no-sa-errors
        </no-sa-errors>
        <ip-integrity-errors>
          ip-integrity-errors
        </ip-integrity-errors>
        <exceeds-tunnel-mtu>
          exceeds-tunnel-mtu
        </exceeds-tunnel-mtu>
        <rule-lookup-fail>
          rule-lookup-fail
        </rule-lookup-fail>
        <misc-errors>
          misc-errors
        </misc-errors>
```


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```
      </error-statistics>
    </ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics>
```

Description

<error-statistics>

Usage

```
<ipsec-total-statistics-information>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <error-statistics>
        <ah-authentication-failures>
          ah-authentication-failures
        </ah-authentication-failures>
        <replay-errors>
          replay-errors
        </replay-errors>
        <esp-authentication-failures>
          esp-authentication-failures
        </esp-authentication-failures>
        <esp-decryption-failures>
          esp-decryption-failures
        </esp-decryption-failures>
        <replay-pkts>
          replay-pkts
        </replay-pkts>
        <replay-before-window-drops>
          replay-before-window-drops
        </replay-before-window-drops>
        <bad-headers>
          bad-headers
        </bad-headers>
        <bad-trailers>
          bad-trailers
        </bad-trailers>
        <flow-errors>
          flow-errors
        </flow-errors>
        <no-sa-errors>
          no-sa-errors
        </no-sa-errors>
        <ip-integrity-errors>
          ip-integrity-errors
        </ip-integrity-errors>
        <exceeds-tunnel-mtu>
          exceeds-tunnel-mtu
        </exceeds-tunnel-mtu>
        <rule-lookup-fail>
          rule-lookup-fail
        </rule-lookup-fail>
        <misc-errors>
          misc-errors
```

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```
        </misc-errors>
       </error-statistics>
      </ipsec-statistics>
     </ipsec-service-set-statistics>
    </ipsec-total-statistics-information>
```

Description

<error-statistics>

Usage

```
<usp-ipsec-total-statistics-information>
 <error-statistics>
  <ah-authentication-failures>
   ah-authentication-failures
  </ah-authentication-failures>
  <replay-errors>
   replay-errors
  </replay-errors>
  <esp-authentication-failures>
   esp-authentication-failures
  </esp-authentication-failures>
  <esp-decryption-failures>
   esp-decryption-failures
  </esp-decryption-failures>
  <replay-pkts>
   replay-pkts
  </replay-pkts>
  <replay-before-window-drops>
   replay-before-window-drops
  </replay-before-window-drops>
  <bad-headers>
   bad-headers
  </bad-headers>
  <bad-trailers>
   bad-trailers
  </bad-trailers>
  <flow-errors>
   flow-errors
  </flow-errors>
  <no-sa-errors>
   no-sa-errors
  </no-sa-errors>
  <ip-integrity-errors>
   ip-integrity-errors
  </ip-integrity-errors>
  <exceeds-tunnel-mtu>
   exceeds-tunnel-mtu
  </exceeds-tunnel-mtu>
  <rule-lookup-fail>
   rule-lookup-fail
  </rule-lookup-fail>
  <misc-errors>
   misc-errors
  </misc-errors>
```


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```
  </error-statistics>
</usp-ipsec-total-statistics-information>
```

Description

<esp-statistics>

Usage

```
<ipsec-service-set-statistics>
  <ipsec-statistics>
    <esp-statistics>
      <esp-encrypted-bytes>
        esp-encrypted-bytes
      </esp-encrypted-bytes>
      <esp-decrypted-bytes>
        esp-decrypted-bytes
      </esp-decrypted-bytes>
      <esp-encrypted-packets>
        esp-encrypted-packets
      </esp-encrypted-packets>
      <esp-decrypted-packets>
        esp-decrypted-packets
      </esp-decrypted-packets>
    </esp-statistics>
  </ipsec-statistics>
</ipsec-service-set-statistics>
```

Description

<esp-statistics>

Usage

```
<ipsec-total-statistics>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <esp-statistics>
        <esp-encrypted-bytes>
          esp-encrypted-bytes
        </esp-encrypted-bytes>
        <esp-decrypted-bytes>
          esp-decrypted-bytes
        </esp-decrypted-bytes>
        <esp-encrypted-packets>
          esp-encrypted-packets
        </esp-encrypted-packets>
        <esp-decrypted-packets>
          esp-decrypted-packets
        </esp-decrypted-packets>
      </esp-statistics>
    </ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics>
```

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Description

<esp-statistics>

Usage

```
<ipsec-total-statistics-information>
 <ipsec-service-set-statistics>
  <ipsec-statistics>
   <esp-statistics>
    <esp-encrypted-bytes>
     esp-encrypted-bytes
    </esp-encrypted-bytes>
    <esp-decrypted-bytes>
     esp-decrypted-bytes
    </esp-decrypted-bytes>
    <esp-encrypted-packets>
     esp-encrypted-packets
    </esp-encrypted-packets>
    <esp-decrypted-packets>
     esp-decrypted-packets
    </esp-decrypted-packets>
   </esp-statistics>
  </ipsec-statistics>
 </ipsec-service-set-statistics>
</ipsec-total-statistics-information>
```

Description

<esp-statistics>

Usage

```
<usp-ipsec-total-statistics-information>
 <esp-statistics>
  <esp-encrypted-bytes>
   esp-encrypted-bytes
  </esp-encrypted-bytes>
  <esp-decrypted-bytes>
   esp-decrypted-bytes
  </esp-decrypted-bytes>
  <esp-encrypted-packets>
   esp-encrypted-packets
  </esp-encrypted-packets>
  <esp-decrypted-packets>
   esp-decrypted-packets
  </esp-decrypted-packets>
 </esp-statistics>
</usp-ipsec-total-statistics-information>
```

Description

<gvpn-kek-security-associations-information>

Usage

```
<gvpn-kek-security-associations-information>
```


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```
  <ike-sa-location>....</ike-sa-location>
  <ike-security-associations>....</ike-security-associations>
  <ike-sa-phase2-information>....</ike-sa-phase2-information>
  <kek-security-associations>....</kek-security-associations>
  <ike-security-associations-block>....</ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description

<ike-active-peers>

Usage

```
<ike-active-peers>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-remote-port>
    ike-sa-remote-port
  </ike-sa-remote-port>
  <ike-ike-id>
    ike-ike-id
  </ike-ike-id>
  <ike-xauth-username>
    ike-xauth-username
  </ike-xauth-username>
  <ike-xauth-user-assigned-ip>
    ike-xauth-user-assigned-ip
  </ike-xauth-user-assigned-ip>
  <ike-xauth-user-assigned-mask>
    ike-xauth-user-assigned-mask
  </ike-xauth-user-assigned-mask>
  <ike-xauth-user-assigned-dns>
    ike-xauth-user-assigned-dns
  </ike-xauth-user-assigned-dns>
  <ike-xauth-user-assigned-dns2>
    ike-xauth-user-assigned-dns2
  </ike-xauth-user-assigned-dns2>
  <ike-xauth-user-assigned-wins>
    ike-xauth-user-assigned-wins
  </ike-xauth-user-assigned-wins>
  <ike-xauth-user-assigned-wins2>
    ike-xauth-user-assigned-wins2
  </ike-xauth-user-assigned-wins2>
</ike-active-peers>
```

Description IKE active peer and XAUTH assigned IP

<ike-active-peers>

Usage

```
<ike-active-peers-block>
  <ike-active-peers>
    <ike-sa-remote-address>
```

```
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-ike-id>
      ike-ike-id
    </ike-ike-id>
    <ike-xauth-username>
      ike-xauth-username
    </ike-xauth-username>
    <ike-xauth-user-assigned-ip>
      ike-xauth-user-assigned-ip
    </ike-xauth-user-assigned-ip>
    <ike-xauth-user-assigned-mask>
      ike-xauth-user-assigned-mask
    </ike-xauth-user-assigned-mask>
    <ike-xauth-user-assigned-dns>
      ike-xauth-user-assigned-dns
    </ike-xauth-user-assigned-dns>
    <ike-xauth-user-assigned-dns2>
      ike-xauth-user-assigned-dns2
    </ike-xauth-user-assigned-dns2>
    <ike-xauth-user-assigned-wins>
      ike-xauth-user-assigned-wins
    </ike-xauth-user-assigned-wins>
    <ike-xauth-user-assigned-wins2>
      ike-xauth-user-assigned-wins2
    </ike-xauth-user-assigned-wins2>
  </ike-active-peers>
</ike-active-peers-block>
```

Description IKE active peer and XAUTH assigned IP

<ike-active-peers>

Usage

```
<ike-active-peers-information>
  <ike-active-peers>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-ike-id>
      ike-ike-id
    </ike-ike-id>
    <ike-xauth-username>
      ike-xauth-username
    </ike-xauth-username>
    <ike-xauth-user-assigned-ip>
      ike-xauth-user-assigned-ip
    </ike-xauth-user-assigned-ip>
```


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```
        <ike-xauth-user-assigned-mask>
          ike-xauth-user-assigned-mask
        </ike-xauth-user-assigned-mask>
        <ike-xauth-user-assigned-dns>
          ike-xauth-user-assigned-dns
        </ike-xauth-user-assigned-dns>
        <ike-xauth-user-assigned-dns2>
          ike-xauth-user-assigned-dns2
        </ike-xauth-user-assigned-dns2>
        <ike-xauth-user-assigned-wins>
          ike-xauth-user-assigned-wins
        </ike-xauth-user-assigned-wins>
        <ike-xauth-user-assigned-wins2>
          ike-xauth-user-assigned-wins2
        </ike-xauth-user-assigned-wins2>
      </ike-active-peers>
    </ike-active-peers-information>
```

Description IKE active peer and XAUTH assigned IP

<ike-active-peers>

Usage

```
<ike-active-peers-information>
  <ike-active-peers-block>
    <ike-active-peers>
      <ike-sa-remote-address>
        ike-sa-remote-address
      </ike-sa-remote-address>
      <ike-sa-remote-port>
        ike-sa-remote-port
      </ike-sa-remote-port>
      <ike-ike-id>
        ike-ike-id
      </ike-ike-id>
      <ike-xauth-username>
        ike-xauth-username
      </ike-xauth-username>
      <ike-xauth-user-assigned-ip>
        ike-xauth-user-assigned-ip
      </ike-xauth-user-assigned-ip>
      <ike-xauth-user-assigned-mask>
        ike-xauth-user-assigned-mask
      </ike-xauth-user-assigned-mask>
      <ike-xauth-user-assigned-dns>
        ike-xauth-user-assigned-dns
      </ike-xauth-user-assigned-dns>
      <ike-xauth-user-assigned-dns2>
        ike-xauth-user-assigned-dns2
      </ike-xauth-user-assigned-dns2>
      <ike-xauth-user-assigned-wins>
        ike-xauth-user-assigned-wins
      </ike-xauth-user-assigned-wins>
      <ike-xauth-user-assigned-wins2>
```

```
            ike-xauth-user-assigned-wins2
          </ike-xauth-user-assigned-wins2>
        </ike-active-peers>
      </ike-active-peers-block>
    </ike-active-peers-information>
```

Description IKE active peer and XAUTH assigned IP

<ike-active-peers-block>

Usage

```
<ike-active-peers-block>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-remote-port>
    ike-sa-remote-port
  </ike-sa-remote-port>
  <ike-ike-id>
    ike-ike-id
  </ike-ike-id>
  <ike-xauth-username>
    ike-xauth-username
  </ike-xauth-username>
  <ike-active-peers>....</ike-active-peers>
</ike-active-peers-block>
```

Description IKE active peer

<ike-active-peers-block>

Usage

```
<ike-active-peers-information>
  <ike-active-peers-block>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-ike-id>
      ike-ike-id
    </ike-ike-id>
    <ike-xauth-username>
      ike-xauth-username
    </ike-xauth-username>
    <ike-active-peers>....</ike-active-peers>
  </ike-active-peers-block>
</ike-active-peers-information>
```

Description IKE active peer

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<ike-active-peers-information>

Usage

```
<ike-active-peers-information>
  <ike-active-peers>....</ike-active-peers>
  <ike-active-peers-block>....</ike-active-peers-block>
</ike-active-peers-information>
```

Description

<ike-sa-algorithms>

Usage

```
<ike-sa-algorithms>
  <ike-sa-authentication-algorithm>
    ike-sa-authentication-algorithm
  </ike-sa-authentication-algorithm>
  <ike-sa-encryption-algorithm>
    ike-sa-encryption-algorithm
  </ike-sa-encryption-algorithm>
  <ike-sa-prf-algorithm>
    ike-sa-prf-algorithm
  </ike-sa-prf-algorithm>
  <ike-sa-dhgroup>
    ike-sa-dhgroup
  </ike-sa-dhgroup>
</ike-sa-algorithms>
```

Description Algorithms used with the SA information

<ike-sa-algorithms>

Usage

```
<ike-security-associations>
  <ike-sa-algorithms>
    <ike-sa-authentication-algorithm>
      ike-sa-authentication-algorithm
    </ike-sa-authentication-algorithm>
    <ike-sa-encryption-algorithm>
      ike-sa-encryption-algorithm
    </ike-sa-encryption-algorithm>
    <ike-sa-prf-algorithm>
      ike-sa-prf-algorithm
    </ike-sa-prf-algorithm>
    <ike-sa-dhgroup>
      ike-sa-dhgroup
    </ike-sa-dhgroup>
  </ike-sa-algorithms>
</ike-security-associations>
```

Description Algorithms used with the SA information

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<ike-sa-algorithms>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-algorithms>
      <ike-sa-authentication-algorithm>
        ike-sa-authentication-algorithm
      </ike-sa-authentication-algorithm>
      <ike-sa-encryption-algorithm>
        ike-sa-encryption-algorithm
      </ike-sa-encryption-algorithm>
      <ike-sa-prf-algorithm>
        ike-sa-prf-algorithm
      </ike-sa-prf-algorithm>
      <ike-sa-dhgroup>
        ike-sa-dhgroup
      </ike-sa-dhgroup>
    </ike-sa-algorithms>
  </ike-security-associations>
</ike-security-associations-block>
```

Description Algorithms used with the SA information

<ike-sa-algorithms>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <ike-sa-algorithms>
      <ike-sa-authentication-algorithm>
        ike-sa-authentication-algorithm
      </ike-sa-authentication-algorithm>
      <ike-sa-encryption-algorithm>
        ike-sa-encryption-algorithm
      </ike-sa-encryption-algorithm>
      <ike-sa-prf-algorithm>
        ike-sa-prf-algorithm
      </ike-sa-prf-algorithm>
      <ike-sa-dhgroup>
        ike-sa-dhgroup
      </ike-sa-dhgroup>
    </ike-sa-algorithms>
  </ike-security-associations>
</ike-security-associations-information>
```

Description Algorithms used with the SA information

<ike-sa-algorithms>

Usage

```
<ike-security-associations-information>
```


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```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-algorithms>
      <ike-sa-authentication-algorithm>
        ike-sa-authentication-algorithm
      </ike-sa-authentication-algorithm>
      <ike-sa-encryption-algorithm>
        ike-sa-encryption-algorithm
      </ike-sa-encryption-algorithm>
      <ike-sa-prf-algorithm>
        ike-sa-prf-algorithm
      </ike-sa-prf-algorithm>
      <ike-sa-dhgroup>
        ike-sa-dhgroup
      </ike-sa-dhgroup>
    </ike-sa-algorithms>
  </ike-security-associations>
 </ike-security-associations-block>
</ike-security-associations-information>
```

Description Algorithms used with the SA information

<ike-sa-algorithms>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <ike-sa-algorithms>
      <ike-sa-authentication-algorithm>
        ike-sa-authentication-algorithm
      </ike-sa-authentication-algorithm>
      <ike-sa-encryption-algorithm>
        ike-sa-encryption-algorithm
      </ike-sa-encryption-algorithm>
      <ike-sa-prf-algorithm>
        ike-sa-prf-algorithm
      </ike-sa-prf-algorithm>
      <ike-sa-dhgroup>
        ike-sa-dhgroup
      </ike-sa-dhgroup>
    </ike-sa-algorithms>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Algorithms used with the SA information

<ike-sa-algorithms>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
```

```
<ike-sa-algorithms>
  <ike-sa-authentication-algorithm>
    ike-sa-authentication-algorithm
  </ike-sa-authentication-algorithm>
  <ike-sa-encryption-algorithm>
    ike-sa-encryption-algorithm
  </ike-sa-encryption-algorithm>
  <ike-sa-prf-algorithm>
    ike-sa-prf-algorithm
  </ike-sa-prf-algorithm>
  <ike-sa-dhgroup>
    ike-sa-dhgroup
  </ike-sa-dhgroup>
</ike-sa-algorithms>
</ike-security-associations>
</ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Algorithms used with the SA information

<ike-sa-location>

Usage

```
<ike-security-associations-block>
  <ike-sa-location>
    <ike-sa-fpc>
      ike-sa-fpc
    </ike-sa-fpc>
    <ike-sa-pic>
      ike-sa-pic
    </ike-sa-pic>
    <ike-sa-kmd-instance>
      ike-sa-kmd-instance
    </ike-sa-kmd-instance>
  </ike-sa-location>
</ike-security-associations-block>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<ike-sa-location>
  <ike-sa-fpc>
    ike-sa-fpc
  </ike-sa-fpc>
  <ike-sa-pic>
    ike-sa-pic
  </ike-sa-pic>
  <ike-sa-kmd-instance>
    ike-sa-kmd-instance
  </ike-sa-kmd-instance>
```


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```
</ike-sa-location>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<ike-security-associations-information>
  <ike-sa-location>
    <ike-sa-fpc>
      ike-sa-fpc
    </ike-sa-fpc>
    <ike-sa-pic>
      ike-sa-pic
    </ike-sa-pic>
    <ike-sa-kmd-instance>
      ike-sa-kmd-instance
    </ike-sa-kmd-instance>
  </ike-sa-location>
</ike-security-associations-information>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-sa-location>
      <ike-sa-fpc>
        ike-sa-fpc
      </ike-sa-fpc>
      <ike-sa-pic>
        ike-sa-pic
      </ike-sa-pic>
      <ike-sa-kmd-instance>
        ike-sa-kmd-instance
      </ike-sa-kmd-instance>
    </ike-sa-location>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-sa-location>
    <ike-sa-fpc>
      ike-sa-fpc
```

```
    </ike-sa-fpc>
    <ike-sa-pic>
      ike-sa-pic
    </ike-sa-pic>
    <ike-sa-kmd-instance>
      ike-sa-kmd-instance
    </ike-sa-kmd-instance>
  </ike-sa-location>
</gvpn-kek-security-associations-information>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-sa-location>
      <ike-sa-fpc>
        ike-sa-fpc
      </ike-sa-fpc>
      <ike-sa-pic>
        ike-sa-pic
      </ike-sa-pic>
      <ike-sa-kmd-instance>
        ike-sa-kmd-instance
      </ike-sa-kmd-instance>
    </ike-sa-location>
  </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Location where SA is processed

<ike-sa-location>

Usage

```
<ike-stats-information>
  <ike-sa-location>
    <ike-sa-fpc>
      ike-sa-fpc
    </ike-sa-fpc>
    <ike-sa-pic>
      ike-sa-pic
    </ike-sa-pic>
    <ike-sa-kmd-instance>
      ike-sa-kmd-instance
    </ike-sa-kmd-instance>
  </ike-sa-location>
</ike-stats-information>
```

Description Location where SA is processed

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<ike-sa-misc>

Usage

```
<ike-sa-misc>
  <ike-sa-flags>
    ike-sa-flags
  </ike-sa-flags>
  <ike-sa-num-ipsec-sas-created>
    ike-sa-num-ipsec-sas-created
  </ike-sa-num-ipsec-sas-created>
  <ike-sa-num-ipsec-sas-deleted>
    ike-sa-num-ipsec-sas-deleted
  </ike-sa-num-ipsec-sas-deleted>
  <ike-sa-num-phase2-negotiations>
    ike-sa-num-phase2-negotiations
  </ike-sa-num-phase2-negotiations>
</ike-sa-misc>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<ike-security-associations>
  <ike-sa-misc>
    <ike-sa-flags>
      ike-sa-flags
    </ike-sa-flags>
    <ike-sa-num-ipsec-sas-created>
      ike-sa-num-ipsec-sas-created
    </ike-sa-num-ipsec-sas-created>
    <ike-sa-num-ipsec-sas-deleted>
      ike-sa-num-ipsec-sas-deleted
    </ike-sa-num-ipsec-sas-deleted>
    <ike-sa-num-phase2-negotiations>
      ike-sa-num-phase2-negotiations
    </ike-sa-num-phase2-negotiations>
  </ike-sa-misc>
</ike-security-associations>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-misc>
      <ike-sa-flags>
        ike-sa-flags
      </ike-sa-flags>
      <ike-sa-num-ipsec-sas-created>
```

```
                ike-sa-num-ipsec-sas-created
               </ike-sa-num-ipsec-sas-created>
               <ike-sa-num-ipsec-sas-deleted>
                ike-sa-num-ipsec-sas-deleted
               </ike-sa-num-ipsec-sas-deleted>
               <ike-sa-num-phase2-negotiations>
                ike-sa-num-phase2-negotiations
               </ike-sa-num-phase2-negotiations>
              </ike-sa-misc>
             </ike-security-associations>
            </ike-security-associations-block>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<ike-security-associations-information>
 <ike-security-associations>
  <ike-sa-misc>
   <ike-sa-flags>
    ike-sa-flags
   </ike-sa-flags>
   <ike-sa-num-ipsec-sas-created>
    ike-sa-num-ipsec-sas-created
   </ike-sa-num-ipsec-sas-created>
   <ike-sa-num-ipsec-sas-deleted>
    ike-sa-num-ipsec-sas-deleted
   </ike-sa-num-ipsec-sas-deleted>
   <ike-sa-num-phase2-negotiations>
    ike-sa-num-phase2-negotiations
   </ike-sa-num-phase2-negotiations>
  </ike-sa-misc>
 </ike-security-associations>
</ike-security-associations-information>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<ike-security-associations-information>
 <ike-security-associations-block>
  <ike-security-associations>
   <ike-sa-misc>
    <ike-sa-flags>
     ike-sa-flags
    </ike-sa-flags>
    <ike-sa-num-ipsec-sas-created>
     ike-sa-num-ipsec-sas-created
    </ike-sa-num-ipsec-sas-created>
    <ike-sa-num-ipsec-sas-deleted>
```


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```
                ike-sa-num-ipsec-sas-deleted
               </ike-sa-num-ipsec-sas-deleted>
               <ike-sa-num-phase2-negotiations>
                ike-sa-num-phase2-negotiations
               </ike-sa-num-phase2-negotiations>
              </ike-sa-misc>
             </ike-security-associations>
            </ike-security-associations-block>
           </ike-security-associations-information>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<gvpn-kek-security-associations-information>
 <ike-security-associations>
  <ike-sa-misc>
   <ike-sa-flags>
    ike-sa-flags
   </ike-sa-flags>
   <ike-sa-num-ipsec-sas-created>
    ike-sa-num-ipsec-sas-created
   </ike-sa-num-ipsec-sas-created>
   <ike-sa-num-ipsec-sas-deleted>
    ike-sa-num-ipsec-sas-deleted
   </ike-sa-num-ipsec-sas-deleted>
   <ike-sa-num-phase2-negotiations>
    ike-sa-num-phase2-negotiations
   </ike-sa-num-phase2-negotiations>
  </ike-sa-misc>
 </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Miscellaneous IKE SA information

<ike-sa-misc>

Usage

```
<gvpn-kek-security-associations-information>
 <ike-security-associations-block>
  <ike-security-associations>
   <ike-sa-misc>
    <ike-sa-flags>
     ike-sa-flags
    </ike-sa-flags>
    <ike-sa-num-ipsec-sas-created>
     ike-sa-num-ipsec-sas-created
    </ike-sa-num-ipsec-sas-created>
    <ike-sa-num-ipsec-sas-deleted>
     ike-sa-num-ipsec-sas-deleted
    </ike-sa-num-ipsec-sas-deleted>
```

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```
            <ike-sa-num-phase2-negotiations>
              ike-sa-num-phase2-negotiations
            </ike-sa-num-phase2-negotiations>
          </ike-sa-misc>
        </ike-security-associations>
      </ike-security-associations-block>
    </gvpn-kek-security-associations-information>
```

Description Miscellaneous IKE SA information

<ike-sa-phase2-information>

Usage

```
<ike-sa-phase2-information>
  <ike-sa-phase2-type>
    ike-sa-phase2-type
  </ike-sa-phase2-type>
  <ike-sa-role>
    ike-sa-role
  </ike-sa-role>
  <ike-sa-msg-id>
    ike-sa-msg-id
  </ike-sa-msg-id>
  <ike-sa-local-address>
    ike-sa-local-address
  </ike-sa-local-address>
  <ike-sa-local-port>
    ike-sa-local-port
  </ike-sa-local-port>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-remote-port>
    ike-sa-remote-port
  </ike-sa-remote-port>
  <ike-sa-local-id>
    ike-sa-local-id
  </ike-sa-local-id>
  <ike-sa-remote-id>
    ike-sa-remote-id
  </ike-sa-remote-id>
  <ike-sa-flags>
    ike-sa-flags
  </ike-sa-flags>
</ike-sa-phase2-information>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<ike-security-associations>
```


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```
<ike-sa-phase2-information>
  <ike-sa-phase2-type>
    ike-sa-phase2-type
  </ike-sa-phase2-type>
  <ike-sa-role>
    ike-sa-role
  </ike-sa-role>
  <ike-sa-msg-id>
    ike-sa-msg-id
  </ike-sa-msg-id>
  <ike-sa-local-address>
    ike-sa-local-address
  </ike-sa-local-address>
  <ike-sa-local-port>
    ike-sa-local-port
  </ike-sa-local-port>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-remote-port>
    ike-sa-remote-port
  </ike-sa-remote-port>
  <ike-sa-local-id>
    ike-sa-local-id
  </ike-sa-local-id>
  <ike-sa-remote-id>
    ike-sa-remote-id
  </ike-sa-remote-id>
  <ike-sa-flags>
    ike-sa-flags
  </ike-sa-flags>
 </ike-sa-phase2-information>
</ike-security-associations>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-phase2-information>
      <ike-sa-phase2-type>
        ike-sa-phase2-type
      </ike-sa-phase2-type>
      <ike-sa-role>
        ike-sa-role
      </ike-sa-role>
      <ike-sa-msg-id>
        ike-sa-msg-id
      </ike-sa-msg-id>
      <ike-sa-local-address>
        ike-sa-local-address
      </ike-sa-local-address>
```

```
            <ike-sa-local-port>
              ike-sa-local-port
            </ike-sa-local-port>
            <ike-sa-remote-address>
              ike-sa-remote-address
            </ike-sa-remote-address>
            <ike-sa-remote-port>
              ike-sa-remote-port
            </ike-sa-remote-port>
            <ike-sa-local-id>
              ike-sa-local-id
            </ike-sa-local-id>
            <ike-sa-remote-id>
              ike-sa-remote-id
            </ike-sa-remote-id>
            <ike-sa-flags>
              ike-sa-flags
            </ike-sa-flags>
          </ike-sa-phase2-information>
        </ike-security-associations>
      </ike-security-associations-block>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <ike-sa-phase2-information>
      <ike-sa-phase2-type>
        ike-sa-phase2-type
      </ike-sa-phase2-type>
      <ike-sa-role>
        ike-sa-role
      </ike-sa-role>
      <ike-sa-msg-id>
        ike-sa-msg-id
      </ike-sa-msg-id>
      <ike-sa-local-address>
        ike-sa-local-address
      </ike-sa-local-address>
      <ike-sa-local-port>
        ike-sa-local-port
      </ike-sa-local-port>
      <ike-sa-remote-address>
        ike-sa-remote-address
      </ike-sa-remote-address>
      <ike-sa-remote-port>
        ike-sa-remote-port
      </ike-sa-remote-port>
      <ike-sa-local-id>
        ike-sa-local-id
      </ike-sa-local-id>
```


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```
        <ike-sa-remote-id>
          ike-sa-remote-id
        </ike-sa-remote-id>
        <ike-sa-flags>
          ike-sa-flags
        </ike-sa-flags>
      </ike-sa-phase2-information>
    </ike-security-associations>
  </ike-security-associations-information>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<ike-security-associations-information>
  <ike-sa-phase2-information>
    <ike-sa-phase2-type>
      ike-sa-phase2-type
    </ike-sa-phase2-type>
    <ike-sa-role>
      ike-sa-role
    </ike-sa-role>
    <ike-sa-msg-id>
      ike-sa-msg-id
    </ike-sa-msg-id>
    <ike-sa-local-address>
      ike-sa-local-address
    </ike-sa-local-address>
    <ike-sa-local-port>
      ike-sa-local-port
    </ike-sa-local-port>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-sa-local-id>
      ike-sa-local-id
    </ike-sa-local-id>
    <ike-sa-remote-id>
      ike-sa-remote-id
    </ike-sa-remote-id>
    <ike-sa-flags>
      ike-sa-flags
    </ike-sa-flags>
  </ike-sa-phase2-information>
</ike-security-associations-information>
```

Description Information about phase 2 negotiation

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<ike-sa-phase2-information>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <ike-sa-phase2-information>
        <ike-sa-phase2-type>
          ike-sa-phase2-type
        </ike-sa-phase2-type>
        <ike-sa-role>
          ike-sa-role
        </ike-sa-role>
        <ike-sa-msg-id>
          ike-sa-msg-id
        </ike-sa-msg-id>
        <ike-sa-local-address>
          ike-sa-local-address
        </ike-sa-local-address>
        <ike-sa-local-port>
          ike-sa-local-port
        </ike-sa-local-port>
        <ike-sa-remote-address>
          ike-sa-remote-address
        </ike-sa-remote-address>
        <ike-sa-remote-port>
          ike-sa-remote-port
        </ike-sa-remote-port>
        <ike-sa-local-id>
          ike-sa-local-id
        </ike-sa-local-id>
        <ike-sa-remote-id>
          ike-sa-remote-id
        </ike-sa-remote-id>
        <ike-sa-flags>
          ike-sa-flags
        </ike-sa-flags>
      </ike-sa-phase2-information>
    </ike-security-associations>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <ike-sa-phase2-information>
      <ike-sa-phase2-type>
        ike-sa-phase2-type
      </ike-sa-phase2-type>
```


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```
        <ike-sa-role>
          ike-sa-role
        </ike-sa-role>
        <ike-sa-msg-id>
          ike-sa-msg-id
        </ike-sa-msg-id>
        <ike-sa-local-address>
          ike-sa-local-address
        </ike-sa-local-address>
        <ike-sa-local-port>
          ike-sa-local-port
        </ike-sa-local-port>
        <ike-sa-remote-address>
          ike-sa-remote-address
        </ike-sa-remote-address>
        <ike-sa-remote-port>
          ike-sa-remote-port
        </ike-sa-remote-port>
        <ike-sa-local-id>
          ike-sa-local-id
        </ike-sa-local-id>
        <ike-sa-remote-id>
          ike-sa-remote-id
        </ike-sa-remote-id>
        <ike-sa-flags>
          ike-sa-flags
        </ike-sa-flags>
      </ike-sa-phase2-information>
    </ike-security-associations>
  </gvpn-kek-security-associations-information>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-sa-phase2-information>
    <ike-sa-phase2-type>
      ike-sa-phase2-type
    </ike-sa-phase2-type>
    <ike-sa-role>
      ike-sa-role
    </ike-sa-role>
    <ike-sa-msg-id>
      ike-sa-msg-id
    </ike-sa-msg-id>
    <ike-sa-local-address>
      ike-sa-local-address
    </ike-sa-local-address>
    <ike-sa-local-port>
      ike-sa-local-port
    </ike-sa-local-port>
    <ike-sa-remote-address>
```

```
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-sa-local-id>
      ike-sa-local-id
    </ike-sa-local-id>
    <ike-sa-remote-id>
      ike-sa-remote-id
    </ike-sa-remote-id>
    <ike-sa-flags>
      ike-sa-flags
    </ike-sa-flags>
  </ike-sa-phase2-information>
</gvpn-kek-security-associations-information>
```

Description Information about phase 2 negotiation

<ike-sa-phase2-information>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <ike-sa-phase2-information>
        <ike-sa-phase2-type>
          ike-sa-phase2-type
        </ike-sa-phase2-type>
        <ike-sa-role>
          ike-sa-role
        </ike-sa-role>
        <ike-sa-msg-id>
          ike-sa-msg-id
        </ike-sa-msg-id>
        <ike-sa-local-address>
          ike-sa-local-address
        </ike-sa-local-address>
        <ike-sa-local-port>
          ike-sa-local-port
        </ike-sa-local-port>
        <ike-sa-remote-address>
          ike-sa-remote-address
        </ike-sa-remote-address>
        <ike-sa-remote-port>
          ike-sa-remote-port
        </ike-sa-remote-port>
        <ike-sa-local-id>
          ike-sa-local-id
        </ike-sa-local-id>
        <ike-sa-remote-id>
          ike-sa-remote-id
        </ike-sa-remote-id>
        <ike-sa-flags>
```


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```
                ike-sa-flags
               </ike-sa-flags>
              </ike-sa-phase2-information>
             </ike-security-associations>
            </ike-security-associations-block>
           </gvpn-kek-security-associations-information>
```

Description Information about phase 2 negotiation

<ike-sa-traffic-statistics>

Usage

```
<ike-sa-traffic-statistics>
 <ike-sa-input-packets>
  ike-sa-input-packets
 </ike-sa-input-packets>
 <ike-sa-output-packets>
  ike-sa-output-packets
 </ike-sa-output-packets>
 <ike-sa-input-bytes>
  ike-sa-input-bytes
 </ike-sa-input-bytes>
 <ike-sa-output-bytes>
  ike-sa-output-bytes
 </ike-sa-output-bytes>
</ike-sa-traffic-statistics>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-sa-traffic-statistics>

Usage

```
<ike-security-associations>
 <ike-sa-traffic-statistics>
  <ike-sa-input-packets>
   ike-sa-input-packets
  </ike-sa-input-packets>
  <ike-sa-output-packets>
   ike-sa-output-packets
  </ike-sa-output-packets>
  <ike-sa-input-bytes>
   ike-sa-input-bytes
  </ike-sa-input-bytes>
  <ike-sa-output-bytes>
   ike-sa-output-bytes
  </ike-sa-output-bytes>
 </ike-sa-traffic-statistics>
</ike-security-associations>
```

Description Number of packets and bytes received and transmitted on the SA

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<ike-sa-traffic-statistics>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-traffic-statistics>
      <ike-sa-input-packets>
        ike-sa-input-packets
      </ike-sa-input-packets>
      <ike-sa-output-packets>
        ike-sa-output-packets
      </ike-sa-output-packets>
      <ike-sa-input-bytes>
        ike-sa-input-bytes
      </ike-sa-input-bytes>
      <ike-sa-output-bytes>
        ike-sa-output-bytes
      </ike-sa-output-bytes>
    </ike-sa-traffic-statistics>
  </ike-security-associations>
</ike-security-associations-block>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-sa-traffic-statistics>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <ike-sa-traffic-statistics>
      <ike-sa-input-packets>
        ike-sa-input-packets
      </ike-sa-input-packets>
      <ike-sa-output-packets>
        ike-sa-output-packets
      </ike-sa-output-packets>
      <ike-sa-input-bytes>
        ike-sa-input-bytes
      </ike-sa-input-bytes>
      <ike-sa-output-bytes>
        ike-sa-output-bytes
      </ike-sa-output-bytes>
    </ike-sa-traffic-statistics>
  </ike-security-associations>
</ike-security-associations-information>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-sa-traffic-statistics>

Usage

```
<ike-security-associations-information>
```


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```
<ike-security-associations-block>
 <ike-security-associations>
  <ike-sa-traffic-statistics>
   <ike-sa-input-packets>
    ike-sa-input-packets
   </ike-sa-input-packets>
   <ike-sa-output-packets>
    ike-sa-output-packets
   </ike-sa-output-packets>
   <ike-sa-input-bytes>
    ike-sa-input-bytes
   </ike-sa-input-bytes>
   <ike-sa-output-bytes>
    ike-sa-output-bytes
   </ike-sa-output-bytes>
  </ike-sa-traffic-statistics>
 </ike-security-associations>
</ike-security-associations-block>
</ike-security-associations-information>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-sa-traffic-statistics>

Usage

```
<gvpn-kek-security-associations-information>
 <ike-security-associations>
  <ike-sa-traffic-statistics>
   <ike-sa-input-packets>
    ike-sa-input-packets
   </ike-sa-input-packets>
   <ike-sa-output-packets>
    ike-sa-output-packets
   </ike-sa-output-packets>
   <ike-sa-input-bytes>
    ike-sa-input-bytes
   </ike-sa-input-bytes>
   <ike-sa-output-bytes>
    ike-sa-output-bytes
   </ike-sa-output-bytes>
  </ike-sa-traffic-statistics>
 </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-sa-traffic-statistics>

Usage

```
<gvpn-kek-security-associations-information>
 <ike-security-associations-block>
  <ike-security-associations>
```

```
<ike-sa-traffic-statistics>
  <ike-sa-input-packets>
    ike-sa-input-packets
  </ike-sa-input-packets>
  <ike-sa-output-packets>
    ike-sa-output-packets
  </ike-sa-output-packets>
  <ike-sa-input-bytes>
    ike-sa-input-bytes
  </ike-sa-input-bytes>
  <ike-sa-output-bytes>
    ike-sa-output-bytes
  </ike-sa-output-bytes>
 </ike-sa-traffic-statistics>
</ike-security-associations>
</ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Number of packets and bytes received and transmitted on the SA

<ike-security-associations>

Usage

```
<ike-security-associations>
  <ike-sa-role>
    ike-sa-role
  </ike-sa-role>
  <ike-sa-state>
    ike-sa-state
  </ike-sa-state>
  <ike-sa-initiator-cookie>
    ike-sa-initiator-cookie
  </ike-sa-initiator-cookie>
  <ike-sa-responder-cookie>
    ike-sa-responder-cookie
  </ike-sa-responder-cookie>
  <ike-sa-exchange-type>
    ike-sa-exchange-type
  </ike-sa-exchange-type>
  <ike-sa-authentication-method>
    ike-sa-authentication-method
  </ike-sa-authentication-method>
  <ike-sa-routing-instance>
    ike-sa-routing-instance
  </ike-sa-routing-instance>
  <ike-sa-local-address>
    ike-sa-local-address
  </ike-sa-local-address>
  <ike-sa-local-port>
    ike-sa-local-port
  </ike-sa-local-port>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
```


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```
<ike-sa-remote-port>
  ike-sa-remote-port
</ike-sa-remote-port>
<ike-sa-lifetime>
  ike-sa-lifetime
</ike-sa-lifetime>
<ike-sa-algorithms>....</ike-sa-algorithms>
<ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
<ike-sa-misc>....</ike-sa-misc>
<ike-sa-index>
  ike-sa-index
</ike-sa-index>
<ike-xauth-user-info>....</ike-xauth-user-info>
<ike-sa-phase2-information>....</ike-sa-phase2-information>
<kek-sa-misc>....</kek-sa-misc>
<kek-sa-group-info>....</kek-sa-group-info>
<kek-sa-server-info>....</kek-sa-server-info>
</ike-security-associations>
```

Description Information about a single security association

<ike-security-associations>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-sa-role>
      ike-sa-role
    </ike-sa-role>
    <ike-sa-state>
      ike-sa-state
    </ike-sa-state>
    <ike-sa-initiator-cookie>
      ike-sa-initiator-cookie
    </ike-sa-initiator-cookie>
    <ike-sa-responder-cookie>
      ike-sa-responder-cookie
    </ike-sa-responder-cookie>
    <ike-sa-exchange-type>
      ike-sa-exchange-type
    </ike-sa-exchange-type>
    <ike-sa-authentication-method>
      ike-sa-authentication-method
    </ike-sa-authentication-method>
    <ike-sa-routing-instance>
      ike-sa-routing-instance
    </ike-sa-routing-instance>
    <ike-sa-local-address>
      ike-sa-local-address
    </ike-sa-local-address>
    <ike-sa-local-port>
      ike-sa-local-port
    </ike-sa-local-port>
    <ike-sa-remote-address>
```

```
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-sa-lifetime>
      ike-sa-lifetime
    </ike-sa-lifetime>
    <ike-sa-algorithms>....</ike-sa-algorithms>
    <ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
    <ike-sa-misc>....</ike-sa-misc>
    <ike-sa-index>
      ike-sa-index
    </ike-sa-index>
    <ike-xauth-user-info>....</ike-xauth-user-info>
    <ike-sa-phase2-information>....</ike-sa-phase2-information>
    <kek-sa-misc>....</kek-sa-misc>
    <kek-sa-group-info>....</kek-sa-group-info>
    <kek-sa-server-info>....</kek-sa-server-info>
  </ike-security-associations>
</ike-security-associations-block>
```

Description Information about a single security association

<ike-security-associations>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <ike-sa-role>
      ike-sa-role
    </ike-sa-role>
    <ike-sa-state>
      ike-sa-state
    </ike-sa-state>
    <ike-sa-initiator-cookie>
      ike-sa-initiator-cookie
    </ike-sa-initiator-cookie>
    <ike-sa-responder-cookie>
      ike-sa-responder-cookie
    </ike-sa-responder-cookie>
    <ike-sa-exchange-type>
      ike-sa-exchange-type
    </ike-sa-exchange-type>
    <ike-sa-authentication-method>
      ike-sa-authentication-method
    </ike-sa-authentication-method>
    <ike-sa-routing-instance>
      ike-sa-routing-instance
    </ike-sa-routing-instance>
    <ike-sa-local-address>
      ike-sa-local-address
    </ike-sa-local-address>
    <ike-sa-local-port>
```


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```
      ike-sa-local-port
     </ike-sa-local-port>
     <ike-sa-remote-address>
      ike-sa-remote-address
     </ike-sa-remote-address>
     <ike-sa-remote-port>
      ike-sa-remote-port
     </ike-sa-remote-port>
     <ike-sa-lifetime>
      ike-sa-lifetime
     </ike-sa-lifetime>
     <ike-sa-algorithms>....</ike-sa-algorithms>
     <ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
     <ike-sa-misc>....</ike-sa-misc>
     <ike-sa-index>
      ike-sa-index
     </ike-sa-index>
     <ike-xauth-user-info>....</ike-xauth-user-info>
     <ike-sa-phase2-information>....</ike-sa-phase2-information>
     <kek-sa-misc>....</kek-sa-misc>
     <kek-sa-group-info>....</kek-sa-group-info>
     <kek-sa-server-info>....</kek-sa-server-info>
    </ike-security-associations>
</ike-security-associations-information>
```

Description Information about a single security association

<ike-security-associations>

Usage

```
<ike-security-associations-information>
 <ike-security-associations-block>
  <ike-security-associations>
   <ike-sa-role>
    ike-sa-role
   </ike-sa-role>
   <ike-sa-state>
    ike-sa-state
   </ike-sa-state>
   <ike-sa-initiator-cookie>
    ike-sa-initiator-cookie
   </ike-sa-initiator-cookie>
   <ike-sa-responder-cookie>
    ike-sa-responder-cookie
   </ike-sa-responder-cookie>
   <ike-sa-exchange-type>
    ike-sa-exchange-type
   </ike-sa-exchange-type>
   <ike-sa-authentication-method>
    ike-sa-authentication-method
   </ike-sa-authentication-method>
   <ike-sa-routing-instance>
    ike-sa-routing-instance
   </ike-sa-routing-instance>
```

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```
        <ike-sa-local-address>
          ike-sa-local-address
        </ike-sa-local-address>
        <ike-sa-local-port>
          ike-sa-local-port
        </ike-sa-local-port>
        <ike-sa-remote-address>
          ike-sa-remote-address
        </ike-sa-remote-address>
        <ike-sa-remote-port>
          ike-sa-remote-port
        </ike-sa-remote-port>
        <ike-sa-lifetime>
          ike-sa-lifetime
        </ike-sa-lifetime>
        <ike-sa-algorithms>....</ike-sa-algorithms>
        <ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
        <ike-sa-misc>....</ike-sa-misc>
        <ike-sa-index>
          ike-sa-index
        </ike-sa-index>
        <ike-xauth-user-info>....</ike-xauth-user-info>
        <ike-sa-phase2-information>....</ike-sa-phase2-information>
        <kek-sa-misc>....</kek-sa-misc>
        <kek-sa-group-info>....</kek-sa-group-info>
        <kek-sa-server-info>....</kek-sa-server-info>
      </ike-security-associations>
    </ike-security-associations-block>
  </ike-security-associations-information>
```

Description Information about a single security association

<ike-security-associations>

Usage

```
  <gvpn-kek-security-associations-information>
    <ike-security-associations>
      <ike-sa-role>
        ike-sa-role
      </ike-sa-role>
      <ike-sa-state>
        ike-sa-state
      </ike-sa-state>
      <ike-sa-initiator-cookie>
        ike-sa-initiator-cookie
      </ike-sa-initiator-cookie>
      <ike-sa-responder-cookie>
        ike-sa-responder-cookie
      </ike-sa-responder-cookie>
      <ike-sa-exchange-type>
        ike-sa-exchange-type
      </ike-sa-exchange-type>
      <ike-sa-authentication-method>
        ike-sa-authentication-method
```


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```
    </ike-sa-authentication-method>
    <ike-sa-routing-instance>
      ike-sa-routing-instance
    </ike-sa-routing-instance>
    <ike-sa-local-address>
      ike-sa-local-address
    </ike-sa-local-address>
    <ike-sa-local-port>
      ike-sa-local-port
    </ike-sa-local-port>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-remote-port>
      ike-sa-remote-port
    </ike-sa-remote-port>
    <ike-sa-lifetime>
      ike-sa-lifetime
    </ike-sa-lifetime>
    <ike-sa-algorithms>....</ike-sa-algorithms>
    <ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
    <ike-sa-misc>....</ike-sa-misc>
    <ike-sa-index>
      ike-sa-index
    </ike-sa-index>
    <ike-xauth-user-info>....</ike-xauth-user-info>
    <ike-sa-phase2-information>....</ike-sa-phase2-information>
    <kek-sa-misc>....</kek-sa-misc>
    <kek-sa-group-info>....</kek-sa-group-info>
    <kek-sa-server-info>....</kek-sa-server-info>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Information about a single security association

<ike-security-associations>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <ike-sa-role>
        ike-sa-role
      </ike-sa-role>
      <ike-sa-state>
        ike-sa-state
      </ike-sa-state>
      <ike-sa-initiator-cookie>
        ike-sa-initiator-cookie
      </ike-sa-initiator-cookie>
      <ike-sa-responder-cookie>
        ike-sa-responder-cookie
      </ike-sa-responder-cookie>
      <ike-sa-exchange-type>
```

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```
        ike-sa-exchange-type
      </ike-sa-exchange-type>
      <ike-sa-authentication-method>
        ike-sa-authentication-method
      </ike-sa-authentication-method>
      <ike-sa-routing-instance>
        ike-sa-routing-instance
      </ike-sa-routing-instance>
      <ike-sa-local-address>
        ike-sa-local-address
      </ike-sa-local-address>
      <ike-sa-local-port>
        ike-sa-local-port
      </ike-sa-local-port>
      <ike-sa-remote-address>
        ike-sa-remote-address
      </ike-sa-remote-address>
      <ike-sa-remote-port>
        ike-sa-remote-port
      </ike-sa-remote-port>
      <ike-sa-lifetime>
        ike-sa-lifetime
      </ike-sa-lifetime>
      <ike-sa-algorithms>....</ike-sa-algorithms>
      <ike-sa-traffic-statistics>....</ike-sa-traffic-statistics>
      <ike-sa-misc>....</ike-sa-misc>
      <ike-sa-index>
        ike-sa-index
      </ike-sa-index>
      <ike-xauth-user-info>....</ike-xauth-user-info>
      <ike-sa-phase2-information>....</ike-sa-phase2-information>
      <kek-sa-misc>....</kek-sa-misc>
      <kek-sa-group-info>....</kek-sa-group-info>
      <kek-sa-server-info>....</kek-sa-server-info>
    </ike-security-associations>
  </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Information about a single security association

<ike-security-associations-block>

Usage

```
<ike-security-associations-block>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-index>
    ike-sa-index
  </ike-sa-index>
  <ike-sa-location>....</ike-sa-location>
  <ike-security-associations>....</ike-security-associations>
</ike-security-associations-block>
```


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Description Information about a single security association block

<ike-security-associations-block>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-index>
      ike-sa-index
    </ike-sa-index>
    <ike-sa-location>....</ike-sa-location>
    <ike-security-associations>....</ike-security-associations>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description Information about a single security association block

<ike-security-associations-block>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-index>
      ike-sa-index
    </ike-sa-index>
    <ike-sa-location>....</ike-sa-location>
    <ike-security-associations>....</ike-security-associations>
  </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Information about a single security association block

<ike-security-associations-information>

Usage

```
<ike-security-associations-information>
  <ike-sa-location>....</ike-sa-location>
  <ike-security-associations>....</ike-security-associations>
  <ike-sa-phase2-information>....</ike-sa-phase2-information>
  <ike-security-associations-block>....</ike-security-associations-block>
</ike-security-associations-information>
```

Description

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<ike-show-pre-shared-key-information>

Usage

```
<ike-show-pre-shared-key-information>
  <pre-shared-key>
    pre-shared-key
  </pre-shared-key>
</ike-show-pre-shared-key-information>
```

Description

<ike-stats-information>

Usage

```
<ike-stats-information>
  <ike-sa-location>....</ike-sa-location>
  <stats-name>
    stats-name
  </stats-name>
</ike-stats-information>
```

Description

<ike-xauth-user-info>

Usage

```
<ike-security-associations>
  <ike-xauth-user-info>
    <ike-ike-id>
      ike-ike-id
    </ike-ike-id>
    <ike-xauth-username>
      ike-xauth-username
    </ike-xauth-username>
    <ike-xauth-user-assigned-ip>
      ike-xauth-user-assigned-ip
    </ike-xauth-user-assigned-ip>
  </ike-xauth-user-info>
</ike-security-associations>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <ike-xauth-user-info>
      <ike-ike-id>
        ike-ike-id
      </ike-ike-id>
      <ike-xauth-username>
```


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```
            ike-xauth-username
           </ike-xauth-username>
           <ike-xauth-user-assigned-ip>
            ike-xauth-user-assigned-ip
           </ike-xauth-user-assigned-ip>
          </ike-xauth-user-info>
         </ike-security-associations>
        </ike-security-associations-block>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<ike-xauth-user-info>
 <ike-ike-id>
  ike-ike-id
 </ike-ike-id>
 <ike-xauth-username>
  ike-xauth-username
 </ike-xauth-username>
 <ike-xauth-user-assigned-ip>
  ike-xauth-user-assigned-ip
 </ike-xauth-user-assigned-ip>
</ike-xauth-user-info>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<ike-security-associations-information>
 <ike-security-associations>
  <ike-xauth-user-info>
   <ike-ike-id>
    ike-ike-id
   </ike-ike-id>
   <ike-xauth-username>
    ike-xauth-username
   </ike-xauth-username>
   <ike-xauth-user-assigned-ip>
    ike-xauth-user-assigned-ip
   </ike-xauth-user-assigned-ip>
  </ike-xauth-user-info>
 </ike-security-associations>
</ike-security-associations-information>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <ike-xauth-user-info>
        <ike-ike-id>
          ike-ike-id
        </ike-ike-id>
        <ike-xauth-username>
          ike-xauth-username
        </ike-xauth-username>
        <ike-xauth-user-assigned-ip>
          ike-xauth-user-assigned-ip
        </ike-xauth-user-assigned-ip>
      </ike-xauth-user-info>
    </ike-security-associations>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <ike-xauth-user-info>
      <ike-ike-id>
        ike-ike-id
      </ike-ike-id>
      <ike-xauth-username>
        ike-xauth-username
      </ike-xauth-username>
      <ike-xauth-user-assigned-ip>
        ike-xauth-user-assigned-ip
      </ike-xauth-user-assigned-ip>
    </ike-xauth-user-info>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Xauth user information

<ike-xauth-user-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <ike-xauth-user-info>
        <ike-ike-id>
```


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```
        ike-ike-id
       </ike-ike-id>
       <ike-xauth-username>
        ike-xauth-username
       </ike-xauth-username>
       <ike-xauth-user-assigned-ip>
        ike-xauth-user-assigned-ip
       </ike-xauth-user-assigned-ip>
      </ike-xauth-user-info>
     </ike-security-associations>
    </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Xauth user information

<iked-spu-mapping>

Usage

```
<iked-spu-mapping>
 <spu-logical-spu>
  spu-logical-spu
 </spu-logical-spu>
 <spu-physical-spu>
  spu-physical-spu
 </spu-physical-spu>
</iked-spu-mapping>
```

Description Information about logical SPU to physical SPU mapping

<iked-spu-mapping>

Usage

```
<iked-spu-mapping-information>
 <iked-spu-mapping>
  <spu-logical-spu>
   spu-logical-spu
  </spu-logical-spu>
  <spu-physical-spu>
   spu-physical-spu
  </spu-physical-spu>
 </iked-spu-mapping>
</iked-spu-mapping-information>
```

Description Information about logical SPU to physical SPU mapping

<iked-spu-mapping-information>

Usage

```
<iked-spu-mapping-information>
 <iked-spu-mapping>....</iked-spu-mapping>
```

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```
</iked-spu-mapping-information>
```

Description

<iked-spu-p2-key>

Usage

```
<iked-spu-p2-key>
  <p2-key>
    p2-key
  </p2-key>
</iked-spu-p2-key>
```

Description SPU last phase 2 key synced

<iked-spu-p2-key>

Usage

```
<iked-spu-p2-key-information>
  <iked-spu-p2-key>
    <p2-key>
      p2-key
    </p2-key>
  </iked-spu-p2-key>
</iked-spu-p2-key-information>
```

Description SPU last phase 2 key synced

<iked-spu-p2-key-information>

Usage

```
<iked-spu-p2-key-information>
  <iked-spu-p2-key>....</iked-spu-p2-key>
</iked-spu-p2-key-information>
```

Description

<ipsec-active-tunnel-debug-information>

Usage

```
<ipsec-active-tunnel-debug-information>
  <sa-location>....</sa-location>
  <ipsec-security-associations>....</ipsec-security-associations>
  <ipsec-security-associations-block>....</ipsec-security-associations-block>
  <total-dialup-tunnels>
    total-dialup-tunnels
  </total-dialup-tunnels>
</ipsec-active-tunnel-debug-information>
```


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Description

<ipsec-gvpn-security-associations-block>

Usage

```
<ipsec-gvpn-security-associations-block>
  <sa-configuration-type>
    sa-configuration-type
  </sa-configuration-type>
  <sa-virtual-system>
    sa-virtual-system
  </sa-virtual-system>
  <sa-local-gateway>
    sa-local-gateway
  </sa-local-gateway>
  <sa-remote-gateway>
    sa-remote-gateway
  </sa-remote-gateway>
  <sa-local-identity>
    sa-local-identity
  </sa-local-identity>
  <sa-remote-identity>
    sa-remote-identity
  </sa-remote-identity>
  <sa-df-bit-policy-name>....</sa-df-bit-policy-name>
  <ipsec-security-associations>....</ipsec-security-associations>
  <sa-location>....</sa-location>
</ipsec-gvpn-security-associations-block>
```

Description

<ipsec-gvpn-security-associations-block>

Usage

```
<ipsec-security-associations-information>
  <ipsec-gvpn-security-associations-block>
    <sa-configuration-type>
      sa-configuration-type
    </sa-configuration-type>
    <sa-virtual-system>
      sa-virtual-system
    </sa-virtual-system>
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-df-bit-policy-name>....</sa-df-bit-policy-name>
```

```
    <ipsec-security-associations>....</ipsec-security-associations>
    <sa-location>....</sa-location>
  </ipsec-gvpn-security-associations-block>
</ipsec-security-associations-information>
```

Description

<ipsec-next-hop-tunnel-binding-information>

Usage

```
<ipsec-next-hop-tunnel-binding-information>
  <nhtb-gateway-address>
    nhtb-gateway-address
  </nhtb-gateway-address>
  <nhtb-tunnel-interface-name>
    nhtb-tunnel-interface-name
  </nhtb-tunnel-interface-name>
  <nhtb-vpn-name>
    nhtb-vpn-name
  </nhtb-vpn-name>
  <nhtb-flag>
    nhtb-flag
  </nhtb-flag>
</ipsec-next-hop-tunnel-binding-information>
```

Description

<ipsec-pic-redundancy>

Usage

```
<ipsec-pic-redundancy>
  <ipsec-redundancy-counter>
    ipsec-redundancy-counter
  </ipsec-redundancy-counter>
  <ipsec-redundancy-pic-no-information>
    ipsec-redundancy-pic-no-information
  </ipsec-redundancy-pic-no-information>
  <ipsec-pic-redundancy-primary-interface>
    ipsec-pic-redundancy-primary-interface
  </ipsec-pic-redundancy-primary-interface>
  <ipsec-pic-redundancy-backup-interface>
    ipsec-pic-redundancy-backup-interface
  </ipsec-pic-redundancy-backup-interface>
  <ipsec-redundancy-primary-state>
    ipsec-redundancy-primary-state
  </ipsec-redundancy-primary-state>
  <ipsec-redundancy-backup-state>
    ipsec-redundancy-backup-state
  </ipsec-redundancy-backup-state>
</ipsec-pic-redundancy>
```

Description Information about ipsec pic redundancy

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<ipsec-pic-redundancy>

Usage

```
<ipsec-pic-redundancy-information>
  <ipsec-pic-redundancy>
    <ipsec-redundancy-counter>
      ipsec-redundancy-counter
    </ipsec-redundancy-counter>
    <ipsec-redundancy-pic-no-information>
      ipsec-redundancy-pic-no-information
    </ipsec-redundancy-pic-no-information>
    <ipsec-pic-redundancy-primary-interface>
      ipsec-pic-redundancy-primary-interface
    </ipsec-pic-redundancy-primary-interface>
    <ipsec-pic-redundancy-backup-interface>
      ipsec-pic-redundancy-backup-interface
    </ipsec-pic-redundancy-backup-interface>
    <ipsec-redundancy-primary-state>
      ipsec-redundancy-primary-state
    </ipsec-redundancy-primary-state>
    <ipsec-redundancy-backup-state>
      ipsec-redundancy-backup-state
    </ipsec-redundancy-backup-state>
  </ipsec-pic-redundancy>
</ipsec-pic-redundancy-information>
```

Description Information about ipsec pic redundancy

<ipsec-pic-redundancy-information>

Usage

```
<ipsec-pic-redundancy-information>
  <ipsec-pic-redundancy>....</ipsec-pic-redundancy>
</ipsec-pic-redundancy-information>
```

Description

<ipsec-registered-members>

Usage

```
<ipsec-registered-members>
  <member-gateway-name>
    member-gateway-name
  </member-gateway-name>
  <member-ip-addr>
    member-ip-addr
  </member-ip-addr>
  <member-last-update>
    member-last-update
  </member-last-update>
  <member-vsys>
    member-vsys
  </member-vsys>
```

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```
</ipsec-registered-members>
```

Description

<ipsec-registered-members>

Usage

```
<ipsec-registered-members-information>
  <ipsec-registered-members>
    <member-gateway-name>
      member-gateway-name
    </member-gateway-name>
    <member-ip-addr>
      member-ip-addr
    </member-ip-addr>
    <member-last-update>
      member-last-update
    </member-last-update>
    <member-vsys>
      member-vsys
    </member-vsys>
  </ipsec-registered-members>
</ipsec-registered-members-information>
```

Description

<ipsec-registered-members-information>

Usage

```
<ipsec-registered-members-information>
  <ipsec-registered-members>....</ipsec-registered-members>
  <member-group-name>
    member-group-name
  </member-group-name>
  <member-group-id>
    member-group-id
  </member-group-id>
</ipsec-registered-members-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-security-associations-block>
  <ipsec-security-associations>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-remote-gateway>
```


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```
  sa-remote-gateway
</sa-remote-gateway>
<sa-gvpn-server>
  sa-gvpn-server
</sa-gvpn-server>
<sa-port>
  sa-port
</sa-port>
<sa-protocol>
  sa-protocol
</sa-protocol>
<sa-esp-encryption-algorithm>
  sa-esp-encryption-algorithm
</sa-esp-encryption-algorithm>
<sa-hmac-algorithm>
  sa-hmac-algorithm
</sa-hmac-algorithm>
<sa-spi>
  sa-spi
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
```

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```
        <sa-soft-lifetime>
          sa-soft-lifetime
        </sa-soft-lifetime>
        <sa-anti-replay-service>
          sa-anti-replay-service
        </sa-anti-replay-service>
        <sa-replay-window-size>
          sa-replay-window-size
        </sa-replay-window-size>
        <sa-nego-num>
          sa-nego-num
        </sa-nego-num>
        <sa-nego-fail>
          sa-nego-fail
        </sa-nego-fail>
        <sa-del-num>
          sa-del-num
        </sa-del-num>
        <sa-flag>
          sa-flag
        </sa-flag>
      </ipsec-security-associations>
    </ipsec-security-associations-block>
```

Description

<ipsec-security-associations>

Usage

```
    <ipsec-gvpn-security-associations-block>
      <ipsec-security-associations>
        <sa-tunnel-index>
          sa-tunnel-index
        </sa-tunnel-index>
        <sa-direction>
          sa-direction
        </sa-direction>
        <sa-remote-gateway>
          sa-remote-gateway
        </sa-remote-gateway>
        <sa-gvpn-server>
          sa-gvpn-server
        </sa-gvpn-server>
        <sa-port>
          sa-port
        </sa-port>
        <sa-protocol>
          sa-protocol
        </sa-protocol>
        <sa-esp-encryption-algorithm>
          sa-esp-encryption-algorithm
        </sa-esp-encryption-algorithm>
        <sa-hmac-algorithm>
          sa-hmac-algorithm
        </sa-hmac-algorithm>
```


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```
<sa-spi>
  sa-spi
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
<sa-anti-replay-service>
  sa-anti-replay-service
</sa-anti-replay-service>
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-nego-num>
  sa-nego-num
</sa-nego-num>
<sa-nego-fail>
  sa-nego-fail
</sa-nego-fail>
<sa-del-num>
  sa-del-num
```

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```
    </sa-del-num>
    <sa-flag>
      sa-flag
    </sa-flag>
  </ipsec-security-associations>
</ipsec-gvpn-security-associations-block>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-security-associations>
  <sa-tunnel-index>
    sa-tunnel-index
  </sa-tunnel-index>
  <sa-direction>
    sa-direction
  </sa-direction>
  <sa-remote-gateway>
    sa-remote-gateway
  </sa-remote-gateway>
  <sa-gvpn-server>
    sa-gvpn-server
  </sa-gvpn-server>
  <sa-port>
    sa-port
  </sa-port>
  <sa-protocol>
    sa-protocol
  </sa-protocol>
  <sa-esp-encryption-algorithm>
    sa-esp-encryption-algorithm
  </sa-esp-encryption-algorithm>
  <sa-hmac-algorithm>
    sa-hmac-algorithm
  </sa-hmac-algorithm>
  <sa-spi>
    sa-spi
  </sa-spi>
  <sa-aux-spi>
    sa-aux-spi
  </sa-aux-spi>
  <sa-hard-lifetime>
    sa-hard-lifetime
  </sa-hard-lifetime>
  <sa-lifesize-remaining>
    sa-lifesize-remaining
  </sa-lifesize-remaining>
  <sa-installation-state>
    sa-installation-state
  </sa-installation-state>
  <sa-vpn-monitoring-state>
    sa-vpn-monitoring-state
  </sa-vpn-monitoring-state>
```


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```
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
<sa-anti-replay-service>
  sa-anti-replay-service
</sa-anti-replay-service>
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-nego-num>
  sa-nego-num
</sa-nego-num>
<sa-nego-fail>
  sa-nego-fail
</sa-nego-fail>
<sa-del-num>
  sa-del-num
</sa-del-num>
<sa-flag>
  sa-flag
</sa-flag>
</ipsec-security-associations>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-security-associations-information>
  <ipsec-security-associations>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-direction>
```

```
  sa-direction
</sa-direction>
<sa-remote-gateway>
  sa-remote-gateway
</sa-remote-gateway>
<sa-gvpn-server>
  sa-gvpn-server
</sa-gvpn-server>
<sa-port>
  sa-port
</sa-port>
<sa-protocol>
  sa-protocol
</sa-protocol>
<sa-esp-encryption-algorithm>
  sa-esp-encryption-algorithm
</sa-esp-encryption-algorithm>
<sa-hmac-algorithm>
  sa-hmac-algorithm
</sa-hmac-algorithm>
<sa-spi>
  sa-spi
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
```


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```
      <sa-encryption-algorithm>
        sa-encryption-algorithm
      </sa-encryption-algorithm>
      <sa-soft-lifetime>
        sa-soft-lifetime
      </sa-soft-lifetime>
      <sa-anti-replay-service>
        sa-anti-replay-service
      </sa-anti-replay-service>
      <sa-replay-window-size>
        sa-replay-window-size
      </sa-replay-window-size>
      <sa-nego-num>
        sa-nego-num
      </sa-nego-num>
      <sa-nego-fail>
        sa-nego-fail
      </sa-nego-fail>
      <sa-del-num>
        sa-del-num
      </sa-del-num>
      <sa-flag>
        sa-flag
      </sa-flag>
    </ipsec-security-associations>
  </ipsec-security-associations-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-security-associations-information>
  <ipsec-security-associations-block>
    <ipsec-security-associations>
      <sa-tunnel-index>
        sa-tunnel-index
      </sa-tunnel-index>
      <sa-direction>
        sa-direction
      </sa-direction>
      <sa-remote-gateway>
        sa-remote-gateway
      </sa-remote-gateway>
      <sa-gvpn-server>
        sa-gvpn-server
      </sa-gvpn-server>
      <sa-port>
        sa-port
      </sa-port>
      <sa-protocol>
        sa-protocol
      </sa-protocol>
      <sa-esp-encryption-algorithm>
        sa-esp-encryption-algorithm
```

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```
</sa-esp-encryption-algorithm>
<sa-hmac-algorithm>
  sa-hmac-algorithm
</sa-hmac-algorithm>
<sa-spi>
  sa-spi
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
<sa-anti-replay-service>
  sa-anti-replay-service
</sa-anti-replay-service>
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-nego-num>
  sa-nego-num
</sa-nego-num>
<sa-nego-fail>
```


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```
        sa-nego-fail
       </sa-nego-fail>
       <sa-del-num>
        sa-del-num
       </sa-del-num>
       <sa-flag>
        sa-flag
       </sa-flag>
      </ipsec-security-associations>
     </ipsec-security-associations-block>
    </ipsec-security-associations-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-security-associations-information>
 <ipsec-gvpn-security-associations-block>
  <ipsec-security-associations>
   <sa-tunnel-index>
    sa-tunnel-index
   </sa-tunnel-index>
   <sa-direction>
    sa-direction
   </sa-direction>
   <sa-remote-gateway>
    sa-remote-gateway
   </sa-remote-gateway>
   <sa-gvpn-server>
    sa-gvpn-server
   </sa-gvpn-server>
   <sa-port>
    sa-port
   </sa-port>
   <sa-protocol>
    sa-protocol
   </sa-protocol>
   <sa-esp-encryption-algorithm>
    sa-esp-encryption-algorithm
   </sa-esp-encryption-algorithm>
   <sa-hmac-algorithm>
    sa-hmac-algorithm
   </sa-hmac-algorithm>
   <sa-spi>
    sa-spi
   </sa-spi>
   <sa-aux-spi>
    sa-aux-spi
   </sa-aux-spi>
   <sa-hard-lifetime>
    sa-hard-lifetime
   </sa-hard-lifetime>
   <sa-lifesize-remaining>
    sa-lifesize-remaining
```

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```
        </sa-lifesize-remaining>
        <sa-installation-state>
          sa-installation-state
        </sa-installation-state>
        <sa-vpn-monitoring-state>
          sa-vpn-monitoring-state
        </sa-vpn-monitoring-state>
        <sa-gvpn-groupid>
          sa-gvpn-groupid
        </sa-gvpn-groupid>
        <sa-virtual-system>
          sa-virtual-system
        </sa-virtual-system>
        <sa-mode>
          sa-mode
        </sa-mode>
        <sa-type>
          sa-type
        </sa-type>
        <sa-state>
          sa-state
        </sa-state>
        <sa-authentication-algorithm>
          sa-authentication-algorithm
        </sa-authentication-algorithm>
        <sa-encryption-algorithm>
          sa-encryption-algorithm
        </sa-encryption-algorithm>
        <sa-soft-lifetime>
          sa-soft-lifetime
        </sa-soft-lifetime>
        <sa-anti-replay-service>
          sa-anti-replay-service
        </sa-anti-replay-service>
        <sa-replay-window-size>
          sa-replay-window-size
        </sa-replay-window-size>
        <sa-nego-num>
          sa-nego-num
        </sa-nego-num>
        <sa-nego-fail>
          sa-nego-fail
        </sa-nego-fail>
        <sa-del-num>
          sa-del-num
        </sa-del-num>
        <sa-flag>
          sa-flag
        </sa-flag>
      </ipsec-security-associations>
    </ipsec-gvpn-security-associations-block>
  </ipsec-security-associations-information>
```

Description

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<ipsec-security-associations>

Usage

```
<ipsec-unestablished-tunnel-information>
  <ipsec-security-associations>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-gvpn-server>
      sa-gvpn-server
    </sa-gvpn-server>
    <sa-port>
      sa-port
    </sa-port>
    <sa-protocol>
      sa-protocol
    </sa-protocol>
    <sa-esp-encryption-algorithm>
      sa-esp-encryption-algorithm
    </sa-esp-encryption-algorithm>
    <sa-hmac-algorithm>
      sa-hmac-algorithm
    </sa-hmac-algorithm>
    <sa-spi>
      sa-spi
    </sa-spi>
    <sa-aux-spi>
      sa-aux-spi
    </sa-aux-spi>
    <sa-hard-lifetime>
      sa-hard-lifetime
    </sa-hard-lifetime>
    <sa-lifesize-remaining>
      sa-lifesize-remaining
    </sa-lifesize-remaining>
    <sa-installation-state>
      sa-installation-state
    </sa-installation-state>
    <sa-vpn-monitoring-state>
      sa-vpn-monitoring-state
    </sa-vpn-monitoring-state>
    <sa-gvpn-groupid>
      sa-gvpn-groupid
    </sa-gvpn-groupid>
    <sa-virtual-system>
      sa-virtual-system
    </sa-virtual-system>
    <sa-mode>
      sa-mode
```

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```
      </sa-mode>
      <sa-type>
        sa-type
      </sa-type>
      <sa-state>
        sa-state
      </sa-state>
      <sa-authentication-algorithm>
        sa-authentication-algorithm
      </sa-authentication-algorithm>
      <sa-encryption-algorithm>
        sa-encryption-algorithm
      </sa-encryption-algorithm>
      <sa-soft-lifetime>
        sa-soft-lifetime
      </sa-soft-lifetime>
      <sa-anti-replay-service>
        sa-anti-replay-service
      </sa-anti-replay-service>
      <sa-replay-window-size>
        sa-replay-window-size
      </sa-replay-window-size>
      <sa-nego-num>
        sa-nego-num
      </sa-nego-num>
      <sa-nego-fail>
        sa-nego-fail
      </sa-nego-fail>
      <sa-del-num>
        sa-del-num
      </sa-del-num>
      <sa-flag>
        sa-flag
      </sa-flag>
    </ipsec-security-associations>
  </ipsec-unestablished-tunnel-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-unestablished-tunnel-information>
  <ipsec-security-associations-block>
    <ipsec-security-associations>
      <sa-tunnel-index>
        sa-tunnel-index
      </sa-tunnel-index>
      <sa-direction>
        sa-direction
      </sa-direction>
      <sa-remote-gateway>
        sa-remote-gateway
      </sa-remote-gateway>
      <sa-gvpn-server>
```


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```
  sa-gvpn-server
</sa-gvpn-server>
<sa-port>
  sa-port
</sa-port>
<sa-protocol>
  sa-protocol
</sa-protocol>
<sa-esp-encryption-algorithm>
  sa-esp-encryption-algorithm
</sa-esp-encryption-algorithm>
<sa-hmac-algorithm>
  sa-hmac-algorithm
</sa-hmac-algorithm>
<sa-spi>
  sa-spi
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
```

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```
        <sa-anti-replay-service>
          sa-anti-replay-service
        </sa-anti-replay-service>
        <sa-replay-window-size>
          sa-replay-window-size
        </sa-replay-window-size>
        <sa-nego-num>
          sa-nego-num
        </sa-nego-num>
        <sa-nego-fail>
          sa-nego-fail
        </sa-nego-fail>
        <sa-del-num>
          sa-del-num
        </sa-del-num>
        <sa-flag>
          sa-flag
        </sa-flag>
      </ipsec-security-associations>
    </ipsec-security-associations-block>
  </ipsec-unestablished-tunnel-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-active-tunnel-debug-information>
  <ipsec-security-associations>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-gvpn-server>
      sa-gvpn-server
    </sa-gvpn-server>
    <sa-port>
      sa-port
    </sa-port>
    <sa-protocol>
      sa-protocol
    </sa-protocol>
    <sa-esp-encryption-algorithm>
      sa-esp-encryption-algorithm
    </sa-esp-encryption-algorithm>
    <sa-hmac-algorithm>
      sa-hmac-algorithm
    </sa-hmac-algorithm>
    <sa-spi>
      sa-spi
```


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```
</sa-spi>
<sa-aux-spi>
  sa-aux-spi
</sa-aux-spi>
<sa-hard-lifetime>
  sa-hard-lifetime
</sa-hard-lifetime>
<sa-lifesize-remaining>
  sa-lifesize-remaining
</sa-lifesize-remaining>
<sa-installation-state>
  sa-installation-state
</sa-installation-state>
<sa-vpn-monitoring-state>
  sa-vpn-monitoring-state
</sa-vpn-monitoring-state>
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
<sa-anti-replay-service>
  sa-anti-replay-service
</sa-anti-replay-service>
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-nego-num>
  sa-nego-num
</sa-nego-num>
<sa-nego-fail>
  sa-nego-fail
</sa-nego-fail>
<sa-del-num>
  sa-del-num
</sa-del-num>
<sa-flag>
```

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```
      sa-flag
    </sa-flag>
  </ipsec-security-associations>
</ipsec-active-tunnel-debug-information>
```

Description

<ipsec-security-associations>

Usage

```
<ipsec-active-tunnel-debug-information>
  <ipsec-security-associations-block>
    <ipsec-security-associations>
      <sa-tunnel-index>
        sa-tunnel-index
      </sa-tunnel-index>
      <sa-direction>
        sa-direction
      </sa-direction>
      <sa-remote-gateway>
        sa-remote-gateway
      </sa-remote-gateway>
      <sa-gvpn-server>
        sa-gvpn-server
      </sa-gvpn-server>
      <sa-port>
        sa-port
      </sa-port>
      <sa-protocol>
        sa-protocol
      </sa-protocol>
      <sa-esp-encryption-algorithm>
        sa-esp-encryption-algorithm
      </sa-esp-encryption-algorithm>
      <sa-hmac-algorithm>
        sa-hmac-algorithm
      </sa-hmac-algorithm>
      <sa-spi>
        sa-spi
      </sa-spi>
      <sa-aux-spi>
        sa-aux-spi
      </sa-aux-spi>
      <sa-hard-lifetime>
        sa-hard-lifetime
      </sa-hard-lifetime>
      <sa-lifesize-remaining>
        sa-lifesize-remaining
      </sa-lifesize-remaining>
      <sa-installation-state>
        sa-installation-state
      </sa-installation-state>
      <sa-vpn-monitoring-state>
        sa-vpn-monitoring-state
      </sa-vpn-monitoring-state>
```


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```
<sa-gvpn-groupid>
  sa-gvpn-groupid
</sa-gvpn-groupid>
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-mode>
  sa-mode
</sa-mode>
<sa-type>
  sa-type
</sa-type>
<sa-state>
  sa-state
</sa-state>
<sa-authentication-algorithm>
  sa-authentication-algorithm
</sa-authentication-algorithm>
<sa-encryption-algorithm>
  sa-encryption-algorithm
</sa-encryption-algorithm>
<sa-soft-lifetime>
  sa-soft-lifetime
</sa-soft-lifetime>
<sa-anti-replay-service>
  sa-anti-replay-service
</sa-anti-replay-service>
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-nego-num>
  sa-nego-num
</sa-nego-num>
<sa-nego-fail>
  sa-nego-fail
</sa-nego-fail>
<sa-del-num>
  sa-del-num
</sa-del-num>
<sa-flag>
  sa-flag
</sa-flag>
</ipsec-security-associations>
</ipsec-security-associations-block>
</ipsec-active-tunnel-debug-information>
```

Description

<ipsec-security-associations-block>

Usage

```
<ipsec-security-associations-block>
  <sa-configuration-type>
    sa-configuration-type
  </sa-configuration-type>
```

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```
<sa-virtual-system>
  sa-virtual-system
</sa-virtual-system>
<sa-local-gateway>
  sa-local-gateway
</sa-local-gateway>
<sa-remote-gateway>
  sa-remote-gateway
</sa-remote-gateway>
<sa-local-identity>
  sa-local-identity
</sa-local-identity>
<sa-remote-identity>
  sa-remote-identity
</sa-remote-identity>
<sa-df-bit-policy-name>....</sa-df-bit-policy-name>
<sa-ike-version>
  sa-ike-version
</sa-ike-version>
<ipsec-security-associations>....</ipsec-security-associations>
<sa-location>....</sa-location>
</ipsec-security-associations-block>
```

Description

<ipsec-security-associations-block>

Usage

```
<ipsec-security-associations-information>
  <ipsec-security-associations-block>
    <sa-configuration-type>
      sa-configuration-type
    </sa-configuration-type>
    <sa-virtual-system>
      sa-virtual-system
    </sa-virtual-system>
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-df-bit-policy-name>....</sa-df-bit-policy-name>
    <sa-ike-version>
      sa-ike-version
    </sa-ike-version>
    <ipsec-security-associations>....</ipsec-security-associations>
    <sa-location>....</sa-location>
  </ipsec-security-associations-block>
```


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```
</ipsec-security-associations-information>
```

Description

<ipsec-security-associations-block>

Usage

```
<ipsec-unestablished-tunnel-information>
 <ipsec-security-associations-block>
  <sa-configuration-type>
   sa-configuration-type
  </sa-configuration-type>
  <sa-virtual-system>
   sa-virtual-system
  </sa-virtual-system>
  <sa-local-gateway>
   sa-local-gateway
  </sa-local-gateway>
  <sa-remote-gateway>
   sa-remote-gateway
  </sa-remote-gateway>
  <sa-local-identity>
   sa-local-identity
  </sa-local-identity>
  <sa-remote-identity>
   sa-remote-identity
  </sa-remote-identity>
  <sa-df-bit-policy-name>....</sa-df-bit-policy-name>
  <sa-ike-version>
   sa-ike-version
  </sa-ike-version>
  <ipsec-security-associations>....</ipsec-security-associations>
  <sa-location>....</sa-location>
 </ipsec-security-associations-block>
</ipsec-unestablished-tunnel-information>
```

Description

<ipsec-security-associations-block>

Usage

```
<ipsec-active-tunnel-debug-information>
 <ipsec-security-associations-block>
  <sa-configuration-type>
   sa-configuration-type
  </sa-configuration-type>
  <sa-virtual-system>
   sa-virtual-system
  </sa-virtual-system>
  <sa-local-gateway>
   sa-local-gateway
  </sa-local-gateway>
  <sa-remote-gateway>
   sa-remote-gateway
```

```
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-df-bit-policy-name>....</sa-df-bit-policy-name>
    <sa-ike-version>
      sa-ike-version
    </sa-ike-version>
    <ipsec-security-associations>....</ipsec-security-associations>
    <sa-location>....</sa-location>
  </ipsec-security-associations-block>
</ipsec-active-tunnel-debug-information>
```

Description

<ipsec-security-associations-information>

Usage

```
<ipsec-security-associations-information>
  <sa-location>....</sa-location>
  <ipsec-security-associations>....</ipsec-security-associations>
  <ipsec-security-associations-block>....</ipsec-security-associations-block>

<ipsec-gvpn-security-associations-block>....</ipsec-gvpn-security-associations-block>

  <total-active-tunnels>
    total-active-tunnels
  </total-active-tunnels>
</ipsec-security-associations-information>
```

Description

<ipsec-server-ipsecsa-information>

Usage

```
<ipsec-server-ipsecsa-information>
  <ipsecsa-group-info>....</ipsecsa-group-info>
  <ipsecsa-sa-count>
    ipsecsa-sa-count
  </ipsecsa-sa-count>
  <ipsecsa-sa-info>....</ipsecsa-sa-info>
</ipsec-server-ipsecsa-information>
```

Description

<ipsec-service-set-statistics>

Usage

```
<ipsec-service-set-statistics>
  <pic-name>
```


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```
    pic-name
  </pic-name>
  <service-set-name>
    service-set-name
  </service-set-name>
  <ipsec-statistics>....</ipsec-statistics>
</ipsec-service-set-statistics>
```

Description

<ipsec-service-set-statistics>

Usage

```
<ipsec-total-statistics>
  <ipsec-service-set-statistics>
    <pic-name>
      pic-name
    </pic-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <ipsec-statistics>....</ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics>
```

Description

<ipsec-service-set-statistics>

Usage

```
<ipsec-total-statistics-information>
  <ipsec-service-set-statistics>
    <pic-name>
      pic-name
    </pic-name>
    <service-set-name>
      service-set-name
    </service-set-name>
    <ipsec-statistics>....</ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics-information>
```

Description

<ipsec-statistics>

Usage

```
<ipsec-service-set-statistics>
  <ipsec-statistics>
    <local-gateway>
      local-gateway
    </local-gateway>
    <remote-gateway>
```

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```
      remote-gateway
    </remote-gateway>
    <tunnel-index>
      tunnel-index
    </tunnel-index>
    <esp-statistics>....</esp-statistics>
    <ah-statistics>....</ah-statistics>
    <error-statistics>....</error-statistics>
    <statistics-no-information>
      statistics-no-information
    </statistics-no-information>
  </ipsec-statistics>
</ipsec-service-set-statistics>
```

Description

<ipsec-statistics>

Usage

```
<ipsec-total-statistics>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <local-gateway>
        local-gateway
      </local-gateway>
      <remote-gateway>
        remote-gateway
      </remote-gateway>
      <tunnel-index>
        tunnel-index
      </tunnel-index>
      <esp-statistics>....</esp-statistics>
      <ah-statistics>....</ah-statistics>
      <error-statistics>....</error-statistics>
      <statistics-no-information>
        statistics-no-information
      </statistics-no-information>
    </ipsec-statistics>
  </ipsec-service-set-statistics>
</ipsec-total-statistics>
```

Description

<ipsec-statistics>

Usage

```
<ipsec-total-statistics-information>
  <ipsec-service-set-statistics>
    <ipsec-statistics>
      <local-gateway>
        local-gateway
      </local-gateway>
      <remote-gateway>
        remote-gateway
```


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```
    </remote-gateway>
    <tunnel-index>
      tunnel-index
    </tunnel-index>
    <esp-statistics>....</esp-statistics>
    <ah-statistics>....</ah-statistics>
    <error-statistics>....</error-statistics>
    <statistics-no-information>
      statistics-no-information
    </statistics-no-information>
  </ipsec-statistics>
 </ipsec-service-set-statistics>
</ipsec-total-statistics-information>
```

Description

<ipsec-total-statistics>

Usage

```
<ipsec-total-statistics>
 <ipsec-service-set-statistics>....</ipsec-service-set-statistics>
</ipsec-total-statistics>
```

Description

<ipsec-total-statistics-information>

Usage

```
<ipsec-total-statistics-information>
 <ipsec-service-set-statistics>....</ipsec-service-set-statistics>
</ipsec-total-statistics-information>
```

Description

<ipsec-tunnel-redundancy>

Usage

```
<ipsec-tunnel-redundancy>
 <sa-name>
  sa-name
 </sa-name>
 <ipsec-redundancy-counter>
  ipsec-redundancy-counter
 </ipsec-redundancy-counter>
 <ipsec-redundancy-tunnel-no-information>
  ipsec-redundancy-tunnel-no-information
 </ipsec-redundancy-tunnel-no-information>
 <ipsec-tunnel-redundancy-local-address>
  ipsec-tunnel-redundancy-local-address
 </ipsec-tunnel-redundancy-local-address>
 <ipsec-tunnel-redundancy-primary-remote-address>
  ipsec-tunnel-redundancy-primary-remote-address
 </ipsec-tunnel-redundancy-primary-remote-address>
```

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```
<ipsec-tunnel-redundancy-backup-remote-address>
  ipsec-tunnel-redundancy-backup-remote-address
</ipsec-tunnel-redundancy-backup-remote-address>
<ipsec-redundancy-primary-state>
  ipsec-redundancy-primary-state
</ipsec-redundancy-primary-state>
<ipsec-redundancy-backup-state>
  ipsec-redundancy-backup-state
</ipsec-redundancy-backup-state>
</ipsec-tunnel-redundancy>
```

Description Information about ipsec tunnel redundancy

<ipsec-tunnel-redundancy>

Usage

```
<ipsec-tunnel-redundancy-information>
  <ipsec-tunnel-redundancy>
    <sa-name>
      sa-name
    </sa-name>
    <ipsec-redundancy-counter>
      ipsec-redundancy-counter
    </ipsec-redundancy-counter>
    <ipsec-redundancy-tunnel-no-information>
      ipsec-redundancy-tunnel-no-information
    </ipsec-redundancy-tunnel-no-information>
    <ipsec-tunnel-redundancy-local-address>
      ipsec-tunnel-redundancy-local-address
    </ipsec-tunnel-redundancy-local-address>
    <ipsec-tunnel-redundancy-primary-remote-address>
      ipsec-tunnel-redundancy-primary-remote-address
    </ipsec-tunnel-redundancy-primary-remote-address>
    <ipsec-tunnel-redundancy-backup-remote-address>
      ipsec-tunnel-redundancy-backup-remote-address
    </ipsec-tunnel-redundancy-backup-remote-address>
    <ipsec-redundancy-primary-state>
      ipsec-redundancy-primary-state
    </ipsec-redundancy-primary-state>
    <ipsec-redundancy-backup-state>
      ipsec-redundancy-backup-state
    </ipsec-redundancy-backup-state>
  </ipsec-tunnel-redundancy>
</ipsec-tunnel-redundancy-information>
```

Description Information about ipsec tunnel redundancy

<ipsec-tunnel-redundancy-information>

Usage

```
<ipsec-tunnel-redundancy-information>
  <ipsec-tunnel-redundancy>....</ipsec-tunnel-redundancy>
```


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```
</ipsec-tunnel-redundancy-information>
```

Description

<ipsec-unestablished-tunnel-information>

Usage

```
<ipsec-unestablished-tunnel-information>
  <sa-location>....</sa-location>
  <ipsec-security-associations>....</ipsec-security-associations>
  <ipsec-security-associations-block>....</ipsec-security-associations-block>
  <total-inactive-tunnels>
    total-inactive-tunnels
  </total-inactive-tunnels>
  <total-inactive-tunnels-with-establish-immediately>
    total-inactive-tunnels-with-establish-immediately
  </total-inactive-tunnels-with-establish-immediately>
</ipsec-unestablished-tunnel-information>
```

Description

<ipsecsa-group-info>

Usage

```
<ipsecsa-group-info>
  <ipsecsa-group-name>
    ipsecsa-group-name
  </ipsecsa-group-name>
  <ipsecsa-group-id>
    ipsecsa-group-id
  </ipsecsa-group-id>
  <ipsecsa-group-act-time>
    ipsecsa-group-act-time
  </ipsecsa-group-act-time>
  <ipsecsa-group-deact-time>
    ipsecsa-group-deact-time
  </ipsecsa-group-deact-time>
  <ipsecsa-group-anti-replay-win>
    ipsecsa-group-anti-replay-win
  </ipsecsa-group-anti-replay-win>
  <ipsecsa-group-server-soft-lifetime>
    ipsecsa-group-server-soft-lifetime
  </ipsecsa-group-server-soft-lifetime>
  <ipsecsa-sa-count>
    ipsecsa-sa-count
  </ipsecsa-sa-count>
  <ipsecsa-sa-info>....</ipsecsa-sa-info>
</ipsecsa-group-info>
```

Description

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<ipsecsa-group-info>

Usage

```
<ipsec-server-ipsecsa-information>
 <ipsecsa-group-info>
  <ipsecsa-group-name>
   ipsecsa-group-name
  </ipsecsa-group-name>
  <ipsecsa-group-id>
   ipsecsa-group-id
  </ipsecsa-group-id>
  <ipsecsa-group-act-time>
   ipsecsa-group-act-time
  </ipsecsa-group-act-time>
  <ipsecsa-group-deact-time>
   ipsecsa-group-deact-time
  </ipsecsa-group-deact-time>
  <ipsecsa-group-anti-replay-win>
   ipsecsa-group-anti-replay-win
  </ipsecsa-group-anti-replay-win>
  <ipsecsa-group-server-soft-lifetime>
   ipsecsa-group-server-soft-lifetime
  </ipsecsa-group-server-soft-lifetime>
  <ipsecsa-sa-count>
   ipsecsa-sa-count
  </ipsecsa-sa-count>
  <ipsecsa-sa-info>....</ipsecsa-sa-info>
 </ipsecsa-group-info>
</ipsec-server-ipsecsa-information>
```

Description

<ipsecsa-policy-info>

Usage

```
<ipsecsa-group-info>
 <ipsecsa-sa-info>
  <ipsecsa-policy-info>
   <ipsecsa-policy-name>
    ipsecsa-policy-name
   </ipsecsa-policy-name>
   <ipsecsa-policy-source>
    ipsecsa-policy-source
   </ipsecsa-policy-source>
   <ipsecsa-policy-srcport>
    ipsecsa-policy-srcport
   </ipsecsa-policy-srcport>
   <ipsecsa-policy-destination>
    ipsecsa-policy-destination
   </ipsecsa-policy-destination>
   <ipsecsa-policy-destport>
    ipsecsa-policy-destport
   </ipsecsa-policy-destport>
   <ipsecsa-policy-protocol>
```


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```
        ipsecsa-policy-protocol
       </ipsecsa-policy-protocol>
      </ipsecsa-policy-info>
     </ipsecsa-sa-info>
    </ipsecsa-group-info>
```

Description

<ipsecsa-policy-info>

Usage

```
<ipsecsa-policy-info>
 <ipsecsa-policy-name>
  ipsecsa-policy-name
 </ipsecsa-policy-name>
 <ipsecsa-policy-source>
  ipsecsa-policy-source
 </ipsecsa-policy-source>
 <ipsecsa-policy-srcport>
  ipsecsa-policy-srcport
 </ipsecsa-policy-srcport>
 <ipsecsa-policy-destination>
  ipsecsa-policy-destination
 </ipsecsa-policy-destination>
 <ipsecsa-policy-destport>
  ipsecsa-policy-destport
 </ipsecsa-policy-destport>
 <ipsecsa-policy-protocol>
  ipsecsa-policy-protocol
 </ipsecsa-policy-protocol>
</ipsecsa-policy-info>
```

Description

<ipsecsa-policy-info>

Usage

```
<ipsecsa-sa-info>
 <ipsecsa-policy-info>
  <ipsecsa-policy-name>
   ipsecsa-policy-name
  </ipsecsa-policy-name>
  <ipsecsa-policy-source>
   ipsecsa-policy-source
  </ipsecsa-policy-source>
  <ipsecsa-policy-srcport>
   ipsecsa-policy-srcport
  </ipsecsa-policy-srcport>
  <ipsecsa-policy-destination>
   ipsecsa-policy-destination
  </ipsecsa-policy-destination>
  <ipsecsa-policy-destport>
   ipsecsa-policy-destport
  </ipsecsa-policy-destport>
```

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```
    <ipsecsa-policy-protocol>
     ipsecsa-policy-protocol
    </ipsecsa-policy-protocol>
   </ipsecsa-policy-info>
</ipsecsa-sa-info>
```

Description

<ipsecsa-policy-info>

Usage

```
<ipsec-server-ipsecsa-information>
 <ipsecsa-group-info>
  <ipsecsa-sa-info>
   <ipsecsa-policy-info>
    <ipsecsa-policy-name>
     ipsecsa-policy-name
    </ipsecsa-policy-name>
    <ipsecsa-policy-source>
     ipsecsa-policy-source
    </ipsecsa-policy-source>
    <ipsecsa-policy-srcport>
     ipsecsa-policy-srcport
    </ipsecsa-policy-srcport>
    <ipsecsa-policy-destination>
     ipsecsa-policy-destination
    </ipsecsa-policy-destination>
    <ipsecsa-policy-destport>
     ipsecsa-policy-destport
    </ipsecsa-policy-destport>
    <ipsecsa-policy-protocol>
     ipsecsa-policy-protocol
    </ipsecsa-policy-protocol>
   </ipsecsa-policy-info>
  </ipsecsa-sa-info>
 </ipsecsa-group-info>
</ipsec-server-ipsecsa-information>
```

Description

<ipsecsa-policy-info>

Usage

```
<ipsec-server-ipsecsa-information>
 <ipsecsa-sa-info>
  <ipsecsa-policy-info>
   <ipsecsa-policy-name>
    ipsecsa-policy-name
   </ipsecsa-policy-name>
   <ipsecsa-policy-source>
    ipsecsa-policy-source
   </ipsecsa-policy-source>
   <ipsecsa-policy-srcport>
    ipsecsa-policy-srcport
```


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```
      </ipsecsa-policy-srcport>
      <ipsecsa-policy-destination>
       ipsecsa-policy-destination
      </ipsecsa-policy-destination>
      <ipsecsa-policy-destport>
       ipsecsa-policy-destport
      </ipsecsa-policy-destport>
      <ipsecsa-policy-protocol>
       ipsecsa-policy-protocol
      </ipsecsa-policy-protocol>
     </ipsecsa-policy-info>
    </ipsecsa-sa-info>
</ipsec-server-ipsecsa-information>
```

Description

<ipsecsa-sa-info>

Usage

```
<ipsecsa-group-info>
 <ipsecsa-sa-info>
  <ipsecsa-name>
   ipsecsa-name
  </ipsecsa-name>
  <ipsecsa-algorithm>
   ipsecsa-algorithm
  </ipsecsa-algorithm>
  <ipsecsa-protocol>
   ipsecsa-protocol
  </ipsecsa-protocol>
  <ipsecsa-authalg>
   ipsecsa-authalg
  </ipsecsa-authalg>
  <ipsecsa-encalg>
   ipsecsa-encalg
  </ipsecsa-encalg>
  <ipsecsa-spi>
   ipsecsa-spi
  </ipsecsa-spi>
  <ipsecsa-lifetime>
   ipsecsa-lifetime
  </ipsecsa-lifetime>
  <ipsecsa-policy-info>....</ipsecsa-policy-info>
 </ipsecsa-sa-info>
</ipsecsa-group-info>
```

Description

<ipsecsa-sa-info>

Usage

```
<ipsecsa-sa-info>
 <ipsecsa-name>
  ipsecsa-name
```

```
  </ipsecsa-name>
  <ipsecsa-algorithm>
   ipsecsa-algorithm
  </ipsecsa-algorithm>
  <ipsecsa-protocol>
   ipsecsa-protocol
  </ipsecsa-protocol>
  <ipsecsa-authalg>
   ipsecsa-authalg
  </ipsecsa-authalg>
  <ipsecsa-encalg>
   ipsecsa-encalg
  </ipsecsa-encalg>
  <ipsecsa-spi>
   ipsecsa-spi
  </ipsecsa-spi>
  <ipsecsa-lifetime>
   ipsecsa-lifetime
  </ipsecsa-lifetime>
  <ipsecsa-policy-info>....</ipsecsa-policy-info>
</ipsecsa-sa-info>
```

Description

<ipsecsa-sa-info>

Usage

```
<ipsec-server-ipsecsa-information>
 <ipsecsa-group-info>
  <ipsecsa-sa-info>
   <ipsecsa-name>
    ipsecsa-name
   </ipsecsa-name>
   <ipsecsa-algorithm>
    ipsecsa-algorithm
   </ipsecsa-algorithm>
   <ipsecsa-protocol>
    ipsecsa-protocol
   </ipsecsa-protocol>
   <ipsecsa-authalg>
    ipsecsa-authalg
   </ipsecsa-authalg>
   <ipsecsa-encalg>
    ipsecsa-encalg
   </ipsecsa-encalg>
   <ipsecsa-spi>
    ipsecsa-spi
   </ipsecsa-spi>
   <ipsecsa-lifetime>
    ipsecsa-lifetime
   </ipsecsa-lifetime>
   <ipsecsa-policy-info>....</ipsecsa-policy-info>
  </ipsecsa-sa-info>
 </ipsecsa-group-info>
```


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```
</ipsec-server-ipsecsa-information>
```

Description

<ipsecsa-sa-info>

Usage

```
<ipsec-server-ipsecsa-information>
 <ipsecsa-sa-info>
  <ipsecsa-name>
   ipsecsa-name
  </ipsecsa-name>
  <ipsecsa-algorithm>
   ipsecsa-algorithm
  </ipsecsa-algorithm>
  <ipsecsa-protocol>
   ipsecsa-protocol
  </ipsecsa-protocol>
  <ipsecsa-authalg>
   ipsecsa-authalg
  </ipsecsa-authalg>
  <ipsecsa-encalg>
   ipsecsa-encalg
  </ipsecsa-encalg>
  <ipsecsa-spi>
   ipsecsa-spi
  </ipsecsa-spi>
  <ipsecsa-lifetime>
   ipsecsa-lifetime
  </ipsecsa-lifetime>
  <ipsecsa-policy-info>....</ipsecsa-policy-info>
 </ipsecsa-sa-info>
</ipsec-server-ipsecsa-information>
```

Description

<kek-sa-group-info>

Usage

```
<ike-security-associations>
 <kek-sa-group-info>
  <kek-sa-group-id>
   kek-sa-group-id
  </kek-sa-group-id>
  <kek-sa-group-name>
   kek-sa-group-name
  </kek-sa-group-name>
  <kek-sa-group-server-version>
   kek-sa-group-server-version
  </kek-sa-group-server-version>
  <kek-sa-group-heartbeat-threshold>
   kek-sa-group-heartbeat-threshold
  </kek-sa-group-heartbeat-threshold>
  <kek-sa-group-heartbeat-interval>
```

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```
        kek-sa-group-heartbeat-interval
      </kek-sa-group-heartbeat-interval>
      <kek-sa-group-heartbeat-timeout-left>
        kek-sa-group-heartbeat-timeout-left
      </kek-sa-group-heartbeat-timeout-left>
      <kek-sa-group-multicast-group>
        kek-sa-group-multicast-group
      </kek-sa-group-multicast-group>
      <kek-sa-group-replay-window>
        kek-sa-group-replay-window
      </kek-sa-group-replay-window>
      <kek-sa-group-activation-delay>
        kek-sa-group-activation-delay
      </kek-sa-group-activation-delay>
    </kek-sa-group-info>
  </ike-security-associations>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <kek-sa-group-info>
      <kek-sa-group-id>
        kek-sa-group-id
      </kek-sa-group-id>
      <kek-sa-group-name>
        kek-sa-group-name
      </kek-sa-group-name>
      <kek-sa-group-server-version>
        kek-sa-group-server-version
      </kek-sa-group-server-version>
      <kek-sa-group-heartbeat-threshold>
        kek-sa-group-heartbeat-threshold
      </kek-sa-group-heartbeat-threshold>
      <kek-sa-group-heartbeat-interval>
        kek-sa-group-heartbeat-interval
      </kek-sa-group-heartbeat-interval>
      <kek-sa-group-heartbeat-timeout-left>
        kek-sa-group-heartbeat-timeout-left
      </kek-sa-group-heartbeat-timeout-left>
      <kek-sa-group-multicast-group>
        kek-sa-group-multicast-group
      </kek-sa-group-multicast-group>
      <kek-sa-group-replay-window>
        kek-sa-group-replay-window
      </kek-sa-group-replay-window>
      <kek-sa-group-activation-delay>
        kek-sa-group-activation-delay
      </kek-sa-group-activation-delay>
    </kek-sa-group-info>
  </ike-security-associations>
```


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```
</ike-security-associations-block>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <kek-sa-group-info>
      <kek-sa-group-id>
        kek-sa-group-id
      </kek-sa-group-id>
      <kek-sa-group-name>
        kek-sa-group-name
      </kek-sa-group-name>
      <kek-sa-group-server-version>
        kek-sa-group-server-version
      </kek-sa-group-server-version>
      <kek-sa-group-heartbeat-threshold>
        kek-sa-group-heartbeat-threshold
      </kek-sa-group-heartbeat-threshold>
      <kek-sa-group-heartbeat-interval>
        kek-sa-group-heartbeat-interval
      </kek-sa-group-heartbeat-interval>
      <kek-sa-group-heartbeat-timeout-left>
        kek-sa-group-heartbeat-timeout-left
      </kek-sa-group-heartbeat-timeout-left>
      <kek-sa-group-multicast-group>
        kek-sa-group-multicast-group
      </kek-sa-group-multicast-group>
      <kek-sa-group-replay-window>
        kek-sa-group-replay-window
      </kek-sa-group-replay-window>
      <kek-sa-group-activation-delay>
        kek-sa-group-activation-delay
      </kek-sa-group-activation-delay>
    </kek-sa-group-info>
  </ike-security-associations>
</ike-security-associations-information>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <kek-sa-group-info>
        <kek-sa-group-id>
          kek-sa-group-id
```

```
        </kek-sa-group-id>
        <kek-sa-group-name>
          kek-sa-group-name
        </kek-sa-group-name>
        <kek-sa-group-server-version>
          kek-sa-group-server-version
        </kek-sa-group-server-version>
        <kek-sa-group-heartbeat-threshold>
          kek-sa-group-heartbeat-threshold
        </kek-sa-group-heartbeat-threshold>
        <kek-sa-group-heartbeat-interval>
          kek-sa-group-heartbeat-interval
        </kek-sa-group-heartbeat-interval>
        <kek-sa-group-heartbeat-timeout-left>
          kek-sa-group-heartbeat-timeout-left
        </kek-sa-group-heartbeat-timeout-left>
        <kek-sa-group-multicast-group>
          kek-sa-group-multicast-group
        </kek-sa-group-multicast-group>
        <kek-sa-group-replay-window>
          kek-sa-group-replay-window
        </kek-sa-group-replay-window>
        <kek-sa-group-activation-delay>
          kek-sa-group-activation-delay
        </kek-sa-group-activation-delay>
      </kek-sa-group-info>
    </ike-security-associations>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<kek-sa-group-info>
  <kek-sa-group-id>
    kek-sa-group-id
  </kek-sa-group-id>
  <kek-sa-group-name>
    kek-sa-group-name
  </kek-sa-group-name>
  <kek-sa-group-server-version>
    kek-sa-group-server-version
  </kek-sa-group-server-version>
  <kek-sa-group-heartbeat-threshold>
    kek-sa-group-heartbeat-threshold
  </kek-sa-group-heartbeat-threshold>
  <kek-sa-group-heartbeat-interval>
    kek-sa-group-heartbeat-interval
  </kek-sa-group-heartbeat-interval>
  <kek-sa-group-heartbeat-timeout-left>
    kek-sa-group-heartbeat-timeout-left
  </kek-sa-group-heartbeat-timeout-left>
```


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```
  <kek-sa-group-multicast-group>
    kek-sa-group-multicast-group
  </kek-sa-group-multicast-group>
  <kek-sa-group-replay-window>
    kek-sa-group-replay-window
  </kek-sa-group-replay-window>
  <kek-sa-group-activation-delay>
    kek-sa-group-activation-delay
  </kek-sa-group-activation-delay>
</kek-sa-group-info>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <kek-sa-group-info>
      <kek-sa-group-id>
        kek-sa-group-id
      </kek-sa-group-id>
      <kek-sa-group-name>
        kek-sa-group-name
      </kek-sa-group-name>
      <kek-sa-group-server-version>
        kek-sa-group-server-version
      </kek-sa-group-server-version>
      <kek-sa-group-heartbeat-threshold>
        kek-sa-group-heartbeat-threshold
      </kek-sa-group-heartbeat-threshold>
      <kek-sa-group-heartbeat-interval>
        kek-sa-group-heartbeat-interval
      </kek-sa-group-heartbeat-interval>
      <kek-sa-group-heartbeat-timeout-left>
        kek-sa-group-heartbeat-timeout-left
      </kek-sa-group-heartbeat-timeout-left>
      <kek-sa-group-multicast-group>
        kek-sa-group-multicast-group
      </kek-sa-group-multicast-group>
      <kek-sa-group-replay-window>
        kek-sa-group-replay-window
      </kek-sa-group-replay-window>
      <kek-sa-group-activation-delay>
        kek-sa-group-activation-delay
      </kek-sa-group-activation-delay>
    </kek-sa-group-info>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description KEK SA group information

<kek-sa-group-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <kek-sa-group-info>
        <kek-sa-group-id>
          kek-sa-group-id
        </kek-sa-group-id>
        <kek-sa-group-name>
          kek-sa-group-name
        </kek-sa-group-name>
        <kek-sa-group-server-version>
          kek-sa-group-server-version
        </kek-sa-group-server-version>
        <kek-sa-group-heartbeat-threshold>
          kek-sa-group-heartbeat-threshold
        </kek-sa-group-heartbeat-threshold>
        <kek-sa-group-heartbeat-interval>
          kek-sa-group-heartbeat-interval
        </kek-sa-group-heartbeat-interval>
        <kek-sa-group-heartbeat-timeout-left>
          kek-sa-group-heartbeat-timeout-left
        </kek-sa-group-heartbeat-timeout-left>
        <kek-sa-group-multicast-group>
          kek-sa-group-multicast-group
        </kek-sa-group-multicast-group>
        <kek-sa-group-replay-window>
          kek-sa-group-replay-window
        </kek-sa-group-replay-window>
        <kek-sa-group-activation-delay>
          kek-sa-group-activation-delay
        </kek-sa-group-activation-delay>
      </kek-sa-group-info>
    </ike-security-associations>
  </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description KEK SA group information

<kek-sa-misc>

Usage

```
<ike-security-associations>
  <kek-sa-misc>
    <kek-sa-sequence-number>
      kek-sa-sequence-number
    </kek-sa-sequence-number>
  </kek-sa-misc>
</ike-security-associations>
```


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Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<ike-security-associations-block>
  <ike-security-associations>
    <kek-sa-misc>
      <kek-sa-sequence-number>
        kek-sa-sequence-number
      </kek-sa-sequence-number>
    </kek-sa-misc>
  </ike-security-associations>
</ike-security-associations-block>
```

Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<ike-security-associations-information>
  <ike-security-associations>
    <kek-sa-misc>
      <kek-sa-sequence-number>
        kek-sa-sequence-number
      </kek-sa-sequence-number>
    </kek-sa-misc>
  </ike-security-associations>
</ike-security-associations-information>
```

Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<ike-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <kek-sa-misc>
        <kek-sa-sequence-number>
          kek-sa-sequence-number
        </kek-sa-sequence-number>
      </kek-sa-misc>
    </ike-security-associations>
  </ike-security-associations-block>
</ike-security-associations-information>
```

Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<kek-sa-misc>
  <kek-sa-sequence-number>
    kek-sa-sequence-number
  </kek-sa-sequence-number>
</kek-sa-misc>
```

Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <kek-sa-misc>
      <kek-sa-sequence-number>
        kek-sa-sequence-number
      </kek-sa-sequence-number>
    </kek-sa-misc>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description Miscellaneous KEK SA information

<kek-sa-misc>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <kek-sa-misc>
        <kek-sa-sequence-number>
          kek-sa-sequence-number
        </kek-sa-sequence-number>
      </kek-sa-misc>
    </ike-security-associations>
  </ike-security-associations-block>
</gvpn-kek-security-associations-information>
```

Description Miscellaneous KEK SA information

<kek-sa-server-info>

Usage

```
<ike-security-associations>
  <kek-sa-server-info>
    <kek-sa-server-retrans-period>
      kek-sa-server-retrans-period
```


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```
    </kek-sa-server-retrans-period>
    <kek-sa-server-retrans-number>
     kek-sa-server-retrans-number
    </kek-sa-server-retrans-number>
    <kek-sa-server-lifetime-secs>
     kek-sa-server-lifetime-secs
    </kek-sa-server-lifetime-secs>
    <kek-sa-server-certificate>
     kek-sa-server-certificate
    </kek-sa-server-certificate>
   </kek-sa-server-info>
</ike-security-associations>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<ike-security-associations-block>
 <ike-security-associations>
  <kek-sa-server-info>
   <kek-sa-server-retrans-period>
    kek-sa-server-retrans-period
   </kek-sa-server-retrans-period>
   <kek-sa-server-retrans-number>
    kek-sa-server-retrans-number
   </kek-sa-server-retrans-number>
   <kek-sa-server-lifetime-secs>
    kek-sa-server-lifetime-secs
   </kek-sa-server-lifetime-secs>
   <kek-sa-server-certificate>
    kek-sa-server-certificate
   </kek-sa-server-certificate>
  </kek-sa-server-info>
 </ike-security-associations>
</ike-security-associations-block>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<ike-security-associations-information>
 <ike-security-associations>
  <kek-sa-server-info>
   <kek-sa-server-retrans-period>
    kek-sa-server-retrans-period
   </kek-sa-server-retrans-period>
   <kek-sa-server-retrans-number>
    kek-sa-server-retrans-number
   </kek-sa-server-retrans-number>
   <kek-sa-server-lifetime-secs>
```

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```
            kek-sa-server-lifetime-secs
           </kek-sa-server-lifetime-secs>
           <kek-sa-server-certificate>
            kek-sa-server-certificate
           </kek-sa-server-certificate>
          </kek-sa-server-info>
         </ike-security-associations>
        </ike-security-associations-information>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<ike-security-associations-information>
 <ike-security-associations-block>
  <ike-security-associations>
   <kek-sa-server-info>
    <kek-sa-server-retrans-period>
     kek-sa-server-retrans-period
    </kek-sa-server-retrans-period>
    <kek-sa-server-retrans-number>
     kek-sa-server-retrans-number
    </kek-sa-server-retrans-number>
    <kek-sa-server-lifetime-secs>
     kek-sa-server-lifetime-secs
    </kek-sa-server-lifetime-secs>
    <kek-sa-server-certificate>
     kek-sa-server-certificate
    </kek-sa-server-certificate>
   </kek-sa-server-info>
  </ike-security-associations>
 </ike-security-associations-block>
</ike-security-associations-information>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<kek-sa-server-info>
 <kek-sa-server-retrans-period>
  kek-sa-server-retrans-period
 </kek-sa-server-retrans-period>
 <kek-sa-server-retrans-number>
  kek-sa-server-retrans-number
 </kek-sa-server-retrans-number>
 <kek-sa-server-lifetime-secs>
  kek-sa-server-lifetime-secs
 </kek-sa-server-lifetime-secs>
 <kek-sa-server-certificate>
  kek-sa-server-certificate
```


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```
  </kek-sa-server-certificate>
</kek-sa-server-info>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations>
    <kek-sa-server-info>
      <kek-sa-server-retrans-period>
        kek-sa-server-retrans-period
      </kek-sa-server-retrans-period>
      <kek-sa-server-retrans-number>
        kek-sa-server-retrans-number
      </kek-sa-server-retrans-number>
      <kek-sa-server-lifetime-secs>
        kek-sa-server-lifetime-secs
      </kek-sa-server-lifetime-secs>
      <kek-sa-server-certificate>
        kek-sa-server-certificate
      </kek-sa-server-certificate>
    </kek-sa-server-info>
  </ike-security-associations>
</gvpn-kek-security-associations-information>
```

Description KEK SA server information

<kek-sa-server-info>

Usage

```
<gvpn-kek-security-associations-information>
  <ike-security-associations-block>
    <ike-security-associations>
      <kek-sa-server-info>
        <kek-sa-server-retrans-period>
          kek-sa-server-retrans-period
        </kek-sa-server-retrans-period>
        <kek-sa-server-retrans-number>
          kek-sa-server-retrans-number
        </kek-sa-server-retrans-number>
        <kek-sa-server-lifetime-secs>
          kek-sa-server-lifetime-secs
        </kek-sa-server-lifetime-secs>
        <kek-sa-server-certificate>
          kek-sa-server-certificate
        </kek-sa-server-certificate>
      </kek-sa-server-info>
    </ike-security-associations>
  </ike-security-associations-block>
```

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```
</gvpn-kek-security-associations-information>
```

Description KEK SA server information

<kek-security-associations>

Usage

```
<kek-security-associations>
  <ike-sa-index>
    ike-sa-index
  </ike-sa-index>
  <ike-sa-remote-address>
    ike-sa-remote-address
  </ike-sa-remote-address>
  <ike-sa-state>
    ike-sa-state
  </ike-sa-state>
  <ike-sa-initiator-cookie>
    ike-sa-initiator-cookie
  </ike-sa-initiator-cookie>
  <ike-sa-responder-cookie>
    ike-sa-responder-cookie
  </ike-sa-responder-cookie>
  <kek-sa-group-id>
    kek-sa-group-id
  </kek-sa-group-id>
</kek-security-associations>
```

Description

<kek-security-associations>

Usage

```
<gvpn-kek-security-associations-information>
  <kek-security-associations>
    <ike-sa-index>
      ike-sa-index
    </ike-sa-index>
    <ike-sa-remote-address>
      ike-sa-remote-address
    </ike-sa-remote-address>
    <ike-sa-state>
      ike-sa-state
    </ike-sa-state>
    <ike-sa-initiator-cookie>
      ike-sa-initiator-cookie
    </ike-sa-initiator-cookie>
    <ike-sa-responder-cookie>
      ike-sa-responder-cookie
    </ike-sa-responder-cookie>
    <kek-sa-group-id>
      kek-sa-group-id
    </kek-sa-group-id>
```


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```
  </kek-security-associations>
</gvpn-kek-security-associations-information>
```

Description

<kmd-memory-usage>

Usage

```
<kmd-memory-usage>
  <memory-block-type>
    memory-block-type
  </memory-block-type>
  <memory-in-use>
    memory-in-use
  </memory-in-use>
</kmd-memory-usage>
```

Description Information about key management daemon memory usage

<kmd-memory-usage>

Usage

```
<kmd-memory-usage-information>
  <kmd-memory-usage>
    <memory-block-type>
      memory-block-type
    </memory-block-type>
    <memory-in-use>
      memory-in-use
    </memory-in-use>
  </kmd-memory-usage>
</kmd-memory-usage-information>
```

Description Information about key management daemon memory usage

<kmd-memory-usage-information>

Usage

```
<kmd-memory-usage-information>
  <kmd-memory-usage>....</kmd-memory-usage>
  <kmd-debug-memory-usage>
    kmd-debug-memory-usage
  </kmd-debug-memory-usage>
</kmd-memory-usage-information>
```

Description

<sa-df-bit-policy-name>

Usage

```
<sa-df-bit-policy-name>
```

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```
  <sa-df-bit>
    sa-df-bit
  </sa-df-bit>
  <sa-policy-name>
    sa-policy-name
  </sa-policy-name>
</sa-df-bit-policy-name>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-security-associations-block>
  <sa-df-bit-policy-name>
    <sa-df-bit>
      sa-df-bit
    </sa-df-bit>
    <sa-policy-name>
      sa-policy-name
    </sa-policy-name>
  </sa-df-bit-policy-name>
</ipsec-security-associations-block>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-gvpn-security-associations-block>
  <sa-df-bit-policy-name>
    <sa-df-bit>
      sa-df-bit
    </sa-df-bit>
    <sa-policy-name>
      sa-policy-name
    </sa-policy-name>
  </sa-df-bit-policy-name>
</ipsec-gvpn-security-associations-block>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-security-associations-information>
  <ipsec-security-associations-block>
    <sa-df-bit-policy-name>
      <sa-df-bit>
        sa-df-bit
      </sa-df-bit>
      <sa-policy-name>
        sa-policy-name
```


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```
      </sa-policy-name>
    </sa-df-bit-policy-name>
  </ipsec-security-associations-block>
</ipsec-security-associations-information>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-security-associations-information>
  <ipsec-gvpn-security-associations-block>
    <sa-df-bit-policy-name>
      <sa-df-bit>
        sa-df-bit
      </sa-df-bit>
      <sa-policy-name>
        sa-policy-name
      </sa-policy-name>
    </sa-df-bit-policy-name>
  </ipsec-gvpn-security-associations-block>
</ipsec-security-associations-information>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-unestablished-tunnel-information>
  <ipsec-security-associations-block>
    <sa-df-bit-policy-name>
      <sa-df-bit>
        sa-df-bit
      </sa-df-bit>
      <sa-policy-name>
        sa-policy-name
      </sa-policy-name>
    </sa-df-bit-policy-name>
  </ipsec-security-associations-block>
</ipsec-unestablished-tunnel-information>
```

Description

<sa-df-bit-policy-name>

Usage

```
<ipsec-active-tunnel-debug-information>
  <ipsec-security-associations-block>
    <sa-df-bit-policy-name>
      <sa-df-bit>
        sa-df-bit
      </sa-df-bit>
      <sa-policy-name>
```

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```
            sa-policy-name
           </sa-policy-name>
          </sa-df-bit-policy-name>
         </ipsec-security-associations-block>
        </ipsec-active-tunnel-debug-information>
```

Description

<sa-location>

Usage

```
<sa-location>
 <sa-fpc>
  sa-fpc
 </sa-fpc>
 <sa-pic>
  sa-pic
 </sa-pic>
 <sa-kmd-instance>
  sa-kmd-instance
 </sa-kmd-instance>
</sa-location>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-security-associations-block>
 <sa-location>
  <sa-fpc>
   sa-fpc
  </sa-fpc>
  <sa-pic>
   sa-pic
  </sa-pic>
  <sa-kmd-instance>
   sa-kmd-instance
  </sa-kmd-instance>
 </sa-location>
</ipsec-security-associations-block>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-gvpn-security-associations-block>
 <sa-location>
  <sa-fpc>
   sa-fpc
```


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```
    </sa-fpc>
    <sa-pic>
      sa-pic
    </sa-pic>
    <sa-kmd-instance>
      sa-kmd-instance
    </sa-kmd-instance>
  </sa-location>
</ipsec-gvpn-security-associations-block>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-security-associations-information>
  <sa-location>
    <sa-fpc>
      sa-fpc
    </sa-fpc>
    <sa-pic>
      sa-pic
    </sa-pic>
    <sa-kmd-instance>
      sa-kmd-instance
    </sa-kmd-instance>
  </sa-location>
</ipsec-security-associations-information>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-security-associations-information>
  <ipsec-security-associations-block>
    <sa-location>
      <sa-fpc>
        sa-fpc
      </sa-fpc>
      <sa-pic>
        sa-pic
      </sa-pic>
      <sa-kmd-instance>
        sa-kmd-instance
      </sa-kmd-instance>
    </sa-location>
  </ipsec-security-associations-block>
</ipsec-security-associations-information>
```

Description Location where SA is processed

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<sa-location>

Usage

```
<ipsec-security-associations-information>
 <ipsec-gvpn-security-associations-block>
  <sa-location>
   <sa-fpc>
    sa-fpc
   </sa-fpc>
   <sa-pic>
    sa-pic
   </sa-pic>
   <sa-kmd-instance>
    sa-kmd-instance
   </sa-kmd-instance>
  </sa-location>
 </ipsec-gvpn-security-associations-block>
</ipsec-security-associations-information>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-unestablished-tunnel-information>
 <sa-location>
  <sa-fpc>
   sa-fpc
  </sa-fpc>
  <sa-pic>
   sa-pic
  </sa-pic>
  <sa-kmd-instance>
   sa-kmd-instance
  </sa-kmd-instance>
 </sa-location>
</ipsec-unestablished-tunnel-information>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-unestablished-tunnel-information>
 <ipsec-security-associations-block>
  <sa-location>
   <sa-fpc>
    sa-fpc
   </sa-fpc>
   <sa-pic>
    sa-pic
   </sa-pic>
```


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```
      <sa-kmd-instance>
       sa-kmd-instance
      </sa-kmd-instance>
     </sa-location>
    </ipsec-security-associations-block>
</ipsec-unestablished-tunnel-information>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-active-tunnel-debug-information>
 <sa-location>
  <sa-fpc>
   sa-fpc
  </sa-fpc>
  <sa-pic>
   sa-pic
  </sa-pic>
  <sa-kmd-instance>
   sa-kmd-instance
  </sa-kmd-instance>
 </sa-location>
</ipsec-active-tunnel-debug-information>
```

Description Location where SA is processed

<sa-location>

Usage

```
<ipsec-active-tunnel-debug-information>
 <ipsec-security-associations-block>
  <sa-location>
   <sa-fpc>
    sa-fpc
   </sa-fpc>
   <sa-pic>
    sa-pic
   </sa-pic>
   <sa-kmd-instance>
    sa-kmd-instance
   </sa-kmd-instance>
  </sa-location>
 </ipsec-security-associations-block>
</ipsec-active-tunnel-debug-information>
```

Description Location where SA is processed

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<sa-tunnel-information>

Usage

```
<security-associations-block>
  <sa-tunnel-information>
    <sa-rule-name>
      sa-rule-name
    </sa-rule-name>
    <sa-term-name>
      sa-term-name
    </sa-term-name>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-inside-interface>
      sa-inside-interface
    </sa-inside-interface>
    <sa-tunnel-mtu>
      sa-tunnel-mtu
    </sa-tunnel-mtu>
    <sa-no-information>
      sa-no-information
    </sa-no-information>
  </sa-tunnel-information>
</security-associations-block>
```

Description

<sa-tunnel-information>

Usage

```
<services-security-associations-block>
  <sa-tunnel-information>
    <sa-rule-name>
      sa-rule-name
    </sa-rule-name>
    <sa-term-name>
      sa-term-name
    </sa-term-name>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
```


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```
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-inside-interface>
      sa-inside-interface
    </sa-inside-interface>
    <sa-tunnel-mtu>
      sa-tunnel-mtu
    </sa-tunnel-mtu>
    <sa-no-information>
      sa-no-information
    </sa-no-information>
  </sa-tunnel-information>
</services-security-associations-block>
```

Description

<sa-tunnel-information>

Usage

```
<sa-tunnel-information>
  <sa-rule-name>
    sa-rule-name
  </sa-rule-name>
  <sa-term-name>
    sa-term-name
  </sa-term-name>
  <sa-tunnel-index>
    sa-tunnel-index
  </sa-tunnel-index>
  <sa-local-gateway>
    sa-local-gateway
  </sa-local-gateway>
  <sa-remote-gateway>
    sa-remote-gateway
  </sa-remote-gateway>
  <sa-local-identity>
    sa-local-identity
  </sa-local-identity>
  <sa-remote-identity>
    sa-remote-identity
  </sa-remote-identity>
  <sa-inside-interface>
    sa-inside-interface
  </sa-inside-interface>
  <sa-tunnel-mtu>
```

```
    sa-tunnel-mtu
   </sa-tunnel-mtu>
   <sa-no-information>
    sa-no-information
   </sa-no-information>
</sa-tunnel-information>
```

Description

<sa-tunnel-information>

Usage

```
<security-associations-information>
 <security-associations-block>
  <sa-tunnel-information>
   <sa-rule-name>
    sa-rule-name
   </sa-rule-name>
   <sa-term-name>
    sa-term-name
   </sa-term-name>
   <sa-tunnel-index>
    sa-tunnel-index
   </sa-tunnel-index>
   <sa-local-gateway>
    sa-local-gateway
   </sa-local-gateway>
   <sa-remote-gateway>
    sa-remote-gateway
   </sa-remote-gateway>
   <sa-local-identity>
    sa-local-identity
   </sa-local-identity>
   <sa-remote-identity>
    sa-remote-identity
   </sa-remote-identity>
   <sa-inside-interface>
    sa-inside-interface
   </sa-inside-interface>
   <sa-tunnel-mtu>
    sa-tunnel-mtu
   </sa-tunnel-mtu>
   <sa-no-information>
    sa-no-information
   </sa-no-information>
  </sa-tunnel-information>
 </security-associations-block>
</security-associations-information>
```

Description

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<sa-tunnel-information>

Usage

```
<security-associations-information>
  <sa-tunnel-information>
    <sa-rule-name>
      sa-rule-name
    </sa-rule-name>
    <sa-term-name>
      sa-term-name
    </sa-term-name>
    <sa-tunnel-index>
      sa-tunnel-index
    </sa-tunnel-index>
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-inside-interface>
      sa-inside-interface
    </sa-inside-interface>
    <sa-tunnel-mtu>
      sa-tunnel-mtu
    </sa-tunnel-mtu>
    <sa-no-information>
      sa-no-information
    </sa-no-information>
  </sa-tunnel-information>
</security-associations-information>
```

Description

<sa-tunnel-information>

Usage

```
<services-security-associations-information>
  <services-security-associations-block>
    <sa-tunnel-information>
      <sa-rule-name>
        sa-rule-name
      </sa-rule-name>
      <sa-term-name>
        sa-term-name
      </sa-term-name>
      <sa-tunnel-index>
        sa-tunnel-index
```

```
    </sa-tunnel-index>
    <sa-local-gateway>
      sa-local-gateway
    </sa-local-gateway>
    <sa-remote-gateway>
      sa-remote-gateway
    </sa-remote-gateway>
    <sa-local-identity>
      sa-local-identity
    </sa-local-identity>
    <sa-remote-identity>
      sa-remote-identity
    </sa-remote-identity>
    <sa-inside-interface>
      sa-inside-interface
    </sa-inside-interface>
    <sa-tunnel-mtu>
      sa-tunnel-mtu
    </sa-tunnel-mtu>
    <sa-no-information>
      sa-no-information
    </sa-no-information>
  </sa-tunnel-information>
 </services-security-associations-block>
</services-security-associations-information>
```

Description

<sa-tunnel-information>

Usage

```
<services-security-associations-information>
 <sa-tunnel-information>
  <sa-rule-name>
   sa-rule-name
  </sa-rule-name>
  <sa-term-name>
   sa-term-name
  </sa-term-name>
  <sa-tunnel-index>
   sa-tunnel-index
  </sa-tunnel-index>
  <sa-local-gateway>
   sa-local-gateway
  </sa-local-gateway>
  <sa-remote-gateway>
   sa-remote-gateway
  </sa-remote-gateway>
  <sa-local-identity>
   sa-local-identity
  </sa-local-identity>
  <sa-remote-identity>
   sa-remote-identity
  </sa-remote-identity>
  <sa-inside-interface>
```


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```
      sa-inside-interface
    </sa-inside-interface>
    <sa-tunnel-mtu>
      sa-tunnel-mtu
    </sa-tunnel-mtu>
    <sa-no-information>
      sa-no-information
    </sa-no-information>
  </sa-tunnel-information>
</services-security-associations-information>
```

Description

<security-associations>

Usage

```
<security-associations-block>
  <security-associations>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-spi>
      sa-spi
    </sa-spi>
    <sa-aux-spi>
      sa-aux-spi
    </sa-aux-spi>
    <sa-state>
      sa-state
    </sa-state>
    <sa-mode>
      sa-mode
    </sa-mode>
    <sa-type>
      sa-type
    </sa-type>
    <sa-protocol>
      sa-protocol
    </sa-protocol>
    <sa-authentication-algorithm>
      sa-authentication-algorithm
    </sa-authentication-algorithm>
    <sa-encryption-algorithm>
      sa-encryption-algorithm
    </sa-encryption-algorithm>
    <sa-soft-lifetime>
      sa-soft-lifetime
    </sa-soft-lifetime>
    <sa-hard-lifetime>
      sa-hard-lifetime
    </sa-hard-lifetime>
    <sa-anti-replay-service>
      sa-anti-replay-service
    </sa-anti-replay-service>
    <sa-replay-window-size>
```

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```
        sa-replay-window-size
      </sa-replay-window-size>
      <sa-authentication-key>
        sa-authentication-key
      </sa-authentication-key>
      <sa-encryption-key>
        sa-encryption-key
      </sa-encryption-key>
    </security-associations>
  </security-associations-block>
```

Description Information about a single security association

<security-associations>

Usage

```
<services-security-associations-block>
  <security-associations>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-spi>
      sa-spi
    </sa-spi>
    <sa-aux-spi>
      sa-aux-spi
    </sa-aux-spi>
    <sa-state>
      sa-state
    </sa-state>
    <sa-mode>
      sa-mode
    </sa-mode>
    <sa-type>
      sa-type
    </sa-type>
    <sa-protocol>
      sa-protocol
    </sa-protocol>
    <sa-authentication-algorithm>
      sa-authentication-algorithm
    </sa-authentication-algorithm>
    <sa-encryption-algorithm>
      sa-encryption-algorithm
    </sa-encryption-algorithm>
    <sa-soft-lifetime>
      sa-soft-lifetime
    </sa-soft-lifetime>
    <sa-hard-lifetime>
      sa-hard-lifetime
    </sa-hard-lifetime>
    <sa-anti-replay-service>
      sa-anti-replay-service
    </sa-anti-replay-service>
```


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```
    <sa-replay-window-size>
      sa-replay-window-size
    </sa-replay-window-size>
    <sa-authentication-key>
      sa-authentication-key
    </sa-authentication-key>
    <sa-encryption-key>
      sa-encryption-key
    </sa-encryption-key>
  </security-associations>
</services-security-associations-block>
```

Description Information about a single security association

<security-associations>

Usage

```
<security-associations>
  <sa-direction>
    sa-direction
  </sa-direction>
  <sa-spi>
    sa-spi
  </sa-spi>
  <sa-aux-spi>
    sa-aux-spi
  </sa-aux-spi>
  <sa-state>
    sa-state
  </sa-state>
  <sa-mode>
    sa-mode
  </sa-mode>
  <sa-type>
    sa-type
  </sa-type>
  <sa-protocol>
    sa-protocol
  </sa-protocol>
  <sa-authentication-algorithm>
    sa-authentication-algorithm
  </sa-authentication-algorithm>
  <sa-encryption-algorithm>
    sa-encryption-algorithm
  </sa-encryption-algorithm>
  <sa-soft-lifetime>
    sa-soft-lifetime
  </sa-soft-lifetime>
  <sa-hard-lifetime>
    sa-hard-lifetime
  </sa-hard-lifetime>
  <sa-anti-replay-service>
    sa-anti-replay-service
  </sa-anti-replay-service>
```

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```
<sa-replay-window-size>
  sa-replay-window-size
</sa-replay-window-size>
<sa-authentication-key>
  sa-authentication-key
</sa-authentication-key>
<sa-encryption-key>
  sa-encryption-key
</sa-encryption-key>
</security-associations>
```

Description Information about a single security association

<security-associations>

Usage

```
<security-associations-information>
  <security-associations-block>
    <security-associations>
      <sa-direction>
        sa-direction
      </sa-direction>
      <sa-spi>
        sa-spi
      </sa-spi>
      <sa-aux-spi>
        sa-aux-spi
      </sa-aux-spi>
      <sa-state>
        sa-state
      </sa-state>
      <sa-mode>
        sa-mode
      </sa-mode>
      <sa-type>
        sa-type
      </sa-type>
      <sa-protocol>
        sa-protocol
      </sa-protocol>
      <sa-authentication-algorithm>
        sa-authentication-algorithm
      </sa-authentication-algorithm>
      <sa-encryption-algorithm>
        sa-encryption-algorithm
      </sa-encryption-algorithm>
      <sa-soft-lifetime>
        sa-soft-lifetime
      </sa-soft-lifetime>
      <sa-hard-lifetime>
        sa-hard-lifetime
      </sa-hard-lifetime>
      <sa-anti-replay-service>
        sa-anti-replay-service
```


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```
      </sa-anti-replay-service>
      <sa-replay-window-size>
        sa-replay-window-size
      </sa-replay-window-size>
      <sa-authentication-key>
        sa-authentication-key
      </sa-authentication-key>
      <sa-encryption-key>
        sa-encryption-key
      </sa-encryption-key>
    </security-associations>
  </security-associations-block>
</security-associations-information>
```

Description Information about a single security association

<security-associations>

Usage

```
<security-associations-information>
  <security-associations>
    <sa-direction>
      sa-direction
    </sa-direction>
    <sa-spi>
      sa-spi
    </sa-spi>
    <sa-aux-spi>
      sa-aux-spi
    </sa-aux-spi>
    <sa-state>
      sa-state
    </sa-state>
    <sa-mode>
      sa-mode
    </sa-mode>
    <sa-type>
      sa-type
    </sa-type>
    <sa-protocol>
      sa-protocol
    </sa-protocol>
    <sa-authentication-algorithm>
      sa-authentication-algorithm
    </sa-authentication-algorithm>
    <sa-encryption-algorithm>
      sa-encryption-algorithm
    </sa-encryption-algorithm>
    <sa-soft-lifetime>
      sa-soft-lifetime
    </sa-soft-lifetime>
    <sa-hard-lifetime>
      sa-hard-lifetime
    </sa-hard-lifetime>
```

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```
    <sa-anti-replay-service>
      sa-anti-replay-service
    </sa-anti-replay-service>
    <sa-replay-window-size>
      sa-replay-window-size
    </sa-replay-window-size>
    <sa-authentication-key>
      sa-authentication-key
    </sa-authentication-key>
    <sa-encryption-key>
      sa-encryption-key
    </sa-encryption-key>
  </security-associations>
</security-associations-information>
```

Description Information about a single security association

<security-associations>

Usage

```
<services-security-associations-information>
  <services-security-associations-block>
    <security-associations>
      <sa-direction>
        sa-direction
      </sa-direction>
      <sa-spi>
        sa-spi
      </sa-spi>
      <sa-aux-spi>
        sa-aux-spi
      </sa-aux-spi>
      <sa-state>
        sa-state
      </sa-state>
      <sa-mode>
        sa-mode
      </sa-mode>
      <sa-type>
        sa-type
      </sa-type>
      <sa-protocol>
        sa-protocol
      </sa-protocol>
      <sa-authentication-algorithm>
        sa-authentication-algorithm
      </sa-authentication-algorithm>
      <sa-encryption-algorithm>
        sa-encryption-algorithm
      </sa-encryption-algorithm>
      <sa-soft-lifetime>
        sa-soft-lifetime
      </sa-soft-lifetime>
      <sa-hard-lifetime>
```


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```
        sa-hard-lifetime
       </sa-hard-lifetime>
       <sa-anti-replay-service>
        sa-anti-replay-service
       </sa-anti-replay-service>
       <sa-replay-window-size>
        sa-replay-window-size
       </sa-replay-window-size>
       <sa-authentication-key>
        sa-authentication-key
       </sa-authentication-key>
       <sa-encryption-key>
        sa-encryption-key
       </sa-encryption-key>
      </security-associations>
     </services-security-associations-block>
</services-security-associations-information>
```

Description Information about a single security association

<security-associations>

Usage

```
<services-security-associations-information>
 <security-associations>
  <sa-direction>
   sa-direction
  </sa-direction>
  <sa-spi>
   sa-spi
  </sa-spi>
  <sa-aux-spi>
   sa-aux-spi
  </sa-aux-spi>
  <sa-state>
   sa-state
  </sa-state>
  <sa-mode>
   sa-mode
  </sa-mode>
  <sa-type>
   sa-type
  </sa-type>
  <sa-protocol>
   sa-protocol
  </sa-protocol>
  <sa-authentication-algorithm>
   sa-authentication-algorithm
  </sa-authentication-algorithm>
  <sa-encryption-algorithm>
   sa-encryption-algorithm
  </sa-encryption-algorithm>
  <sa-soft-lifetime>
   sa-soft-lifetime
```

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```
    </sa-soft-lifetime>
    <sa-hard-lifetime>
      sa-hard-lifetime
    </sa-hard-lifetime>
    <sa-anti-replay-service>
      sa-anti-replay-service
    </sa-anti-replay-service>
    <sa-replay-window-size>
      sa-replay-window-size
    </sa-replay-window-size>
    <sa-authentication-key>
      sa-authentication-key
    </sa-authentication-key>
    <sa-encryption-key>
      sa-encryption-key
    </sa-encryption-key>
  </security-associations>
</services-security-associations-information>
```

Description Information about a single security association

<security-associations-block>

Usage

```
<security-associations-block>
  <sa-name>
    sa-name
  </sa-name>
  <sa-block-state>
    sa-block-state
  </sa-block-state>
  <sa-tunnel-information>....</sa-tunnel-information>
  <security-associations>....</security-associations>
</security-associations-block>
```

Description Information about a single security association block

<security-associations-block>

Usage

```
<security-associations-information>
  <security-associations-block>
    <sa-name>
      sa-name
    </sa-name>
    <sa-block-state>
      sa-block-state
    </sa-block-state>
    <sa-tunnel-information>....</sa-tunnel-information>
    <security-associations>....</security-associations>
  </security-associations-block>
```


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```
</security-associations-information>
```

Description Information about a single security association block

<security-associations-information>

Usage

```
<security-associations-information>
  <security-associations-block>....</security-associations-block>
  <sa-tunnel-information>....</sa-tunnel-information>
  <security-associations>....</security-associations>
</security-associations-information>
```

Description

<services-security-associations-block>

Usage

```
<services-security-associations-block>
  <svc-set-name>
    svc-set-name
  </svc-set-name>
  <outside-service-interface-routing-instance>
    outside-service-interface-routing-instance
  </outside-service-interface-routing-instance>
  <sa-tunnel-information>....</sa-tunnel-information>
  <security-associations>....</security-associations>
  <tunnel-redundancy-extensive>....</tunnel-redundancy-extensive>
</services-security-associations-block>
```

Description Information about a single services security associations block

<services-security-associations-block>

Usage

```
<services-security-associations-information>
  <services-security-associations-block>
    <svc-set-name>
      svc-set-name
    </svc-set-name>
    <outside-service-interface-routing-instance>
      outside-service-interface-routing-instance
    </outside-service-interface-routing-instance>
    <sa-tunnel-information>....</sa-tunnel-information>
    <security-associations>....</security-associations>
    <tunnel-redundancy-extensive>....</tunnel-redundancy-extensive>
  </services-security-associations-block>
</services-security-associations-information>
```

Description Information about a single services security associations block

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<services-security-associations-information>

Usage

```
<services-security-associations-information>
 <services-security-associations-block>....</services-security-associations-block>

  <sa-tunnel-information>....</sa-tunnel-information>
  <security-associations>....</security-associations>
  <tunnel-redundancy-extensive>....</tunnel-redundancy-extensive>
</services-security-associations-information>
```

Description

<tunnel-redundancy-extensive>

Usage

```
<tunnel-redundancy-extensive>
  <ipsec-redundancy-counter>
    ipsec-redundancy-counter
  </ipsec-redundancy-counter>
  <ipsec-redundancy-tunnel-no-information>
    ipsec-redundancy-tunnel-no-information
  </ipsec-redundancy-tunnel-no-information>
  <ipsec-tunnel-redundancy-primary-remote-address>
    ipsec-tunnel-redundancy-primary-remote-address
  </ipsec-tunnel-redundancy-primary-remote-address>
  <ipsec-tunnel-redundancy-backup-remote-address>
    ipsec-tunnel-redundancy-backup-remote-address
  </ipsec-tunnel-redundancy-backup-remote-address>
  <ipsec-redundancy-primary-state>
    ipsec-redundancy-primary-state
  </ipsec-redundancy-primary-state>
  <ipsec-redundancy-backup-state>
    ipsec-redundancy-backup-state
  </ipsec-redundancy-backup-state>
</tunnel-redundancy-extensive>
```

Description Information about IPSec tunnel redundancy

<tunnel-redundancy-extensive>

Usage

```
<services-security-associations-block>
  <tunnel-redundancy-extensive>
    <ipsec-redundancy-counter>
      ipsec-redundancy-counter
    </ipsec-redundancy-counter>
    <ipsec-redundancy-tunnel-no-information>
      ipsec-redundancy-tunnel-no-information
    </ipsec-redundancy-tunnel-no-information>
    <ipsec-tunnel-redundancy-primary-remote-address>
      ipsec-tunnel-redundancy-primary-remote-address
    </ipsec-tunnel-redundancy-primary-remote-address>
```


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```
      <ipsec-tunnel-redundancy-backup-remote-address>
        ipsec-tunnel-redundancy-backup-remote-address
      </ipsec-tunnel-redundancy-backup-remote-address>
      <ipsec-redundancy-primary-state>
        ipsec-redundancy-primary-state
      </ipsec-redundancy-primary-state>
      <ipsec-redundancy-backup-state>
        ipsec-redundancy-backup-state
      </ipsec-redundancy-backup-state>
    </tunnel-redundancy-extensive>
  </services-security-associations-block>
```

Description Information about IPSec tunnel redundancy

<tunnel-redundancy-extensive>

Usage

```
<services-security-associations-information>
  <services-security-associations-block>
    <tunnel-redundancy-extensive>
      <ipsec-redundancy-counter>
        ipsec-redundancy-counter
      </ipsec-redundancy-counter>
      <ipsec-redundancy-tunnel-no-information>
        ipsec-redundancy-tunnel-no-information
      </ipsec-redundancy-tunnel-no-information>
      <ipsec-tunnel-redundancy-primary-remote-address>
        ipsec-tunnel-redundancy-primary-remote-address
      </ipsec-tunnel-redundancy-primary-remote-address>
      <ipsec-tunnel-redundancy-backup-remote-address>
        ipsec-tunnel-redundancy-backup-remote-address
      </ipsec-tunnel-redundancy-backup-remote-address>
      <ipsec-redundancy-primary-state>
        ipsec-redundancy-primary-state
      </ipsec-redundancy-primary-state>
      <ipsec-redundancy-backup-state>
        ipsec-redundancy-backup-state
      </ipsec-redundancy-backup-state>
    </tunnel-redundancy-extensive>
  </services-security-associations-block>
</services-security-associations-information>
```

Description Information about IPSec tunnel redundancy

<tunnel-redundancy-extensive>

Usage

```
<services-security-associations-information>
  <tunnel-redundancy-extensive>
    <ipsec-redundancy-counter>
      ipsec-redundancy-counter
    </ipsec-redundancy-counter>
```

```
    <ipsec-redundancy-tunnel-no-information>
      ipsec-redundancy-tunnel-no-information
    </ipsec-redundancy-tunnel-no-information>
    <ipsec-tunnel-redundancy-primary-remote-address>
      ipsec-tunnel-redundancy-primary-remote-address
    </ipsec-tunnel-redundancy-primary-remote-address>
    <ipsec-tunnel-redundancy-backup-remote-address>
      ipsec-tunnel-redundancy-backup-remote-address
    </ipsec-tunnel-redundancy-backup-remote-address>
    <ipsec-redundancy-primary-state>
      ipsec-redundancy-primary-state
    </ipsec-redundancy-primary-state>
    <ipsec-redundancy-backup-state>
      ipsec-redundancy-backup-state
    </ipsec-redundancy-backup-state>
  </tunnel-redundancy-extensive>
</services-security-associations-information>
```

Description Information about IPSec tunnel redundancy

<usp-ipsec-total-statistics-information>

Usage

```
<usp-ipsec-total-statistics-information>
  <esp-statistics>....</esp-statistics>
  <ah-statistics>....</ah-statistics>
  <error-statistics>....</error-statistics>
</usp-ipsec-total-statistics-information>
```

Description

Summary of ISDN Response Tags

<ces-status>

Usage

```
<ces-status>
  <ces-num>
    ces-num
  </ces-num>
  <layer2-status>
    layer2-status
  </layer2-status>
  <tei-status>
    tei-status
  </tei-status>
  <tei-assigned>
    tei-assigned
  </tei-assigned>
</ces-status>
```


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Description Connection Endpoint Suffix status

<ces-status>

Usage

```
<q921-status>
  <ces-status>
    <ces-num>
      ces-num
    </ces-num>
    <layer2-status>
      layer2-status
    </layer2-status>
    <tei-status>
      tei-status
    </tei-status>
    <tei-assigned>
      tei-assigned
    </tei-assigned>
  </ces-status>
</q921-status>
```

Description Connection Endpoint Suffix status

<ces-status>

Usage

```
<isdn-status>
  <q921-status>
    <ces-status>
      <ces-num>
        ces-num
      </ces-num>
      <layer2-status>
        layer2-status
      </layer2-status>
      <tei-status>
        tei-status
      </tei-status>
      <tei-assigned>
        tei-assigned
      </tei-assigned>
    </ces-status>
  </q921-status>
</isdn-status>
```

Description Connection Endpoint Suffix status

<endpoint>

Usage

```
<endpoint>
```

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```
<ces-num>
  ces-num
</ces-num>
<isdn-spid>
  isdn-spid
</isdn-spid>
<endpoint-state>
  endpoint-state
</endpoint-state>
<usid>
  usid
</usid>
<tid>
  tid
</tid>
</endpoint>
```

Description Detailed output for one endpoint

<endpoint>

Usage

```
<endpoint-status>
  <endpoint>
    <ces-num>
      ces-num
    </ces-num>
    <isdn-spid>
      isdn-spid
    </isdn-spid>
    <endpoint-state>
      endpoint-state
    </endpoint-state>
    <usid>
      usid
    </usid>
    <tid>
      tid
    </tid>
  </endpoint>
</endpoint-status>
```

Description Detailed output for one endpoint

<endpoint>

Usage

```
<isdn-config-options>
  <endpoint-status>
    <endpoint>
      <ces-num>
        ces-num
```


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```
        </ces-num>
        <isdn-spid>
          isdn-spid
        </isdn-spid>
        <endpoint-state>
          endpoint-state
        </endpoint-state>
        <usid>
          usid
        </usid>
        <tid>
          tid
        </tid>
      </endpoint>
    </endpoint-status>
  </isdn-config-options>
```

Description Detailed output for one endpoint

<endpoint-status>

Usage

```
<endpoint-status>
  <endpoint>....</endpoint>
</endpoint-status>
```

Description ISDN endpoint status

<endpoint-status>

Usage

```
<isdn-config-options>
  <endpoint-status>
    <endpoint>....</endpoint>
  </endpoint-status>
</isdn-config-options>
```

Description ISDN endpoint status

<isdn-call>

Usage

```
<isdn-call>
  <bc-interface-name>
    bc-interface-name
  </bc-interface-name>
  <call-status>
    call-status
  </call-status>
  <error-code>
    error-code
```

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```
  </error-code>
  <call-duration>
   call-duration
  </call-duration>
  <call-direction>
   call-direction
  </call-direction>
  <called-number>
   called-number
  </called-number>
  <calling-number>
   calling-number
  </calling-number>
</isdn-call>
```

Description

<isdn-call>

Usage

```
<isdn-calls>
  <isdn-call>
    <bc-interface-name>
     bc-interface-name
    </bc-interface-name>
    <call-status>
     call-status
    </call-status>
    <error-code>
     error-code
    </error-code>
    <call-duration>
     call-duration
    </call-duration>
    <call-direction>
     call-direction
    </call-direction>
    <called-number>
     called-number
    </called-number>
    <calling-number>
     calling-number
    </calling-number>
  </isdn-call>
</isdn-calls>
```

Description

<isdn-call>

Usage

```
<isdn-call-history>
  <isdn-call>
    <bc-interface-name>
```


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```
      bc-interface-name
    </bc-interface-name>
    <call-status>
      call-status
    </call-status>
    <error-code>
      error-code
    </error-code>
    <call-duration>
      call-duration
    </call-duration>
    <call-direction>
      call-direction
    </call-direction>
    <called-number>
      called-number
    </called-number>
    <calling-number>
      calling-number
    </calling-number>
  </isdn-call>
</isdn-call-history>
```

Description

<isdn-call-history>

Usage

```
<isdn-call-history>
  <isdn-call>....</isdn-call>
</isdn-call-history>
```

Description

<isdn-calls>

Usage

```
<isdn-calls>
  <isdn-call>....</isdn-call>
</isdn-calls>
```

Description

<isdn-config-options>

Usage

```
<isdn-config-options>
  <isdn-switch-type>
    isdn-switch-type
  </isdn-switch-type>
  <isdn-interface-type>
    isdn-interface-type
  </isdn-interface-type>
```

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```
<isdn-calling-number>
  isdn-calling-number
</isdn-calling-number>
<isdn-timer-t306>
  isdn-timer-t306
</isdn-timer-t306>
<isdn-timer-t310>
  isdn-timer-t310
</isdn-timer-t310>
<isdn-tei-option>
  isdn-tei-option
</isdn-tei-option>
<endpoint-status>....</endpoint-status>
</isdn-config-options>
```

Description

<isdn-status>

Usage

```
<isdn-status>
  <isdn-interface-name>
    isdn-interface-name
  </isdn-interface-name>
  <layer1-status>
    layer1-status
  </layer1-status>
  <q921-status>....</q921-status>
  <q931-status>....</q931-status>
</isdn-status>
```

Description Isdn stack status

<q921-statistics>

Usage

```
<q921-statistics>
  <info-frame-sent>
    info-frame-sent
  </info-frame-sent>
  <rr-frame-sent>
    rr-frame-sent
  </rr-frame-sent>
  <rnr-frame-sent>
    rnr-frame-sent
  </rnr-frame-sent>
  <rej-frame-sent>
    rej-frame-sent
  </rej-frame-sent>
  <sabme-frame-sent>
    sabme-frame-sent
  </sabme-frame-sent>
  <disc-frame-sent>
```


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```
  disc-frame-sent
</disc-frame-sent>
<ua-frame-sent>
  ua-frame-sent
</ua-frame-sent>
<dm-frame-sent>
  dm-frame-sent
</dm-frame-sent>
<frmr-frame-sent>
  frmr-frame-sent
</frmr-frame-sent>
<xid-frame-sent>
  xid-frame-sent
</xid-frame-sent>
<ui-frame-sent>
  ui-frame-sent
</ui-frame-sent>
<info-frame-recv>
  info-frame-recv
</info-frame-recv>
<rr-frame-recv>
  rr-frame-recv
</rr-frame-recv>
<rnr-frame-recv>
  rnr-frame-recv
</rnr-frame-recv>
<rej-frame-recv>
  rej-frame-recv
</rej-frame-recv>
<sabme-frame-recv>
  sabme-frame-recv
</sabme-frame-recv>
<disc-frame-recv>
  disc-frame-recv
</disc-frame-recv>
<ua-frame-recv>
  ua-frame-recv
</ua-frame-recv>
<dm-frame-recv>
  dm-frame-recv
</dm-frame-recv>
<frmr-frame-recv>
  frmr-frame-recv
</frmr-frame-recv>
<xid-frame-recv>
  xid-frame-recv
</xid-frame-recv>
<ui-frame-recv>
  ui-frame-recv
</ui-frame-recv>
</q921-statistics>
```

Description

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<q921-status>

Usage

```
<q921-status>
  <ces-status>....</ces-status>
</q921-status>
```

Description Q921 status

<q921-status>

Usage

```
<isdn-status>
  <q921-status>
    <ces-status>....</ces-status>
  </q921-status>
</isdn-status>
```

Description Q921 status

<q931-statistics>

Usage

```
<q931-statistics>
  <alerting-sent>
    alerting-sent
  </alerting-sent>
  <call-proceed-sent>
    call-proceed-sent
  </call-proceed-sent>
  <conn-sent>
    conn-sent
  </conn-sent>
  <conn-ack-sent>
    conn-ack-sent
  </conn-ack-sent>
  <progress-sent>
    progress-sent
  </progress-sent>
  <setup-sent>
    setup-sent
  </setup-sent>
  <setup-ack-sent>
    setup-ack-sent
  </setup-ack-sent>
  <disc-sent>
    disc-sent
  </disc-sent>
  <rel-sent>
    rel-sent
  </rel-sent>
  <rel-cmplt-sent>
```


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```
  rel-cmplt-sent
</rel-cmplt-sent>
<rst-sent>
  rst-sent
</rst-sent>
<rst-ack-sent>
  rst-ack-sent
</rst-ack-sent>
<info-sent>
  info-sent
</info-sent>
<notify-sent>
  notify-sent
</notify-sent>
<stat-sent>
  stat-sent
</stat-sent>
<stat-enq-sent>
  stat-enq-sent
</stat-enq-sent>
<alerting-recv>
  alerting-recv
</alerting-recv>
<call-proceed-recv>
  call-proceed-recv
</call-proceed-recv>
<conn-recv>
  conn-recv
</conn-recv>
<conn-ack-recv>
  conn-ack-recv
</conn-ack-recv>
<progress-recv>
  progress-recv
</progress-recv>
<setup-recv>
  setup-recv
</setup-recv>
<setup-ack-recv>
  setup-ack-recv
</setup-ack-recv>
<disc-recv>
  disc-recv
</disc-recv>
<rel-recv>
  rel-recv
</rel-recv>
<rel-cmplt-recv>
  rel-cmplt-recv
</rel-cmplt-recv>
<rst-recv>
  rst-recv
</rst-recv>
<rst-ack-recv>
  rst-ack-recv
</rst-ack-recv>
```

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```
  <info-recv>
    info-recv
  </info-recv>
  <notify-recv>
    notify-recv
  </notify-recv>
  <stat-recv>
    stat-recv
  </stat-recv>
  <stat-enq-recv>
    stat-enq-recv
  </stat-enq-recv>
</q931-statistics>
```

Description

<q931-status>

Usage

```
<q931-status>
  <active-num-calls>
    active-num-calls
  </active-num-calls>
</q931-status>
```

Description Q931 layer 3 status

<q931-status>

Usage

```
<isdn-status>
  <q931-status>
    <active-num-calls>
      active-num-calls
    </active-num-calls>
  </q931-status>
</isdn-status>
```

Description Q931 layer 3 status

Summary of Stateful Redundancy Response Tags

<chassis-cluster-control>

Usage

```
<chassis-cluster-statistics>
  <chassis-cluster-interfaces>
    <chassis-cluster-control>
      <heartbeat-sent>
        heartbeat-sent
      </heartbeat-sent>
```


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```
        <heartbeat-received>
          heartbeat-received
        </heartbeat-received>
        <control-interface-index>
          control-interface-index
        </control-interface-index>
        <heartbeat-errors>
          heartbeat-errors
        </heartbeat-errors>
      </chassis-cluster-control>
    </chassis-cluster-interfaces>
  </chassis-cluster-statistics>
```

Description

<chassis-cluster-control-statistics>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-internal-statistics>
    <chassis-cluster-control-statistics>
      <heartbeat-sent>
        heartbeat-sent
      </heartbeat-sent>
      <heartbeat-received>
        heartbeat-received
      </heartbeat-received>
      <heartbeat-errors>
        heartbeat-errors
      </heartbeat-errors>
      <heartbeat-duplicates>
        heartbeat-duplicates
      </heartbeat-duplicates>
      <control-interface-index>
        control-interface-index
      </control-interface-index>
      <control-link-recovery-packet-count>
        control-link-recovery-packet-count
      </control-link-recovery-packet-count>
      <last-heartbeat-id-sent>
        last-heartbeat-id-sent
      </last-heartbeat-id-sent>
      <last-heartbeat-id-received>
        last-heartbeat-id-received
      </last-heartbeat-id-received>
    </chassis-cluster-control-statistics>
  </chassis-cluster-internal-statistics>
</chassis-cluster-information>
```

Description

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<chassis-cluster-dataplane-interfaces>

Usage

```
<chassis-cluster-dataplane-interfaces>
  <fabric-interface-index>
    fabric-interface-index
  </fabric-interface-index>
  <fabric-information>....</fabric-information>
</chassis-cluster-dataplane-interfaces>
```

Description

<chassis-cluster-ethernet-switching-interfaces>

Usage

```
<chassis-cluster-ethernet-switching-interfaces>
  <swfabric-interface-index>
    swfabric-interface-index
  </swfabric-interface-index>
  <swfabric-information>....</swfabric-information>
</chassis-cluster-ethernet-switching-interfaces>
```

Description

<chassis-cluster-ethernet-switching-statistics>

Usage

```
<chassis-cluster-ethernet-switching-statistics>
  <chassis-cluster-swfabric>....</chassis-cluster-swfabric>
</chassis-cluster-ethernet-switching-statistics>
```

Description

<chassis-cluster-ethernet-switching-status>

Usage

```
<chassis-cluster-ethernet-switching-status>
  <chassis-cluster-status>....</chassis-cluster-status>
  <ethernet-switching-status>
    ethernet-switching-status
  </ethernet-switching-status>
</chassis-cluster-ethernet-switching-status>
```

Description

<chassis-cluster-fabric>

Usage

```
<chassis-cluster-statistics>
  <chassis-cluster-interfaces>
    <chassis-cluster-fabric>
      <rto-packets>
```


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```
        rto-packets
       </rto-packets>
       <forwarded-packets>
        forwarded-packets
       </forwarded-packets>
       <fabric-child>....</fabric-child>
      </chassis-cluster-fabric>
     </chassis-cluster-interfaces>
    </chassis-cluster-statistics>
```

Description

<chassis-cluster-fabric-statistics>

Usage

```
<chassis-cluster-information>
 <chassis-cluster-internal-statistics>
  <chassis-cluster-fabric-statistics>
   <fabric-child>....</fabric-child>
  </chassis-cluster-fabric-statistics>
 </chassis-cluster-internal-statistics>
</chassis-cluster-information>
```

Description

<chassis-cluster-information>

Usage

```
<chassis-cluster-information>
 <chassis-cluster-redundancy-mode>....</chassis-cluster-redundancy-mode>
 <chassis-cluster-internal-statistics>....</chassis-cluster-internal-statistics>
 <chassis-cluster-led-information>....</chassis-cluster-led-information>
 <control-link-vlan-information>....</control-link-vlan-information>
 <redundancy-group-information-list>....</redundancy-group-information-list>
 <spu-monitoring-information>....</spu-monitoring-information>
 <loopback-information>....</loopback-information>

<cold-synchronization-monitoring-information>....</cold-synchronization-monitoring-information>

 <interface-monitoring-information>....</interface-monitoring-information>
 <fabric-link-information>....</fabric-link-information>
 <control-link-information>....</control-link-information>
 <hardware-monitoring-information>....</hardware-monitoring-information>
 <chassis-cluster-information-issu>....</chassis-cluster-information-issu>

<chassis-cluster-information-command-history>....</chassis-cluster-information-command-history>

 </chassis-cluster-information>
```

Description Displays complete statistics for debugging purposes

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<chassis-cluster-information-command-history>

Usage

```
<chassis-cluster-information-command-history>
  <chassis-cluster-information-command-history-event>
    chassis-cluster-information-command-history-event
  </chassis-cluster-information-command-history-event>
</chassis-cluster-information-command-history>
```

Description Displays command history information for debugging purposes

<chassis-cluster-information-command-history>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-information-command-history>
    <chassis-cluster-information-command-history-event>
      chassis-cluster-information-command-history-event
    </chassis-cluster-information-command-history-event>
  </chassis-cluster-information-command-history>
</chassis-cluster-information>
```

Description Displays command history information for debugging purposes

<chassis-cluster-information-issu>

Usage

```
<chassis-cluster-information-issu>
  <chassis-cluster-information-issu-event>
    chassis-cluster-information-issu-event
  </chassis-cluster-information-issu-event>
</chassis-cluster-information-issu>
```

Description Displays complete ISSU information for debugging purposes

<chassis-cluster-information-issu>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-information-issu>
    <chassis-cluster-information-issu-event>
      chassis-cluster-information-issu-event
    </chassis-cluster-information-issu-event>
  </chassis-cluster-information-issu>
</chassis-cluster-information>
```

Description Displays complete ISSU information for debugging purposes

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<chassis-cluster-information-uspipc>

Usage

```
<chassis-cluster-information-uspipc>
  <chassis-cluster-information-uspipc-event>
    chassis-cluster-information-uspipc-event
  </chassis-cluster-information-uspipc-event>
</chassis-cluster-information-uspipc>
```

Description Displays complete uspipc information for debugging purposes

<chassis-cluster-interface-statistics>

Usage

```
<chassis-cluster-interface-statistics>
  <control-interface-status>
    control-interface-status
  </control-interface-status>
  <control-link-interfaces>....</control-link-interfaces>
  <dataplane-interface-status>
    dataplane-interface-status
  </dataplane-interface-status>
  <dataplane-interfaces>....</dataplane-interfaces>
  <reth>....</reth>
  <interface-monitoring>....</interface-monitoring>
</chassis-cluster-interface-statistics>
```

Description

<chassis-cluster-interfaces>

Usage

```
<chassis-cluster-statistics>
  <chassis-cluster-interfaces>
    <chassis-cluster-control>....</chassis-cluster-control>
    <chassis-cluster-fabric>....</chassis-cluster-fabric>
  </chassis-cluster-interfaces>
</chassis-cluster-statistics>
```

Description

<chassis-cluster-internal-statistics>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-internal-statistics>
    <chassis-cluster-control-statistics>....</chassis-cluster-control-statistics>
    <chassis-cluster-fabric-statistics>....</chassis-cluster-fabric-statistics>
    <chassis-cluster-swfabric-statistics>....</chassis-cluster-swfabric-statistics>
  </chassis-cluster-internal-statistics>
</chassis-cluster-information>
```

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Description

<chassis-cluster-ip-monitoring>

Usage

```
<chassis-cluster-ip-monitoring>
  <redundancy-group>
    redundancy-group
  </redundancy-group>
  <ip-monitoring-weight>
    ip-monitoring-weight
  </ip-monitoring-weight>
  <ip-reachability-status>
    ip-reachability-status
  </ip-reachability-status>
  <reason>
    reason
  </reason>
  <ip-address>
    ip-address
  </ip-address>
  <failure-count>
    failure-count
  </failure-count>
</chassis-cluster-ip-monitoring>
```

Description

<chassis-cluster-ip-monitoring-database>

Usage

```
<chassis-cluster-ip-monitoring-information>
  <chassis-cluster-ip-monitoring-database>
    <ip-monitoring-index>
      ip-monitoring-index
    </ip-monitoring-index>
    <ip-monitoring-version>
      ip-monitoring-version
    </ip-monitoring-version>
    <ip-monitoring-ip-address>
      ip-monitoring-ip-address
    </ip-monitoring-ip-address>
    <ip-monitoring-redundant-ethernet>
      ip-monitoring-redundant-ethernet
    </ip-monitoring-redundant-ethernet>
    <ip-monitoring-status>
      ip-monitoring-status
    </ip-monitoring-status>
    <ip-monitoring-retry-count>
      ip-monitoring-retry-count
    </ip-monitoring-retry-count>
    <ip-monitoring-retry-interval>
      ip-monitoring-retry-interval
    </ip-monitoring-retry-interval>
    <ip-monitoring-reth-logical-interface-count>
```


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```
        ip-monitoring-reth-logical-interface-count
      </ip-monitoring-reth-logical-interface-count>
      <ip-monitoring-redundancy-group>
        ip-monitoring-redundancy-group
      </ip-monitoring-redundancy-group>
      <ip-monitoring-secondary-ip-address>
        ip-monitoring-secondary-ip-address
      </ip-monitoring-secondary-ip-address>
    </chassis-cluster-ip-monitoring-database>
  </chassis-cluster-ip-monitoring-information>
```

Description

<chassis-cluster-ip-monitoring-global-database>

Usage

```
<chassis-cluster-ip-monitoring-information>
  <chassis-cluster-ip-monitoring-global-database>
    <ip-monitoring-index>
      ip-monitoring-index
    </ip-monitoring-index>
    <ip-monitoring-version>
      ip-monitoring-version
    </ip-monitoring-version>
    <ip-monitoring-ip-address>
      ip-monitoring-ip-address
    </ip-monitoring-ip-address>
    <ip-monitoring-redundant-ethernet>
      ip-monitoring-redundant-ethernet
    </ip-monitoring-redundant-ethernet>
    <ip-monitoring-reference-count>
      ip-monitoring-reference-count
    </ip-monitoring-reference-count>
    <ip-monitoring-status>
      ip-monitoring-status
    </ip-monitoring-status>
  </chassis-cluster-ip-monitoring-global-database>
</chassis-cluster-ip-monitoring-information>
```

Description

<chassis-cluster-ip-monitoring-information>

Usage

```
<chassis-cluster-ip-monitoring-information>

<chassis-cluster-ip-monitoring-global-database>....</chassis-cluster-ip-monitoring-global-database>


<chassis-cluster-ip-monitoring-database>....</chassis-cluster-ip-monitoring-database>

  <chassis-cluster-reth-database>....</chassis-cluster-reth-database>
</chassis-cluster-ip-monitoring-information>
```

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Description Show IP monitoring information

<chassis-cluster-led-information>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-led-information>
    <current-led-color>
      current-led-color
    </current-led-color>
    <last-change-reason>
      last-change-reason
    </last-change-reason>
  </chassis-cluster-led-information>
</chassis-cluster-information>
```

Description Chassis cluster LED related information

<chassis-cluster-redundancy-mode>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-redundancy-mode>
    <configured>
      configured
    </configured>
    <operational>
      operational
    </operational>
  </chassis-cluster-redundancy-mode>
</chassis-cluster-information>
```

Description

<chassis-cluster-reth-database>

Usage

```
<chassis-cluster-ip-monitoring-information>
  <chassis-cluster-reth-database>
    <ip-monitoring-redundant-ethernet>
      ip-monitoring-redundant-ethernet
    </ip-monitoring-redundant-ethernet>
    <reth-child-info-count>
      reth-child-info-count
    </reth-child-info-count>
    <reth-interface-to-mac-status>
      reth-interface-to-mac-status
    </reth-interface-to-mac-status>
    <reth-child-interface>
      reth-child-interface
    </reth-child-interface>
    <reth-child-mac-address>
      reth-child-mac-address
```


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```
    </reth-child-mac-address>
    <reth-child-status>
     reth-child-status
    </reth-child-status>
   </chassis-cluster-reth-database>
</chassis-cluster-ip-monitoring-information>
```

Description

<chassis-cluster-statistics>

Usage

```
<chassis-cluster-statistics>
  <chassis-cluster-interfaces>....</chassis-cluster-interfaces>
</chassis-cluster-statistics>
```

Description

<chassis-cluster-status>

Usage

```
<chassis-cluster-status>
  <cluster-id>
   cluster-id
  </cluster-id>
  <redundancy-group>
   redundancy-group
  </redundancy-group>
</chassis-cluster-status>
```

Description

<chassis-cluster-status>

Usage

```
<chassis-cluster-ethernet-switching-status>
  <chassis-cluster-status>
    <cluster-id>
     cluster-id
    </cluster-id>
    <redundancy-group>
     redundancy-group
    </redundancy-group>
  </chassis-cluster-status>
</chassis-cluster-ethernet-switching-status>
```

Description

<chassis-cluster-swfabric>

Usage

```
<chassis-cluster-swfabric>
```

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```
<swfabric-probe-state>
  swfabric-probe-state
</swfabric-probe-state>
<swfabric-link-heartbeat-packets-sent>
  swfabric-link-heartbeat-packets-sent
</swfabric-link-heartbeat-packets-sent>
<swfabric-link-heartbeat-packets-received>
  swfabric-link-heartbeat-packets-received
</swfabric-link-heartbeat-packets-received>
<swfabric-probe-recv-errors>
  swfabric-probe-recv-errors
</swfabric-probe-recv-errors>
<swfabric-probe-send-errors>
  swfabric-probe-send-errors
</swfabric-probe-send-errors>
</chassis-cluster-swfabric>
```

Description

<chassis-cluster-swfabric>

Usage

```
<chassis-cluster-ethernet-switching-statistics>
  <chassis-cluster-swfabric>
    <swfabric-probe-state>
      swfabric-probe-state
    </swfabric-probe-state>
    <swfabric-link-heartbeat-packets-sent>
      swfabric-link-heartbeat-packets-sent
    </swfabric-link-heartbeat-packets-sent>
    <swfabric-link-heartbeat-packets-received>
      swfabric-link-heartbeat-packets-received
    </swfabric-link-heartbeat-packets-received>
    <swfabric-probe-recv-errors>
      swfabric-probe-recv-errors
    </swfabric-probe-recv-errors>
    <swfabric-probe-send-errors>
      swfabric-probe-send-errors
    </swfabric-probe-send-errors>
  </chassis-cluster-swfabric>
</chassis-cluster-ethernet-switching-statistics>
```

Description

<chassis-cluster-swfabric-statistics>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-internal-statistics>
    <chassis-cluster-swfabric-statistics>
      <swfabric-probe-state>
        swfabric-probe-state
      </swfabric-probe-state>
      <swfabric-link-heartbeat-packets-sent>
```


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```
            swfabric-link-heartbeat-packets-sent
          </swfabric-link-heartbeat-packets-sent>
          <swfabric-link-heartbeat-packets-received>
            swfabric-link-heartbeat-packets-received
          </swfabric-link-heartbeat-packets-received>
          <swfabric-probe-recv-errors>
            swfabric-probe-recv-errors
          </swfabric-probe-recv-errors>
          <swfabric-probe-send-errors>
            swfabric-probe-send-errors
          </swfabric-probe-send-errors>
          <swfabric-probe-recv-dropped>
            swfabric-probe-recv-dropped
          </swfabric-probe-recv-dropped>
          <swfabric-last-probe-id-sent>
            swfabric-last-probe-id-sent
          </swfabric-last-probe-id-sent>
          <swfabric-last-probe-id-rcvd>
            swfabric-last-probe-id-rcvd
          </swfabric-last-probe-id-rcvd>
        </chassis-cluster-swfabric-statistics>
      </chassis-cluster-internal-statistics>
    </chassis-cluster-information>
```

Description

<clear-chassis-cluster-information>

Usage

```
<clear-chassis-cluster-information>
  <chassis-cluster-information-type>
    chassis-cluster-information-type
  </chassis-cluster-information-type>
</clear-chassis-cluster-information>
```

Description Clear chassis cluster information

<clear-chassis-cluster-statistics>

Usage

```
<clear-chassis-cluster-statistics>
  <chassis-cluster-statistics-type>
    chassis-cluster-statistics-type
  </chassis-cluster-statistics-type>
</clear-chassis-cluster-statistics>
```

Description Clear chassis cluster statistics

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<cold-synchronization-events>

Usage

```
<cold-synchronization-monitoring-information>
  <cold-synchronization-events>
    <cold-synchronization-event>
      cold-synchronization-event
    </cold-synchronization-event>
  </cold-synchronization-events>
</cold-synchronization-monitoring-information>
```

Description List of cold synchronization events

<cold-synchronization-events>

Usage

```
<chassis-cluster-information>
  <cold-synchronization-monitoring-information>
    <cold-synchronization-events>
      <cold-synchronization-event>
        cold-synchronization-event
      </cold-synchronization-event>
    </cold-synchronization-events>
  </cold-synchronization-monitoring-information>
</chassis-cluster-information>
```

Description List of cold synchronization events

<cold-synchronization-monitoring-information>

Usage

```
<cold-synchronization-monitoring-information>

<cold-synchronization-status-information>....</cold-synchronization-status-information>

  <cold-synchronization-statistics>....</cold-synchronization-statistics>
  <cold-synchronization-events>....</cold-synchronization-events>
</cold-synchronization-monitoring-information>
```

Description Cold sync monitoring related information

<cold-synchronization-monitoring-information>

Usage

```
<chassis-cluster-information>
  <cold-synchronization-monitoring-information>

<cold-synchronization-status-information>....</cold-synchronization-status-information>

    <cold-synchronization-statistics>....</cold-synchronization-statistics>
```


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```
    <cold-synchronization-events>....</cold-synchronization-events>
   </cold-synchronization-monitoring-information>
</chassis-cluster-information>
```

Description Cold sync monitoring related information

<cold-synchronization-pfe-statistics>

Usage

```
<cold-synchronization-monitoring-information>
  <cold-synchronization-statistics>
    <cold-synchronization-pfe-statistics>
      <pfe-name>
        pfe-name
      </pfe-name>
      <cold-synchronization-pfe-completed>
        cold-synchronization-pfe-completed
      </cold-synchronization-pfe-completed>
      <cold-synchronization-pfe-failed>
        cold-synchronization-pfe-failed
      </cold-synchronization-pfe-failed>
    </cold-synchronization-pfe-statistics>
  </cold-synchronization-statistics>
</cold-synchronization-monitoring-information>
```

Description Cold synchroniizaton statistics for each PFE

<cold-synchronization-pfe-statistics>

Usage

```
<chassis-cluster-information>
  <cold-synchronization-monitoring-information>
    <cold-synchronization-statistics>
      <cold-synchronization-pfe-statistics>
        <pfe-name>
          pfe-name
        </pfe-name>
        <cold-synchronization-pfe-completed>
          cold-synchronization-pfe-completed
        </cold-synchronization-pfe-completed>
        <cold-synchronization-pfe-failed>
          cold-synchronization-pfe-failed
        </cold-synchronization-pfe-failed>
      </cold-synchronization-pfe-statistics>
    </cold-synchronization-statistics>
  </cold-synchronization-monitoring-information>
</chassis-cluster-information>
```

Description Cold synchroniizaton statistics for each PFE

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<cold-synchronization-statistics>

Usage

```
<cold-synchronization-monitoring-information>
  <cold-synchronization-statistics>
    <current-cold-synchronization-completed>
      current-cold-synchronization-completed
    </current-cold-synchronization-completed>
    <current-cold-synchronization-failed>
      current-cold-synchronization-failed
    </current-cold-synchronization-failed>
    <cold-synchronization-pfe-statistics>....</cold-synchronization-pfe-statistics>
  </cold-synchronization-statistics>
</cold-synchronization-monitoring-information>
```

Description Cold synchronization statistics

<cold-synchronization-statistics>

Usage

```
<chassis-cluster-information>
  <cold-synchronization-monitoring-information>
    <cold-synchronization-statistics>
      <current-cold-synchronization-completed>
        current-cold-synchronization-completed
      </current-cold-synchronization-completed>
      <current-cold-synchronization-failed>
        current-cold-synchronization-failed
      </current-cold-synchronization-failed>
      <cold-synchronization-pfe-statistics>....</cold-synchronization-pfe-statistics>

    </cold-synchronization-statistics>
  </cold-synchronization-monitoring-information>
</chassis-cluster-information>
```

Description Cold synchronization statistics

<cold-synchronization-status-information>

Usage

```
<cold-synchronization-monitoring-information>
  <cold-synchronization-status-information>
    <cold-synchronization-completed>
      cold-synchronization-completed
    </cold-synchronization-completed>
    <cold-synchronization-not-completed>
      cold-synchronization-not-completed
    </cold-synchronization-not-completed>
    <cold-synchronization-unknown>
      cold-synchronization-unknown
    </cold-synchronization-unknown>
    <cold-synchronization-weight>
```


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```
      cold-synchronization-weight
    </cold-synchronization-weight>
  </cold-synchronization-status-information>
</cold-synchronization-monitoring-information>
```

Description Cold synchronization related status information

<cold-synchronization-status-information>

Usage

```
<chassis-cluster-information>
  <cold-synchronization-monitoring-information>
    <cold-synchronization-status-information>
      <cold-synchronization-completed>
        cold-synchronization-completed
      </cold-synchronization-completed>
      <cold-synchronization-not-completed>
        cold-synchronization-not-completed
      </cold-synchronization-not-completed>
      <cold-synchronization-unknown>
        cold-synchronization-unknown
      </cold-synchronization-unknown>
      <cold-synchronization-weight>
        cold-synchronization-weight
      </cold-synchronization-weight>
    </cold-synchronization-status-information>
  </cold-synchronization-monitoring-information>
</chassis-cluster-information>
```

Description Cold synchronization related status information

<control-information>

Usage

```
<chassis-cluster-interface-statistics>
  <control-link-interfaces>
    <control-information>
      <control-link-interface-index>
        control-link-interface-index
      </control-link-interface-index>
      <control-link-interface-name>
        control-link-interface-name
      </control-link-interface-name>
      <control-link-interface-status>
        control-link-interface-status
      </control-link-interface-status>
    </control-information>
  </control-link-interfaces>
</chassis-cluster-interface-statistics>
```

Description

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<control-link-client-information>

Usage

```
<control-link-information>
  <control-link-client-information>
    <client-status>
      client-status
    </client-status>
    <client-connections>
      client-connections
    </client-connections>
  </control-link-client-information>
</control-link-information>
```

Description Control link client information

<control-link-client-information>

Usage

```
<chassis-cluster-information>
  <control-link-information>
    <control-link-client-information>
      <client-status>
        client-status
      </client-status>
      <client-connections>
        client-connections
      </client-connections>
    </control-link-client-information>
  </control-link-information>
</chassis-cluster-information>
```

Description Control link client information

<control-link-events>

Usage

```
<control-link-information>
  <control-link-events>
    <control-link-event>
      control-link-event
    </control-link-event>
  </control-link-events>
</control-link-information>
```

Description List of control link events

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<control-link-events>

Usage

```
<chassis-cluster-information>
  <control-link-information>
    <control-link-events>
      <control-link-event>
        control-link-event
      </control-link-event>
    </control-link-events>
  </control-link-information>
</chassis-cluster-information>
```

Description List of control link events

<control-link-hb-events>

Usage

```
<control-link-information>
  <control-link-hb-events>
    <control-link-hb-event>
      control-link-hb-event
    </control-link-hb-event>
  </control-link-hb-events>
</control-link-information>
```

Description List of control link monitoring heartbeat and jitter events

<control-link-hb-events>

Usage

```
<chassis-cluster-information>
  <control-link-information>
    <control-link-hb-events>
      <control-link-hb-event>
        control-link-hb-event
      </control-link-hb-event>
    </control-link-hb-events>
  </control-link-information>
</chassis-cluster-information>
```

Description List of control link monitoring heartbeat and jitter events

<control-link-information>

Usage

```
<control-link-information>
  <control-interface-status>
    control-interface-status
  </control-interface-status>
```

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```
  <control-link-server-information>....</control-link-server-information>
  <control-link-client-information>....</control-link-client-information>
  <control-link-events>....</control-link-events>
  <control-link-hb-events>....</control-link-hb-events>
</control-link-information>
```

Description Displays complete control link information for debugging purposes

<control-link-information>

Usage

```
<chassis-cluster-information>
  <control-link-information>
    <control-interface-status>
      control-interface-status
    </control-interface-status>
    <control-link-server-information>....</control-link-server-information>
    <control-link-client-information>....</control-link-client-information>
    <control-link-events>....</control-link-events>
    <control-link-hb-events>....</control-link-hb-events>
  </control-link-information>
</chassis-cluster-information>
```

Description Displays complete control link information for debugging purposes

<control-link-interfaces>

Usage

```
<chassis-cluster-interface-statistics>
  <control-link-interfaces>
    <control-information>....</control-information>
  </control-link-interfaces>
</chassis-cluster-interface-statistics>
```

Description

<control-link-server-information>

Usage

```
<control-link-information>
  <control-link-server-information>
    <server-status>
      server-status
    </server-status>
    <server-connections>
      server-connections
    </server-connections>
  </control-link-server-information>
</control-link-information>
```


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Description Control link server information

<control-link-server-information>

Usage

```
<chassis-cluster-information>
  <control-link-information>
    <control-link-server-information>
      <server-status>
        server-status
      </server-status>
      <server-connections>
        server-connections
      </server-connections>
    </control-link-server-information>
  </control-link-information>
</chassis-cluster-information>
```

Description Control link server information

<control-link-vlan-information>

Usage

```
<chassis-cluster-information>
  <control-link-vlan-information>
    <control-link-vlan-status>
      control-link-vlan-status
    </control-link-vlan-status>
  </control-link-vlan-information>
</chassis-cluster-information>
```

Description Control port traffic tagging with vlan(4094) enabled or disabled

<dataplane-interfaces>

Usage

```
<chassis-cluster-interface-statistics>
  <dataplane-interfaces>
    <fabric-information>....</fabric-information>
  </dataplane-interfaces>
</chassis-cluster-interface-statistics>
```

Description

<fabric-child>

Usage

```
<chassis-cluster-statistics>
  <chassis-cluster-interfaces>
    <chassis-cluster-fabric>
      <fabric-child>
```

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```
        <fabric-child-index>
          fabric-child-index
        </fabric-child-index>
        <fabric-hello-sent>
          fabric-hello-sent
        </fabric-hello-sent>
        <fabric-hello-received>
          fabric-hello-received
        </fabric-hello-received>
        <fabric-hello-error>
          fabric-hello-error
        </fabric-hello-error>
      </fabric-child>
    </chassis-cluster-fabric>
  </chassis-cluster-interfaces>
</chassis-cluster-statistics>
```

Description

<fabric-child>

Usage

```
<chassis-cluster-information>
  <chassis-cluster-internal-statistics>
    <chassis-cluster-fabric-statistics>
      <fabric-child>
        <fabric-child-index>
          fabric-child-index
        </fabric-child-index>
        <fabric-hello-sent>
          fabric-hello-sent
        </fabric-hello-sent>
        <fabric-hello-received>
          fabric-hello-received
        </fabric-hello-received>
        <fabric-hello-error>
          fabric-hello-error
        </fabric-hello-error>
      </fabric-child>
    </chassis-cluster-fabric-statistics>
  </chassis-cluster-internal-statistics>
</chassis-cluster-information>
```

Description

<fabric-information>

Usage

```
<chassis-cluster-interface-statistics>
  <dataplane-interfaces>
    <fabric-information>
      <fabric-interface-index>
        fabric-interface-index
      </fabric-interface-index>
```


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```
      <fabric-child-interface-name>
        fabric-child-interface-name
      </fabric-child-interface-name>
      <fabric-child-interface-status>
        fabric-child-interface-status
      </fabric-child-interface-status>
    </fabric-information>
  </dataplane-interfaces>
</chassis-cluster-interface-statistics>
```

Description

<fabric-information>

Usage

```
<chassis-cluster-dataplane-interfaces>
  <fabric-information>
    <fabric-interface-index>
      fabric-interface-index
    </fabric-interface-index>
    <fabric-child-interface-name>
      fabric-child-interface-name
    </fabric-child-interface-name>
    <fabric-child-interface-status>
      fabric-child-interface-status
    </fabric-child-interface-status>
  </fabric-information>
</chassis-cluster-dataplane-interfaces>
```

Description

<fabric-link-events>

Usage

```
<fabric-link-information>
  <fabric-link-events>
    <fabric-link-event>
      fabric-link-event
    </fabric-link-event>
  </fabric-link-events>
</fabric-link-information>
```

Description List of fabric link events

<fabric-link-events>

Usage

```
<chassis-cluster-information>
  <fabric-link-information>
    <fabric-link-events>
      <fabric-link-event>
        fabric-link-event
```

```
      </fabric-link-event>
    </fabric-link-events>
  </fabric-link-information>
</chassis-cluster-information>
```

Description List of fabric link events

<fabric-link-hb-events>

Usage

```
<fabric-link-information>
  <fabric-link-hb-events>
    <fabric-link-hb-event>
      fabric-link-hb-event
    </fabric-link-hb-event>
  </fabric-link-hb-events>
</fabric-link-information>
```

Description List of fabric link heartbeat and jitter events

<fabric-link-hb-events>

Usage

```
<chassis-cluster-information>
  <fabric-link-information>
    <fabric-link-hb-events>
      <fabric-link-hb-event>
        fabric-link-hb-event
      </fabric-link-hb-event>
    </fabric-link-hb-events>
  </fabric-link-information>
</chassis-cluster-information>
```

Description List of fabric link heartbeat and jitter events

<fabric-link-information>

Usage

```
<fabric-link-information>
  <fabric-monitoring-information>....</fabric-monitoring-information>
  <fabric-link-events>....</fabric-link-events>
  <fabric-link-hb-events>....</fabric-link-hb-events>
</fabric-link-information>
```

Description Displays complete fabric link information for debugging purposes

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<fabric-link-information>

Usage

```
<chassis-cluster-information>
  <fabric-link-information>
    <fabric-monitoring-information>....</fabric-monitoring-information>
    <fabric-link-events>....</fabric-link-events>
    <fabric-link-hb-events>....</fabric-link-hb-events>
  </fabric-link-information>
</chassis-cluster-information>
```

Description Displays complete fabric link information for debugging purposes

<fabric-monitoring-information>

Usage

```
<fabric-monitoring-information>
  <fabric-monitoring-status>....</fabric-monitoring-status>
</fabric-monitoring-information>
```

Description Fabric monitoring related information

<fabric-monitoring-information>

Usage

```
<fabric-link-information>
  <fabric-monitoring-information>
    <fabric-monitoring-status>....</fabric-monitoring-status>
  </fabric-monitoring-information>
</fabric-link-information>
```

Description Fabric monitoring related information

<fabric-monitoring-information>

Usage

```
<chassis-cluster-information>
  <fabric-link-information>
    <fabric-monitoring-information>
      <fabric-monitoring-status>....</fabric-monitoring-status>
    </fabric-monitoring-information>
  </fabric-link-information>
</chassis-cluster-information>
```

Description Fabric monitoring related information

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<fabric-monitoring-status>

Usage

```
<fabric-monitoring-information>
  <fabric-monitoring-status>
    <fabric-monitoring-state>
      fabric-monitoring-state
    </fabric-monitoring-state>
    <fabric-monitoring-activation-status>
      fabric-monitoring-activation-status
    </fabric-monitoring-activation-status>
    <fabric-monitoring-data-plane-notified-status>
      fabric-monitoring-data-plane-notified-status
    </fabric-monitoring-data-plane-notified-status>
    <fabric-monitoring-internal-status>
      fabric-monitoring-internal-status
    </fabric-monitoring-internal-status>
  </fabric-monitoring-status>
</fabric-monitoring-information>
```

Description Fabric monitoring status

<fabric-monitoring-status>

Usage

```
<fabric-link-information>
  <fabric-monitoring-information>
    <fabric-monitoring-status>
      <fabric-monitoring-state>
        fabric-monitoring-state
      </fabric-monitoring-state>
      <fabric-monitoring-activation-status>
        fabric-monitoring-activation-status
      </fabric-monitoring-activation-status>
      <fabric-monitoring-data-plane-notified-status>
        fabric-monitoring-data-plane-notified-status
      </fabric-monitoring-data-plane-notified-status>
      <fabric-monitoring-internal-status>
        fabric-monitoring-internal-status
      </fabric-monitoring-internal-status>
    </fabric-monitoring-status>
  </fabric-monitoring-information>
</fabric-link-information>
```

Description Fabric monitoring status

<fabric-monitoring-status>

Usage

```
<chassis-cluster-information>
  <fabric-link-information>
    <fabric-monitoring-information>
```


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```
<fabric-monitoring-status>
  <fabric-monitoring-state>
    fabric-monitoring-state
  </fabric-monitoring-state>
  <fabric-monitoring-activation-status>
    fabric-monitoring-activation-status
  </fabric-monitoring-activation-status>
  <fabric-monitoring-data-plane-notified-status>
    fabric-monitoring-data-plane-notified-status
  </fabric-monitoring-data-plane-notified-status>
  <fabric-monitoring-internal-status>
    fabric-monitoring-internal-status
  </fabric-monitoring-internal-status>
</fabric-monitoring-status>
</fabric-monitoring-information>
</fabric-link-information>
</chassis-cluster-information>
```

Description Fabric monitoring status

<hardware-monitoring-events>

Usage

```
<hardware-monitoring-information>
  <hardware-monitoring-events>
    <hardware-monitoring-event>
      hardware-monitoring-event
    </hardware-monitoring-event>
  </hardware-monitoring-events>
</hardware-monitoring-information>
```

Description List of hardware monitoring events

<hardware-monitoring-events>

Usage

```
<chassis-cluster-information>
  <hardware-monitoring-information>
    <hardware-monitoring-events>
      <hardware-monitoring-event>
        hardware-monitoring-event
      </hardware-monitoring-event>
    </hardware-monitoring-events>
  </hardware-monitoring-information>
</chassis-cluster-information>
```

Description List of hardware monitoring events

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<hardware-monitoring-information>

Usage

```
<hardware-monitoring-information>

<hardware-monitoring-status-information>....</hardware-monitoring-status-information>

  <hardware-monitoring-events>....</hardware-monitoring-events>
</hardware-monitoring-information>
```

Description Displays complete hardware monitoring information for debugging purposes

<hardware-monitoring-information>

Usage

```
<chassis-cluster-information>
  <hardware-monitoring-information>

<hardware-monitoring-status-information>....</hardware-monitoring-status-information>

    <hardware-monitoring-events>....</hardware-monitoring-events>
  </hardware-monitoring-information>
</chassis-cluster-information>
```

Description Displays complete hardware monitoring information for debugging purposes

<hardware-monitoring-status-information>

Usage

```
<hardware-monitoring-information>
  <hardware-monitoring-status-information>
    <hardware-monitoring-activation-status>
      hardware-monitoring-activation-status
    </hardware-monitoring-activation-status>
    <hardware-monitoring-rg0-errors>
      hardware-monitoring-rg0-errors
    </hardware-monitoring-rg0-errors>
    <hardware-monitoring-rg1-errors>
      hardware-monitoring-rg1-errors
    </hardware-monitoring-rg1-errors>
    <hardware-monitoring-rg0-failover>
      hardware-monitoring-rg0-failover
    </hardware-monitoring-rg0-failover>
  </hardware-monitoring-status-information>
</hardware-monitoring-information>
```

Description

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<hardware-monitoring-status-information>

Usage

```
<chassis-cluster-information>
  <hardware-monitoring-information>
    <hardware-monitoring-status-information>
      <hardware-monitoring-activation-status>
        hardware-monitoring-activation-status
      </hardware-monitoring-activation-status>
      <hardware-monitoring-rg0-errors>
        hardware-monitoring-rg0-errors
      </hardware-monitoring-rg0-errors>
      <hardware-monitoring-rg1-errors>
        hardware-monitoring-rg1-errors
      </hardware-monitoring-rg1-errors>
      <hardware-monitoring-rg0-failover>
        hardware-monitoring-rg0-failover
      </hardware-monitoring-rg0-failover>
    </hardware-monitoring-status-information>
  </hardware-monitoring-information>
</chassis-cluster-information>
```

Description

<interface-monitoring>

Usage

```
<chassis-cluster-interface-statistics>
  <interface-monitoring>
    <weight>
      weight
    </weight>
    <status>
      status
    </status>
    <interface-name-for-monitoring>
      interface-name-for-monitoring
    </interface-name-for-monitoring>
    <redundancy-group-for-interface>
      redundancy-group-for-interface
    </redundancy-group-for-interface>
  </interface-monitoring>
</chassis-cluster-interface-statistics>
```

Description

<interface-monitoring-events>

Usage

```
<interface-monitoring-information>
  <interface-monitoring-events>
    <interface-monitoring-event>
      interface-monitoring-event
```

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```
    </interface-monitoring-event>
  </interface-monitoring-events>
</interface-monitoring-information>
```

Description List of interface monitoring events

<interface-monitoring-events>

Usage

```
<chassis-cluster-information>
  <interface-monitoring-information>
    <interface-monitoring-events>
      <interface-monitoring-event>
        interface-monitoring-event
      </interface-monitoring-event>
    </interface-monitoring-events>
  </interface-monitoring-information>
</chassis-cluster-information>
```

Description List of interface monitoring events

<interface-monitoring-information>

Usage

```
<interface-monitoring-information>
  <interface-monitoring-statistics>....</interface-monitoring-statistics>
  <interface-monitoring-events>....</interface-monitoring-events>
</interface-monitoring-information>
```

Description Interface monitoring related information

<interface-monitoring-information>

Usage

```
<chassis-cluster-information>
  <interface-monitoring-information>
    <interface-monitoring-statistics>....</interface-monitoring-statistics>
    <interface-monitoring-events>....</interface-monitoring-events>
  </interface-monitoring-information>
</chassis-cluster-information>
```

Description Interface monitoring related information

<interface-monitoring-statistics>

Usage

```
<interface-monitoring-information>
  <interface-monitoring-statistics>
    <monitored-interface-failover-count>
```


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```
        monitored-interface-failover-count
      </monitored-interface-failover-count>
    </interface-monitoring-statistics>
  </interface-monitoring-information>
```

Description Interface monitoring related statistics

<interface-monitoring-statistics>

Usage

```
<chassis-cluster-information>
  <interface-monitoring-information>
    <interface-monitoring-statistics>
      <monitored-interface-failover-count>
        monitored-interface-failover-count
      </monitored-interface-failover-count>
    </interface-monitoring-statistics>
  </interface-monitoring-information>
</chassis-cluster-information>
```

Description Interface monitoring related statistics

<loopback-information>

Usage

```
<loopback-information>
  <pfe-name>
    pfe-name
  </pfe-name>
  <loopback-status>
    loopback-status
  </loopback-status>
  <nexthop-status>
    nexthop-status
  </nexthop-status>
  <mbuf-status>
    mbuf-status
  </mbuf-status>
</loopback-information>
```

Description Loopback information

<loopback-information>

Usage

```
<chassis-cluster-information>
  <loopback-information>
    <pfe-name>
      pfe-name
    </pfe-name>
    <loopback-status>
```

```
            loopback-status
          </loopback-status>
          <nexthop-status>
            nexthop-status
          </nexthop-status>
          <mbuf-status>
            mbuf-status
          </mbuf-status>
        </loopback-information>
      </chassis-cluster-information>
```

Description Loopback information

<redundancy-group-information>

Usage

```
      <redundancy-group-information-list>
        <redundancy-group-information>
          <redundancy-group-id>
            redundancy-group-id
          </redundancy-group-id>

      <redundancy-group-monitoring-information>....</redundancy-group-monitoring-information>


      <redundancy-group-state-transition-events>....</redundancy-group-state-transition-events>

        </redundancy-group-information>
      </redundancy-group-information-list>
```

Description Redundancy group related information

<redundancy-group-information>

Usage

```
      <chassis-cluster-information>
        <redundancy-group-information-list>
          <redundancy-group-information>
            <redundancy-group-id>
              redundancy-group-id
            </redundancy-group-id>

      <redundancy-group-monitoring-information>....</redundancy-group-monitoring-information>


      <redundancy-group-state-transition-events>....</redundancy-group-state-transition-events>

          </redundancy-group-information>
        </redundancy-group-information-list>
      </chassis-cluster-information>
```


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Description Redundancy group related information

<redundancy-group-information-list>

Usage

```
<redundancy-group-information-list>
  <redundancy-group-information>....</redundancy-group-information>
</redundancy-group-information-list>
```

Description

<redundancy-group-information-list>

Usage

```
<chassis-cluster-information>
  <redundancy-group-information-list>
    <redundancy-group-information>....</redundancy-group-information>
  </redundancy-group-information-list>
</chassis-cluster-information>
```

Description

<redundancy-group-monitoring-information>

Usage

```
<redundancy-group-information-list>
  <redundancy-group-information>
    <redundancy-group-monitoring-information>
      <monitoring-failure-string>
        monitoring-failure-string
      </monitoring-failure-string>
      <redundancy-group-threshold>
        redundancy-group-threshold
      </redundancy-group-threshold>
    </redundancy-group-monitoring-information>
  </redundancy-group-information>
</redundancy-group-information-list>
```

Description

<redundancy-group-monitoring-information>

Usage

```
<chassis-cluster-information>
  <redundancy-group-information-list>
    <redundancy-group-information>
      <redundancy-group-monitoring-information>
        <monitoring-failure-string>
          monitoring-failure-string
        </monitoring-failure-string>
        <redundancy-group-threshold>
          redundancy-group-threshold
        </redundancy-group-threshold>
```

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```
      </redundancy-group-monitoring-information>
    </redundancy-group-information>
  </redundancy-group-information-list>
</chassis-cluster-information>
```

Description

<redundancy-group-state-transition-events>

Usage

```
<redundancy-group-information-list>
  <redundancy-group-information>
    <redundancy-group-state-transition-events>
      <redundancy-group-state-transition-event>
        redundancy-group-state-transition-event
      </redundancy-group-state-transition-event>
    </redundancy-group-state-transition-events>
  </redundancy-group-information>
</redundancy-group-information-list>
```

Description Redundancy group state transition details

<redundancy-group-state-transition-events>

Usage

```
<chassis-cluster-information>
  <redundancy-group-information-list>
    <redundancy-group-information>
      <redundancy-group-state-transition-events>
        <redundancy-group-state-transition-event>
          redundancy-group-state-transition-event
        </redundancy-group-state-transition-event>
      </redundancy-group-state-transition-events>
    </redundancy-group-information>
  </redundancy-group-information-list>
</chassis-cluster-information>
```

Description Redundancy group state transition details

<reth>

Usage

```
<chassis-cluster-interface-statistics>
  <reth>
    <reth-name>
      reth-name
    </reth-name>
    <reth-status>
      reth-status
    </reth-status>
    <redundancy-group-id-for-reth>
```


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```
      redundancy-group-id-for-reth
    </redundancy-group-id-for-reth>
  </reth>
</chassis-cluster-interface-statistics>
```

Description

<services-synchronized>

Usage

```
<services-synchronized>
  <service-name>
    service-name
  </service-name>
  <rtos-sent>
    rtos-sent
  </rtos-sent>
  <rtos-received>
    rtos-received
  </rtos-received>
</services-synchronized>
```

Description

<spu-monitoring-events>

Usage

```
<spu-monitoring-information>
  <spu-monitoring-events>
    <spu-monitoring-event>
      spu-monitoring-event
    </spu-monitoring-event>
  </spu-monitoring-events>
</spu-monitoring-information>
```

Description List of SPU monitoring events

<spu-monitoring-events>

Usage

```
<chassis-cluster-information>
  <spu-monitoring-information>
    <spu-monitoring-events>
      <spu-monitoring-event>
        spu-monitoring-event
      </spu-monitoring-event>
    </spu-monitoring-events>
  </spu-monitoring-information>
</chassis-cluster-information>
```

Description List of SPU monitoring events

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<spu-monitoring-information>

Usage

```
<spu-monitoring-information>
  <spu-monitoring-status>....</spu-monitoring-status>
  <spu-monitoring-statistics>....</spu-monitoring-statistics>
  <spu-monitoring-events>....</spu-monitoring-events>
</spu-monitoring-information>
```

Description SPU monitoring related information

<spu-monitoring-information>

Usage

```
<chassis-cluster-information>
  <spu-monitoring-information>
    <spu-monitoring-status>....</spu-monitoring-status>
    <spu-monitoring-statistics>....</spu-monitoring-statistics>
    <spu-monitoring-events>....</spu-monitoring-events>
  </spu-monitoring-information>
</chassis-cluster-information>
```

Description SPU monitoring related information

<spu-monitoring-spu-state>

Usage

```
<spu-monitoring-information>
  <spu-monitoring-status>
    <spu-monitoring-spu-state>
      <pfe-name>
        pfe-name
      </pfe-name>
      <pic-state>
        pic-state
      </pic-state>
    </spu-monitoring-spu-state>
  </spu-monitoring-status>
</spu-monitoring-information>
```

Description Each SPU current state

<spu-monitoring-spu-state>

Usage

```
<chassis-cluster-information>
  <spu-monitoring-information>
    <spu-monitoring-status>
      <spu-monitoring-spu-state>
        <pfe-name>
```


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```
            pfe-name
           </pfe-name>
           <pic-state>
            pic-state
           </pic-state>
          </spu-monitoring-spu-state>
         </spu-monitoring-status>
        </spu-monitoring-information>
       </chassis-cluster-information>
```

Description Each SPU current state

<spu-monitoring-statistics>

Usage

```
<spu-monitoring-information>
 <spu-monitoring-statistics>
  <spu-up-count>
   spu-up-count
  </spu-up-count>
  <spu-down-count>
   spu-down-count
  </spu-down-count>
  <npc-up-count>
   npc-up-count
  </npc-up-count>
  <npc-down-count>
   npc-down-count
  </npc-down-count>
  <chinfo-blob-error-count>
   chinfo-blob-error-count
  </chinfo-blob-error-count>
 </spu-monitoring-statistics>
</spu-monitoring-information>
```

Description Detailed statistics of SPU monitoring

<spu-monitoring-statistics>

Usage

```
<chassis-cluster-information>
 <spu-monitoring-information>
  <spu-monitoring-statistics>
   <spu-up-count>
    spu-up-count
   </spu-up-count>
   <spu-down-count>
    spu-down-count
   </spu-down-count>
   <npc-up-count>
    npc-up-count
   </npc-up-count>
```

```
        <npc-down-count>
          npc-down-count
        </npc-down-count>
        <chinfo-blob-error-count>
          chinfo-blob-error-count
        </chinfo-blob-error-count>
      </spu-monitoring-statistics>
    </spu-monitoring-information>
  </chassis-cluster-information>
```

Description Detailed statistics of SPU monitoring

<spu-monitoring-status>

Usage

```
<spu-monitoring-information>
  <spu-monitoring-status>
    <spu-monitoring-state>
      spu-monitoring-state
    </spu-monitoring-state>
    <spu-monitoring-weight>
      spu-monitoring-weight
    </spu-monitoring-weight>
    <spu-monitoring-spu-state>....</spu-monitoring-spu-state>
  </spu-monitoring-status>
</spu-monitoring-information>
```

Description SPU monitoring related status information

<spu-monitoring-status>

Usage

```
<chassis-cluster-information>
  <spu-monitoring-information>
    <spu-monitoring-status>
      <spu-monitoring-state>
        spu-monitoring-state
      </spu-monitoring-state>
      <spu-monitoring-weight>
        spu-monitoring-weight
      </spu-monitoring-weight>
      <spu-monitoring-spu-state>....</spu-monitoring-spu-state>
    </spu-monitoring-status>
  </spu-monitoring-information>
</chassis-cluster-information>
```

Description SPU monitoring related status information

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<swfabric-information>

Usage

```
<chassis-cluster-ethernet-switching-interfaces>
  <swfabric-information>
    <swfab-child-interface-name>
      swfab-child-interface-name
    </swfab-child-interface-name>
    <swfab-child-interface-status>
      swfab-child-interface-status
    </swfab-child-interface-status>
  </swfabric-information>
</chassis-cluster-ethernet-switching-interfaces>
```

Description

Summary of Logical Systems Response Tags

<lsys-lic-status>

Usage

```
<show-lsys-lic-status>
  <lsys-lic-status>
    <lsys-name>
      lsys-name
    </lsys-name>
    <lic-status>
      lic-status
    </lic-status>
  </lsys-lic-status>
</show-lsys-lic-status>
```

Description

<show-lsys-lic-status>

Usage

```
<show-lsys-lic-status>
  <lsys-lic-status>....</lsys-lic-status>
</show-lsys-lic-status>
```

Description License status for each logical system

Summary of DNS Proxy Response Response Tags

<dns-proxy>

Usage

```
<dns-proxy-information>
  <dns-proxy>
    <status>
```

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```
      status
    </status>
    <queries-received>
      queries-received
    </queries-received>
    <responses-sent>
      responses-sent
    </responses-sent>
    <queries-forwarded>
      queries-forwarded
    </queries-forwarded>
    <negative-responses>
      negative-responses
    </negative-responses>
    <retries>
      retries
    </retries>
    <pending-requests>
      pending-requests
    </pending-requests>
    <server-failures>
      server-failures
    </server-failures>
    <cache-entries>
      cache-entries
    </cache-entries>
    <interfaces>....</interfaces>
  </dns-proxy>
</dns-proxy-information>
```

Description Information DNS proxy status and statistics

<dns-proxy-cache-entry>

Usage

```
<dns-proxy-cache-information>
  <dns-proxy-cache-entry>
    <hostname>
      hostname
    </hostname>
    <host-address>
      host-address
    </host-address>
    <ttl>
      ttl
    </ttl>
    <entry-type>
      entry-type
    </entry-type>
    <class>
      class
    </class>
  </dns-proxy-cache-entry>
```


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```
</dns-proxy-cache-information>
```

Description Information DNS proxy status and statistics

<dns-proxy-cache-information>

Usage

```
<dns-proxy-cache-information>
  <dns-proxy-cache-entry>....</dns-proxy-cache-entry>
</dns-proxy-cache-information>
```

Description Information about DNS proxy cache

<dns-proxy-information>

Usage

```
<dns-proxy-information>
  <dns-proxy>....</dns-proxy>
</dns-proxy-information>
```

Description Information about DNS proxy

<dynamic-dns-client>

Usage

```
<dynamic-dns-client-information>
  <dynamic-dns-client>
    <internal-hostname>
      internal-hostname
    </internal-hostname>
    <server>
      server
    </server>
    <last-response>
      last-response
    </last-response>
    <last-update-time>
      last-update-time
    </last-update-time>
    <interface>
      interface
    </interface>
    <user-name>
      user-name
    </user-name>
    <agent>
      agent
    </agent>
  </dynamic-dns-client>
</dynamic-dns-client-information>
```

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Description Information about a Dynamic DNS client status

<dynamic-dns-client-information>

Usage

```
<dynamic-dns-client-information>
  <dynamic-dns-client>....</dynamic-dns-client>
</dynamic-dns-client-information>
```

Description Information about one or more Dynamic DNS clients status

<interfaces>

Usage

```
<interfaces>
  <interface>
    interface
  </interface>
</interfaces>
```

Description Interfaces configured

<interfaces>

Usage

```
<dns-proxy-information>
  <dns-proxy>
    <interfaces>
      <interface>
        interface
      </interface>
    </interfaces>
  </dns-proxy>
</dns-proxy-information>
```

Description Interfaces configured

Summary of NAT Response Tags

<destination-address-range-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <destination-address-range-entry>
      <rule-destination-address>
        rule-destination-address
      </rule-destination-address>
      <rule-destination-address-low-range>
        rule-destination-address-low-range
```

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```
      </rule-destination-address-low-range>
      <rule-destination-address-high-range>
        rule-destination-address-high-range
      </rule-destination-address-high-range>
    </destination-address-range-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description The destination address range

<destination-nat-entry>

Usage

```
<destination-nat-summary-information>
  <destination-nat-entry>
    <destination-nat-pool-name>
      destination-nat-pool-name
    </destination-nat-pool-name>
    <destination-address-range>
      destination-address-range
    </destination-address-range>
    <destination-port-number>
      destination-port-number
    </destination-port-number>
  </destination-nat-entry>
</destination-nat-summary-information>
```

Description Information about a destination NAT entry

<destination-nat-pool-entry>

Usage

```
<destination-nat-pool-information>
  <destination-nat-pool-entry>
    <pool-name>
      pool-name
    </pool-name>
    <pool-description>
      pool-description
    </pool-description>
    <pool-id>
      pool-id
    </pool-id>
    <routing-instance-name>
      routing-instance-name
    </routing-instance-name>
    <total-pool-address>
      total-pool-address
    </total-pool-address>
    <address-pool-hits>
      address-pool-hits
    </address-pool-hits>
```

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```
    <pool-address-range>....</pool-address-range>
  </destination-nat-pool-entry>
</destination-nat-pool-information>
```

Description Information on the destination-nat pool

<destination-nat-pool-information>

Usage

```
<destination-nat-pool-information>
  <total-destination-nat-pool-number>....</total-destination-nat-pool-number>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <destination-nat-pool-entry>....</destination-nat-pool-entry>
</destination-nat-pool-information>
```

Description Show destination-nat address pool information

<destination-nat-rule-entry>

Usage

```
<destination-nat-rule-information>
  <destination-nat-rule-entry>
    <rule-name>
      rule-name
    </rule-name>
    <rule-set-name>
      rule-set-name
    </rule-set-name>
    <rule-description>
      rule-description
    </rule-description>
    <rule-id>
      rule-id
    </rule-id>
    <rule-matching-position>
      rule-matching-position
    </rule-matching-position>
    <rule-from-context>
      rule-from-context
    </rule-from-context>
    <rule-from-context-name>
      rule-from-context-name
    </rule-from-context-name>
    <rule-source-address-range-entry>....</rule-source-address-range-entry>
  <rule-destination-address-range-entry>....</rule-destination-address-range-entry>

    <destination-port>
      destination-port
    </destination-port>
    <dst-nat-protocol-entry>....</dst-nat-protocol-entry>
```


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```
<destination-nat-rule-action>
  destination-nat-rule-action
</destination-nat-rule-action>
<address-pool-hits>
  address-pool-hits
</address-pool-hits>
</destination-nat-rule-entry>
</destination-nat-rule-information>
```

Description Information on the destination-nat rule

<destination-nat-rule-information>

Usage

```
<destination-nat-rule-information>
  <total-destination-nat-rules>....</total-destination-nat-rules>

<total-destination-nat-rule-ref-addr-num>....</total-destination-nat-rule-ref-addr-num>

  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <destination-nat-rule-entry>....</destination-nat-rule-entry>
</destination-nat-rule-information>
```

Description Show destination-nat rule information

<destination-nat-summary-information>

Usage

```
<destination-nat-summary-information>
  <destination-nat-entry>....</destination-nat-entry>
</destination-nat-summary-information>
```

Description Information about one or more destination NAT entries

<destination-port-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <destination-port-entry>
      <rule-destination-port-low>
        rule-destination-port-low
      </rule-destination-port-low>
      <rule-destination-port-high>
        rule-destination-port-high
      </rule-destination-port-high>
    </destination-port-entry>
  </source-nat-rule-entry>
```

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```
</source-nat-rule-detail-information>
```

Description The destination address range

<dst-nat-protocol-entry>

Usage

```
<destination-nat-rule-information>
  <destination-nat-rule-entry>
    <dst-nat-protocol-entry>
      <dst-nat-protocol>
        dst-nat-protocol
      </dst-nat-protocol>
    </dst-nat-protocol-entry>
  </destination-nat-rule-entry>
</destination-nat-rule-information>
```

Description IP protocol

<incoming-table-entry>

Usage

```
<incoming-table-information>
  <incoming-table-entry>
    <destination>
      destination
    </destination>
    <host>
      host
    </host>
    <references>
      references
    </references>
    <timeout>
      timeout
    </timeout>
    <source-pool>
      source-pool
    </source-pool>
  </incoming-table-entry>
</incoming-table-information>
```

Description

<incoming-table-information>

Usage

```
<incoming-table-information>
  <in-use>
    in-use
  </in-use>
```


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```
  <maximum>
    maximum
  </maximum>
  <entry-allocation-failed>
    entry-allocation-failed
  </entry-allocation-failed>
  <incoming-table-entry>....</incoming-table-entry>
</incoming-table-information>
```

Description

<interface-nat-ports-entry>

Usage

```
<interface-nat-ports-information>
  <interface-nat-ports-entry>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <pool-index>
      pool-index
    </pool-index>
    <total-ports>
      total-ports
    </total-ports>
    <single-ports-allocated>
      single-ports-allocated
    </single-ports-allocated>
    <single-ports-available>
      single-ports-available
    </single-ports-available>
    <twin-ports-allocated>
      twin-ports-allocated
    </twin-ports-allocated>
    <twin-ports-available>
      twin-ports-available
    </twin-ports-available>
  </interface-nat-ports-entry>
</interface-nat-ports-information>
```

Description

<interface-nat-ports-information>

Usage

```
<interface-nat-ports-information>
  <interface-nat-ports-entry>....</interface-nat-ports-entry>
</interface-nat-ports-information>
```

Description

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<persist-nat-external-node-entry>

Usage

```
<persist-nat-external-node-table>
  <persist-nat-external-node-entry>
    <persist-nat-enode-internal-ip>
      persist-nat-enode-internal-ip
    </persist-nat-enode-internal-ip>
    <persist-nat-enode-internal-port>
      persist-nat-enode-internal-port
    </persist-nat-enode-internal-port>
    <persist-nat-enode-external-ip>
      persist-nat-enode-external-ip
    </persist-nat-enode-external-ip>
    <persist-nat-enode-external-port>
      persist-nat-enode-external-port
    </persist-nat-enode-external-port>
    <persist-nat-zone-name>
      persist-nat-zone-name
    </persist-nat-zone-name>
  </persist-nat-external-node-entry>
</persist-nat-external-node-table>
```

Description Information about a Persistent NAT external node entry

<persist-nat-external-node-table>

Usage

```
<persist-nat-external-node-table>
  <persist-nat-external-node-entry>....</persist-nat-external-node-entry>
</persist-nat-external-node-table>
```

Description Information of Persistent NAT external node table

<persist-nat-table>

Usage

```
<persist-nat-table>
  <persist-nat-spu-id>
    persist-nat-spu-id
  </persist-nat-spu-id>
  <persist-nat-table-entry>....</persist-nat-table-entry>
</persist-nat-table>
```

Description Summay Information of Persistent NAT

<persist-nat-table-entry>

Usage

```
<persist-nat-table>
```


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```
<persist-nat-table-entry>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <persist-nat-internal-ip>
    persist-nat-internal-ip
  </persist-nat-internal-ip>
  <persist-nat-internal-port>
    persist-nat-internal-port
  </persist-nat-internal-port>
  <persist-nat-internal-proto>
    persist-nat-internal-proto
  </persist-nat-internal-proto>
  <persist-nat-reflexive-ip>
    persist-nat-reflexive-ip
  </persist-nat-reflexive-ip>
  <persist-nat-reflexive-port>
    persist-nat-reflexive-port
  </persist-nat-reflexive-port>
  <persist-nat-reflexive-proto>
    persist-nat-reflexive-proto
  </persist-nat-reflexive-proto>
  <persist-nat-pool-name>
    persist-nat-pool-name
  </persist-nat-pool-name>
  <persist-nat-type>
    persist-nat-type
  </persist-nat-type>
  <persist-nat-left-time>
    persist-nat-left-time
  </persist-nat-left-time>
  <persist-nat-config-time>
    persist-nat-config-time
  </persist-nat-config-time>
  <persist-nat-current-session-num>
    persist-nat-current-session-num
  </persist-nat-current-session-num>
  <persist-nat-max-session-num>
    persist-nat-max-session-num
  </persist-nat-max-session-num>
  <persist-nat-rule-name>
    persist-nat-rule-name
  </persist-nat-rule-name>
 </persist-nat-table-entry>
</persist-nat-table>
```

Description Information about a Persistent NAT entry

<persist-nat-table-statistic>

Usage

```
<persist-nat-table-statistic>
  <persist-nat-spu-id>
    persist-nat-spu-id
```

```
</persist-nat-spu-id>
<logical-system-name>
  logical-system-name
</logical-system-name>
<persist-nat-binding-total>
  persist-nat-binding-total
</persist-nat-binding-total>
<persist-nat-binding-in-use>
  persist-nat-binding-in-use
</persist-nat-binding-in-use>
<persist-nat-enode-total>
  persist-nat-enode-total
</persist-nat-enode-total>
<persist-nat-enode-in-use>
  persist-nat-enode-in-use
</persist-nat-enode-in-use>
</persist-nat-table-statistic>
```

Description Persistent NAT statistic

<pool-address-range>

Usage

```
<destination-nat-pool-information>
  <destination-nat-pool-entry>
    <pool-address-range>
      <address-range-low>
        address-range-low
      </address-range-low>
      <address-range-high>
        address-range-high
      </address-range-high>
      <address-port>
        address-port
      </address-port>
    </pool-address-range>
  </destination-nat-pool-entry>
</destination-nat-pool-information>
```

Description Information on address range

<rule-destination-address-range-entry>

Usage

```
<destination-nat-rule-information>
  <destination-nat-rule-entry>
    <rule-destination-address-range-entry>
      <rule-destination-address>
        rule-destination-address
      </rule-destination-address>
      <rule-destination-address-low-range>
        rule-destination-address-low-range
```


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```
        </rule-destination-address-low-range>
        <rule-destination-address-high-range>
          rule-destination-address-high-range
        </rule-destination-address-high-range>
      </rule-destination-address-range-entry>
    </destination-nat-rule-entry>
  </destination-nat-rule-information>
```

Description The destination address range

<rule-source-address-range-entry>

Usage

```
<destination-nat-rule-information>
  <destination-nat-rule-entry>
    <rule-source-address-range-entry>
      <rule-source-address>
        rule-source-address
      </rule-source-address>
      <rule-source-address-low-range>
        rule-source-address-low-range
      </rule-source-address-low-range>
      <rule-source-address-high-range>
        rule-source-address-high-range
      </rule-source-address-high-range>
    </rule-source-address-range-entry>
  </destination-nat-rule-entry>
</destination-nat-rule-information>
```

Description The source address range

<source-address-range-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <source-address-range-entry>
      <rule-source-address>
        rule-source-address
      </rule-source-address>
      <rule-source-address-low-range>
        rule-source-address-low-range
      </rule-source-address-low-range>
      <rule-source-address-high-range>
        rule-source-address-high-range
      </rule-source-address-high-range>
    </source-address-range-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description The source address range

<source-nat-entry>

Usage

```
<source-nat-summary>
  <source-nat-entry>
    <pool-name>
      pool-name
    </pool-name>
    <address-low>
      address-low
    </address-low>
    <address-high>
      address-high
    </address-high>
    <interface>
      interface
    </interface>
    <port-address-translation>
      port-address-translation
    </port-address-translation>
  </source-nat-entry>
</source-nat-summary>
```

Description

<source-nat-pool-detail-information>

Usage

```
<source-nat-pool-detail-information>
  <total-source-nat-pools>....</total-source-nat-pools>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <source-nat-pool-info-entry>....</source-nat-pool-info-entry>
</source-nat-pool-detail-information>
```

Description Show source NAT pool information

<source-nat-pool-entry>

Usage

```
<source-nat-pool-information>
  <source-nat-pool-entry>
    <pool-name>
      pool-name
    </pool-name>
    <address>
      address
    </address>
    <pool-status>
      pool-status
    </pool-status>
    <single-ports>
```


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```
      single-ports
    </single-ports>
    <twin-ports>
      twin-ports
    </twin-ports>
    <host-address>
      host-address
    </host-address>
    <references>
      references
    </references>
    <port-address-translation>
      port-address-translation
    </port-address-translation>
  </source-nat-pool-entry>
</source-nat-pool-information>
```

Description

<source-nat-pool-info-entry>

Usage

```
<source-nat-pool-detail-information>
  <source-nat-pool-info-entry>
    <pool-name>
      pool-name
    </pool-name>
    <pool-description>
      pool-description
    </pool-description>
    <pool-id>
      pool-id
    </pool-id>
    <routing-instance-name>
      routing-instance-name
    </routing-instance-name>
    <host-address-base>
      host-address-base
    </host-address-base>
    <source-pool-port-translation>
      source-pool-port-translation
    </source-pool-port-translation>
    <port-overloading-factor>
      port-overloading-factor
    </port-overloading-factor>
    <source-pool-overflow-pool>
      source-pool-overflow-pool
    </source-pool-overflow-pool>
    <total-pool-address>
      total-pool-address
    </total-pool-address>
    <address-available>
      address-available
    </address-available>
    <address-pool-hits>
```

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```
      address-pool-hits
    </address-pool-hits>
    <source-pool-address-range>....</source-pool-address-range>
  </source-nat-pool-info-entry>
</source-nat-pool-detail-information>
```

Description Information on the source NAT pool

<source-nat-pool-information>

Usage

```
<source-nat-pool-information>
  <source-nat-pool-entry>....</source-nat-pool-entry>
</source-nat-pool-information>
```

Description

<source-nat-rule-action-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <source-nat-rule-action-entry>
      <source-nat-rule-action>
        source-nat-rule-action
      </source-nat-rule-action>
      <persistent-nat-type>
        persistent-nat-type
      </persistent-nat-type>
      <persistent-nat-mapping-type>
        persistent-nat-mapping-type
      </persistent-nat-mapping-type>
      <persistent-nat-timeout>
        persistent-nat-timeout
      </persistent-nat-timeout>
      <persistent-nat-max-session>
        persistent-nat-max-session
      </persistent-nat-max-session>
    </source-nat-rule-action-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description The action taken when the rule is matched

<source-nat-rule-detail-information>

Usage

```
<source-nat-rule-detail-information>
  <total-source-nat-rules>....</total-source-nat-rules>
  <total-source-nat-rule-ref-addr-num>....</total-source-nat-rule-ref-addr-num>
  <logical-system-name>
```


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```
    logical-system-name
  </logical-system-name>
  <source-nat-rule-entry>....</source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description Show source NAT rule information

<source-nat-rule-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <rule-name>
      rule-name
    </rule-name>
    <rule-set-name>
      rule-set-name
    </rule-set-name>
    <rule-description>
      rule-description
    </rule-description>
    <rule-id>
      rule-id
    </rule-id>
    <rule-matching-position>
      rule-matching-position
    </rule-matching-position>
    <rule-from-context>
      rule-from-context
    </rule-from-context>
    <rule-from-context-name>
      rule-from-context-name
    </rule-from-context-name>
    <rule-to-context>
      rule-to-context
    </rule-to-context>
    <rule-to-context-name>
      rule-to-context-name
    </rule-to-context-name>
    <source-address-range-entry>....</source-address-range-entry>
    <destination-address-range-entry>....</destination-address-range-entry>
    <destination-port-entry>....</destination-port-entry>
    <src-nat-protocol-entry>....</src-nat-protocol-entry>
    <source-nat-rule-action-entry>....</source-nat-rule-action-entry>
    <source-nat-rule-hits-entry>....</source-nat-rule-hits-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description Information on the source NAT rule

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<source-nat-rule-hits-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <source-nat-rule-hits-entry>
      <number_of_hits>
        number_of_hits
      </number_of_hits>
    </source-nat-rule-hits-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description Number of translation hits

<source-nat-summary>

Usage

```
<source-nat-summary>
  <source-nat-entry>....</source-nat-entry>
</source-nat-summary>
```

Description

<source-pool-address-range>

Usage

```
<source-nat-pool-detail-information>
  <source-nat-pool-info-entry>
    <source-pool-address-range>
      <address-range-low>
        address-range-low
      </address-range-low>
      <address-range-high>
        address-range-high
      </address-range-high>
      <single-port>
        single-port
      </single-port>
      <twin-port>
        twin-port
      </twin-port>
    </source-pool-address-range>
  </source-nat-pool-info-entry>
</source-nat-pool-detail-information>
```

Description Information on address range

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<src-nat-protocol-entry>

Usage

```
<source-nat-rule-detail-information>
  <source-nat-rule-entry>
    <src-nat-protocol-entry>
      <src-nat-protocol>
        src-nat-protocol
      </src-nat-protocol>
    </src-nat-protocol-entry>
  </source-nat-rule-entry>
</source-nat-rule-detail-information>
```

Description IP protocol

<ssg-destination-nat-rule-entry>

Usage

```
<ssg-destination-nat-summary-information>
  <ssg-destination-nat-rule-entry>
    <rule-name>
      rule-name
    </rule-name>
    <rule-set-name>
      rule-set-name
    </rule-set-name>
    <rule-from-context>
      rule-from-context
    </rule-from-context>
    <ssg-destination-rule-action>
      ssg-destination-rule-action
    </ssg-destination-rule-action>
  </ssg-destination-nat-rule-entry>
</ssg-destination-nat-summary-information>
```

Description Information about a destination NAT rule entry

<ssg-destination-nat-summary-information>

Usage

```
<ssg-destination-nat-summary-information>
  <ssg-total-destination-pool-num>....</ssg-total-destination-pool-num>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <ssg-destination-pool-entry>....</ssg-destination-pool-entry>
  <ssg-total-destination-rule-num>....</ssg-total-destination-rule-num>
  <ssg-destination-nat-rule-entry>....</ssg-destination-nat-rule-entry>
</ssg-destination-nat-summary-information>
```

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Description Summay Information of destination NAT

<ssg-destination-pool-entry>

Usage

```
<ssg-destination-nat-summary-information>
  <ssg-destination-pool-entry>
    <pool-name>
      pool-name
    </pool-name>
    <address-range-low>
      address-range-low
    </address-range-low>
    <address-range-high>
      address-range-high
    </address-range-high>
    <routing-instance-name>
      routing-instance-name
    </routing-instance-name>
    <ssg-destination-pool-port-info>
      ssg-destination-pool-port-info
    </ssg-destination-pool-port-info>
    <ssg-destination-pool-total-address>
      ssg-destination-pool-total-address
    </ssg-destination-pool-total-address>
  </ssg-destination-pool-entry>
</ssg-destination-nat-summary-information>
```

Description Information about a destination NAT entry

<ssg-max-source-pat-port-num>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-max-source-pat-port-num>
    <max-source-pat-port-num>
      max-source-pat-port-num
    </max-source-pat-port-num>
  </ssg-max-source-pat-port-num>
</ssg-source-nat-summary-information>
```

Description Maximum source NAT port xlation pool port number

<ssg-source-nat-summary-information>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-total-source-pool-num>....</ssg-total-source-pool-num>
  <ssg-total-source-pat-port-num>....</ssg-total-source-pat-port-num>
  <ssg-max-source-pat-port-num>....</ssg-max-source-pat-port-num>
  <logical-system-name>
    logical-system-name
```


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```
  </logical-system-name>
  <ssg-source-pool-entry>....</ssg-source-pool-entry>
  <ssg-total-source-rule-num>....</ssg-total-source-rule-num>
  <ssg-source-rule-entry>....</ssg-source-rule-entry>
</ssg-source-nat-summary-information>
```

Description Summay Information of source NAT

<ssg-source-pool-entry>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-source-pool-entry>
    <ssg-source-pool-name>
      ssg-source-pool-name
    </ssg-source-pool-name>
    <ssg-source-pool-address-range>
      ssg-source-pool-address-range
    </ssg-source-pool-address-range>
    <ssg-source-pool-routing-instance>
      ssg-source-pool-routing-instance
    </ssg-source-pool-routing-instance>
    <ssg-source-pool-pat>
      ssg-source-pool-pat
    </ssg-source-pool-pat>
    <ssg-source-pool-total-address>
      ssg-source-pool-total-address
    </ssg-source-pool-total-address>
  </ssg-source-pool-entry>
</ssg-source-nat-summary-information>
```

Description Information about a source NAT entry

<ssg-source-rule-entry>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-source-rule-entry>
    <ssg-source-rule-name>
      ssg-source-rule-name
    </ssg-source-rule-name>
    <ssg-source-rule-set-name>
      ssg-source-rule-set-name
    </ssg-source-rule-set-name>
    <ssg-source-rule-context-from>
      ssg-source-rule-context-from
    </ssg-source-rule-context-from>
    <ssg-source-rule-context-to>
      ssg-source-rule-context-to
    </ssg-source-rule-context-to>
    <ssg-source-rule-action>
      ssg-source-rule-action
```

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```
    </ssg-source-rule-action>
  </ssg-source-rule-entry>
</ssg-source-nat-summary-information>
```

Description Information about a source NAT rule entry

<ssg-total-destination-pool-num>

Usage

```
<ssg-destination-nat-summary-information>
  <ssg-total-destination-pool-num>
    <summary-total-destination-pool>
      summary-total-destination-pool
    </summary-total-destination-pool>
  </ssg-total-destination-pool-num>
</ssg-destination-nat-summary-information>
```

Description Total Destination NAT pool number

<ssg-total-destination-rule-num>

Usage

```
<ssg-destination-nat-summary-information>
  <ssg-total-destination-rule-num>
    <summary-total-destination-rule>
      summary-total-destination-rule
    </summary-total-destination-rule>
  </ssg-total-destination-rule-num>
</ssg-destination-nat-summary-information>
```

Description Total Destination NAT rule number

<ssg-total-source-pat-port-num>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-total-source-pat-port-num>
    <total-source-summary-pat-port-num>
      total-source-summary-pat-port-num
    </total-source-summary-pat-port-num>
  </ssg-total-source-pat-port-num>
</ssg-source-nat-summary-information>
```

Description Total source NAT port xlation pool port number

<ssg-total-source-pool-num>

Usage

```
<ssg-source-nat-summary-information>
```


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```
<ssg-total-source-pool-num>
  <total-source-summary-pools>
    total-source-summary-pools
  </total-source-summary-pools>
</ssg-total-source-pool-num>
</ssg-source-nat-summary-information>
```

Description Total source NAT pool number

<ssg-total-source-rule-num>

Usage

```
<ssg-source-nat-summary-information>
  <ssg-total-source-rule-num>
    <summary-total-source-rules>
      summary-total-source-rules
    </summary-total-source-rules>
  </ssg-total-source-rule-num>
</ssg-source-nat-summary-information>
```

Description Total source NAT rule number

<static-nat-entry>

Usage

```
<static-nat-summary>
  <static-nat-entry>
    <ingress-interface>
      ingress-interface
    </ingress-interface>
    <destination-prefix>
      destination-prefix
    </destination-prefix>
    <host-prefix>
      host-prefix
    </host-prefix>
    <virtual-router>
      virtual-router
    </virtual-router>
  </static-nat-entry>
</static-nat-summary>
```

Description

<static-nat-rule-entry>

Usage

```
<static-nat-rule-information>
  <static-nat-rule-entry>
    <rule-name>
      rule-name
```

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```
    </rule-name>
    <rule-set-name>
      rule-set-name
    </rule-set-name>
    <rule-description>
      rule-description
    </rule-description>
    <rule-id>
      rule-id
    </rule-id>
    <rule-matching-position>
      rule-matching-position
    </rule-matching-position>
    <rule-from-context>
      rule-from-context
    </rule-from-context>
    <rule-from-context-name>
      rule-from-context-name
    </rule-from-context-name>
    <rule-destination-address-prefix>
      rule-destination-address-prefix
    </rule-destination-address-prefix>
    <rule-host-address-prefix>
      rule-host-address-prefix
    </rule-host-address-prefix>
    <rule-address-netmask>
      rule-address-netmask
    </rule-address-netmask>
    <rule-host-routing-instance>
      rule-host-routing-instance
    </rule-host-routing-instance>
    <rule-hits>
      rule-hits
    </rule-hits>
  </static-nat-rule-entry>
</static-nat-rule-information>
```

Description Information on the static-nat rule

<static-nat-rule-information>

Usage

```
<static-nat-rule-information>
  <total-static-nat-rules>....</total-static-nat-rules>
  <total-static-nat-rule-ref-addr-num>....</total-static-nat-rule-ref-addr-num>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <static-nat-rule-entry>....</static-nat-rule-entry>
</static-nat-rule-information>
```

Description Show static-nat rule information

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<static-nat-summary>

Usage

```
<static-nat-summary>
  <static-nat-total>
    static-nat-total
  </static-nat-total>
  <static-nat-maximum>
    static-nat-maximum
  </static-nat-maximum>
  <static-nat-entry>....</static-nat-entry>
</static-nat-summary>
```

Description

<total-destination-nat-pool-number>

Usage

```
<destination-nat-pool-information>
  <total-destination-nat-pool-number>
    <total-pools>
      total-pools
    </total-pools>
  </total-destination-nat-pool-number>
</destination-nat-pool-information>
```

Description Total number of destination-nat pools

<total-destination-nat-rule-ref-addr-num>

Usage

```
<destination-nat-rule-information>
  <total-destination-nat-rule-ref-addr-num>
    <total-destination-nat-rule-ref-addr-num-v4>
      total-destination-nat-rule-ref-addr-num-v4
    </total-destination-nat-rule-ref-addr-num-v4>
    <total-destination-nat-rule-ref-addr-num-v6>
      total-destination-nat-rule-ref-addr-num-v6
    </total-destination-nat-rule-ref-addr-num-v6>
  </total-destination-nat-rule-ref-addr-num>
</destination-nat-rule-information>
```

Description Total referenced IPv4/IPv6 ip-prefixes in destination NAT rule

<total-destination-nat-rules>

Usage

```
<destination-nat-rule-information>
  <total-destination-nat-rules>
    <total-rules>
      total-rules
```

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```
    </total-rules>
  </total-destination-nat-rules>
</destination-nat-rule-information>
```

Description Total number of destination-nat rules

<total-source-nat-pools>

Usage

```
<source-nat-pool-detail-information>
  <total-source-nat-pools>
    <total-source-pools>
      total-source-pools
    </total-source-pools>
  </total-source-nat-pools>
</source-nat-pool-detail-information>
```

Description Information of source NAT pools

<total-source-nat-rule-ref-addr-num>

Usage

```
<source-nat-rule-detail-information>
  <total-source-nat-rule-ref-addr-num>
    <total-source-nat-rule-ref-addr-num-v4>
      total-source-nat-rule-ref-addr-num-v4
    </total-source-nat-rule-ref-addr-num-v4>
    <total-source-nat-rule-ref-addr-num-v6>
      total-source-nat-rule-ref-addr-num-v6
    </total-source-nat-rule-ref-addr-num-v6>
  </total-source-nat-rule-ref-addr-num>
</source-nat-rule-detail-information>
```

Description Total referenced IPv4/IPv6 ip-prefixes in source NAT rule

<total-source-nat-rules>

Usage

```
<source-nat-rule-detail-information>
  <total-source-nat-rules>
    <total-src-rules>
      total-src-rules
    </total-src-rules>
  </total-source-nat-rules>
</source-nat-rule-detail-information>
```

Description Total number of source NAT rules

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<total-static-nat-rule-ref-addr-num>

Usage

```
<static-nat-rule-information>
  <total-static-nat-rule-ref-addr-num>
    <total-static-nat-rule-ref-addr-num-v4>
      total-static-nat-rule-ref-addr-num-v4
    </total-static-nat-rule-ref-addr-num-v4>
    <total-static-nat-rule-ref-addr-num-v6>
      total-static-nat-rule-ref-addr-num-v6
    </total-static-nat-rule-ref-addr-num-v6>
  </total-static-nat-rule-ref-addr-num>
</static-nat-rule-information>
```

Description Total referenced IPv4/IPv6 ip-prefixes in static NAT rule

<total-static-nat-rules>

Usage

```
<static-nat-rule-information>
  <total-static-nat-rules>
    <total-rules>
      total-rules
    </total-rules>
  </total-static-nat-rules>
</static-nat-rule-information>
```

Description Total number of static-nat rules

<translation-context-entry>

Usage

```
<translation-context-information>
  <translation-context-entry>
    <host>
      host
    </host>
    <translated>
      translated
    </translated>
    <port-count>
      port-count
    </port-count>
    <references>
      references
    </references>
    <source-pool>
      source-pool
    </source-pool>
  </translation-context-entry>
</translation-context-information>
```

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Description

<translation-context-information>

Usage

```
<translation-context-information>
  <in-use>
    in-use
  </in-use>
  <maximum>
    maximum
  </maximum>
  <entry-allocation-failed>
    entry-allocation-failed
  </entry-allocation-failed>
  <translation-context-entry>....</translation-context-entry>
</translation-context-information>
```

Description

Summary of Junos OS Reports Response Tags

<recent-blocked-url-activity>

Usage

```
<reports-recent-activities>
  <recent-blocked-url-activity>
    <blocked-url-name>
      blocked-url-name
    </blocked-url-name>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-source-port>
      report-source-port
    </report-source-port>
    <report-destination-ipaddress>
      report-destination-ipaddress
    </report-destination-ipaddress>
    <report-destination-port>
      report-destination-port
    </report-destination-port>
    <report-protocol>
      report-protocol
    </report-protocol>
    <report-action>
      report-action
    </report-action>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </recent-blocked-url-activity>
</reports-recent-activities>
```


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Description

<recent-idp-attack-activity>

Usage

```
<reports-recent-activities>
  <recent-idp-attack-activity>
    <idp-attack-name>
      idp-attack-name
    </idp-attack-name>
    <idp-attack-severity>
      idp-attack-severity
    </idp-attack-severity>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-source-port>
      report-source-port
    </report-source-port>
    <report-destination-ipaddress>
      report-destination-ipaddress
    </report-destination-ipaddress>
    <report-destination-port>
      report-destination-port
    </report-destination-port>
    <report-protocol>
      report-protocol
    </report-protocol>
    <report-action>
      report-action
    </report-action>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </recent-idp-attack-activity>
</reports-recent-activities>
```

Description

<recent-spam-activity>

Usage

```
<reports-recent-activities>
  <recent-spam-activity>
    <spam-email-blocked>
      spam-email-blocked
    </spam-email-blocked>
    <spam-threat-severity>
      spam-threat-severity
    </spam-threat-severity>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-action>
      report-action
```

```
    </report-action>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </recent-spam-activity>
</reports-recent-activities>
```

Description

<recent-virus-hit-activity>

Usage

```
<reports-recent-activities>
  <recent-virus-hit-activity>
    <virus-threat-name>
      virus-threat-name
    </virus-threat-name>
    <virus-threat-severity>
      virus-threat-severity
    </virus-threat-severity>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-source-port>
      report-source-port
    </report-source-port>
    <report-destination-ipaddress>
      report-destination-ipaddress
    </report-destination-ipaddress>
    <report-destination-port>
      report-destination-port
    </report-destination-port>
    <report-protocol>
      report-protocol
    </report-protocol>
    <virus-threat-description>
      virus-threat-description
    </virus-threat-description>
    <report-threat-hyperlink>
      report-threat-hyperlink
    </report-threat-hyperlink>
    <report-action>
      report-action
    </report-action>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </recent-virus-hit-activity>
</reports-recent-activities>
```

Description

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<report-traffic-most-recent-session>

Usage

```
<reports-traffic-statistics>
  <report-traffic-most-recent-session>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-source-port>
      report-source-port
    </report-source-port>
    <report-destination-ipaddress>
      report-destination-ipaddress
    </report-destination-ipaddress>
    <report-destination-port>
      report-destination-port
    </report-destination-port>
    <report-protocol>
      report-protocol
    </report-protocol>
    <report-session-bytes-in>
      report-session-bytes-in
    </report-session-bytes-in>
    <report-session-bytes-out>
      report-session-bytes-out
    </report-session-bytes-out>
    <report-session-packets-in>
      report-session-packets-in
    </report-session-packets-in>
    <report-session-packets-out>
      report-session-packets-out
    </report-session-packets-out>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </report-traffic-most-recent-session>
</reports-traffic-statistics>
```

Description

<report-traffic-session-summary>

Usage

```
<reports-traffic-statistics>
  <report-traffic-session-summary>
    <report-session-protocol-name>
      report-session-protocol-name
    </report-session-protocol-name>
    <total-number-of-sessions>
      total-number-of-sessions
    </total-number-of-sessions>
    <total-session-bytes-in>
      total-session-bytes-in
    </total-session-bytes-in>
```

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```
    <total-session-bytes-out>
      total-session-bytes-out
    </total-session-bytes-out>
    <total-session-packets-in>
      total-session-packets-in
    </total-session-packets-in>
    <total-session-packets-out>
      total-session-packets-out
    </total-session-packets-out>
  </report-traffic-session-summary>
</reports-traffic-statistics>
```

Description

<report-traffic-sessions-per-protocol>

Usage

```
<reports-traffic-statistics>
  <report-traffic-sessions-per-protocol>
    <session-data-per-protocol>....</session-data-per-protocol>
  </report-traffic-sessions-per-protocol>
</reports-traffic-statistics>
```

Description

<reports-recent-activities>

Usage

```
<reports-recent-activities>
  <recent-virus-hit-activity>....</recent-virus-hit-activity>
  <recent-spam-activity>....</recent-spam-activity>
  <recent-blocked-url-activity>....</recent-blocked-url-activity>
  <recent-idp-attack-activity>....</recent-idp-attack-activity>
</reports-recent-activities>
```

Description Show security most-recent threat activity information

<reports-threat-statistics>

Usage

```
<reports-threat-statistics>
  <threat-past-24hr-hit-count>
    threat-past-24hr-hit-count
  </threat-past-24hr-hit-count>
  <threat-past-1hr-hit-count>
    threat-past-1hr-hit-count
  </threat-past-1hr-hit-count>
  <threat-report-general-statistics>....</threat-report-general-statistics>
  <web-filtering-statistics>....</web-filtering-statistics>
  <threat-24hr-history-by-severity>....</threat-24hr-history-by-severity>
  <threat-24hr-history-by-category>....</threat-24hr-history-by-category>
  <threat-report-most-recent-statistic>....</threat-report-most-recent-statistic>
```


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```
</reports-threat-statistics>
```

Description Show security report threat information

<reports-threat-summary>

Usage

```
<reports-threat-summary>
  <threat-report-activity-counts>....</threat-report-activity-counts>
</reports-threat-summary>
```

Description Show report threat information

<reports-traffic-statistics>

Usage

```
<reports-traffic-statistics>
  <report-traffic-most-recent-session>....</report-traffic-most-recent-session>
  <report-traffic-session-summary>....</report-traffic-session-summary>
  <report-traffic-sessions-per-protocol>....</report-traffic-sessions-per-protocol>
</reports-traffic-statistics>
```

Description

<session-data-per-protocol>

Usage

```
<reports-traffic-statistics>
  <report-traffic-sessions-per-protocol>
    <session-data-per-protocol>
      <report-interval-count>
        report-interval-count
      </report-interval-count>
      <report-session-protocol-name>
        report-session-protocol-name
      </report-session-protocol-name>
      <number-of-sessions-this-interval>
        number-of-sessions-this-interval
      </number-of-sessions-this-interval>
      <report-session-bytes-in>
        report-session-bytes-in
      </report-session-bytes-in>
      <report-session-bytes-out>
        report-session-bytes-out
      </report-session-bytes-out>
      <report-session-packets-in>
        report-session-packets-in
      </report-session-packets-in>
      <report-session-packets-out>
        report-session-packets-out
      </report-session-packets-out>
```

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```
    </session-data-per-protocol>
  </report-traffic-sessions-per-protocol>
</reports-traffic-statistics>
```

Description Session related statistic for a specific protocol

<threat-24hr-history-by-category>

Usage

```
<reports-threat-statistics>
  <threat-24hr-history-by-category>
    <report-interval-count>
      report-interval-count
    </report-interval-count>
    <threat-history-antivirus-count>
      threat-history-antivirus-count
    </threat-history-antivirus-count>
    <threat-history-antispam-count>
      threat-history-antispam-count
    </threat-history-antispam-count>
    <threat-history-webfilter-count>
      threat-history-webfilter-count
    </threat-history-webfilter-count>
    <threat-history-contentfilter-count>
      threat-history-contentfilter-count
    </threat-history-contentfilter-count>
    <threat-history-idp-count>
      threat-history-idp-count
    </threat-history-idp-count>
  </threat-24hr-history-by-category>
</reports-threat-statistics>
```

Description

<threat-24hr-history-by-severity>

Usage

```
<reports-threat-statistics>
  <threat-24hr-history-by-severity>
    <report-interval-count>
      report-interval-count
    </report-interval-count>
    <threat-history-critical-threats>
      threat-history-critical-threats
    </threat-history-critical-threats>
    <threat-history-major-threats>
      threat-history-major-threats
    </threat-history-major-threats>
    <threat-history-minor-threats>
      threat-history-minor-threats
    </threat-history-minor-threats>
  </threat-24hr-history-by-severity>
```


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```
</reports-threat-statistics>
```

Description

<threat-report-activity-counts>

Usage

```
<reports-threat-summary>
  <threat-report-activity-counts>
    <cumulative-av-counts>
      cumulative-av-counts
    </cumulative-av-counts>
    <cumulative-spam-counts>
      cumulative-spam-counts
    </cumulative-spam-counts>
    <cumulative-webfilter-content-counts>
      cumulative-webfilter-content-counts
    </cumulative-webfilter-content-counts>
    <cumulative-contentfiltering-counts>
      cumulative-contentfiltering-counts
    </cumulative-contentfiltering-counts>
    <cumulative-idp-attack-counts>
      cumulative-idp-attack-counts
    </cumulative-idp-attack-counts>
  </threat-report-activity-counts>
</reports-threat-summary>
```

Description

<threat-report-general-statistics>

Usage

```
<reports-threat-statistics>
  <threat-report-general-statistics>
    <threat-category-name>
      threat-category-name
    </threat-category-name>
    <threat-severity>
      threat-severity
    </threat-severity>
    <threat-past-24hr-hit-count>
      threat-past-24hr-hit-count
    </threat-past-24hr-hit-count>
    <threat-past-1hr-hit-count>
      threat-past-1hr-hit-count
    </threat-past-1hr-hit-count>
  </threat-report-general-statistics>
</reports-threat-statistics>
```

Description

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<threat-report-most-recent-statistic>

Usage

```
<reports-threat-statistics>
  <threat-report-most-recent-statistic>
    <recent-threat-object-name>
      recent-threat-object-name
    </recent-threat-object-name>
    <recent-threat-category>
      recent-threat-category
    </recent-threat-category>
    <report-source-ipaddress>
      report-source-ipaddress
    </report-source-ipaddress>
    <report-source-port>
      report-source-port
    </report-source-port>
    <report-destination-ipaddress>
      report-destination-ipaddress
    </report-destination-ipaddress>
    <report-destination-port>
      report-destination-port
    </report-destination-port>
    <report-protocol>
      report-protocol
    </report-protocol>
    <recent-threat-description>
      recent-threat-description
    </recent-threat-description>
    <report-action>
      report-action
    </report-action>
    <report-timestamps>
      report-timestamps
    </report-timestamps>
  </threat-report-most-recent-statistic>
</reports-threat-statistics>
```

Description

<web-filtering-statistics>

Usage

```
<reports-threat-statistics>
  <web-filtering-statistics>
    <web-filtering-category>
      web-filtering-category
    </web-filtering-category>
    <threat-past-24hr-hit-count>
      threat-past-24hr-hit-count
    </threat-past-24hr-hit-count>
    <threat-past-1hr-hit-count>
      threat-past-1hr-hit-count
    </threat-past-1hr-hit-count>
```


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```
  </web-filtering-statistics>
</reports-threat-statistics>
```

Description

Summary of Resource Manager Response Tags

<resmgr-group-active>

Usage

```
<resmgr-group-active>
  <resmgr-group-active-total>
    resmgr-group-active-total
  </resmgr-group-active-total>
  <resmgr-group-active-count>
    resmgr-group-active-count
  </resmgr-group-active-count>
  <resmgr-group-active-data>....</resmgr-group-active-data>
</resmgr-group-active>
```

Description

<resmgr-group-active-data>

Usage

```
<resmgr-group-active>
  <resmgr-group-active-data>
    <resmgr-group-active-data-grp-id>
      resmgr-group-active-data-grp-id
    </resmgr-group-active-data-grp-id>
    <resmgr-group-active-data-client>
      resmgr-group-active-data-client
    </resmgr-group-active-data-client>
  </resmgr-group-active-data>
</resmgr-group-active>
```

Description

<resmgr-group-active-number>

Usage

```
<resmgr-group-active-number>
  <resmgr-group-active-number-id>
    resmgr-group-active-number-id
  </resmgr-group-active-number-id>
  <resmgr-group-active-number-state>
    resmgr-group-active-number-state
  </resmgr-group-active-number-state>
  <resmgr-group-active-number-client>
    resmgr-group-active-number-client
  </resmgr-group-active-number-client>
  <resmgr-group-active-number-timeout>
    resmgr-group-active-number-timeout
```

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```
        </resmgr-group-active-number-timeout>
        <resmgr-group-active-number-num-res>
          resmgr-group-active-number-num-res
        </resmgr-group-active-number-num-res>

      <resmgr-group-active-number-resource>....</resmgr-group-active-number-resource>

      </resmgr-group-active-number>
```

Description

<resmgr-group-active-number-resource>

Usage

```
<resmgr-group-active-number>
  <resmgr-group-active-number-resource>
    <resmgr-group-active-number-resource-id>
      resmgr-group-active-number-resource-id
    </resmgr-group-active-number-resource-id>
  </resmgr-group-active-number-resource>
</resmgr-group-active-number>
```

Description

<resmgr-resource-active>

Usage

```
<resmgr-resource-active>
  <resmgr-resource-active-total>
    resmgr-resource-active-total
  </resmgr-resource-active-total>
  <resmgr-resource-active-count>
    resmgr-resource-active-count
  </resmgr-resource-active-count>
  <resmgr-resource-active-data>....</resmgr-resource-active-data>
</resmgr-resource-active>
```

Description

<resmgr-resource-active-data>

Usage

```
<resmgr-resource-active>
  <resmgr-resource-active-data>
    <resmgr-resource-active-data-res-id>
      resmgr-resource-active-data-res-id
    </resmgr-resource-active-data-res-id>
    <resmgr-resource-active-data-grp-id>
      resmgr-resource-active-data-grp-id
    </resmgr-resource-active-data-grp-id>
    <resmgr-resource-active-data-client>
      resmgr-resource-active-data-client
    </resmgr-resource-active-data-client>
```


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```
  </resmgr-resource-active-data>
</resmgr-resource-active>
```

Description

<resmgr-resource-active-number>

Usage

```
<resmgr-resource-active-number>
  <resmgr-resource-active-number-id>
    resmgr-resource-active-number-id
  </resmgr-resource-active-number-id>
  <resmgr-resource-active-number-state>
    resmgr-resource-active-number-state
  </resmgr-resource-active-number-state>
  <resmgr-resource-active-number-client>
    resmgr-resource-active-number-client
  </resmgr-resource-active-number-client>
  <resmgr-resource-active-number-parent>
    resmgr-resource-active-number-parent
  </resmgr-resource-active-number-parent>
  <resmgr-resource-active-number-policy>
    resmgr-resource-active-number-policy
  </resmgr-resource-active-number-policy>
  <resmgr-resource-active-number-zone-from>
    resmgr-resource-active-number-zone-from
  </resmgr-resource-active-number-zone-from>
  <resmgr-resource-active-number-zone-to>
    resmgr-resource-active-number-zone-to
  </resmgr-resource-active-number-zone-to>
  <resmgr-resource-active-number-timeout>
    resmgr-resource-active-number-timeout
  </resmgr-resource-active-number-timeout>
  <resmgr-resource-active-number-num-sessions>
    resmgr-resource-active-number-num-sessions
  </resmgr-resource-active-number-num-sessions>

<resmgr-resource-active-number-session>....</resmgr-resource-active-number-session>

  <resmgr-resource-active-number-num-holes>
    resmgr-resource-active-number-num-holes
  </resmgr-resource-active-number-num-holes>
<resmgr-resource-active-number-hole>....</resmgr-resource-active-number-hole>

</resmgr-resource-active-number>
```

Description

<resmgr-resource-active-number-hole>

Usage

```
<resmgr-resource-active-number>
  <resmgr-resource-active-number-hole>
    <resmgr-resource-active-number-hole-id>
```

```
                resmgr-resource-active-number-hole-id
              </resmgr-resource-active-number-hole-id>
              <resmgr-resource-active-number-hole-src-ip0>
                resmgr-resource-active-number-hole-src-ip0
              </resmgr-resource-active-number-hole-src-ip0>
              <resmgr-resource-active-number-hole-src-ip1>
                resmgr-resource-active-number-hole-src-ip1
              </resmgr-resource-active-number-hole-src-ip1>
              <resmgr-resource-active-number-hole-dst-ip0>
                resmgr-resource-active-number-hole-dst-ip0
              </resmgr-resource-active-number-hole-dst-ip0>
              <resmgr-resource-active-number-hole-dst-ip1>
                resmgr-resource-active-number-hole-dst-ip1
              </resmgr-resource-active-number-hole-dst-ip1>
              <resmgr-resource-active-number-hole-src-port0>
                resmgr-resource-active-number-hole-src-port0
              </resmgr-resource-active-number-hole-src-port0>
              <resmgr-resource-active-number-hole-src-port1>
                resmgr-resource-active-number-hole-src-port1
              </resmgr-resource-active-number-hole-src-port1>
              <resmgr-resource-active-number-hole-dst-port0>
                resmgr-resource-active-number-hole-dst-port0
              </resmgr-resource-active-number-hole-dst-port0>
              <resmgr-resource-active-number-hole-dst-port1>
                resmgr-resource-active-number-hole-dst-port1
              </resmgr-resource-active-number-hole-dst-port1>
              <resource-hole-translated-source-ip>
                resource-hole-translated-source-ip
              </resource-hole-translated-source-ip>
              <resource-hole-translated-source-port>
                resource-hole-translated-source-port
              </resource-hole-translated-source-port>
              <resource-hole-translated-destination-ip>
                resource-hole-translated-destination-ip
              </resource-hole-translated-destination-ip>
              <resource-hole-translated-destination-port>
                resource-hole-translated-destination-port
              </resource-hole-translated-destination-port>
              <resmgr-resource-active-number-hole-proto>
                resmgr-resource-active-number-hole-proto
              </resmgr-resource-active-number-hole-proto>
              <resmgr-resource-active-number-hole-refcnt>
                resmgr-resource-active-number-hole-refcnt
              </resmgr-resource-active-number-hole-refcnt>
            </resmgr-resource-active-number-hole>
          </resmgr-resource-active-number>
```

Description

<resmgr-resource-active-number-session>

Usage

```
<resmgr-resource-active-number>
  <resmgr-resource-active-number-session>
    <resmgr-resource-active-number-session-id>
```


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```
      resmgr-resource-active-number-session-id
    </resmgr-resource-active-number-session-id>
  </resmgr-resource-active-number-session>
</resmgr-resource-active-number>
```

Description

<resmgr-settings>

Usage

```
<resmgr-settings>
  <resmgr-settings-timeout>
    resmgr-settings-timeout
  </resmgr-settings-timeout>
  <resmgr-settings-count>
    resmgr-settings-count
  </resmgr-settings-count>
  <resmgr-settings-pinhole-age>
    resmgr-settings-pinhole-age
  </resmgr-settings-pinhole-age>
</resmgr-settings>
```

Description

<resource-manager-summary-information>

Usage

```
<resource-manager-summary-information>
  <active-client-count>
    active-client-count
  </active-client-count>
  <active-group-count>
    active-group-count
  </active-group-count>
  <active-resource-count>
    active-resource-count
  </active-resource-count>
  <active-session-count>
    active-session-count
  </active-session-count>
</resource-manager-summary-information>
```

Description

Summary of VLAN Retag Response Tags

<clear-vlan-retag-statistics-information>

Usage

```
<clear-vlan-retag-statistics-information>
  <clear-vlan-retag-statistics-status>....</clear-vlan-retag-statistics-status>
</clear-vlan-retag-statistics-information>
```

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Description

<clear-vlan-retag-statistics-status>

Usage

```
<clear-vlan-retag-statistics-information>
  <clear-vlan-retag-statistics-status>
    <vlan-retag-clear-status>
      vlan-retag-clear-status
    </vlan-retag-clear-status>
  </clear-vlan-retag-statistics-status>
</clear-vlan-retag-statistics-information>
```

Description

<show-retag-statistics-information>

Usage

```
<show-retag-statistics-information>
  <vlan-retag-entry>....</vlan-retag-entry>
</show-retag-statistics-information>
```

Description

<vlan-retag-entry>

Usage

```
<show-retag-statistics-information>
  <vlan-retag-entry>
    <retag-interface-index>
      retag-interface-index
    </retag-interface-index>
    <retag-from-vlan>
      retag-from-vlan
    </retag-from-vlan>
    <retag-to-vlan>
      retag-to-vlan
    </retag-to-vlan>
    <retag-statistics-ingress>
      retag-statistics-ingress
    </retag-statistics-ingress>
    <retag-statistics-egress>
      retag-statistics-egress
    </retag-statistics-egress>
  </vlan-retag-entry>
</show-retag-statistics-information>
```

Description Information About Vlan Rewrite Statistics

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Summary of Real Time Media Convergence Response Tags

<cli-response>

Usage

```
<media-gateway>
  <cli-response>
    <message>
      message
    </message>
  </cli-response>
</media-gateway>
```

Description Cli response

<media-gateway>

Usage

```
<media-gateway>
  <cli-request>
    cli-request
  </cli-request>
  <cli-response>....</cli-response>
</media-gateway>
```

Description Media gateway information

<sessions>

Usage

```
<survivable-call-service>
  <sessions>
    <address>
      address
    </address>
    <port>
      port
    </port>
    <transport>
      transport
    </transport>
    <state>
      state
    </state>
    <duration>
      duration
    </duration>
    <timer>
      timer
    </timer>
  </sessions>
```

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```
</survivable-call-service>
```

Description Survivable call service sessions

<statistics>

Usage

```
<survivable-call-service>
  <statistics>
    <name>
      name
    </name>
    <last-down-time>
      last-down-time
    </last-down-time>
    <total-down-time>
      total-down-time
    </total-down-time>
    <total-down-count>
      total-down-count
    </total-down-count>
    <minimum-response-time>
      minimum-response-time
    </minimum-response-time>
    <maximum-response-time>
      maximum-response-time
    </maximum-response-time>
    <average-response-time>
      average-response-time
    </average-response-time>
  </statistics>
</survivable-call-service>
```

Description Survivable call service statistics

<status>

Usage

```
<survivable-call-service>
  <status>
    <name>
      name
    </name>
    <address>
      address
    </address>
    <port>
      port
    </port>
    <transport>
      transport
    </transport>
```


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```
    <state>
      state
    </state>
    <mode>
      mode
    </mode>
  </status>
</survivable-call-service>
```

Description Survivable call service status

<survivable-call-service>

Usage

```
<survivable-call-service>
  <status>....</status>
  <statistics>....</statistics>
  <sessions>....</sessions>
</survivable-call-service>
```

Description Survivable call service information

Summary of Scheduler Response Tags

<scheduler>

Usage

```
<schedulers>
  <scheduler>
    <scheduler-name>
      scheduler-name
    </scheduler-name>
    <scheduler-state>
      scheduler-state
    </scheduler-state>
    <scheduler-description>
      scheduler-description
    </scheduler-description>
    <scheduler-next-activation-date-time>
      scheduler-next-activation-date-time
    </scheduler-next-activation-date-time>
    <scheduler-next-deactivation-date-time>
      scheduler-next-deactivation-date-time
    </scheduler-next-deactivation-date-time>
  </scheduler>
</schedulers>
```

Description Information about a scheduler

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<schedulers>

Usage

```
<schedulers>
  <schedulers-logical-system>....</schedulers-logical-system>
  <scheduler>....</scheduler>
</schedulers>
```

Description Information about one or more schedulers

<schedulers-logical-system>

Usage

```
<schedulers>
  <schedulers-logical-system>
    <name>
      name
    </name>
  </schedulers-logical-system>
</schedulers>
```

Description Logical system

Summary of SCTP Response Tags

<clear-counters>

Usage

```
<sctp-clear-counters>
  <clear-counters>
    <clear-counters-status>
      clear-counters-status
    </clear-counters-status>
  </clear-counters>
</sctp-clear-counters>
```

Description

<sctp-clear-counters>

Usage

```
<sctp-clear-counters>
  <clear-counters>....</clear-counters>
</sctp-clear-counters>
```

Description

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<sctp-show-counters>

Usage

```
<sctp-show-counters>
  <show-counters-slot>....</show-counters-slot>
  <show-counters-recvdrop>....</show-counters-recvdrop>
  <show-counters-errdrop>....</show-counters-errdrop>
</sctp-show-counters>
```

Description

<show-counters-errdrop>

Usage

```
<sctp-show-counters>
  <show-counters-errdrop>
    <errdrop-name>
      errdrop-name
    </errdrop-name>
    <errdrop>
      errdrop
    </errdrop>
  </show-counters-errdrop>
</sctp-show-counters>
```

Description

<show-counters-recvdrop>

Usage

```
<sctp-show-counters>
  <show-counters-recvdrop>
    <recvdrop-name>
      recvdrop-name
    </recvdrop-name>
    <received>
      received
    </received>
    <drop>
      drop
    </drop>
  </show-counters-recvdrop>
</sctp-show-counters>
```

Description

<show-counters-slot>

Usage

```
<sctp-show-counters>
  <show-counters-slot>
    <fpc-slot>
```

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```
    fpc-slot
   </fpc-slot>
   <pic-slot>
    pic-slot
   </pic-slot>
  </show-counters-slot>
</sctp-show-counters>
```

Description

Summary of Security Firewall Response Tags

<application-firewall>

Usage

```
<application-firewall>
  <rule-set-info>....</rule-set-info>
</application-firewall>
```

Description Information of the application firewall

<default-rule>

Usage

```
<default-rule>
  <action>
   action
  </action>
  <session-matched-counter>
   session-matched-counter
  </session-matched-counter>
</default-rule>
```

Description Information of the default rule

<default-rule>

Usage

```
<rule-list>
  <default-rule>
   <action>
    action
   </action>
   <session-matched-counter>
    session-matched-counter
   </session-matched-counter>
  </default-rule>
</rule-list>
```

Description Information of the default rule

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<default-rule>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-list>
        <default-rule>
          <action>
            action
          </action>
          <session-matched-counter>
            session-matched-counter
          </session-matched-counter>
        </default-rule>
      </rule-list>
    </rule-set>
  </rule-set-info>
</application-firewall>
```

Description Information of the default rule

<dynamic-application-group-list>

Usage

```
<dynamic-application-group-list>
  <dynamic-application-group>
    dynamic-application-group
  </dynamic-application-group>
</dynamic-application-group-list>
```

Description Information of all dynamic application groups

<dynamic-application-group-list>

Usage

```
<rule-list>
  <rule>
    <dynamic-application-group-list>
      <dynamic-application-group>
        dynamic-application-group
      </dynamic-application-group>
    </dynamic-application-group-list>
  </rule>
</rule-list>
```

Description Information of all dynamic application groups

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<dynamic-application-group-list>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-list>
        <rule>
          <dynamic-application-group-list>
            <dynamic-application-group>
              dynamic-application-group
            </dynamic-application-group>
          </dynamic-application-group-list>
        </rule>
      </rule-list>
    </rule-set>
  </rule-set-info>
</application-firewall>
```

Description Information of all dynamic application groups

<dynamic-application-list>

Usage

```
<dynamic-application-list>
  <dynamic-application>
    dynamic-application
  </dynamic-application>
</dynamic-application-list>
```

Description Information of all dynamic applications

<dynamic-application-list>

Usage

```
<rule-list>
  <rule>
    <dynamic-application-list>
      <dynamic-application>
        dynamic-application
      </dynamic-application>
    </dynamic-application-list>
  </rule>
</rule-list>
```

Description Information of all dynamic applications

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<dynamic-application-list>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-list>
        <rule>
          <dynamic-application-list>
            <dynamic-application>
              dynamic-application
            </dynamic-application>
          </dynamic-application-list>
        </rule>
      </rule-list>
    </rule-set>
  </rule-set-info>
</application-firewall>
```

Description Information of all dynamic applications

<rule>

Usage

```
<rule-list>
  <rule>
    <rule-name>
      rule-name
    </rule-name>
    <dynamic-application-list>....</dynamic-application-list>
    <dynamic-application-group-list>....</dynamic-application-group-list>
    <action>
      action
    </action>
    <session-matched-counter>
      session-matched-counter
    </session-matched-counter>
  </rule>
</rule-list>
```

Description Information of the rule

<rule>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-list>
        <rule>
          <rule-name>
            rule-name
```

```
            </rule-name>
            <dynamic-application-list>....</dynamic-application-list>
            <dynamic-application-group-list>....</dynamic-application-group-list>
            <action>
              action
            </action>
            <session-matched-counter>
              session-matched-counter
            </session-matched-counter>
          </rule>
        </rule-list>
      </rule-set>
    </rule-set-info>
  </application-firewall>
```

Description Information of the rule

<rule-list>

Usage

```
<rule-list>
  <rule>....</rule>
  <default-rule>....</default-rule>
</rule-list>
```

Description Information of all the rules

<rule-list>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-list>
        <rule>....</rule>
        <default-rule>....</default-rule>
      </rule-list>
    </rule-set>
  </rule-set-info>
</application-firewall>
```

Description Information of all the rules

<rule-set>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>
      <rule-set-name>
        rule-set-name
```


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```
      </rule-set-name>
      <logical-system-name>
        logical-system-name
      </logical-system-name>
      <rule-list>....</rule-list>
      <session-pending-counter>
        session-pending-counter
      </session-pending-counter>
    </rule-set>
  </rule-set-info>
</application-firewall>
```

Description

<rule-set-info>

Usage

```
<application-firewall>
  <rule-set-info>
    <rule-set>....</rule-set>
  </rule-set-info>
</application-firewall>
```

Description Information of the rule-set

Summary of Security Policy Response Tags

<address-table>

Usage

```
<security-dns-cache>
  <dns-cache>
    <dns-address>
      <address-table>
        <address-entry>
          address-entry
        </address-entry>
      </address-table>
    </dns-address>
  </dns-cache>
</security-dns-cache>
```

Description DNS address table

<alarm>

Usage

```
<policy-count-alarms>
  <alarm>
    <alarm-count>
      alarm-count
```

```
    </alarm-count>
    <alarm-type>
     alarm-type
    </alarm-type>
   </alarm>
  </policy-count-alarms>
```

Description Information about a single alarm

<alarm>

Usage

```
<policy-information>
 <policy-count-alarms>
  <alarm>
   <alarm-count>
    alarm-count
   </alarm-count>
   <alarm-type>
    alarm-type
   </alarm-type>
  </alarm>
 </policy-count-alarms>
</policy-information>
```

Description Information about a single alarm

<alarm>

Usage

```
<security-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-count-alarms>
     <alarm>
      <alarm-count>
       alarm-count
      </alarm-count>
      <alarm-type>
       alarm-type
      </alarm-type>
     </alarm>
    </policy-count-alarms>
   </policy-information>
  </policies>
 </security-context>
</security-policies>
```

Description Information about a single alarm

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<alarm>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-count-alarms>
          <alarm>
            <alarm-count>
              alarm-count
            </alarm-count>
            <alarm-type>
              alarm-type
            </alarm-type>
          </alarm>
        </policy-count-alarms>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about a single alarm

<alarm>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-count-alarms>
      <alarm>
        <alarm-count>
          alarm-count
        </alarm-count>
        <alarm-type>
          alarm-type
        </alarm-type>
      </alarm>
    </policy-count-alarms>
  </policy-information>
</security-policy-match>
```

Description Information about a single alarm

<application>

Usage

```
<applications>
  <application>
    <application-name>
      application-name
    </application-name>
```

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```
    <application-term>....</application-term>
  </application>
</applications>
```

Description Information about an application in the policy

<application>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-name>
        application-name
      </application-name>
      <application-term>....</application-term>
    </application>
  </applications>
</policy-information>
```

Description Information about an application in the policy

<application>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-name>
              application-name
            </application-name>
            <application-term>....</application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about an application in the policy

<application>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
```


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```
        <applications>
          <application>
            <application-name>
              application-name
            </application-name>
            <application-term>....</application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about an application in the policy

<application>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>
        <application-name>
          application-name
        </application-name>
        <application-term>....</application-term>
      </application>
    </applications>
  </policy-information>
</security-policy-match>
```

Description Information about an application in the policy

<application-acceleration>

Usage

```
<policy-application-services>
  <application-acceleration>
    <application-acceleration-profile-name>
      application-acceleration-profile-name
    </application-acceleration-profile-name>
    <application-acceleration-service-options>
      application-acceleration-service-options
    </application-acceleration-service-options>
  </application-acceleration>
</policy-application-services>
```

Description Information of the application acceleration

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<application-acceleration>

Usage

```
<policy-information>
  <policy-application-services>
    <application-acceleration>
      <application-acceleration-profile-name>
        application-acceleration-profile-name
      </application-acceleration-profile-name>
      <application-acceleration-service-options>
        application-acceleration-service-options
      </application-acceleration-service-options>
    </application-acceleration>
  </policy-application-services>
</policy-information>
```

Description Information of the application acceleration

<application-acceleration>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-acceleration>
            <application-acceleration-profile-name>
              application-acceleration-profile-name
            </application-acceleration-profile-name>
            <application-acceleration-service-options>
              application-acceleration-service-options
            </application-acceleration-service-options>
          </application-acceleration>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the application acceleration

<application-acceleration>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-acceleration>
            <application-acceleration-profile-name>
```


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```
                application-acceleration-profile-name
               </application-acceleration-profile-name>
               <application-acceleration-service-options>
                application-acceleration-service-options
               </application-acceleration-service-options>
              </application-acceleration>
             </policy-application-services>
            </policy-information>
           </policies>
          </security-context>
         </security-dynamic-policies>
```

Description Information of the application acceleration

<application-acceleration>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-application-services>
   <application-acceleration>
    <application-acceleration-profile-name>
     application-acceleration-profile-name
    </application-acceleration-profile-name>
    <application-acceleration-service-options>
     application-acceleration-service-options
    </application-acceleration-service-options>
   </application-acceleration>
  </policy-application-services>
 </policy-information>
</security-policy-match>
```

Description Information of the application acceleration

<application-firewall>

Usage

```
<policy-application-services>
 <application-firewall>
  <rule-set-info>....</rule-set-info>
 </application-firewall>
</policy-application-services>
```

Description Information of the application firewall

<application-firewall>

Usage

```
<policy-information>
 <policy-application-services>
  <application-firewall>
```

```
      <rule-set-info>....</rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of the application firewall

<application-firewall>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>....</rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the application firewall

<application-firewall>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>....</rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of the application firewall

<application-firewall>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
```


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```
      <application-firewall>
        <rule-set-info>....</rule-set-info>
      </application-firewall>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the application firewall

<application-term>

Usage

```
<applications>
  <application>
    <application-term>
      <protocol>
        protocol
      </protocol>
      <alg-name>
        alg-name
      </alg-name>
      <inactivity-timeout>
        inactivity-timeout
      </inactivity-timeout>
      <source-port-range>....</source-port-range>
      <destination-port-range>....</destination-port-range>
      <icmp-info>....</icmp-info>
      <rpc-information>....</rpc-information>
    </application-term>
  </application>
</applications>
```

Description Information about a term within an application

<application-term>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
        <protocol>
          protocol
        </protocol>
        <alg-name>
          alg-name
        </alg-name>
        <inactivity-timeout>
          inactivity-timeout
        </inactivity-timeout>
        <source-port-range>....</source-port-range>
        <destination-port-range>....</destination-port-range>
```

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```
        <icmp-info>....</icmp-info>
        <rpc-information>....</rpc-information>
       </application-term>
      </application>
     </applications>
    </policy-information>
```

Description Information about a term within an application

<application-term>

Usage

```
<security-policies>
 <security-context>
  <policies>
   <policy-information>
    <applications>
     <application>
      <application-term>
       <protocol>
        protocol
       </protocol>
       <alg-name>
        alg-name
       </alg-name>
       <inactivity-timeout>
        inactivity-timeout
       </inactivity-timeout>
       <source-port-range>....</source-port-range>
       <destination-port-range>....</destination-port-range>
       <icmp-info>....</icmp-info>
       <rpc-information>....</rpc-information>
      </application-term>
     </application>
    </applications>
   </policy-information>
  </policies>
 </security-context>
</security-policies>
```

Description Information about a term within an application

<application-term>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <applications>
     <application>
      <application-term>
```


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```
                <protocol>
                  protocol
                </protocol>
                <alg-name>
                  alg-name
                </alg-name>
                <inactivity-timeout>
                  inactivity-timeout
                </inactivity-timeout>
                <source-port-range>....</source-port-range>
                <destination-port-range>....</destination-port-range>
                <icmp-info>....</icmp-info>
                <rpc-information>....</rpc-information>
              </application-term>
            </application>
          </applications>
        </policy-information>
      </policies>
    </security-context>
  </security-dynamic-policies>
```

Description Information about a term within an application

<application-term>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>
        <application-term>
          <protocol>
            protocol
          </protocol>
          <alg-name>
            alg-name
          </alg-name>
          <inactivity-timeout>
            inactivity-timeout
          </inactivity-timeout>
          <source-port-range>....</source-port-range>
          <destination-port-range>....</destination-port-range>
          <icmp-info>....</icmp-info>
          <rpc-information>....</rpc-information>
        </application-term>
      </application>
    </applications>
  </policy-information>
</security-policy-match>
```

Description Information about a term within an application

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<application-traffic-control>

Usage

```
<policy-application-services>
  <application-traffic-control>
    <rule-set-name>
      rule-set-name
    </rule-set-name>
  </application-traffic-control>
</policy-application-services>
```

Description Information of the application traffic control

<application-traffic-control>

Usage

```
<policy-information>
  <policy-application-services>
    <application-traffic-control>
      <rule-set-name>
        rule-set-name
      </rule-set-name>
    </application-traffic-control>
  </policy-application-services>
</policy-information>
```

Description Information of the application traffic control

<application-traffic-control>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-traffic-control>
            <rule-set-name>
              rule-set-name
            </rule-set-name>
          </application-traffic-control>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the application traffic control

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<application-traffic-control>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-traffic-control>
            <rule-set-name>
              rule-set-name
            </rule-set-name>
          </application-traffic-control>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of the application traffic control

<application-traffic-control>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <application-traffic-control>
        <rule-set-name>
          rule-set-name
        </rule-set-name>
      </application-traffic-control>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the application traffic control

<applications>

Usage

```
<applications>
  <application>....</application>
</applications>
```

Description

<applications>

Usage

```
<policy-information>
```

```
  <applications>
    <application>....</application>
  </applications>
</policy-information>
```

Description

<applications>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>....</application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description

<applications>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>....</application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description

<applications>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>....</application>
    </applications>
  </policy-information>
</security-policy-match>
```


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Description

<context-information>

Usage

```
<context-information>
  <global-context>
    global-context
  </global-context>
  <source-zone-name>
    source-zone-name
  </source-zone-name>
  <destination-zone-name>
    destination-zone-name
  </destination-zone-name>
</context-information>
```

Description Information about the logical system, source zone, and destination zone for a policy

<context-information>

Usage

```
<policy-information>
  <context-information>
    <global-context>
      global-context
    </global-context>
    <source-zone-name>
      source-zone-name
    </source-zone-name>
    <destination-zone-name>
      destination-zone-name
    </destination-zone-name>
  </context-information>
</policy-information>
```

Description Information about the logical system, source zone, and destination zone for a policy

<context-information>

Usage

```
<security-policies>
  <security-context>
    <context-information>
      <global-context>
        global-context
      </global-context>
      <source-zone-name>
        source-zone-name
      </source-zone-name>
      <destination-zone-name>
        destination-zone-name
      </destination-zone-name>
```

```
    </context-information>
  </security-context>
</security-policies>
```

Description Information about the logical system, source zone, and destination zone for a policy

<context-information>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <context-information>
          <global-context>
            global-context
          </global-context>
          <source-zone-name>
            source-zone-name
          </source-zone-name>
          <destination-zone-name>
            destination-zone-name
          </destination-zone-name>
        </context-information>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about the logical system, source zone, and destination zone for a policy

<context-information>

Usage

```
<security-dynamic-policies>
  <security-context>
    <context-information>
      <global-context>
        global-context
      </global-context>
      <source-zone-name>
        source-zone-name
      </source-zone-name>
      <destination-zone-name>
        destination-zone-name
      </destination-zone-name>
    </context-information>
  </security-context>
</security-dynamic-policies>
```

Description Information about the logical system, source zone, and destination zone for a policy

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<context-information>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <context-information>
          <global-context>
            global-context
          </global-context>
          <source-zone-name>
            source-zone-name
          </source-zone-name>
          <destination-zone-name>
            destination-zone-name
          </destination-zone-name>
        </context-information>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the logical system, source zone, and destination zone for a policy

<context-information>

Usage

```
<security-policy-match>
  <policy-information>
    <context-information>
      <global-context>
        global-context
      </global-context>
      <source-zone-name>
        source-zone-name
      </source-zone-name>
      <destination-zone-name>
        destination-zone-name
      </destination-zone-name>
    </context-information>
  </policy-information>
</security-policy-match>
```

Description Information about the logical system, source zone, and destination zone for a policy

<default-rule>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
```

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```
            <rule-set>
              <rule-list>
                <default-rule>
                  <action>
                    action
                  </action>
                </default-rule>
              </rule-list>
            </rule-set>
          </rule-set-info>
        </application-firewall>
      </policy-application-services>
```

Description Information of the default rule

<default-rule>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <rule-list>
            <default-rule>
              <action>
                action
              </action>
            </default-rule>
          </rule-list>
        </rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of the default rule

<default-rule>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <default-rule>
                    <action>
```


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```
                    action
                  </action>
                </default-rule>
              </rule-list>
            </rule-set>
          </rule-set-info>
        </application-firewall>
      </policy-application-services>
    </policy-information>
  </policies>
 </security-context>
</security-policies>
```

Description Information of the default rule

<default-rule>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-application-services>
     <application-firewall>
      <rule-set-info>
       <rule-set>
        <rule-list>
         <default-rule>
          <action>
           action
          </action>
         </default-rule>
        </rule-list>
       </rule-set>
      </rule-set-info>
     </application-firewall>
    </policy-application-services>
   </policy-information>
  </policies>
 </security-context>
</security-dynamic-policies>
```

Description Information of the default rule

<default-rule>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-application-services>
   <application-firewall>
    <rule-set-info>
```

```
<rule-set>
  <rule-list>
    <default-rule>
      <action>
        action
      </action>
    </default-rule>
  </rule-list>
</rule-set>
</rule-set-info>
</application-firewall>
</policy-application-services>
</policy-information>
</security-policy-match>
```

Description Information of the default rule

<destination-address>

Usage

```
<destination-addresses>
  <destination-address>
    <address-name>
      address-name
    </address-name>
    <prefixes>....</prefixes>
  </destination-address>
</destination-addresses>
```

Description Information about a destination address

<destination-address>

Usage

```
<policy-information>
  <destination-addresses>
    <destination-address>
      <address-name>
        address-name
      </address-name>
      <prefixes>....</prefixes>
    </destination-address>
  </destination-addresses>
</policy-information>
```

Description Information about a destination address

<destination-address>

Usage

```
<security-policies>
```


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```
<security-context>
  <policies>
    <policy-information>
      <destination-addresses>
        <destination-address>
          <address-name>
            address-name
          </address-name>
          <prefixes>....</prefixes>
        </destination-address>
      </destination-addresses>
    </policy-information>
  </policies>
 </security-context>
</security-policies>
```

Description Information about a destination address

<destination-address>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <destination-addresses>
          <destination-address>
            <address-name>
              address-name
            </address-name>
            <prefixes>....</prefixes>
          </destination-address>
        </destination-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about a destination address

<destination-address>

Usage

```
<security-policy-match>
  <policy-information>
    <destination-addresses>
      <destination-address>
        <address-name>
          address-name
        </address-name>
        <prefixes>....</prefixes>
      </destination-address>
```

```
    </destination-addresses>
  </policy-information>
</security-policy-match>
```

Description Information about a destination address

<destination-addresses>

Usage

```
<destination-addresses>
  <destination-address>....</destination-address>
</destination-addresses>
```

Description Information about the destination addresses

<destination-addresses>

Usage

```
<policy-information>
  <destination-addresses>
    <destination-address>....</destination-address>
  </destination-addresses>
</policy-information>
```

Description Information about the destination addresses

<destination-addresses>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <destination-addresses>
          <destination-address>....</destination-address>
        </destination-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about the destination addresses

<destination-addresses>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
```


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```
      <policy-information>
        <destination-addresses>
          <destination-address>....</destination-address>
        </destination-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the destination addresses

<destination-addresses>

Usage

```
<security-policy-match>
  <policy-information>
    <destination-addresses>
      <destination-address>....</destination-address>
    </destination-addresses>
  </policy-information>
</security-policy-match>
```

Description Information about the destination addresses

<destination-port-range>

Usage

```
<applications>
  <application>
    <application-term>
      <destination-port-range>
        <low>
          low
        </low>
        <high>
          high
        </high>
      </destination-port-range>
    </application-term>
  </application>
</applications>
```

Description Range of the destination ports

<destination-port-range>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
```

```
            <destination-port-range>
              <low>
                low
              </low>
              <high>
                high
              </high>
            </destination-port-range>
          </application-term>
        </application>
      </applications>
    </policy-information>
```

Description Range of the destination ports

<destination-port-range>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <destination-port-range>
                <low>
                  low
                </low>
                <high>
                  high
                </high>
              </destination-port-range>
            </application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Range of the destination ports

<destination-port-range>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
```


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```
                <application-term>
                 <destination-port-range>
                  <low>
                   low
                  </low>
                  <high>
                   high
                  </high>
                 </destination-port-range>
                </application-term>
               </application>
              </applications>
             </policy-information>
            </policies>
           </security-context>
          </security-dynamic-policies>
```

Description Range of the destination ports

<destination-port-range>

Usage

```
<security-policy-match>
 <policy-information>
  <applications>
   <application>
    <application-term>
     <destination-port-range>
      <low>
       low
      </low>
      <high>
       high
      </high>
     </destination-port-range>
    </application-term>
   </application>
  </applications>
 </policy-information>
</security-policy-match>
```

Description Range of the destination ports

<dns-address>

Usage

```
<security-dns-cache>
 <dns-cache>
  <dns-address>
   <address-family>
    address-family
   </address-family>
```

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```
        <address-ttl>
          address-ttl
        </address-ttl>
        <address-table>....</address-table>
      </dns-address>
    </dns-cache>
  </security-dns-cache>
```

Description DNS address

<dns-cache>

Usage

```
<security-dns-cache>
  <dns-cache>
    <dns-name>
      dns-name
    </dns-name>
    <dns-address>....</dns-address>
  </dns-cache>
</security-dns-cache>
```

Description DNS cache of a DNS name

<dynamic-application-group-list>

Usage

```
<dynamic-application-group-list>
  <dynamic-application-group>
    dynamic-application-group
  </dynamic-application-group>
</dynamic-application-group-list>
```

Description Information of all dynamic application group

<dynamic-application-group-list>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>
        <rule-list>
          <rule>
            <dynamic-application-group-list>
              <dynamic-application-group>
                dynamic-application-group
              </dynamic-application-group>
            </dynamic-application-group-list>
          </rule>
        </rule-list>
```


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```
      </rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description Information of all dynamic application group

<dynamic-application-group-list>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <rule-list>
            <rule>
              <dynamic-application-group-list>
                <dynamic-application-group>
                  dynamic-application-group
                </dynamic-application-group>
              </dynamic-application-group-list>
            </rule>
          </rule-list>
        </rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of all dynamic application group

<dynamic-application-group-list>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>
                    <dynamic-application-group-list>
                      <dynamic-application-group>
                        dynamic-application-group
                      </dynamic-application-group>
                    </dynamic-application-group-list>
                  </rule>
                </rule-list>
```

```
            </rule-set>
           </rule-set-info>
          </application-firewall>
         </policy-application-services>
        </policy-information>
       </policies>
      </security-context>
     </security-policies>
```

Description Information of all dynamic application group

<dynamic-application-group-list>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-application-services>
     <application-firewall>
      <rule-set-info>
       <rule-set>
        <rule-list>
         <rule>
          <dynamic-application-group-list>
           <dynamic-application-group>
            dynamic-application-group
           </dynamic-application-group>
          </dynamic-application-group-list>
         </rule>
        </rule-list>
       </rule-set>
      </rule-set-info>
     </application-firewall>
    </policy-application-services>
   </policy-information>
  </policies>
 </security-context>
</security-dynamic-policies>
```

Description Information of all dynamic application group

<dynamic-application-group-list>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-application-services>
   <application-firewall>
    <rule-set-info>
     <rule-set>
      <rule-list>
```


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```
                    <rule>
                      <dynamic-application-group-list>
                        <dynamic-application-group>
                          dynamic-application-group
                        </dynamic-application-group>
                      </dynamic-application-group-list>
                    </rule>
                  </rule-list>
                </rule-set>
              </rule-set-info>
            </application-firewall>
          </policy-application-services>
        </policy-information>
      </security-policy-match>
```

Description Information of all dynamic application group

<dynamic-application-list>

Usage

```
<dynamic-application-list>
  <dynamic-application>
    dynamic-application
  </dynamic-application>
</dynamic-application-list>
```

Description Information of all dynamic application

<dynamic-application-list>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>
        <rule-list>
          <rule>
            <dynamic-application-list>
              <dynamic-application>
                dynamic-application
              </dynamic-application>
            </dynamic-application-list>
          </rule>
        </rule-list>
      </rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description Information of all dynamic application

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<dynamic-application-list>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <rule-list>
            <rule>
              <dynamic-application-list>
                <dynamic-application>
                  dynamic-application
                </dynamic-application>
              </dynamic-application-list>
            </rule>
          </rule-list>
        </rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of all dynamic application

<dynamic-application-list>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>
                    <dynamic-application-list>
                      <dynamic-application>
                        dynamic-application
                      </dynamic-application>
                    </dynamic-application-list>
                  </rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
```


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```
</security-policies>
```

Description Information of all dynamic application

<dynamic-application-list>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>
                    <dynamic-application-list>
                      <dynamic-application>
                        dynamic-application
                      </dynamic-application>
                    </dynamic-application-list>
                  </rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of all dynamic application

<dynamic-application-list>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <application-firewall>
        <rule-set-info>
          <rule-set>
            <rule-list>
              <rule>
                <dynamic-application-list>
                  <dynamic-application>
                    dynamic-application
                  </dynamic-application>
                </dynamic-application-list>
              </rule>
```

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```
            </rule-list>
          </rule-set>
        </rule-set-info>
      </application-firewall>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of all dynamic application

<icmp-info>

Usage

```
<applications>
  <application>
    <application-term>
      <icmp-info>
        <icmp-type>
          icmp-type
        </icmp-type>
        <icmp-code>
          icmp-code
        </icmp-code>
      </icmp-info>
    </application-term>
  </application>
</applications>
```

Description ICMP type information

<icmp-info>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
        <icmp-info>
          <icmp-type>
            icmp-type
          </icmp-type>
          <icmp-code>
            icmp-code
          </icmp-code>
        </icmp-info>
      </application-term>
    </application>
  </applications>
</policy-information>
```

Description ICMP type information

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<icmp-info>

Usage

```
<security-policies>
 <security-context>
  <policies>
   <policy-information>
    <applications>
     <application>
      <application-term>
       <icmp-info>
        <icmp-type>
         icmp-type
        </icmp-type>
        <icmp-code>
         icmp-code
        </icmp-code>
       </icmp-info>
      </application-term>
     </application>
    </applications>
   </policy-information>
  </policies>
 </security-context>
</security-policies>
```

Description ICMP type information

<icmp-info>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <applications>
     <application>
      <application-term>
       <icmp-info>
        <icmp-type>
         icmp-type
        </icmp-type>
        <icmp-code>
         icmp-code
        </icmp-code>
       </icmp-info>
      </application-term>
     </application>
    </applications>
   </policy-information>
  </policies>
 </security-context>
```

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```
</security-dynamic-policies>
```

Description ICMP type information

<icmp-info>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>
        <application-term>
          <icmp-info>
            <icmp-type>
              icmp-type
            </icmp-type>
            <icmp-code>
              icmp-code
            </icmp-code>
          </icmp-info>
        </application-term>
      </application>
    </applications>
  </policy-information>
</security-policy-match>
```

Description ICMP type information

<policies>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>....</policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description

<policies>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>....</policy-information>
    </policies>
  </security-context>
```


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```
</security-dynamic-policies>
```

Description

<policy-action>

Usage

```
<policy-action>
  <action-type>
    action-type
  </action-type>
  <tunnel>
    tunnel
  </tunnel>
  <nat-source>
    nat-source
  </nat-source>
  <nat-destination>
    nat-destination
  </nat-destination>
  <firewall-authentication>
    firewall-authentication
  </firewall-authentication>
  <services-offload>
    services-offload
  </services-offload>
  <application-services>
    application-services
  </application-services>
  <uac-enabled>
    uac-enabled
  </uac-enabled>
  <log>
    log
  </log>
  <count>
    count
  </count>
  <scheduled>
    scheduled
  </scheduled>
</policy-action>
```

Description Action specified in the policy

<policy-action>

Usage

```
<policy-information>
  <policy-action>
    <action-type>
      action-type
    </action-type>
```

```
<tunnel>
  tunnel
</tunnel>
<nat-source>
  nat-source
</nat-source>
<nat-destination>
  nat-destination
</nat-destination>
<firewall-authentication>
  firewall-authentication
</firewall-authentication>
<services-offload>
  services-offload
</services-offload>
<application-services>
  application-services
</application-services>
<uac-enabled>
  uac-enabled
</uac-enabled>
<log>
  log
</log>
<count>
  count
</count>
<scheduled>
  scheduled
</scheduled>
</policy-action>
</policy-information>
```

Description Action specified in the policy

<policy-action>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-action>
          <action-type>
            action-type
          </action-type>
          <tunnel>
            tunnel
          </tunnel>
          <nat-source>
            nat-source
          </nat-source>
          <nat-destination>
            nat-destination
```


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```
            </nat-destination>
            <firewall-authentication>
              firewall-authentication
            </firewall-authentication>
            <services-offload>
              services-offload
            </services-offload>
            <application-services>
              application-services
            </application-services>
            <uac-enabled>
              uac-enabled
            </uac-enabled>
            <log>
              log
            </log>
            <count>
              count
            </count>
            <scheduled>
              scheduled
            </scheduled>
          </policy-action>
        </policy-information>
      </policies>
    </security-context>
  </security-policies>
```

Description Action specified in the policy

<policy-action>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-action>
          <action-type>
            action-type
          </action-type>
          <tunnel>
            tunnel
          </tunnel>
          <nat-source>
            nat-source
          </nat-source>
          <nat-destination>
            nat-destination
          </nat-destination>
          <firewall-authentication>
            firewall-authentication
          </firewall-authentication>
          <services-offload>
```

```
            services-offload
          </services-offload>
          <application-services>
            application-services
          </application-services>
          <uac-enabled>
            uac-enabled
          </uac-enabled>
          <log>
            log
          </log>
          <count>
            count
          </count>
          <scheduled>
            scheduled
          </scheduled>
        </policy-action>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Action specified in the policy

<policy-action>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-action>
      <action-type>
        action-type
      </action-type>
      <tunnel>
        tunnel
      </tunnel>
      <nat-source>
        nat-source
      </nat-source>
      <nat-destination>
        nat-destination
      </nat-destination>
      <firewall-authentication>
        firewall-authentication
      </firewall-authentication>
      <services-offload>
        services-offload
      </services-offload>
      <application-services>
        application-services
      </application-services>
      <uac-enabled>
        uac-enabled
```


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```
    </uac-enabled>
    <log>
      log
    </log>
    <count>
      count
    </count>
    <scheduled>
      scheduled
    </scheduled>
  </policy-action>
 </policy-information>
</security-policy-match>
```

Description Action specified in the policy

<policy-application-services>

Usage

```
<policy-application-services>
 <gprs-gtp-profile>
  gprs-gtp-profile
 </gprs-gtp-profile>
 <gprs-sctp-profile>
  gprs-sctp-profile
 </gprs-sctp-profile>
 <idp>
  idp
 </idp>
 <uac-policy>
  uac-policy
 </uac-policy>
 <application-firewall>....</application-firewall>
 <application-acceleration>....</application-acceleration>
 <ssl-initiation>....</ssl-initiation>
 <ssl-termination>....</ssl-termination>
 <ssl-proxy>....</ssl-proxy>
 <application-traffic-control>....</application-traffic-control>
 <utm>
  utm
 </utm>
 <wan-acceleration>
  wan-acceleration
 </wan-acceleration>
 <wx-optimizer>....</wx-optimizer>
</policy-application-services>
```

Description Application services

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<policy-application-services>

Usage

```
<policy-information>
  <policy-application-services>
    <gprs-gtp-profile>
      gprs-gtp-profile
    </gprs-gtp-profile>
    <gprs-sctp-profile>
      gprs-sctp-profile
    </gprs-sctp-profile>
    <idp>
      idp
    </idp>
    <uac-policy>
      uac-policy
    </uac-policy>
    <application-firewall>....</application-firewall>
    <application-acceleration>....</application-acceleration>
    <ssl-initiation>....</ssl-initiation>
    <ssl-termination>....</ssl-termination>
    <ssl-proxy>....</ssl-proxy>
    <application-traffic-control>....</application-traffic-control>
    <utm>
      utm
    </utm>
    <wan-acceleration>
      wan-acceleration
    </wan-acceleration>
    <wx-optimizer>....</wx-optimizer>
  </policy-application-services>
</policy-information>
```

Description Application services

<policy-application-services>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <gprs-gtp-profile>
            gprs-gtp-profile
          </gprs-gtp-profile>
          <gprs-sctp-profile>
            gprs-sctp-profile
          </gprs-sctp-profile>
          <idp>
            idp
          </idp>
          <uac-policy>
```


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```
            uac-policy
           </uac-policy>
           <application-firewall>....</application-firewall>
           <application-acceleration>....</application-acceleration>
           <ssl-initiation>....</ssl-initiation>
           <ssl-termination>....</ssl-termination>
           <ssl-proxy>....</ssl-proxy>
           <application-traffic-control>....</application-traffic-control>
           <utm>
            utm
           </utm>
           <wan-acceleration>
            wan-acceleration
           </wan-acceleration>
           <wx-optimizer>....</wx-optimizer>
          </policy-application-services>
         </policy-information>
        </policies>
       </security-context>
      </security-policies>
```

Description Application services

<policy-application-services>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-application-services>
     <gprs-gtp-profile>
      gprs-gtp-profile
     </gprs-gtp-profile>
     <gprs-sctp-profile>
      gprs-sctp-profile
     </gprs-sctp-profile>
     <idp>
      idp
     </idp>
     <uac-policy>
      uac-policy
     </uac-policy>
     <application-firewall>....</application-firewall>
     <application-acceleration>....</application-acceleration>
     <ssl-initiation>....</ssl-initiation>
     <ssl-termination>....</ssl-termination>
     <ssl-proxy>....</ssl-proxy>
     <application-traffic-control>....</application-traffic-control>
     <utm>
      utm
     </utm>
     <wan-acceleration>
      wan-acceleration
```

```
            </wan-acceleration>
            <wx-optimizer>....</wx-optimizer>
          </policy-application-services>
        </policy-information>
      </policies>
    </security-context>
  </security-dynamic-policies>
```

Description Application services

<policy-application-services>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <gprs-gtp-profile>
        gprs-gtp-profile
      </gprs-gtp-profile>
      <gprs-sctp-profile>
        gprs-sctp-profile
      </gprs-sctp-profile>
      <idp>
        idp
      </idp>
      <uac-policy>
        uac-policy
      </uac-policy>
      <application-firewall>....</application-firewall>
      <application-acceleration>....</application-acceleration>
      <ssl-initiation>....</ssl-initiation>
      <ssl-termination>....</ssl-termination>
      <ssl-proxy>....</ssl-proxy>
      <application-traffic-control>....</application-traffic-control>
      <utm>
        utm
      </utm>
      <wan-acceleration>
        wan-acceleration
      </wan-acceleration>
      <wx-optimizer>....</wx-optimizer>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Application services

<policy-context-checksum-entry>

Usage

```
<policy-context-checksum-info>
  <policy-context-checksum-entry>
```


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```
<source-zone-name>
  source-zone-name
</source-zone-name>
<destination-zone-name>
  destination-zone-name
</destination-zone-name>
<context-checksum>
  context-checksum
</context-checksum>
</policy-context-checksum-entry>
</policy-context-checksum-info>
```

Description Information about a context

<policy-context-checksum-entry>

Usage

```
<security-policies>
  <policy-context-checksum-info>
    <policy-context-checksum-entry>
      <source-zone-name>
        source-zone-name
      </source-zone-name>
      <destination-zone-name>
        destination-zone-name
      </destination-zone-name>
      <context-checksum>
        context-checksum
      </context-checksum>
    </policy-context-checksum-entry>
  </policy-context-checksum-info>
</security-policies>
```

Description Information about a context

<policy-context-checksum-info>

Usage

```
<policy-context-checksum-info>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <policy-context-checksum-entry>....</policy-context-checksum-entry>
</policy-context-checksum-info>
```

Description Show policy checksum

<policy-context-checksum-info>

Usage

```
<security-policies>
```

```
<policy-context-checksum-info>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <policy-context-checksum-entry>....</policy-context-checksum-entry>
</policy-context-checksum-info>
</security-policies>
```

Description Show policy checksum

<policy-count-alarms>

Usage

```
<policy-count-alarms>
  <alarm>....</alarm>
</policy-count-alarms>
```

Description Information about alarms for the policy

<policy-count-alarms>

Usage

```
<policy-information>
  <policy-count-alarms>
    <alarm>....</alarm>
  </policy-count-alarms>
</policy-information>
```

Description Information about alarms for the policy

<policy-count-alarms>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-count-alarms>
          <alarm>....</alarm>
        </policy-count-alarms>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about alarms for the policy

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<policy-count-alarms>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-count-alarms>
          <alarm>....</alarm>
        </policy-count-alarms>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about alarms for the policy

<policy-count-alarms>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-count-alarms>
      <alarm>....</alarm>
    </policy-count-alarms>
  </policy-information>
</security-policy-match>
```

Description Information about alarms for the policy

<policy-firewall-authentication>

Usage

```
<policy-firewall-authentication>
  <authentication-type>
    authentication-type
  </authentication-type>
  <access-profile-name>
    access-profile-name
  </access-profile-name>
  <client-match-name>
    client-match-name
  </client-match-name>
  <web-redirect>
    web-redirect
  </web-redirect>
</policy-firewall-authentication>
```

Description Information about firewall authentication in the policy

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<policy-firewall-authentication>

Usage

```
<policy-information>
  <policy-firewall-authentication>
    <authentication-type>
      authentication-type
    </authentication-type>
    <access-profile-name>
      access-profile-name
    </access-profile-name>
    <client-match-name>
      client-match-name
    </client-match-name>
    <web-redirect>
      web-redirect
    </web-redirect>
  </policy-firewall-authentication>
</policy-information>
```

Description Information about firewall authentication in the policy

<policy-firewall-authentication>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-firewall-authentication>
          <authentication-type>
            authentication-type
          </authentication-type>
          <access-profile-name>
            access-profile-name
          </access-profile-name>
          <client-match-name>
            client-match-name
          </client-match-name>
          <web-redirect>
            web-redirect
          </web-redirect>
        </policy-firewall-authentication>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about firewall authentication in the policy

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<policy-firewall-authentication>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-firewall-authentication>
          <authentication-type>
            authentication-type
          </authentication-type>
          <access-profile-name>
            access-profile-name
          </access-profile-name>
          <client-match-name>
            client-match-name
          </client-match-name>
          <web-redirect>
            web-redirect
          </web-redirect>
        </policy-firewall-authentication>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about firewall authentication in the policy

<policy-firewall-authentication>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-firewall-authentication>
      <authentication-type>
        authentication-type
      </authentication-type>
      <access-profile-name>
        access-profile-name
      </access-profile-name>
      <client-match-name>
        client-match-name
      </client-match-name>
      <web-redirect>
        web-redirect
      </web-redirect>
    </policy-firewall-authentication>
  </policy-information>
</security-policy-match>
```

Description Information about firewall authentication in the policy

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<policy-hit-count>

Usage

```
<policy-hit-count>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <policy-hit-count-num>
    policy-hit-count-num
  </policy-hit-count-num>
  <policy-hit-count-entry>....</policy-hit-count-entry>
</policy-hit-count>
```

Description Show policy hit-count

<policy-hit-count-entry>

Usage

```
<policy-hit-count-entry>
  <policy-hit-count-index>
    policy-hit-count-index
  </policy-hit-count-index>
  <policy-hit-count-from-zone>
    policy-hit-count-from-zone
  </policy-hit-count-from-zone>
  <policy-hit-count-to-zone>
    policy-hit-count-to-zone
  </policy-hit-count-to-zone>
  <policy-hit-count-policy-name>
    policy-hit-count-policy-name
  </policy-hit-count-policy-name>
  <policy-hit-count-count>
    policy-hit-count-count
  </policy-hit-count-count>
</policy-hit-count-entry>
```

Description Information about policy hit-count

<policy-hit-count-entry>

Usage

```
<policy-hit-count>
  <policy-hit-count-entry>
    <policy-hit-count-index>
      policy-hit-count-index
    </policy-hit-count-index>
    <policy-hit-count-from-zone>
      policy-hit-count-from-zone
    </policy-hit-count-from-zone>
    <policy-hit-count-to-zone>
      policy-hit-count-to-zone
    </policy-hit-count-to-zone>
```


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```
    <policy-hit-count-policy-name>
      policy-hit-count-policy-name
    </policy-hit-count-policy-name>
    <policy-hit-count-count>
      policy-hit-count-count
    </policy-hit-count-count>
  </policy-hit-count-entry>
</policy-hit-count>
```

Description Information about policy hit-count

<policy-information>

Usage

```
<policy-information>
  <policy-name>
    policy-name
  </policy-name>
  <policy-identifier>
    policy-identifier
  </policy-identifier>
  <scope-policy-identifier>
    scope-policy-identifier
  </scope-policy-identifier>
  <policy-sequence-number>
    policy-sequence-number
  </policy-sequence-number>
  <policy-action>....</policy-action>
  <policy-state>
    policy-state
  </policy-state>
  <context-information>....</context-information>
  <policy-description>
    policy-description
  </policy-description>
  <policy-type-information>....</policy-type-information>
  <source-addresses>....</source-addresses>
  <destination-addresses>....</destination-addresses>
  <applications>....</applications>
  <source-identities>....</source-identities>
  <policy-tcp-options>....</policy-tcp-options>
  <policy-tunnel>....</policy-tunnel>
  <policy-firewall-authentication>....</policy-firewall-authentication>
  <policy-application-services>....</policy-application-services>
  <policy-count-alarms>....</policy-count-alarms>
  <policy-log>....</policy-log>
  <policy-scheduler>....</policy-scheduler>
  <policy-statistics-information>....</policy-statistics-information>
</policy-information>
```

Description Information about security policies

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<policy-information>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-name>
          policy-name
        </policy-name>
        <policy-identifier>
          policy-identifier
        </policy-identifier>
        <scope-policy-identifier>
          scope-policy-identifier
        </scope-policy-identifier>
        <policy-sequence-number>
          policy-sequence-number
        </policy-sequence-number>
        <policy-action>....</policy-action>
        <policy-state>
          policy-state
        </policy-state>
        <context-information>....</context-information>
        <policy-description>
          policy-description
        </policy-description>
        <policy-type-information>....</policy-type-information>
        <source-addresses>....</source-addresses>
        <destination-addresses>....</destination-addresses>
        <applications>....</applications>
        <source-identities>....</source-identities>
        <policy-tcp-options>....</policy-tcp-options>
        <policy-tunnel>....</policy-tunnel>
        <policy-firewall-authentication>....</policy-firewall-authentication>
        <policy-application-services>....</policy-application-services>
        <policy-count-alarms>....</policy-count-alarms>
        <policy-log>....</policy-log>
        <policy-scheduler>....</policy-scheduler>
        <policy-statistics-information>....</policy-statistics-information>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about security policies

<policy-information>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
```


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```
<policy-information>
  <policy-name>
    policy-name
  </policy-name>
  <policy-identifier>
    policy-identifier
  </policy-identifier>
  <scope-policy-identifier>
    scope-policy-identifier
  </scope-policy-identifier>
  <policy-sequence-number>
    policy-sequence-number
  </policy-sequence-number>
  <policy-action>....</policy-action>
  <policy-state>
    policy-state
  </policy-state>
  <context-information>....</context-information>
  <policy-description>
    policy-description
  </policy-description>
  <policy-type-information>....</policy-type-information>
  <source-addresses>....</source-addresses>
  <destination-addresses>....</destination-addresses>
  <applications>....</applications>
  <source-identities>....</source-identities>
  <policy-tcp-options>....</policy-tcp-options>
  <policy-tunnel>....</policy-tunnel>
  <policy-firewall-authentication>....</policy-firewall-authentication>
  <policy-application-services>....</policy-application-services>
  <policy-count-alarms>....</policy-count-alarms>
  <policy-log>....</policy-log>
  <policy-scheduler>....</policy-scheduler>
  <policy-statistics-information>....</policy-statistics-information>
 </policy-information>
</policies>
</security-context>
</security-dynamic-policies>
```

Description Information about security policies

<policy-information>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-name>
   policy-name
  </policy-name>
  <policy-identifier>
   policy-identifier
  </policy-identifier>
  <scope-policy-identifier>
   scope-policy-identifier
```

```
    </scope-policy-identifier>
    <policy-sequence-number>
      policy-sequence-number
    </policy-sequence-number>
    <policy-action>....</policy-action>
    <policy-state>
      policy-state
    </policy-state>
    <context-information>....</context-information>
    <policy-description>
      policy-description
    </policy-description>
    <policy-type-information>....</policy-type-information>
    <source-addresses>....</source-addresses>
    <destination-addresses>....</destination-addresses>
    <applications>....</applications>
    <source-identities>....</source-identities>
    <policy-tcp-options>....</policy-tcp-options>
    <policy-tunnel>....</policy-tunnel>
    <policy-firewall-authentication>....</policy-firewall-authentication>
    <policy-application-services>....</policy-application-services>
    <policy-count-alarms>....</policy-count-alarms>
    <policy-log>....</policy-log>
    <policy-scheduler>....</policy-scheduler>
    <policy-statistics-information>....</policy-statistics-information>
  </policy-information>
</security-policy-match>
```

Description Information about security policies

<policy-internal-information>

Usage

```
<policy-internal-information>
  <current-policies>
    current-policies
  </current-policies>
  <maximum-policies>
    maximum-policies
  </maximum-policies>
  <current-policy-context>
    current-policy-context
  </current-policy-context>
  <maximum-policy-context>
    maximum-policy-context
  </maximum-policy-context>
  <current-policy-per-context>
    current-policy-per-context
  </current-policy-per-context>
  <maximum-policy-per-context>
    maximum-policy-per-context
  </maximum-policy-per-context>
  <current-statistic-counters>
    current-statistic-counters
```


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```
</current-statistic-counters>
<maximum-statistic-counters>
  maximum-statistic-counters
</maximum-statistic-counters>
<current-source-address-per-policy>
  current-source-address-per-policy
</current-source-address-per-policy>
<maximum-source-address-per-policy>
  maximum-source-address-per-policy
</maximum-source-address-per-policy>
<current-destination-address-per-policy>
  current-destination-address-per-policy
</current-destination-address-per-policy>
<maximum-destination-address-per-policy>
  maximum-destination-address-per-policy
</maximum-destination-address-per-policy>
<current-application-per-policy>
  current-application-per-policy
</current-application-per-policy>
<maximum-application-per-policy>
  maximum-application-per-policy
</maximum-application-per-policy>
<current-source-identity-per-policy>
  current-source-identity-per-policy
</current-source-identity-per-policy>
<maximum-source-identity-per-policy>
  maximum-source-identity-per-policy
</maximum-source-identity-per-policy>
<messages-received>
  messages-received
</messages-received>
<messages-rejected>
  messages-rejected
</messages-rejected>
<add-received>
  add-received
</add-received>
<delete-received>
  delete-received
</delete-received>
<clear-received>
  clear-received
</clear-received>
<invalid-received>
  invalid-received
</invalid-received>
<add-pfe>
  add-pfe
</add-pfe>
<delete-pfe>
  delete-pfe
</delete-pfe>
<clear-pfe>
  clear-pfe
</clear-pfe>
<add-success>
```

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```
    add-success
  </add-success>
  <delete-success>
    delete-success
  </delete-success>
  <clear-success>
    clear-success
  </clear-success>
  <add-failed>
    add-failed
  </add-failed>
  <delete-failed>
    delete-failed
  </delete-failed>
  <clear-failed>
    clear-failed
  </clear-failed>
  <ssam-sent>
    ssam-sent
  </ssam-sent>
  <ssam-success>
    ssam-success
  </ssam-success>
  <ssam-failed>
    ssam-failed
  </ssam-failed>
  <invalid-configuration>
    invalid-configuration
  </invalid-configuration>
  <invalid-scope>
    invalid-scope
  </invalid-scope>
</policy-internal-information>
```

Description Information about the policy

<policy-internal-information>

Usage

```
<security-policies>
  <policy-internal-information>
    <current-policies>
      current-policies
    </current-policies>
    <maximum-policies>
      maximum-policies
    </maximum-policies>
    <current-policy-context>
      current-policy-context
    </current-policy-context>
    <maximum-policy-context>
      maximum-policy-context
    </maximum-policy-context>
    <current-policy-per-context>
```


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```
  current-policy-per-context
</current-policy-per-context>
<maximum-policy-per-context>
  maximum-policy-per-context
</maximum-policy-per-context>
<current-statistic-counters>
  current-statistic-counters
</current-statistic-counters>
<maximum-statistic-counters>
  maximum-statistic-counters
</maximum-statistic-counters>
<current-source-address-per-policy>
  current-source-address-per-policy
</current-source-address-per-policy>
<maximum-source-address-per-policy>
  maximum-source-address-per-policy
</maximum-source-address-per-policy>
<current-destination-address-per-policy>
  current-destination-address-per-policy
</current-destination-address-per-policy>
<maximum-destination-address-per-policy>
  maximum-destination-address-per-policy
</maximum-destination-address-per-policy>
<current-application-per-policy>
  current-application-per-policy
</current-application-per-policy>
<maximum-application-per-policy>
  maximum-application-per-policy
</maximum-application-per-policy>
<current-source-identity-per-policy>
  current-source-identity-per-policy
</current-source-identity-per-policy>
<maximum-source-identity-per-policy>
  maximum-source-identity-per-policy
</maximum-source-identity-per-policy>
<messages-received>
  messages-received
</messages-received>
<messages-rejected>
  messages-rejected
</messages-rejected>
<add-received>
  add-received
</add-received>
<delete-received>
  delete-received
</delete-received>
<clear-received>
  clear-received
</clear-received>
<invalid-received>
  invalid-received
</invalid-received>
<add-pfe>
  add-pfe
</add-pfe>
```

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```
<delete-pfe>
  delete-pfe
</delete-pfe>
<clear-pfe>
  clear-pfe
</clear-pfe>
<add-success>
  add-success
</add-success>
<delete-success>
  delete-success
</delete-success>
<clear-success>
  clear-success
</clear-success>
<add-failed>
  add-failed
</add-failed>
<delete-failed>
  delete-failed
</delete-failed>
<clear-failed>
  clear-failed
</clear-failed>
<ssam-sent>
  ssam-sent
</ssam-sent>
<ssam-success>
  ssam-success
</ssam-success>
<ssam-failed>
  ssam-failed
</ssam-failed>
<invalid-configuration>
  invalid-configuration
</invalid-configuration>
<invalid-scope>
  invalid-scope
</invalid-scope>
</policy-internal-information>
</security-policies>
```

Description Information about the policy

<policy-log>

Usage

```
<policy-log>
  <log-session-creation>
    log-session-creation
  </log-session-creation>
  <log-session-close>
    log-session-close
  </log-session-close>
```


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```
</policy-log>
```

Description Information about logging for the policy

<policy-log>

Usage

```
<policy-information>
  <policy-log>
    <log-session-creation>
      log-session-creation
    </log-session-creation>
    <log-session-close>
      log-session-close
    </log-session-close>
  </policy-log>
</policy-information>
```

Description Information about logging for the policy

<policy-log>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-log>
          <log-session-creation>
            log-session-creation
          </log-session-creation>
          <log-session-close>
            log-session-close
          </log-session-close>
        </policy-log>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about logging for the policy

<policy-log>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-log>
          <log-session-creation>
```

```
                log-session-creation
               </log-session-creation>
               <log-session-close>
                log-session-close
               </log-session-close>
              </policy-log>
             </policy-information>
            </policies>
           </security-context>
          </security-dynamic-policies>
```

Description Information about logging for the policy

<policy-log>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-log>
   <log-session-creation>
    log-session-creation
   </log-session-creation>
   <log-session-close>
    log-session-close
   </log-session-close>
  </policy-log>
 </policy-information>
</security-policy-match>
```

Description Information about logging for the policy

<policy-scheduler>

Usage

```
<policy-scheduler>
 <attached-scheduler-name>
  attached-scheduler-name
 </attached-scheduler-name>
</policy-scheduler>
```

Description Information about scheduler attached to the policy

<policy-scheduler>

Usage

```
<policy-information>
 <policy-scheduler>
  <attached-scheduler-name>
   attached-scheduler-name
  </attached-scheduler-name>
 </policy-scheduler>
```


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```
</policy-information>
```

Description Information about scheduler attached to the policy

<policy-scheduler>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-scheduler>
          <attached-scheduler-name>
            attached-scheduler-name
          </attached-scheduler-name>
        </policy-scheduler>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about scheduler attached to the policy

<policy-scheduler>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-scheduler>
          <attached-scheduler-name>
            attached-scheduler-name
          </attached-scheduler-name>
        </policy-scheduler>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about scheduler attached to the policy

<policy-scheduler>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-scheduler>
      <attached-scheduler-name>
        attached-scheduler-name
      </attached-scheduler-name>
```

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```
    </policy-scheduler>
  </policy-information>
</security-policy-match>
```

Description Information about scheduler attached to the policy

<policy-shadow-policies>

Usage

```
<policy-shadow-policies>
  <policy-shadow-policy>....</policy-shadow-policy>
</policy-shadow-policies>
```

Description Show shadow policy information

<policy-shadow-policies>

Usage

```
<security-policy-shadow>
  <policy-shadow-policies>
    <policy-shadow-policy>....</policy-shadow-policy>
  </policy-shadow-policies>
</security-policy-shadow>
```

Description Show shadow policy information

<policy-shadow-policy>

Usage

```
<policy-shadow-policies>
  <policy-shadow-policy>
    <policy-shadow-policy-original-policy>
      policy-shadow-policy-original-policy
    </policy-shadow-policy-original-policy>
    <policy-shadow-policy-shadowed-policy>
      policy-shadow-policy-shadowed-policy
    </policy-shadow-policy-shadowed-policy>
  </policy-shadow-policy>
</policy-shadow-policies>
```

Description Information about a shadow policy

<policy-shadow-policy>

Usage

```
<security-policy-shadow>
  <policy-shadow-policies>
    <policy-shadow-policy>
      <policy-shadow-policy-original-policy>
```


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```
            policy-shadow-policy-original-policy
           </policy-shadow-policy-original-policy>
           <policy-shadow-policy-shadowed-policy>
            policy-shadow-policy-shadowed-policy
           </policy-shadow-policy-shadowed-policy>
          </policy-shadow-policy>
         </policy-shadow-policies>
        </security-policy-shadow>
```

Description Information about a shadow policy

<policy-statistics-information>

Usage

```
<policy-statistics-information>
 <pfe-identifier>
  pfe-identifier
 </pfe-identifier>
 <input-bytes>
  input-bytes
 </input-bytes>
 <output-bytes>
  output-bytes
 </output-bytes>
 <input-byte-rate>
  input-byte-rate
 </input-byte-rate>
 <output-byte-rate>
  output-byte-rate
 </output-byte-rate>
 <input-packets>
  input-packets
 </input-packets>
 <output-packets>
  output-packets
 </output-packets>
 <input-packet-rate>
  input-packet-rate
 </input-packet-rate>
 <output-packet-rate>
  output-packet-rate
 </output-packet-rate>
 <session-creations>
  session-creations
 </session-creations>
 <session-deletions>
  session-deletions
 </session-deletions>
 <session-creation-rate>
  session-creation-rate
 </session-creation-rate>
 <active-sessions>
  active-sessions
 </active-sessions>
```

```
<policy-lookups>
  policy-lookups
 </policy-lookups>
</policy-statistics-information>
```

Description Statistics about the policy

<policy-statistics-information>

Usage

```
<policy-information>
  <policy-statistics-information>
    <pfe-identifier>
      pfe-identifier
    </pfe-identifier>
    <input-bytes>
      input-bytes
    </input-bytes>
    <output-bytes>
      output-bytes
    </output-bytes>
    <input-byte-rate>
      input-byte-rate
    </input-byte-rate>
    <output-byte-rate>
      output-byte-rate
    </output-byte-rate>
    <input-packets>
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
    <input-packet-rate>
      input-packet-rate
    </input-packet-rate>
    <output-packet-rate>
      output-packet-rate
    </output-packet-rate>
    <session-creations>
      session-creations
    </session-creations>
    <session-deletions>
      session-deletions
    </session-deletions>
    <session-creation-rate>
      session-creation-rate
    </session-creation-rate>
    <active-sessions>
      active-sessions
    </active-sessions>
    <policy-lookups>
      policy-lookups
    </policy-lookups>
```


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```
  </policy-statistics-information>
</policy-information>
```

Description Statistics about the policy

<policy-statistics-information>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-statistics-information>
          <pfe-identifier>
            pfe-identifier
          </pfe-identifier>
          <input-bytes>
            input-bytes
          </input-bytes>
          <output-bytes>
            output-bytes
          </output-bytes>
          <input-byte-rate>
            input-byte-rate
          </input-byte-rate>
          <output-byte-rate>
            output-byte-rate
          </output-byte-rate>
          <input-packets>
            input-packets
          </input-packets>
          <output-packets>
            output-packets
          </output-packets>
          <input-packet-rate>
            input-packet-rate
          </input-packet-rate>
          <output-packet-rate>
            output-packet-rate
          </output-packet-rate>
          <session-creations>
            session-creations
          </session-creations>
          <session-deletions>
            session-deletions
          </session-deletions>
          <session-creation-rate>
            session-creation-rate
          </session-creation-rate>
          <active-sessions>
            active-sessions
          </active-sessions>
          <policy-lookups>
            policy-lookups
```

```
            </policy-lookups>
           </policy-statistics-information>
          </policy-information>
         </policies>
        </security-context>
       </security-policies>
```

Description Statistics about the policy

<policy-statistics-information>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-statistics-information>
     <pfe-identifier>
      pfe-identifier
     </pfe-identifier>
     <input-bytes>
      input-bytes
     </input-bytes>
     <output-bytes>
      output-bytes
     </output-bytes>
     <input-byte-rate>
      input-byte-rate
     </input-byte-rate>
     <output-byte-rate>
      output-byte-rate
     </output-byte-rate>
     <input-packets>
      input-packets
     </input-packets>
     <output-packets>
      output-packets
     </output-packets>
     <input-packet-rate>
      input-packet-rate
     </input-packet-rate>
     <output-packet-rate>
      output-packet-rate
     </output-packet-rate>
     <session-creations>
      session-creations
     </session-creations>
     <session-deletions>
      session-deletions
     </session-deletions>
     <session-creation-rate>
      session-creation-rate
     </session-creation-rate>
     <active-sessions>
```


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```
                active-sessions
               </active-sessions>
               <policy-lookups>
                policy-lookups
               </policy-lookups>
              </policy-statistics-information>
             </policy-information>
            </policies>
           </security-context>
          </security-dynamic-policies>
```

Description Statistics about the policy

<policy-statistics-information>

Usage

```
<security-policy-match>
 <policy-information>
  <policy-statistics-information>
   <pfe-identifier>
    pfe-identifier
   </pfe-identifier>
   <input-bytes>
    input-bytes
   </input-bytes>
   <output-bytes>
    output-bytes
   </output-bytes>
   <input-byte-rate>
    input-byte-rate
   </input-byte-rate>
   <output-byte-rate>
    output-byte-rate
   </output-byte-rate>
   <input-packets>
    input-packets
   </input-packets>
   <output-packets>
    output-packets
   </output-packets>
   <input-packet-rate>
    input-packet-rate
   </input-packet-rate>
   <output-packet-rate>
    output-packet-rate
   </output-packet-rate>
   <session-creations>
    session-creations
   </session-creations>
   <session-deletions>
    session-deletions
   </session-deletions>
   <session-creation-rate>
    session-creation-rate
```

```
    </session-creation-rate>
    <active-sessions>
      active-sessions
    </active-sessions>
    <policy-lookups>
      policy-lookups
    </policy-lookups>
  </policy-statistics-information>
 </policy-information>
</security-policy-match>
```

Description Statistics about the policy

<policy-tcp-options>

Usage

```
<policy-tcp-options>
 <policy-tcp-options-syn-check>
  policy-tcp-options-syn-check
 </policy-tcp-options-syn-check>
 <policy-tcp-options-sequence-check>
  policy-tcp-options-sequence-check
 </policy-tcp-options-sequence-check>
</policy-tcp-options>
```

Description Information about the TCP options of policy

<policy-tcp-options>

Usage

```
<policy-information>
 <policy-tcp-options>
  <policy-tcp-options-syn-check>
   policy-tcp-options-syn-check
  </policy-tcp-options-syn-check>
  <policy-tcp-options-sequence-check>
   policy-tcp-options-sequence-check
  </policy-tcp-options-sequence-check>
 </policy-tcp-options>
</policy-information>
```

Description Information about the TCP options of policy

<policy-tcp-options>

Usage

```
<security-policies>
 <security-context>
  <policies>
   <policy-information>
    <policy-tcp-options>
```


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```
            <policy-tcp-options-syn-check>
              policy-tcp-options-syn-check
            </policy-tcp-options-syn-check>
            <policy-tcp-options-sequence-check>
              policy-tcp-options-sequence-check
            </policy-tcp-options-sequence-check>
          </policy-tcp-options>
        </policy-information>
      </policies>
    </security-context>
  </security-policies>
```

Description Information about the TCP options of policy

<policy-tcp-options>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-tcp-options>
          <policy-tcp-options-syn-check>
            policy-tcp-options-syn-check
          </policy-tcp-options-syn-check>
          <policy-tcp-options-sequence-check>
            policy-tcp-options-sequence-check
          </policy-tcp-options-sequence-check>
        </policy-tcp-options>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the TCP options of policy

<policy-tcp-options>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-tcp-options>
      <policy-tcp-options-syn-check>
        policy-tcp-options-syn-check
      </policy-tcp-options-syn-check>
      <policy-tcp-options-sequence-check>
        policy-tcp-options-sequence-check
      </policy-tcp-options-sequence-check>
    </policy-tcp-options>
  </policy-information>
</security-policy-match>
```

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Description Information about the TCP options of policy

<policy-tunnel>

Usage

```
<policy-tunnel>
  <tunnel-type>
    tunnel-type
  </tunnel-type>
  <tunnel-name>
    tunnel-name
  </tunnel-name>
  <tunnel-identifier>
    tunnel-identifier
  </tunnel-identifier>
  <pair-policy-name>
    pair-policy-name
  </pair-policy-name>
</policy-tunnel>
```

Description Information about the policy-based tunnel

<policy-tunnel>

Usage

```
<policy-information>
  <policy-tunnel>
    <tunnel-type>
      tunnel-type
    </tunnel-type>
    <tunnel-name>
      tunnel-name
    </tunnel-name>
    <tunnel-identifier>
      tunnel-identifier
    </tunnel-identifier>
    <pair-policy-name>
      pair-policy-name
    </pair-policy-name>
  </policy-tunnel>
</policy-information>
```

Description Information about the policy-based tunnel

<policy-tunnel>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-tunnel>
```


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```
            <tunnel-type>
              tunnel-type
            </tunnel-type>
            <tunnel-name>
              tunnel-name
            </tunnel-name>
            <tunnel-identifier>
              tunnel-identifier
            </tunnel-identifier>
            <pair-policy-name>
              pair-policy-name
            </pair-policy-name>
          </policy-tunnel>
        </policy-information>
      </policies>
    </security-context>
  </security-policies>
```

Description Information about the policy-based tunnel

<policy-tunnel>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-tunnel>
          <tunnel-type>
            tunnel-type
          </tunnel-type>
          <tunnel-name>
            tunnel-name
          </tunnel-name>
          <tunnel-identifier>
            tunnel-identifier
          </tunnel-identifier>
          <pair-policy-name>
            pair-policy-name
          </pair-policy-name>
        </policy-tunnel>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the policy-based tunnel

<policy-tunnel>

Usage

```
<security-policy-match>
```

```
<policy-information>
  <policy-tunnel>
    <tunnel-type>
      tunnel-type
    </tunnel-type>
    <tunnel-name>
      tunnel-name
    </tunnel-name>
    <tunnel-identifier>
      tunnel-identifier
    </tunnel-identifier>
    <pair-policy-name>
      pair-policy-name
    </pair-policy-name>
  </policy-tunnel>
 </policy-information>
</security-policy-match>
```

Description Information about the policy-based tunnel

<policy-type-information>

Usage

```
<policy-type-information>
  <policy-type-string>
    policy-type-string
  </policy-type-string>
  <policy-type-dynamic-policy-count>
    policy-type-dynamic-policy-count
  </policy-type-dynamic-policy-count>
</policy-type-information>
```

Description Information about the type of policy

<policy-type-information>

Usage

```
<policy-information>
  <policy-type-information>
    <policy-type-string>
      policy-type-string
    </policy-type-string>
    <policy-type-dynamic-policy-count>
      policy-type-dynamic-policy-count
    </policy-type-dynamic-policy-count>
  </policy-type-information>
</policy-information>
```

Description Information about the type of policy

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<policy-type-information>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-type-information>
          <policy-type-string>
            policy-type-string
          </policy-type-string>
          <policy-type-dynamic-policy-count>
            policy-type-dynamic-policy-count
          </policy-type-dynamic-policy-count>
        </policy-type-information>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about the type of policy

<policy-type-information>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-type-information>
          <policy-type-string>
            policy-type-string
          </policy-type-string>
          <policy-type-dynamic-policy-count>
            policy-type-dynamic-policy-count
          </policy-type-dynamic-policy-count>
        </policy-type-information>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the type of policy

<policy-type-information>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-type-information>
      <policy-type-string>
        policy-type-string
```

```
        </policy-type-string>
        <policy-type-dynamic-policy-count>
          policy-type-dynamic-policy-count
        </policy-type-dynamic-policy-count>
      </policy-type-information>
    </policy-information>
  </security-policy-match>
```

Description Information about the type of policy

<policy-zone-context>

Usage

```
<policy-zone-context>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <policy-zone-context-entry>....</policy-zone-context-entry>
</policy-zone-context>
```

Description Show policy zone context

<policy-zone-context>

Usage

```
<security-policies>
  <policy-zone-context>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <policy-zone-context-entry>....</policy-zone-context-entry>
  </policy-zone-context>
</security-policies>
```

Description Show policy zone context

<policy-zone-context-entry>

Usage

```
<policy-zone-context>
  <policy-zone-context-entry>
    <policy-zone-context-from-zone>
      policy-zone-context-from-zone
    </policy-zone-context-from-zone>
    <policy-zone-context-to-zone>
      policy-zone-context-to-zone
    </policy-zone-context-to-zone>
    <policy-zone-context-policy-count>
      policy-zone-context-policy-count
    </policy-zone-context-policy-count>
  </policy-zone-context-entry>
```


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```
</policy-zone-context>
```

Description Information about a context

<policy-zone-context-entry>

Usage

```
<security-policies>
  <policy-zone-context>
    <policy-zone-context-entry>
      <policy-zone-context-from-zone>
        policy-zone-context-from-zone
      </policy-zone-context-from-zone>
      <policy-zone-context-to-zone>
        policy-zone-context-to-zone
      </policy-zone-context-to-zone>
      <policy-zone-context-policy-count>
        policy-zone-context-policy-count
      </policy-zone-context-policy-count>
    </policy-zone-context-entry>
  </policy-zone-context>
</security-policies>
```

Description Information about a context

<prefixes>

Usage

```
<prefixes>
  <address-prefix>
    address-prefix
  </address-prefix>
</prefixes>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<destination-addresses>
  <destination-address>
    <prefixes>
      <address-prefix>
        address-prefix
      </address-prefix>
    </prefixes>
  </destination-address>
</destination-addresses>
```

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Description IP prefixes for an address

<prefixes>

Usage

```
<source-addresses>
  <source-address>
    <prefixes>
      <address-prefix>
        address-prefix
      </address-prefix>
    </prefixes>
  </source-address>
</source-addresses>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<policy-information>
  <source-addresses>
    <source-address>
      <prefixes>
        <address-prefix>
          address-prefix
        </address-prefix>
      </prefixes>
    </source-address>
  </source-addresses>
</policy-information>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<policy-information>
  <destination-addresses>
    <destination-address>
      <prefixes>
        <address-prefix>
          address-prefix
        </address-prefix>
      </prefixes>
    </destination-address>
  </destination-addresses>
</policy-information>
```

Description IP prefixes for an address

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<prefixes>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-addresses>
          <source-address>
            <prefixes>
              <address-prefix>
                address-prefix
              </address-prefix>
            </prefixes>
          </source-address>
        </source-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <destination-addresses>
          <destination-address>
            <prefixes>
              <address-prefix>
                address-prefix
              </address-prefix>
            </prefixes>
          </destination-address>
        </destination-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
```

```
<policy-information>
  <source-addresses>
    <source-address>
      <prefixes>
        <address-prefix>
          address-prefix
        </address-prefix>
      </prefixes>
    </source-address>
  </source-addresses>
</policy-information>
</policies>
</security-context>
</security-dynamic-policies>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <destination-addresses>
          <destination-address>
            <prefixes>
              <address-prefix>
                address-prefix
              </address-prefix>
            </prefixes>
          </destination-address>
        </destination-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<security-policy-match>
  <policy-information>
    <source-addresses>
      <source-address>
        <prefixes>
          <address-prefix>
            address-prefix
          </address-prefix>
        </prefixes>
```


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```
        </source-address>
      </source-addresses>
    </policy-information>
  </security-policy-match>
```

Description IP prefixes for an address

<prefixes>

Usage

```
<security-policy-match>
  <policy-information>
    <destination-addresses>
      <destination-address>
        <prefixes>
          <address-prefix>
            address-prefix
          </address-prefix>
        </prefixes>
      </destination-address>
    </destination-addresses>
  </policy-information>
</security-policy-match>
```

Description IP prefixes for an address

<program-number-range>

Usage

```
<applications>
  <application>
    <application-term>
      <rpc-information>
        <program-number-range>
          <low>
            low
          </low>
          <high>
            high
          </high>
        </program-number-range>
      </rpc-information>
    </application-term>
  </application>
</applications>
```

Description

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<program-number-range>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
        <rpc-information>
          <program-number-range>
            <low>
              low
            </low>
            <high>
              high
            </high>
          </program-number-range>
        </rpc-information>
      </application-term>
    </application>
  </applications>
</policy-information>
```

Description

<program-number-range>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <rpc-information>
                <program-number-range>
                  <low>
                    low
                  </low>
                  <high>
                    high
                  </high>
                </program-number-range>
              </rpc-information>
            </application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description

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<program-number-range>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <rpc-information>
                <program-number-range>
                  <low>
                    low
                  </low>
                  <high>
                    high
                  </high>
                </program-number-range>
              </rpc-information>
            </application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description

<program-number-range>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>
        <application-term>
          <rpc-information>
            <program-number-range>
              <low>
                low
              </low>
              <high>
                high
              </high>
            </program-number-range>
          </rpc-information>
        </application-term>
      </application>
    </applications>
  </policy-information>
</security-policy-match>
```

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Description

<rpc-information>

Usage

```
<applications>
  <application>
    <application-term>
      <rpc-information>
        <program-number-range>....</program-number-range>
        <rpc-uuid>
          rpc-uuid
        </rpc-uuid>
      </rpc-information>
    </application-term>
  </application>
</applications>
```

Description RPC type information

<rpc-information>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
        <rpc-information>
          <program-number-range>....</program-number-range>
          <rpc-uuid>
            rpc-uuid
          </rpc-uuid>
        </rpc-information>
      </application-term>
    </application>
  </applications>
</policy-information>
```

Description RPC type information

<rpc-information>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <rpc-information>
                <program-number-range>....</program-number-range>
                <rpc-uuid>
```


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```
                    rpc-uuid
                   </rpc-uuid>
                  </rpc-information>
                 </application-term>
                </application>
               </applications>
              </policy-information>
             </policies>
            </security-context>
           </security-policies>
```

Description RPC type information

<rpc-information>

Usage

```
<security-dynamic-policies>
 <security-context>
  <policies>
   <policy-information>
    <applications>
     <application>
      <application-term>
       <rpc-information>
        <program-number-range>....</program-number-range>
        <rpc-uuid>
         rpc-uuid
        </rpc-uuid>
       </rpc-information>
      </application-term>
     </application>
    </applications>
   </policy-information>
  </policies>
 </security-context>
</security-dynamic-policies>
```

Description RPC type information

<rpc-information>

Usage

```
<security-policy-match>
 <policy-information>
  <applications>
   <application>
    <application-term>
     <rpc-information>
      <program-number-range>....</program-number-range>
      <rpc-uuid>
       rpc-uuid
      </rpc-uuid>
```

```
            </rpc-information>
          </application-term>
        </application>
      </applications>
    </policy-information>
  </security-policy-match>
```

Description RPC type information

<rule>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>
        <rule-list>
          <rule>
            <name>
              name
            </name>
            <dynamic-application-list>....</dynamic-application-list>
            <dynamic-application-group-list>....</dynamic-application-group-list>
            <action>
              action
            </action>
          </rule>
        </rule-list>
      </rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description Information of the rule

<rule>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <rule-list>
            <rule>
              <name>
                name
              </name>
              <dynamic-application-list>....</dynamic-application-list>
              <dynamic-application-group-list>....</dynamic-application-group-list>
              <action>
                action
```


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```
                    </action>
                  </rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
```

Description Information of the rule

<rule>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>
                    <name>
                      name
                    </name>
                    <dynamic-application-list>....</dynamic-application-list>
                  <dynamic-application-group-list>....</dynamic-application-group-list>

                    <action>
                      action
                    </action>
                  </rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the rule

<rule>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
```

```
                    <policy-information>
                     <policy-application-services>
                      <application-firewall>
                       <rule-set-info>
                        <rule-set>
                         <rule-list>
                          <rule>
                           <name>
                            name
                           </name>
                           <dynamic-application-list>....</dynamic-application-list>
                          <dynamic-application-group-list>....</dynamic-application-group-list>

                           <action>
                            action
                           </action>
                          </rule>
                         </rule-list>
                        </rule-set>
                       </rule-set-info>
                      </application-firewall>
                     </policy-application-services>
                    </policy-information>
                   </policies>
                  </security-context>
                 </security-dynamic-policies>
```

Description Information of the rule

<rule>

Usage

```
                 <security-policy-match>
                  <policy-information>
                   <policy-application-services>
                    <application-firewall>
                     <rule-set-info>
                      <rule-set>
                       <rule-list>
                        <rule>
                         <name>
                          name
                         </name>
                         <dynamic-application-list>....</dynamic-application-list>
                         <dynamic-application-group-list>....</dynamic-application-group-list>

                         <action>
                          action
                         </action>
                        </rule>
                       </rule-list>
                      </rule-set>
                     </rule-set-info>
                    </application-firewall>
```


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```
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the rule

<rule-list>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>
        <rule-list>
          <rule>....</rule>
          <default-rule>....</default-rule>
        </rule-list>
      </rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description Information of all rules

<rule-list>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <rule-list>
            <rule>....</rule>
            <default-rule>....</default-rule>
          </rule-list>
        </rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of all rules

<rule-list>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
```

```
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>....</rule>
                  <default-rule>....</default-rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of all rules

<rule-list>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <rule-list>
                  <rule>....</rule>
                  <default-rule>....</default-rule>
                </rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of all rules

<rule-list>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <application-firewall>
```


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```
        <rule-set-info>
          <rule-set>
            <rule-list>
              <rule>....</rule>
              <default-rule>....</default-rule>
            </rule-list>
          </rule-set>
        </rule-set-info>
      </application-firewall>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of all rules

<rule-set>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>
        <name>
          name
        </name>
        <rule-list>....</rule-list>
      </rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description

<rule-set>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>
          <name>
            name
          </name>
          <rule-list>....</rule-list>
        </rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description

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<rule-set>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <name>
                  name
                </name>
                <rule-list>....</rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description

<rule-set>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>
                <name>
                  name
                </name>
                <rule-list>....</rule-list>
              </rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description

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<rule-set>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <application-firewall>
        <rule-set-info>
          <rule-set>
            <name>
              name
            </name>
            <rule-list>....</rule-list>
          </rule-set>
        </rule-set-info>
      </application-firewall>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description

<rule-set-info>

Usage

```
<policy-application-services>
  <application-firewall>
    <rule-set-info>
      <rule-set>....</rule-set>
    </rule-set-info>
  </application-firewall>
</policy-application-services>
```

Description Information of the rule-set

<rule-set-info>

Usage

```
<policy-information>
  <policy-application-services>
    <application-firewall>
      <rule-set-info>
        <rule-set>....</rule-set>
      </rule-set-info>
    </application-firewall>
  </policy-application-services>
</policy-information>
```

Description Information of the rule-set

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<rule-set-info>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>....</rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the rule-set

<rule-set-info>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <application-firewall>
            <rule-set-info>
              <rule-set>....</rule-set>
            </rule-set-info>
          </application-firewall>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of the rule-set

<rule-set-info>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <application-firewall>
        <rule-set-info>
          <rule-set>....</rule-set>
        </rule-set-info>
```


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```
        </application-firewall>
      </policy-application-services>
    </policy-information>
  </security-policy-match>
```

Description Information of the rule-set

<security-context>

Usage

```
<security-policies>
  <security-context>
    <context-information>....</context-information>
    <policies>....</policies>
  </security-context>
</security-policies>
```

Description Information about the security context

<security-context>

Usage

```
<security-dynamic-policies>
  <security-context>
    <context-information>....</context-information>
    <policies>....</policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about the security context

<security-dns-cache>

Usage

```
<security-dns-cache>
  <dns-cache>....</dns-cache>
</security-dns-cache>
```

Description DNS cache of firewall policy

<security-dynamic-policies>

Usage

```
<security-dynamic-policies>
  <security-context>....</security-context>
</security-dynamic-policies>
```

Description Information about security dynamic policies

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<security-policies>

Usage

```
<security-policies>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <default-policy>
    default-policy
  </default-policy>
  <security-context>....</security-context>
  <policy-internal-information>....</policy-internal-information>
  <policy-zone-context>....</policy-zone-context>
  <policy-context-checksum-info>....</policy-context-checksum-info>
</security-policies>
```

Description Information about security policies

<security-policy-match>

Usage

```
<security-policy-match>
  <policy-information>....</policy-information>
</security-policy-match>
```

Description Find policy match for a given traffic

<security-policy-shadow>

Usage

```
<security-policy-shadow>
  <policy-shadow-policies>....</policy-shadow-policies>
</security-policy-shadow>
```

Description Shadow policy information for a given context

<source-address>

Usage

```
<source-addresses>
  <source-address>
    <address-name>
      address-name
    </address-name>
    <prefixes>....</prefixes>
  </source-address>
</source-addresses>
```

Description Information about a source address

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<source-address>

Usage

```
<policy-information>
  <source-addresses>
    <source-address>
      <address-name>
        address-name
      </address-name>
      <prefixes>....</prefixes>
    </source-address>
  </source-addresses>
</policy-information>
```

Description Information about a source address

<source-address>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-addresses>
          <source-address>
            <address-name>
              address-name
            </address-name>
            <prefixes>....</prefixes>
          </source-address>
        </source-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information about a source address

<source-address>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-addresses>
          <source-address>
            <address-name>
              address-name
            </address-name>
            <prefixes>....</prefixes>
          </source-address>
```

```
        </source-addresses>
       </policy-information>
      </policies>
     </security-context>
    </security-dynamic-policies>
```

Description Information about a source address

<source-address>

Usage

```
<security-policy-match>
 <policy-information>
  <source-addresses>
   <source-address>
    <address-name>
     address-name
    </address-name>
    <prefixes>....</prefixes>
   </source-address>
  </source-addresses>
 </policy-information>
</security-policy-match>
```

Description Information about a source address

<source-addresses>

Usage

```
<source-addresses>
 <source-address>....</source-address>
</source-addresses>
```

Description

<source-addresses>

Usage

```
<policy-information>
 <source-addresses>
  <source-address>....</source-address>
 </source-addresses>
</policy-information>
```

Description

<source-addresses>

Usage

```
<security-policies>
 <security-context>
```


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```
    <policies>
     <policy-information>
      <source-addresses>
       <source-address>....</source-address>
      </source-addresses>
     </policy-information>
    </policies>
   </security-context>
</security-policies>
```

Description

<source-addresses>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-addresses>
          <source-address>....</source-address>
        </source-addresses>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description

<source-addresses>

Usage

```
<security-policy-match>
  <policy-information>
    <source-addresses>
      <source-address>....</source-address>
    </source-addresses>
  </policy-information>
</security-policy-match>
```

Description

<source-identities>

Usage

```
<source-identities>
  <source-identity>....</source-identity>
</source-identities>
```

Description

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<source-identities>

Usage

```
<policy-information>
  <source-identities>
    <source-identity>....</source-identity>
  </source-identities>
</policy-information>
```

Description

<source-identities>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-identities>
          <source-identity>....</source-identity>
        </source-identities>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description

<source-identities>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-identities>
          <source-identity>....</source-identity>
        </source-identities>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description

<source-identities>

Usage

```
<security-policy-match>
  <policy-information>
    <source-identities>
      <source-identity>....</source-identity>
```


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```
    </source-identities>
  </policy-information>
</security-policy-match>
```

Description

<source-identity>

Usage

```
<source-identities>
  <source-identity>
    <role-name>
      role-name
    </role-name>
  </source-identity>
</source-identities>
```

Description Information about a source identity

<source-identity>

Usage

```
<policy-information>
  <source-identities>
    <source-identity>
      <role-name>
        role-name
      </role-name>
    </source-identity>
  </source-identities>
</policy-information>
```

Description Information about a source identity

<source-identity>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-identities>
          <source-identity>
            <role-name>
              role-name
            </role-name>
          </source-identity>
        </source-identities>
      </policy-information>
    </policies>
  </security-context>
```

```
</security-policies>
```

Description Information about a source identity

<source-identity>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <source-identities>
          <source-identity>
            <role-name>
              role-name
            </role-name>
          </source-identity>
        </source-identities>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information about a source identity

<source-identity>

Usage

```
<security-policy-match>
  <policy-information>
    <source-identities>
      <source-identity>
        <role-name>
          role-name
        </role-name>
      </source-identity>
    </source-identities>
  </policy-information>
</security-policy-match>
```

Description Information about a source identity

<source-port-range>

Usage

```
<applications>
  <application>
    <application-term>
      <source-port-range>
        <low>
          low
```


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```
        </low>
        <high>
          high
        </high>
      </source-port-range>
    </application-term>
  </application>
</applications>
```

Description Range of the source ports

<source-port-range>

Usage

```
<policy-information>
  <applications>
    <application>
      <application-term>
        <source-port-range>
          <low>
            low
          </low>
          <high>
            high
          </high>
        </source-port-range>
      </application-term>
    </application>
  </applications>
</policy-information>
```

Description Range of the source ports

<source-port-range>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <source-port-range>
                <low>
                  low
                </low>
                <high>
                  high
                </high>
              </source-port-range>
            </application-term>
```

```
            </application>
          </applications>
        </policy-information>
      </policies>
    </security-context>
  </security-policies>
```

Description Range of the source ports

<source-port-range>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <applications>
          <application>
            <application-term>
              <source-port-range>
                <low>
                  low
                </low>
                <high>
                  high
                </high>
              </source-port-range>
            </application-term>
          </application>
        </applications>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Range of the source ports

<source-port-range>

Usage

```
<security-policy-match>
  <policy-information>
    <applications>
      <application>
        <application-term>
          <source-port-range>
            <low>
              low
            </low>
            <high>
              high
            </high>
```


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```
            </source-port-range>
          </application-term>
        </application>
      </applications>
    </policy-information>
  </security-policy-match>
```

Description Range of the source ports

<ssl-initiation>

Usage

```
<policy-application-services>
  <ssl-initiation>
    <ssl-initiation-profile-name>
      ssl-initiation-profile-name
    </ssl-initiation-profile-name>
  </ssl-initiation>
</policy-application-services>
```

Description Information of the SSL initiation

<ssl-initiation>

Usage

```
<policy-information>
  <policy-application-services>
    <ssl-initiation>
      <ssl-initiation-profile-name>
        ssl-initiation-profile-name
      </ssl-initiation-profile-name>
    </ssl-initiation>
  </policy-application-services>
</policy-information>
```

Description Information of the SSL initiation

<ssl-initiation>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <ssl-initiation>
            <ssl-initiation-profile-name>
              ssl-initiation-profile-name
            </ssl-initiation-profile-name>
          </ssl-initiation>
        </policy-application-services>
```

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```
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the SSL initiation

<ssl-initiation>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <ssl-initiation>
            <ssl-initiation-profile-name>
              ssl-initiation-profile-name
            </ssl-initiation-profile-name>
          </ssl-initiation>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of the SSL initiation

<ssl-initiation>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <ssl-initiation>
        <ssl-initiation-profile-name>
          ssl-initiation-profile-name
        </ssl-initiation-profile-name>
      </ssl-initiation>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the SSL initiation

<ssl-proxy>

Usage

```
<policy-application-services>
  <ssl-proxy>
    <ssl-proxy-profile-name>
```


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```
        ssl-proxy-profile-name
      </ssl-proxy-profile-name>
    </ssl-proxy>
  </policy-application-services>
```

Description Information of the SSL proxy

<ssl-proxy>

Usage

```
<policy-information>
  <policy-application-services>
    <ssl-proxy>
      <ssl-proxy-profile-name>
        ssl-proxy-profile-name
      </ssl-proxy-profile-name>
    </ssl-proxy>
  </policy-application-services>
</policy-information>
```

Description Information of the SSL proxy

<ssl-proxy>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <ssl-proxy>
            <ssl-proxy-profile-name>
              ssl-proxy-profile-name
            </ssl-proxy-profile-name>
          </ssl-proxy>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the SSL proxy

<ssl-proxy>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
```

```
                <ssl-proxy>
                  <ssl-proxy-profile-name>
                    ssl-proxy-profile-name
                  </ssl-proxy-profile-name>
                </ssl-proxy>
              </policy-application-services>
            </policy-information>
          </policies>
        </security-context>
      </security-dynamic-policies>
```

Description Information of the SSL proxy

<ssl-proxy>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <ssl-proxy>
        <ssl-proxy-profile-name>
          ssl-proxy-profile-name
        </ssl-proxy-profile-name>
      </ssl-proxy>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the SSL proxy

<ssl-termination>

Usage

```
<policy-application-services>
  <ssl-termination>
    <ssl-termination-profile-name>
      ssl-termination-profile-name
    </ssl-termination-profile-name>
  </ssl-termination>
</policy-application-services>
```

Description Information of the SSL termination

<ssl-termination>

Usage

```
<policy-information>
  <policy-application-services>
    <ssl-termination>
      <ssl-termination-profile-name>
        ssl-termination-profile-name
```


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```
      </ssl-termination-profile-name>
    </ssl-termination>
  </policy-application-services>
</policy-information>
```

Description Information of the SSL termination

<ssl-termination>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <ssl-termination>
            <ssl-termination-profile-name>
              ssl-termination-profile-name
            </ssl-termination-profile-name>
          </ssl-termination>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Information of the SSL termination

<ssl-termination>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <ssl-termination>
            <ssl-termination-profile-name>
              ssl-termination-profile-name
            </ssl-termination-profile-name>
          </ssl-termination>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Information of the SSL termination

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<ssl-termination>

Usage

```
<security-policy-match>
  <policy-information>
    <policy-application-services>
      <ssl-termination>
        <ssl-termination-profile-name>
          ssl-termination-profile-name
        </ssl-termination-profile-name>
      </ssl-termination>
    </policy-application-services>
  </policy-information>
</security-policy-match>
```

Description Information of the SSL termination

<wx-optimizer>

Usage

```
<policy-application-services>
  <wx-optimizer>
    <wx-optimizer-profile-name>
      wx-optimizer-profile-name
    </wx-optimizer-profile-name>
    <wx-optimizer-service-options>
      wx-optimizer-service-options
    </wx-optimizer-service-options>
  </wx-optimizer>
</policy-application-services>
```

Description Wan-optimizer configuration

<wx-optimizer>

Usage

```
<policy-information>
  <policy-application-services>
    <wx-optimizer>
      <wx-optimizer-profile-name>
        wx-optimizer-profile-name
      </wx-optimizer-profile-name>
      <wx-optimizer-service-options>
        wx-optimizer-service-options
      </wx-optimizer-service-options>
    </wx-optimizer>
  </policy-application-services>
</policy-information>
```

Description Wan-optimizer configuration

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<wx-optimizer>

Usage

```
<security-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <wx-optimizer>
            <wx-optimizer-profile-name>
              wx-optimizer-profile-name
            </wx-optimizer-profile-name>
            <wx-optimizer-service-options>
              wx-optimizer-service-options
            </wx-optimizer-service-options>
          </wx-optimizer>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-policies>
```

Description Wan-optimizer configuration

<wx-optimizer>

Usage

```
<security-dynamic-policies>
  <security-context>
    <policies>
      <policy-information>
        <policy-application-services>
          <wx-optimizer>
            <wx-optimizer-profile-name>
              wx-optimizer-profile-name
            </wx-optimizer-profile-name>
            <wx-optimizer-service-options>
              wx-optimizer-service-options
            </wx-optimizer-service-options>
          </wx-optimizer>
        </policy-application-services>
      </policy-information>
    </policies>
  </security-context>
</security-dynamic-policies>
```

Description Wan-optimizer configuration

<wx-optimizer>

Usage

```
<security-policy-match>
```

```
<policy-information>
  <policy-application-services>
    <wx-optimizer>
      <wx-optimizer-profile-name>
        wx-optimizer-profile-name
      </wx-optimizer-profile-name>
      <wx-optimizer-service-options>
        wx-optimizer-service-options
      </wx-optimizer-service-options>
    </wx-optimizer>
  </policy-application-services>
 </policy-information>
</security-policy-match>
```

Description Wan-optimizer configuration

Summary of Security Profile Response Tags

<security-profile-address-book-information>

Usage

```
<security-profile-address-book-information>
  <security-profile-information>....</security-profile-information>
</security-profile-address-book-information>
```

Description Address book resource usage versus logical system's security profile

<security-profile-all-resource-information>

Usage

```
<security-profile-all-resource-information>
  <resources-name>
    resources-name
  </resources-name>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <security-profile-name>
    security-profile-name
  </security-profile-name>
  <resources-used>
    resources-used
  </resources-used>
  <resources-reserved>
    resources-reserved
  </resources-reserved>
  <resources-maximum>
    resources-maximum
  </resources-maximum>
  <resources-drop-rate-status>
    resources-drop-rate-status
  </resources-drop-rate-status>
```


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```
<resources-available>
  resources-available
</resources-available>
<heaviest-usage>
  heaviest-usage
</heaviest-usage>
<heaviest-user>
  heaviest-user
</heaviest-user>
<lightest-usage>
  lightest-usage
</lightest-usage>
<lightest-user>
  lightest-user
</lightest-user>
</security-profile-all-resource-information>
```

Description Security profile information of all resources for logical system

<security-profile-appfw-rule-information>

Usage

```
<security-profile-appfw-rule-information>
  <security-profile-information>....</security-profile-information>
</security-profile-appfw-rule-information>
```

Description Appfw rule resource usage versus logical system's security profile

<security-profile-appfw-rule-set-information>

Usage

```
<security-profile-appfw-rule-set-information>
  <security-profile-information>....</security-profile-information>
</security-profile-appfw-rule-set-information>
```

Description Appfw rule set resource usage versus logical system's security profile

<security-profile-auth-entry-information>

Usage

```
<security-profile-auth-entry-information>
  <security-profile-information>....</security-profile-information>
</security-profile-auth-entry-information>
```

Description Firewall authentication resource usage

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<security-profile-cpu-information>

Usage

```
<security-profile-cpu-information>
  <security-profile-information>....</security-profile-information>
</security-profile-cpu-information>
```

Description CPU utilization versus logical system's security profile

<security-profile-dslite-softwire-initiator-information>

Usage

```
<security-profile-dslite-softwire-initiator-information>
  <security-profile-information>....</security-profile-information>
</security-profile-dslite-softwire-initiator-information>
```

Description Security ds-lite softwire initiator resource usage versus logical system's security profile

<security-profile-flow-gate-information>

Usage

```
<security-profile-flow-gate-information>
  <security-profile-information>....</security-profile-information>
</security-profile-flow-gate-information>
```

Description Policy resource usage versus logical system's security profile

<security-profile-flow-session-information>

Usage

```
<security-profile-flow-session-information>
  <security-profile-information>....</security-profile-information>
</security-profile-flow-session-information>
```

Description Policy resource usage versus logical system's security profile

<security-profile-information>

Usage

```
<security-profile-information>
  <logical-system-name>
    logical-system-name
  </logical-system-name>
  <security-profile-name>
    security-profile-name
  </security-profile-name>
  <resources-used>
    resources-used
```


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```
</resources-used>
<resources-reserved>
  resources-reserved
</resources-reserved>
<resources-maximum>
  resources-maximum
</resources-maximum>
<resources-available>
  resources-available
</resources-available>
<total-logical-systems>
  total-logical-systems
</total-logical-systems>
<total-profiles>
  total-profiles
</total-profiles>
<heaviest-usage>
  heaviest-usage
</heaviest-usage>
<heaviest-user>
  heaviest-user
</heaviest-user>
<lightest-usage>
  lightest-usage
</lightest-usage>
<lightest-user>
  lightest-user
</lightest-user>
</security-profile-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-auth-entry-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
```

```
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-auth-entry-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-zone-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
```


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```
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-zone-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-policy-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
```

```
        <lightest-user>
          lightest-user
        </lightest-user>
      </security-profile-information>
    </security-profile-policy-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-appfw-rule-set-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-appfw-rule-set-information>
```

Description Security profile information for logical system

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<security-profile-information>

Usage

```
<security-profile-appfw-rule-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-appfw-rule-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-policy-with-count-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
```

```
</logical-system-name>
<security-profile-name>
  security-profile-name
</security-profile-name>
<resources-used>
  resources-used
</resources-used>
<resources-reserved>
  resources-reserved
</resources-reserved>
<resources-maximum>
  resources-maximum
</resources-maximum>
<resources-available>
  resources-available
</resources-available>
<total-logical-systems>
  total-logical-systems
</total-logical-systems>
<total-profiles>
  total-profiles
</total-profiles>
<heaviest-usage>
  heaviest-usage
</heaviest-usage>
<heaviest-user>
  heaviest-user
</heaviest-user>
<lightest-usage>
  lightest-usage
</lightest-usage>
<lightest-user>
  lightest-user
</lightest-user>
</security-profile-information>
</security-profile-policy-with-count-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-source-pool-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
```


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```
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-source-pool-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-flow-session-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
```

```
        <total-logical-systems>
          total-logical-systems
        </total-logical-systems>
        <total-profiles>
          total-profiles
        </total-profiles>
        <heaviest-usage>
          heaviest-usage
        </heaviest-usage>
        <heaviest-user>
          heaviest-user
        </heaviest-user>
        <lightest-usage>
          lightest-usage
        </lightest-usage>
        <lightest-user>
          lightest-user
        </lightest-user>
      </security-profile-information>
    </security-profile-flow-session-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
    <security-profile-flow-gate-information>
      <security-profile-information>
        <logical-system-name>
          logical-system-name
        </logical-system-name>
        <security-profile-name>
          security-profile-name
        </security-profile-name>
        <resources-used>
          resources-used
        </resources-used>
        <resources-reserved>
          resources-reserved
        </resources-reserved>
        <resources-maximum>
          resources-maximum
        </resources-maximum>
        <resources-available>
          resources-available
        </resources-available>
        <total-logical-systems>
          total-logical-systems
        </total-logical-systems>
        <total-profiles>
          total-profiles
        </total-profiles>
        <heaviest-usage>
          heaviest-usage
```


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```
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-flow-gate-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-destination-pool-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
```

```
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-destination-pool-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-pat-address-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-pat-address-information>
```

Description Security profile information for logical system

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<security-profile-information>

Usage

```
<security-profile-nat-nopat-address-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-nopat-address-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-pat-portnum-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
```

```
</logical-system-name>
<security-profile-name>
  security-profile-name
</security-profile-name>
<resources-used>
  resources-used
</resources-used>
<resources-reserved>
  resources-reserved
</resources-reserved>
<resources-maximum>
  resources-maximum
</resources-maximum>
<resources-available>
  resources-available
</resources-available>
<total-logical-systems>
  total-logical-systems
</total-logical-systems>
<total-profiles>
  total-profiles
</total-profiles>
<heaviest-usage>
  heaviest-usage
</heaviest-usage>
<heaviest-user>
  heaviest-user
</heaviest-user>
<lightest-usage>
  lightest-usage
</lightest-usage>
<lightest-user>
  lightest-user
</lightest-user>
</security-profile-information>
</security-profile-nat-pat-portnum-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-source-rule-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
```


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```
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-source-rule-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-destination-rule-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
```

```
        <total-logical-systems>
          total-logical-systems
        </total-logical-systems>
        <total-profiles>
          total-profiles
        </total-profiles>
        <heaviest-usage>
          heaviest-usage
        </heaviest-usage>
        <heaviest-user>
          heaviest-user
        </heaviest-user>
        <lightest-usage>
          lightest-usage
        </lightest-usage>
        <lightest-user>
          lightest-user
        </lightest-user>
      </security-profile-information>
    </security-profile-nat-destination-rule-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
    <security-profile-nat-static-rule-information>
      <security-profile-information>
        <logical-system-name>
          logical-system-name
        </logical-system-name>
        <security-profile-name>
          security-profile-name
        </security-profile-name>
        <resources-used>
          resources-used
        </resources-used>
        <resources-reserved>
          resources-reserved
        </resources-reserved>
        <resources-maximum>
          resources-maximum
        </resources-maximum>
        <resources-available>
          resources-available
        </resources-available>
        <total-logical-systems>
          total-logical-systems
        </total-logical-systems>
        <total-profiles>
          total-profiles
        </total-profiles>
        <heaviest-usage>
          heaviest-usage
```


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```
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-static-rule-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-cone-binding-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
```

```
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-cone-binding-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-nat-port-ol-ipnumber-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-port-ol-ipnumber-information>
```

Description Security profile information for logical system

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<security-profile-information>

Usage

```
<security-profile-nat-rule-referenced-prefix-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-nat-rule-referenced-prefix-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-scheduler-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
```

```
</logical-system-name>
<security-profile-name>
  security-profile-name
</security-profile-name>
<resources-used>
  resources-used
</resources-used>
<resources-reserved>
  resources-reserved
</resources-reserved>
<resources-maximum>
  resources-maximum
</resources-maximum>
<resources-available>
  resources-available
</resources-available>
<total-logical-systems>
  total-logical-systems
</total-logical-systems>
<total-profiles>
  total-profiles
</total-profiles>
<heaviest-usage>
  heaviest-usage
</heaviest-usage>
<heaviest-user>
  heaviest-user
</heaviest-user>
<lightest-usage>
  lightest-usage
</lightest-usage>
<lightest-user>
  lightest-user
</lightest-user>
</security-profile-information>
</security-profile-scheduler-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-dslite-softwire-initiator-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
```


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```
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-dslite-softwire-initiator-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-cpu-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
```

```
        <total-logical-systems>
          total-logical-systems
        </total-logical-systems>
        <total-profiles>
          total-profiles
        </total-profiles>
        <heaviest-usage>
          heaviest-usage
        </heaviest-usage>
        <heaviest-user>
          heaviest-user
        </heaviest-user>
        <lightest-usage>
          lightest-usage
        </lightest-usage>
        <lightest-user>
          lightest-user
        </lightest-user>
      </security-profile-information>
    </security-profile-cpu-information>
```

Description Security profile information for logical system

<security-profile-information>

Usage

```
<security-profile-address-book-information>
  <security-profile-information>
    <logical-system-name>
      logical-system-name
    </logical-system-name>
    <security-profile-name>
      security-profile-name
    </security-profile-name>
    <resources-used>
      resources-used
    </resources-used>
    <resources-reserved>
      resources-reserved
    </resources-reserved>
    <resources-maximum>
      resources-maximum
    </resources-maximum>
    <resources-available>
      resources-available
    </resources-available>
    <total-logical-systems>
      total-logical-systems
    </total-logical-systems>
    <total-profiles>
      total-profiles
    </total-profiles>
    <heaviest-usage>
      heaviest-usage
```


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```
    </heaviest-usage>
    <heaviest-user>
      heaviest-user
    </heaviest-user>
    <lightest-usage>
      lightest-usage
    </lightest-usage>
    <lightest-user>
      lightest-user
    </lightest-user>
  </security-profile-information>
</security-profile-address-book-information>
```

Description Security profile information for logical system

<security-profile-nat-cone-binding-information>

Usage

```
<security-profile-nat-cone-binding-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-cone-binding-information>
```

Description Nat cone binding resource usage versus logical system's security profile

<security-profile-nat-destination-pool-information>

Usage

```
<security-profile-nat-destination-pool-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-destination-pool-information>
```

Description Nat destination pool resource usage versus logical system's security profile

<security-profile-nat-destination-rule-information>

Usage

```
<security-profile-nat-destination-rule-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-destination-rule-information>
```

Description Nat destination rule resource usage versus logical system's security profile

<security-profile-nat-nopat-address-information>

Usage

```
<security-profile-nat-nopat-address-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-nopat-address-information>
```

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Description Nat IP address in src pool without PAT resource usage versus logical system's security profile

<security-profile-nat-pat-address-information>

Usage

```
<security-profile-nat-pat-address-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-pat-address-information>
```

Description Nat IP address in src pool with PAT resource usage versus logical system's security profile

<security-profile-nat-pat-portnum-information>

Usage

```
<security-profile-nat-pat-portnum-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-pat-portnum-information>
```

Description Nat port number in src pool with PAT resource usage versus logical system's security profile

<security-profile-nat-port-ol-ipnumber-information>

Usage

```
<security-profile-nat-port-ol-ipnumber-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-port-ol-ipnumber-information>
```

Description Nat port overloading ip number resource usage versus logical system's security profile

<security-profile-nat-rule-referenced-prefix-information>

Usage

```
<security-profile-nat-rule-referenced-prefix-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-rule-referenced-prefix-information>
```

Description Nat rule referenced IP-prefix usage versus logical system's security profile

<security-profile-nat-source-pool-information>

Usage

```
<security-profile-nat-source-pool-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-source-pool-information>
```


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Description Nat source pool resource usage versus logical system's security profile

<security-profile-nat-source-rule-information>

Usage

```
<security-profile-nat-source-rule-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-source-rule-information>
```

Description Nat source rule resource usage versus logical system's security profile

<security-profile-nat-static-rule-information>

Usage

```
<security-profile-nat-static-rule-information>
  <security-profile-information>....</security-profile-information>
</security-profile-nat-static-rule-information>
```

Description Nat static rule resource usage versus logical system's security profile

<security-profile-policy-information>

Usage

```
<security-profile-policy-information>
  <security-profile-information>....</security-profile-information>
</security-profile-policy-information>
```

Description Policy resource usage versus logical system's security profile

<security-profile-policy-with-count-information>

Usage

```
<security-profile-policy-with-count-information>
  <security-profile-information>....</security-profile-information>
</security-profile-policy-with-count-information>
```

Description Policy with count resource usage versus logical system's security profile

<security-profile-scheduler-information>

Usage

```
<security-profile-scheduler-information>
  <security-profile-information>....</security-profile-information>
</security-profile-scheduler-information>
```

Description Scheduler resource usage versus logical system's security profile

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<security-profile-zone-information>

Usage

```
<security-profile-zone-information>
  <security-profile-information>....</security-profile-information>
</security-profile-zone-information>
```

Description Zone resource usage versus logical system's security profile

<show-lcu-control>

Usage

```
<show-lcu-control>
  <cpu-control>
    cpu-control
  </cpu-control>
  <cpu-control-target>
    cpu-control-target
  </cpu-control-target>
</show-lcu-control>
```

Description Logical system cpu utilization settings

<show-lcu-status>

Usage

```
<show-lcu-status>
  <lsys-name>
    lsys-name
  </lsys-name>
  <profile-name>
    profile-name
  </profile-name>
  <fpc-name>
    fpc-name
  </fpc-name>
  <pic-name>
    pic-name
  </pic-name>
  <usage-status>
    usage-status
  </usage-status>
  <reserved-status>
    reserved-status
  </reserved-status>
  <drop-rate-status>
    drop-rate-status
  </drop-rate-status>
  <cpu-type>
    cpu-type
  </cpu-type>
  <cpu-resources-used>
```


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```
  cpu-resources-used
 </cpu-resources-used>
 <cpu-resources-maximum>
  cpu-resources-maximum
 </cpu-resources-maximum>
 <cpu-resources-available>
  cpu-resources-available
 </cpu-resources-available>
 <tot-logical-systems>
  tot-logical-systems
 </tot-logical-systems>
 <tot-profiles>
  tot-profiles
 </tot-profiles>
 <cpu-heaviest-usage>
  cpu-heaviest-usage
 </cpu-heaviest-usage>
 <cpu-heaviest-user>
  cpu-heaviest-user
 </cpu-heaviest-user>
 <cpu-lightest-usage>
  cpu-lightest-usage
 </cpu-lightest-usage>
 <cpu-lightest-user>
  cpu-lightest-user
 </cpu-lightest-user>
</show-lcu-status>
```

Description Logical system cpu utilization status

Summary of SMTP Response Tags

<smtp-client-service-status>

Usage

```
<smtp-statistics>
  <smtp-client-service-status>
    <service-status>
      service-status
    </service-status>
  </smtp-client-service-status>
</smtp-statistics>
```

Description SMTP mail client service status information

<smtp-config-servers-information>

Usage

```
<smtp-config-servers-information>
  <smtp-servers>....</smtp-servers>
</smtp-config-servers-information>
```

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Description Information about configured smtp servers

<smtp-queue-statistics>

Usage

```
<smtp-statistics>
  <smtp-queue-statistics>
    <high-priority-message-queued>
      high-priority-message-queued
    </high-priority-message-queued>
    <med-priority-message-queued>
      med-priority-message-queued
    </med-priority-message-queued>
    <low-priority-message-queued>
      low-priority-message-queued
    </low-priority-message-queued>
  </smtp-queue-statistics>
</smtp-statistics>
```

Description Informatin about the message queues

<smtp-send-statistics>

Usage

```
<smtp-statistics>
  <smtp-send-statistics>
    <num_payload_send_requested>
      num_payload_send_requested
    </num_payload_send_requested>
    <num_payload_sent>
      num_payload_sent
    </num_payload_sent>
    <num_payload_dropped>
      num_payload_dropped
    </num_payload_dropped>
  </smtp-send-statistics>
</smtp-statistics>
```

Description SMTP Client Service Statistics

<smtp-servers>

Usage

```
<smtp-config-servers-information>
  <smtp-servers>
    <smtp-server-address>
      smtp-server-address
    </smtp-server-address>
    <account-email>
      account-email
    </account-email>
    <server_idle_status>
```


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```
      server_idle_status
    </server_idle_status>
  </smtp-servers>
</smtp-config-servers-information>
```

Description Information on a configured SMTP server

<smtp-statistics>

Usage

```
<smtp-statistics>
  <smtp-client-service-status>....</smtp-client-service-status>
  <smtp-queue-statistics>....</smtp-queue-statistics>
  <smtp-send-statistics>....</smtp-send-statistics>
</smtp-statistics>
```

Description

Summary of SPU Monitoring Response Tags

<fpc>

Usage

```
<fpc>
  <fpc-number>
    fpc-number
  </fpc-number>
  <pic>....</pic>
</fpc>
```

Description FPC

<fpc>

Usage

```
<spu-monitoring-information>
  <spu-utilization-statistics>
    <fpc>
      <fpc-number>
        fpc-number
      </fpc-number>
      <pic>....</pic>
    </fpc>
  </spu-utilization-statistics>
</spu-monitoring-information>
```

Description FPC

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<pic>

Usage

```
<pic>
  <pic-number>
    pic-number
  </pic-number>
  <spu-cpu-utilization>
    spu-cpu-utilization
  </spu-cpu-utilization>
  <spu-memory-utilization>
    spu-memory-utilization
  </spu-memory-utilization>
  <spu-current-flow-session>
    spu-current-flow-session
  </spu-current-flow-session>
  <spu-max-flow-session>
    spu-max-flow-session
  </spu-max-flow-session>
  <spu-current-cp-session>
    spu-current-cp-session
  </spu-current-cp-session>
  <spu-max-cp-session>
    spu-max-cp-session
  </spu-max-cp-session>
  <session-cps>
    session-cps
  </session-cps>
  <session-cps2>
    session-cps2
  </session-cps2>
</pic>
```

Description PIC stats

<pic>

Usage

```
<fpc>
  <pic>
    <pic-number>
      pic-number
    </pic-number>
    <spu-cpu-utilization>
      spu-cpu-utilization
    </spu-cpu-utilization>
    <spu-memory-utilization>
      spu-memory-utilization
    </spu-memory-utilization>
    <spu-current-flow-session>
      spu-current-flow-session
    </spu-current-flow-session>
    <spu-max-flow-session>
```


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```
      spu-max-flow-session
    </spu-max-flow-session>
    <spu-current-cp-session>
      spu-current-cp-session
    </spu-current-cp-session>
    <spu-max-cp-session>
      spu-max-cp-session
    </spu-max-cp-session>
    <session-cps>
      session-cps
    </session-cps>
    <session-cps2>
      session-cps2
    </session-cps2>
  </pic>
</fpc>
```

Description PIC stats

<pic>

Usage

```
<spu-monitoring-information>
  <spu-utilization-statistics>
    <fpc>
      <pic>
        <pic-number>
          pic-number
        </pic-number>
        <spu-cpu-utilization>
          spu-cpu-utilization
        </spu-cpu-utilization>
        <spu-memory-utilization>
          spu-memory-utilization
        </spu-memory-utilization>
        <spu-current-flow-session>
          spu-current-flow-session
        </spu-current-flow-session>
        <spu-max-flow-session>
          spu-max-flow-session
        </spu-max-flow-session>
        <spu-current-cp-session>
          spu-current-cp-session
        </spu-current-cp-session>
        <spu-max-cp-session>
          spu-max-cp-session
        </spu-max-cp-session>
        <session-cps>
          session-cps
        </session-cps>
        <session-cps2>
          session-cps2
        </session-cps2>
      </pic>
```

```
    </fpc>
  </spu-utilization-statistics>
</spu-monitoring-information>
```

Description PIC stats

<spu-monitoring-information>

Usage

```
<spu-monitoring-information>
  <spu-utilization-statistics>....</spu-utilization-statistics>
</spu-monitoring-information>
```

Description

<spu-utilization-statistics>

Usage

```
<spu-monitoring-information>
  <spu-utilization-statistics>
    <fpc>....</fpc>
  </spu-utilization-statistics>
</spu-monitoring-information>
```

Description

Summary of SPU Performance Response Tags

<performance-arena-information>

Usage

```
<performance-arena-information>
  <performance-arena-statistics>....</performance-arena-statistics>
</performance-arena-information>
```

Description

<performance-arena-statistics>

Usage

```
<performance-arena-information>
  <performance-arena-statistics>
    <fpc-number>
      fpc-number
    </fpc-number>
    <pic-number>
      pic-number
    </pic-number>
    <performance-info>
      performance-info
    </performance-info>
```


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```
  </performance-arena-statistics>
</performance-arena-information>
```

Description

<performance-heap-information>

Usage

```
<performance-heap-information>
  <performance-heap-statistics>....</performance-heap-statistics>
</performance-heap-information>
```

Description

<performance-heap-statistics>

Usage

```
<performance-heap-information>
  <performance-heap-statistics>
    <fpc-number>
      fpc-number
    </fpc-number>
    <pic-number>
      pic-number
    </pic-number>
    <performance-info>
      performance-info
    </performance-info>
  </performance-heap-statistics>
</performance-heap-information>
```

Description

<performance-session-information>

Usage

```
<performance-session-information>
  <performance-session-statistics>....</performance-session-statistics>
</performance-session-information>
```

Description

<performance-session-statistics>

Usage

```
<performance-session-information>
  <performance-session-statistics>
    <fpc-number>
      fpc-number
    </fpc-number>
    <pic-number>
      pic-number
```

```
    </pic-number>
    <performance-info>
     performance-info
    </performance-info>
   </performance-session-statistics>
</performance-session-information>
```

Description

<performance-spu-information>

Usage

```
<performance-spu-information>
  <performance-spu-statistics>....</performance-spu-statistics>
</performance-spu-information>
```

Description

<performance-spu-statistics>

Usage

```
<performance-spu-information>
  <performance-spu-statistics>
    <fpc-number>
     fpc-number
    </fpc-number>
    <pic-number>
     pic-number
    </pic-number>
    <performance-info>
     performance-info
    </performance-info>
  </performance-spu-statistics>
</performance-spu-information>
```

Description

Summary of Telephony Gateway Module Response Tags

<dynamic-cac-information>

Usage

```
<dynamic-cac-information>
  <dynamic-cac-interface-name>
   dynamic-cac-interface-name
  </dynamic-cac-interface-name>
  <dynamic-cac-interface-state>
   dynamic-cac-interface-state
  </dynamic-cac-interface-state>
  <dynamic-cac-activation-priority>
   dynamic-cac-activation-priority
  </dynamic-cac-activation-priority>
  <dynamic-cac-bbl>
```


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```
    dynamic-cac-bbl
  </dynamic-cac-bbl>
</dynamic-cac-information>
```

Description Information about dynamic call admission control

<dynamic-cac-information>

Usage

```
<tgm-dynamic-cac-list>
  <dynamic-cac-information>
    <dynamic-cac-interface-name>
      dynamic-cac-interface-name
    </dynamic-cac-interface-name>
    <dynamic-cac-interface-state>
      dynamic-cac-interface-state
    </dynamic-cac-interface-state>
    <dynamic-cac-activation-priority>
      dynamic-cac-activation-priority
    </dynamic-cac-activation-priority>
    <dynamic-cac-bbl>
      dynamic-cac-bbl
    </dynamic-cac-bbl>
  </dynamic-cac-information>
</tgm-dynamic-cac-list>
```

Description Information about dynamic call admission control

<dynamic-cac-information>

Usage

```
<tgm-dynamic-cac-information>
  <tgm-dynamic-cac-list>
    <dynamic-cac-information>
      <dynamic-cac-interface-name>
        dynamic-cac-interface-name
      </dynamic-cac-interface-name>
      <dynamic-cac-interface-state>
        dynamic-cac-interface-state
      </dynamic-cac-interface-state>
      <dynamic-cac-activation-priority>
        dynamic-cac-activation-priority
      </dynamic-cac-activation-priority>
      <dynamic-cac-bbl>
        dynamic-cac-bbl
      </dynamic-cac-bbl>
    </dynamic-cac-information>
  </tgm-dynamic-cac-list>
</tgm-dynamic-cac-information>
```

Description Information about dynamic call admission control

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<media-gateway-controller-configuration>

Usage

```
<tgm-information>
  <media-gateway-controller-configuration>
    <media-gateway-controller>
      media-gateway-controller
    </media-gateway-controller>
  </media-gateway-controller-configuration>
</tgm-information>
```

Description Information about a telephony gateway module (TGM) media gateway controller

<telephony-interface-module-status>

Usage

```
<telephony-interface-module-status>
  <slot>
    slot
  </slot>
  <tim-state>
    tim-state
  </tim-state>
  <offline-reason>
    offline-reason
  </offline-reason>
</telephony-interface-module-status>
```

Description Status of the telephony interface modules

<telephony-interface-module-status>

Usage

```
<telephony-interface-module-status-information>
  <telephony-interface-module-status>
    <slot>
      slot
    </slot>
    <tim-state>
      tim-state
    </tim-state>
    <offline-reason>
      offline-reason
    </offline-reason>
  </telephony-interface-module-status>
</telephony-interface-module-status-information>
```

Description Status of the telephony interface modules

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<telephony-interface-module-status-information>

Usage

```
<telephony-interface-module-status-information>
  <telephony-interface-module-status>....</telephony-interface-module-status>
</telephony-interface-module-status-information>
```

Description

<tgm-dsp-capacity-information>

Usage

```
<tgm-dsp-capacity-information>
  <dsp-capacity>
    dsp-capacity
  </dsp-capacity>
</tgm-dsp-capacity-information>
```

Description

<tgm-dynamic-cac-information>

Usage

```
<tgm-dynamic-cac-information>
  <tgm-reported-bearer-bandwidth-limit>
    tgm-reported-bearer-bandwidth-limit
  </tgm-reported-bearer-bandwidth-limit>
  <tgm-dynamic-cac-list>....</tgm-dynamic-cac-list>
</tgm-dynamic-cac-information>
```

Description Information about dynamic call admission control

<tgm-dynamic-cac-list>

Usage

```
<tgm-dynamic-cac-list>
  <dynamic-cac-information>....</dynamic-cac-information>
</tgm-dynamic-cac-list>
```

Description List of dynamic call admission control configured interfaces

<tgm-dynamic-cac-list>

Usage

```
<tgm-dynamic-cac-information>
  <tgm-dynamic-cac-list>
    <dynamic-cac-information>....</dynamic-cac-information>
  </tgm-dynamic-cac-list>
</tgm-dynamic-cac-information>
```

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Description List of dynamic call admission control configured interfaces

<tgm-information>

Usage

```
<tgm-information>

<media-gateway-controller-configuration>....</media-gateway-controller-configuration>

</tgm-information>
```

Description

Summary of Unified Access Control Response Tags

<authentication-table>

Usage

```
<authentication-table>
  <entry>....</entry>
  <total-users>
    total-users
  </total-users>
  <auth-table-extended-header>
    auth-table-extended-header
  </auth-table-extended-header>
</authentication-table>
```

Description Authentication table

<entry>

Usage

```
<authentication-table>
  <entry>
    <id>
      id
    </id>
    <source>
      source
    </source>
    <username>
      username
    </username>
    <age>
      age
    </age>
    <roles>....</roles>
  </entry>
</authentication-table>
```


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Description Authentication entry information

<infranet-controller>

Usage

```
<infranet-controllers>
  <infranet-controller>
    <host-name>
      host-name
    </host-name>
    <address>
      address
    </address>
    <port>
      port
    </port>
    <interface>
      interface
    </interface>
    <connection-state>
      connection-state
    </connection-state>
  </infranet-controller>
</infranet-controllers>
```

Description Infranet controller connection information

<infranet-controllers>

Usage

```
<infranet-controllers>
  <infranet-controller>....</infranet-controller>
</infranet-controllers>
```

Description Infranet controllers

<policy>

Usage

```
<resource-access-policies>
  <policy>
    <id>
      id
    </id>
    <resources>....</resources>
    <policy-action>
      policy-action
    </policy-action>
    <apply>
      apply
    </apply>
    <roles>....</roles>
```

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```
  </policy>
</resource-access-policies>
```

Description Resource access policy information

<resource-access-policies>

Usage

```
<resource-access-policies>
  <policy>....</policy>
  <total-policies>
    total-policies
  </total-policies>
</resource-access-policies>
```

Description Resource access policies

<resources>

Usage

```
<resource-access-policies>
  <policy>
    <resources>
      <resource>
        resource
      </resource>
    </resources>
  </policy>
</resource-access-policies>
```

Description Resource list

<role>

Usage

```
<role>
  <role-id>
    role-id
  </role-id>
  <role-name>
    role-name
  </role-name>
</role>
```

Description Role

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<role>

Usage

```
<roles>
  <role>
    <role-id>
      role-id
    </role-id>
    <role-name>
      role-name
    </role-name>
  </role>
</roles>
```

Description Role

<role>

Usage

```
<resource-access-policies>
  <policy>
    <roles>
      <role>
        <role-id>
          role-id
        </role-id>
        <role-name>
          role-name
        </role-name>
      </role>
    </roles>
  </policy>
</resource-access-policies>
```

Description Role

<role>

Usage

```
<authentication-table>
  <entry>
    <roles>
      <role>
        <role-id>
          role-id
        </role-id>
        <role-name>
          role-name
        </role-name>
      </role>
    </roles>
  </entry>
```

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```
</authentication-table>
```

Description Role

<role-entries>

Usage

```
<role-entries>
  <role-entry>....</role-entry>
  <total-roles>
    total-roles
  </total-roles>
</role-entries>
```

Description Role List

<role-entry>

Usage

```
<role-entries>
  <role-entry>
    <role-id>
      role-id
    </role-id>
    <role-name>
      role-name
    </role-name>
  </role-entry>
</role-entries>
```

Description Role detail

<roles>

Usage

```
<roles>
  <role>....</role>
</roles>
```

Description Role list

<roles>

Usage

```
<resource-access-policies>
  <policy>
    <roles>
      <role>....</role>
    </roles>
```


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```
  </policy>
</resource-access-policies>
```

Description Role list

<roles>

Usage

```
<authentication-table>
  <entry>
    <roles>
      <role>....</role>
    </roles>
  </entry>
</authentication-table>
```

Description Role list

Summary of Local Authentication Response Tags

<local-authentication-info>

Usage

```
<user-identification>
  <local-authentication-table>
    <local-authentication-info>
      <ip-address>
        ip-address
      </ip-address>
      <user-name>
        user-name
      </user-name>
      <role-name-list>....</role-name-list>
    </local-authentication-info>
  </local-authentication-table>
</user-identification>
```

Description

<local-authentication-table>

Usage

```
<user-identification>
  <local-authentication-table>
    <total-count>
      total-count
    </total-count>
    <local-authentication-info>....</local-authentication-info>
  </local-authentication-table>
</user-identification>
```

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Description Information of the local authentication table

<role-name-list>

Usage

```
<user-identification>
  <local-authentication-table>
    <local-authentication-info>
      <role-name-list>
        <role-name>
          role-name
        </role-name>
      </role-name-list>
    </local-authentication-info>
  </local-authentication-table>
</user-identification>
```

Description Information of all role name

<user-identification>

Usage

```
<user-identification>
  <local-authentication-table>....</local-authentication-table>
</user-identification>
```

Description Information of the user identification

<user-identification-role-name>

Usage

```
<user-identification-role-name>
  <role-name>
    role-name
  </role-name>
</user-identification-role-name>
```

Description Roles name of the user identification

Summary of Antispam Statistics Response Tags

<anti-spam>

Usage

```
<anti-spam>
  <anti-spam-statistics>....</anti-spam-statistics>
  <anti-spam-status>....</anti-spam-status>
</anti-spam>
```


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Description Statistics of anti spam features

<anti-spam-clear>

Usage

```
<anti-spam-clear>
  <anti-spam-clear-result>
    anti-spam-clear-result
  </anti-spam-clear-result>
</anti-spam-clear>
```

Description UTM anti-spam clear result

<anti-spam-statistics>

Usage

```
<anti-spam>
  <anti-spam-statistics>
    <total-connections>
      total-connections
    </total-connections>
    <denied-connections>
      denied-connections
    </denied-connections>
    <total-greetings>
      total-greetings
    </total-greetings>
    <denied-greetings>
      denied-greetings
    </denied-greetings>
    <total-emails-scanned>
      total-emails-scanned
    </total-emails-scanned>
    <as-white-list-hit>
      as-white-list-hit
    </as-white-list-hit>
    <as-black-list-hit>
      as-black-list-hit
    </as-black-list-hit>
    <spam-total>
      spam-total
    </spam-total>
    <spam-tagged>
      spam-tagged
    </spam-tagged>
    <spam-dropped>
      spam-dropped
    </spam-dropped>
    <dns-errors>
      dns-errors
    </dns-errors>
    <timeout-errors>
      timeout-errors
```

```
    </timeout-errors>
    <return-errors>
     return-errors
    </return-errors>
    <invalid-parameter-errors>
     invalid-parameter-errors
    </invalid-parameter-errors>
    <statistics-start-time>
     statistics-start-time
    </statistics-start-time>
    <statistics-last-10-days>....</statistics-last-10-days>
  </anti-spam-statistics>
</anti-spam>
```

Description Anti-spam statistics

<anti-spam-status>

Usage

```
<anti-spam>
  <anti-spam-status>
    <dns-server-setting>....</dns-server-setting>
  </anti-spam-status>
</anti-spam>
```

Description Anti-Spam status

<anti-spam-test>

Usage

```
<anti-spam-test>
  <anti-spam-test-result>
    anti-spam-test-result
  </anti-spam-test-result>
</anti-spam-test>
```

Description UTM anti-spam test results

<anti-virus>

Usage

```
<anti-virus>
  <anti-virus-statistics>....</anti-virus-statistics>
  <anti-virus-status>....</anti-virus-status>
  <sophos-anti-virus-status>....</sophos-anti-virus-status>
  <anti-virus-statistics-details>....</anti-virus-statistics-details>
</anti-virus>
```

Description Statistics of anti virus features

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<anti-virus-clear>

Usage

```
<anti-virus-clear>
  <anti-virus-clear-result>
    anti-virus-clear-result
  </anti-virus-clear-result>
</anti-virus-clear>
```

Description UTM anti-virus clear result

<anti-virus-request-update>

Usage

```
<anti-virus-request-update>
  <anti-virus-request-update-result>
    anti-virus-request-update-result
  </anti-virus-request-update-result>
</anti-virus-request-update>
```

Description UTM anti-virus request update

<anti-virus-statistics>

Usage

```
<anti-virus>
  <anti-virus-statistics>
    <forward-to-scan-engine>
      forward-to-scan-engine
    </forward-to-scan-engine>
    <scan-intelligent>
      scan-intelligent
    </scan-intelligent>
    <skip-mime>
      skip-mime
    </skip-mime>
    <url-white>
      url-white
    </url-white>
    <scan-mode>....</scan-mode>
    <scan-code>....</scan-code>
    <scan-request>....</scan-request>
    <fall-back>....</fall-back>
    <fall-back-permit>....</fall-back-permit>
  </anti-virus-statistics>
</anti-virus>
```

Description Anti-virus statistics

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<anti-virus-statistics-details>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-http>....</anti-virus-statistics-details-http>
    <anti-virus-statistics-details-ftp>....</anti-virus-statistics-details-ftp>
    <anti-virus-statistics-details-smtp>....</anti-virus-statistics-details-smtp>
    <anti-virus-statistics-details-pop3>....</anti-virus-statistics-details-pop3>
    <anti-virus-statistics-details-imap>....</anti-virus-statistics-details-imap>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<anti-virus-statistics-details-ftp>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-ftp>
      <ftp-scan-request>....</ftp-scan-request>
      <ftp-fallback-request-no-permit>....</ftp-fallback-request-no-permit>
      <ftp-fallback-request>....</ftp-fallback-request>
    </anti-virus-statistics-details-ftp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<anti-virus-statistics-details-http>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-http>
      <http-mime-whitelist-passed>
        http-mime-whitelist-passed
      </http-mime-whitelist-passed>
      <http-url-whitelist-passed>
        http-url-whitelist-passed
      </http-url-whitelist-passed>
      <http-scan-request>....</http-scan-request>
      <http-fallback-request-no-permit>....</http-fallback-request-no-permit>
      <http-fallback-request>....</http-fallback-request>
    </anti-virus-statistics-details-http>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

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<anti-virus-statistics-details-imap>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-imap>
      <imap-scan-request>....</imap-scan-request>
      <imap-fallback-request-no-permit>....</imap-fallback-request-no-permit>
      <imap-fallback-request>....</imap-fallback-request>
    </anti-virus-statistics-details-imap>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<anti-virus-statistics-details-pop3>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-pop3>
      <pop3-scan-request>....</pop3-scan-request>
      <pop3-fallback-request-no-permit>....</pop3-fallback-request-no-permit>
      <pop3-fallback-request>....</pop3-fallback-request>
    </anti-virus-statistics-details-pop3>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<anti-virus-statistics-details-smtp>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-smtp>
      <smtp-scan-request>....</smtp-scan-request>
      <smtp-fallback-request-no-permit>....</smtp-fallback-request-no-permit>
      <smtp-fallback-request>....</smtp-fallback-request>
    </anti-virus-statistics-details-smtp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<anti-virus-status>

Usage

```
<anti-virus>
  <anti-virus-status>
    <anti-virus-key-expire-date>
      anti-virus-key-expire-date
```

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```
    </anti-virus-key-expire-date>
    <anti-virus-update-url>
      anti-virus-update-url
    </anti-virus-update-url>
    <anti-virus-update-interval>
      anti-virus-update-interval
    </anti-virus-update-interval>
    <anti-virus-update-status>
      anti-virus-update-status
    </anti-virus-update-status>
    <anti-virus-proxy-server>
      anti-virus-proxy-server
    </anti-virus-proxy-server>
    <anti-virus-update-result>
      anti-virus-update-result
    </anti-virus-update-result>
    <anti-virus-signature-version>
      anti-virus-signature-version
    </anti-virus-signature-version>
    <anti-virus-compiler-version>
      anti-virus-compiler-version
    </anti-virus-compiler-version>
    <anti-virus-scan-engine-type>
      anti-virus-scan-engine-type
    </anti-virus-scan-engine-type>
    <anti-virus-scan-engine-information>
      anti-virus-scan-engine-information
    </anti-virus-scan-engine-information>
    <anti-virus-status-detail>
      anti-virus-status-detail
    </anti-virus-status-detail>
  </anti-virus-status>
</anti-virus>
```

Description Anti-virus status

<anti-virus-test>

Usage

```
<anti-virus-test>
  <anti-virus-test-result>
    anti-virus-test-result
  </anti-virus-test-result>
</anti-virus-test>
```

Description UTM anti-virus test results

<clear-content-filter>

Usage

```
<clear-content-filter>
  <clear-content-filter-result>
```


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```
    clear-content-filter-result
  </clear-content-filter-result>
</clear-content-filter>
```

Description UTM content-filter clear result

<content-filtering>

Usage

```
<content-filtering>
  <content-filtering-statistics>....</content-filtering-statistics>
  <content-filtering-status>....</content-filtering-status>
</content-filtering>
```

Description Statistics of content-filtering features

<content-filtering-statistics>

Usage

```
<content-filtering>
  <content-filtering-statistics>
    <passed-blocked>....</passed-blocked>
  </content-filtering-statistics>
</content-filtering>
```

Description Content-filtering statistics

<content-filtering-status>

Usage

```
<content-filtering>
  <content-filtering-status>
    <content-filtering-status-value>
      content-filtering-status-value
    </content-filtering-status-value>
    <content-filtering-profile-name>
      content-filtering-profile-name
    </content-filtering-profile-name>
  </content-filtering-status>
</content-filtering>
```

Description Content-filtering status

<dns-server-setting>

Usage

```
<anti-spam>
  <anti-spam-status>
    <dns-server-setting>
```

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```
      <primary>
       primary
      </primary>
      <primary-source-interface>
       primary-source-interface
      </primary-source-interface>
      <secondary>
       secondary
      </secondary>
      <secondary-source-interface>
       secondary-source-interface
      </secondary-source-interface>
      <ternary>
       ternary
      </ternary>
      <ternary-source-interface>
       ternary-source-interface
      </ternary-source-interface>
     </dns-server-setting>
    </anti-spam-status>
   </anti-spam>
```

Description

<fall-back>

Usage

```
<anti-virus>
 <anti-virus-statistics>
  <fall-back>
   <engine-not-ready-log-and-permit>
    engine-not-ready-log-and-permit
   </engine-not-ready-log-and-permit>
   <engine-not-ready-block>
    engine-not-ready-block
   </engine-not-ready-block>
   <password-log-and-permit>
    password-log-and-permit
   </password-log-and-permit>
   <password-block>
    password-block
   </password-block>
   <decompress-layer-log-and-permit>
    decompress-layer-log-and-permit
   </decompress-layer-log-and-permit>
   <decompress-layer-block>
    decompress-layer-block
   </decompress-layer-block>
   <corrupted-file-log-and-permit>
    corrupted-file-log-and-permit
   </corrupted-file-log-and-permit>
   <corrupted-file-block>
    corrupted-file-block
   </corrupted-file-block>
   <out-of-resource-log-and-permit>
```


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```
      out-of-resource-log-and-permit
    </out-of-resource-log-and-permit>
    <out-of-resource-block>
      out-of-resource-block
    </out-of-resource-block>
    <timeout-log-and-permit>
      timeout-log-and-permit
    </timeout-log-and-permit>
    <timeout-block>
      timeout-block
    </timeout-block>
    <maximum-content-size-log-and-permit>
      maximum-content-size-log-and-permit
    </maximum-content-size-log-and-permit>
    <maximum-content-size-block>
      maximum-content-size-block
    </maximum-content-size-block>
    <too-many-requests-log-and-permit>
      too-many-requests-log-and-permit
    </too-many-requests-log-and-permit>
    <too-many-requests-block>
      too-many-requests-block
    </too-many-requests-block>
    <others-log-and-permit>
      others-log-and-permit
    </others-log-and-permit>
    <others-block>
      others-block
    </others-block>
  </fall-back>
 </anti-virus-statistics>
</anti-virus>
```

Description Anti-virus fallback results

<fall-back-permit>

Usage

```
<anti-virus>
 <anti-virus-statistics>
  <fall-back-permit>
    <engine-not-ready-log-and-permit>
      engine-not-ready-log-and-permit
    </engine-not-ready-log-and-permit>
    <engine-not-ready-permit>
      engine-not-ready-permit
    </engine-not-ready-permit>
    <engine-not-ready-block>
      engine-not-ready-block
    </engine-not-ready-block>
    <password-log-and-permit>
      password-log-and-permit
    </password-log-and-permit>
    <password-permit>
```

```
  password-permit
</password-permit>
<password-block>
  password-block
</password-block>
<decompress-layer-log-and-permit>
  decompress-layer-log-and-permit
</decompress-layer-log-and-permit>
<decompress-layer-permit>
  decompress-layer-permit
</decompress-layer-permit>
<decompress-layer-block>
  decompress-layer-block
</decompress-layer-block>
<corrupted-file-log-and-permit>
  corrupted-file-log-and-permit
</corrupted-file-log-and-permit>
<corrupted-file-permit>
  corrupted-file-permit
</corrupted-file-permit>
<corrupted-file-block>
  corrupted-file-block
</corrupted-file-block>
<out-of-resource-log-and-permit>
  out-of-resource-log-and-permit
</out-of-resource-log-and-permit>
<out-of-resource-permit>
  out-of-resource-permit
</out-of-resource-permit>
<out-of-resource-block>
  out-of-resource-block
</out-of-resource-block>
<timeout-log-and-permit>
  timeout-log-and-permit
</timeout-log-and-permit>
<timeout-permit>
  timeout-permit
</timeout-permit>
<timeout-block>
  timeout-block
</timeout-block>
<maximum-content-size-log-and-permit>
  maximum-content-size-log-and-permit
</maximum-content-size-log-and-permit>
<maximum-content-size-permit>
  maximum-content-size-permit
</maximum-content-size-permit>
<maximum-content-size-block>
  maximum-content-size-block
</maximum-content-size-block>
<too-many-requests-log-and-permit>
  too-many-requests-log-and-permit
</too-many-requests-log-and-permit>
<too-many-requests-permit>
  too-many-requests-permit
</too-many-requests-permit>
```


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```
      <too-many-requests-block>
       too-many-requests-block
      </too-many-requests-block>
      <others-log-and-permit>
       others-log-and-permit
      </others-log-and-permit>
      <others-permit>
       others-permit
      </others-permit>
      <others-block>
       others-block
      </others-block>
     </fall-back-permit>
    </anti-virus-statistics>
   </anti-virus>
```

Description Anti-virus fallback results

<ftp-fallback-request>

Usage

```
<anti-virus>
 <anti-virus-statistics-details>
  <anti-virus-statistics-details-ftp>
   <ftp-fallback-request>
    <ftp-fallback-engine-not-ready-log-permit>
     ftp-fallback-engine-not-ready-log-permit
    </ftp-fallback-engine-not-ready-log-permit>
    <ftp-fallback-engine-not-ready-block>
     ftp-fallback-engine-not-ready-block
    </ftp-fallback-engine-not-ready-block>
    <ftp-fallback-engine-not-ready-permit>
     ftp-fallback-engine-not-ready-permit
    </ftp-fallback-engine-not-ready-permit>
    <ftp-fallback-out-resource-log-permit>
     ftp-fallback-out-resource-log-permit
    </ftp-fallback-out-resource-log-permit>
    <ftp-fallback-out-resource-block>
     ftp-fallback-out-resource-block
    </ftp-fallback-out-resource-block>
    <ftp-fallback-out-resource-permit>
     ftp-fallback-out-resource-permit
    </ftp-fallback-out-resource-permit>
    <ftp-fallback-timeout-log-permit>
     ftp-fallback-timeout-log-permit
    </ftp-fallback-timeout-log-permit>
    <ftp-fallback-timeout-block>
     ftp-fallback-timeout-block
    </ftp-fallback-timeout-block>
    <ftp-fallback-timeout-permit>
     ftp-fallback-timeout-permit
    </ftp-fallback-timeout-permit>
    <ftp-fallback-maximum-content-size-log-permit>
     ftp-fallback-maximum-content-size-log-permit
```

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```
        </ftp-fallback-maximum-content-size-log-permit>
        <ftp-fallback-maximum-content-size-block>
          ftp-fallback-maximum-content-size-block
        </ftp-fallback-maximum-content-size-block>
        <ftp-fallback-maximum-content-size-permit>
          ftp-fallback-maximum-content-size-permit
        </ftp-fallback-maximum-content-size-permit>
        <ftp-fallback-too-many-requests-log-permit>
          ftp-fallback-too-many-requests-log-permit
        </ftp-fallback-too-many-requests-log-permit>
        <ftp-fallback-too-many-requests-block>
          ftp-fallback-too-many-requests-block
        </ftp-fallback-too-many-requests-block>
        <ftp-fallback-too-many-requests-permit>
          ftp-fallback-too-many-requests-permit
        </ftp-fallback-too-many-requests-permit>
        <ftp-fallback-others-log-permit>
          ftp-fallback-others-log-permit
        </ftp-fallback-others-log-permit>
        <ftp-fallback-others-block>
          ftp-fallback-others-block
        </ftp-fallback-others-block>
        <ftp-fallback-others-permit>
          ftp-fallback-others-permit
        </ftp-fallback-others-permit>
      </ftp-fallback-request>
    </anti-virus-statistics-details-ftp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<ftp-fallback-request-no-permit>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-ftp>
      <ftp-fallback-request-no-permit>
        <ftp-fallback-engine-not-ready-log-permit>
          ftp-fallback-engine-not-ready-log-permit
        </ftp-fallback-engine-not-ready-log-permit>
        <ftp-fallback-engine-not-ready-block>
          ftp-fallback-engine-not-ready-block
        </ftp-fallback-engine-not-ready-block>
        <ftp-fallback-engine-not-ready-permit>
          ftp-fallback-engine-not-ready-permit
        </ftp-fallback-engine-not-ready-permit>
        <ftp-fallback-out-resource-log-permit>
          ftp-fallback-out-resource-log-permit
        </ftp-fallback-out-resource-log-permit>
        <ftp-fallback-out-resource-block>
          ftp-fallback-out-resource-block
        </ftp-fallback-out-resource-block>
        <ftp-fallback-out-resource-permit>
```


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```
          ftp-fallback-out-resource-permit
        </ftp-fallback-out-resource-permit>
        <ftp-fallback-timeout-log-permit>
          ftp-fallback-timeout-log-permit
        </ftp-fallback-timeout-log-permit>
        <ftp-fallback-timeout-block>
          ftp-fallback-timeout-block
        </ftp-fallback-timeout-block>
        <ftp-fallback-timeout-permit>
          ftp-fallback-timeout-permit
        </ftp-fallback-timeout-permit>
        <ftp-fallback-maximum-content-size-log-permit>
          ftp-fallback-maximum-content-size-log-permit
        </ftp-fallback-maximum-content-size-log-permit>
        <ftp-fallback-maximum-content-size-block>
          ftp-fallback-maximum-content-size-block
        </ftp-fallback-maximum-content-size-block>
        <ftp-fallback-maximum-content-size-permit>
          ftp-fallback-maximum-content-size-permit
        </ftp-fallback-maximum-content-size-permit>
        <ftp-fallback-too-many-requests-log-permit>
          ftp-fallback-too-many-requests-log-permit
        </ftp-fallback-too-many-requests-log-permit>
        <ftp-fallback-too-many-requests-block>
          ftp-fallback-too-many-requests-block
        </ftp-fallback-too-many-requests-block>
        <ftp-fallback-too-many-requests-permit>
          ftp-fallback-too-many-requests-permit
        </ftp-fallback-too-many-requests-permit>
        <ftp-fallback-others-log-permit>
          ftp-fallback-others-log-permit
        </ftp-fallback-others-log-permit>
        <ftp-fallback-others-block>
          ftp-fallback-others-block
        </ftp-fallback-others-block>
        <ftp-fallback-others-permit>
          ftp-fallback-others-permit
        </ftp-fallback-others-permit>
      </ftp-fallback-request-no-permit>
    </anti-virus-statistics-details-ftp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<ftp-scan-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-ftp>
      <ftp-scan-request>
        <ftp-scan-request-total>
          ftp-scan-request-total
        </ftp-scan-request-total>
```

```
        <ftp-scan-request-clean>
          ftp-scan-request-clean
        </ftp-scan-request-clean>
        <ftp-scan-request-threat>
          ftp-scan-request-threat
        </ftp-scan-request-threat>
      </ftp-scan-request>
    </anti-virus-statistics-details-ftp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<http-fallback-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-http>
      <http-fallback-request>
        <http-fallback-engine-not-ready-log-permit>
          http-fallback-engine-not-ready-log-permit
        </http-fallback-engine-not-ready-log-permit>
        <http-fallback-engine-not-ready-block>
          http-fallback-engine-not-ready-block
        </http-fallback-engine-not-ready-block>
        <http-fallback-engine-not-ready-permit>
          http-fallback-engine-not-ready-permit
        </http-fallback-engine-not-ready-permit>
        <http-fallback-out-resource-log-permit>
          http-fallback-out-resource-log-permit
        </http-fallback-out-resource-log-permit>
        <http-fallback-out-resource-block>
          http-fallback-out-resource-block
        </http-fallback-out-resource-block>
        <http-fallback-out-resource-permit>
          http-fallback-out-resource-permit
        </http-fallback-out-resource-permit>
        <http-fallback-timeout-log-permit>
          http-fallback-timeout-log-permit
        </http-fallback-timeout-log-permit>
        <http-fallback-timeout-block>
          http-fallback-timeout-block
        </http-fallback-timeout-block>
        <http-fallback-timeout-permit>
          http-fallback-timeout-permit
        </http-fallback-timeout-permit>
        <http-fallback-maximum-content-size-log-permit>
          http-fallback-maximum-content-size-log-permit
        </http-fallback-maximum-content-size-log-permit>
        <http-fallback-maximum-content-size-block>
          http-fallback-maximum-content-size-block
        </http-fallback-maximum-content-size-block>
        <http-fallback-maximum-content-size-permit>
          http-fallback-maximum-content-size-permit
```


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```
        </http-fallback-maximum-content-size-permit>
        <http-fallback-too-many-requests-log-permit>
          http-fallback-too-many-requests-log-permit
        </http-fallback-too-many-requests-log-permit>
        <http-fallback-too-many-requests-block>
          http-fallback-too-many-requests-block
        </http-fallback-too-many-requests-block>
        <http-fallback-too-many-requests-permit>
          http-fallback-too-many-requests-permit
        </http-fallback-too-many-requests-permit>
        <http-fallback-others-log-permit>
          http-fallback-others-log-permit
        </http-fallback-others-log-permit>
        <http-fallback-others-block>
          http-fallback-others-block
        </http-fallback-others-block>
        <http-fallback-others-permit>
          http-fallback-others-permit
        </http-fallback-others-permit>
      </http-fallback-request>
    </anti-virus-statistics-details-http>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<http-fallback-request-no-permit>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-http>
      <http-fallback-request-no-permit>
        <http-fallback-engine-not-ready-log-permit>
          http-fallback-engine-not-ready-log-permit
        </http-fallback-engine-not-ready-log-permit>
        <http-fallback-engine-not-ready-block>
          http-fallback-engine-not-ready-block
        </http-fallback-engine-not-ready-block>
        <http-fallback-engine-not-ready-permit>
          http-fallback-engine-not-ready-permit
        </http-fallback-engine-not-ready-permit>
        <http-fallback-out-resource-log-permit>
          http-fallback-out-resource-log-permit
        </http-fallback-out-resource-log-permit>
        <http-fallback-out-resource-block>
          http-fallback-out-resource-block
        </http-fallback-out-resource-block>
        <http-fallback-out-resource-permit>
          http-fallback-out-resource-permit
        </http-fallback-out-resource-permit>
        <http-fallback-timeout-log-permit>
          http-fallback-timeout-log-permit
        </http-fallback-timeout-log-permit>
        <http-fallback-timeout-block>
```

```
            http-fallback-timeout-block
          </http-fallback-timeout-block>
          <http-fallback-timeout-permit>
            http-fallback-timeout-permit
          </http-fallback-timeout-permit>
          <http-fallback-maximum-content-size-log-permit>
            http-fallback-maximum-content-size-log-permit
          </http-fallback-maximum-content-size-log-permit>
          <http-fallback-maximum-content-size-block>
            http-fallback-maximum-content-size-block
          </http-fallback-maximum-content-size-block>
          <http-fallback-maximum-content-size-permit>
            http-fallback-maximum-content-size-permit
          </http-fallback-maximum-content-size-permit>
          <http-fallback-too-many-requests-log-permit>
            http-fallback-too-many-requests-log-permit
          </http-fallback-too-many-requests-log-permit>
          <http-fallback-too-many-requests-block>
            http-fallback-too-many-requests-block
          </http-fallback-too-many-requests-block>
          <http-fallback-too-many-requests-permit>
            http-fallback-too-many-requests-permit
          </http-fallback-too-many-requests-permit>
          <http-fallback-others-log-permit>
            http-fallback-others-log-permit
          </http-fallback-others-log-permit>
          <http-fallback-others-block>
            http-fallback-others-block
          </http-fallback-others-block>
          <http-fallback-others-permit>
            http-fallback-others-permit
          </http-fallback-others-permit>
        </http-fallback-request-no-permit>
      </anti-virus-statistics-details-http>
    </anti-virus-statistics-details>
  </anti-virus>
```

Description

<http-scan-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-http>
      <http-scan-request>
        <http-scan-request-total>
          http-scan-request-total
        </http-scan-request-total>
        <http-scan-request-clean>
          http-scan-request-clean
        </http-scan-request-clean>
        <http-scan-request-threat>
          http-scan-request-threat
        </http-scan-request-threat>
```


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```
      </http-scan-request>
    </anti-virus-statistics-details-http>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<imap-fallback-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-imap>
      <imap-fallback-request>
        <imap-fallback-engine-not-ready-log-permit>
          imap-fallback-engine-not-ready-log-permit
        </imap-fallback-engine-not-ready-log-permit>
        <imap-fallback-engine-not-ready-block>
          imap-fallback-engine-not-ready-block
        </imap-fallback-engine-not-ready-block>
        <imap-fallback-engine-not-ready-permit>
          imap-fallback-engine-not-ready-permit
        </imap-fallback-engine-not-ready-permit>
        <imap-fallback-out-resource-log-permit>
          imap-fallback-out-resource-log-permit
        </imap-fallback-out-resource-log-permit>
        <imap-fallback-out-resource-block>
          imap-fallback-out-resource-block
        </imap-fallback-out-resource-block>
        <imap-fallback-out-resource-permit>
          imap-fallback-out-resource-permit
        </imap-fallback-out-resource-permit>
        <imap-fallback-timeout-log-permit>
          imap-fallback-timeout-log-permit
        </imap-fallback-timeout-log-permit>
        <imap-fallback-timeout-block>
          imap-fallback-timeout-block
        </imap-fallback-timeout-block>
        <imap-fallback-timeout-permit>
          imap-fallback-timeout-permit
        </imap-fallback-timeout-permit>
        <imap-fallback-maximum-content-size-log-permit>
          imap-fallback-maximum-content-size-log-permit
        </imap-fallback-maximum-content-size-log-permit>
        <imap-fallback-maximum-content-size-block>
          imap-fallback-maximum-content-size-block
        </imap-fallback-maximum-content-size-block>
        <imap-fallback-maximum-content-size-permit>
          imap-fallback-maximum-content-size-permit
        </imap-fallback-maximum-content-size-permit>
        <imap-fallback-too-many-requests-log-permit>
          imap-fallback-too-many-requests-log-permit
        </imap-fallback-too-many-requests-log-permit>
        <imap-fallback-too-many-requests-block>
          imap-fallback-too-many-requests-block
```

```
        </imap-fallback-too-many-requests-block>
        <imap-fallback-too-many-requests-permit>
          imap-fallback-too-many-requests-permit
        </imap-fallback-too-many-requests-permit>
        <imap-fallback-others-log-permit>
          imap-fallback-others-log-permit
        </imap-fallback-others-log-permit>
        <imap-fallback-others-block>
          imap-fallback-others-block
        </imap-fallback-others-block>
        <imap-fallback-others-permit>
          imap-fallback-others-permit
        </imap-fallback-others-permit>
      </imap-fallback-request>
    </anti-virus-statistics-details-imap>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<imap-fallback-request-no-permit>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-imap>
      <imap-fallback-request-no-permit>
        <imap-fallback-engine-not-ready-log-permit>
          imap-fallback-engine-not-ready-log-permit
        </imap-fallback-engine-not-ready-log-permit>
        <imap-fallback-engine-not-ready-block>
          imap-fallback-engine-not-ready-block
        </imap-fallback-engine-not-ready-block>
        <imap-fallback-engine-not-ready-permit>
          imap-fallback-engine-not-ready-permit
        </imap-fallback-engine-not-ready-permit>
        <imap-fallback-out-resource-log-permit>
          imap-fallback-out-resource-log-permit
        </imap-fallback-out-resource-log-permit>
        <imap-fallback-out-resource-block>
          imap-fallback-out-resource-block
        </imap-fallback-out-resource-block>
        <imap-fallback-out-resource-permit>
          imap-fallback-out-resource-permit
        </imap-fallback-out-resource-permit>
        <imap-fallback-timeout-log-permit>
          imap-fallback-timeout-log-permit
        </imap-fallback-timeout-log-permit>
        <imap-fallback-timeout-block>
          imap-fallback-timeout-block
        </imap-fallback-timeout-block>
        <imap-fallback-timeout-permit>
          imap-fallback-timeout-permit
        </imap-fallback-timeout-permit>
        <imap-fallback-maximum-content-size-log-permit>
```


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```
            imap-fallback-maximum-content-size-log-permit
          </imap-fallback-maximum-content-size-log-permit>
          <imap-fallback-maximum-content-size-block>
            imap-fallback-maximum-content-size-block
          </imap-fallback-maximum-content-size-block>
          <imap-fallback-maximum-content-size-permit>
            imap-fallback-maximum-content-size-permit
          </imap-fallback-maximum-content-size-permit>
          <imap-fallback-too-many-requests-log-permit>
            imap-fallback-too-many-requests-log-permit
          </imap-fallback-too-many-requests-log-permit>
          <imap-fallback-too-many-requests-block>
            imap-fallback-too-many-requests-block
          </imap-fallback-too-many-requests-block>
          <imap-fallback-too-many-requests-permit>
            imap-fallback-too-many-requests-permit
          </imap-fallback-too-many-requests-permit>
          <imap-fallback-others-log-permit>
            imap-fallback-others-log-permit
          </imap-fallback-others-log-permit>
          <imap-fallback-others-block>
            imap-fallback-others-block
          </imap-fallback-others-block>
          <imap-fallback-others-permit>
            imap-fallback-others-permit
          </imap-fallback-others-permit>
        </imap-fallback-request-no-permit>
      </anti-virus-statistics-details-imap>
    </anti-virus-statistics-details>
  </anti-virus>
```

Description

<imap-scan-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-imap>
      <imap-scan-request>
        <imap-scan-request-total>
          imap-scan-request-total
        </imap-scan-request-total>
        <imap-scan-request-clean>
          imap-scan-request-clean
        </imap-scan-request-clean>
        <imap-scan-request-threat>
          imap-scan-request-threat
        </imap-scan-request-threat>
      </imap-scan-request>
    </anti-virus-statistics-details-imap>
  </anti-virus-statistics-details>
</anti-virus>
```

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Description

<passed-blocked>

Usage

```
<content-filtering>
  <content-filtering-statistics>
    <passed-blocked>
      <content-filtering-command-passed>
        content-filtering-command-passed
      </content-filtering-command-passed>
      <content-filtering-command-blocked>
        content-filtering-command-blocked
      </content-filtering-command-blocked>
      <content-filtering-mime-passed>
        content-filtering-mime-passed
      </content-filtering-mime-passed>
      <content-filtering-mime-blocked>
        content-filtering-mime-blocked
      </content-filtering-mime-blocked>
      <content-filtering-extension-passed>
        content-filtering-extension-passed
      </content-filtering-extension-passed>
      <content-filtering-extension-blocked>
        content-filtering-extension-blocked
      </content-filtering-extension-blocked>
      <content-filtering-activex-passed>
        content-filtering-activex-passed
      </content-filtering-activex-passed>
      <content-filtering-activex-blocked>
        content-filtering-activex-blocked
      </content-filtering-activex-blocked>
      <content-filtering-java-applet-passed>
        content-filtering-java-applet-passed
      </content-filtering-java-applet-passed>
      <content-filtering-java-applet-blocked>
        content-filtering-java-applet-blocked
      </content-filtering-java-applet-blocked>
      <content-filtering-exe-passed>
        content-filtering-exe-passed
      </content-filtering-exe-passed>
      <content-filtering-exe-blocked>
        content-filtering-exe-blocked
      </content-filtering-exe-blocked>
      <content-filtering-zip-passed>
        content-filtering-zip-passed
      </content-filtering-zip-passed>
      <content-filtering-zip-blocked>
        content-filtering-zip-blocked
      </content-filtering-zip-blocked>
      <content-filtering-cookie-passed>
        content-filtering-cookie-passed
      </content-filtering-cookie-passed>
      <content-filtering-cookie-blocked>
        content-filtering-cookie-blocked
      </content-filtering-cookie-blocked>
```


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```
    </passed-blocked>
  </content-filtering-statistics>
</content-filtering>
```

Description

<pop3-fallback-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-pop3>
      <pop3-fallback-request>
        <pop3-fallback-engine-not-ready-log-permit>
          pop3-fallback-engine-not-ready-log-permit
        </pop3-fallback-engine-not-ready-log-permit>
        <pop3-fallback-engine-not-ready-block>
          pop3-fallback-engine-not-ready-block
        </pop3-fallback-engine-not-ready-block>
        <pop3-fallback-engine-not-ready-permit>
          pop3-fallback-engine-not-ready-permit
        </pop3-fallback-engine-not-ready-permit>
        <pop3-fallback-out-resource-log-permit>
          pop3-fallback-out-resource-log-permit
        </pop3-fallback-out-resource-log-permit>
        <pop3-fallback-out-resource-block>
          pop3-fallback-out-resource-block
        </pop3-fallback-out-resource-block>
        <pop3-fallback-out-resource-permit>
          pop3-fallback-out-resource-permit
        </pop3-fallback-out-resource-permit>
        <pop3-fallback-timeout-log-permit>
          pop3-fallback-timeout-log-permit
        </pop3-fallback-timeout-log-permit>
        <pop3-fallback-timeout-block>
          pop3-fallback-timeout-block
        </pop3-fallback-timeout-block>
        <pop3-fallback-timeout-permit>
          pop3-fallback-timeout-permit
        </pop3-fallback-timeout-permit>
        <pop3-fallback-maximum-content-size-log-permit>
          pop3-fallback-maximum-content-size-log-permit
        </pop3-fallback-maximum-content-size-log-permit>
        <pop3-fallback-maximum-content-size-block>
          pop3-fallback-maximum-content-size-block
        </pop3-fallback-maximum-content-size-block>
        <pop3-fallback-maximum-content-size-permit>
          pop3-fallback-maximum-content-size-permit
        </pop3-fallback-maximum-content-size-permit>
        <pop3-fallback-too-many-requests-log-permit>
          pop3-fallback-too-many-requests-log-permit
        </pop3-fallback-too-many-requests-log-permit>
        <pop3-fallback-too-many-requests-block>
          pop3-fallback-too-many-requests-block
        </pop3-fallback-too-many-requests-block>
```

```
        <pop3-fallback-too-many-requests-permit>
          pop3-fallback-too-many-requests-permit
        </pop3-fallback-too-many-requests-permit>
        <pop3-fallback-others-log-permit>
          pop3-fallback-others-log-permit
        </pop3-fallback-others-log-permit>
        <pop3-fallback-others-block>
          pop3-fallback-others-block
        </pop3-fallback-others-block>
        <pop3-fallback-others-permit>
          pop3-fallback-others-permit
        </pop3-fallback-others-permit>
      </pop3-fallback-request>
    </anti-virus-statistics-details-pop3>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<pop3-fallback-request-no-permit>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-pop3>
      <pop3-fallback-request-no-permit>
        <pop3-fallback-engine-not-ready-log-permit>
          pop3-fallback-engine-not-ready-log-permit
        </pop3-fallback-engine-not-ready-log-permit>
        <pop3-fallback-engine-not-ready-block>
          pop3-fallback-engine-not-ready-block
        </pop3-fallback-engine-not-ready-block>
        <pop3-fallback-engine-not-ready-permit>
          pop3-fallback-engine-not-ready-permit
        </pop3-fallback-engine-not-ready-permit>
        <pop3-fallback-out-resource-log-permit>
          pop3-fallback-out-resource-log-permit
        </pop3-fallback-out-resource-log-permit>
        <pop3-fallback-out-resource-block>
          pop3-fallback-out-resource-block
        </pop3-fallback-out-resource-block>
        <pop3-fallback-out-resource-permit>
          pop3-fallback-out-resource-permit
        </pop3-fallback-out-resource-permit>
        <pop3-fallback-timeout-log-permit>
          pop3-fallback-timeout-log-permit
        </pop3-fallback-timeout-log-permit>
        <pop3-fallback-timeout-block>
          pop3-fallback-timeout-block
        </pop3-fallback-timeout-block>
        <pop3-fallback-timeout-permit>
          pop3-fallback-timeout-permit
        </pop3-fallback-timeout-permit>
        <pop3-fallback-maximum-content-size-log-permit>
          pop3-fallback-maximum-content-size-log-permit
```


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```
      </pop3-fallback-maximum-content-size-log-permit>
      <pop3-fallback-maximum-content-size-block>
        pop3-fallback-maximum-content-size-block
      </pop3-fallback-maximum-content-size-block>
      <pop3-fallback-maximum-content-size-permit>
        pop3-fallback-maximum-content-size-permit
      </pop3-fallback-maximum-content-size-permit>
      <pop3-fallback-too-many-requests-log-permit>
        pop3-fallback-too-many-requests-log-permit
      </pop3-fallback-too-many-requests-log-permit>
      <pop3-fallback-too-many-requests-block>
        pop3-fallback-too-many-requests-block
      </pop3-fallback-too-many-requests-block>
      <pop3-fallback-too-many-requests-permit>
        pop3-fallback-too-many-requests-permit
      </pop3-fallback-too-many-requests-permit>
      <pop3-fallback-others-log-permit>
        pop3-fallback-others-log-permit
      </pop3-fallback-others-log-permit>
      <pop3-fallback-others-block>
        pop3-fallback-others-block
      </pop3-fallback-others-block>
      <pop3-fallback-others-permit>
        pop3-fallback-others-permit
      </pop3-fallback-others-permit>
    </pop3-fallback-request-no-permit>
  </anti-virus-statistics-details-pop3>
 </anti-virus-statistics-details>
</anti-virus>
```

Description

<pop3-scan-request>

Usage

```
<anti-virus>
 <anti-virus-statistics-details>
  <anti-virus-statistics-details-pop3>
   <pop3-scan-request>
    <pop3-scan-request-total>
     pop3-scan-request-total
    </pop3-scan-request-total>
    <pop3-scan-request-clean>
     pop3-scan-request-clean
    </pop3-scan-request-clean>
    <pop3-scan-request-threat>
     pop3-scan-request-threat
    </pop3-scan-request-threat>
   </pop3-scan-request>
  </anti-virus-statistics-details-pop3>
 </anti-virus-statistics-details>
</anti-virus>
```

Description

<scan-code>

Usage

```
<anti-virus>
  <anti-virus-statistics>
    <scan-code>
      <clear>
        clear
      </clear>
      <infected>
        infected
      </infected>
      <password>
        password
      </password>
      <decompress-layer>
        decompress-layer
      </decompress-layer>
      <corrupted-file>
        corrupted-file
      </corrupted-file>
      <out-of-resource>
        out-of-resource
      </out-of-resource>
      <internal-error>
        internal-error
      </internal-error>
    </scan-code>
  </anti-virus-statistics>
</anti-virus>
```

Description Anti-virus scan results

<scan-mode>

Usage

```
<anti-virus>
  <anti-virus-statistics>
    <scan-mode>
      <scan-all>
        scan-all
      </scan-all>
      <scan-extension>
        scan-extension
      </scan-extension>
    </scan-mode>
  </anti-virus-statistics>
</anti-virus>
```

Description Anti-virus scan mode

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<scan-request>

Usage

```
<anti-virus>
  <anti-virus-statistics>
    <scan-request>
      <scan-request-total>
        scan-request-total
      </scan-request-total>
      <scan-request-clean>
        scan-request-clean
      </scan-request-clean>
      <scan-request-threat>
        scan-request-threat
      </scan-request-threat>
      <scan-request-fallback>
        scan-request-fallback
      </scan-request-fallback>
    </scan-request>
  </anti-virus-statistics>
</anti-virus>
```

Description

<session-result>

Usage

```
<session-result>
  <maximum-sessions>
    maximum-sessions
  </maximum-sessions>
  <total-allocated-sessions>
    total-allocated-sessions
  </total-allocated-sessions>
  <total-freed-sessions>
    total-freed-sessions
  </total-freed-sessions>
  <active-sessions>
    active-sessions
  </active-sessions>
</session-result>
```

Description Information of UTM sessions

<smtp-fallback-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-smtp>
      <smtp-fallback-request>
        <smtp-fallback-engine-not-ready-log-permit>
          smtp-fallback-engine-not-ready-log-permit
```

```
        </smtp-fallback-engine-not-ready-log-permit>
        <smtp-fallback-engine-not-ready-block>
          smtp-fallback-engine-not-ready-block
        </smtp-fallback-engine-not-ready-block>
        <smtp-fallback-engine-not-ready-permit>
          smtp-fallback-engine-not-ready-permit
        </smtp-fallback-engine-not-ready-permit>
        <smtp-fallback-out-resource-log-permit>
          smtp-fallback-out-resource-log-permit
        </smtp-fallback-out-resource-log-permit>
        <smtp-fallback-out-resource-block>
          smtp-fallback-out-resource-block
        </smtp-fallback-out-resource-block>
        <smtp-fallback-out-resource-permit>
          smtp-fallback-out-resource-permit
        </smtp-fallback-out-resource-permit>
        <smtp-fallback-timeout-log-permit>
          smtp-fallback-timeout-log-permit
        </smtp-fallback-timeout-log-permit>
        <smtp-fallback-timeout-block>
          smtp-fallback-timeout-block
        </smtp-fallback-timeout-block>
        <smtp-fallback-timeout-permit>
          smtp-fallback-timeout-permit
        </smtp-fallback-timeout-permit>
        <smtp-fallback-maximum-content-size-log-permit>
          smtp-fallback-maximum-content-size-log-permit
        </smtp-fallback-maximum-content-size-log-permit>
        <smtp-fallback-maximum-content-size-block>
          smtp-fallback-maximum-content-size-block
        </smtp-fallback-maximum-content-size-block>
        <smtp-fallback-maximum-content-size-permit>
          smtp-fallback-maximum-content-size-permit
        </smtp-fallback-maximum-content-size-permit>
        <smtp-fallback-too-many-requests-log-permit>
          smtp-fallback-too-many-requests-log-permit
        </smtp-fallback-too-many-requests-log-permit>
        <smtp-fallback-too-many-requests-block>
          smtp-fallback-too-many-requests-block
        </smtp-fallback-too-many-requests-block>
        <smtp-fallback-too-many-requests-permit>
          smtp-fallback-too-many-requests-permit
        </smtp-fallback-too-many-requests-permit>
        <smtp-fallback-others-log-permit>
          smtp-fallback-others-log-permit
        </smtp-fallback-others-log-permit>
        <smtp-fallback-others-block>
          smtp-fallback-others-block
        </smtp-fallback-others-block>
        <smtp-fallback-others-permit>
          smtp-fallback-others-permit
        </smtp-fallback-others-permit>
      </smtp-fallback-request>
    </anti-virus-statistics-details-smtp>
  </anti-virus-statistics-details>
```


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```
</anti-virus>
```

Description

<smtp-fallback-request-no-permit>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-smtp>
      <smtp-fallback-request-no-permit>
        <smtp-fallback-engine-not-ready-log-permit>
          smtp-fallback-engine-not-ready-log-permit
        </smtp-fallback-engine-not-ready-log-permit>
        <smtp-fallback-engine-not-ready-block>
          smtp-fallback-engine-not-ready-block
        </smtp-fallback-engine-not-ready-block>
        <smtp-fallback-engine-not-ready-permit>
          smtp-fallback-engine-not-ready-permit
        </smtp-fallback-engine-not-ready-permit>
        <smtp-fallback-out-resource-log-permit>
          smtp-fallback-out-resource-log-permit
        </smtp-fallback-out-resource-log-permit>
        <smtp-fallback-out-resource-block>
          smtp-fallback-out-resource-block
        </smtp-fallback-out-resource-block>
        <smtp-fallback-out-resource-permit>
          smtp-fallback-out-resource-permit
        </smtp-fallback-out-resource-permit>
        <smtp-fallback-timeout-log-permit>
          smtp-fallback-timeout-log-permit
        </smtp-fallback-timeout-log-permit>
        <smtp-fallback-timeout-block>
          smtp-fallback-timeout-block
        </smtp-fallback-timeout-block>
        <smtp-fallback-timeout-permit>
          smtp-fallback-timeout-permit
        </smtp-fallback-timeout-permit>
        <smtp-fallback-maximum-content-size-log-permit>
          smtp-fallback-maximum-content-size-log-permit
        </smtp-fallback-maximum-content-size-log-permit>
        <smtp-fallback-maximum-content-size-block>
          smtp-fallback-maximum-content-size-block
        </smtp-fallback-maximum-content-size-block>
        <smtp-fallback-maximum-content-size-permit>
          smtp-fallback-maximum-content-size-permit
        </smtp-fallback-maximum-content-size-permit>
        <smtp-fallback-too-many-requests-log-permit>
          smtp-fallback-too-many-requests-log-permit
        </smtp-fallback-too-many-requests-log-permit>
        <smtp-fallback-too-many-requests-block>
          smtp-fallback-too-many-requests-block
        </smtp-fallback-too-many-requests-block>
        <smtp-fallback-too-many-requests-permit>
          smtp-fallback-too-many-requests-permit
```

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```
        </smtp-fallback-too-many-requests-permit>
        <smtp-fallback-others-log-permit>
          smtp-fallback-others-log-permit
        </smtp-fallback-others-log-permit>
        <smtp-fallback-others-block>
          smtp-fallback-others-block
        </smtp-fallback-others-block>
        <smtp-fallback-others-permit>
          smtp-fallback-others-permit
        </smtp-fallback-others-permit>
      </smtp-fallback-request-no-permit>
    </anti-virus-statistics-details-smtp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<smtp-scan-request>

Usage

```
<anti-virus>
  <anti-virus-statistics-details>
    <anti-virus-statistics-details-smtp>
      <smtp-scan-request>
        <smtp-scan-request-total>
          smtp-scan-request-total
        </smtp-scan-request-total>
        <smtp-scan-request-clean>
          smtp-scan-request-clean
        </smtp-scan-request-clean>
        <smtp-scan-request-threat>
          smtp-scan-request-threat
        </smtp-scan-request-threat>
      </smtp-scan-request>
    </anti-virus-statistics-details-smtp>
  </anti-virus-statistics-details>
</anti-virus>
```

Description

<sophos-anti-virus-status>

Usage

```
<anti-virus>
  <sophos-anti-virus-status>
    <anti-virus-key-expire-date>
      anti-virus-key-expire-date
    </anti-virus-key-expire-date>
    <anti-virus-update-url>
      anti-virus-update-url
    </anti-virus-update-url>
    <anti-virus-update-interval>
      anti-virus-update-interval
    </anti-virus-update-interval>
```


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```
      <anti-virus-update-status>
        anti-virus-update-status
      </anti-virus-update-status>
      <anti-virus-update-result>
        anti-virus-update-result
      </anti-virus-update-result>
      <anti-virus-signature-version>
        anti-virus-signature-version
      </anti-virus-signature-version>
      <anti-virus-compiler-version>
        anti-virus-compiler-version
      </anti-virus-compiler-version>
      <anti-virus-scan-engine-type>
        anti-virus-scan-engine-type
      </anti-virus-scan-engine-type>
      <anti-virus-scan-engine-information>
        anti-virus-scan-engine-information
      </anti-virus-scan-engine-information>
      <anti-virus-status-detail>
        anti-virus-status-detail
      </anti-virus-status-detail>
    </sophos-anti-virus-status>
  </anti-virus>
```

Description Anti-virus status

<statistics-last-10-days>

Usage

```
<anti-spam>
  <anti-spam-statistics>
    <statistics-last-10-days>
      <day1-permitted-emails>
        day1-permitted-emails
      </day1-permitted-emails>
      <day1-spam-emails>
        day1-spam-emails
      </day1-spam-emails>
      <day2-permitted-emails>
        day2-permitted-emails
      </day2-permitted-emails>
      <day2-spam-emails>
        day2-spam-emails
      </day2-spam-emails>
      <day3-permitted-emails>
        day3-permitted-emails
      </day3-permitted-emails>
      <day3-spam-emails>
        day3-spam-emails
      </day3-spam-emails>
      <day4-permitted-emails>
        day4-permitted-emails
      </day4-permitted-emails>
      <day4-spam-emails>
```

```
                day4-spam-emails
               </day4-spam-emails>
               <day5-permitted-emails>
                day5-permitted-emails
               </day5-permitted-emails>
               <day5-spam-emails>
                day5-spam-emails
               </day5-spam-emails>
               <day6-permitted-emails>
                day6-permitted-emails
               </day6-permitted-emails>
               <day6-spam-emails>
                day6-spam-emails
               </day6-spam-emails>
               <day7-permitted-emails>
                day7-permitted-emails
               </day7-permitted-emails>
               <day7-spam-emails>
                day7-spam-emails
               </day7-spam-emails>
               <day8-permitted-emails>
                day8-permitted-emails
               </day8-permitted-emails>
               <day8-spam-emails>
                day8-spam-emails
               </day8-spam-emails>
               <day9-permitted-emails>
                day9-permitted-emails
               </day9-permitted-emails>
               <day9-spam-emails>
                day9-spam-emails
               </day9-spam-emails>
               <day10-permitted-emails>
                day10-permitted-emails
               </day10-permitted-emails>
               <day10-spam-emails>
                day10-spam-emails
               </day10-spam-emails>
              </statistics-last-10-days>
             </anti-spam-statistics>
            </anti-spam>
```

Description

<utm-session-clear>

Usage

```
<utm-session-clear>
 <utm-session-clear-result>
  utm-session-clear-result
 </utm-session-clear-result>
</utm-session-clear>
```

Description UTM clear session

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<utmd-status>

Usage

```
<utmd-status>
  <running>
    running
  </running>
</utmd-status>
```

Description Status of utmd service

<utmd-web-filtering>

Usage

```
<utmd-web-filtering>
  <utmd-web-filtering-statistics>....</utmd-web-filtering-statistics>
  <utmd-web-filtering-status>....</utmd-web-filtering-status>
</utmd-web-filtering>
```

Description Statistics of web-filtering features

<utmd-web-filtering-statistics>

Usage

```
<utmd-web-filtering>
  <utmd-web-filtering-statistics>
    <total-requests>
      total-requests
    </total-requests>
    <white-list-hit>
      white-list-hit
    </white-list-hit>
    <black-list-hit>
      black-list-hit
    </black-list-hit>
    <queries-to-server>
      queries-to-server
    </queries-to-server>
    <server-reply-permit>
      server-reply-permit
    </server-reply-permit>
    <server-reply-block>
      server-reply-block
    </server-reply-block>
    <custom-category-permit>
      custom-category-permit
    </custom-category-permit>
    <custom-category-block>
      custom-category-block
    </custom-category-block>
    <site-reputation-permit>
      site-reputation-permit
```

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```
    </site-reputation-permit>
    <site-reputation-block>
      site-reputation-block
    </site-reputation-block>
    <cache-hit-permit>
      cache-hit-permit
    </cache-hit-permit>
    <cache-hit-block>
      cache-hit-block
    </cache-hit-block>
    <safe-search-redirect>
      safe-search-redirect
    </safe-search-redirect>
    <web-filtering-session-total>
      web-filtering-session-total
    </web-filtering-session-total>
    <web-filtering-session-inuse>
      web-filtering-session-inuse
    </web-filtering-session-inuse>
    <web-filtering-fallback>....</web-filtering-fallback>
  </utmd-web-filtering-statistics>
</utmd-web-filtering>
```

Description UTM web-filtering statistics

<utmd-web-filtering-status>

Usage

```
<utmd-web-filtering>
  <utmd-web-filtering-status>
    <web-filtering-server-status>
      web-filtering-server-status
    </web-filtering-server-status>
  </utmd-web-filtering-status>
</utmd-web-filtering>
```

Description UTM web-filtering status

<web-filter-clear>

Usage

```
<web-filter-clear>
  <web-filter-clear-result>
    web-filter-clear-result
  </web-filter-clear-result>
</web-filter-clear>
```

Description UTM web-filter clear result

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<web-filtering-fallback>

Usage

```
<utmd-web-filtering>
  <utmd-web-filtering-statistics>
    <web-filtering-fallback>
      <fallback-permit-default>
        fallback-permit-default
      </fallback-permit-default>
      <fallback-permit-timeout>
        fallback-permit-timeout
      </fallback-permit-timeout>
      <fallback-permit-connectivity>
        fallback-permit-connectivity
      </fallback-permit-connectivity>
      <fallback-permit-too-many-requests>
        fallback-permit-too-many-requests
      </fallback-permit-too-many-requests>
      <fallback-block-default>
        fallback-block-default
      </fallback-block-default>
      <fallback-block-timeout>
        fallback-block-timeout
      </fallback-block-timeout>
      <fallback-block-connectivity>
        fallback-block-connectivity
      </fallback-block-connectivity>
      <fallback-block-too-many-requests>
        fallback-block-too-many-requests
      </fallback-block-too-many-requests>
    </web-filtering-fallback>
  </utmd-web-filtering-statistics>
</utmd-web-filtering>
```

Description

<web-filtering-request-cache-flush>

Usage

```
<web-filtering-request-cache-flush>
  <web-filtering-request-cache-flush-result>
    web-filtering-request-cache-flush-result
  </web-filtering-request-cache-flush-result>
</web-filtering-request-cache-flush>
```

Description UTM Web-Filtering request cache flush

<web-filtering-test>

Usage

```
<web-filtering-test>
  <web-filtering-test-result>
    web-filtering-test-result
```

```
  </web-filtering-test-result>
</web-filtering-test>
```

Description UTM web-filtering test results

Summary of Wireless LAN Access Points Response Tags

<access-point-client-associations>

Usage

```
<access-point-client-associations>
  <access-point-name>
    access-point-name
  </access-point-name>
  <radio-id>
    radio-id
  </radio-id>
  <vap-id>
    vap-id
  </vap-id>
  <status-information>....</status-information>
</access-point-client-associations>
```

Description Information about client associations for a specified access point

<access-point-client-associations>

Usage

```
<wlan-access-point-client-associations-list>
  <access-point-client-associations>
    <access-point-name>
      access-point-name
    </access-point-name>
    <radio-id>
      radio-id
    </radio-id>
    <vap-id>
      vap-id
    </vap-id>
    <status-information>....</status-information>
  </access-point-client-associations>
</wlan-access-point-client-associations-list>
```

Description Information about client associations for a specified access point

<access-point-client-associations>

Usage

```
<wlan-access-point-client-associations-detail-list>
  <access-point-client-associations>
```


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```
    <access-point-name>
      access-point-name
    </access-point-name>
    <radio-id>
      radio-id
    </radio-id>
    <vap-id>
      vap-id
    </vap-id>
    <status-information>....</status-information>
  </access-point-client-associations>
</wlan-access-point-client-associations-detail-list>
```

Description Information about client associations for a specified access point

<access-point-client-display>

Usage

```
<access-point-client-display>
  <access-point-name>
    access-point-name
  </access-point-name>
</access-point-client-display>
```

Description

<access-point-client-display>

Usage

```
<wlan-access-point-client-associations-list>
  <access-point-client-display>
    <access-point-name>
      access-point-name
    </access-point-name>
  </access-point-client-display>
</wlan-access-point-client-associations-list>
```

Description

<access-point-client-display-detail>

Usage

```
<access-point-client-display-detail>
  <ap-empty>
    ap-empty
  </ap-empty>
</access-point-client-display-detail>
```

Description

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<access-point-client-display-detail>

Usage

```
<wlan-access-point-client-associations-detail-list>
  <access-point-client-display-detail>
    <ap-empty>
      ap-empty
    </ap-empty>
  </access-point-client-display-detail>
</wlan-access-point-client-associations-detail-list>
```

Description

<access-point-neighbors>

Usage

```
<access-point-neighbors>
  <mac-address>
    mac-address
  </mac-address>
  <ssid>
    ssid
  </ssid>
  <security>
    security
  </security>
  <wpa>
    wpa
  </wpa>
  <band>
    band
  </band>
  <channel>
    channel
  </channel>
  <last-beacon>
    last-beacon
  </last-beacon>
  <signal>
    signal
  </signal>
</access-point-neighbors>
```

Description Information about neighboring access points

<access-point-neighbors>

Usage

```
<wlan-access-point-neighbors-list>
  <access-point-neighbors>
    <mac-address>
      mac-address
    </mac-address>
```


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```
    <ssid>
      ssid
    </ssid>
    <security>
      security
    </security>
    <wpa>
      wpa
    </wpa>
    <band>
      band
    </band>
    <channel>
      channel
    </channel>
    <last-beacon>
      last-beacon
    </last-beacon>
    <signal>
      signal
    </signal>
  </access-point-neighbors>
</wlan-access-point-neighbors-list>
```

Description Information about neighboring access points

<access-points>

Usage

```
<access-points>
  <access-point-name>
    access-point-name
  </access-point-name>
  <access-point-type>
    access-point-type
  </access-point-type>
  <access-interface>
    access-interface
  </access-interface>
  <system-time>
    system-time
  </system-time>
  <access-point-status>
    access-point-status
  </access-point-status>
  <radio-mode-channel>
    radio-mode-channel
  </radio-mode-channel>
  <location>
    location
  </location>
  <serial-number>
    serial-number
  </serial-number>
```

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```
<firmware-version>
  firmware-version
</firmware-version>
<alt-firmware-version>
  alt-firmware-version
</alt-firmware-version>
<regulatory-domain>
  regulatory-domain
</regulatory-domain>
<country>
  country
</country>
<access-ipv4-address>
  access-ipv4-address
</access-ipv4-address>
<pcap-status>
  pcap-status
</pcap-status>
<capture-interface>
  capture-interface
</capture-interface>
<capture-file>
  capture-file
</capture-file>
<capture-duration>
  capture-duration
</capture-duration>
<capture-file-size>
  capture-file-size
</capture-file-size>
<radio-information>....</radio-information>
<radio-status-information>....</radio-status-information>
<ethernet-port-information>....</ethernet-port-information>
</access-points>
```

Description Information about access point

<access-points>

Usage

```
<wlan-access-points-list>
  <access-points>
    <access-point-name>
      access-point-name
    </access-point-name>
    <access-point-type>
      access-point-type
    </access-point-type>
    <access-interface>
      access-interface
    </access-interface>
    <system-time>
      system-time
    </system-time>
```


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```
<access-point-status>
  access-point-status
</access-point-status>
<radio-mode-channel>
  radio-mode-channel
</radio-mode-channel>
<location>
  location
</location>
<serial-number>
  serial-number
</serial-number>
<firmware-version>
  firmware-version
</firmware-version>
<alt-firmware-version>
  alt-firmware-version
</alt-firmware-version>
<regulatory-domain>
  regulatory-domain
</regulatory-domain>
<country>
  country
</country>
<access-ipv4-address>
  access-ipv4-address
</access-ipv4-address>
<pcap-status>
  pcap-status
</pcap-status>
<capture-interface>
  capture-interface
</capture-interface>
<capture-file>
  capture-file
</capture-file>
<capture-duration>
  capture-duration
</capture-duration>
<capture-file-size>
  capture-file-size
</capture-file-size>
<radio-information>....</radio-information>
<radio-status-information>....</radio-status-information>
<ethernet-port-information>....</ethernet-port-information>
</access-points>
</wlan-access-points-list>
```

Description Information about access point

<capture-local>

Usage

```
<capture-local>
```

```
<capture-interface>
  capture-interface
</capture-interface>
<capture-file>
  capture-file
</capture-file>
<capture-duration>
  capture-duration
</capture-duration>
<capture-file-size>
  capture-file-size
</capture-file-size>
</capture-local>
```

Description Local packet capture operation

<capture-local>

Usage

```
<wlan-access-point-packet-capture-start>
  <capture-local>
    <capture-interface>
      capture-interface
    </capture-interface>
    <capture-file>
      capture-file
    </capture-file>
    <capture-duration>
      capture-duration
    </capture-duration>
    <capture-file-size>
      capture-file-size
    </capture-file-size>
  </capture-local>
</wlan-access-point-packet-capture-start>
```

Description Local packet capture operation

<capture-local>

Usage

```
<wlan-access-point-packet-capture-stop>
  <capture-local>
    <capture-interface>
      capture-interface
    </capture-interface>
    <capture-file>
      capture-file
    </capture-file>
    <capture-duration>
      capture-duration
    </capture-duration>
```


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```
    <capture-file-size>
      capture-file-size
    </capture-file-size>
  </capture-local>
</wlan-access-point-packet-capture-stop>
```

Description Local packet capture operation

<cluster>

Usage

```
<cluster>
  <cluster-id>
    cluster-id
  </cluster-id>
  <access-point-name>
    access-point-name
  </access-point-name>
</cluster>
```

Description Cluster information

<cluster>

Usage

```
<wlan-clusters-list>
  <cluster>
    <cluster-id>
      cluster-id
    </cluster-id>
    <access-point-name>
      access-point-name
    </access-point-name>
  </cluster>
</wlan-clusters-list>
```

Description Cluster information

<diagnostics-info>

Usage

```
<diagnostics-info>
  <access-point-name>
    access-point-name
  </access-point-name>
  <pcap-status>
    pcap-status
  </pcap-status>
  <capture-interface>
    capture-interface
  </capture-interface>
```

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```
<syslog-status>
  syslog-status
</syslog-status>
</diagnostics-info>
```

Description Diagnostics information about an access point

<diagnostics-info>

Usage

```
<wlan-diagnostics-list>
 <diagnostics-info>
  <access-point-name>
   access-point-name
  </access-point-name>
  <pcap-status>
   pcap-status
  </pcap-status>
  <capture-interface>
   capture-interface
  </capture-interface>
  <syslog-status>
   syslog-status
  </syslog-status>
 </diagnostics-info>
</wlan-diagnostics-list>
```

Description Diagnostics information about an access point

<dotlx>

Usage

```
<dotlx>
 <global-radius-setting>
  global-radius-setting
 </global-radius-setting>
 <radius-ip-address>
  radius-ip-address
 </radius-ip-address>
 <radius-ip-address-1>
  radius-ip-address-1
 </radius-ip-address-1>
 <radius-ip-address-2>
  radius-ip-address-2
 </radius-ip-address-2>
 <radius-ip-address-3>
  radius-ip-address-3
 </radius-ip-address-3>
 <radius-accounting>
  radius-accounting
 </radius-accounting>
 <active-server>
```


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```
    active-server
   </active-server>
   <broadcast-key-refresh-rate>
    broadcast-key-refresh-rate
   </broadcast-key-refresh-rate>
   <session-key-refresh-rate>
    session-key-refresh-rate
   </session-key-refresh-rate>
  </dotlx>
```

Description Information about virtual access point dotlx-detail

<dotlx>

Usage

```
<virtual-access-points>
 <dotlx>
  <global-radius-setting>
   global-radius-setting
  </global-radius-setting>
  <radius-ip-address>
   radius-ip-address
  </radius-ip-address>
  <radius-ip-address-1>
   radius-ip-address-1
  </radius-ip-address-1>
  <radius-ip-address-2>
   radius-ip-address-2
  </radius-ip-address-2>
  <radius-ip-address-3>
   radius-ip-address-3
  </radius-ip-address-3>
  <radius-accounting>
   radius-accounting
  </radius-accounting>
  <active-server>
   active-server
  </active-server>
  <broadcast-key-refresh-rate>
   broadcast-key-refresh-rate
  </broadcast-key-refresh-rate>
  <session-key-refresh-rate>
   session-key-refresh-rate
  </session-key-refresh-rate>
 </dotlx>
</virtual-access-points>
```

Description Information about virtual access point dotlx-detail

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<dotlx>

Usage

```
<radio-list>
  <virtual-access-points>
    <dotlx>
      <global-radius-setting>
        global-radius-setting
      </global-radius-setting>
      <radius-ip-address>
        radius-ip-address
      </radius-ip-address>
      <radius-ip-address-1>
        radius-ip-address-1
      </radius-ip-address-1>
      <radius-ip-address-2>
        radius-ip-address-2
      </radius-ip-address-2>
      <radius-ip-address-3>
        radius-ip-address-3
      </radius-ip-address-3>
      <radius-accounting>
        radius-accounting
      </radius-accounting>
      <active-server>
        active-server
      </active-server>
      <broadcast-key-refresh-rate>
        broadcast-key-refresh-rate
      </broadcast-key-refresh-rate>
      <session-key-refresh-rate>
        session-key-refresh-rate
      </session-key-refresh-rate>
    </dotlx>
  </virtual-access-points>
</radio-list>
```

Description Information about virtual access point dotlx-detail

<dotlx>

Usage

```
<wlan-virtual-access-points-list>
  <radio-list>
    <virtual-access-points>
      <dotlx>
        <global-radius-setting>
          global-radius-setting
        </global-radius-setting>
        <radius-ip-address>
          radius-ip-address
        </radius-ip-address>
        <radius-ip-address-1>
```


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```
            radius-ip-address-1
           </radius-ip-address-1>
           <radius-ip-address-2>
            radius-ip-address-2
           </radius-ip-address-2>
           <radius-ip-address-3>
            radius-ip-address-3
           </radius-ip-address-3>
           <radius-accounting>
            radius-accounting
           </radius-accounting>
           <active-server>
            active-server
           </active-server>
           <broadcast-key-refresh-rate>
            broadcast-key-refresh-rate
           </broadcast-key-refresh-rate>
           <session-key-refresh-rate>
            session-key-refresh-rate
           </session-key-refresh-rate>
          </dotlx>
         </virtual-access-points>
        </radio-list>
       </wlan-virtual-access-points-list>
```

Description Information about virtual access point dotlx-detail

<ethernet-port-information>

Usage

```
<ethernet-port-information>
 <mac-address>
  mac-address
 </mac-address>
 <access-ipv4-address>
  access-ipv4-address
 </access-ipv4-address>
</ethernet-port-information>
```

Description Information about ethernet port

<ethernet-port-information>

Usage

```
<access-points>
 <ethernet-port-information>
  <mac-address>
   mac-address
  </mac-address>
  <access-ipv4-address>
   access-ipv4-address
  </access-ipv4-address>
```

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```
    </ethernet-port-information>
  </access-points>
```

Description Information about ethernet port

<ethernet-port-information>

Usage

```
<wlan-access-points-list>
  <access-points>
    <ethernet-port-information>
      <mac-address>
        mac-address
      </mac-address>
      <access-ipv4-address>
        access-ipv4-address
      </access-ipv4-address>
    </ethernet-port-information>
  </access-points>
</wlan-access-points-list>
```

Description Information about ethernet port

<radio-information>

Usage

```
<radio-information>
  <radio-id>
    radio-id
  </radio-id>
  <radio-mode>
    radio-mode
  </radio-mode>
  <channel>
    channel
  </channel>
</radio-information>
```

Description Information about radio

<radio-information>

Usage

```
<access-points>
  <radio-information>
    <radio-id>
      radio-id
    </radio-id>
    <radio-mode>
      radio-mode
    </radio-mode>
```


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```
    <channel>
     channel
    </channel>
   </radio-information>
</access-points>
```

Description Information about radio

<radio-information>

Usage

```
<wlan-access-points-list>
 <access-points>
  <radio-information>
   <radio-id>
    radio-id
   </radio-id>
   <radio-mode>
    radio-mode
   </radio-mode>
   <channel>
    channel
   </channel>
  </radio-information>
 </access-points>
</wlan-access-points-list>
```

Description Information about radio

<radio-list>

Usage

```
<radio-list>
 <radio-id>
  radio-id
 </radio-id>
 <virtual-access-points>....</virtual-access-points>
 <virtual-access-points_detail>....</virtual-access-points_detail>
</radio-list>
```

Description Information about radio options

<radio-list>

Usage

```
<wlan-virtual-access-points-list>
 <radio-list>
  <radio-id>
   radio-id
  </radio-id>
  <virtual-access-points>....</virtual-access-points>
```

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```
    <virtual-access-points_detail>....</virtual-access-points_detail>
  </radio-list>
</wlan-virtual-access-points-list>
```

Description Information about radio options

<radio-status-information>

Usage

```
<radio-status-information>
  <radio-id>
    radio-id
  </radio-id>
  <status>
    status
  </status>
  <mac-address>
    mac-address
  </mac-address>
  <radio-mode>
    radio-mode
  </radio-mode>
  <channel>
    channel
  </channel>
</radio-status-information>
```

Description Status information about radio

<radio-status-information>

Usage

```
<access-points>
  <radio-status-information>
    <radio-id>
      radio-id
    </radio-id>
    <status>
      status
    </status>
    <mac-address>
      mac-address
    </mac-address>
    <radio-mode>
      radio-mode
    </radio-mode>
    <channel>
      channel
    </channel>
  </radio-status-information>
</access-points>
```


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Description Status information about radio

<radio-status-information>

Usage

```
<wlan-access-points-list>
  <access-points>
    <radio-status-information>
      <radio-id>
        radio-id
      </radio-id>
      <status>
        status
      </status>
      <mac-address>
        mac-address
      </mac-address>
      <radio-mode>
        radio-mode
      </radio-mode>
      <channel>
        channel
      </channel>
    </radio-status-information>
  </access-points>
</wlan-access-points-list>
```

Description Status information about radio

<static-wep>

Usage

```
<static-wep>
  <transfer-key-index>
    transfer-key-index
  </transfer-key-index>
  <key-length>
    key-length
  </key-length>
  <key-type>
    key-type
  </key-type>
  <open-system>
    open-system
  </open-system>
  <shared-key>
    shared-key
  </shared-key>
</static-wep>
```

Description Information about virtual access point static-wep-detail

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<static-wep>

Usage

```
<virtual-access-points>
  <static-wep>
    <transfer-key-index>
      transfer-key-index
    </transfer-key-index>
    <key-length>
      key-length
    </key-length>
    <key-type>
      key-type
    </key-type>
    <open-system>
      open-system
    </open-system>
    <shared-key>
      shared-key
    </shared-key>
  </static-wep>
</virtual-access-points>
```

Description Information about virtual access point static-wep-detail

<static-wep>

Usage

```
<radio-list>
  <virtual-access-points>
    <static-wep>
      <transfer-key-index>
        transfer-key-index
      </transfer-key-index>
      <key-length>
        key-length
      </key-length>
      <key-type>
        key-type
      </key-type>
      <open-system>
        open-system
      </open-system>
      <shared-key>
        shared-key
      </shared-key>
    </static-wep>
  </virtual-access-points>
</radio-list>
```

Description Information about virtual access point static-wep-detail

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<static-wep>

Usage

```
<wlan-virtual-access-points-list>
  <radio-list>
    <virtual-access-points>
      <static-wep>
        <transfer-key-index>
          transfer-key-index
        </transfer-key-index>
        <key-length>
          key-length
        </key-length>
        <key-type>
          key-type
        </key-type>
        <open-system>
          open-system
        </open-system>
        <shared-key>
          shared-key
        </shared-key>
      </static-wep>
    </virtual-access-points>
  </radio-list>
</wlan-virtual-access-points-list>
```

Description Information about virtual access point static-wep-detail

<status-information>

Usage

```
<status-information>
  <client-mac-address>
    client-mac-address
  </client-mac-address>
  <authentication>
    authentication
  </authentication>
  <channel>
    channel
  </channel>
  <rate>
    rate
  </rate>
  <signal>
    signal
  </signal>
  <rx-packets>
    rx-packets
  </rx-packets>
  <tx-packets>
    tx-packets
```

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```
  </tx-packets>
  <rx-bytes>
    rx-bytes
  </rx-bytes>
  <tx-bytes>
    tx-bytes
  </tx-bytes>
</status-information>
```

Description Status information

<status-information>

Usage

```
<access-point-client-associations>
  <status-information>
    <client-mac-address>
      client-mac-address
    </client-mac-address>
    <authentication>
      authentication
    </authentication>
    <channel>
      channel
    </channel>
    <rate>
      rate
    </rate>
    <signal>
      signal
    </signal>
    <rx-packets>
      rx-packets
    </rx-packets>
    <tx-packets>
      tx-packets
    </tx-packets>
    <rx-bytes>
      rx-bytes
    </rx-bytes>
    <tx-bytes>
      tx-bytes
    </tx-bytes>
  </status-information>
</access-point-client-associations>
```

Description Status information

<status-information>

Usage

```
<wlan-access-point-client-associations-list>
```


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```
<access-point-client-associations>
  <status-information>
    <client-mac-address>
      client-mac-address
    </client-mac-address>
    <authentication>
      authentication
    </authentication>
    <channel>
      channel
    </channel>
    <rate>
      rate
    </rate>
    <signal>
      signal
    </signal>
    <rx-packets>
      rx-packets
    </rx-packets>
    <tx-packets>
      tx-packets
    </tx-packets>
    <rx-bytes>
      rx-bytes
    </rx-bytes>
    <tx-bytes>
      tx-bytes
    </tx-bytes>
  </status-information>
 </access-point-client-associations>
</wlan-access-point-client-associations-list>
```

Description Status information

<status-information>

Usage

```
<wlan-access-point-client-associations-detail-list>
 <access-point-client-associations>
   <status-information>
     <client-mac-address>
       client-mac-address
     </client-mac-address>
     <authentication>
       authentication
     </authentication>
     <channel>
       channel
     </channel>
     <rate>
       rate
     </rate>
     <signal>
```

```
            signal
           </signal>
           <rx-packets>
            rx-packets
           </rx-packets>
           <tx-packets>
            tx-packets
           </tx-packets>
           <rx-bytes>
            rx-bytes
           </rx-bytes>
           <tx-bytes>
            tx-bytes
           </tx-bytes>
          </status-information>
         </access-point-client-associations>
        </wlan-access-point-client-associations-detail-list>
```

Description Status information

<traffic-statistics>

Usage

```
<traffic-statistics>
 <input-bytes>
  input-bytes
 </input-bytes>
 <output-bytes>
  output-bytes
 </output-bytes>
 <input-packets>
  input-packets
 </input-packets>
 <output-packets>
  output-packets
 </output-packets>
</traffic-statistics>
```

Description Information about virtual access point traffic statistics

<traffic-statistics>

Usage

```
<virtual-access-points>
 <traffic-statistics>
  <input-bytes>
   input-bytes
  </input-bytes>
  <output-bytes>
   output-bytes
  </output-bytes>
  <input-packets>
```


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```
      input-packets
    </input-packets>
    <output-packets>
      output-packets
    </output-packets>
  </traffic-statistics>
</virtual-access-points>
```

Description Information about virtual access point traffic statistics

<traffic-statistics>

Usage

```
<radio-list>
  <virtual-access-points>
    <traffic-statistics>
      <input-bytes>
        input-bytes
      </input-bytes>
      <output-bytes>
        output-bytes
      </output-bytes>
      <input-packets>
        input-packets
      </input-packets>
      <output-packets>
        output-packets
      </output-packets>
    </traffic-statistics>
  </virtual-access-points>
</radio-list>
```

Description Information about virtual access point traffic statistics

<traffic-statistics>

Usage

```
<wlan-virtual-access-points-list>
  <radio-list>
    <virtual-access-points>
      <traffic-statistics>
        <input-bytes>
          input-bytes
        </input-bytes>
        <output-bytes>
          output-bytes
        </output-bytes>
        <input-packets>
          input-packets
        </input-packets>
        <output-packets>
          output-packets
```

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```
            </output-packets>
           </traffic-statistics>
          </virtual-access-points>
         </radio-list>
        </wlan-virtual-access-points-list>
```

Description Information about virtual access point traffic statistics

<virtual-access-points>

Usage

```
<virtual-access-points>
 <access-point-name>
  access-point-name
 </access-point-name>
 <vap-id>
  vap-id
 </vap-id>
 <ssid>
  ssid
 </ssid>
 <mac-address>
  mac-address
 </mac-address>
 <vlan-id>
  vlan-id
 </vlan-id>
 <vap-security>
  vap-security
 </vap-security>
 <traffic-statistics>....</traffic-statistics>
 <wpa-enterprise>....</wpa-enterprise>
 <static-wep>....</static-wep>
 <wpa-personal>....</wpa-personal>
 <dotlx>....</dotlx>
</virtual-access-points>
```

Description Information about virtual access points

<virtual-access-points>

Usage

```
<radio-list>
 <virtual-access-points>
  <access-point-name>
   access-point-name
  </access-point-name>
  <vap-id>
   vap-id
  </vap-id>
  <ssid>
   ssid
```


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```
    </ssid>
    <mac-address>
     mac-address
    </mac-address>
    <vlan-id>
     vlan-id
    </vlan-id>
    <vap-security>
     vap-security
    </vap-security>
    <traffic-statistics>....</traffic-statistics>
    <wpa-enterprise>....</wpa-enterprise>
    <static-wep>....</static-wep>
    <wpa-personal>....</wpa-personal>
    <dotlx>....</dotlx>
   </virtual-access-points>
</radio-list>
```

Description Information about virtual access points

<virtual-access-points>

Usage

```
<wlan-virtual-access-points-list>
 <radio-list>
  <virtual-access-points>
   <access-point-name>
    access-point-name
   </access-point-name>
   <vap-id>
    vap-id
   </vap-id>
   <ssid>
    ssid
   </ssid>
   <mac-address>
    mac-address
   </mac-address>
   <vlan-id>
    vlan-id
   </vlan-id>
   <vap-security>
    vap-security
   </vap-security>
   <traffic-statistics>....</traffic-statistics>
   <wpa-enterprise>....</wpa-enterprise>
   <static-wep>....</static-wep>
   <wpa-personal>....</wpa-personal>
   <dotlx>....</dotlx>
  </virtual-access-points>
 </radio-list>
</wlan-virtual-access-points-list>
```

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Description Information about virtual access points

<virtual-access-points_detail>

Usage

```
<virtual-access-points_detail>
  <access-point-name>
    access-point-name
  </access-point-name>
  <vap-id>
    vap-id
  </vap-id>
  <ssid>
    ssid
  </ssid>
  <mac-address>
    mac-address
  </mac-address>
  <vlan-id>
    vlan-id
  </vlan-id>
  <vap-security>
    vap-security
  </vap-security>
</virtual-access-points_detail>
```

Description Information about virtual access points

<virtual-access-points_detail>

Usage

```
<radio-list>
  <virtual-access-points_detail>
    <access-point-name>
      access-point-name
    </access-point-name>
    <vap-id>
      vap-id
    </vap-id>
    <ssid>
      ssid
    </ssid>
    <mac-address>
      mac-address
    </mac-address>
    <vlan-id>
      vlan-id
    </vlan-id>
    <vap-security>
      vap-security
    </vap-security>
  </virtual-access-points_detail>
```


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```
</radio-list>
```

Description Information about virtual access points

<virtual-access-points_detail>

Usage

```
<wlan-virtual-access-points-list>
  <radio-list>
    <virtual-access-points_detail>
      <access-point-name>
        access-point-name
      </access-point-name>
      <vap-id>
        vap-id
      </vap-id>
      <ssid>
        ssid
      </ssid>
      <mac-address>
        mac-address
      </mac-address>
      <vlan-id>
        vlan-id
      </vlan-id>
      <vap-security>
        vap-security
      </vap-security>
    </virtual-access-points_detail>
  </radio-list>
</wlan-virtual-access-points-list>
```

Description Information about virtual access points

<wlan-access-point-client-associations-detail-list>

Usage

```
<wlan-access-point-client-associations-detail-list>
  <access-point-client-display-detail>....</access-point-client-display-detail>
  <access-point-client-associations>....</access-point-client-associations>
</wlan-access-point-client-associations-detail-list>
```

Description Information about client associations

<wlan-access-point-client-associations-list>

Usage

```
<wlan-access-point-client-associations-list>
  <access-point-client-display>....</access-point-client-display>
  <access-point-client-associations>....</access-point-client-associations>
```

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```
</wlan-access-point-client-associations-list>
```

Description

<wlan-access-point-neighbors-list>

Usage

```
<wlan-access-point-neighbors-list>
  <access-point-name>
    access-point-name
  </access-point-name>
  <access-point-neighbors>....</access-point-neighbors>
</wlan-access-point-neighbors-list>
```

Description

<wlan-access-point-packet-capture-start>

Usage

```
<wlan-access-point-packet-capture-start>
  <capture-local>....</capture-local>
</wlan-access-point-packet-capture-start>
```

Description

<wlan-access-point-packet-capture-stop>

Usage

```
<wlan-access-point-packet-capture-stop>
  <capture-local>....</capture-local>
</wlan-access-point-packet-capture-stop>
```

Description

<wlan-access-points-list>

Usage

```
<wlan-access-points-list>
  <access-points>....</access-points>
</wlan-access-points-list>
```

Description

<wlan-clusters-list>

Usage

```
<wlan-clusters-list>
  <cluster>....</cluster>
</wlan-clusters-list>
```


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Description

<wlan-diagnostics-list>

Usage

```
<wlan-diagnostics-list>
  <diagnostics-info>....</diagnostics-info>
</wlan-diagnostics-list>
```

Description

<wlan-virtual-access-points-list>

Usage

```
<wlan-virtual-access-points-list>
  <access-point-name>
    access-point-name
  </access-point-name>
  <radio-list>....</radio-list>
</wlan-virtual-access-points-list>
```

Description

<wpa-enterprise>

Usage

```
<wpa-enterprise>
  <wpa>
    wpa
  </wpa>
  <wpa2>
    wpa2
  </wpa2>
  <pre-auth>
    pre-auth
  </pre-auth>
  <tkpi>
    tkpi
  </tkpi>
  <ccmp>
    ccmp
  </ccmp>
  <global-radius-setting>
    global-radius-setting
  </global-radius-setting>
  <radius-ip-address>
    radius-ip-address
  </radius-ip-address>
  <radius-ip-address-1>
    radius-ip-address-1
  </radius-ip-address-1>
  <radius-ip-address-2>
    radius-ip-address-2
  </radius-ip-address-2>
```

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```
<radius-ip-address-3>
  radius-ip-address-3
</radius-ip-address-3>
<radius-accounting>
  radius-accounting
</radius-accounting>
<active-server>
  active-server
</active-server>
<broadcast-key-refresh-rate>
  broadcast-key-refresh-rate
</broadcast-key-refresh-rate>
<session-key-refresh-rate>
  session-key-refresh-rate
</session-key-refresh-rate>
</wpa-enterprise>
```

Description Information about virtual access point wpa-enterprise-detail

<wpa-enterprise>

Usage

```
<virtual-access-points>
  <wpa-enterprise>
    <wpa>
      wpa
    </wpa>
    <wpa2>
      wpa2
    </wpa2>
    <pre-auth>
      pre-auth
    </pre-auth>
    <tkpi>
      tkpi
    </tkpi>
    <ccmp>
      ccmp
    </ccmp>
    <global-radius-setting>
      global-radius-setting
    </global-radius-setting>
    <radius-ip-address>
      radius-ip-address
    </radius-ip-address>
    <radius-ip-address-1>
      radius-ip-address-1
    </radius-ip-address-1>
    <radius-ip-address-2>
      radius-ip-address-2
    </radius-ip-address-2>
    <radius-ip-address-3>
      radius-ip-address-3
    </radius-ip-address-3>
```


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```
    <radius-accounting>
      radius-accounting
    </radius-accounting>
    <active-server>
      active-server
    </active-server>
    <broadcast-key-refresh-rate>
      broadcast-key-refresh-rate
    </broadcast-key-refresh-rate>
    <session-key-refresh-rate>
      session-key-refresh-rate
    </session-key-refresh-rate>
  </wpa-enterprise>
</virtual-access-points>
```

Description Information about virtual access point wpa-enterprise-detail

<wpa-enterprise>

Usage

```
<radio-list>
  <virtual-access-points>
    <wpa-enterprise>
      <wpa>
        wpa
      </wpa>
      <wpa2>
        wpa2
      </wpa2>
      <pre-auth>
        pre-auth
      </pre-auth>
      <tkpi>
        tkpi
      </tkpi>
      <ccmp>
        ccmp
      </ccmp>
      <global-radius-setting>
        global-radius-setting
      </global-radius-setting>
      <radius-ip-address>
        radius-ip-address
      </radius-ip-address>
      <radius-ip-address-1>
        radius-ip-address-1
      </radius-ip-address-1>
      <radius-ip-address-2>
        radius-ip-address-2
      </radius-ip-address-2>
      <radius-ip-address-3>
        radius-ip-address-3
      </radius-ip-address-3>
      <radius-accounting>
```

```
            radius-accounting
           </radius-accounting>
           <active-server>
            active-server
           </active-server>
           <broadcast-key-refresh-rate>
            broadcast-key-refresh-rate
           </broadcast-key-refresh-rate>
           <session-key-refresh-rate>
            session-key-refresh-rate
           </session-key-refresh-rate>
          </wpa-enterprise>
         </virtual-access-points>
        </radio-list>
```

Description Information about virtual access point wpa-enterprise-detail

<wpa-enterprise>

Usage

```
<wlan-virtual-access-points-list>
 <radio-list>
  <virtual-access-points>
   <wpa-enterprise>
    <wpa>
     wpa
    </wpa>
    <wpa2>
     wpa2
    </wpa2>
    <pre-auth>
     pre-auth
    </pre-auth>
    <tkpi>
     tkpi
    </tkpi>
    <ccmp>
     ccmp
    </ccmp>
    <global-radius-setting>
     global-radius-setting
    </global-radius-setting>
    <radius-ip-address>
     radius-ip-address
    </radius-ip-address>
    <radius-ip-address-1>
     radius-ip-address-1
    </radius-ip-address-1>
    <radius-ip-address-2>
     radius-ip-address-2
    </radius-ip-address-2>
    <radius-ip-address-3>
     radius-ip-address-3
    </radius-ip-address-3>
```


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```
        <radius-accounting>
          radius-accounting
        </radius-accounting>
        <active-server>
          active-server
        </active-server>
        <broadcast-key-refresh-rate>
          broadcast-key-refresh-rate
        </broadcast-key-refresh-rate>
        <session-key-refresh-rate>
          session-key-refresh-rate
        </session-key-refresh-rate>
      </wpa-enterprise>
    </virtual-access-points>
  </radio-list>
</wlan-virtual-access-points-list>
```

Description Information about virtual access point wpa-enterprise-detail

<wpa-personal>

Usage

```
<wpa-personal>
  <wpa>
    wpa
  </wpa>
  <wpa2>
    wpa2
  </wpa2>
  <tkpi>
    tkpi
  </tkpi>
  <ccmp>
    ccmp
  </ccmp>
  <broadcast-key-refresh-rate>
    broadcast-key-refresh-rate
  </broadcast-key-refresh-rate>
</wpa-personal>
```

Description Information about virtual access point wpa-personal-detail

<wpa-personal>

Usage

```
<virtual-access-points>
  <wpa-personal>
    <wpa>
      wpa
    </wpa>
    <wpa2>
      wpa2
```

```
    </wpa2>
    <tkpi>
     tkpi
    </tkpi>
    <ccmp>
     ccmp
    </ccmp>
    <broadcast-key-refresh-rate>
     broadcast-key-refresh-rate
    </broadcast-key-refresh-rate>
   </wpa-personal>
  </virtual-access-points>
```

Description Information about virtual access point wpa-personal-detail

<wpa-personal>

Usage

```
<radio-list>
 <virtual-access-points>
  <wpa-personal>
   <wpa>
    wpa
   </wpa>
   <wpa2>
    wpa2
   </wpa2>
   <tkpi>
    tkpi
   </tkpi>
   <ccmp>
    ccmp
   </ccmp>
   <broadcast-key-refresh-rate>
    broadcast-key-refresh-rate
   </broadcast-key-refresh-rate>
  </wpa-personal>
 </virtual-access-points>
</radio-list>
```

Description Information about virtual access point wpa-personal-detail

<wpa-personal>

Usage

```
<wlan-virtual-access-points-list>
 <radio-list>
  <virtual-access-points>
   <wpa-personal>
    <wpa>
     wpa
    </wpa>
```


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```
        <wpa2>
          wpa2
        </wpa2>
        <tkpi>
          tkpi
        </tkpi>
        <ccmp>
          ccmp
        </ccmp>
        <broadcast-key-refresh-rate>
          broadcast-key-refresh-rate
        </broadcast-key-refresh-rate>
      </wpa-personal>
    </virtual-access-points>
  </radio-list>
</wlan-virtual-access-points-list>
```

Description Information about virtual access point wpa-personal-detail

Summary of GSM Response Tags

<gsm-profile>

Usage

```
<gsm-profile>
  <profile-id>
    profile-id
  </profile-id>
  <profile-valid>
    profile-valid
  </profile-valid>
  <profile-username>
    profile-username
  </profile-username>
  <profile-password>
    profile-password
  </profile-password>
  <profile-access-point-name>
    profile-access-point-name
  </profile-access-point-name>
  <profile-authentication>
    profile-authentication
  </profile-authentication>
</gsm-profile>
```

Description

<gsm-profile>

Usage

```
<gsm-profiles>
  <gsm-profile>
    <profile-id>
```

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```
      profile-id
    </profile-id>
    <profile-valid>
      profile-valid
    </profile-valid>
    <profile-username>
      profile-username
    </profile-username>
    <profile-password>
      profile-password
    </profile-password>
    <profile-access-point-name>
      profile-access-point-name
    </profile-access-point-name>
    <profile-authentication>
      profile-authentication
    </profile-authentication>
  </gsm-profile>
</gsm-profiles>
```

Description

<gsm-profile>

Usage

```
<wwand-modem-wireless-interface-profiles>
  <gsm-profiles>
    <gsm-profile>
      <profile-id>
        profile-id
      </profile-id>
      <profile-valid>
        profile-valid
      </profile-valid>
      <profile-username>
        profile-username
      </profile-username>
      <profile-password>
        profile-password
      </profile-password>
      <profile-access-point-name>
        profile-access-point-name
      </profile-access-point-name>
      <profile-authentication>
        profile-authentication
      </profile-authentication>
    </gsm-profile>
  </gsm-profiles>
</wwand-modem-wireless-interface-profiles>
```

Description

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<gsm-profile>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-profiles>
    <gsm-profiles>
      <gsm-profile>
        <profile-id>
          profile-id
        </profile-id>
        <profile-valid>
          profile-valid
        </profile-valid>
        <profile-username>
          profile-username
        </profile-username>
        <profile-password>
          profile-password
        </profile-password>
        <profile-access-point-name>
          profile-access-point-name
        </profile-access-point-name>
        <profile-authentication>
          profile-authentication
        </profile-authentication>
      </gsm-profile>
    </gsm-profiles>
  </wwand-modem-wireless-interface-profiles>
</wwand-modem-wireless-interface>
```

Description

<gsm-profiles>

Usage

```
<gsm-profiles>
  <gsm-profile>....</gsm-profile>
</gsm-profiles>
```

Description

<gsm-profiles>

Usage

```
<wwand-modem-wireless-interface-profiles>
  <gsm-profiles>
    <gsm-profile>....</gsm-profile>
  </gsm-profiles>
</wwand-modem-wireless-interface-profiles>
```

Description

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<gsm-profiles>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-profiles>
    <gsm-profiles>
      <gsm-profile>....</gsm-profile>
    </gsm-profiles>
  </wwand-modem-wireless-interface-profiles>
</wwand-modem-wireless-interface>
```

Description

<profile-summary>

Usage

```
<profile-summary>
  <max-profiles>
    max-profiles
  </max-profiles>
  <default-profile>
    default-profile
  </default-profile>
</profile-summary>
```

Description

<profile-summary>

Usage

```
<wwand-modem-wireless-interface-profiles>
  <profile-summary>
    <max-profiles>
      max-profiles
    </max-profiles>
    <default-profile>
      default-profile
    </default-profile>
  </profile-summary>
</wwand-modem-wireless-interface-profiles>
```

Description

<profile-summary>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-profiles>
    <profile-summary>
      <max-profiles>
        max-profiles
      </max-profiles>
```


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```
      <default-profile>
        default-profile
      </default-profile>
    </profile-summary>
  </wwand-modem-wireless-interface-profiles>
</wwand-modem-wireless-interface>
```

Description

<wwand-modem-wireless-cdma-interface-firmware>

Usage

```
<wwand-modem-wireless-cdma-interface-firmware>
  <electronic-serial-number>
    electronic-serial-number
  </electronic-serial-number>
  <prl-version>
    prl-version
  </prl-version>
  <supported-mode>
    supported-mode
  </supported-mode>
  <modem-activation>
    modem-activation
  </modem-activation>
  <activation-date>
    activation-date
  </activation-date>
  <powerup-lock>
    powerup-lock
  </powerup-lock>
</wwand-modem-wireless-cdma-interface-firmware>
```

Description

<wwand-modem-wireless-gsm-interface-firmware>

Usage

```
<wwand-modem-wireless-gsm-interface-firmware>
  <gsm-fsn>
    gsm-fsn
  </gsm-fsn>
  <pin-security>
    pin-security
  </pin-security>
  <gsm-imei>
    gsm-imei
  </gsm-imei>
  <sim-status>
    sim-status
  </sim-status>
  <sim-lock>
    sim-lock
  </sim-lock>
```

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```
<gsm-user-op>
  gsm-user-op
</gsm-user-op>
<retries-remaining>
  retries-remaining
</retries-remaining>
</wwand-modem-wireless-gsm-interface-firmware>
```

Description

<wwand-modem-wireless-gsm-interface-network>

Usage

```
<wwand-modem-wireless-gsm-interface-network>
  <modem-status>
    modem-status
  </modem-status>
  <service-status>
    service-status
  </service-status>
  <service-type>
    service-type
  </service-type>
  <service-mode>
    service-mode
  </service-mode>
  <gsm-band>
    gsm-band
  </gsm-band>
  <gsm-roaming-status>
    gsm-roaming-status
  </gsm-roaming-status>
  <network-selection>
    network-selection
  </network-selection>
  <network>
    network
  </network>
  <mcc>
    mcc
  </mcc>
  <mnc>
    mnc
  </mnc>
  <msin>
    msin
  </msin>
  <lac>
    lac
  </lac>
  <rac>
    rac
  </rac>
  <cell-id>
    cell-id
```


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```
  </cell-id>
  <scrambling-code>
    scrambling-code
  </scrambling-code>
</wwand-modem-wireless-gsm-interface-network>
```

Description

<wwand-modem-wireless-interface>

Usage

```
<wwand-modem-wireless-interface>

<wwand-modem-wireless-interface-firmware>....</wwand-modem-wireless-interface-firmware>

<wwand-modem-wireless-interface-network>....</wwand-modem-wireless-interface-network>

<wwand-modem-wireless-interface-rssi>....</wwand-modem-wireless-interface-rssi>

<wwand-modem-wireless-interface-profiles>....</wwand-modem-wireless-interface-profiles>

</wwand-modem-wireless-interface>
```

Description

<wwand-modem-wireless-interface-firmware>

Usage

```
<wwand-modem-wireless-interface-firmware>
  <firmware-version>
    firmware-version
  </firmware-version>
  <firmware-build-date>
    firmware-build-date
  </firmware-build-date>
  <card-type>
    card-type
  </card-type>
  <card-manufacturer>
    card-manufacturer
  </card-manufacturer>
  <hardware-version>
    hardware-version
  </hardware-version>
  <modem-temperature>
    modem-temperature
  </modem-temperature>
</wwand-modem-wireless-interface-firmware>
```

Description

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<wwand-modem-wireless-interface-firmware>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-firmware>
    <firmware-version>
      firmware-version
    </firmware-version>
    <firmware-build-date>
      firmware-build-date
    </firmware-build-date>
    <card-type>
      card-type
    </card-type>
    <card-manufacturer>
      card-manufacturer
    </card-manufacturer>
    <hardware-version>
      hardware-version
    </hardware-version>
    <modem-temperature>
      modem-temperature
    </modem-temperature>
  </wwand-modem-wireless-interface-firmware>
</wwand-modem-wireless-interface>
```

Description

<wwand-modem-wireless-interface-network>

Usage

```
<wwand-modem-wireless-interface-network>
  <running-operating-mode>
    running-operating-mode
  </running-operating-mode>
  <call-setup-mode>
    call-setup-mode
  </call-setup-mode>
  <system-identifier>
    system-identifier
  </system-identifier>
  <network-identifier>
    network-identifier
  </network-identifier>
  <imsi>
    imsi
  </imsi>
  <roaming-status>
    roaming-status
  </roaming-status>
  <idle-digital-mode>
    idle-digital-mode
  </idle-digital-mode>
  <network-time>
```


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```
    network-time
  </network-time>
</wwand-modem-wireless-interface-network>
```

Description

<wwand-modem-wireless-interface-network>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-network>
    <running-operating-mode>
      running-operating-mode
    </running-operating-mode>
    <call-setup-mode>
      call-setup-mode
    </call-setup-mode>
    <system-identifier>
      system-identifier
    </system-identifier>
    <network-identifier>
      network-identifier
    </network-identifier>
    <imsi>
      imsi
    </imsi>
    <roaming-status>
      roaming-status
    </roaming-status>
    <idle-digital-mode>
      idle-digital-mode
    </idle-digital-mode>
    <network-time>
      network-time
    </network-time>
  </wwand-modem-wireless-interface-network>
</wwand-modem-wireless-interface>
```

Description

<wwand-modem-wireless-interface-profiles>

Usage

```
<wwand-modem-wireless-interface-profiles>
  <profile-summary>....</profile-summary>
  <gsm-profiles>....</gsm-profiles>
</wwand-modem-wireless-interface-profiles>
```

Description

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<wwand-modem-wireless-interface-profiles>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-profiles>
    <profile-summary>....</profile-summary>
    <gsm-profiles>....</gsm-profiles>
  </wwand-modem-wireless-interface-profiles>
</wwand-modem-wireless-interface>
```

Description

<wwand-modem-wireless-interface-rssi>

Usage

```
<wwand-modem-wireless-interface-rssi>
  <rssi>
    rssi
  </rssi>
</wwand-modem-wireless-interface-rssi>
```

Description

<wwand-modem-wireless-interface-rssi>

Usage

```
<wwand-modem-wireless-interface>
  <wwand-modem-wireless-interface-rssi>
    <rssi>
      rssi
    </rssi>
  </wwand-modem-wireless-interface-rssi>
</wwand-modem-wireless-interface>
```

Description

Summary of WXOS Protocol Response Tags

<wx-status>

Usage

```
<wx-status>
  <wx-redirection-status>
    wx-redirection-status
  </wx-redirection-status>
  <wx-interface-name>
    wx-interface-name
  </wx-interface-name>
  <wx-primary-ip>
    wx-primary-ip
  </wx-primary-ip>
  <wx-secondary-ip>
```


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```
    wx-secondary-ip
  </wx-secondary-ip>
  <junos-version>
    junos-version
  </junos-version>
  <wxos-version>
    wxos-version
  </wxos-version>
  <junos-wxos-protocol-compatibility-status>
    junos-wxos-protocol-compatibility-status
  </junos-wxos-protocol-compatibility-status>
  <junos-protocol-version>
    junos-protocol-version
  </junos-protocol-version>
  <wxos-protocol-version>
    wxos-protocol-version
  </wxos-protocol-version>
</wx-status>
```

Description Information about WX Status

Summary of Zones Response Tags

<zones-functional>

Usage

```
<zones-information>
  <zones-functional>
    <zones-management>....</zones-management>
  </zones-functional>
</zones-information>
```

Description Information about one or more functional zones

<zones-information>

Usage

```
<zones-information>
  <zones-functional>....</zones-functional>
  <zones-security>....</zones-security>
  <zones-logical-system>....</zones-logical-system>
</zones-information>
```

Description Information about one or more zones

<zones-logical-system>

Usage

```
<zones-information>
  <zones-logical-system>
```

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```
    <name>
     name
    </name>
   </zones-logical-system>
</zones-information>
```

Description Logical system

<zones-management>

Usage

```
<zones-information>
 <zones-functional>
  <zones-management>
   <zones-management-zonename>
    zones-management-zonename
   </zones-management-zonename>
   <zones-management-description>
    zones-management-description
   </zones-management-description>
   <zones-management-policy-configurable>
    zones-management-policy-configurable
   </zones-management-policy-configurable>
   <zones-management-screen>
    zones-management-screen
   </zones-management-screen>
   <zones-management-interfaces-bound>
    zones-management-interfaces-bound
   </zones-management-interfaces-bound>
   <zones-management-interfaces>....</zones-management-interfaces>
  </zones-management>
 </zones-functional>
</zones-information>
```

Description Information about management zone

<zones-management-interfaces>

Usage

```
<zones-information>
 <zones-functional>
  <zones-management>
   <zones-management-interfaces>
    <zones-management-interface-name>
     zones-management-interface-name
    </zones-management-interface-name>
   </zones-management-interfaces>
  </zones-management>
 </zones-functional>
</zones-information>
```


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Description Interfaces bound to the zone

<zones-security>

Usage

```
<zones-information>
  <zones-security>
    <zones-security-zonename>
      zones-security-zonename
    </zones-security-zonename>
    <zones-security-description>
      zones-security-description
    </zones-security-description>
    <zones-security-scope>
      zones-security-scope
    </zones-security-scope>
    <zones-security-send-reset>
      zones-security-send-reset
    </zones-security-send-reset>
    <zones-security-policy-configurable>
      zones-security-policy-configurable
    </zones-security-policy-configurable>
    <zones-security-screen>
      zones-security-screen
    </zones-security-screen>
    <zones-security-interfaces-bound>
      zones-security-interfaces-bound
    </zones-security-interfaces-bound>
    <zones-security-interfaces>....</zones-security-interfaces>
  </zones-security>
</zones-information>
```

Description Information about one or more security zone

<zones-security-interfaces>

Usage

```
<zones-information>
  <zones-security>
    <zones-security-interfaces>
      <zones-security-interface-name>
        zones-security-interface-name
      </zones-security-interface-name>
    </zones-security-interfaces>
  </zones-security>
</zones-information>
```

Description Interfaces bound to the zone

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CHAPTER 60

DTD for Accounting Response Tags Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-accounting.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-accounting.dtd -->

<!ELEMENT accounting-profile-columns (column-label)*>

<!ELEMENT accounting-profile-filter (filter-name | next-scheduled-collection)*>

<!ELEMENT accounting-profile-header (profile-name | profile-type | profile-interval
 | profile-use-count | filename | filesize | filenumber | bytes-written |
transfer-interval | next-transfer-time)*>
<!ATTLIST accounting-profile-header junos:style CDATA #IMPLIED>

<!ELEMENT accounting-profile-information (accounting-profile-header |
accounting-profile-columns | accounting-profile-interfaces | accounting-profile-mib
 | accounting-profile-filter)*>

<!ELEMENT accounting-profile-interfaces (interface-name |
next-scheduled-collection)*>

<!ELEMENT accounting-profile-mib (mib-name | next-scheduled-collection)*>

<!ELEMENT accounting-record-information (interface-accounting-statistics |
routing-engine-accounting-statistics | filter-accounting-statistics |
cu-accounting-statistics | mib-accounting-statistics | file-accounting-records)*>

<!ELEMENT accounting-server-interim-buckets (interim-interval | interim-granularity
 | interim-slot | interim-device | interim-num-subscribers | interim-num-services
 | interim-subscriber-sent | interim-subscriber-sent-err | interim-subscriber-rcvd
 | interim-subscriber-rcvd-err | interim-service-sent | interim-service-sent-err
 | interim-service-rcvd | interim-service-rcvd-err)*>
```

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```
<!ELEMENT accounting-server-statistics (statistics_connection_header |
statistics_pfe_header | statistics_pfed_header | statistics_libstat_header)*>

<!ELEMENT address-family (#PCDATA)>

<!ELEMENT arp-count (#PCDATA)>

<!ELEMENT atm-oam-count (#PCDATA)>

<!ELEMENT bad-route-discard (#PCDATA)>

<!ELEMENT bfd-bad-checksum (#PCDATA)>

<!ELEMENT bfd-bad-ifl-prefix-length (#PCDATA)>

<!ELEMENT bfd-bad-length (#PCDATA)>

<!ELEMENT bfd-bad-options (#PCDATA)>

<!ELEMENT bfd-bad-udp-checksum (#PCDATA)>

<!ELEMENT bfd-bad-udp-length (#PCDATA)>

<!ELEMENT bfd-bad-udp-ports (#PCDATA)>

<!ELEMENT bfd-count (#PCDATA)>

<!ELEMENT bfd-invalid-iff (#PCDATA)>

<!ELEMENT bfd-invalid-iif (#PCDATA)>

<!ELEMENT bfd-no-local-ifl (#PCDATA)>

<!ELEMENT bfd-out-of-packets (#PCDATA)>

<!ELEMENT bfd-rx-queue-overflow (#PCDATA)>

<!ELEMENT bfd-total-absorbed (#PCDATA)>

<!ELEMENT bfd-total-packets (#PCDATA)>

<!ELEMENT bfd-transmit-errors (#PCDATA)>

<!ELEMENT bits-to-test-discard (#PCDATA)>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT bytes-written (#PCDATA)>

<!ELEMENT cfm-packets-absorbed (#PCDATA)>

<!ELEMENT cfm-packets-dropped (#PCDATA)>

<!ELEMENT cfm-packets-received (#PCDATA)>

<!ELEMENT cfm-packets-received-invalid-length (#PCDATA)>

<!ELEMENT cfm-packets-received-with-sequence-number (#PCDATA)>

<!ELEMENT cfm-packets-sent-to-re (#PCDATA)>
```


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```
<!ELEMENT cfm-packets-transmit-error (#PCDATA)>

<!ELEMENT cfm-packets-transmitted (#PCDATA)>

<!ELEMENT column-label (#PCDATA)>

<!ELEMENT conn-name (#PCDATA)>

<!ELEMENT counter-name (#PCDATA)>

<!ELEMENT cpu15min (#PCDATA)>

<!ELEMENT cpu1min (#PCDATA)>

<!ELEMENT cpu5min (#PCDATA)>

<!ELEMENT cu-accounting-record (profile-layout | epoch-timestamp | utc-timestamp
 | interface-name | address-family | destination-class-name | source-class-name
| counter-name | packet-count | byte-count)*>
<!ATTLIST cu-accounting-record junos:style CDATA #IMPLIED>

<!ELEMENT cu-accounting-statistics (cu-accounting-record)*>

<!ELEMENT data-error-discard (#PCDATA)>

<!ELEMENT date-yyyymmdd (#PCDATA)>

<!ELEMENT destination-class-name (#PCDATA)>

<!ELEMENT epoch-timestamp (#PCDATA)>

<!ELEMENT error (#PCDATA)>

<!ELEMENT ether-oam-count (#PCDATA)>

<!ELEMENT fabric-discard (#PCDATA)>

<!ELEMENT file-accounting-record (profile-layout | epoch-timestamp)*>

<!ELEMENT file-accounting-records (file-accounting-record)*>

<!ELEMENT filename (#PCDATA)>

<!ELEMENT filenumber (#PCDATA)>

<!ELEMENT filesize (#PCDATA)>

<!ELEMENT filter-accounting-record (profile-layout | epoch-timestamp |
utc-timestamp | interfaces | filter-name | counter-name | packet-count |
byte-count)*>
<!ATTLIST filter-accounting-record junos:style CDATA #IMPLIED>

<!ELEMENT filter-accounting-statistics (filter-accounting-record)*>

<!ELEMENT filter-name (#PCDATA)>

<!ELEMENT forwarding-class-name (#PCDATA)>

<!ELEMENT fr-lmi-count (#PCDATA)>
```

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```
<!ELEMENT from-libstat (#PCDATA)>

<!ELEMENT hardware-input-drops (#PCDATA)>

<!ELEMENT hdlc-keepalive-count (#PCDATA)>

<!ELEMENT hostname (#PCDATA)>

<!ELEMENT index (index-name | index-value)*>

<!ELEMENT index-name (#PCDATA)>

<!ELEMENT index-value (#PCDATA)>

<!ELEMENT info-cell-discard (#PCDATA)>

<!ELEMENT input-bytes (#PCDATA)>

<!ELEMENT input-checksum (#PCDATA)>

<!ELEMENT input-errors (#PCDATA)>

<!ELEMENT input-multicast (#PCDATA)>

<!ELEMENT input-packets (#PCDATA)>

<!ELEMENT input-pps (#PCDATA)>

<!ELEMENT input-unicast (#PCDATA)>

<!ELEMENT interface-accounting-record (profile-layout | epoch-timestamp |
utc-timestamp | interface-name | snmp-index | input-bytes | output-bytes |
input-packets | output-packets | input-unicast | output-unicast | input-multicast
 | output-multicast | input-errors | output-errors | no-proto | rpf-check-bytes
| rpf-check-packets | rpf-check6-bytes | rpf-check6-packets)*>
<!ATTLIST interface-accounting-record junos:style CDATA #IMPLIED>

<!ELEMENT interface-accounting-statistics (interface-accounting-record)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interfaces (#PCDATA)>

<!ELEMENT interim-device (#PCDATA)>

<!ELEMENT interim-granularity (#PCDATA)>

<!ELEMENT interim-interval (#PCDATA)>

<!ELEMENT interim-num-services (#PCDATA)>

<!ELEMENT interim-num-subscribers (#PCDATA)>

<!ELEMENT interim-service-rcvd (#PCDATA)>

<!ELEMENT interim-service-rcvd-err (#PCDATA)>

<!ELEMENT interim-service-sent (#PCDATA)>

<!ELEMENT interim-service-sent-err (#PCDATA)>
```


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```
<!ELEMENT interim-slot (#PCDATA)>

<!ELEMENT interim-subscriber-rcvd (#PCDATA)>

<!ELEMENT interim-subscriber-rcvd-err (#PCDATA)>

<!ELEMENT interim-subscriber-sent (#PCDATA)>

<!ELEMENT interim-subscriber-sent-err (#PCDATA)>

<!ELEMENT invalid-iif-discard (#PCDATA)>

<!ELEMENT isis-iih-count (#PCDATA)>

<!ELEMENT lacp-count (#PCDATA)>

<!ELEMENT ldp-hello-count (#PCDATA)>

<!ELEMENT lfm-packets-absorbed (#PCDATA)>

<!ELEMENT lfm-packets-dropped (#PCDATA)>

<!ELEMENT lfm-packets-received (#PCDATA)>

<!ELEMENT lfm-packets-sent-to-re (#PCDATA)>

<!ELEMENT lfm-packets-transmit-error (#PCDATA)>

<!ELEMENT lfm-packets-transmitted (#PCDATA)>

<!ELEMENT libstat-counter-names (#PCDATA)>

<!ELEMENT memory-usage (#PCDATA)>

<!ELEMENT mgmt-state (#PCDATA)>

<!ELEMENT mib-accounting-record (profile | epoch-timestamp | utc-timestamp | name
 | object-value)*>
<!ATTLIST mib-accounting-record junos:style CDATA #IMPLIED>

<!ELEMENT mib-accounting-statistics (mib-accounting-record)*>

<!ELEMENT mib-name (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT next-scheduled-collection (#PCDATA)>

<!ELEMENT next-transfer-time (#PCDATA)>

<!ELEMENT nexthop-discard (#PCDATA)>

<!ELEMENT no-proto (#PCDATA)>

<!ELEMENT number (#PCDATA)>

<!ELEMENT object-value (#PCDATA)>

<!ELEMENT object-value-type (#PCDATA)>

<!ELEMENT oid (#PCDATA)>
```

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```
<!ELEMENT ospf-hello-count (#PCDATA)>

<!ELEMENT ospf3-hello-count (#PCDATA)>

<!ELEMENT output-bytes (#PCDATA)>

<!ELEMENT output-errors (#PCDATA)>

<!ELEMENT output-mtu (#PCDATA)>

<!ELEMENT output-multicast (#PCDATA)>

<!ELEMENT output-packets (#PCDATA)>

<!ELEMENT output-pps (#PCDATA)>

<!ELEMENT output-unicast (#PCDATA)>

<!ELEMENT packet-count (#PCDATA)>

<!ELEMENT pfe (slot-index | slot-type | slot-state | mgmt-state | up-time)*>

<!ELEMENT pfe-bfd-statistics-detail (bfd-invalid-iif | bfd-invalid-iff |
bfd-bad-checksum | bfd-bad-options | bfd-bad-length | bfd-bad-udp-checksum |
bfd-bad-udp-length | bfd-bad-udp-ports | bfd-no-local-ifl |
bfd-bad-ifl-prefix-length | bfd-rx-queue-overflow | bfd-out-of-packets |
bfd-total-packets | bfd-total-absorbed | bfd-transmit-errors)*>

<!ELEMENT pfe-cfm-statistics-detail (cfm-packets-received | cfm-packets-sent-to-re
 | cfm-packets-absorbed | cfm-packets-received-with-sequence-number |
cfm-packets-received-invalid-length | cfm-packets-transmitted |
cfm-packets-transmit-error | cfm-packets-dropped)*>

<!ELEMENT pfe-chip-statistics (input-checksum | output-mtu)*>

<!ELEMENT pfe-counter-names (#PCDATA)>

<!ELEMENT pfe-cpu-stats (pfe-queue-counters)*>

<!ELEMENT pfe-description (#PCDATA)>

<!ELEMENT pfe-fabric-bytes (#PCDATA)>

<!ELEMENT pfe-fabric-packets (#PCDATA)>

<!ELEMENT pfe-fabric-prefix (#PCDATA)>

<!ELEMENT pfe-fabric-statistics (pfe-fabric-prefix | pfe-fabric-packets |
pfe-fabric-bytes)*>

<!ELEMENT pfe-forwarding-module-instance (#PCDATA)>

<!ELEMENT pfe-forwarding-module-name (#PCDATA)>

<!ELEMENT pfe-fpc-instance (#PCDATA)>

<!ELEMENT pfe-hardware-discard-statistics (timeout-discard | truncated-key-discard
 | bits-to-test-discard | data-error-discard | stack-underflow-discard |
stack-overflow-discard | bad-route-discard | nexthop-discard | invalid-iif-discard
 | info-cell-discard | fabric-discard)*>
```


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```
<!ELEMENT pfe-information (pfe)*>
<!ATTLIST pfe-information junos:style CDATA #IMPLIED>

<!ELEMENT pfe-input-packets (#PCDATA)>

<!ELEMENT pfe-instance (#PCDATA)>

<!ELEMENT pfe-lfm-statistics-detail (lfm-packets-received | lfm-packets-sent-to-re
 | lfm-packets-absorbed | lfm-packets-transmitted | lfm-packets-transmit-error |
 lfm-packets-dropped)*>

<!ELEMENT pfe-local-protocol-statistics (hdlc-keepalive-count | atm-oam-count |
fr-lmi-count | ppp-lcp-ncp-count | ospf-hello-count | ospf3-hello-count |
rsvp-hello-count | ldp-hello-count | bfd-count | isis-iih-count | lacp-count |
arp-count | ether-oam-count | unknown-count)*>

<!ELEMENT pfe-local-traffic-statistics (pfe-input-packets | pfe-output-packets |
 software-input-control-drops | software-input-high-drops |
software-input-medium-drops | software-input-low-drops | software-output-low-drops
 | hardware-input-drops)*>

<!ELEMENT pfe-multicast-stats (pfe-queue-counters)*>

<!ELEMENT pfe-output-packets (#PCDATA)>

<!ELEMENT pfe-queue (number | forwarding-class-name | queued-packets |
queued-packets-na | queued-bytes-na | queued-bytes | queued-packets-rate |
queued-bytes-rate | trans-packets | trans-bytes | trans-packets-rate |
trans-bytes-rate | tail-drop-packets | tail-drop-packets-rate |
tail-drop-packets-na | rate-limit-drop-packets | rate-limit-drop-packets-rate |
rate-limit-drop-packets-na | rate-limit-drop-bytes | rate-limit-drop-bytes-rate
| rate-limit-drop-bytes-na | red-packets-na | red-packets | red-bytes-na |
red-bytes | red-packets-rate | red-bytes-rate | red-packets-ln | red-bytes-ln |
red-packets-rate-ln | red-bytes-rate-ln | red-packets-lt | red-bytes-lt |
red-packets-rate-lt | red-bytes-rate-lt | red-packets-ht | red-bytes-ht |
red-packets-rate-ht | red-bytes-rate-ht | red-packets-hn | red-bytes-hn |
red-packets-rate-hn | red-bytes-rate-hn | red-packets-low | red-bytes-low |
red-packets-rate-low | red-bytes-rate-low | red-packets-medium-low |
red-bytes-medium-low | red-packets-rate-medium-low | red-bytes-rate-medium-low |
 red-packets-medium-high | red-bytes-medium-high | red-packets-rate-medium-high
| red-bytes-rate-medium-high | red-packets-medium | red-bytes-medium |
red-packets-rate-medium | red-bytes-rate-medium | red-packets-high | red-bytes-high
 | red-packets-rate-high | red-bytes-rate-high)*>

<!ELEMENT pfe-queue-counters (pfe-queue)*>

<!ELEMENT pfe-resource (pfe-resource-usage)*>

<!ELEMENT pfe-resource-free (#PCDATA)>

<!ELEMENT pfe-resource-general-information (pfe-description | pfe-instance |
pfe-forwarding-module-name | pfe-forwarding-module-instance |
pfe-resource-usage-details)*>

<!ELEMENT pfe-resource-highlight (#PCDATA)>

<!ELEMENT pfe-resource-inuse (#PCDATA)>

<!ELEMENT pfe-resource-inuse-percent (#PCDATA)>
```

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```
<!ELEMENT pfe-resource-name (#PCDATA)>

<!ELEMENT pfe-resource-total (#PCDATA)>

<!ELEMENT pfe-resource-units (#PCDATA)>

<!ELEMENT pfe-resource-usage (pfe-fpc-instance | pfe-resource-usage-legend |
pfe-resource-general-information)*>

<!ELEMENT pfe-resource-usage-details (pfe-resource-total | pfe-resource-units |
pfe-resource-free | pfe-resource-inuse | pfe-resource-name |
pfe-resource-inuse-percent | pfe-resource-highlight)*>

<!ELEMENT pfe-resource-usage-legend (#PCDATA)>

<!ELEMENT pfe-statistics (pfe-multicast-stats | pfe-cpu-stats |
pfe-tail-drop-statistics | pfe-total-tail-drop | pfe-traffic-statistics |
pfe-fabric-statistics | pfe-local-traffic-statistics |
pfe-local-protocol-statistics | pfe-bfd-statistics-detail |
pfe-cfm-statistics-detail | pfe-lfm-statistics-detail | pfe-vrrp-statistics-detail
 | pfe-hardware-discard-statistics | pfe-chip-statistics)*>

<!ELEMENT pfe-tail-drop-statistics (pfe-queue-counters)*>

<!ELEMENT pfe-total-tail-drop (pfe-queue-counters)*>

<!ELEMENT pfe-traffic-statistics (pfe-input-packets | pfe-output-packets |
input-pps | output-pps)*>

<!ELEMENT pfe-vrrp-statistics-detail (vrrp-packets-received |
vrrp-packets-sent-to-re | vrrp-packets-absorbed | vrrp-packets-transmitted |
vrrp-packets-transmit-error | vrrp-packets-dropped)*>

<!ELEMENT pfed-counter-names (#PCDATA)>

<!ELEMENT ppp-lcp-ncp-count (#PCDATA)>

<!ELEMENT profile (#PCDATA)>

<!ELEMENT profile-interval (#PCDATA)>

<!ELEMENT profile-layout (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT profile-type (#PCDATA)>

<!ELEMENT profile-use-count (#PCDATA)>

<!ELEMENT queued-bytes (#PCDATA)>

<!ELEMENT queued-bytes-na (#PCDATA)>

<!ELEMENT queued-bytes-rate (#PCDATA)>

<!ELEMENT queued-packets (#PCDATA)>

<!ELEMENT queued-packets-na (#PCDATA)>

<!ELEMENT queued-packets-rate (#PCDATA)>
```


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```
<!ELEMENT rate-limit-drop-bytes (#PCDATA)>
<!ELEMENT rate-limit-drop-bytes-na (#PCDATA)>
<!ELEMENT rate-limit-drop-bytes-rate (#PCDATA)>
<!ELEMENT rate-limit-drop-packets (#PCDATA)>
<!ELEMENT rate-limit-drop-packets-na (#PCDATA)>
<!ELEMENT rate-limit-drop-packets-rate (#PCDATA)>
<!ELEMENT red-bytes (#PCDATA)>
<!ELEMENT red-bytes-high (#PCDATA)>
<!ELEMENT red-bytes-hn (#PCDATA)>
<!ELEMENT red-bytes-ht (#PCDATA)>
<!ELEMENT red-bytes-ln (#PCDATA)>
<!ELEMENT red-bytes-low (#PCDATA)>
<!ELEMENT red-bytes-lt (#PCDATA)>
<!ELEMENT red-bytes-medium (#PCDATA)>
<!ELEMENT red-bytes-medium-high (#PCDATA)>
<!ELEMENT red-bytes-medium-low (#PCDATA)>
<!ELEMENT red-bytes-na (#PCDATA)>
<!ELEMENT red-bytes-rate (#PCDATA)>
<!ELEMENT red-bytes-rate-high (#PCDATA)>
<!ELEMENT red-bytes-rate-hn (#PCDATA)>
<!ELEMENT red-bytes-rate-ht (#PCDATA)>
<!ELEMENT red-bytes-rate-ln (#PCDATA)>
<!ELEMENT red-bytes-rate-low (#PCDATA)>
<!ELEMENT red-bytes-rate-lt (#PCDATA)>
<!ELEMENT red-bytes-rate-medium (#PCDATA)>
<!ELEMENT red-bytes-rate-medium-high (#PCDATA)>
<!ELEMENT red-bytes-rate-medium-low (#PCDATA)>
<!ELEMENT red-packets (#PCDATA)>
<!ELEMENT red-packets-high (#PCDATA)>
<!ELEMENT red-packets-hn (#PCDATA)>
<!ELEMENT red-packets-ht (#PCDATA)>
```

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<!ELEMENT red-packets-ln (#PCDATA)>

<!ELEMENT red-packets-low (#PCDATA)>

<!ELEMENT red-packets-lt (#PCDATA)>

<!ELEMENT red-packets-medium (#PCDATA)>

<!ELEMENT red-packets-medium-high (#PCDATA)>

<!ELEMENT red-packets-medium-low (#PCDATA)>

<!ELEMENT red-packets-na (#PCDATA)>

<!ELEMENT red-packets-rate (#PCDATA)>

<!ELEMENT red-packets-rate-high (#PCDATA)>

<!ELEMENT red-packets-rate-hn (#PCDATA)>

<!ELEMENT red-packets-rate-ht (#PCDATA)>

<!ELEMENT red-packets-rate-ln (#PCDATA)>

<!ELEMENT red-packets-rate-low (#PCDATA)>

<!ELEMENT red-packets-rate-lt (#PCDATA)>

<!ELEMENT red-packets-rate-medium (#PCDATA)>

<!ELEMENT red-packets-rate-medium-high (#PCDATA)>

<!ELEMENT red-packets-rate-medium-low (#PCDATA)>

<!ELEMENT routing-engine-accounting-record (profile-layout | epoch-timestamp |
utc-timestamp | hostname | date-yyyymmdd | timeofday-hhmmss | uptime | cpu1min |
 cpu5min | cpu15min | memory-usage | total-cpu-usage)*>
<!ATTLIST routing-engine-accounting-record junos:style CDATA #IMPLIED>

<!ELEMENT routing-engine-accounting-statistics (routing-engine-accounting-record)*>

<!ELEMENT rpf-check-bytes (#PCDATA)>

<!ELEMENT rpf-check-packets (#PCDATA)>

<!ELEMENT rpf-check6-bytes (#PCDATA)>

<!ELEMENT rpf-check6-packets (#PCDATA)>

<!ELEMENT rsvp-hello-count (#PCDATA)>

<!ELEMENT slot-index (#PCDATA)>

<!ELEMENT slot-state (#PCDATA)>

<!ELEMENT slot-type (#PCDATA)>

<!ELEMENT snmp-index (#PCDATA)>

<!ELEMENT snmp-object (name | index | oid | object-value | object-value-type |
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error)*>

<!ELEMENT snmp-object-information (snmp-object | snmp-request-error)*>

<!ELEMENT snmp-req-error-value (#PCDATA)>

<!ELEMENT snmp-request-error (snmp-req-error-value)*>

<!ELEMENT software-input-control-drops (#PCDATA)>

<!ELEMENT software-input-high-drops (#PCDATA)>

<!ELEMENT software-input-low-drops (#PCDATA)>

<!ELEMENT software-input-medium-drops (#PCDATA)>

<!ELEMENT software-output-low-drops (#PCDATA)>

<!ELEMENT source-class-name (#PCDATA)>

<!ELEMENT stack-overflow-discard (#PCDATA)>

<!ELEMENT stack-underflow-discard (#PCDATA)>

<!ELEMENT statistics_connection_header (conn-name)*>

<!ELEMENT statistics_libstat_header (libstat-counter-names | to-libstat |
from-libstat)*>

<!ELEMENT statistics_pfe_header (pfe-counter-names | stats-to-pfe | stats-from-pfe
 | timeout-count)*>

<!ELEMENT statistics_pfed_header (pfed-counter-names | stats-to-pfed)*>

<!ELEMENT stats-from-pfe (#PCDATA)>

<!ELEMENT stats-to-pfe (#PCDATA)>

<!ELEMENT stats-to-pfed (#PCDATA)>

<!ELEMENT tail-drop-packets (#PCDATA)>

<!ELEMENT tail-drop-packets-na (#PCDATA)>

<!ELEMENT tail-drop-packets-rate (#PCDATA)>

<!ELEMENT timeofday-hhmmss (#PCDATA)>

<!ELEMENT timeout-count (#PCDATA)>

<!ELEMENT timeout-discard (#PCDATA)>

<!ELEMENT to-libstat (#PCDATA)>

<!ELEMENT total-cpu-usage (#PCDATA)>

<!ELEMENT trans-bytes (#PCDATA)>

<!ELEMENT trans-bytes-rate (#PCDATA)>

<!ELEMENT trans-packets (#PCDATA)>
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<!ELEMENT trans-packets-rate (#PCDATA)>

<!ELEMENT transfer-interval (#PCDATA)>

<!ELEMENT truncated-key-discard (#PCDATA)>

<!ELEMENT unknown-count (#PCDATA)>

<!ELEMENT up-time (#PCDATA)>
<!ATTLIST up-time junos:seconds CDATA #IMPLIED>

<!ELEMENT uptime (#PCDATA)>
<!ATTLIST uptime junos:seconds CDATA #IMPLIED>

<!ELEMENT utc-timestamp (#PCDATA)>

<!ELEMENT vrrp-packets-absorbed (#PCDATA)>

<!ELEMENT vrrp-packets-dropped (#PCDATA)>

<!ELEMENT vrrp-packets-received (#PCDATA)>

<!ELEMENT vrrp-packets-sent-to-re (#PCDATA)>

<!ELEMENT vrrp-packets-transmit-error (#PCDATA)>

<!ELEMENT vrrp-packets-transmitted (#PCDATA)>
```


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CHAPTER 61

DTD for Adaptive Services Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-adaptive-services.dtd.To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-adaptive-services.dtd -->

<!ELEMENT ack-invalid (#PCDATA)>

<!ELEMENT ack-retransmits (#PCDATA)>

<!ELEMENT ack-valid (#PCDATA)>

<!ELEMENT active-block-timeout (#PCDATA)>

<!ELEMENT active-controller (#PCDATA)>

<!ELEMENT actively-checked-server-address (#PCDATA)>

<!ELEMENT actively-checked-server-last-availability (#PCDATA)>

<!ELEMENT actively-checked-server-name (#PCDATA)>

<!ELEMENT actively-checked-server-next-check (#PCDATA)>

<!ELEMENT address-mappingv2 (internal-ip | external-ip | b4-ip | session-count |
 ports-used | internal-port | external-port | state)*>
<!ATTLIST address-mappingv2 junos:style CDATA #IMPLIED>

<!ELEMENT admin-disconnect-count (#PCDATA)>

<!ELEMENT alg-bootp-errors (#PCDATA)>

<!ELEMENT alg-dce-rpc-errors (#PCDATA)>

<!ELEMENT alg-dce-rpc-portmap-errors (#PCDATA)>
```

```
<!ELEMENT alg-dns-errors (#PCDATA)>

<!ELEMENT alg-error-counters (alg-bootp-errors | alg-dce-rpc-errors |
alg-dce-rpc-portmap-errors | alg-dns-errors | alg-exec-errors | alg-ftp-errors |
 alg-h323-errors | alg-icmp-errors | alg-iiop-errors | alg-login-errors |
alg-netbios-errors | alg-netshow-errors | alg-realaudio-errors | alg-rpc-errors
| alg-rpc-portmap-errors | alg-rtsp-errors | alg-shell-errors | alg-sip-errors |
 alg-snmp-errors | alg-sqlnet-errors | alg-tftp-errors | alg-traceroute-errors)*>

<!ELEMENT alg-errors (#PCDATA)>

<!ELEMENT alg-exec-errors (#PCDATA)>

<!ELEMENT alg-ftp-errors (#PCDATA)>

<!ELEMENT alg-h323-errors (#PCDATA)>

<!ELEMENT alg-icmp-errors (#PCDATA)>

<!ELEMENT alg-iiop-errors (#PCDATA)>

<!ELEMENT alg-login-errors (#PCDATA)>

<!ELEMENT alg-name (#PCDATA)>

<!ELEMENT alg-netbios-errors (#PCDATA)>

<!ELEMENT alg-netshow-errors (#PCDATA)>

<!ELEMENT alg-realaudio-errors (#PCDATA)>

<!ELEMENT alg-rpc-errors (#PCDATA)>

<!ELEMENT alg-rpc-portmap-errors (#PCDATA)>

<!ELEMENT alg-rtsp-errors (#PCDATA)>

<!ELEMENT alg-shell-errors (#PCDATA)>

<!ELEMENT alg-sip-errors (#PCDATA)>

<!ELEMENT alg-snmp-errors (#PCDATA)>

<!ELEMENT alg-sqlnet-errors (#PCDATA)>

<!ELEMENT alg-tftp-errors (#PCDATA)>

<!ELEMENT alg-traceroute-errors (#PCDATA)>

<!ELEMENT audit-observed-events-returns-history (#PCDATA)>

<!ELEMENT authentication-failure-count (#PCDATA)>

<!ELEMENT b4-ip (#PCDATA)>

<!ELEMENT bad-checksum (#PCDATA)>

<!ELEMENT bad-syn-cookie-response (#PCDATA)>

<!ELEMENT base-root-entry (brp_name | brp_minimum | brp_maximum | brp_default)*>
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```
<!ELEMENT brief-num-of-dirty-flows (#PCDATA)>

<!ELEMENT brp_default (#PCDATA)>

<!ELEMENT brp_maximum (#PCDATA)>

<!ELEMENT brp_minimum (#PCDATA)>

<!ELEMENT brp_name (#PCDATA)>

<!ELEMENT bsg-address-of-record (bsg-aor-name | bsg-aor-bindings-num-of-lu |
bsg-address-of-record-bindings)*>

<!ELEMENT bsg-address-of-record-binding (bsg-aor-bindings-uri |
bsg-aor-bindings-reg-realm | bsg-aor-bindings-service-point |
bsg-aor-bindings-last-reg-time | bsg-aor-bindings-first-reg-time |
bsg-aor-bindings-expiration-time | bsg-aor-bindings-lu)*>

<!ELEMENT bsg-address-of-record-bindings (bsg-address-of-record-binding)*>

<!ELEMENT bsg-address-of-records (bsg-address-of-record)*>

<!ELEMENT bsg-admission-control-details (bsg-cac-name |
bsg-admission-control-dialogs | bsg-admission-control-transactions)*>

<!ELEMENT bsg-admission-control-dialog-title (#PCDATA)>

<!ELEMENT bsg-admission-control-dialogs (bsg-admission-control-dialog-title |
bsg-admission-controlled-object)*>

<!ELEMENT bsg-admission-control-transaction-title (#PCDATA)>

<!ELEMENT bsg-admission-control-transactions
(bsg-admission-control-transaction-title | bsg-admission-controlled-object)*>

<!ELEMENT bsg-admission-controlled-object (bsg-cac-active |
bsg-cac-attempts-handled | bsg-cac-attempts-rejected-concurrent |
bsg-cac-attempts-rejected-rate)*>

<!ELEMENT bsg-admission-controller (#PCDATA)>

<!ELEMENT bsg-aor-bindings-expiration-time (#PCDATA)>

<!ELEMENT bsg-aor-bindings-first-reg-time (#PCDATA)>

<!ELEMENT bsg-aor-bindings-last-reg-time (#PCDATA)>

<!ELEMENT bsg-aor-bindings-lu (#PCDATA)>

<!ELEMENT bsg-aor-bindings-num-of-lu (#PCDATA)>

<!ELEMENT bsg-aor-bindings-reg-realm (#PCDATA)>

<!ELEMENT bsg-aor-bindings-service-point (#PCDATA)>

<!ELEMENT bsg-aor-bindings-uri (#PCDATA)>

<!ELEMENT bsg-aor-name (#PCDATA)>

<!ELEMENT bsg-cac-active (#PCDATA)>
```

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```
<!ELEMENT bsg-cac-attempts-handled (#PCDATA)>

<!ELEMENT bsg-cac-attempts-rejected-concurrent (#PCDATA)>

<!ELEMENT bsg-cac-attempts-rejected-rate (#PCDATA)>

<!ELEMENT bsg-cac-name (#PCDATA)>

<!ELEMENT bsg-call-context-id (#PCDATA)>

<!ELEMENT bsg-calls-duration (bsg-calls-duration-details)*>

<!ELEMENT bsg-calls-duration-details (bsg-start-time |
bsg-service-point-calls-duration-details)*>

<!ELEMENT bsg-charging-cdf-host (#PCDATA)>

<!ELEMENT bsg-charging-cdf-name (#PCDATA)>

<!ELEMENT bsg-charging-cdf-priority (#PCDATA)>

<!ELEMENT bsg-charging-cdf-realm (#PCDATA)>

<!ELEMENT bsg-charging-name (#PCDATA)>

<!ELEMENT bsg-charging-operational-mode (#PCDATA)>

<!ELEMENT bsg-charging-release-number (#PCDATA)>

<!ELEMENT bsg-charging-statistics (number-of-ctf-messages |
number-of-ctf-retries-messages | number-of-ctf-replied-messages |
number-of-ctf-error-replied-messages)*>

<!ELEMENT bsg-charging-status (bsg-charging-name | bsg-charging-release-number |
 bsg-charging-operational-mode | bsg-charging-status-cdf)*>

<!ELEMENT bsg-charging-status-cdf (bsg-charging-cdf-name | bsg-charging-cdf-realm
 | bsg-charging-cdf-host | bsg-charging-cdf-priority)*>

<!ELEMENT bsg-contact (#PCDATA)>

<!ELEMENT bsg-database-size (database-name | database-size)*>

<!ELEMENT bsg-denied-message (#PCDATA)>

<!ELEMENT bsg-denied-messages-details (bsg-denied-message)*>

<!ELEMENT bsg-dialog-information-call-id (#PCDATA)>

<!ELEMENT bsg-dialog-information-local-tag (#PCDATA)>

<!ELEMENT bsg-dialog-information-local-uri (#PCDATA)>

<!ELEMENT bsg-dialog-information-remote-tag (#PCDATA)>

<!ELEMENT bsg-dialog-information-remote-uri (#PCDATA)>

<!ELEMENT bsg-drain-name-resolution-details (#PCDATA)>

<!ELEMENT bsg-gate-id (#PCDATA)>
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```
<!ELEMENT bsg-information-active-calls (#PCDATA)>

<!ELEMENT bsg-information-brief (bsg-information-brief-details)*>

<!ELEMENT bsg-information-brief-details (bsg-call-context-id | bsg-request-uri |
 bsg-contact | bsg-signaling-source-ip | bsg-signaling-destination-ip |
bsg-dialog-information-call-id)*>

<!ELEMENT bsg-information-details-detailed (bsg-service-point-calls-information)*>

<!ELEMENT bsg-information-summary (bsg-information-active-calls)*>

<!ELEMENT bsg-macthed-policies (#PCDATA)>

<!ELEMENT bsg-manipulation-rules (#PCDATA)>

<!ELEMENT bsg-media-details (bsg-gate-id | bsg-media-ip | bsg-media-port |
bsg-media-status)*>

<!ELEMENT bsg-media-ip (#PCDATA)>

<!ELEMENT bsg-media-port (#PCDATA)>

<!ELEMENT bsg-media-status (#PCDATA)>

<!ELEMENT bsg-memory-pools (memory-pool-name | memory-pool-chunks-num |
memory-pool-free-chunks-num | memory-pool-chunk-size | memory-pool-chunk-used)*>

<!ELEMENT bsg-name-resolution-cache-information (bsg-nr-cache)*>

<!ELEMENT bsg-name-resolution-entry (bsg-nr-entry-fqdn | bsg-nr-entry-type |
bsg-nr-entry-rdata | bsg-nr-entry-ttl-expiry | bsg-nr-entry-blacklist-expiry)*>

<!ELEMENT bsg-next-hop (#PCDATA)>

<!ELEMENT bsg-nr-cache (bsg-name-resolution-entry)*>

<!ELEMENT bsg-nr-entry-blacklist-expiry (#PCDATA)>

<!ELEMENT bsg-nr-entry-fqdn (#PCDATA)>

<!ELEMENT bsg-nr-entry-rdata (#PCDATA)>

<!ELEMENT bsg-nr-entry-ttl-expiry (#PCDATA)>

<!ELEMENT bsg-nr-entry-type (#PCDATA)>

<!ELEMENT bsg-redundancy-conn-details (#PCDATA)>

<!ELEMENT bsg-redundancy-conn-messages (#PCDATA)>

<!ELEMENT bsg-redundancy-conn-status (#PCDATA)>

<!ELEMENT bsg-redundancy-conn-type (#PCDATA)>

<!ELEMENT bsg-redundancy-connection-info (bsg-redundancy-conn-type |
bsg-redundancy-conn-details | bsg-redundancy-conn-status |
bsg-redundancy-conn-messages)*>

<!ELEMENT bsg-redundancy-info (#PCDATA)>
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<!ELEMENT bsg-redundancy-local-or-remote (#PCDATA)>

<!ELEMENT bsg-redundancy-pic-if-name (#PCDATA)>

<!ELEMENT bsg-redundancy-pic-info (bsg-redundancy-local-or-remote |
bsg-redundancy-pic-if-name | bsg-redundancy-pic-ip | bsg-redundancy-pic-rms-role)*>

<!ELEMENT bsg-redundancy-pic-ip (#PCDATA)>

<!ELEMENT bsg-redundancy-pic-rms-role (#PCDATA)>

<!ELEMENT bsg-redundancy-state (#PCDATA)>

<!ELEMENT bsg-registrations (bsg-registrations-start-time |
bsg-registrations-active-registrations)*>

<!ELEMENT bsg-registrations-active-registrations (#PCDATA)>

<!ELEMENT bsg-registrations-realm (bsg-registrations-realm-start-time |
bsg-registrations-realm-name | bsg-registrations-realm-active-registrations)*>

<!ELEMENT bsg-registrations-realm-active-registrations (#PCDATA)>

<!ELEMENT bsg-registrations-realm-name (#PCDATA)>

<!ELEMENT bsg-registrations-realm-start-time (#PCDATA)>

<!ELEMENT bsg-registrations-start-time (#PCDATA)>

<!ELEMENT bsg-request-uri (#PCDATA)>

<!ELEMENT bsg-routing-blacklist-actively-checked (actively-checked-server-name |
 actively-checked-server-address | actively-checked-server-last-availability |
actively-checked-server-next-check)*>

<!ELEMENT bsg-routing-blacklist-actively-checked-title (#PCDATA)>

<!ELEMENT bsg-routing-blacklist-actively-checked-wrapper
(bsg-routing-blacklist-actively-checked-title |
bsg-routing-blacklist-actively-checked)*>

<!ELEMENT bsg-routing-blacklist-details (bsg-routing-blacklist-entry)*>

<!ELEMENT bsg-routing-blacklist-entry (bsg-start-time |
bsg-routing-blacklist-actively-checked-wrapper |
bsg-routing-blacklist-not-actively-checked-wrapper)*>

<!ELEMENT bsg-routing-blacklist-not-actively-checked
(not-actively-checked-server-name | not-actively-checked-server-address |
not-actively-checked-server-next-availability)*>

<!ELEMENT bsg-routing-blacklist-not-actively-checked-title (#PCDATA)>

<!ELEMENT bsg-routing-blacklist-not-actively-checked-wrapper
(bsg-routing-blacklist-not-actively-checked-title |
bsg-routing-blacklist-not-actively-checked)*>

<!ELEMENT bsg-server-name (#PCDATA)>

<!ELEMENT bsg-service-point-calls-details (bsg-sp-name | service-interface |
bsg-server-name | bsg-sp-direction | bsg-sp-failed-calls | bsg-sp-completed-calls
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 | bsg-sp-active-calls)*>

<!ELEMENT bsg-service-point-calls-duration-details (bsg-sp-name | service-interface
 | bsg-server-name | service-point-direction | calls-duration-histogram)*>

<!ELEMENT bsg-service-point-calls-failed-details (bsg-sp-name | service-interface
 | bsg-server-name | bsg-sp-direction | bsg-sp-error-response-code |
bsg-sp-internal-error | bsg-sp-inactive-timeout | bsg-sp-setup-media-failure |
bsg-sp-established-call-media-inactivity | bsg-sp-cac-policy-rejection |
bsg-sp-default-behavior-policy-rejection |
bsg-sp-configured-behavior-policy-rejection |
bsg-sp-transport-conflict-policy-rejection | bsg-sp-protocol-error |
bsg-sp-setup-timeout | bsg-sp-transport-error | bsg-sp-canceled-calls |
bsg-sp-media-abort)*>

<!ELEMENT bsg-service-point-calls-information (bsg-call-context-id |
bsg-request-uri | bsg-contact | bsg-signaling-source-ip |
bsg-signaling-destination-ip | bsg-dialog-information-call-id |
bsg-dialog-information-local-uri | bsg-dialog-information-remote-uri |
bsg-dialog-information-local-tag | bsg-dialog-information-remote-tag | bsg-next-hop
 | bsg-media-details | bsg-macthed-policies | bsg-admission-controller |
bsg-manipulation-rules)*>

<!ELEMENT bsg-signaling-destination-ip (#PCDATA)>

<!ELEMENT bsg-signaling-source-ip (#PCDATA)>

<!ELEMENT bsg-sp-active-calls (#PCDATA)>

<!ELEMENT bsg-sp-cac-policy-rejection (#PCDATA)>

<!ELEMENT bsg-sp-canceled-calls (#PCDATA)>

<!ELEMENT bsg-sp-completed-calls (#PCDATA)>

<!ELEMENT bsg-sp-configured-behavior-policy-rejection (#PCDATA)>

<!ELEMENT bsg-sp-default-behavior-policy-rejection (#PCDATA)>

<!ELEMENT bsg-sp-direction (#PCDATA)>

<!ELEMENT bsg-sp-error-response-code (#PCDATA)>

<!ELEMENT bsg-sp-established-call-media-inactivity (#PCDATA)>

<!ELEMENT bsg-sp-failed-calls (#PCDATA)>

<!ELEMENT bsg-sp-inactive-timeout (#PCDATA)>

<!ELEMENT bsg-sp-internal-error (#PCDATA)>

<!ELEMENT bsg-sp-media-abort (#PCDATA)>

<!ELEMENT bsg-sp-name (#PCDATA)>

<!ELEMENT bsg-sp-protocol-error (#PCDATA)>

<!ELEMENT bsg-sp-setup-media-failure (#PCDATA)>

<!ELEMENT bsg-sp-setup-timeout (#PCDATA)>
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<!ELEMENT bsg-sp-transport-conflict-policy-rejection (#PCDATA)>

<!ELEMENT bsg-sp-transport-error (#PCDATA)>

<!ELEMENT bsg-start-time (#PCDATA)>

<!ELEMENT bsg-statistics-admission-control (bsg-start-time |
bsg-admission-control-details)*>

<!ELEMENT bsg-statistics-admission-control-information
(bsg-statistics-admission-control)*>

<!ELEMENT bsg-statistics-calls (bsg-start-time | bsg-service-point-calls-details)*>

<!ELEMENT bsg-statistics-calls-details (bsg-statistics-calls)*>

<!ELEMENT bsg-statistics-calls-failed (bsg-start-time |
bsg-service-point-calls-failed-details)*>

<!ELEMENT bsg-statistics-calls-failed-details (bsg-statistics-calls-failed)*>

<!ELEMENT bsg-statistics-clear-denied-messages (#PCDATA)>

<!ELEMENT bsg-statistics-denied-messages (overload-last-reset-time |
bsg-denied-messages-details)*>

<!ELEMENT bsg-statistics-denied-messages-details (bsg-statistics-denied-messages)*>

<!ELEMENT bsg-statistics-drain-information (#PCDATA)>

<!ELEMENT bsg-status-information (bsg-redundancy-pic-info |
bsg-redundancy-connection-info | bsg-redundancy-state | bsg-redundancy-info)*>

<!ELEMENT burst-duration (#PCDATA)>

<!ELEMENT burst-loss-density (#PCDATA)>

<!ELEMENT bye-invalid (#PCDATA)>

<!ELEMENT bye-valid (#PCDATA)>

<!ELEMENT bypass-output (#PCDATA)>

<!ELEMENT bytes (#PCDATA)>

<!ELEMENT bytes-used (#PCDATA)>

<!ELEMENT call-segments (#PCDATA)>

<!ELEMENT calls-duration-entry (duration-start | duration-end | number-of-calls)*>

<!ELEMENT calls-duration-histogram (calls-duration-entry)*>

<!ELEMENT cancel-invalid (#PCDATA)>

<!ELEMENT cancel-valid (#PCDATA)>

<!ELEMENT cause-cost-warning (#PCDATA)>

<!ELEMENT cause-credit-expiry (#PCDATA)>
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<!ELEMENT cause-default (#PCDATA)>

<!ELEMENT cause-not-allowed (#PCDATA)>

<!ELEMENT cause-quality-of-service (#PCDATA)>

<!ELEMENT cause-roaming (#PCDATA)>

<!ELEMENT cause-time-of-day (#PCDATA)>

<!ELEMENT cause-unknown (#PCDATA)>

<!ELEMENT cause-unsubscribed (#PCDATA)>

<!ELEMENT cause-volume-expired (#PCDATA)>

<!ELEMENT child-fflow-dst-ip (#PCDATA)>

<!ELEMENT child-fflow-dst-port (#PCDATA)>

<!ELEMENT child-fflow-src-ip (#PCDATA)>

<!ELEMENT child-fflow-src-port (#PCDATA)>

<!ELEMENT child-flow-protocol (#PCDATA)>

<!ELEMENT child-rflow-dst-ip (#PCDATA)>

<!ELEMENT child-rflow-dst-port (#PCDATA)>

<!ELEMENT child-rflow-src-ip (#PCDATA)>

<!ELEMENT child-rflow-src-port (#PCDATA)>

<!ELEMENT child-sess-id (#PCDATA)>

<!ELEMENT cleanup-timeout (#PCDATA)>

<!ELEMENT clear-nat-statistics-status (#PCDATA)>

<!ELEMENT clear-service-bsg-registrations-statistics (#PCDATA)>

<!ELEMENT clear-services-bsg-registrations-subscription
(clear-services-bsg-registrations-subscription-result)*>

<!ELEMENT clear-services-bsg-registrations-subscription-result (#PCDATA)>

<!ELEMENT client-name (#PCDATA)>

<!ELEMENT client-state (#PCDATA)>

<!ELEMENT clients-active (#PCDATA)>

<!ELEMENT command-name (#PCDATA)>

<!ELEMENT commands-error (#PCDATA)>

<!ELEMENT commands-success (#PCDATA)>

<!ELEMENT commands-total (#PCDATA)>
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<!ELEMENT commands-wildcard (#PCDATA)>

<!ELEMENT compressed (#PCDATA)>

<!ELEMENT compute-rx-bytes (#PCDATA)>

<!ELEMENT compute-rx-flows (#PCDATA)>

<!ELEMENT compute-rx-pkts (#PCDATA)>

<!ELEMENT compute-tx-bytes (#PCDATA)>

<!ELEMENT compute-tx-flows (#PCDATA)>

<!ELEMENT compute-tx-pkts (#PCDATA)>

<!ELEMENT connection-status (#PCDATA)>

<!ELEMENT content-errors (#PCDATA)>

<!ELEMENT contexts-number (#PCDATA)>

<!ELEMENT control-rx-bytes (#PCDATA)>

<!ELEMENT control-rx-flows (#PCDATA)>

<!ELEMENT control-rx-pkts (#PCDATA)>

<!ELEMENT control-tx-bytes (#PCDATA)>

<!ELEMENT control-tx-flows (#PCDATA)>

<!ELEMENT control-tx-pkts (#PCDATA)>

<!ELEMENT controller-entry (controller-name | remote-ip-address | remote-port)*>

<!ELEMENT controller-name (#PCDATA)>

<!ELEMENT conversations-removed (#PCDATA)>

<!ELEMENT cos-stats-service-set-dscp-entry (received-dscp |
total-received-dscp-packets | total-marked-dscp-packets)*>

<!ELEMENT cos-stats-service-set-dscp-information
(cos-stats-service-set-dscp-entry)*>

<!ELEMENT cos-stats-service-set-forwarding-class-entry (received-forwarding-class
 | total-received-forwarding-class-packets |
total-assigned-forwarding-class-packets)*>

<!ELEMENT cos-stats-service-set-forwarding-class-information
(cos-stats-service-set-forwarding-class-entry)*>

<!ELEMENT cpu-name (#PCDATA)>

<!ELEMENT cpu-role-name (#PCDATA)>

<!ELEMENT cpu-utilization-percent (#PCDATA)>

<!ELEMENT cpulimit-drops (#PCDATA)>
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<!ELEMENT crtp-compressed-rx (#PCDATA)>

<!ELEMENT crtp-compressed-tx (#PCDATA)>

<!ELEMENT crtp-compression-ratio (#PCDATA)>

<!ELEMENT crtp-config-info-entry (interface-name | crtp-port-min | crtp-port-max
 | crtp-tcp-space | crtp-udp-space | crtp-max-period | crtp-max-time |
crtp-rtp-queues)*>

<!ELEMENT crtp-counter-name (#PCDATA)>

<!ELEMENT crtp-counter-received (#PCDATA)>

<!ELEMENT crtp-counter-table (crtp-counter-name | crtp-counter-received |
crtp-counter-transmit)*>

<!ELEMENT crtp-counter-transmit (#PCDATA)>

<!ELEMENT crtp-decompression-ratio (#PCDATA)>

<!ELEMENT crtp-discards (#PCDATA)>

<!ELEMENT crtp-flow-context-id (#PCDATA)>

<!ELEMENT crtp-flow-destination-info (#PCDATA)>

<!ELEMENT crtp-flow-entry (crtp-flow-context-id | crtp-flow-rtp-id |
crtp-flow-source-info | crtp-flow-destination-info | crtp-flow-type)*>

<!ELEMENT crtp-flow-rtp-id (#PCDATA)>

<!ELEMENT crtp-flow-source-info (#PCDATA)>

<!ELEMENT crtp-flow-type (#PCDATA)>

<!ELEMENT crtp-ip-counter-name (#PCDATA)>

<!ELEMENT crtp-ip-counter-received (#PCDATA)>

<!ELEMENT crtp-ip-counter-table (crtp-ip-counter-name | crtp-ip-counter-received
 | crtp-ip-counter-transmit)*>

<!ELEMENT crtp-ip-counter-transmit (#PCDATA)>

<!ELEMENT crtp-max-period (#PCDATA)>

<!ELEMENT crtp-max-time (#PCDATA)>

<!ELEMENT crtp-per-interface-flow-table (interface-name |
service-crtp-flow-table)*>

<!ELEMENT crtp-port-max (#PCDATA)>

<!ELEMENT crtp-port-min (#PCDATA)>

<!ELEMENT crtp-rtp-queues (#PCDATA)>

<!ELEMENT crtp-sessions-rx (#PCDATA)>

<!ELEMENT crtp-sessions-tx (#PCDATA)>
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<!ELEMENT crtp-stats-entry (crtp-compression-ratio | crtp-decompression-ratio |
crtp-sessions-rx | crtp-sessions-tx | crtp-compressed-rx | crtp-compressed-tx |
crtp-discards)*>

<!ELEMENT crtp-tcp-space (#PCDATA)>

<!ELEMENT crtp-udp-space (#PCDATA)>

<!ELEMENT cul-mov-avg-http-flow-lifetime (#PCDATA)>

<!ELEMENT database-name (#PCDATA)>

<!ELEMENT database-size (#PCDATA)>

<!ELEMENT dce-rpc-call-mismatch (#PCDATA)>

<!ELEMENT dce-rpc-drop-pkts (#PCDATA)>

<!ELEMENT dce-rpc-fail-reply (#PCDATA)>

<!ELEMENT dce-rpc-fragment-pkts (#PCDATA)>

<!ELEMENT dce-rpc-id-mismatch (#PCDATA)>

<!ELEMENT dce-rpc-lookup-reply (#PCDATA)>

<!ELEMENT dce-rpc-lookup-request (#PCDATA)>

<!ELEMENT dce-rpc-map-reply (#PCDATA)>

<!ELEMENT dce-rpc-map-request (#PCDATA)>

<!ELEMENT dce-rpc-non-epm3 (#PCDATA)>

<!ELEMENT dce-rpc-queue-pkts (#PCDATA)>

<!ELEMENT dce-rpc-released-pkts (#PCDATA)>

<!ELEMENT dce-rpc-type-mismatch (#PCDATA)>

<!ELEMENT dce-rpc-wrong-header (#PCDATA)>

<!ELEMENT debug-applicationq-latency-information (#PCDATA)>

<!ELEMENT debug-applicationq-size-information (#PCDATA)>

<!ELEMENT debug-commit-latency-information (#PCDATA)>

<!ELEMENT debug-mem-mgmt-location-information (#PCDATA)>

<!ELEMENT debug-mem-mgmt-memory-usage-information (#PCDATA)>

<!ELEMENT debug-mem-mgmt-type-information (#PCDATA)>

<!ELEMENT debug-resumeq-latency-information (#PCDATA)>

<!ELEMENT debug-resumeq-size-information (#PCDATA)>

<!ELEMENT debug-roundtrip-information (#PCDATA)>
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<!ELEMENT debug-waitq-latency-information (#PCDATA)>
<!ELEMENT debug-waitq-size-information (#PCDATA)>
<!ELEMENT debug-workq-latency-information (#PCDATA)>
<!ELEMENT debug-workq-size-information (#PCDATA)>
<!ELEMENT decap-failed-ipv4-l3-integrity (#PCDATA)>
<!ELEMENT decap-failed-ipv4-l4-integrity (#PCDATA)>
<!ELEMENT decap-failed-ipv6-next-header-offset (#PCDATA)>
<!ELEMENT decap-failed-packet-not-ipv4 (#PCDATA)>
<!ELEMENT decap-packet-not-ipv6 (#PCDATA)>
<!ELEMENT default (#PCDATA)>
<!ELEMENT destination-routing-instance (#PCDATA)>
<!ELEMENT detect (#PCDATA)>
<!ELEMENT detnat-internal-host (#PCDATA)>
<!ELEMENT detnat-nat-ip (#PCDATA)>
<!ELEMENT detnat-nat-port-high (#PCDATA)>
<!ELEMENT detnat-nat-port-low (#PCDATA)>
<!ELEMENT dns-invalid-pkts (#PCDATA)>
<!ELEMENT dns-oversize-pkts (#PCDATA)>
<!ELEMENT dns-reply-pkts (#PCDATA)>
<!ELEMENT drop (#PCDATA)>
<!ELEMENT drop-bytes-algs (#PCDATA)>
<!ELEMENT drop-bytes-flow-drop-state (#PCDATA)>
<!ELEMENT drop-bytes-flow-rate-limit (#PCDATA)>
<!ELEMENT drop-bytes-other (#PCDATA)>
<!ELEMENT drop-packets-algs (#PCDATA)>
<!ELEMENT drop-packets-flow-drop-state (#PCDATA)>
<!ELEMENT drop-packets-flow-rate-limit (#PCDATA)>
<!ELEMENT drop-packets-other (#PCDATA)>
<!ELEMENT drop_counters (ip-option | syn-defense | nat-ports-exhausted)*>
<!ELEMENT ds-lite-softwire-count (#PCDATA)>
<!ELEMENT dscp (#PCDATA)>
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<!ELEMENT dst-ip-high (#PCDATA)>

<!ELEMENT dst-ip-low (#PCDATA)>

<!ELEMENT dst-port-high (#PCDATA)>

<!ELEMENT dst-port-low (#PCDATA)>

<!ELEMENT duration-end (#PCDATA)>

<!ELEMENT duration-start (#PCDATA)>

<!ELEMENT effective-pba-port-range (#PCDATA)>

<!ELEMENT effective-port-blocks (#PCDATA)>

<!ELEMENT effective-ports (#PCDATA)>

<!ELEMENT emergency-contexts-number (#PCDATA)>

<!ELEMENT end-system-delay (#PCDATA)>

<!ELEMENT error-counters (ip-errors | tcp-errors | udp-errors | icmp-errors |
non-ip-packets | alg-errors)*>

<!ELEMENT errored-bytes (#PCDATA)>

<!ELEMENT errored-packets (#PCDATA)>

<!ELEMENT errored-packets-http-transaction-in-error (#PCDATA)>

<!ELEMENT errored-packets-tcp-malformed (#PCDATA)>

<!ELEMENT errored-packets-wap-invalid-transaction (#PCDATA)>

<!ELEMENT errored-packets-wap-transaction-in-error (#PCDATA)>

<!ELEMENT estimated-moscq (#PCDATA)>

<!ELEMENT estimated-moslq (#PCDATA)>

<!ELEMENT existing-flow-accepts (#PCDATA)>

<!ELEMENT existing-flow-counters (existing-flow-accepts | existing-flow-discards
 | existing-flow-rejects)*>

<!ELEMENT existing-flow-discards (#PCDATA)>

<!ELEMENT existing-flow-rejects (#PCDATA)>

<!ELEMENT extended-num-of-dirty-flows (#PCDATA)>

<!ELEMENT external-ip (#PCDATA)>

<!ELEMENT external-port (#PCDATA)>

<!ELEMENT external-r-factor (#PCDATA)>

<!ELEMENT fast-path (#PCDATA)>
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<!ELEMENT fast-path-encap (#PCDATA)>

<!ELEMENT fast-path-hairpinned-packets (#PCDATA)>

<!ELEMENT fast-update-filters-entry (max-terms | max-term-percentage)*>

<!ELEMENT firewall-entry (connection-status | number-of-terms |
number-of-filters)*>

<!ELEMENT five-second-usage (#PCDATA)>

<!ELEMENT flow (#PCDATA)>

<!ELEMENT flow-analysis-num-flows-sec-entry (flow-operation |
num-flows-sec-300000-plus | num-flows-sec-250000-plus | num-flows-sec-200000-plus
 | num-flows-sec-160000-plus | num-flows-sec-150000-plus | num-flows-sec-50000-plus
 | num-flows-sec-40000-50000 | num-flows-sec-30000-40000 |
num-flows-sec-20000-30000 | num-flows-sec-10000-20000 | num-flows-sec-1000-10000
 | num-flows-sec-1000-minus)*>

<!ELEMENT flow-analysis-num-flows-sec-samples-entry (num-flows-sec-samples)*>

<!ELEMENT flow-analysis-protocol-lifetime-entry (flow-lifetime-240s-plus |
udp-flow-lifetime-240s-plus | http-flow-lifetime-240s-plus |
flow-lifetime-120s-240s | udp-flow-lifetime-120s-240s | flow-lifetime-60s-120s |
 udp-flow-lifetime-60s-120s | flow-lifetime-30s-60s | udp-flow-lifetime-30s-60s
| flow-lifetime-15s-30s | udp-flow-lifetime-15s-30s | flow-lifetime-5s-15s |
udp-flow-lifetime-5s-15s | flow-lifetime-1s-5s | udp-flow-lifetime-1s-5s |
flow-lifetime-1s-minus | udp-flow-lifetime-1s-minus)*>

<!ELEMENT flow-analysis-statistics-entry (num-total-flows-active |
num-total-tcp-flows-active | num-total-udp-flows-active |
num-total-other-flows-active | num-total-predicted-flows-active |
num-created-flows-per-sec | num-deleted-flows-per-sec | peak-total-flows-active
| peak-total-tcp-flows-active | peak-total-udp-flows-active |
peak-total-other-flows-active | peak-created-flows-per-second |
peak-deleted-flows-per-second | cul-mov-avg-http-flow-lifetime | pkts-received |
 pkts-transmitted | slow-path-forward | slow-path-discard)*>

<!ELEMENT flow-analysis-statistics-pic-info (pic-name)*>

<!ELEMENT flow-byte-errored (#PCDATA)>

<!ELEMENT flow-bytes-processed (#PCDATA)>

<!ELEMENT flow-count (#PCDATA)>

<!ELEMENT flow-created (#PCDATA)>

<!ELEMENT flow-creation-failed (#PCDATA)>

<!ELEMENT flow-creation-failed-for-reverse-packet (#PCDATA)>

<!ELEMENT flow-creation-failed-retry (#PCDATA)>

<!ELEMENT flow-creation-failed-retry-for-reverse-packet (#PCDATA)>

<!ELEMENT flow-freed (#PCDATA)>

<!ELEMENT flow-freed-idle (#PCDATA)>
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<!ELEMENT flow-gate-pdr (#PCDATA)>

<!ELEMENT flow-gate-pdr-mbs (#PCDATA)>

<!ELEMENT flow-gate-sdr (#PCDATA)>

<!ELEMENT flow-gate-sdr-mbs (#PCDATA)>

<!ELEMENT flow-gate-tman-policing (#PCDATA)>

<!ELEMENT flow-icmp-bytes-errored (#PCDATA)>

<!ELEMENT flow-icmp-bytes-processed (#PCDATA)>

<!ELEMENT flow-icmp-packets-errored (#PCDATA)>

<!ELEMENT flow-icmp-packets-errored-bad-flow (#PCDATA)>

<!ELEMENT flow-icmp-packets-processed (#PCDATA)>

<!ELEMENT flow-lifetime-120s-240s (#PCDATA)>

<!ELEMENT flow-lifetime-15s-30s (#PCDATA)>

<!ELEMENT flow-lifetime-1s-5s (#PCDATA)>

<!ELEMENT flow-lifetime-1s-minus (#PCDATA)>

<!ELEMENT flow-lifetime-240s-plus (#PCDATA)>

<!ELEMENT flow-lifetime-30s-60s (#PCDATA)>

<!ELEMENT flow-lifetime-5s-15s (#PCDATA)>

<!ELEMENT flow-lifetime-60s-120s (#PCDATA)>

<!ELEMENT flow-limit-exceeded (#PCDATA)>

<!ELEMENT flow-operation (#PCDATA)>

<!ELEMENT flow-packets-errored (#PCDATA)>

<!ELEMENT flow-packets-processed (#PCDATA)>

<!ELEMENT flow-peak (#PCDATA)>

<!ELEMENT flow-replication-status (#PCDATA)>

<!ELEMENT flow-table-statistics (interface-name | flow-tables | flow | flow-peak
 | flow-tcp | flow-tcp-peak | flow-udp | flow-udp-peak | flow-created | flow-freed
 | flow-freed-idle | flow-tcp-created | flow-tcp-freed | flow-tcp-freed-idle |
flow-udp-created | flow-udp-freed | flow-udp-freed-idle | flow-packets-processed
 | flow-packets-errored | flow-bytes-processed | flow-byte-errored |
flow-tcp-packets-processed | flow-tcp-packets-errored |
flow-tcp-packets-errored-bad-flow | flow-tcp-bytes-processed |
flow-tcp-bytes-errored | flow-udp-packets-processed | flow-udp-packets-errored |
 flow-udp-packets-errored-bad-flow | flow-udp-bytes-processed |
flow-udp-bytes-errored | flow-icmp-packets-processed | flow-icmp-packets-errored
 | flow-icmp-packets-errored-bad-flow | flow-icmp-bytes-processed |
flow-icmp-bytes-errored)*>
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<!ELEMENT flow-table-statistics-information (flow-table-statistics)*>
<!ELEMENT flow-tables (#PCDATA)>
<!ELEMENT flow-tcp (#PCDATA)>
<!ELEMENT flow-tcp-bytes-errored (#PCDATA)>
<!ELEMENT flow-tcp-bytes-processed (#PCDATA)>
<!ELEMENT flow-tcp-created (#PCDATA)>
<!ELEMENT flow-tcp-freed (#PCDATA)>
<!ELEMENT flow-tcp-freed-idle (#PCDATA)>
<!ELEMENT flow-tcp-packets-errored (#PCDATA)>
<!ELEMENT flow-tcp-packets-errored-bad-flow (#PCDATA)>
<!ELEMENT flow-tcp-packets-processed (#PCDATA)>
<!ELEMENT flow-tcp-peak (#PCDATA)>
<!ELEMENT flow-udp (#PCDATA)>
<!ELEMENT flow-udp-bytes-errored (#PCDATA)>
<!ELEMENT flow-udp-bytes-processed (#PCDATA)>
<!ELEMENT flow-udp-created (#PCDATA)>
<!ELEMENT flow-udp-freed (#PCDATA)>
<!ELEMENT flow-udp-freed-idle (#PCDATA)>
<!ELEMENT flow-udp-packets-errored (#PCDATA)>
<!ELEMENT flow-udp-packets-errored-bad-flow (#PCDATA)>
<!ELEMENT flow-udp-packets-processed (#PCDATA)>
<!ELEMENT flow-udp-peak (#PCDATA)>
<!ELEMENT flowlimit-drops (#PCDATA)>
<!ELEMENT flows-created (#PCDATA)>
<!ELEMENT flows-deleted (#PCDATA)>
<!ELEMENT flows-removed (#PCDATA)>
<!ELEMENT fragment-limit-exceeded (#PCDATA)>
<!ELEMENT fragment-output (#PCDATA)>
<!ELEMENT fragment-overlap (#PCDATA)>
<!ELEMENT fragment-reassembly-timeout (#PCDATA)>
<!ELEMENT fragmentation (#PCDATA)>
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<!ELEMENT fragmenter-entries (fragmenter-entry)*>

<!ELEMENT fragmenter-entry (cpu-name | idle | timer | system | freeback | drop |
 fragmentation | reassembly)*>

<!ELEMENT free-frame (#PCDATA)>

<!ELEMENT freeback (#PCDATA)>

<!ELEMENT ftp-drop-pkts (#PCDATA)>

<!ELEMENT ftp-parse-fail-pkts (#PCDATA)>

<!ELEMENT ftp-translated-pkts (#PCDATA)>

<!ELEMENT gap-duration (#PCDATA)>

<!ELEMENT gap-loss-density (#PCDATA)>

<!ELEMENT gate-action (#PCDATA)>

<!ELEMENT gate-count (#PCDATA)>

<!ELEMENT gate-direction (#PCDATA)>

<!ELEMENT gate-dropped-packets (#PCDATA)>

<!ELEMENT gate-dscp (#PCDATA)>

<!ELEMENT gate-fractional-lost-rtp-packets (#PCDATA)>

<!ELEMENT gate-fuf-policer-drop-count (#PCDATA)>

<!ELEMENT gate-fuf-policing (#PCDATA)>

<!ELEMENT gate-fuf-statistics-information (gate-fuf-policer-drop-count)*>

<!ELEMENT gate-green-action (#PCDATA)>

<!ELEMENT gate-id (#PCDATA)>

<!ELEMENT gate-input-packets (#PCDATA)>

<!ELEMENT gate-latch (#PCDATA)>

<!ELEMENT gate-local-destination-address (#PCDATA)>

<!ELEMENT gate-local-destination-port (#PCDATA)>

<!ELEMENT gate-local-source-address (#PCDATA)>

<!ELEMENT gate-local-source-port (#PCDATA)>

<!ELEMENT gate-lost-rtp-packets (#PCDATA)>

<!ELEMENT gate-mbs (#PCDATA)>

<!ELEMENT gate-measured-rate (#PCDATA)>

<!ELEMENT gate-mirroring-correlation-number (#PCDATA)>
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<!ELEMENT gate-mirroring-direction (#PCDATA)>

<!ELEMENT gate-mirroring-state (#PCDATA)>

<!ELEMENT gate-mirroring-target-id (#PCDATA)>

<!ELEMENT gate-output-packets (#PCDATA)>

<!ELEMENT gate-pdr (#PCDATA)>

<!ELEMENT gate-red-action (#PCDATA)>

<!ELEMENT gate-remote-destination-address (#PCDATA)>

<!ELEMENT gate-remote-destination-port (#PCDATA)>

<!ELEMENT gate-remote-source-address (#PCDATA)>

<!ELEMENT gate-remote-source-port (#PCDATA)>

<!ELEMENT gate-rtcp-extended-burst-metrics-report (minimum-gap-threshold |
burst-loss-density | burst-duration | gap-loss-density | gap-duration)*>

<!ELEMENT gate-rtcp-extended-information (gate-rtcp-extended-report |
gate-rtcp-extended-burst-metrics-report)*>

<!ELEMENT gate-rtcp-extended-report (rtcp-xr-ssrc | packet-loss-concealment-type
 | network-packet-loss-rate | jitter-buffer-discard-rate | rtcp-round-trip-delay
 | end-system-delay | signal-level | noise-level | residual-echo-return-loss |
r-factor | external-r-factor | estimated-moslq | estimated-moscq)*>

<!ELEMENT gate-rtcp-information (gate-rtcp-sender-information |
gate-rtcp-receiver-information | gate-rtcp-extended-information)*>

<!ELEMENT gate-rtcp-invalid-pkts (#PCDATA)>

<!ELEMENT gate-rtcp-received-ssrc (#PCDATA)>

<!ELEMENT gate-rtcp-receiver-entry (gate-rtcp-received-ssrc |
gate-rtcp-receiver-lost-pkts | gate-rtcp-receiver-lost-pkt-fraction |
gate-rtcp-receiver-jitter)*>

<!ELEMENT gate-rtcp-receiver-information (gate-rtcp-receiver-entry)*>

<!ELEMENT gate-rtcp-receiver-jitter (#PCDATA)>

<!ELEMENT gate-rtcp-receiver-lost-pkt-fraction (#PCDATA)>

<!ELEMENT gate-rtcp-receiver-lost-pkts (#PCDATA)>

<!ELEMENT gate-rtcp-sender-information (gate-rtcp-sender-ssrc |
gate-rtcp-sender-octets | gate-rtcp-sender-pkts | gate-rtcp-invalid-pkts)*>

<!ELEMENT gate-rtcp-sender-octets (#PCDATA)>

<!ELEMENT gate-rtcp-sender-pkts (#PCDATA)>

<!ELEMENT gate-rtcp-sender-ssrc (#PCDATA)>

<!ELEMENT gate-rtcp-shadow (#PCDATA)>
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<!ELEMENT gate-sdr (#PCDATA)>

<!ELEMENT gate-service-set-id (#PCDATA)>

<!ELEMENT gate-state (#PCDATA)>

<!ELEMENT gate-tman-policing (#PCDATA)>

<!ELEMENT gate-transport (#PCDATA)>

<!ELEMENT gate-yellow-action (#PCDATA)>

<!ELEMENT gateway-collections-number (#PCDATA)>

<!ELEMENT gateway-entry (gateway-name | local-ip-address | gateway-vrf | local-port
 | platform | service-state | active-controller | replication-socket |
synchronization-state | up-time | load-status | cleanup-timeout |
maximum-concurrent-calls | inactivity-timeout-delay | inactivity-timeout-duration
 | latch-deadlock-duration | h248-timers-entry | base-root-entry |
h248-options-entry | h248-segmentation-properties-entry | h248-diffserv-entry |
h248-notification-behavior-entry | h248-application-data-inactivity-detection-entry
 | h248-event-timestamp-notification-entry | inactivity-timer-entry |
fast-update-filters-entry | controller-entry | overload-control-entry)*>

<!ELEMENT gateway-name (#PCDATA)>

<!ELEMENT gateway-vrf (#PCDATA)>

<!ELEMENT group-id (#PCDATA)>

<!ELEMENT group-is-active (#PCDATA)>

<!ELEMENT group-state (#PCDATA)>

<!ELEMENT group-timeout (#PCDATA)>

<!ELEMENT groups-active (#PCDATA)>

<!ELEMENT h248-application-data-inactivity-detection-entry
(ip-flow-stop-detection)*>

<!ELEMENT h248-diffserv-entry (dscp)*>

<!ELEMENT h248-event-timestamp-notification-entry (requested-timestamp)*>

<!ELEMENT h248-notification-behavior-entry (notification-regulation)*>

<!ELEMENT h248-options-entry (wildcard-response-service-change |
audit-observed-events-returns-history | h248-profile)*>

<!ELEMENT h248-profile (#PCDATA)>

<!ELEMENT h248-segmentation-properties-entry (sgp_name | sgp_minimum | sgp_maximum
 | sgp_default)*>

<!ELEMENT h248-timers-entry (maximum-waiting-delay | tmax-retransmission-delay |
 initial-average-ack-delay | maximum-net-propagation-delay)*>

<!ELEMENT hairpinning-counters (slow-path-hairpinned-packets |
fast-path-hairpinned-packets)*>
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<!ELEMENT hcm-stats-rule-entry (total-term-count | term-number)*>

<!ELEMENT hcm-stats-rule-information (hcm-stats-rule-entry)*>

<!ELEMENT header-examination-bytes (#PCDATA)>

<!ELEMENT header-examination-failed-configuration (#PCDATA)>

<!ELEMENT header-examination-flow (#PCDATA)>

<!ELEMENT header-examination-flow-matched (#PCDATA)>

<!ELEMENT header-examination-http-protocol-required (#PCDATA)>

<!ELEMENT header-examination-packets (#PCDATA)>

<!ELEMENT header-examination-protocol-required (#PCDATA)>

<!ELEMENT header-examination-wap-protocol-required (#PCDATA)>

<!ELEMENT header-redirect-set-name (#PCDATA)>

<!ELEMENT header-redirect-set-statistics (header-redirect-set-name | cause-roaming
 | cause-time-of-day | cause-quality-of-service | cause-volume-expired |
cause-cost-warning | cause-not-allowed | cause-unsubscribed | cause-credit-expiry
 | cause-unknown | cause-default)*>

<!ELEMENT header-redirect-set-statistics-information (interface-name | interfaces
 | header-redirect-set-statistics)*>

<!ELEMENT http-flow-lifetime-240s-plus (#PCDATA)>

<!ELEMENT http-transaction-created (#PCDATA)>

<!ELEMENT http-transaction-freed (#PCDATA)>

<!ELEMENT http-transaction-idle-freed (#PCDATA)>

<!ELEMENT http-transaction-maximum (#PCDATA)>

<!ELEMENT icmp-error-counters (icmp-length-error | icmp-error-length-error |
ping-duplicate-sequence-number | ping-mismatched-sequence-number |
icmp-error-no-matching-flow)*>

<!ELEMENT icmp-error-length-error (#PCDATA)>

<!ELEMENT icmp-error-no-matching-flow (#PCDATA)>

<!ELEMENT icmp-errors (#PCDATA)>

<!ELEMENT icmp-length-error (#PCDATA)>

<!ELEMENT icmpv4-dropped-packets (#PCDATA)>

<!ELEMENT id (#PCDATA)>

<!ELEMENT idle (#PCDATA)>

<!ELEMENT idle-timeout-count (#PCDATA)>
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<!ELEMENT ids-anomalies-count (#PCDATA)>

<!ELEMENT ids-anomaly-count (#PCDATA)>

<!ELEMENT ids-anomaly-description (#PCDATA)>

<!ELEMENT ids-anomaly-elapsed (#PCDATA)>

<!ELEMENT ids-anomaly-entry (ids-anomaly-description | ids-anomaly-count |
ids-anomaly-rate | ids-anomaly-elapsed)*>

<!ELEMENT ids-anomaly-rate (#PCDATA)>

<!ELEMENT ids-bytes-count (#PCDATA)>

<!ELEMENT ids-flow-application (#PCDATA)>

<!ELEMENT ids-flow-count (#PCDATA)>

<!ELEMENT ids-flow-destination-ip (#PCDATA)>

<!ELEMENT ids-flow-entry (ids-flow-source-ip | ids-flow-destination-ip |
ids-flow-time | ids-flow-flags | ids-flow-long-flags | ids-flow-count |
ids-flow-application | ids-bytes-count | ids-packets-count | ids-flows-count |
ids-anomalies-count | ids-anomaly-entry)*>
<!ATTLIST ids-flow-entry junos:style CDATA #IMPLIED>

<!ELEMENT ids-flow-flags (#PCDATA)>

<!ELEMENT ids-flow-long-flags (#PCDATA)>

<!ELEMENT ids-flow-source-ip (#PCDATA)>

<!ELEMENT ids-flow-table (ids-flow-entry)*>
<!ATTLIST ids-flow-table heading CDATA #IMPLIED>

<!ELEMENT ids-flow-time (#PCDATA)>

<!ELEMENT ids-flows-count (#PCDATA)>

<!ELEMENT ids-packets-count (#PCDATA)>

<!ELEMENT ids-per-service-set-flow-table (service-set-name | interface-name |
ids-sort-order | ids-flow-table)*>

<!ELEMENT ids-show-summary (interface-name | ids-total-entries |
ids-total-failed-insertions | ids-total-events)*>

<!ELEMENT ids-sort-order (#PCDATA)>

<!ELEMENT ids-total-entries (#PCDATA)>

<!ELEMENT ids-total-events (#PCDATA)>

<!ELEMENT ids-total-failed-insertions (#PCDATA)>

<!ELEMENT illegal-destination-address (#PCDATA)>

<!ELEMENT illegal-fragment-length (#PCDATA)>

<!ELEMENT illegal-ip-protocol (#PCDATA)>
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<!ELEMENT illegal-sequence-number-flags (#PCDATA)>

<!ELEMENT illegal-source-address (#PCDATA)>

<!ELEMENT inactivity-timeout-delay (#PCDATA)>

<!ELEMENT inactivity-timeout-duration (#PCDATA)>

<!ELEMENT inactivity-timer-entry (detect | maximum-inactivity-time)*>

<!ELEMENT info-invalid (#PCDATA)>

<!ELEMENT info-valid (#PCDATA)>

<!ELEMENT initial-average-ack-delay (#PCDATA)>

<!ELEMENT inline-nat-statistics-entry (srv-pic-name | si-nat-slow-path-pkts-rcvd
 | si-nat-slow-path-pkts-dropped)*>

<!ELEMENT inline-nat-statistics-information (inline-nat-statistics-entry)*>
<!ATTLIST inline-nat-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT inline-service-sw-statistics-information
(inline-sw-6rd-statistics-entry)*>
<!ATTLIST inline-service-sw-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT inline-sw-6rd-statistics-entry (srv-pic-name | sc-icmpv4-echo-reqs |
sc-icmpv4-echo-resp | sc-icmpv4-drops | sc-ipv4-frag-drops | sc-udp-pkts-rcvd |
sc-icmpv4-errors-sent | sc-icmpv4-errors-send-errors | sc-out-of-memory-errors |
 sc-otherv4-drops | v6rd-decap-pkts | v6rd-encap-pkts | v6rd-decap-errors |
v6rd-encap-errors | v6rd-v4-mtu-errors | v6rd-inactive-sc-errors | v6rd-decap-bytes
 | v6rd-encap-bytes | v6rd-decap-errors-bytes | v6rd-encap-errors-bytes |
v6rd-v4-mtu-errors-bytes | v6rd-inactive-sc-errors-bytes)*>

<!ELEMENT input (#PCDATA)>

<!ELEMENT input-1 (#PCDATA)>

<!ELEMENT input-2 (#PCDATA)>

<!ELEMENT input-fragments (#PCDATA)>

<!ELEMENT input-lfi (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interfaces (#PCDATA)>

<!ELEMENT internal-ip (#PCDATA)>

<!ELEMENT internal-port (#PCDATA)>

<!ELEMENT invite-new (#PCDATA)>

<!ELEMENT invite-retransmits (#PCDATA)>

<!ELEMENT ip-error-counters (ip-length-error | ip-header-length-error | long-packet
 | illegal-source-address | illegal-destination-address | ttl-zero |
illegal-ip-protocol | land-attack | not-ip-packet | non-ipv4 | bad-checksum |
illegal-fragment-length | fragment-overlap | fragment-reassembly-timeout |
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fragment-limit-exceeded | unknown)*>

<!ELEMENT ip-errors (#PCDATA)>

<!ELEMENT ip-flow-stop-detection (#PCDATA)>

<!ELEMENT ip-header-length-error (#PCDATA)>

<!ELEMENT ip-length-error (#PCDATA)>

<!ELEMENT ip-option (#PCDATA)>

<!ELEMENT ipv4-client-fragments (#PCDATA)>

<!ELEMENT ipv4-server-first-fragments (#PCDATA)>

<!ELEMENT ipv4-server-last-fragments (#PCDATA)>

<!ELEMENT ipv4-server-more-fragments (#PCDATA)>

<!ELEMENT ipv6-fragmentation-error (#PCDATA)>

<!ELEMENT ipv6-packets-fragmented (#PCDATA)>

<!ELEMENT jitter-buffer-discard-rate (#PCDATA)>

<!ELEMENT l2tp-calling-number-avp (#PCDATA)>

<!ELEMENT l2tp-control-memory-bytes (#PCDATA)>

<!ELEMENT l2tp-control-rx-bytes (#PCDATA)>

<!ELEMENT l2tp-control-rx-packets (#PCDATA)>

<!ELEMENT l2tp-control-tx-bytes (#PCDATA)>

<!ELEMENT l2tp-control-tx-packets (#PCDATA)>

<!ELEMENT l2tp-cos-policer-statistics-result (l2tp-session-username |
l2tp-session-sessionid | l2tp-session-physical-interface | l2tp-session-type)*>
<!ATTLIST l2tp-cos-policer-statistics-result junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-create-time (#PCDATA)>

<!ELEMENT l2tp-data-memory-bytes (#PCDATA)>

<!ELEMENT l2tp-data-rx-bytes (#PCDATA)>

<!ELEMENT l2tp-data-rx-packets (#PCDATA)>

<!ELEMENT l2tp-data-tx-bytes (#PCDATA)>

<!ELEMENT l2tp-data-tx-packets (#PCDATA)>

<!ELEMENT l2tp-destination-clear-entry (l2tp-destination-local-name)*>
<!ATTLIST l2tp-destination-clear-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-destination-entry (l2tp-destination-local-name |
l2tp-destination-remote-ip | l2tp-destination-state | l2tp-destination-tunnel-count
 | l2tp-destination-tunnel-total | l2tp-destination-tunnel-active |
l2tp-destination-tunnel-failed | l2tp-destination-session-count |
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l2tp-destination-session-total | l2tp-destination-session-active |
l2tp-destination-session-failed | l2tp-destination-local-ip |
l2tp-destination-maximum-tunnels | l2tp-destination-transport |
l2tp-destination-router-instance | l2tp-destination-logical-system |
l2tp-control-tx-packets | l2tp-control-rx-packets | l2tp-data-tx-packets |
l2tp-data-rx-packets | l2tp-control-tx-bytes | l2tp-control-rx-bytes |
l2tp-data-tx-bytes | l2tp-data-rx-bytes | l2tp-error-tx-packets |
l2tp-error-rx-packets | lcp-echo-req-tx-packets | lcp-echo-req-rx-packets |
lcp-echo-rep-tx-packets | lcp-echo-rep-rx-packets | lcp-echo-req-timeout |
lcp-tx-echo-req-error | lcp-tx-echo-rep-error | lcp-rx-echo-req-error |
lcp-rx-echo-rep-error | l2tp-destination-lockout-state)*>
<!ATTLIST l2tp-destination-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-destination-local-ip (#PCDATA)>

<!ELEMENT l2tp-destination-local-name (#PCDATA)>

<!ELEMENT l2tp-destination-lockout-state (#PCDATA)>

<!ELEMENT l2tp-destination-logical-system (#PCDATA)>

<!ELEMENT l2tp-destination-maximum-tunnels (#PCDATA)>

<!ELEMENT l2tp-destination-remote-ip (#PCDATA)>

<!ELEMENT l2tp-destination-router-instance (#PCDATA)>

<!ELEMENT l2tp-destination-session-active (#PCDATA)>

<!ELEMENT l2tp-destination-session-count (#PCDATA)>

<!ELEMENT l2tp-destination-session-failed (#PCDATA)>

<!ELEMENT l2tp-destination-session-total (#PCDATA)>

<!ELEMENT l2tp-destination-state (#PCDATA)>

<!ELEMENT l2tp-destination-table (l2tp-destination-entry)*>
<!ATTLIST l2tp-destination-table heading CDATA #IMPLIED>

<!ELEMENT l2tp-destination-transport (#PCDATA)>

<!ELEMENT l2tp-destination-tunnel-active (#PCDATA)>

<!ELEMENT l2tp-destination-tunnel-count (#PCDATA)>

<!ELEMENT l2tp-destination-tunnel-failed (#PCDATA)>

<!ELEMENT l2tp-destination-tunnel-total (#PCDATA)>

<!ELEMENT l2tp-destinations (#PCDATA)>

<!ELEMENT l2tp-destruct-timeout (#PCDATA)>

<!ELEMENT l2tp-error-rx-packets (#PCDATA)>

<!ELEMENT l2tp-error-tx-packets (#PCDATA)>

<!ELEMENT l2tp-failover-preference-level (#PCDATA)>

<!ELEMENT l2tp-failover-protocol (#PCDATA)>
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<!ELEMENT l2tp-idle-time (#PCDATA)>

<!ELEMENT l2tp-interface-control-rx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-control-tx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-data-rx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-data-tx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-error-rx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-error-tx-packets (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-echo-requests-recieved (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-echo-requests-transmitted (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-echo-responses-recieved (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-echo-responses-transmitted (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-echo-timedout (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-rx-echo-request-errors (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-rx-echo-response-errors (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-tx-echo-request-errors (#PCDATA)>

<!ELEMENT l2tp-interface-lcp-tx-echo-response-errors (#PCDATA)>

<!ELEMENT l2tp-interface-name (#PCDATA)>

<!ELEMENT l2tp-iq2-cos-statistics-result (l2tp-session-cos-queue-number |
l2tp-session-cos-queue-counters-queued-packets |
l2tp-session-cos-queue-counters-queued-bytes |
l2tp-session-cos-queue-counters-queued-packets-rate |
l2tp-session-cos-queue-counters-queued-bits-rate |
l2tp-session-cos-queue-counters-trans-packets |
l2tp-session-cos-queue-counters-trans-bytes |
l2tp-session-cos-queue-counters-trans-packets-rate |
l2tp-session-cos-queue-counters-trans-bits-rate |
l2tp-session-cos-queue-counters-rl-packets |
l2tp-session-cos-queue-counters-rl-bytes |
l2tp-session-cos-queue-counters-rl-packets-rate |
l2tp-session-cos-queue-counters-rl-bits-rate |
l2tp-session-cos-queue-counters-red-packets |
l2tp-session-cos-queue-counters-red-bytes |
l2tp-session-cos-queue-counters-red-packets-rate |
l2tp-session-cos-queue-counters-red-bits-rate | queue)*>

<!ELEMENT l2tp-iq2e-cos-statistics-result (l2tp-session-cos-queue-number |
l2tp-session-cos-queue-counters-queued-packets |
l2tp-session-cos-queue-counters-queued-bytes |
l2tp-session-cos-queue-counters-queued-packets-rate |
l2tp-session-cos-queue-counters-queued-bits-rate |
l2tp-session-cos-queue-counters-trans-packets |
l2tp-session-cos-queue-counters-trans-bytes |
l2tp-session-cos-queue-counters-trans-packets-rate |
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l2tp-session-cos-queue-counters-trans-bits-rate |
l2tp-session-cos-queue-counters-red-packets-low |
l2tp-session-cos-queue-counters-red-bytes-low |
l2tp-session-cos-queue-counters-red-packets-rate-low |
l2tp-session-cos-queue-counters-red-bits-rate-low |
l2tp-session-cos-queue-counters-red-packets-medium-low |
l2tp-session-cos-queue-counters-red-bytes-medium-low |
l2tp-session-cos-queue-counters-red-packets-rate-medium-low |
l2tp-session-cos-queue-counters-red-bits-rate-medium-low |
l2tp-session-cos-queue-counters-red-packets-medium-high |
l2tp-session-cos-queue-counters-red-bytes-medium-high |
l2tp-session-cos-queue-counters-red-packets-rate-medium-high |
l2tp-session-cos-queue-counters-red-bits-rate-medium-high |
l2tp-session-cos-queue-counters-red-packets-high |
l2tp-session-cos-queue-counters-red-bytes-high |
l2tp-session-cos-queue-counters-red-packets-rate-high |
l2tp-session-cos-queue-counters-red-bits-rate-high |
l2tp-session-cos-queue-counters-rl-packets |
l2tp-session-cos-queue-counters-rl-bytes |
l2tp-session-cos-queue-counters-rl-packets-rate |
l2tp-session-cos-queue-counters-rl-bits-rate | queue)*>

<!ELEMENT l2tp-lac-summary-table (#PCDATA)>

<!ELEMENT l2tp-lcp-echo-requests-recieved (#PCDATA)>

<!ELEMENT l2tp-lcp-echo-requests-transmitted (#PCDATA)>

<!ELEMENT l2tp-lcp-echo-responses-recieved (#PCDATA)>

<!ELEMENT l2tp-lcp-echo-responses-transmitted (#PCDATA)>

<!ELEMENT l2tp-lcp-echo-timedout (#PCDATA)>

<!ELEMENT l2tp-lcp-rx-echo-request-errors (#PCDATA)>

<!ELEMENT l2tp-lcp-rx-echo-response-errors (#PCDATA)>

<!ELEMENT l2tp-lcp-tx-echo-request-errors (#PCDATA)>

<!ELEMENT l2tp-lcp-tx-echo-response-errors (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-droptime (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-endpoint (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-id (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-links (l2tp-multilink-bundle-links-number |
l2tp-multilink-bundle-links-ml-seq | l2tp-multilink-bundle-links-ml-qlen |
l2tp-multilink-bundle-links-ml-mru | l2tp-multilink-bundle-links-ml-encap |
l2tp-multilink-bundle-links-ml-context)*>

<!ELEMENT l2tp-multilink-bundle-links-ml-context (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-links-ml-encap (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-links-ml-mru (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-links-ml-qlen (#PCDATA)>
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<!ELEMENT l2tp-multilink-bundle-links-ml-seq (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-links-number (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-maxfrag (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-maxqlen (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-minfrag (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-minmru (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-mrru (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-mrru-input (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-mrru-output (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-mseq (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-num-links (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rx-copyfrag (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rx-frags (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rx-maxdiff (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rx-packets (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rx-reass (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-rxseq (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-tx-frags (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-tx-packets (#PCDATA)>

<!ELEMENT l2tp-multilink-bundle-txseq (#PCDATA)>

<!ELEMENT l2tp-multilink-clear-entry (l2tp-multilink-bundle-id)*>
<!ATTLIST l2tp-multilink-clear-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-multilink-entry (l2tp-multilink-bundle-id |
l2tp-multilink-bundle-endpoint | l2tp-multilink-bundle-num-links |
l2tp-multilink-bundle-mrru-input | l2tp-multilink-bundle-mrru-output |
l2tp-statistics-since | l2tp-control-tx-packets | l2tp-control-rx-packets |
l2tp-data-tx-packets | l2tp-data-rx-packets | l2tp-control-tx-bytes |
l2tp-control-rx-bytes | l2tp-data-tx-bytes | l2tp-data-rx-bytes |
l2tp-error-tx-packets | l2tp-error-rx-packets | lcp-echo-req-tx-packets |
lcp-echo-req-rx-packets | lcp-echo-rep-tx-packets | lcp-echo-rep-rx-packets |
lcp-echo-req-timeout | lcp-tx-echo-req-error | lcp-tx-echo-rep-error |
lcp-rx-echo-req-error | lcp-rx-echo-rep-error | l2tp-multilink-bundle-mrru |
l2tp-multilink-bundle-droptime | l2tp-multilink-bundle-maxfrag |
l2tp-multilink-bundle-minfrag | l2tp-multilink-bundle-minmru |
l2tp-multilink-bundle-maxqlen | l2tp-multilink-bundle-tx-packets |
l2tp-multilink-bundle-tx-frags | l2tp-multilink-bundle-txseq |
l2tp-multilink-bundle-rx-packets | l2tp-multilink-bundle-rx-frags |
l2tp-multilink-bundle-rxseq | l2tp-multilink-bundle-mseq |
l2tp-multilink-bundle-rx-maxdiff | l2tp-multilink-bundle-rx-reass |
l2tp-multilink-bundle-rx-copyfrag | l2tp-multilink-bundle-links |
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l2tp-multilink-links)*>
<!ATTLIST l2tp-multilink-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-multilink-links (l2tp-session-entry)*>

<!ELEMENT l2tp-per-tunnel-group-tunnel-table (tunnel-group-name | interface-name
 | l2tp-tunnel-table)*>

<!ELEMENT l2tp-per-tunnel-session-table (tunnel-group-name | interface-name |
l2tp-tunnel-local-id | l2tp-session-table)*>
<!ATTLIST l2tp-per-tunnel-session-table junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-per-tunnel-user-table (#PCDATA)>

<!ELEMENT l2tp-policer-statistics-result (l2tp-session-policer-trans-packets |
l2tp-session-policer-trans-packets-rate | l2tp-session-policer-trans-bytes |
l2tp-session-policer-trans-bits-rate | l2tp-session-policer-drop-packets |
l2tp-session-policer-drop-packets-rate | l2tp-session-policer-drop-bytes |
l2tp-session-policer-drop-bits-rate)*>

<!ELEMENT l2tp-session-authentication (#PCDATA)>

<!ELEMENT l2tp-session-bearer-type (#PCDATA)>

<!ELEMENT l2tp-session-bundle-id (#PCDATA)>

<!ELEMENT l2tp-session-call-serial-number (#PCDATA)>

<!ELEMENT l2tp-session-cell-overhead (#PCDATA)>

<!ELEMENT l2tp-session-clear-entry (l2tp-session-local-id)*>
<!ATTLIST l2tp-session-clear-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-session-cos-queue-counters-queued-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-queued-bytes (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-queued-packets (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-queued-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bits-rate-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bits-rate-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bits-rate-medium-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bits-rate-medium-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bytes (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bytes-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bytes-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bytes-medium-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-bytes-medium-low (#PCDATA)>
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<!ELEMENT l2tp-session-cos-queue-counters-red-packets (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-medium-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-medium-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-rate-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-rate-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-rate-medium-high (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-red-packets-rate-medium-low (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-rl-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-rl-bytes (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-rl-packets (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-rl-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-trans-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-trans-bytes (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-trans-packets (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-counters-trans-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-cos-queue-number (#PCDATA)>

<!ELEMENT l2tp-session-create-time (#PCDATA)>

<!ELEMENT l2tp-session-encapsulation-overhead (#PCDATA)>

<!ELEMENT l2tp-session-entry (l2tp-session-local-id | l2tp-session-remote-id |
l2tp-session-remote-ip | l2tp-session-local-ip | l2tp-session-state |
l2tp-session-bundle-id | l2tp-session-user-name | l2tp-session-own-ip |
l2tp-session-peer-ip | l2tp-session-local-name | l2tp-session-remote-name |
l2tp-session-mode | l2tp-session-local-mru | l2tp-session-remote-mru |
l2tp-session-tx-speed | l2tp-session-rx-speed | l2tp-session-bearer-type |
l2tp-session-framing-type | l2tp-session-lcp-renegotiation |
l2tp-session-authentication | l2tp-session-interface-id |
l2tp-session-interface-unit | l2tp-session-call-serial-number |
l2tp-session-policer-bandwidth | l2tp-session-policer-exclude-bandwidth |
l2tp-session-policer-burstsize | l2tp-session-firewall-filter |
l2tp-session-encapsulation-overhead | l2tp-session-cell-overhead |
l2tp-session-create-time | l2tp-session-interface-name | l2tp-session-tos-reflect
 | l2tp-statistics-since | l2tp-control-tx-packets | l2tp-control-rx-packets |
l2tp-data-tx-packets | l2tp-data-rx-packets | l2tp-control-tx-bytes |
l2tp-control-rx-bytes | l2tp-data-tx-bytes | l2tp-data-rx-bytes |
l2tp-error-tx-packets | l2tp-error-rx-packets | lcp-echo-req-tx-packets |
lcp-echo-req-rx-packets | lcp-echo-rep-tx-packets | lcp-echo-rep-rx-packets |
lcp-echo-req-timeout | lcp-tx-echo-req-error | lcp-tx-echo-rep-error |
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lcp-rx-echo-req-error | lcp-rx-echo-rep-error | l2tp-create-time | l2tp-up-time
| l2tp-idle-time)*>
<!ATTLIST l2tp-session-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-session-firewall-filter (#PCDATA)>

<!ELEMENT l2tp-session-framing-type (#PCDATA)>

<!ELEMENT l2tp-session-interface-id (#PCDATA)>

<!ELEMENT l2tp-session-interface-name (#PCDATA)>

<!ELEMENT l2tp-session-interface-unit (#PCDATA)>

<!ELEMENT l2tp-session-lcp-renegotiation (#PCDATA)>

<!ELEMENT l2tp-session-local-id (#PCDATA)>

<!ELEMENT l2tp-session-local-ip (#PCDATA)>

<!ELEMENT l2tp-session-local-mru (#PCDATA)>

<!ELEMENT l2tp-session-local-name (#PCDATA)>

<!ELEMENT l2tp-session-mode (#PCDATA)>

<!ELEMENT l2tp-session-own-ip (#PCDATA)>

<!ELEMENT l2tp-session-peer-ip (#PCDATA)>

<!ELEMENT l2tp-session-physical-interface (#PCDATA)>

<!ELEMENT l2tp-session-policer-bandwidth (#PCDATA)>

<!ELEMENT l2tp-session-policer-burstsize (#PCDATA)>

<!ELEMENT l2tp-session-policer-drop-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-policer-drop-bytes (#PCDATA)>

<!ELEMENT l2tp-session-policer-drop-packets (#PCDATA)>

<!ELEMENT l2tp-session-policer-drop-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-policer-exclude-bandwidth (#PCDATA)>

<!ELEMENT l2tp-session-policer-trans-bits-rate (#PCDATA)>

<!ELEMENT l2tp-session-policer-trans-bytes (#PCDATA)>

<!ELEMENT l2tp-session-policer-trans-packets (#PCDATA)>

<!ELEMENT l2tp-session-policer-trans-packets-rate (#PCDATA)>

<!ELEMENT l2tp-session-remote-id (#PCDATA)>

<!ELEMENT l2tp-session-remote-ip (#PCDATA)>

<!ELEMENT l2tp-session-remote-mru (#PCDATA)>

<!ELEMENT l2tp-session-remote-name (#PCDATA)>
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<!ELEMENT l2tp-session-rx-speed (#PCDATA)>

<!ELEMENT l2tp-session-sessionid (#PCDATA)>

<!ELEMENT l2tp-session-state (#PCDATA)>

<!ELEMENT l2tp-session-table (l2tp-session-entry)*>
<!ATTLIST l2tp-session-table heading CDATA #IMPLIED>

<!ELEMENT l2tp-session-tos-reflect (#PCDATA)>

<!ELEMENT l2tp-session-tx-speed (#PCDATA)>

<!ELEMENT l2tp-session-type (#PCDATA)>

<!ELEMENT l2tp-session-user-name (#PCDATA)>

<!ELEMENT l2tp-session-username (#PCDATA)>

<!ELEMENT l2tp-sessions (#PCDATA)>

<!ELEMENT l2tp-statistics-since (#PCDATA)>

<!ELEMENT l2tp-summary-table (l2tp-destinations | l2tp-tunnels | l2tp-sessions |
 l2tp-error-tx-packets | l2tp-error-rx-packets | l2tp-control-tx-packets |
l2tp-control-rx-packets | l2tp-lcp-echo-requests-transmitted |
l2tp-lcp-echo-requests-recieved | l2tp-lcp-echo-responses-transmitted |
l2tp-lcp-echo-responses-recieved | l2tp-lcp-echo-timedout |
l2tp-lcp-tx-echo-request-errors | l2tp-lcp-tx-echo-response-errors |
l2tp-lcp-rx-echo-request-errors | l2tp-lcp-rx-echo-response-errors |
l2tp-interface-lcp-echo-requests-transmitted |
l2tp-interface-lcp-echo-requests-recieved |
l2tp-interface-lcp-echo-responses-transmitted |
l2tp-interface-lcp-echo-responses-recieved | l2tp-interface-lcp-echo-timedout |
l2tp-interface-lcp-tx-echo-request-errors |
l2tp-interface-lcp-tx-echo-response-errors |
l2tp-interface-lcp-rx-echo-request-errors |
l2tp-interface-lcp-rx-echo-response-errors | l2tp-interface-error-tx-packets |
l2tp-interface-error-rx-packets | l2tp-interface-control-tx-packets |
l2tp-interface-control-rx-packets | l2tp-control-memory-bytes |
l2tp-data-tx-packets | l2tp-data-rx-packets | l2tp-interface-data-tx-packets |
l2tp-interface-data-rx-packets | l2tp-data-memory-bytes | l2tp-interface-name |
l2tp-failover-preference-level | l2tp-weighted-load-balancing |
l2tp-tunnel-authentication-challenge | l2tp-calling-number-avp |
l2tp-failover-protocol | l2tp-tx-connect-speed-method |
l2tp-tunnel-assignment-id-format | l2tp-tunnel-retranmission-count-established |
 l2tp-tunnel-retranmission-count-not-established | l2tp-tunnel-idle-timeout |
l2tp-destruct-timeout)*>
<!ATTLIST l2tp-summary-table junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-tunnel-assignment-id-format (#PCDATA)>

<!ELEMENT l2tp-tunnel-authentication-challenge (#PCDATA)>

<!ELEMENT l2tp-tunnel-clear-entry (l2tp-tunnel-local-id)*>
<!ATTLIST l2tp-tunnel-clear-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-tunnel-entry (l2tp-tunnel-local-id | l2tp-tunnel-name |
l2tp-tunnel-remote-id | l2tp-tunnel-remote-ip | l2tp-tunnel-state |
l2tp-tunnel-session-count | l2tp-tunnel-local-ip | l2tp-tunnel-remote-name |
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l2tp-tunnel-local-name | l2tp-tunnel-maximum-sessions | l2tp-tunnel-window-size
| l2tp-tunnel-hello-interval | l2tp-tunnel-tos-reflect | l2tp-tunnel-interface-name
 | l2tp-tunnel-group-name | l2tp-tunnel-prm | l2tp-statistics-since |
l2tp-control-tx-packets | l2tp-control-rx-packets | l2tp-data-tx-packets |
l2tp-data-rx-packets | l2tp-control-tx-bytes | l2tp-control-rx-bytes |
l2tp-data-tx-bytes | l2tp-data-rx-bytes | l2tp-error-tx-packets |
l2tp-error-rx-packets | lcp-echo-req-tx-packets | lcp-echo-req-rx-packets |
lcp-echo-rep-tx-packets | lcp-echo-rep-rx-packets | lcp-echo-req-timeout |
lcp-tx-echo-req-error | lcp-tx-echo-rep-error | lcp-rx-echo-req-error |
lcp-rx-echo-rep-error | l2tp-create-time | l2tp-up-time | l2tp-idle-time)*>
<!ATTLIST l2tp-tunnel-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2tp-tunnel-group-name (#PCDATA)>

<!ELEMENT l2tp-tunnel-hello-interval (#PCDATA)>

<!ELEMENT l2tp-tunnel-idle-timeout (#PCDATA)>

<!ELEMENT l2tp-tunnel-interface-name (#PCDATA)>

<!ELEMENT l2tp-tunnel-local-id (#PCDATA)>

<!ELEMENT l2tp-tunnel-local-ip (#PCDATA)>

<!ELEMENT l2tp-tunnel-local-name (#PCDATA)>

<!ELEMENT l2tp-tunnel-maximum-sessions (#PCDATA)>

<!ELEMENT l2tp-tunnel-name (#PCDATA)>

<!ELEMENT l2tp-tunnel-prm (#PCDATA)>

<!ELEMENT l2tp-tunnel-remote-id (#PCDATA)>

<!ELEMENT l2tp-tunnel-remote-ip (#PCDATA)>

<!ELEMENT l2tp-tunnel-remote-name (#PCDATA)>

<!ELEMENT l2tp-tunnel-retranmission-count-established (#PCDATA)>

<!ELEMENT l2tp-tunnel-retranmission-count-not-established (#PCDATA)>

<!ELEMENT l2tp-tunnel-session-count (#PCDATA)>

<!ELEMENT l2tp-tunnel-state (#PCDATA)>

<!ELEMENT l2tp-tunnel-table (l2tp-tunnel-entry)*>
<!ATTLIST l2tp-tunnel-table heading CDATA #IMPLIED>

<!ELEMENT l2tp-tunnel-test-result-entry (tunnel-name | tunnel-peer |
tunnel-logical-system | tunnel-routing-instance | tunnel-status)*>

<!ELEMENT l2tp-tunnel-test-result-table (l2tp-tunnel-test-result-entry)*>

<!ELEMENT l2tp-tunnel-test-subscriber-information (subscriber-name |
subscriber-authentication-status | subscriber-tunneling-status)*>

<!ELEMENT l2tp-tunnel-tos-reflect (#PCDATA)>

<!ELEMENT l2tp-tunnel-window-size (#PCDATA)>
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<!ELEMENT l2tp-tunnels (#PCDATA)>

<!ELEMENT l2tp-tx-connect-speed-method (#PCDATA)>

<!ELEMENT l2tp-up-time (#PCDATA)>

<!ELEMENT l2tp-weighted-load-balancing (#PCDATA)>

<!ELEMENT land-attack (#PCDATA)>

<!ELEMENT last-change (#PCDATA)>

<!ELEMENT last-detected-event (#PCDATA)>

<!ELEMENT last-detected-event-time (#PCDATA)>

<!ELEMENT last-reset-time (#PCDATA)>

<!ELEMENT latch-deadlock-duration (#PCDATA)>

<!ELEMENT lcp-echo-rep-rx-packets (#PCDATA)>

<!ELEMENT lcp-echo-rep-tx-packets (#PCDATA)>

<!ELEMENT lcp-echo-req-rx-packets (#PCDATA)>

<!ELEMENT lcp-echo-req-timeout (#PCDATA)>

<!ELEMENT lcp-echo-req-tx-packets (#PCDATA)>

<!ELEMENT lcp-rx-echo-rep-error (#PCDATA)>

<!ELEMENT lcp-rx-echo-req-error (#PCDATA)>

<!ELEMENT lcp-tx-echo-rep-error (#PCDATA)>

<!ELEMENT lcp-tx-echo-req-error (#PCDATA)>

<!ELEMENT load-balancer-entries (load-balancer-entry)*>

<!ELEMENT load-balancer-entry (cpu-name | idle | system | output | freeback |
input-1 | input-2)*>

<!ELEMENT load-status (#PCDATA)>

<!ELEMENT local-ip-address (#PCDATA)>

<!ELEMENT local-port (#PCDATA)>

<!ELEMENT long-packet (#PCDATA)>

<!ELEMENT loss-of-service-count (#PCDATA)>

<!ELEMENT lsqinfo-cpu-usage-information (cpu-role-name | one-second-usage |
five-second-usage | fragmenter-entries | quality-of-service-entries |
sequencer-entries | load-balancer-entries)*>
<!ATTLIST lsqinfo-cpu-usage-information junos:style CDATA #IMPLIED>

<!ELEMENT max-blocks-per-address (#PCDATA)>

<!ELEMENT max-port-blocks-used (#PCDATA)>
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<!ELEMENT max-term-percentage (#PCDATA)>

<!ELEMENT max-terms (#PCDATA)>

<!ELEMENT maximum (#PCDATA)>

<!ELEMENT maximum-concurrent-calls (#PCDATA)>

<!ELEMENT maximum-inactivity-time (minimum | maximum | default)*>

<!ELEMENT maximum-net-propagation-delay (#PCDATA)>

<!ELEMENT maximum-waiting-delay (#PCDATA)>

<!ELEMENT media-card-name (#PCDATA)>

<!ELEMENT media-handler-name (#PCDATA)>

<!ELEMENT media-service-entry (media-service-name | media-service-nat-pool)*>

<!ELEMENT media-service-name (#PCDATA)>

<!ELEMENT media-service-nat-pool (#PCDATA)>

<!ELEMENT media-service-ref-entry (media-service-ref-name)*>

<!ELEMENT media-service-ref-name (#PCDATA)>

<!ELEMENT memlimit-drops (#PCDATA)>

<!ELEMENT memory-pool-chunk-size (#PCDATA)>

<!ELEMENT memory-pool-chunk-used (#PCDATA)>

<!ELEMENT memory-pool-chunks-num (#PCDATA)>

<!ELEMENT memory-pool-free-chunks-num (#PCDATA)>

<!ELEMENT memory-pool-name (#PCDATA)>

<!ELEMENT message-counters (register-new | invite-new | reinvites |
invite-retransmits | response-provisional | response-invite-ok |
response-non-invite-ok | response-redir | response-request-failure |
response-server-failure | response-global-failure | response-invalid |
response-retransmits | ack-valid | ack-invalid | ack-retransmits | bye-valid |
bye-invalid | cancel-valid | cancel-invalid | subscribe-valid | subscribe-invalid
 | notify-valid | notify-invalid | options-valid | options-invalid | info-valid
| info-invalid | update-valid | update-invalid | refer-valid | refer-invalid)*>

<!ELEMENT messages-received (#PCDATA)>

<!ELEMENT messages-sent (#PCDATA)>

<!ELEMENT minimum (#PCDATA)>

<!ELEMENT minimum-gap-threshold (#PCDATA)>

<!ELEMENT msp-alg-conv-all-entry (client-name | client-state | num-groups |
parent-sess-state | parent-sess-id | parent-flow-protocol | parent-fflow-src-ip
| parent-fflow-dst-ip | parent-fflow-src-port | parent-fflow-dst-port |
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parent-rflow-src-ip | parent-rflow-dst-ip | parent-rflow-src-port |
parent-rflow-dst-port | child-sess-id | child-flow-protocol | child-fflow-src-ip
 | child-fflow-dst-ip | child-fflow-src-port | child-fflow-dst-port |
child-rflow-src-ip | child-rflow-dst-ip | child-rflow-src-port |
child-rflow-dst-port)*>

<!ELEMENT msp-alg-conv-all-extensive-entry (client-name | client-state | num-groups
 | group-id | group-state | parent-sess-state | parent-sess-id |
parent-flow-protocol | parent-fflow-src-ip | parent-fflow-dst-ip |
parent-fflow-src-port | parent-fflow-dst-port | parent-rflow-src-ip |
parent-rflow-dst-ip | parent-rflow-src-port | parent-rflow-dst-port | num-resources
 | resource-id | resource-state | num-sessions | child-sess-id |
child-flow-protocol | child-fflow-src-ip | child-fflow-dst-ip |
child-fflow-src-port | child-fflow-dst-port | child-rflow-src-ip |
child-rflow-dst-ip | child-rflow-src-port | child-rflow-dst-port)*>

<!ELEMENT msp-alg-conv-group-num-entry (group-id | group-is-active | client-name
 | parent-session-id | group-timeout | num-resources | resource)*>

<!ELEMENT msp-alg-conv-groups-entry (group-id | group-is-active | client-name |
num-resources | resource-id)*>

<!ELEMENT msp-alg-conv-resource-num-entry (resource-id | resource-is-active |
num-sessions | session-ids | num-holes | src-ip-low | src-ip-high | src-port-low
 | src-port-high | dst-ip-low | dst-ip-high | dst-port-low | dst-port-high |
translated-src-ip | translated-src-port | translated-dst-ip | translated-dst-port
 | ref-count | proto)*>

<!ELEMENT msp-alg-conv-resources-entry (resource-id | resource-is-active | group-id
 | client-name | num-sessions | session-id)*>

<!ELEMENT msp-alg-conv-summary-entry (clients-active | groups-active |
resources-active | sessions-active)*>

<!ELEMENT msp-alg-dce-rpc-entry (dce-rpc-wrong-header | dce-rpc-non-epm3 |
dce-rpc-type-mismatch | dce-rpc-id-mismatch | dce-rpc-call-mismatch |
dce-rpc-fragment-pkts | dce-rpc-queue-pkts | dce-rpc-drop-pkts |
dce-rpc-released-pkts)*>

<!ELEMENT msp-alg-dce-rpc-portmap-entry (dce-rpc-lookup-request |
dce-rpc-map-request | dce-rpc-lookup-reply | dce-rpc-map-reply |
dce-rpc-fail-reply)*>

<!ELEMENT msp-alg-dns-entry (dns-invalid-pkts | dns-reply-pkts |
dns-oversize-pkts)*>

<!ELEMENT msp-alg-ftp-entry (ftp-drop-pkts | ftp-parse-fail-pkts |
ftp-translated-pkts)*>

<!ELEMENT msp-alg-pptp-entry (pptp-objects-active | pptp-objects-total |
pptp-objects-error | pptp-group-active | pptp-group-total | pptp-group-error |
pptp-packets-received | pptp-packets-discarded | pptp-packets-free | pptp-ocrq-rcvd
 | pptp-ocrq-discarded | pptp-ocrp-rcvd | pptp-ocrp-discarded | pptp-wen-rcvd |
pptp-wen-discarded | pptp-ccrq-rcvd | pptp-cdsn-rcvd | pptp-ccrq-discarded |
pptp-session-create | pptp-session-destroy | pptp-gate-create | pptp-gate-hit |
pptp-gate-timeout | pptp-nat-event | pptp-nat-total | pptp-nat-ok |
pptp-nat-pending | pptp-nat-fail | pptp-rm-total | pptp-rm-ok | pptp-rm-pending
| pptp-rm-fail | pptp-nat-async-total | pptp-nat-async-invalid |
pptp-nat-async-error1 | pptp-nat-async-error2 | pptp-asl-hole-ok |
pptp-asl-hole-error | pptp-asl-first-hit | pptp-asl-hole-timeout | pptp-asl-invalid
 | pptp-nat-ctx-free | pptp-create-resource-error | pptp-s2c-hole-error |
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pptp-c2s-hole-error | pptp-lnbrk-error | pptp-mpool-error | pptp-rm-client-error)*>

<!ELEMENT msp-alg-rpc-entry (rpc-call-bind-version-2 | rpc-call-bind-version-3 |
 rpc-call-bind-version-4 | rpc-call-bind-version-error | rpc-reply-bind-version-2
 | rpc-reply-bind-version-3 | rpc-reply-bind-version-4 |
rpc-reply-bind-version-error | rpc-pkt-fragmented | rpc-pkt-drop |
rpc-pkt-release)*>

<!ELEMENT msp-alg-rpc-portmap-entry (rpc-process-fail | rpc-request | rpc-call-dump
 | rpc-call-callit | rpc-reply-ok | rpc-reply-dump | rpc-reply-callit |
rpc-process-reply-deny | rpc-process-reply-xid-mismatch | rpc-pkt-ver-error |
rpc-pkt-not-rpcbind)*>

<!ELEMENT msp-alg-rsh-entry (rsh-invalid-pkts | rsh-drop-pkts | rsh-parse-fail-pkts
 | rsh-freed-pkts)*>

<!ELEMENT msp-alg-rtsp-entry (rtsp-exceed-max-data-len | rtsp-drop-packets |
rtsp-describe-msg-cnt | rtsp-setup-msg-cnt | rtsp-teardown-msg-cnt)*>

<!ELEMENT msp-alg-sip-entry (sip-pkts-drop | sip-unexpect-req-drop |
sip-unexpect-res-drop | sip-dscp-marked | sip-dscp-marked-err | sip-nat-err |
sip-rr-hdr-exceed-max | sip-contact-hdr-exceed-max | sip-invite-drop-call-limit
| sip-msgs-not-processed | sip-unknown-pkts-drop | sip-decoding-error |
sip-out-of-state)*>

<!ELEMENT msp-alg-sip-globals-entry (sip-max-no-calls | sip-inactive-media-timeout
 | sip-max-call-timeout | sip-t1-interval | sip-t4-interval | sip-c-interval)*>

<!ELEMENT msp-alg-sql-entry (sql-rcvd-pkts | sql-parse-fail-pkts | sql-freed-pkts
 | sql-gate-fail-errs)*>

<!ELEMENT msp-alg-talk-entry (talk-lookup-pkts | talk-announce-pkts |
talk-delete-pkts)*>

<!ELEMENT msp-per-service-set-sess-table (msp-sess-entry | sfw-flow-entry |
nat-plugin-sess-entry)*>

<!ELEMENT msp-serv-set-name (#PCDATA)>

<!ELEMENT msp-sess-alg-id (#PCDATA)>

<!ELEMENT msp-sess-asymmetric (#PCDATA)>

<!ELEMENT msp-sess-entry (msp-serv-set-name | msp-sess-id | msp-sess-alg-id |
msp-sess-flags | msp-sess-ip-action | msp-sess-offload | msp-sess-asymmetric |
msp-sess-plugin-info)*>

<!ELEMENT msp-sess-flags (#PCDATA)>

<!ELEMENT msp-sess-id (#PCDATA)>

<!ELEMENT msp-sess-ip-action (#PCDATA)>

<!ELEMENT msp-sess-offload (#PCDATA)>

<!ELEMENT msp-sess-plugin-info (#PCDATA)>

<!ELEMENT nas-error-count (#PCDATA)>

<!ELEMENT nat-action (#PCDATA)>
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<!ELEMENT nat-dst-ipv4-restorations (#PCDATA)>
<!ELEMENT nat-dst-ipv4-translations (#PCDATA)>
<!ELEMENT nat-dst-port-restorations (#PCDATA)>
<!ELEMENT nat-dst-port-translations (#PCDATA)>
<!ELEMENT nat-gre-call-id-restorations (#PCDATA)>
<!ELEMENT nat-gre-call-id-translations (#PCDATA)>
<!ELEMENT nat-icmp-error-translations (#PCDATA)>
<!ELEMENT nat-icmp-id-restorations (#PCDATA)>
<!ELEMENT nat-icmp-id-translations (#PCDATA)>
<!ELEMENT nat-map-allocation-failures (#PCDATA)>
<!ELEMENT nat-map-allocation-successes (#PCDATA)>
<!ELEMENT nat-pkt-dst-in-nat-route (#PCDATA)>
<!ELEMENT nat-plugin-sess-entry (nat-action | sfw-flow-nat)*>
<!ELEMENT nat-ports-exhausted (#PCDATA)>
<!ELEMENT nat-session-accepts-due-to-alg (#PCDATA)>
<!ELEMENT nat-session-ext-alloc-failures (#PCDATA)>
<!ELEMENT nat-src-ipv4-restorations (#PCDATA)>
<!ELEMENT nat-src-ipv4-translations (#PCDATA)>
<!ELEMENT nat-src-port-restorations (#PCDATA)>
<!ELEMENT nat-src-port-translations (#PCDATA)>
<!ELEMENT nat-tcp-port-restorations (#PCDATA)>
<!ELEMENT nat-tcp-port-translations (#PCDATA)>
<!ELEMENT nat-total-pkts-discarded (#PCDATA)>
<!ELEMENT nat-total-pkts-forwarded (#PCDATA)>
<!ELEMENT nat-total-pkts-processed (#PCDATA)>
<!ELEMENT nat-total-pkts-restored (#PCDATA)>
<!ELEMENT nat-total-pkts-translated (#PCDATA)>
<!ELEMENT nat-total-session-accepts (#PCDATA)>
<!ELEMENT nat-total-session-discards (#PCDATA)>
<!ELEMENT nat-total-session-ignores (#PCDATA)>
<!ELEMENT nat-udp-port-restorations (#PCDATA)>
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<!ELEMENT nat-udp-port-translations (#PCDATA)>

<!ELEMENT natmapping-address-mapping (natmapping-total-flow-count |
natmapping-source-ip | natmapping-nat-ip | natmapping-sw-ip | natmapping-flow-count
 | natmapping-source-port | natmapping-nat-port |
natmapping-flow-count-per-port-map)*>
<!ATTLIST natmapping-address-mapping junos:style CDATA #IMPLIED>

<!ELEMENT natmapping-flow-count (#PCDATA)>

<!ELEMENT natmapping-flow-count-per-port-map (#PCDATA)>

<!ELEMENT natmapping-nat-ip (#PCDATA)>

<!ELEMENT natmapping-nat-port (#PCDATA)>

<!ELEMENT natmapping-source-ip (#PCDATA)>

<!ELEMENT natmapping-source-port (#PCDATA)>

<!ELEMENT natmapping-summary (natmapping-total-address-mappings |
natmapping-total-port-mappings | natmapping-total-filters)*>

<!ELEMENT natmapping-sw-ip (#PCDATA)>

<!ELEMENT natmapping-total-address-mappings (#PCDATA)>

<!ELEMENT natmapping-total-filters (#PCDATA)>

<!ELEMENT natmapping-total-flow-count (#PCDATA)>

<!ELEMENT natmapping-total-port-mappings (#PCDATA)>

<!ELEMENT network-packet-loss-rate (#PCDATA)>

<!ELEMENT new-flow-accepts (#PCDATA)>

<!ELEMENT new-flow-counters (new-flow-accepts | new-flow-discards |
new-flow-rejects)*>

<!ELEMENT new-flow-discards (#PCDATA)>

<!ELEMENT new-flow-rejects (#PCDATA)>

<!ELEMENT no-flow-extension (#PCDATA)>

<!ELEMENT no-softwire-id (#PCDATA)>

<!ELEMENT no-space-for-outer-header (#PCDATA)>

<!ELEMENT noise-level (#PCDATA)>

<!ELEMENT non-ip-packets (#PCDATA)>

<!ELEMENT non-ipv4 (#PCDATA)>

<!ELEMENT non-syn-first-packet (#PCDATA)>

<!ELEMENT not-actively-checked-server-address (#PCDATA)>
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<!ELEMENT not-actively-checked-server-name (#PCDATA)>
<!ELEMENT not-actively-checked-server-next-availability (#PCDATA)>
<!ELEMENT not-ip-packet (#PCDATA)>
<!ELEMENT notification-regulation (#PCDATA)>
<!ELEMENT notify-invalid (#PCDATA)>
<!ELEMENT notify-valid (#PCDATA)>
<!ELEMENT num-created-flows-per-sec (#PCDATA)>
<!ELEMENT num-created-subs-per-sec (#PCDATA)>
<!ELEMENT num-deleted-flows-per-sec (#PCDATA)>
<!ELEMENT num-deleted-subs-per-sec (#PCDATA)>
<!ELEMENT num-flows-sec-1000-10000 (#PCDATA)>
<!ELEMENT num-flows-sec-1000-minus (#PCDATA)>
<!ELEMENT num-flows-sec-10000-20000 (#PCDATA)>
<!ELEMENT num-flows-sec-150000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-160000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-20000-30000 (#PCDATA)>
<!ELEMENT num-flows-sec-200000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-250000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-30000-40000 (#PCDATA)>
<!ELEMENT num-flows-sec-300000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-40000-50000 (#PCDATA)>
<!ELEMENT num-flows-sec-50000-plus (#PCDATA)>
<!ELEMENT num-flows-sec-samples (#PCDATA)>
<!ELEMENT num-groups (#PCDATA)>
<!ELEMENT num-holes (#PCDATA)>
<!ELEMENT num-of-nacks (#PCDATA)>
<!ELEMENT num-replicated-flows (#PCDATA)>
<!ELEMENT num-resources (#PCDATA)>
<!ELEMENT num-sessions (#PCDATA)>
<!ELEMENT num-subs-sec-1000-minus (#PCDATA)>
<!ELEMENT num-subs-sec-1000-plus (#PCDATA)>
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<!ELEMENT num-subs-sec-10000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-100000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-150000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-20000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-200000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-250000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-30000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-300000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-40000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-50000-plus (#PCDATA)>
<!ELEMENT num-subs-sec-samples (#PCDATA)>
<!ELEMENT num-total-flows-active (#PCDATA)>
<!ELEMENT num-total-other-flows-active (#PCDATA)>
<!ELEMENT num-total-predicted-flows-active (#PCDATA)>
<!ELEMENT num-total-subs-active (#PCDATA)>
<!ELEMENT num-total-tcp-flows-active (#PCDATA)>
<!ELEMENT num-total-udp-flows-active (#PCDATA)>
<!ELEMENT number-of-calls (#PCDATA)>
<!ELEMENT number-of-ctf-error-replied-messages (#PCDATA)>
<!ELEMENT number-of-ctf-messages (#PCDATA)>
<!ELEMENT number-of-ctf-replied-messages (#PCDATA)>
<!ELEMENT number-of-ctf-retries-messages (#PCDATA)>
<!ELEMENT number-of-filters (#PCDATA)>
<!ELEMENT number-of-terms (#PCDATA)>
<!ELEMENT octets-received (#PCDATA)>
<!ELEMENT octets-sent (#PCDATA)>
<!ELEMENT one-second-usage (#PCDATA)>
<!ELEMENT options-invalid (#PCDATA)>
<!ELEMENT options-valid (#PCDATA)>
<!ELEMENT output (#PCDATA)>
```

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```
<!ELEMENT output-fragments (#PCDATA)>

<!ELEMENT output-retry (#PCDATA)>

<!ELEMENT overload-control-entry (queue-limit-percentage |
reject-new-calls-threshold | reject-all-commands-threshold)*>

<!ELEMENT overload-last-reset-time (#PCDATA)>

<!ELEMENT packet-loss-concealment-type (#PCDATA)>

<!ELEMENT packet-not-ipv4-in-ipv6 (#PCDATA)>

<!ELEMENT packet-not-ipv6-in-ipv4 (#PCDATA)>

<!ELEMENT packet-processing-error (#PCDATA)>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT parent-fflow-dst-ip (#PCDATA)>

<!ELEMENT parent-fflow-dst-port (#PCDATA)>

<!ELEMENT parent-fflow-src-ip (#PCDATA)>

<!ELEMENT parent-fflow-src-port (#PCDATA)>

<!ELEMENT parent-flow-protocol (#PCDATA)>

<!ELEMENT parent-rflow-dst-ip (#PCDATA)>

<!ELEMENT parent-rflow-dst-port (#PCDATA)>

<!ELEMENT parent-rflow-src-ip (#PCDATA)>

<!ELEMENT parent-rflow-src-port (#PCDATA)>

<!ELEMENT parent-sess-id (#PCDATA)>

<!ELEMENT parent-sess-state (#PCDATA)>

<!ELEMENT parent-session-id (#PCDATA)>

<!ELEMENT parser-counters (syntax-errors | content-errors | unknown-methods)*>

<!ELEMENT peak-created-flows-per-second (#PCDATA)>

<!ELEMENT peak-created-subs-per-second (#PCDATA)>

<!ELEMENT peak-deleted-flows-per-second (#PCDATA)>

<!ELEMENT peak-deleted-subs-per-second (#PCDATA)>

<!ELEMENT peak-total-flows-active (#PCDATA)>

<!ELEMENT peak-total-other-flows-active (#PCDATA)>

<!ELEMENT peak-total-subs-active (#PCDATA)>

<!ELEMENT peak-total-tcp-flows-active (#PCDATA)>
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<!ELEMENT peak-total-udp-flows-active (#PCDATA)>

<!ELEMENT per-command-header-name (#PCDATA)>

<!ELEMENT pgcp-conversation (pgcp-flow-table-conv-initiator |
pgcp-flow-table-conv-responder | service-pgcp-flow-table)*>

<!ELEMENT pgcp-flow-destination-ip (#PCDATA)>

<!ELEMENT pgcp-flow-destination-port (#PCDATA)>

<!ELEMENT pgcp-flow-direction (#PCDATA)>

<!ELEMENT pgcp-flow-entry (pgcp-flow-protocol | pgcp-flow-source-ip |
pgcp-flow-source-port | pgcp-flow-destination-ip | pgcp-flow-destination-port |
pgcp-flow-state | pgcp-flow-direction | pgcp-flow-frame-counter | pgcp-flow-gate-id
 | pgcp-flow-nat | pgcp-flow-table-byte-count | source-routing-instance |
destination-routing-instance | pgcp-flow-table-tcp-window-size |
pgcp-flow-table-tcp-acknowledge | pgcp-flow-table-tcp-tickle | pgcp-flow-table-role
 | pgcp-flow-table-timeout | pgcp-flow-table-protocol-detail |
flow-gate-tman-policing | flow-gate-sdr | flow-gate-sdr-mbs | flow-gate-pdr |
flow-gate-pdr-mbs | flow-replication-status)*>

<!ELEMENT pgcp-flow-frame-counter (#PCDATA)>

<!ELEMENT pgcp-flow-gate-id (#PCDATA)>

<!ELEMENT pgcp-flow-nat (pgcp-flow-nat-ip | pgcp-flow-nat-port |
pgcp-flow-translated-ip | pgcp-flow-translated-port)*>
<!ATTLIST pgcp-flow-nat nat-type CDATA #IMPLIED>

<!ELEMENT pgcp-flow-nat-ip (#PCDATA)>

<!ELEMENT pgcp-flow-nat-port (#PCDATA)>

<!ELEMENT pgcp-flow-protocol (#PCDATA)>

<!ELEMENT pgcp-flow-source-ip (#PCDATA)>

<!ELEMENT pgcp-flow-source-port (#PCDATA)>

<!ELEMENT pgcp-flow-state (#PCDATA)>

<!ELEMENT pgcp-flow-table-byte-count (#PCDATA)>

<!ELEMENT pgcp-flow-table-conv-initiator (#PCDATA)>

<!ELEMENT pgcp-flow-table-conv-responder (#PCDATA)>

<!ELEMENT pgcp-flow-table-protocol-detail (#PCDATA)>

<!ELEMENT pgcp-flow-table-role (#PCDATA)>

<!ELEMENT pgcp-flow-table-tcp-acknowledge (#PCDATA)>

<!ELEMENT pgcp-flow-table-tcp-tickle (#PCDATA)>

<!ELEMENT pgcp-flow-table-tcp-window-size (#PCDATA)>

<!ELEMENT pgcp-flow-table-timeout (#PCDATA)>
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<!ELEMENT pgcp-flow-translated-ip (#PCDATA)>

<!ELEMENT pgcp-flow-translated-port (#PCDATA)>

<!ELEMENT pgcp-per-service-set-conversation (service-set-name | interface-name |
 pgcp-conversation)*>

<!ELEMENT pgcp-per-service-set-flow-table (service-set-name | interface-name |
service-pgcp-flow-table)*>

<!ELEMENT pgcpd-active-configuration (virtual-interface-entry | controller-entry
 | h248-timers-entry | h248-options-entry | base-root-entry |
h248-segmentation-properties-entry | h248-diffserv-entry |
h248-notification-behavior-entry | h248-application-data-inactivity-detection-entry
 | h248-event-timestamp-notification-entry | inactivity-timer-entry |
fast-update-filters-entry | overload-control-entry | gateway-entry | rule-ref-entry
 | rule-entry | service-pic-entry | service-set-entry | firewall-entry |
pgcpd-config)*>

<!ELEMENT pgcpd-config (media-service-entry | virtual-interface-entry |
gateway-entry | rule-entry | service-set-entry | service-pic-entry |
firewall-entry)*>

<!ELEMENT pic-ha-state (#PCDATA)>

<!ELEMENT pic-name (#PCDATA)>

<!ELEMENT pic-redundancy-state (#PCDATA)>

<!ELEMENT pic-status (#PCDATA)>

<!ELEMENT ping-duplicate-sequence-number (#PCDATA)>

<!ELEMENT ping-mismatched-sequence-number (#PCDATA)>

<!ELEMENT pkts-received (#PCDATA)>

<!ELEMENT pkts-transmitted (#PCDATA)>

<!ELEMENT platform (#PCDATA)>

<!ELEMENT plugin-id (#PCDATA)>

<!ELEMENT plugin-name (#PCDATA)>

<!ELEMENT plugins-configured (#PCDATA)>

<!ELEMENT pool-address-end (#PCDATA)>

<!ELEMENT pool-address-range (#PCDATA)>

<!ELEMENT pool-address-range-list (#PCDATA)>

<!ELEMENT pool-address-start (#PCDATA)>

<!ELEMENT pool-addresses-in-use (#PCDATA)>

<!ELEMENT pool-max-ports-in-use (#PCDATA)>

<!ELEMENT pool-name (#PCDATA)>
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<!ELEMENT pool-out-of-address-errors (#PCDATA)>
<!ELEMENT pool-out-of-port-errors (#PCDATA)>
<!ELEMENT pool-port-high (#PCDATA)>
<!ELEMENT pool-port-low (#PCDATA)>
<!ELEMENT pool-port-range (#PCDATA)>
<!ELEMENT pool-ports-in-use (#PCDATA)>
<!ELEMENT pool-users (#PCDATA)>
<!ELEMENT port-block-allocation-errors (#PCDATA)>
<!ELEMENT port-block-efficiency (#PCDATA)>
<!ELEMENT port-block-mem-alloc-failure-errors (#PCDATA)>
<!ELEMENT port-block-size (#PCDATA)>
<!ELEMENT port-block-type (#PCDATA)>
<!ELEMENT port-blocks-in-use (#PCDATA)>
<!ELEMENT port-blocks-limit-exceeded-errors (#PCDATA)>
<!ELEMENT port-error-count (#PCDATA)>
<!ELEMENT port-suspended-count (#PCDATA)>
<!ELEMENT ports-used (#PCDATA)>
<!ELEMENT pptp-asl-first-hit (#PCDATA)>
<!ELEMENT pptp-asl-hole-error (#PCDATA)>
<!ELEMENT pptp-asl-hole-ok (#PCDATA)>
<!ELEMENT pptp-asl-hole-timeout (#PCDATA)>
<!ELEMENT pptp-asl-invalid (#PCDATA)>
<!ELEMENT pptp-c2s-hole-error (#PCDATA)>
<!ELEMENT pptp-ccrq-discarded (#PCDATA)>
<!ELEMENT pptp-ccrq-rcvd (#PCDATA)>
<!ELEMENT pptp-cdsn-rcvd (#PCDATA)>
<!ELEMENT pptp-create-resource-error (#PCDATA)>
<!ELEMENT pptp-gate-create (#PCDATA)>
<!ELEMENT pptp-gate-hit (#PCDATA)>
<!ELEMENT pptp-gate-timeout (#PCDATA)>
<!ELEMENT pptp-group-active (#PCDATA)>
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<!ELEMENT pptp-group-error (#PCDATA)>
<!ELEMENT pptp-group-total (#PCDATA)>
<!ELEMENT pptp-lnbrk-error (#PCDATA)>
<!ELEMENT pptp-mpool-error (#PCDATA)>
<!ELEMENT pptp-nat-async-error1 (#PCDATA)>
<!ELEMENT pptp-nat-async-error2 (#PCDATA)>
<!ELEMENT pptp-nat-async-invalid (#PCDATA)>
<!ELEMENT pptp-nat-async-total (#PCDATA)>
<!ELEMENT pptp-nat-ctx-free (#PCDATA)>
<!ELEMENT pptp-nat-event (#PCDATA)>
<!ELEMENT pptp-nat-fail (#PCDATA)>
<!ELEMENT pptp-nat-ok (#PCDATA)>
<!ELEMENT pptp-nat-pending (#PCDATA)>
<!ELEMENT pptp-nat-total (#PCDATA)>
<!ELEMENT pptp-objects-active (#PCDATA)>
<!ELEMENT pptp-objects-error (#PCDATA)>
<!ELEMENT pptp-objects-total (#PCDATA)>
<!ELEMENT pptp-ocrp-discarded (#PCDATA)>
<!ELEMENT pptp-ocrp-rcvd (#PCDATA)>
<!ELEMENT pptp-ocrq-discarded (#PCDATA)>
<!ELEMENT pptp-ocrq-rcvd (#PCDATA)>
<!ELEMENT pptp-packets-discarded (#PCDATA)>
<!ELEMENT pptp-packets-free (#PCDATA)>
<!ELEMENT pptp-packets-received (#PCDATA)>
<!ELEMENT pptp-rm-client-error (#PCDATA)>
<!ELEMENT pptp-rm-fail (#PCDATA)>
<!ELEMENT pptp-rm-ok (#PCDATA)>
<!ELEMENT pptp-rm-pending (#PCDATA)>
<!ELEMENT pptp-rm-total (#PCDATA)>
<!ELEMENT pptp-s2c-hole-error (#PCDATA)>
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<!ELEMENT pptp-session-create (#PCDATA)>

<!ELEMENT pptp-session-destroy (#PCDATA)>

<!ELEMENT pptp-wen-discarded (#PCDATA)>

<!ELEMENT pptp-wen-rcvd (#PCDATA)>

<!ELEMENT primary-pic (#PCDATA)>

<!ELEMENT process-id (#PCDATA)>

<!ELEMENT proto (#PCDATA)>

<!ELEMENT protocol-errors (#PCDATA)>

<!ELEMENT protocol-inspected-flow (#PCDATA)>

<!ELEMENT protocol-inspection-bytes (#PCDATA)>

<!ELEMENT protocol-inspection-flow (#PCDATA)>

<!ELEMENT protocol-inspection-flow-protocol-identified (#PCDATA)>

<!ELEMENT protocol-inspection-http-uri (#PCDATA)>

<!ELEMENT protocol-inspection-http-uri-matched (#PCDATA)>

<!ELEMENT protocol-inspection-packets (#PCDATA)>

<!ELEMENT protocol-inspection-wap-uri (#PCDATA)>

<!ELEMENT protocol-inspection-wap-uri-matched (#PCDATA)>

<!ELEMENT quality-of-service-entries (quality-of-service-entry)*>

<!ELEMENT quality-of-service-entry (cpu-name | idle | timer | system | output |
input | fragment-output | bypass-output | free-frame)*>

<!ELEMENT query-unsupported-msg (#PCDATA)>

<!ELEMENT queue (#PCDATA)>

<!ELEMENT queue-limit-percentage (#PCDATA)>

<!ELEMENT r-factor (#PCDATA)>

<!ELEMENT radius-accounting-server-information-entry (radius-server-ip-address |
 radius-server-state | radius-server-udp-port | radius-server-retry-count |
radius-server-timeout | radius-server-pending-requests |
radius-server-maximum-sessions | radius-server-dead-time |
radius-server-secret-type)*>

<!ELEMENT radius-accounting-statistic-information-entry
(radius-server-statistics-entry-header | radius-server-profile-name |
radius-server-ip-address | radius-server-udp-port | radius-statistic-requests |
radius-statistic-start-requests | radius-statistic-interim-requests |
radius-statistic-stop-requests | radius-statistic-rollover-requests |
radius-statistic-retransmissions | radius-statistic-responses |
radius-statistic-start-responses | radius-statistic-interim-responses |
radius-statistic-stop-responses | radius-statistic-malformed-responses |
```

```
radius-statistic-bad-authenticators | radius-statistic-requests-pending |
radius-statistic-request-timeouts | radius-statistic-unknown-responses |
radius-statistic-packets-dropped)*>

<!ELEMENT radius-authentication-server-information-entry (radius-server-ip-address
 | radius-server-state | radius-server-udp-port | radius-server-retry-count |
radius-server-timeout | radius-server-pending-requests |
radius-server-maximum-sessions | radius-server-dead-time |
radius-server-secret-type)*>

<!ELEMENT radius-authentication-statistic-information-entry
(radius-server-statistics-entry-header | radius-server-profile-name |
radius-server-ip-address | radius-server-udp-port |
radius-statistic-access-requests | radius-statistic-rollover-requests |
radius-statistic-retransmissions | radius-statistic-access-accepts |
radius-statistic-access-rejects | radius-statistic-access-challenges |
radius-statistic-malformed-responses | radius-statistic-bad-authenticators |
radius-statistic-requests-pending | radius-statistic-request-timeouts |
radius-statistic-unknown-responses | radius-statistic-packets-dropped)*>

<!ELEMENT radius-client-password (#PCDATA)>

<!ELEMENT radius-client-user-name (#PCDATA)>

<!ELEMENT radius-profile-access-test-detail-result (radius-profile-name |
radius-client-user-name | radius-client-password | radius-profile-num-servers |
radius-server-ip-address | radius-server-udp-port | radius-server-source-address
 | radius-server-timeout | radius-server-retry-count | radius-server-secret |
radius-server-status | radius-server-attempts | radius-server-attribute-name |
radius-server-attribute-len | radius-server-attribute-value)*>

<!ELEMENT radius-profile-access-test-result (radius-profile-name |
radius-client-user-name | radius-client-password | radius-profile-num-servers |
radius-server-ip-address | radius-server-udp-port | radius-server-source-address
 | radius-server-timeout | radius-server-retry-count | radius-server-secret |
radius-server-status | radius-server-attempts)*>

<!ELEMENT radius-profile-name (#PCDATA)>

<!ELEMENT radius-profile-num-servers (#PCDATA)>

<!ELEMENT radius-server-access-test-result (radius-server-ip-address |
radius-server-udp-port | radius-server-source-address | radius-server-timeout |
radius-server-retry-count | radius-server-secret | radius-client-user-name |
radius-client-password | radius-server-status)*>

<!ELEMENT radius-server-attempts (#PCDATA)>

<!ELEMENT radius-server-attribute-len (#PCDATA)>

<!ELEMENT radius-server-attribute-name (#PCDATA)>

<!ELEMENT radius-server-attribute-value (#PCDATA)>

<!ELEMENT radius-server-dead-time (#PCDATA)>

<!ELEMENT radius-server-information-table-header (#PCDATA)>

<!ELEMENT radius-server-ip-address (#PCDATA)>

<!ELEMENT radius-server-maximum-sessions (#PCDATA)>
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<!ELEMENT radius-server-pending-requests (#PCDATA)>
<!ELEMENT radius-server-profile-name (#PCDATA)>
<!ELEMENT radius-server-retry-count (#PCDATA)>
<!ELEMENT radius-server-secret (#PCDATA)>
<!ELEMENT radius-server-secret-type (#PCDATA)>
<!ELEMENT radius-server-source-address (#PCDATA)>
<!ELEMENT radius-server-state (#PCDATA)>
<!ELEMENT radius-server-statistics-entry-header (#PCDATA)>
<!ELEMENT radius-server-status (#PCDATA)>
<!ELEMENT radius-server-timeout (#PCDATA)>
<!ELEMENT radius-server-udp-port (#PCDATA)>
<!ELEMENT radius-statistic-access-accepts (#PCDATA)>
<!ELEMENT radius-statistic-access-challenges (#PCDATA)>
<!ELEMENT radius-statistic-access-rejects (#PCDATA)>
<!ELEMENT radius-statistic-access-requests (#PCDATA)>
<!ELEMENT radius-statistic-bad-authenticators (#PCDATA)>
<!ELEMENT radius-statistic-interim-requests (#PCDATA)>
<!ELEMENT radius-statistic-interim-responses (#PCDATA)>
<!ELEMENT radius-statistic-malformed-responses (#PCDATA)>
<!ELEMENT radius-statistic-packets-dropped (#PCDATA)>
<!ELEMENT radius-statistic-request-timeouts (#PCDATA)>
<!ELEMENT radius-statistic-requests (#PCDATA)>
<!ELEMENT radius-statistic-requests-pending (#PCDATA)>
<!ELEMENT radius-statistic-responses (#PCDATA)>
<!ELEMENT radius-statistic-retransmissions (#PCDATA)>
<!ELEMENT radius-statistic-rollover-requests (#PCDATA)>
<!ELEMENT radius-statistic-start-requests (#PCDATA)>
<!ELEMENT radius-statistic-start-responses (#PCDATA)>
<!ELEMENT radius-statistic-stop-requests (#PCDATA)>
<!ELEMENT radius-statistic-stop-responses (#PCDATA)>
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<!ELEMENT radius-statistic-unknown-responses (#PCDATA)>
<!ELEMENT reassembly (#PCDATA)>
<!ELEMENT received-dscp (#PCDATA)>
<!ELEMENT received-forwarding-class (#PCDATA)>
<!ELEMENT ref-count (#PCDATA)>
<!ELEMENT refer-invalid (#PCDATA)>
<!ELEMENT refer-valid (#PCDATA)>
<!ELEMENT register-new (#PCDATA)>
<!ELEMENT reinvites (#PCDATA)>
<!ELEMENT reject-all-commands-threshold (#PCDATA)>
<!ELEMENT reject-new-calls-threshold (#PCDATA)>
<!ELEMENT remote-ip-address (#PCDATA)>
<!ELEMENT remote-port (#PCDATA)>
<!ELEMENT replication-socket (#PCDATA)>
<!ELEMENT requested-timestamp (#PCDATA)>
<!ELEMENT residual-echo-return-loss (#PCDATA)>
<!ELEMENT resource (#PCDATA)>
<!ELEMENT resource-id (#PCDATA)>
<!ELEMENT resource-is-active (#PCDATA)>
<!ELEMENT resource-state (#PCDATA)>
<!ELEMENT resources-active (#PCDATA)>
<!ELEMENT response-global-failure (#PCDATA)>
<!ELEMENT response-invalid (#PCDATA)>
<!ELEMENT response-invite-ok (#PCDATA)>
<!ELEMENT response-non-invite-ok (#PCDATA)>
<!ELEMENT response-provisional (#PCDATA)>
<!ELEMENT response-redir (#PCDATA)>
<!ELEMENT response-request-failure (#PCDATA)>
<!ELEMENT response-retransmits (#PCDATA)>
<!ELEMENT response-server-failure (#PCDATA)>
<!ELEMENT restart-bsg-service-information (gateway-name | platform | process-id)*>
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<!ELEMENT restart-pgcp-service-information (gateway-name | platform | process-id)*>
<!ELEMENT root-termination-information (#PCDATA)>
<!ELEMENT routing-instance (#PCDATA)>
<!ELEMENT rpc-call-bind-version-2 (#PCDATA)>
<!ELEMENT rpc-call-bind-version-3 (#PCDATA)>
<!ELEMENT rpc-call-bind-version-4 (#PCDATA)>
<!ELEMENT rpc-call-bind-version-error (#PCDATA)>
<!ELEMENT rpc-call-callit (#PCDATA)>
<!ELEMENT rpc-call-dump (#PCDATA)>
<!ELEMENT rpc-pkt-drop (#PCDATA)>
<!ELEMENT rpc-pkt-fragmented (#PCDATA)>
<!ELEMENT rpc-pkt-not-rpcbind (#PCDATA)>
<!ELEMENT rpc-pkt-release (#PCDATA)>
<!ELEMENT rpc-pkt-ver-error (#PCDATA)>
<!ELEMENT rpc-process-fail (#PCDATA)>
<!ELEMENT rpc-process-reply-deny (#PCDATA)>
<!ELEMENT rpc-process-reply-xid-mismatch (#PCDATA)>
<!ELEMENT rpc-reply-bind-version-2 (#PCDATA)>
<!ELEMENT rpc-reply-bind-version-3 (#PCDATA)>
<!ELEMENT rpc-reply-bind-version-4 (#PCDATA)>
<!ELEMENT rpc-reply-bind-version-error (#PCDATA)>
<!ELEMENT rpc-reply-callit (#PCDATA)>
<!ELEMENT rpc-reply-dump (#PCDATA)>
<!ELEMENT rpc-reply-ok (#PCDATA)>
<!ELEMENT rpc-request (#PCDATA)>
<!ELEMENT rsh-drop-pkts (#PCDATA)>
<!ELEMENT rsh-freed-pkts (#PCDATA)>
<!ELEMENT rsh-invalid-pkts (#PCDATA)>
<!ELEMENT rsh-parse-fail-pkts (#PCDATA)>
<!ELEMENT rtcp-mbs (#PCDATA)>
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<!ELEMENT rtcp-pdr (#PCDATA)>

<!ELEMENT rtcp-round-trip-delay (#PCDATA)>

<!ELEMENT rtcp-sdr (#PCDATA)>

<!ELEMENT rtcp-xr-ssrc (#PCDATA)>

<!ELEMENT rtsp-describe-msg-cnt (#PCDATA)>

<!ELEMENT rtsp-drop-packets (#PCDATA)>

<!ELEMENT rtsp-exceed-max-data-len (#PCDATA)>

<!ELEMENT rtsp-setup-msg-cnt (#PCDATA)>

<!ELEMENT rtsp-teardown-msg-cnt (#PCDATA)>

<!ELEMENT rule-entry (rule-name | rule-gateway-name | media-service-ref-entry)*>

<!ELEMENT rule-gateway-name (#PCDATA)>

<!ELEMENT rule-match-failed (#PCDATA)>

<!ELEMENT rule-match-succeeded (#PCDATA)>

<!ELEMENT rule-name (#PCDATA)>

<!ELEMENT rule-ref-entry (rule-ref-name)*>

<!ELEMENT rule-ref-name (#PCDATA)>

<!ELEMENT rx-errors (#PCDATA)>

<!ELEMENT sc-icmpv4-drops (#PCDATA)>

<!ELEMENT sc-icmpv4-echo-reqs (#PCDATA)>

<!ELEMENT sc-icmpv4-echo-resp (#PCDATA)>

<!ELEMENT sc-icmpv4-errors-send-errors (#PCDATA)>

<!ELEMENT sc-icmpv4-errors-sent (#PCDATA)>

<!ELEMENT sc-ipv4-frag-drops (#PCDATA)>

<!ELEMENT sc-otherv4-drops (#PCDATA)>

<!ELEMENT sc-out-of-memory-errors (#PCDATA)>

<!ELEMENT sc-udp-pkts-rcvd (#PCDATA)>

<!ELEMENT secondary-pic (#PCDATA)>

<!ELEMENT sequencer-entries (sequencer-entry)*>

<!ELEMENT sequencer-entry (cpu-name | idle | system | input-lfi | input-fragments
 | output-fragments | output-retry)*>

<!ELEMENT service-bsg-debug-method-invoker
(service-bsg-debug-method-invoker-result)*>
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<!ELEMENT service-bsg-debug-method-invoker-result (#PCDATA)>

<!ELEMENT service-cos-statistics-entry (interface-name | service-set-name |
cos-stats-service-set-dscp-information |
cos-stats-service-set-forwarding-class-information)*>

<!ELEMENT service-cos-statistics-information (service-cos-statistics-entry)*>
<!ATTLIST service-cos-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT service-crtp-extensive-information (#PCDATA)>

<!ELEMENT service-crtp-flow-table (crtp-flow-entry)*>

<!ELEMENT service-crtp-flow-table-information (crtp-per-interface-flow-table)*>

<!ELEMENT service-crtp-params-information (#PCDATA)>

<!ELEMENT service-current-softwire-count (interface-name | service-set-name |
ds-lite-softwire-count | v6rd-softwire-count)*>

<!ELEMENT service-current-softwire-count-information
(service-current-softwire-count)*>

<!ELEMENT service-detnat-information (service-set-name | interface-name | pool-name
 | detnat-internal-host | detnat-nat-ip | detnat-nat-port-low |
detnat-nat-port-high)*>

<!ELEMENT service-flow-analysis-information (flow-analysis-statistics-pic-info |
 flow-analysis-statistics-entry | flow-analysis-num-flows-sec-samples-entry |
flow-analysis-num-flows-sec-entry | flow-analysis-protocol-lifetime-entry)*>

<!ELEMENT service-hcm-statistics-entry (interface-name |
hcm-stats-rule-information)*>

<!ELEMENT service-hcm-statistics-information (service-hcm-statistics-entry)*>
<!ATTLIST service-hcm-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT service-identification-statistics (interface-name | interfaces | packets
 | bytes | errored-packets | errored-bytes | packet-processing-error |
errored-packets-tcp-malformed | errored-packets-wap-invalid-transaction |
errored-packets-wap-transaction-in-error |
errored-packets-http-transaction-in-error | header-examination-packets |
header-examination-bytes | header-examination-flow |
header-examination-flow-matched | header-examination-protocol-required |
header-examination-http-protocol-required |
header-examination-wap-protocol-required | protocol-inspected-flow |
protocol-inspection-flow | protocol-inspection-packets | protocol-inspection-bytes
 | protocol-inspection-flow-protocol-identified | protocol-inspection-http-uri |
 protocol-inspection-http-uri-matched | protocol-inspection-wap-uri |
protocol-inspection-wap-uri-matched | wap-transaction-created |
wap-transaction-maximum | wap-transaction-freed | wap-transaction-idle-freed |
http-transaction-created | http-transaction-maximum | http-transaction-freed |
http-transaction-idle-freed | uri-processing-error | uri-error-failed-to-process
 | uri-error-too-long | transaction-error-failed-to-parse |
uri-error-no-system-resources | header-examination-failed-configuration |
uri-examination-failed-configuration)*>

<!ELEMENT service-identification-statistics-information
(service-identification-statistics)*>
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<!ELEMENT service-ids-flow-table-information (ids-show-summary |
ids-per-service-set-flow-table)*>

<!ELEMENT service-interface (#PCDATA)>

<!ELEMENT service-l2tp-destination-clear-information
(l2tp-destination-clear-entry)*>

<!ELEMENT service-l2tp-destination-information (l2tp-destination-table)*>

<!ELEMENT service-l2tp-disconnect-cause-clear-summary (#PCDATA)>

<!ELEMENT service-l2tp-disconnect-cause-summary (user-request-count |
loss-of-service-count | idle-timeout-count | session-timeout-count |
admin-disconnect-count | port-error-count | nas-error-count | port-suspended-count
 | service-unavailable-count | user-error-count | authentication-failure-count)*>

<!ELEMENT service-l2tp-lac-summary-information (l2tp-lac-summary-table)*>

<!ELEMENT service-l2tp-multilink-clear-information (l2tp-multilink-clear-entry)*>

<!ELEMENT service-l2tp-session-clear-information (l2tp-session-clear-entry)*>

<!ELEMENT service-l2tp-session-information (l2tp-per-tunnel-session-table)*>

<!ELEMENT service-l2tp-summary-information (l2tp-summary-table)*>

<!ELEMENT service-l2tp-tunnel-clear-information (l2tp-tunnel-clear-entry)*>

<!ELEMENT service-l2tp-tunnel-information (l2tp-per-tunnel-group-tunnel-table)*>

<!ELEMENT service-l2tp-user-information (l2tp-per-tunnel-user-table)*>

<!ELEMENT service-msp-alg-conversation-information (interface-name |
msp-alg-conv-all-entry | msp-alg-conv-all-extensive-entry |
msp-alg-conv-summary-entry | msp-alg-conv-groups-entry |
msp-alg-conv-group-num-entry | msp-alg-conv-resources-entry |
msp-alg-conv-resource-num-entry)*>

<!ELEMENT service-msp-alg-sip-globals-information (interface-name |
msp-alg-sip-globals-entry)*>

<!ELEMENT service-msp-alg-stats-information (interface-name | msp-alg-rsh-entry
| msp-alg-dns-entry | msp-alg-pptp-entry | msp-alg-rtsp-entry | msp-alg-ftp-entry
 | msp-alg-talk-entry | msp-alg-sql-entry | msp-alg-dce-rpc-portmap-entry |
msp-alg-dce-rpc-entry | msp-alg-rpc-portmap-entry | msp-alg-rpc-entry |
msp-alg-sip-entry)*>

<!ELEMENT service-msp-flow-drain (interface-name | service-set-name |
flows-removed)*>

<!ELEMENT service-msp-flow-drain-information (service-msp-flow-drain)*>

<!ELEMENT service-msp-sess-count (interface-name | service-set-name | sess-count)*>

<!ELEMENT service-msp-sess-count-information (service-msp-sess-count)*>

<!ELEMENT service-msp-sess-table-information (msp-per-service-set-sess-table)*>

<!ELEMENT service-nat-ipv6-multicast-interfaces (v6-multicast-interface-name |
v6-multicast-configured-status | v6-multicast-operation-status |
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v6-multicast-by-all)*>

<!ELEMENT service-nat-ipv6-multicast-interfaces-information
(service-nat-ipv6-multicast-interfaces)*>
<!ATTLIST service-nat-ipv6-multicast-interfaces-information junos:style CDATA
#IMPLIED>

<!ELEMENT service-nat-mapping-information (natmapping-address-mapping |
address-mappingv2 | sfw-per-service-set-nat-mapping | natmapping-summary)*>

<!ELEMENT service-nat-pool (pool-name | translation-type | pool-address-start |
pool-address-end | pool-address-range | pool-address-range-list | pool-port-low
| pool-port-high | pool-port-range | pool-ports-in-use | pool-out-of-port-errors
 | pool-out-of-address-errors | pool-max-ports-in-use | pool-users |
pool-addresses-in-use | port-block-type | port-block-size | active-block-timeout
 | max-blocks-per-address | effective-port-blocks | effective-ports |
max-port-blocks-used | port-blocks-in-use | port-block-allocation-errors |
effective-pba-port-range | port-block-efficiency |
port-block-mem-alloc-failure-errors | port-blocks-limit-exceeded-errors)*>

<!ELEMENT service-nat-pool-information (sfw-per-service-set-nat-pool)*>

<!ELEMENT service-nat-pool-map (pool-name | natmapping-address-mapping |
address-mappingv2)*>

<!ELEMENT service-nat-statistics-clear-information (clear-nat-statistics-status)*>

<!ELEMENT service-nat-statistics-information (interface-name |
query-unsupported-msg | nat-total-session-accepts | nat-total-session-discards |
 nat-total-session-ignores | nat-session-accepts-due-to-alg |
nat-pkt-dst-in-nat-route | nat-session-ext-alloc-failures |
nat-map-allocation-successes | nat-map-allocation-failures |
nat-total-pkts-processed | nat-total-pkts-forwarded | nat-total-pkts-discarded |
 nat-total-pkts-translated | nat-total-pkts-restored | nat-src-ipv4-translations
 | nat-src-ipv4-restorations | nat-dst-ipv4-translations |
nat-dst-ipv4-restorations | nat-src-port-translations | nat-src-port-restorations
 | nat-dst-port-translations | nat-dst-port-restorations | nat-icmp-id-translations
 | nat-icmp-id-restorations | nat-icmp-error-translations |
nat-tcp-port-translations | nat-tcp-port-restorations | nat-udp-port-translations
 | nat-udp-port-restorations | nat-gre-call-id-translations |
nat-gre-call-id-restorations)*>

<!ELEMENT service-pgcp-conversation-information
(pgcp-per-service-set-conversation)*>

<!ELEMENT service-pgcp-debug-applicationq-latency
(debug-applicationq-latency-information)*>

<!ELEMENT service-pgcp-debug-applicationq-size
(debug-applicationq-size-information)*>

<!ELEMENT service-pgcp-debug-commit-latency (debug-commit-latency-information)*>

<!ELEMENT service-pgcp-debug-mem-mgmt-location
(debug-mem-mgmt-location-information)*>

<!ELEMENT service-pgcp-debug-mem-mgmt-memory-usage
(debug-mem-mgmt-memory-usage-information)*>

<!ELEMENT service-pgcp-debug-mem-mgmt-type (debug-mem-mgmt-type-information)*>
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<!ELEMENT service-pgcp-debug-profiling-applicationq-latency-information (#PCDATA)>

<!ELEMENT service-pgcp-debug-profiling-datastore-commit-latency-information
(#PCDATA)>

<!ELEMENT service-pgcp-debug-profiling-resumeq-latency-information (#PCDATA)>

<!ELEMENT service-pgcp-debug-profiling-waitq-latency-information (#PCDATA)>

<!ELEMENT service-pgcp-debug-profiling-workq-latency-information (#PCDATA)>

<!ELEMENT service-pgcp-debug-resumeq-latency (debug-resumeq-latency-information)*>

<!ELEMENT service-pgcp-debug-resumeq-size (debug-resumeq-size-information)*>

<!ELEMENT service-pgcp-debug-roundtrip (debug-roundtrip-information)*>

<!ELEMENT service-pgcp-debug-waitq-latency (debug-waitq-latency-information)*>

<!ELEMENT service-pgcp-debug-waitq-size (debug-waitq-size-information)*>

<!ELEMENT service-pgcp-debug-workq-latency (debug-workq-latency-information)*>

<!ELEMENT service-pgcp-debug-workq-size (debug-workq-size-information)*>

<!ELEMENT service-pgcp-error-reply (service-pgcp-error-reply-message)*>

<!ELEMENT service-pgcp-error-reply-message (#PCDATA)>

<!ELEMENT service-pgcp-flow-count (interface-name | service-set-name |
flow-count)*>

<!ELEMENT service-pgcp-flow-count-information (service-pgcp-flow-count)*>

<!ELEMENT service-pgcp-flow-table (pgcp-flow-entry)*>
<!ATTLIST service-pgcp-flow-table heading CDATA #IMPLIED>

<!ELEMENT service-pgcp-flow-table-information (pgcp-per-service-set-flow-table)*>

<!ELEMENT service-pgcp-gate-entry-information (gate-id | gate-state |
gate-direction | gate-action | source-routing-instance |
destination-routing-instance | gate-service-set-id | media-card-name |
media-handler-name | termination-id-string | gate-remote-source-address |
gate-remote-source-port | gate-remote-destination-address |
gate-remote-destination-port | gate-local-source-address | gate-local-source-port
 | gate-local-destination-address | gate-local-destination-port | gate-transport
 | gate-rtcp-shadow | gate-latch | gate-dscp | gate-tman-policing | gate-sdr |
gate-pdr | gate-mbs | rtcp-sdr | rtcp-pdr | rtcp-mbs | gate-fuf-policing |
gate-green-action | gate-yellow-action | gate-red-action | gate-output-packets |
 gate-input-packets | gate-dropped-packets | gate-lost-rtp-packets |
gate-fractional-lost-rtp-packets | gate-rtcp-information | gate-measured-rate |
service-rate-limit-information | gate-fuf-statistics-information |
gate-mirroring-state | gate-mirroring-correlation-number | gate-mirroring-target-id
 | gate-mirroring-direction)*>

<!ELEMENT service-pgcp-gates (gateway-entry | service-pgcp-gate-entry-information
 | service-pgcp-gates-count)*>
<!ATTLIST service-pgcp-gates junos:style CDATA #IMPLIED>

<!ELEMENT service-pgcp-gates-count (gate-count | gateway-name)*>
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<!ELEMENT service-pgcp-gates-drain-information (gateway-collections-number)*>

<!ELEMENT service-pgcp-stat-h248-per-command (command-name | commands-total |
commands-wildcard | commands-success | commands-error)*>

<!ELEMENT service-pgcp-stat-h248-per-command-header (per-command-header-name)*>

<!ELEMENT service-pgcp-statistics-drain-information (#PCDATA)>

<!ELEMENT service-pgcp-statistics-gateway (gateway-entry | service-pic-entry |
services-pgcp-dropped-traffic-entry | usage-counters-entry |
service-pgcp-statistics-h248 | service-pgcp-stat-h248-per-command-header |
service-pgcp-stat-h248-per-command)*>

<!ELEMENT service-pgcp-statistics-h248 (messages-received | octets-received |
messages-sent | octets-sent | protocol-errors | transport-losses |
last-detected-event | last-detected-event-time | last-reset-time)*>

<!ELEMENT service-pgcp-termination-entry-information (termination-id-string |
termination-state | termination-duration | termination-h248-dump)*>

<!ELEMENT service-pgcp-termination-gates-information (gate-id | gate-direction |
 gate-state | gate-action)*>

<!ELEMENT service-pgcp-terminations (gateway-entry |
service-pgcp-termination-entry-information |
service-pgcp-termination-gates-information | service-pgcp-terminations-count)*>
<!ATTLIST service-pgcp-terminations junos:style CDATA #IMPLIED>

<!ELEMENT service-pgcp-terminations-count (termination-count | gateway-name)*>

<!ELEMENT service-pic-entry (pic-name | pic-status | pic-redundancy-state |
primary-pic | secondary-pic | pic-ha-state | last-change)*>

<!ELEMENT service-point-direction (#PCDATA)>

<!ELEMENT service-rate-limit-byte-count (#PCDATA)>

<!ELEMENT service-rate-limit-entry (service-rate-limit-mark-color |
service-rate-limit-packet-count | service-rate-limit-byte-count)*>

<!ELEMENT service-rate-limit-information (service-rate-limit-entry)*>

<!ELEMENT service-rate-limit-mark-color (#PCDATA)>

<!ELEMENT service-rate-limit-packet-count (#PCDATA)>

<!ELEMENT service-set-bytes-used (#PCDATA)>

<!ELEMENT service-set-cpu-statistics (service-set-name | interface-name |
cpu-utilization-percent)*>

<!ELEMENT service-set-cpu-statistics-information (service-set-cpu-statistics)*>

<!ELEMENT service-set-cpu-utilization (#PCDATA)>

<!ELEMENT service-set-entry (service-set-name | id | rule-ref-entry)*>

<!ELEMENT service-set-memory-statistics (service-set-name | interface-name |
bytes-used)*>
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<!ELEMENT service-set-memory-statistics-information
(service-set-memory-statistics)*>

<!ELEMENT service-set-name (#PCDATA)>

<!ELEMENT service-set-packet-drop-statistics (service-set-packet-drops)*>
<!ATTLIST service-set-packet-drop-statistics junos:style CDATA #IMPLIED>

<!ELEMENT service-set-packet-drops (service-set-name | interface-name |
cpulimit-drops | memlimit-drops | flowlimit-drops | tcpalg-drops)*>

<!ELEMENT service-set-percent-bytes-used (#PCDATA)>

<!ELEMENT service-set-percent-policy-bytes-used (#PCDATA)>

<!ELEMENT service-set-plugin-information (service-set-name | service-set-state |
 plugins-configured | plugin-name | plugin-id)*>

<!ELEMENT service-set-plugin-summary (interface-name |
service-set-plugin-information)*>

<!ELEMENT service-set-policy-bytes-used (#PCDATA)>

<!ELEMENT service-set-policy-usage (service-set-name | interface-name | size_bytes
 | compressed)*>

<!ELEMENT service-set-policy-usage-stats (service-set-policy-usage)*>

<!ELEMENT service-set-service-type-entry (service-type | service-sets-configured
 | service-set-bytes-used | service-set-percent-bytes-used |
service-set-cpu-utilization | service-set-policy-bytes-used |
service-set-percent-policy-bytes-used)*>

<!ELEMENT service-set-state (#PCDATA)>

<!ELEMENT service-set-summary-information (service-set-summary-information-entry)*>
<!ATTLIST service-set-summary-information junos:style CDATA #IMPLIED>

<!ELEMENT service-set-summary-information-entry (interface-name |
service-set-service-type-entry)*>

<!ELEMENT service-set-tcp-mss (service-set-name | interface-name | syn-received
| syn-modified)*>

<!ELEMENT service-set-tcp-mss-statistics (service-set-tcp-mss)*>

<!ELEMENT service-sets-configured (#PCDATA)>

<!ELEMENT service-sfw-conversation-information (sfw-per-service-set-conversation)*>

<!ELEMENT service-sfw-flow-count (interface-name | service-set-name | flow-count)*>

<!ELEMENT service-sfw-flow-count-information (service-sfw-flow-count)*>

<!ELEMENT service-sfw-flow-drain (interface-name | service-set-name |
conversations-removed)*>

<!ELEMENT service-sfw-flow-drain-information (service-sfw-flow-drain)*>

<!ELEMENT service-sfw-flow-table (sfw-flow-entry)*>
<!ATTLIST service-sfw-flow-table heading CDATA #IMPLIED>
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<!ELEMENT service-sfw-flow-table-information (sfw-per-service-set-flow-table)*>

<!ELEMENT service-sfw-ha-statistics (compute-tx-flows | compute-rx-flows |
control-tx-flows | control-rx-flows | tcp-tx-flows | tcp-rx-flows | udp-tx-flows
 | udp-rx-flows | compute-tx-pkts | compute-rx-pkts | control-tx-pkts |
control-rx-pkts | tcp-tx-pkts | tcp-rx-pkts | udp-tx-pkts | udp-rx-pkts |
compute-tx-bytes | compute-rx-bytes | control-tx-bytes | control-rx-bytes |
tcp-tx-bytes | tcp-rx-bytes | udp-tx-bytes | udp-rx-bytes | tx-errors | rx-errors
 | num-of-nacks | extended-num-of-dirty-flows | brief-num-of-dirty-flows |
num-replicated-flows)*>

<!ELEMENT service-sfw-sip-call-count (interface-name | service-set-name |
sip-call-count)*>

<!ELEMENT service-sfw-sip-call-count-information (service-sfw-sip-call-count)*>

<!ELEMENT service-sfw-sip-call-drain (interface-name | service-set-name |
sip-calls-removed)*>

<!ELEMENT service-sfw-sip-call-drain-information (service-sfw-sip-call-drain)*>

<!ELEMENT service-sfw-sip-call-information (sfw-per-service-set-sip-calls)*>

<!ELEMENT service-sfw-sip-registration-count (interface-name | service-set-name
| sip-registration-count)*>

<!ELEMENT service-sfw-sip-registration-count-information
(service-sfw-sip-registration-count)*>

<!ELEMENT service-sfw-sip-registration-drain (interface-name | service-set-name
| sip-registration-removed)*>

<!ELEMENT service-sfw-sip-registration-drain-information
(service-sfw-sip-registration-drain)*>

<!ELEMENT service-sfw-sip-registration-information
(sfw-per-service-set-sip-registrations)*>

<!ELEMENT service-sfw-statistics-entry (interface-name |
sfw-stats-service-set-entry)*>

<!ELEMENT service-sfw-statistics-information (service-sfw-statistics-entry)*>
<!ATTLIST service-sfw-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT service-softwire-6rd-statistics-entry (srv-pic-name | softwire-created
 | softwire-deleted | flows-created | flows-deleted | slow-path |
slow-path-gratuitous-packet | fast-path | fast-path-encap | rule-match-succeeded
 | rule-match-failed | flow-creation-failed-retry | slow-path-failed-retry |
softwire-creation-failed | flow-creation-failed | slow-path-failed |
packet-not-ipv6-in-ipv4 | softwire-creation-failed-ipv6-next-header-offset |
decap-packet-not-ipv6 | no-space-for-outer-header | no-softwire-id |
no-flow-extension | icmpv4-dropped-packets)*>

<!ELEMENT service-softwire-6rd-statistics-information
(flow-analysis-statistics-pic-info | service-softwire-6rd-statistics-entry)*>

<!ELEMENT service-softwire-count (interface-name | service-set-name |
softwire-count)*>

<!ELEMENT service-softwire-count-information (service-softwire-count)*>
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<!ELEMENT service-softwire-dslite-statistics-entry (srv-pic-name | softwire-created
 | softwire-created-for-reverse-packet | softwire-deleted | flows-created |
flows-deleted | slow-path | slow-path-reverse-packet | fast-path | fast-path-encap
 | softwire-eif-rule-accepts | rule-match-succeeded | rule-match-failed |
ipv6-packets-fragmented | ipv4-client-fragments | ipv4-server-first-fragments |
ipv4-server-more-fragments | ipv4-server-last-fragments | softwire-icmpv4-sent |
 softwire-icmpv4-err-sent | softwire-icmpv6-sent | softwire-icmpv6-drop |
flow-creation-failed-retry | flow-creation-failed-retry-for-reverse-packet |
slow-path-failed-retry | softwire-creation-failed |
softwire-creation-failed-for-reverse-packet | flow-creation-failed |
flow-creation-failed-for-reverse-packet | slow-path-failed |
packet-not-ipv4-in-ipv6 | ipv6-fragmentation-error |
softwire-creation-failed-ipv6-next-header-offset | decap-failed-packet-not-ipv4
| decap-failed-ipv6-next-header-offset | decap-failed-ipv4-l3-integrity |
decap-failed-ipv4-l4-integrity | no-softwire-id | no-flow-extension |
flow-limit-exceeded)*>

<!ELEMENT service-softwire-dslite-statistics-information
(flow-analysis-statistics-pic-info | service-softwire-dslite-statistics-entry)*>

<!ELEMENT service-softwire-flow-table-information
(softwire-per-service-set-flow-table)*>

<!ELEMENT service-softwire-statistics-information
(service-softwire-dslite-statistics-entry |
service-softwire-6rd-statistics-entry)*>
<!ATTLIST service-softwire-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT service-softwire-table (softwire-entry | sfw-flow-entry)*>
<!ATTLIST service-softwire-table heading CDATA #IMPLIED>

<!ELEMENT service-softwire-table-information
(softwire-per-service-set-flow-table)*>

<!ELEMENT service-state (#PCDATA)>

<!ELEMENT service-subs-analysis-information (subs-analysis-statistics-pic-info |
 subs-analysis-statistics-entry | subs-analysis-num-subs-sec-samples-entry |
subs-analysis-num-subs-sec-entry)*>

<!ELEMENT service-type (#PCDATA)>

<!ELEMENT service-unavailable-count (#PCDATA)>

<!ELEMENT services-l2tp-cos-policer-statistics-result
(l2tp-cos-policer-statistics-result)*>

<!ELEMENT services-l2tp-multilink-information (l2tp-multilink-entry)*>

<!ELEMENT services-l2tp-radius-accounting-servers-information
(radius-accounting-server-information-entry)*>

<!ELEMENT services-l2tp-radius-accounting-statistics-information
(radius-accounting-statistic-information-entry)*>

<!ELEMENT services-l2tp-radius-authentication-accounting-servers-information
(radius-authentication-server-information-entry |
radius-accounting-server-information-entry)*>

<!ELEMENT services-l2tp-radius-authentication-accounting-statistics-information
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(radius-authentication-statistic-information-entry |
radius-accounting-statistic-information-entry)*>

<!ELEMENT services-l2tp-radius-authentication-servers-information
(radius-authentication-server-information-entry)*>

<!ELEMENT services-l2tp-radius-authentication-statistics-information
(radius-authentication-statistic-information-entry)*>

<!ELEMENT services-l2tp-radius-servers-information-table-header
(radius-server-information-table-header | radius-server-profile-name)*>

<!ELEMENT services-pgcp-dropped-traffic-entry (drop-packets-flow-drop-state |
drop-bytes-flow-drop-state | drop-packets-flow-rate-limit |
drop-bytes-flow-rate-limit | drop-packets-algs | drop-bytes-algs |
drop-packets-other | drop-bytes-other)*>

<!ELEMENT services-pgcpd-root-termination (root-termination-information)*>

<!ELEMENT sess-count (#PCDATA)>

<!ELEMENT session-count (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-ids (#PCDATA)>

<!ELEMENT session-timeout-count (#PCDATA)>

<!ELEMENT sessions-active (#PCDATA)>

<!ELEMENT sfw-conversation (sfw-flow-table-conv-alg | sfw-flow-table-conv-initiator
 | sfw-flow-table-conv-responder | service-sfw-flow-table)*>

<!ELEMENT sfw-flow-destination-ip (#PCDATA)>

<!ELEMENT sfw-flow-destination-port (#PCDATA)>

<!ELEMENT sfw-flow-direction (#PCDATA)>

<!ELEMENT sfw-flow-entry (sfw-flow-protocol | sfw-flow-source-ip |
sfw-flow-source-port | sfw-flow-destination-ip | sfw-flow-destination-port |
sfw-flow-state | sfw-flow-direction | sfw-flow-frame-counter | sfw-flow-gate-id
| sfw-flow-nat | sfw-flow-table-byte-count | sfw-flow-table-tcp-window-size |
sfw-flow-table-tcp-acknowledge | sfw-flow-table-tcp-tickle | sfw-flow-table-role
 | sfw-flow-table-timeout | sfw-flow-table-protocol-detail | sw-flow-nat-entry)*>

<!ELEMENT sfw-flow-frame-counter (#PCDATA)>

<!ELEMENT sfw-flow-gate-id (#PCDATA)>

<!ELEMENT sfw-flow-nat (sfw-flow-nat-type | sfw-flow-nat-ip | sfw-flow-nat-port
| sfw-flow-translated-ip | sfw-flow-translated-port)*>

<!ELEMENT sfw-flow-nat-ip (#PCDATA)>

<!ELEMENT sfw-flow-nat-port (#PCDATA)>

<!ELEMENT sfw-flow-nat-sw-nat-type (#PCDATA)>

<!ELEMENT sfw-flow-nat-type (#PCDATA)>
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<!ELEMENT sfw-flow-protocol (#PCDATA)>

<!ELEMENT sfw-flow-source-ip (#PCDATA)>

<!ELEMENT sfw-flow-source-port (#PCDATA)>

<!ELEMENT sfw-flow-state (#PCDATA)>

<!ELEMENT sfw-flow-table-byte-count (#PCDATA)>

<!ELEMENT sfw-flow-table-conv-alg (#PCDATA)>

<!ELEMENT sfw-flow-table-conv-initiator (#PCDATA)>

<!ELEMENT sfw-flow-table-conv-responder (#PCDATA)>

<!ELEMENT sfw-flow-table-protocol-detail (#PCDATA)>

<!ELEMENT sfw-flow-table-role (#PCDATA)>

<!ELEMENT sfw-flow-table-tcp-acknowledge (#PCDATA)>

<!ELEMENT sfw-flow-table-tcp-tickle (#PCDATA)>

<!ELEMENT sfw-flow-table-tcp-window-size (#PCDATA)>

<!ELEMENT sfw-flow-table-timeout (#PCDATA)>

<!ELEMENT sfw-flow-translated-ip (#PCDATA)>

<!ELEMENT sfw-flow-translated-port (#PCDATA)>

<!ELEMENT sfw-per-service-set-conversation (service-set-name | interface-name |
sfw-conversation)*>

<!ELEMENT sfw-per-service-set-flow-table (service-set-name | interface-name |
service-sfw-flow-table)*>

<!ELEMENT sfw-per-service-set-nat-mapping (interface-name | service-set-name |
service-nat-pool-map)*>

<!ELEMENT sfw-per-service-set-nat-pool (service-set-name | interface-name |
service-nat-pool)*>
<!ATTLIST sfw-per-service-set-nat-pool junos:style CDATA #IMPLIED>

<!ELEMENT sfw-per-service-set-sip-calls (interface-name | service-set-name |
sfw-sip-calls)*>

<!ELEMENT sfw-per-service-set-sip-registrations (interface-name | service-set-name
 | sfw-sip-registers)*>

<!ELEMENT sfw-sip-call-entry (sfw-sip-from | sfw-sip-to | sfw-sip-callid |
sfw-sip-number-control-iflows | sfw-sip-number-control-rflows |
sfw-sip-control-iflow-table | sfw-sip-control-rflow-table |
sfw-sip-number-contact-iflows | sfw-sip-number-contact-rflows |
sfw-sip-contact-iflow-table | sfw-sip-contact-rflow-table |
sfw-sip-number-media-iflows | sfw-sip-number-media-rflows |
sfw-sip-media-iflow-table | sfw-sip-media-rflow-table)*>

<!ELEMENT sfw-sip-callid (#PCDATA)>
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<!ELEMENT sfw-sip-calls (sfw-sip-call-entry)*>

<!ELEMENT sfw-sip-contact-iflow-table (#PCDATA)>

<!ELEMENT sfw-sip-contact-rflow-table (#PCDATA)>

<!ELEMENT sfw-sip-control-iflow-table (#PCDATA)>

<!ELEMENT sfw-sip-control-rflow-table (#PCDATA)>

<!ELEMENT sfw-sip-from (#PCDATA)>

<!ELEMENT sfw-sip-media-iflow-table (#PCDATA)>

<!ELEMENT sfw-sip-media-rflow-table (#PCDATA)>

<!ELEMENT sfw-sip-number-contact-iflows (#PCDATA)>

<!ELEMENT sfw-sip-number-contact-rflows (#PCDATA)>

<!ELEMENT sfw-sip-number-control-iflows (#PCDATA)>

<!ELEMENT sfw-sip-number-control-rflows (#PCDATA)>

<!ELEMENT sfw-sip-number-media-iflows (#PCDATA)>

<!ELEMENT sfw-sip-number-media-rflows (#PCDATA)>

<!ELEMENT sfw-sip-register-acked EMPTY>

<!ELEMENT sfw-sip-register-address (#PCDATA)>

<!ELEMENT sfw-sip-register-entry (sfw-sip-register-protocol |
sfw-sip-register-address | sfw-sip-register-port | sfw-sip-register-acked |
sfw-sip-register-expiration | sfw-sip-register-remaining | sfw-sip-from |
sfw-sip-to | sfw-sip-callid)*>

<!ELEMENT sfw-sip-register-expiration (#PCDATA)>

<!ELEMENT sfw-sip-register-port (#PCDATA)>

<!ELEMENT sfw-sip-register-protocol (#PCDATA)>

<!ELEMENT sfw-sip-register-remaining (#PCDATA)>

<!ELEMENT sfw-sip-registers (sfw-sip-register-entry)*>

<!ELEMENT sfw-sip-to (#PCDATA)>

<!ELEMENT sfw-stats-service-set-entry (service-set-name | total-flow-accepts |
total-flow-discards | total-flow-rejects | total-drops | new-flow-counters |
existing-flow-counters | hairpinning-counters | drop_counters | error-counters |
 ip-error-counters | tcp-error-counters | udp-error-counters | icmp-error-counters
 | alg-error-counters | alg-name | sip-active-call-count | sip-active-reg-count
| sip-alg-counters)*>

<!ELEMENT sgp_default (#PCDATA)>

<!ELEMENT sgp_maximum (#PCDATA)>
```

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```
<!ELEMENT sgp_minimum (#PCDATA)>

<!ELEMENT sgp_name (#PCDATA)>

<!ELEMENT si-nat-pool (pool-name | si-pool-nated-packets | si-pool-denated-packets
 | si-pool-errors | translation-type | pool-address-range |
si-pool-address-range-list)*>

<!ELEMENT si-nat-pool-information (si-per-service-set-nat-pool)*>

<!ELEMENT si-nat-slow-path-pkts-dropped (#PCDATA)>

<!ELEMENT si-nat-slow-path-pkts-rcvd (#PCDATA)>

<!ELEMENT si-per-service-set-nat-pool (service-set-name | interface-name |
si-nat-pool)*>
<!ATTLIST si-per-service-set-nat-pool junos:style CDATA #IMPLIED>

<!ELEMENT si-pool-address-range-list (#PCDATA)>

<!ELEMENT si-pool-denated-packets (#PCDATA)>

<!ELEMENT si-pool-errors (#PCDATA)>

<!ELEMENT si-pool-nated-packets (#PCDATA)>

<!ELEMENT signal-level (#PCDATA)>

<!ELEMENT sip-active-call-count (#PCDATA)>

<!ELEMENT sip-active-reg-count (#PCDATA)>

<!ELEMENT sip-alg-counters (total-counters | parser-counters | message-counters)*>
<!ATTLIST sip-alg-counters junos:style CDATA #IMPLIED>

<!ELEMENT sip-c-interval (#PCDATA)>

<!ELEMENT sip-call-count (#PCDATA)>

<!ELEMENT sip-calls-removed (#PCDATA)>

<!ELEMENT sip-contact-hdr-exceed-max (#PCDATA)>

<!ELEMENT sip-decoding-error (#PCDATA)>

<!ELEMENT sip-dscp-marked (#PCDATA)>

<!ELEMENT sip-dscp-marked-err (#PCDATA)>

<!ELEMENT sip-inactive-media-timeout (#PCDATA)>

<!ELEMENT sip-invite-drop-call-limit (#PCDATA)>

<!ELEMENT sip-max-call-timeout (#PCDATA)>

<!ELEMENT sip-max-no-calls (#PCDATA)>

<!ELEMENT sip-msgs-not-processed (#PCDATA)>

<!ELEMENT sip-nat-err (#PCDATA)>
```


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```
<!ELEMENT sip-out-of-state (#PCDATA)>

<!ELEMENT sip-pkts-drop (#PCDATA)>

<!ELEMENT sip-registration-count (#PCDATA)>

<!ELEMENT sip-registration-removed (#PCDATA)>

<!ELEMENT sip-rr-hdr-exceed-max (#PCDATA)>

<!ELEMENT sip-t1-interval (#PCDATA)>

<!ELEMENT sip-t4-interval (#PCDATA)>

<!ELEMENT sip-unexpect-req-drop (#PCDATA)>

<!ELEMENT sip-unexpect-res-drop (#PCDATA)>

<!ELEMENT sip-unknown-pkts-drop (#PCDATA)>

<!ELEMENT size_bytes (#PCDATA)>

<!ELEMENT slow-path (#PCDATA)>

<!ELEMENT slow-path-discard (#PCDATA)>

<!ELEMENT slow-path-failed (#PCDATA)>

<!ELEMENT slow-path-failed-retry (#PCDATA)>

<!ELEMENT slow-path-forward (#PCDATA)>

<!ELEMENT slow-path-gratuitous-packet (#PCDATA)>

<!ELEMENT slow-path-hairpinned-packets (#PCDATA)>

<!ELEMENT slow-path-reverse-packet (#PCDATA)>

<!ELEMENT softwire-count (#PCDATA)>

<!ELEMENT softwire-created (#PCDATA)>

<!ELEMENT softwire-created-for-reverse-packet (#PCDATA)>

<!ELEMENT softwire-creation-failed (#PCDATA)>

<!ELEMENT softwire-creation-failed-for-reverse-packet (#PCDATA)>

<!ELEMENT softwire-creation-failed-ipv6-next-header-offset (#PCDATA)>

<!ELEMENT softwire-deleted (#PCDATA)>

<!ELEMENT softwire-destination-ip (#PCDATA)>

<!ELEMENT softwire-direction (#PCDATA)>

<!ELEMENT softwire-eif-rule-accepts (#PCDATA)>

<!ELEMENT softwire-entry (softwire-source-ip | softwire-destination-ip |
softwire-direction | softwire-flow-count | softwire-table-timeout)*>
```

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```
<!ELEMENT softwire-flow-count (#PCDATA)>

<!ELEMENT softwire-icmpv4-err-sent (#PCDATA)>

<!ELEMENT softwire-icmpv4-sent (#PCDATA)>

<!ELEMENT softwire-icmpv6-drop (#PCDATA)>

<!ELEMENT softwire-icmpv6-sent (#PCDATA)>

<!ELEMENT softwire-per-service-set-flow-table (service-set-name | interface-name
 | service-softwire-table)*>

<!ELEMENT softwire-source-ip (#PCDATA)>

<!ELEMENT softwire-table-timeout (#PCDATA)>

<!ELEMENT source-routing-instance (#PCDATA)>

<!ELEMENT sql-freed-pkts (#PCDATA)>

<!ELEMENT sql-gate-fail-errs (#PCDATA)>

<!ELEMENT sql-parse-fail-pkts (#PCDATA)>

<!ELEMENT sql-rcvd-pkts (#PCDATA)>

<!ELEMENT src-ip-high (#PCDATA)>

<!ELEMENT src-ip-low (#PCDATA)>

<!ELEMENT src-port-high (#PCDATA)>

<!ELEMENT src-port-low (#PCDATA)>

<!ELEMENT srv-pic-name (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT subs-analysis-num-subs-sec-entry (subs-operation |
num-subs-sec-300000-plus | num-subs-sec-250000-plus | num-subs-sec-200000-plus |
 num-subs-sec-150000-plus | num-subs-sec-100000-plus | num-subs-sec-50000-plus |
 num-subs-sec-40000-plus | num-subs-sec-30000-plus | num-subs-sec-20000-plus |
num-subs-sec-10000-plus | num-subs-sec-1000-plus | num-subs-sec-1000-minus)*>

<!ELEMENT subs-analysis-num-subs-sec-samples-entry (num-subs-sec-samples)*>

<!ELEMENT subs-analysis-statistics-entry (num-total-subs-active |
num-created-subs-per-sec | num-deleted-subs-per-sec | peak-total-subs-active |
peak-created-subs-per-second | peak-deleted-subs-per-second)*>

<!ELEMENT subs-analysis-statistics-pic-info (pic-name)*>

<!ELEMENT subs-operation (#PCDATA)>

<!ELEMENT subscribe-invalid (#PCDATA)>

<!ELEMENT subscribe-valid (#PCDATA)>

<!ELEMENT subscriber-authentication-status (#PCDATA)>
```


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```
<!ELEMENT subscriber-name (#PCDATA)>

<!ELEMENT subscriber-tunneling-status (#PCDATA)>

<!ELEMENT sw-flow-nat-entry (sfw-flow-nat-sw-nat-type | sfw-flow-nat-ip |
sfw-flow-nat-port | sfw-flow-translated-ip | sfw-flow-translated-port)*>

<!ELEMENT syn-attack (#PCDATA)>

<!ELEMENT syn-defense (#PCDATA)>

<!ELEMENT syn-modified (#PCDATA)>

<!ELEMENT syn-received (#PCDATA)>

<!ELEMENT synchronization-state (#PCDATA)>

<!ELEMENT syntax-errors (#PCDATA)>

<!ELEMENT syslog-stats-class (syslog-stats-class-name | syslog-stats-class-sent
| syslog-stats-class-dropped | syslog-stats-class-dropped-low-priority |
syslog-stats-class-dropped-no-class-set |
syslog-stats-class-dropped-above-rate-limit)*>

<!ELEMENT syslog-stats-class-dropped (#PCDATA)>

<!ELEMENT syslog-stats-class-dropped-above-rate-limit (#PCDATA)>

<!ELEMENT syslog-stats-class-dropped-low-priority (#PCDATA)>

<!ELEMENT syslog-stats-class-dropped-no-class-set (#PCDATA)>

<!ELEMENT syslog-stats-class-name (#PCDATA)>

<!ELEMENT syslog-stats-class-sent (#PCDATA)>

<!ELEMENT syslog-stats-global (syslog-stats-global-rate-limit |
syslog-stats-global-sent | syslog-stats-global-dropped)*>

<!ELEMENT syslog-stats-global-dropped (#PCDATA)>

<!ELEMENT syslog-stats-global-rate-limit (#PCDATA)>

<!ELEMENT syslog-stats-global-sent (#PCDATA)>

<!ELEMENT syslog-stats-interface (syslog-stats-interface-name)*>

<!ELEMENT syslog-stats-interface-name (#PCDATA)>

<!ELEMENT syslog-stats-service-set (syslog-stats-svc-set-name |
syslog-stats-svc-set-sent | syslog-stats-svc-set-dropped)*>

<!ELEMENT syslog-stats-svc-set-dropped (#PCDATA)>

<!ELEMENT syslog-stats-svc-set-name (#PCDATA)>

<!ELEMENT syslog-stats-svc-set-sent (#PCDATA)>

<!ELEMENT system (#PCDATA)>

<!ELEMENT talk-announce-pkts (#PCDATA)>
```

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```
<!ELEMENT talk-delete-pkts (#PCDATA)>

<!ELEMENT talk-lookup-pkts (#PCDATA)>

<!ELEMENT tcp-3way-error-client-sent-syn-ack (#PCDATA)>

<!ELEMENT tcp-3way-error-fin-received (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-ack (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-fin (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-fin-ack (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-invalid-flags (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-rst (#PCDATA)>

<!ELEMENT tcp-3way-error-first-packet-syn-ack (#PCDATA)>

<!ELEMENT tcp-3way-error-invalid-flags (#PCDATA)>

<!ELEMENT tcp-3way-error-rst-seq-num-mismatch (#PCDATA)>

<!ELEMENT tcp-3way-error-server-sent-ack (#PCDATA)>

<!ELEMENT tcp-3way-error-syn-no-flow-initiator (#PCDATA)>

<!ELEMENT tcp-3way-error-syn-seq-num-retrans-mismatch (#PCDATA)>

<!ELEMENT tcp-close-error-no-final-ack (#PCDATA)>

<!ELEMENT tcp-error-counters (tcp-header-length-error | tcp-zero-port |
illegal-sequence-number-flags | syn-attack | non-syn-first-packet | tcp-port-scan
 | bad-syn-cookie-response | tcp-recon-sequence-number-error |
tcp-recon-retransmits | tcp-partially-opened-connection-timeout-syn-rcvd |
tcp-partially-opened-connection-timeout-syn-ack-rcvd |
tcp-partially-closed-connection-reuse | tcp-3way-error-client-sent-syn-ack |
tcp-3way-error-server-sent-ack | tcp-3way-error-syn-seq-num-retrans-mismatch |
tcp-3way-error-rst-seq-num-mismatch | tcp-3way-error-fin-received |
tcp-3way-error-invalid-flags | tcp-3way-error-syn-no-flow-initiator |
tcp-3way-error-first-packet-syn-ack | tcp-3way-error-first-packet-fin-ack |
tcp-3way-error-first-packet-fin | tcp-3way-error-first-packet-rst |
tcp-3way-error-first-packet-ack | tcp-3way-error-first-packet-invalid-flags |
tcp-close-error-no-final-ack | tcp-resumed-flow)*>

<!ELEMENT tcp-errors (#PCDATA)>

<!ELEMENT tcp-header-length-error (#PCDATA)>

<!ELEMENT tcp-partially-closed-connection-reuse (#PCDATA)>

<!ELEMENT tcp-partially-opened-connection-timeout-syn-ack-rcvd (#PCDATA)>

<!ELEMENT tcp-partially-opened-connection-timeout-syn-rcvd (#PCDATA)>

<!ELEMENT tcp-port-scan (#PCDATA)>

<!ELEMENT tcp-recon-retransmits (#PCDATA)>
```


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```
<!ELEMENT tcp-recon-sequence-number-error (#PCDATA)>

<!ELEMENT tcp-resumed-flow (#PCDATA)>

<!ELEMENT tcp-rx-bytes (#PCDATA)>

<!ELEMENT tcp-rx-flows (#PCDATA)>

<!ELEMENT tcp-rx-pkts (#PCDATA)>

<!ELEMENT tcp-tx-bytes (#PCDATA)>

<!ELEMENT tcp-tx-flows (#PCDATA)>

<!ELEMENT tcp-tx-pkts (#PCDATA)>

<!ELEMENT tcp-zero-port (#PCDATA)>

<!ELEMENT tcpalg-drops (#PCDATA)>

<!ELEMENT term-number (#PCDATA)>

<!ELEMENT termination-count (#PCDATA)>

<!ELEMENT termination-duration (#PCDATA)>

<!ELEMENT termination-h248-dump (#PCDATA)>

<!ELEMENT termination-id-string (#PCDATA)>

<!ELEMENT termination-state (#PCDATA)>

<!ELEMENT test-services-l2tp-tunnel-result (l2tp-tunnel-test-subscriber-information
 | l2tp-tunnel-test-result-table)*>

<!ELEMENT timer (#PCDATA)>

<!ELEMENT tmax-retransmission-delay (#PCDATA)>

<!ELEMENT total-assigned-forwarding-class-packets (#PCDATA)>

<!ELEMENT total-counters (total-messages | call-segments)*>

<!ELEMENT total-drops (#PCDATA)>

<!ELEMENT total-flow-accepts (#PCDATA)>

<!ELEMENT total-flow-discards (#PCDATA)>

<!ELEMENT total-flow-rejects (#PCDATA)>

<!ELEMENT total-marked-dscp-packets (#PCDATA)>

<!ELEMENT total-messages (#PCDATA)>

<!ELEMENT total-received-dscp-packets (#PCDATA)>

<!ELEMENT total-received-forwarding-class-packets (#PCDATA)>

<!ELEMENT total-term-count (#PCDATA)>
```

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```
<!ELEMENT transaction-error-failed-to-parse (#PCDATA)>

<!ELEMENT translated-dst-ip (#PCDATA)>

<!ELEMENT translated-dst-port (#PCDATA)>

<!ELEMENT translated-src-ip (#PCDATA)>

<!ELEMENT translated-src-port (#PCDATA)>

<!ELEMENT translation-type (#PCDATA)>

<!ELEMENT transport-losses (#PCDATA)>

<!ELEMENT ttl-zero (#PCDATA)>

<!ELEMENT tunnel-group-name (#PCDATA)>

<!ELEMENT tunnel-logical-system (#PCDATA)>

<!ELEMENT tunnel-name (#PCDATA)>

<!ELEMENT tunnel-peer (#PCDATA)>

<!ELEMENT tunnel-routing-instance (#PCDATA)>

<!ELEMENT tunnel-status (#PCDATA)>

<!ELEMENT tx-errors (#PCDATA)>

<!ELEMENT udp-error-counters (udp-header-length-error | udp-zero-port |
udp-port-scan)*>

<!ELEMENT udp-errors (#PCDATA)>

<!ELEMENT udp-flow-lifetime-120s-240s (#PCDATA)>

<!ELEMENT udp-flow-lifetime-15s-30s (#PCDATA)>

<!ELEMENT udp-flow-lifetime-1s-5s (#PCDATA)>

<!ELEMENT udp-flow-lifetime-1s-minus (#PCDATA)>

<!ELEMENT udp-flow-lifetime-240s-plus (#PCDATA)>

<!ELEMENT udp-flow-lifetime-30s-60s (#PCDATA)>

<!ELEMENT udp-flow-lifetime-5s-15s (#PCDATA)>

<!ELEMENT udp-flow-lifetime-60s-120s (#PCDATA)>

<!ELEMENT udp-header-length-error (#PCDATA)>

<!ELEMENT udp-port-scan (#PCDATA)>

<!ELEMENT udp-rx-bytes (#PCDATA)>

<!ELEMENT udp-rx-flows (#PCDATA)>

<!ELEMENT udp-rx-pkts (#PCDATA)>
```


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```
<!ELEMENT udp-tx-bytes (#PCDATA)>

<!ELEMENT udp-tx-flows (#PCDATA)>

<!ELEMENT udp-tx-pkts (#PCDATA)>

<!ELEMENT udp-zero-port (#PCDATA)>

<!ELEMENT unknown (#PCDATA)>

<!ELEMENT unknown-methods (#PCDATA)>

<!ELEMENT up-time (#PCDATA)>
<!ATTLIST up-time junos:seconds CDATA #IMPLIED>

<!ELEMENT update-invalid (#PCDATA)>

<!ELEMENT update-valid (#PCDATA)>

<!ELEMENT uri-error-failed-to-process (#PCDATA)>

<!ELEMENT uri-error-no-system-resources (#PCDATA)>

<!ELEMENT uri-error-too-long (#PCDATA)>

<!ELEMENT uri-examination-failed-configuration (#PCDATA)>

<!ELEMENT uri-processing-error (#PCDATA)>

<!ELEMENT uri-redirect-set-name (#PCDATA)>

<!ELEMENT uri-redirect-set-statistics (uri-redirect-set-name | cause-roaming |
cause-time-of-day | cause-quality-of-service | cause-volume-expired |
cause-cost-warning | cause-not-allowed | cause-unsubscribed | cause-credit-expiry
 | cause-unknown | cause-default)*>

<!ELEMENT uri-redirect-set-statistics-information (interface-name | interfaces |
 uri-redirect-set-statistics)*>

<!ELEMENT usage-counters-entry (contexts-number | emergency-contexts-number)*>

<!ELEMENT user-error-count (#PCDATA)>

<!ELEMENT user-request-count (#PCDATA)>

<!ELEMENT v6-multicast-by-all (#PCDATA)>

<!ELEMENT v6-multicast-configured-status (#PCDATA)>

<!ELEMENT v6-multicast-interface-name (#PCDATA)>

<!ELEMENT v6-multicast-operation-status (#PCDATA)>

<!ELEMENT v6rd-decap-bytes (#PCDATA)>

<!ELEMENT v6rd-decap-errors (#PCDATA)>

<!ELEMENT v6rd-decap-errors-bytes (#PCDATA)>

<!ELEMENT v6rd-decap-pkts (#PCDATA)>
```

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```
<!ELEMENT v6rd-encap-bytes (#PCDATA)>

<!ELEMENT v6rd-encap-errors (#PCDATA)>

<!ELEMENT v6rd-encap-errors-bytes (#PCDATA)>

<!ELEMENT v6rd-encap-pkts (#PCDATA)>

<!ELEMENT v6rd-inactive-sc-errors (#PCDATA)>

<!ELEMENT v6rd-inactive-sc-errors-bytes (#PCDATA)>

<!ELEMENT v6rd-softwire-count (#PCDATA)>

<!ELEMENT v6rd-v4-mtu-errors (#PCDATA)>

<!ELEMENT v6rd-v4-mtu-errors-bytes (#PCDATA)>

<!ELEMENT vif-service-state (#PCDATA)>

<!ELEMENT virtual-interface-entry (virtual-interface-name | routing-instance |
interface-name | vif-service-state | media-service-ref-entry)*>

<!ELEMENT virtual-interface-name (#PCDATA)>

<!ELEMENT wap-transaction-created (#PCDATA)>

<!ELEMENT wap-transaction-freed (#PCDATA)>

<!ELEMENT wap-transaction-idle-freed (#PCDATA)>

<!ELEMENT wap-transaction-maximum (#PCDATA)>

<!ELEMENT wildcard-response-service-change (#PCDATA)>
```


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CHAPTER 62

DTD for Alarm Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-alarm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-alarm.dtd -->

<!ELEMENT active-alarm-count (#PCDATA)>

<!ELEMENT alarm-class (#PCDATA)>

<!ELEMENT alarm-description (#PCDATA)>

<!ELEMENT alarm-detail (alarm-time | alarm-class | alarm-description |
alarm-short-description | alarm-type)*>

<!ELEMENT alarm-id (#PCDATA)>

<!ELEMENT alarm-id-information (alarm-id)*>

<!ELEMENT alarm-information (alarm-summary | alarm-detail)*>

<!ELEMENT alarm-short-description (#PCDATA)>

<!ELEMENT alarm-summary (active-alarm-count | no-active-alarms)*>

<!ELEMENT alarm-time (#PCDATA)>
<!ATTLIST alarm-time junos:seconds CDATA #IMPLIED>

<!ELEMENT alarm-type (#PCDATA)>

<!ELEMENT multi-routing-engine-item (re-name | alarm-information)*>

<!ELEMENT multi-routing-engine-results (multi-routing-engine-item)*>

<!ELEMENT no-active-alarms EMPTY>
```

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```
<!ELEMENT re-name (#PCDATA)>
```


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CHAPTER 63

DTD for ANCP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ancp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ancp.dtd -->

<!ELEMENT accept-config-deny-count (#PCDATA)>

<!ELEMENT accept-count (#PCDATA)>

<!ELEMENT accept-fail-count (#PCDATA)>

<!ELEMENT access-aggregate-circuit-binary-identifier (#PCDATA)>

<!ELEMENT access-aggregate-circuit-identifier (#PCDATA)>

<!ELEMENT access-loop-identifier (#PCDATA)>

<!ELEMENT access-loop-remote-identifier (#PCDATA)>

<!ELEMENT actual-interleave-delay-downstream (#PCDATA)>

<!ELEMENT actual-interleave-delay-upstream (#PCDATA)>

<!ELEMENT actual-net-data-downstream (#PCDATA)>

<!ELEMENT actual-net-data-upstream (#PCDATA)>

<!ELEMENT adjacency-time (#PCDATA)>

<!ELEMENT adjacency-timer (#PCDATA)>

<!ELEMENT aid-ipaddress (#PCDATA)>

<!ELEMENT aid-name (#PCDATA)>
```

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```
<!ELEMENT ancp-aid-entry (if-type | record-number | if-name | aid-name |
aid-ipaddress | kernel-exist | config-exist)*>

<!ELEMENT ancp-aid-information (ancp-aid-entry)*>

<!ELEMENT ancp-config-entry (if-type | record-number | if-name | aid-name |
aid-ipaddress)*>

<!ELEMENT ancp-config-information (ancp-scalar-entry | ancp-qos-adjust-entry |
ancp-config-entry)*>

<!ELEMENT ancp-cos-entry (interface-type | interface-name | interface-index |
shaping-rate | last-update)*>

<!ELEMENT ancp-cos-heading (qos-adjust | cos-state | connect-time | session-time
 | rtcreate-time | keepalive-time | rate-update-time | keepalive-timer)*>

<!ELEMENT ancp-cos-information (ancp-cos-heading | ancp-cos-entry)*>

<!ELEMENT ancp-kernel-entry (if-type | record-number | if-name | if-index |
aid-name | aid-ipaddress)*>

<!ELEMENT ancp-kernel-information (ancp-kernel-entry)*>

<!ELEMENT ancp-neighbor (received-syn-count | received-synack-count |
received-ack-count | received-rstack-count | received-port-up-count |
received-port-down-count | received-oam-count | received-other-count |
sent-syn-count | sent-synack-count | sent-ack-count | sent-rstack-count |
sent-oam-count | max-discovery-limit-exceed-count | ip-address | tcp-port | up-time
 | mac-address | state | neighbor-subscriber-count | system-instance |
peer-instance | capabilities | adjacency-time | peer-adjacency-time |
partition-type | partition-flag | partition-identifier | dead-time)*>

<!ELEMENT ancp-neighbor-adjacency-timer (#PCDATA)>

<!ELEMENT ancp-neighbor-configuration-entry (record-number | ancp-neighbor-ip |
ancp-neighbor-discovery-mode | ancp-neighbor-ietf-mode |
ancp-neighbor-adjacency-timer | ancp-neighbor-maximum-discovery-entries)*>

<!ELEMENT ancp-neighbor-configuration-information
(ancp-neighbor-configuration-entry)*>

<!ELEMENT ancp-neighbor-discovery-mode (#PCDATA)>

<!ELEMENT ancp-neighbor-ietf-mode (#PCDATA)>

<!ELEMENT ancp-neighbor-information (ancp-neighbor)*>
<!ATTLIST ancp-neighbor-information junos:style CDATA #IMPLIED>

<!ELEMENT ancp-neighbor-ip (#PCDATA)>

<!ELEMENT ancp-neighbor-maximum-discovery-entries (#PCDATA)>

<!ELEMENT ancp-oam (ancp-oam-request-status | ancp-oam-response-code |
ancp-oam-response-text | ancp-oam-response-type)*>

<!ELEMENT ancp-oam-information (ancp-oam)*>

<!ELEMENT ancp-oam-request-status (#PCDATA)>

<!ELEMENT ancp-oam-response-code (#PCDATA)>
```


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```
<!ELEMENT ancp-oam-response-text (#PCDATA)>

<!ELEMENT ancp-oam-response-type (#PCDATA)>

<!ELEMENT ancp-qos-adjust-entry (qos-adjust-adsl | qos-adjust-adsl2 |
qos-adjust-adsl2-plus | qos-adjust-vdsl | qos-adjust-vdsl2 | qos-adjust-sdsl)*>

<!ELEMENT ancp-scalar-entry (qos-adjust | ietf-mode | adjacency-timer |
maximum-discovery-entries-neighbor | wait-for-gsmp-syn | gsmp-syn-timer)*>

<!ELEMENT ancp-statistics-information (neighbor-count | subscriber-count |
received-syn-count | received-synack-count | received-ack-count |
received-rstack-count | received-port-up-count | received-port-down-count |
received-oam-count | received-other-count | sent-syn-count | sent-synack-count |
 sent-ack-count | sent-rstack-count | sent-oam-count | accept-count |
accept-fail-count | accept-config-deny-count)*>

<!ELEMENT ancp-subscriber (access-loop-identifier | access-loop-remote-identifier
 | interface | interface-type | access-aggregate-circuit-identifier |
access-aggregate-circuit-binary-identifier | dsl-type | actual-net-data-upstream
 | actual-net-data-downstream | minimum-net-data-upstream |
minimum-net-data-downstream | maximum-net-data-upstream |
maximum-net-data-downstream | attainable-net-data-upstream |
attainable-net-data-downstream | neighbor-ip-address |
minimum-low-power-data-upstream | minimum-low-power-data-downstream |
maximum-interleave-delay-downstream | maximum-interleave-delay-upstream |
actual-interleave-delay-downstream | actual-interleave-delay-upstream |
dsl-line-state | dsl-line-data-link | dsl-line-encapsulation |
dsl-line-encapsulation-payload)*>

<!ELEMENT ancp-subscriber-information (ancp-subscriber | ancp-neighbor)*>
<!ATTLIST ancp-subscriber-information junos:style CDATA #IMPLIED>

<!ELEMENT attainable-net-data-downstream (#PCDATA)>

<!ELEMENT attainable-net-data-upstream (#PCDATA)>

<!ELEMENT capabilities (#PCDATA)>

<!ELEMENT config-exist (#PCDATA)>

<!ELEMENT connect-time (#PCDATA)>

<!ELEMENT cos-state (#PCDATA)>

<!ELEMENT dead-time (#PCDATA)>

<!ELEMENT dsl-line-data-link (#PCDATA)>

<!ELEMENT dsl-line-encapsulation (#PCDATA)>

<!ELEMENT dsl-line-encapsulation-payload (#PCDATA)>

<!ELEMENT dsl-line-state (#PCDATA)>

<!ELEMENT dsl-type (#PCDATA)>

<!ELEMENT gsmp-syn-timer (#PCDATA)>

<!ELEMENT ietf-mode (#PCDATA)>
```

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```
<!ELEMENT if-index (#PCDATA)>
<!ELEMENT if-name (#PCDATA)>
<!ELEMENT if-type (#PCDATA)>
<!ELEMENT interface (#PCDATA)>
<!ELEMENT interface-index (#PCDATA)>
<!ELEMENT interface-name (#PCDATA)>
<!ELEMENT interface-type (#PCDATA)>
<!ELEMENT ip-address (#PCDATA)>
<!ELEMENT keepalive-time (#PCDATA)>
<!ELEMENT keepalive-timer (#PCDATA)>
<!ELEMENT kernel-exist (#PCDATA)>
<!ELEMENT last-update (#PCDATA)>
<!ELEMENT mac-address (#PCDATA)>
<!ELEMENT max-discovery-limit-exceed-count (#PCDATA)>
<!ELEMENT maximum-discovery-entries-neighbor (#PCDATA)>
<!ELEMENT maximum-interleave-delay-downstream (#PCDATA)>
<!ELEMENT maximum-interleave-delay-upstream (#PCDATA)>
<!ELEMENT maximum-net-data-downstream (#PCDATA)>
<!ELEMENT maximum-net-data-upstream (#PCDATA)>
<!ELEMENT minimum-low-power-data-downstream (#PCDATA)>
<!ELEMENT minimum-low-power-data-upstream (#PCDATA)>
<!ELEMENT minimum-net-data-downstream (#PCDATA)>
<!ELEMENT minimum-net-data-upstream (#PCDATA)>
<!ELEMENT neighbor-count (#PCDATA)>
<!ELEMENT neighbor-ip-address (#PCDATA)>
<!ELEMENT neighbor-subscriber-count (#PCDATA)>
<!ELEMENT partition-flag (#PCDATA)>
<!ELEMENT partition-identifier (#PCDATA)>
<!ELEMENT partition-type (#PCDATA)>
<!ELEMENT peer-adjacency-time (#PCDATA)>
```


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```
<!ELEMENT peer-instance (#PCDATA)>
<!ELEMENT qos-adjust (#PCDATA)>
<!ELEMENT qos-adjust-adsl (#PCDATA)>
<!ELEMENT qos-adjust-adsl2 (#PCDATA)>
<!ELEMENT qos-adjust-adsl2-plus (#PCDATA)>
<!ELEMENT qos-adjust-sdsl (#PCDATA)>
<!ELEMENT qos-adjust-vdsl (#PCDATA)>
<!ELEMENT qos-adjust-vdsl2 (#PCDATA)>
<!ELEMENT rate-update-time (#PCDATA)>
<!ELEMENT received-ack-count (#PCDATA)>
<!ELEMENT received-oam-count (#PCDATA)>
<!ELEMENT received-other-count (#PCDATA)>
<!ELEMENT received-port-down-count (#PCDATA)>
<!ELEMENT received-port-up-count (#PCDATA)>
<!ELEMENT received-rstack-count (#PCDATA)>
<!ELEMENT received-syn-count (#PCDATA)>
<!ELEMENT received-synack-count (#PCDATA)>
<!ELEMENT record-number (#PCDATA)>
<!ELEMENT rtcreate-time (#PCDATA)>
<!ELEMENT sent-ack-count (#PCDATA)>
<!ELEMENT sent-oam-count (#PCDATA)>
<!ELEMENT sent-rstack-count (#PCDATA)>
<!ELEMENT sent-syn-count (#PCDATA)>
<!ELEMENT sent-synack-count (#PCDATA)>
<!ELEMENT session-time (#PCDATA)>
<!ELEMENT shaping-rate (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT subscriber-count (#PCDATA)>
<!ELEMENT system-instance (#PCDATA)>
<!ELEMENT tcp-port (#PCDATA)>
<!ELEMENT up-time (#PCDATA)>
```

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```
<!ELEMENT wait-for-gsmp-syn (#PCDATA)>
```


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CHAPTER 64

DTD for APPIDD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-appidd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-appidd.dtd -->

<!ELEMENT address-matched-sessions (#PCDATA)>

<!ELEMENT address-unknown-sessions (#PCDATA)>

<!ELEMENT appid-application (#PCDATA)>

<!ELEMENT appid-application-group (application-group-summary |
application-group-detail)*>

<!ELEMENT appid-application-group-statistics (application-name | sessions |
bytes)*>

<!ELEMENT appid-application-group-statistics-information (last-reset-group-stats
 | appid-application-group-statistics)*>

<!ELEMENT appid-application-signature (application-signature-summary |
application-signature-detail)*>

<!ELEMENT appid-application-statistics (application-name | sessions | bytes |
is_encrypted)*>

<!ELEMENT appid-application-statistics-information (last-reset-stats |
appid-application-statistics)*>

<!ELEMENT appid-application-system-cache (ip-address | port | protocol |
appid-service | appid-application | cpu-id)*>

<!ELEMENT appid-application-system-cache-information (pic |
appid-cache-configuration | appid-application-system-cache |
appid-application-system-cache-usp)*>
```

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```
<!ELEMENT appid-application-system-cache-usp (virtual-system-identifier |
ip-address | ipv6-address | port | protocol | index | appid-application |
application-groups | is_encrypted)*>

<!ELEMENT appid-asc-enable (#PCDATA)>

<!ELEMENT appid-cache-configuration (appid-asc-enable | appid-nested-asc-enable
| appid-cache-unknown | appid-cache-timeout)*>

<!ELEMENT appid-cache-timeout (#PCDATA)>

<!ELEMENT appid-cache-unknown (#PCDATA)>

<!ELEMENT appid-counter (pic | total-sessions | total-matched-sessions |
total-unknown-sessions | protocol-matched-sessions | protocol-unknown-sessions |
 address-matched-sessions | address-unknown-sessions | port-matched-sessions |
port-unknown-sessions | icmp-matched-sessions | icmp-unknown-sessions |
ip-protocol-matched-sessions | ip-protocol-unknown-sessions |
signature-matched-sessions | uni-signature-matched-sessions |
signature-unknown-sessions | signature-encrypted-sessions | signature-p2p-sessions
 | application-system-cache-hit | application-system-cache-miss)*>

<!ELEMENT appid-counter-information (pic | appid-counter-usp | appid-counter)*>

<!ELEMENT appid-counter-usp (counter-name | counter-value)*>

<!ELEMENT appid-nested-asc-enable (#PCDATA)>

<!ELEMENT appid-package-version (version-detail)*>

<!ELEMENT appid-service (#PCDATA)>

<!ELEMENT application-default-ports (#PCDATA)>

<!ELEMENT application-description (#PCDATA)>

<!ELEMENT application-disabled (#PCDATA)>

<!ELEMENT application-expired-date (#PCDATA)>

<!ELEMENT application-group-detail (application-expired-date | group-name |
group-id | group-description | group-disabled | number-applications |
number-sub-groups | number-parent-groups | application-list-detail |
sub-groups-list-detail | parent-groups-list-detail)*>

<!ELEMENT application-group-list (group-name)*>

<!ELEMENT application-group-summary (total-groups |
application-group-summary-list)*>

<!ELEMENT application-group-summary-list (group-name | group-disabled | group-id)*>

<!ELEMENT application-groups (#PCDATA)>

<!ELEMENT application-id (#PCDATA)>

<!ELEMENT application-list-detail (application-name)*>

<!ELEMENT application-min-data (#PCDATA)>
```


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```
<!ELEMENT application-min-data-stc (#PCDATA)>

<!ELEMENT application-name (#PCDATA)>

<!ELEMENT application-number-parent-groups (#PCDATA)>

<!ELEMENT application-number-signatures (#PCDATA)>

<!ELEMENT application-order (#PCDATA)>

<!ELEMENT application-signature-detail (application-signature-detail-header |
regular-application-signature-detail | nested-application-signature-detail)*>

<!ELEMENT application-signature-detail-header (application-expired-date |
application-name | application-type | application-id | application-description |
 application-disabled | application-number-parent-groups |
application-number-signatures | application-group-list | application-tag-list)*>

<!ELEMENT application-signature-list (application-name | application-disabled |
application-id | application-order)*>

<!ELEMENT application-signature-summary (total-applications |
total-nested-applications | application-signature-list)*>

<!ELEMENT application-system-cache-hit (#PCDATA)>

<!ELEMENT application-system-cache-miss (#PCDATA)>

<!ELEMENT application-tag (#PCDATA)>

<!ELEMENT application-tag-list (application-tag | application-tag-name |
application-tag-value)*>

<!ELEMENT application-tag-name (#PCDATA)>

<!ELEMENT application-tag-value (#PCDATA)>

<!ELEMENT application-type (#PCDATA)>

<!ELEMENT apppack-download-status (apppack-download-status-detail)*>

<!ELEMENT apppack-download-status-detail (#PCDATA)>

<!ELEMENT apppack-expired-application-list (application-name | expired-time)*>

<!ELEMENT apppack-expired-group-list (group-name | expired-time)*>

<!ELEMENT apppack-expired-list-information (apppack-expired-application-list |
apppack-expired-group-list)*>

<!ELEMENT apppack-install-status (apppack-install-status-detail)*>

<!ELEMENT apppack-install-status-detail (#PCDATA)>

<!ELEMENT apppack-uninstall-status (apppack-uninstall-status-detail)*>

<!ELEMENT apppack-uninstall-status-detail (#PCDATA)>

<!ELEMENT bytes (#PCDATA)>

<!ELEMENT counter-name (#PCDATA)>
```

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```
<!ELEMENT counter-value (#PCDATA)>

<!ELEMENT cpu-id (#PCDATA)>

<!ELEMENT elapsed-time (#PCDATA)>

<!ELEMENT expired-time (#PCDATA)>

<!ELEMENT group-description (#PCDATA)>

<!ELEMENT group-disabled (#PCDATA)>

<!ELEMENT group-id (#PCDATA)>

<!ELEMENT group-name (#PCDATA)>

<!ELEMENT icmp-matched-sessions (#PCDATA)>

<!ELEMENT icmp-unknown-sessions (#PCDATA)>

<!ELEMENT index (#PCDATA)>

<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT ip-protocol-matched-sessions (#PCDATA)>

<!ELEMENT ip-protocol-unknown-sessions (#PCDATA)>

<!ELEMENT ipv6-address (#PCDATA)>

<!ELEMENT is_encrypted (#PCDATA)>

<!ELEMENT last-reset (#PCDATA)>

<!ELEMENT last-reset-group-stats (last-reset | elapsed-time)*>

<!ELEMENT last-reset-stats (last-reset | elapsed-time)*>

<!ELEMENT nested-application-signature-detail (nested-signature-name |
nested-signature-chain-order | nested-signature-max-trans | nested-signature-order
 | nested-l7protocol | nested-signature-num-members |
nested-signature-member-list)*>

<!ELEMENT nested-l7protocol (#PCDATA)>

<!ELEMENT nested-signature-chain-order (#PCDATA)>

<!ELEMENT nested-signature-max-trans (#PCDATA)>

<!ELEMENT nested-signature-member-context (#PCDATA)>

<!ELEMENT nested-signature-member-direction (#PCDATA)>

<!ELEMENT nested-signature-member-index (#PCDATA)>

<!ELEMENT nested-signature-member-list (nested-signature-member-index |
nested-signature-member-context | nested-signature-member-pattern |
nested-signature-member-direction)*>

<!ELEMENT nested-signature-member-pattern (#PCDATA)>
```


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```
<!ELEMENT nested-signature-name (#PCDATA)>

<!ELEMENT nested-signature-num-members (#PCDATA)>

<!ELEMENT nested-signature-order (#PCDATA)>

<!ELEMENT number-applications (#PCDATA)>

<!ELEMENT number-parent-groups (#PCDATA)>

<!ELEMENT number-sub-groups (#PCDATA)>

<!ELEMENT parent-groups-list-detail (group-name)*>

<!ELEMENT pic (#PCDATA)>

<!ELEMENT port (#PCDATA)>

<!ELEMENT port-matched-sessions (#PCDATA)>

<!ELEMENT port-unknown-sessions (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT protocol-matched-sessions (#PCDATA)>

<!ELEMENT protocol-unknown-sessions (#PCDATA)>

<!ELEMENT regular-application-signature-detail (application-default-ports |
signature-port-range | signature-cts-dfa-pattern | signature-cts-pcre-pattern |
signature-stc-dfa-pattern | signature-stc-pcre-pattern | application-min-data |
application-min-data-stc | application-order)*>

<!ELEMENT request-predefined-operation-status
(request-predefined-operation-status-detail)*>

<!ELEMENT request-predefined-operation-status-detail (#PCDATA)>

<!ELEMENT sessions (#PCDATA)>

<!ELEMENT signature-cts-dfa-pattern (#PCDATA)>

<!ELEMENT signature-cts-pcre-pattern (#PCDATA)>

<!ELEMENT signature-encrypted-sessions (#PCDATA)>

<!ELEMENT signature-matched-sessions (#PCDATA)>

<!ELEMENT signature-p2p-sessions (#PCDATA)>

<!ELEMENT signature-port-range (#PCDATA)>

<!ELEMENT signature-stc-dfa-pattern (#PCDATA)>

<!ELEMENT signature-stc-pcre-pattern (#PCDATA)>

<!ELEMENT signature-unknown-sessions (#PCDATA)>

<!ELEMENT sub-groups-list-detail (group-name)*>
```

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```
<!ELEMENT total-applications (#PCDATA)>

<!ELEMENT total-groups (#PCDATA)>

<!ELEMENT total-matched-sessions (#PCDATA)>

<!ELEMENT total-nested-applications (#PCDATA)>

<!ELEMENT total-sessions (#PCDATA)>

<!ELEMENT total-unknown-sessions (#PCDATA)>

<!ELEMENT uni-signature-matched-sessions (#PCDATA)>

<!ELEMENT version-detail (#PCDATA)>

<!ELEMENT virtual-system-identifier (#PCDATA)>
```


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CHAPTER 65

DTD for Application Security Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-appsecured.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-appsecured.dtd -->

<!ELEMENT application-name (#PCDATA)>

<!ELEMENT application-ruleset-name (#PCDATA)>

<!ELEMENT appqos-counter (counter-name | counter-value)*>

<!ELEMENT appqos-counter-information (pic)*>

<!ELEMENT appqos-rate-limiter-statistics (application-ruleset-name |
application-name | cts-rate-limiter | cts-rate | stc-rate-limiter | stc-rate)*>

<!ELEMENT appqos-rate-limiter-statistics-information (pic)*>

<!ELEMENT appqos-rule-statistics (ruleset-name | rule-name | rule-hits)*>

<!ELEMENT appqos-rule-statistics-information (pic)*>

<!ELEMENT counter-name (#PCDATA)>

<!ELEMENT counter-value (#PCDATA)>

<!ELEMENT cts-rate (#PCDATA)>

<!ELEMENT cts-rate-limiter (#PCDATA)>

<!ELEMENT name (#PCDATA)>
```

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```
<!ELEMENT pic (name | appqos-counter | appqos-rule-statistics |
appqos-rate-limiter-statistics)*>

<!ELEMENT rule-hits (#PCDATA)>

<!ELEMENT rule-name (#PCDATA)>

<!ELEMENT ruleset-name (#PCDATA)>

<!ELEMENT stc-rate (#PCDATA)>

<!ELEMENT stc-rate-limiter (#PCDATA)>
```


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CHAPTER 66

DTD for APS Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-aps.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-aps.dtd -->

<!ELEMENT aps-adjacent-state (#PCDATA)>

<!ELEMENT aps-annex-b (#PCDATA)>

<!ELEMENT aps-channel-state (#PCDATA)>

<!ELEMENT aps-config-state (#PCDATA)>

<!ELEMENT aps-config-state-circuit (#PCDATA)>

<!ELEMENT aps-interface (aps-interface-name | aps-interface-group |
aps-interface-circuit-type | aps-interface-circuit-state | aps-interface-state |
 aps-neighbor | aps-adjacent-state | aps-neighbor-select-state | aps-time-remaining
 | aps-channel-state | aps-config-state | aps-config-state-circuit |
aps-loop-circuit-type | aps-loop-circuit-name | aps-pair-interface-name |
aps-pair-group-name | aps-local-mode | aps-neighbor-mode | aps-request-k1 |
aps-request-k2 | aps-receive-k1 | aps-transmit-k1 | aps-receive-k2 |
aps-transmit-k2 | aps-neighbor-k1 | aps-neighbor-paired-request | aps-revert-time
 | aps-wait-to-restore-time | aps-annex-b | aps-neighbor-revert-time |
aps-neighbor-wait-to-restore-time | aps-remaining-revert-time |
aps-remaining-wait-to-restore-time | aps-remaining-forced-revert-time |
aps-remaining-hello-timer | aps-remaining-update-timer |
aps-remaining-holddown-timer)*>
<!ATTLIST aps-interface junos:style CDATA #IMPLIED>

<!ELEMENT aps-interface-circuit-state (#PCDATA)>

<!ELEMENT aps-interface-circuit-type (#PCDATA)>

<!ELEMENT aps-interface-group (#PCDATA)>
```

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```
<!ELEMENT aps-interface-information (aps-interface)*>
<!ELEMENT aps-interface-name (#PCDATA)>
<!ELEMENT aps-interface-state (#PCDATA)>
<!ELEMENT aps-local-mode (#PCDATA)>
<!ELEMENT aps-loop-circuit-name (#PCDATA)>
<!ELEMENT aps-loop-circuit-type (#PCDATA)>
<!ELEMENT aps-neighbor (#PCDATA)>
<!ELEMENT aps-neighbor-k1 (#PCDATA)>
<!ELEMENT aps-neighbor-mode (#PCDATA)>
<!ELEMENT aps-neighbor-paired-request (#PCDATA)>
<!ELEMENT aps-neighbor-revert-time (#PCDATA)>
<!ELEMENT aps-neighbor-select-state (#PCDATA)>
<!ELEMENT aps-neighbor-wait-to-restore-time (#PCDATA)>
<!ELEMENT aps-pair-group-name (#PCDATA)>
<!ELEMENT aps-pair-interface-name (#PCDATA)>
<!ELEMENT aps-receive-k1 (#PCDATA)>
<!ELEMENT aps-receive-k2 (#PCDATA)>
<!ELEMENT aps-remaining-forced-revert-time (#PCDATA)>
<!ELEMENT aps-remaining-hello-timer (#PCDATA)>
<!ELEMENT aps-remaining-holddown-timer (#PCDATA)>
<!ELEMENT aps-remaining-revert-time (#PCDATA)>
<!ELEMENT aps-remaining-update-timer (#PCDATA)>
<!ELEMENT aps-remaining-wait-to-restore-time (#PCDATA)>
<!ELEMENT aps-request-k1 (#PCDATA)>
<!ELEMENT aps-request-k2 (#PCDATA)>
<!ELEMENT aps-revert-time (#PCDATA)>
<!ELEMENT aps-time-remaining (#PCDATA)>
<!ELEMENT aps-transmit-k1 (#PCDATA)>
<!ELEMENT aps-transmit-k2 (#PCDATA)>
<!ELEMENT aps-wait-to-restore-time (#PCDATA)>
```


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CHAPTER 67

DTD for ARP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-arp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-arp.dtd -->

<!ELEMENT arp-entry-count (#PCDATA)>

<!ELEMENT arp-table-entry (mac-address | ip-address | hostname | interface-name
| arp-table-entry-flags | time-to-expire)*>

<!ELEMENT arp-table-entry-flags (none | permanent | published | dead | free)*>

<!ELEMENT arp-table-information (arp-table-entry | arp-entry-count)*>
<!ATTLIST arp-table-information junos:style CDATA #IMPLIED>

<!ELEMENT clear-arp-table-result (ip-address | clear-success)*>

<!ELEMENT clear-arp-table-results (clear-arp-table-result)*>

<!ELEMENT clear-success EMPTY>

<!ELEMENT dead EMPTY>

<!ELEMENT free EMPTY>

<!ELEMENT hostname (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT mac-address (#PCDATA)>

<!ELEMENT none EMPTY>
```

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```
<!ELEMENT permanent EMPTY>

<!ELEMENT published EMPTY>

<!ELEMENT time-to-expire (#PCDATA)>
```


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CHAPTER 68

DTD for Authentication Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-auth.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-auth.dtd -->

<!ELEMENT aaa-logical-system-routing-instance (#PCDATA)>

<!ELEMENT aaa-module-accounting-statistics (requests | accounting-response-failures
 | accounting-response-success | timeouts | multistack-suppressions)*>

<!ELEMENT aaa-module-address-assignment-client-statistics (client-name |
out-of-memory | no-matches)*>

<!ELEMENT aaa-module-address-assignment-pool-statistics (pool-name | link-name |
 out-of-memory | out-of-addresses | total-addresses | used-addresses |
pool-usage)*>

<!ELEMENT aaa-module-authentication-statistics (requests | multistack-requests |
 accepts | rejects | radius-failures | rejects-queue-request-deleted |
rejects-malformed-reply | rejects-no-server-configured |
rejects-access-profile-config-unavailable | rejects-no-client-record |
rejects-no-client-request | rejects-no-build-auth-request | rejects-no-server |
rejects-no-create-handle | rejects-no-queue-request | rejects-invalid-credentials
 | rejects-internal-failure | rejects-malformed-request |
rejects-license-unavailable | rejects-redirect-requested | local-failures |
ldap-failures | challenges | timeouts)*>

<!ELEMENT aaa-module-dynamic-requests-statistics (requests | processed-ok |
processing-error | silent-drops)*>

<!ELEMENT aaa-module-profile-radius-servers (profile-name | server-address |
authentication-port | accounting-port | available-status)*>

<!ELEMENT aaa-module-radius-servers-information (aaa-module-profile-radius-servers
 | aaa-module-radius-servers-statistics)*>
```

```
<!ATTLIST aaa-module-radius-servers-information junos:style CDATA #IMPLIED>

<!ELEMENT aaa-module-radius-servers-statistics (server-address |
authentication-requests | authentication-rollover-requests |
authentication-retransmissions | accepts | rejects | challenges |
authentication-malformed-responses | authentication-bad-authenticators |
authentication-requests-pending | authentication-timeouts |
authentication-unknown-responses | authentication-packets-dropped |
accounting-start-requests | accounting-interim-requests | accounting-stop-requests
 | accounting-rollover-requests | accounting-retransmissions |
accounting-start-response | accounting-interim-response | accounting-stop-response
 | accounting-malformed-response | accounting-bad-authenticators |
accounting-requests-pending | accounting-timeouts | accounting-unknown-responses
 | accounting-packets-dropped)*>

<!ELEMENT aaa-module-radius-statistics (server-address | profile | max-outstanding
 | current-outstanding | peak-outstanding | fail-outstanding |
radius-statistics-error)*>

<!ELEMENT aaa-module-re-authentication-statistics (requests | accepts | aborts |
 challenges | internal-errors | rejects | timeouts)*>

<!ELEMENT aaa-module-statistics (requests | multistack-requests | accepts | rejects
 | radius-failures | rejects-queue-request-deleted | rejects-malformed-reply |
rejects-no-server-configured | rejects-access-profile-config-unavailable |
rejects-no-client-record | rejects-no-client-request |
rejects-no-build-auth-request | rejects-no-server | rejects-no-create-handle |
rejects-no-queue-request | rejects-invalid-credentials | rejects-internal-failure
 | rejects-malformed-request | rejects-license-unavailable |
rejects-redirect-requested | local-failures | ldap-failures |
accounting-response-failures | accounting-response-success | timeouts |
multistack-suppressions | challenges | processed-ok | processing-error |
silent-drops | internal-errors | aborts | interim-updates-rcvd |
interim-updates-sent | interim-updates-error-rcvd | requested-final-stats |
final-stats-retry-count | final-stats-rcvd | final-stats-error-rcvd |
final-stats-sent | time-only-info-sent | stats-timer-fired |
libstats-interim-egress-subs | libstats-interim-ingress-subs |
libstats-interim-egress-general-error | libstats-interim-ingress-general-error |
 libstats-interim-egress-kernel-error | libstats-interim-ingress-kernel-error |
libstats-interim-egress-memory-error | libstats-interim-ingress-memory-error |
libstats-interim-egress-ipc-error | libstats-interim-ingress-ipc-error |
libstats-interim-egress-validation-error |
libstats-interim-ingress-validation-error | libstats-interim-egress-db-lookup-error
 | libstats-interim-ingress-db-lookup-error | libstats-final-egress-subs |
libstats-final-ingress-subs | libstats-final-egress-general-error |
libstats-final-ingress-general-error | libstats-final-egress-kernel-error |
libstats-final-ingress-kernel-error | libstats-final-egress-memory-error |
libstats-final-ingress-memory-error | libstats-final-egress-ipc-error |
libstats-final-ingress-ipc-error | libstats-final-egress-validation-error |
libstats-final-ingress-validation-error | libstats-final-egress-db-lookup-error
| libstats-final-ingress-db-lookup-error | libstats-all-egress-msg-types |
libstats-all-ingress-msg-types | libstats-all-egress-general-error |
libstats-all-ingress-general-error | libstats-all-egress-kernel-error |
libstats-all-ingress-kernel-error | libstats-all-egress-memory-error |
libstats-all-ingress-memory-error | libstats-all-egress-ipc-error |
libstats-all-ingress-ipc-error | libstats-all-egress-validation-error |
libstats-all-ingress-validation-error | libstats-all-egress-db-lookup-error |
libstats-all-ingress-db-lookup-error | aaa-module-authentication-statistics |
aaa-module-accounting-statistics | aaa-module-dynamic-requests-statistics |
aaa-module-volume-accounting-statistics | aaa-module-re-authentication-statistics
 | aaa-module-address-assignment-pool-statistics |
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aaa-module-address-assignment-client-statistics | aaa-module-subscriber-statistics
 | aaa-module-radius-statistics)*>

<!ELEMENT aaa-module-subscriber-statistics (total-number-of-subscribers)*>

<!ELEMENT aaa-module-volume-accounting-statistics (interim-updates-rcvd |
interim-updates-sent | interim-updates-error-rcvd | requested-final-stats |
final-stats-retry-count | final-stats-rcvd | final-stats-error-rcvd |
final-stats-sent | time-only-info-sent | stats-timer-fired |
libstats-interim-egress-subs | libstats-interim-ingress-subs |
libstats-interim-egress-general-error | libstats-interim-ingress-general-error |
 libstats-interim-egress-kernel-error | libstats-interim-ingress-kernel-error |
libstats-interim-egress-memory-error | libstats-interim-ingress-memory-error |
libstats-interim-egress-ipc-error | libstats-interim-ingress-ipc-error |
libstats-interim-egress-validation-error |
libstats-interim-ingress-validation-error | libstats-interim-egress-db-lookup-error
 | libstats-interim-ingress-db-lookup-error | libstats-final-egress-subs |
libstats-final-ingress-subs | libstats-final-egress-general-error |
libstats-final-ingress-general-error | libstats-final-egress-kernel-error |
libstats-final-ingress-kernel-error | libstats-final-egress-memory-error |
libstats-final-ingress-memory-error | libstats-final-egress-ipc-error |
libstats-final-ingress-ipc-error | libstats-final-egress-validation-error |
libstats-final-ingress-validation-error | libstats-final-egress-db-lookup-error
| libstats-final-ingress-db-lookup-error | libstats-all-egress-msg-types |
libstats-all-ingress-msg-types | libstats-all-egress-general-error |
libstats-all-ingress-general-error | libstats-all-egress-kernel-error |
libstats-all-ingress-kernel-error | libstats-all-egress-memory-error |
libstats-all-ingress-memory-error | libstats-all-egress-ipc-error |
libstats-all-ingress-ipc-error | libstats-all-egress-validation-error |
libstats-all-ingress-validation-error | libstats-all-egress-db-lookup-error |
libstats-all-ingress-db-lookup-error)*>

<!ELEMENT aaa-subscriber-accounting-statistics (accounting-start-sent-successfully
 | accounting-start-send-failed | accounting-start-responses |
accounting-interim-sent-successfully | accounting-interim-send-failed |
accounting-interim-responses)*>

<!ELEMENT aaa-subscriber-auth-statistics (authentication-challenge-requests |
authentication-challenge-responses)*>

<!ELEMENT aaa-subscriber-reauth-statistics (re-authentication-requests |
re-authentication-responses | re-authentication-aborts)*>

<!ELEMENT aaa-subscriber-service-statistics (service-name | service-creates |
service-deletes | service-timeouts)*>

<!ELEMENT aaa-subscriber-statistics (authentication-challenge-requests |
authentication-challenge-responses | accounting-start-sent-successfully |
accounting-start-send-failed | accounting-start-responses |
accounting-interim-sent-successfully | accounting-interim-send-failed |
accounting-interim-responses | service-creates | service-deletes | service-timeouts
 | re-authentication-requests | re-authentication-responses |
re-authentication-aborts | aaa-subscriber-auth-statistics |
aaa-subscriber-accounting-statistics | aaa-subscriber-service-statistics |
aaa-subscriber-reauth-statistics)*>

<!ELEMENT aaa-subscriber-table (aaa-subscriber-table-entry |
aaa-subscriber-table-entry-details |
aaa-subscriber-table-logical-system-routing-instance-entries |
aaa-subscriber-table-entry-service-details |
aaa-subscriber-table-entry-session-id-detail)*>
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<!ELEMENT aaa-subscriber-table-details (aaa-subscriber-table |
aaa-subscriber-statistics)*>

<!ELEMENT aaa-subscriber-table-entry (user-name | logical-system-routing-instance
 | client-type | session-id)*>
<!ATTLIST aaa-subscriber-table-entry junos:style CDATA #IMPLIED>

<!ELEMENT aaa-subscriber-table-entry-details (logical-system-routing-instance |
client-type | session-uptime | accounting-status)*>
<!ATTLIST aaa-subscriber-table-entry-details junos:style CDATA #IMPLIED>

<!ELEMENT aaa-subscriber-table-entry-service-details (service-name | service-type
 | service-quota | accounting-status)*>
<!ATTLIST aaa-subscriber-table-entry-service-details junos:style CDATA #IMPLIED>

<!ELEMENT aaa-subscriber-table-entry-session-id-detail (client-type | user-name
| stripped-user-name | aaa-logical-system-routing-instance |
target-logical-system-routing-instance | access-profile | session-id |
accounting-session-id | multi-accounting-session-id | ip-address-assigned |
ipv6-address-assigned | ipv6-prefix-assigned | assignment-type | auth-state |
gx-plus-prov-state | accounting-state | provisioning-type | service-name |
service-state | service-session-id | service-accounting-session-id |
accounting-status | session-uptime | service-accounting-state |
accounting-interim-interval | service-accounting-protocol)*>
<!ATTLIST aaa-subscriber-table-entry-session-id-detail junos:style CDATA #IMPLIED>

<!ELEMENT aaa-subscriber-table-logical-system-routing-instance-entries (user-name
 | client-type | logical-system-routing-instance)*>
<!ATTLIST aaa-subscriber-table-logical-system-routing-instance-entries junos:style
 CDATA #IMPLIED>

<!ELEMENT aaa-termcode-custom-mapping (#PCDATA)>

<!ELEMENT aaa-termcode-error (#PCDATA)>

<!ELEMENT aaa-termcode-information (aaa-termcode-list | aaa-termcode-summary-list
 | aaa-termcode-not-found | aaa-termcode-error)*>
<!ATTLIST aaa-termcode-information junos:style CDATA #IMPLIED>

<!ELEMENT aaa-termcode-keyword (#PCDATA)>

<!ELEMENT aaa-termcode-list (aaa-termcode-radius-termcause |
aaa-termcode-custom-mapping | aaa-termcode-usage-count | aaa-termcode-type |
aaa-termcode-keyword)*>

<!ELEMENT aaa-termcode-mapping-count (#PCDATA)>

<!ELEMENT aaa-termcode-not-found (#PCDATA)>

<!ELEMENT aaa-termcode-radius-termcause (#PCDATA)>

<!ELEMENT aaa-termcode-reverse-error (#PCDATA)>

<!ELEMENT aaa-termcode-reverse-information (aaa-termcode-reverse-list |
aaa-termcode-reverse-summary-list | aaa-termcode-reverse-not-found |
aaa-termcode-reverse-error)*>
<!ATTLIST aaa-termcode-reverse-information junos:style CDATA #IMPLIED>

<!ELEMENT aaa-termcode-reverse-list (aaa-termcode-radius-termcause |
aaa-termcode-custom-mapping | aaa-termcode-usage-count | aaa-termcode-type |
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aaa-termcode-keyword)*>

<!ELEMENT aaa-termcode-reverse-not-found (#PCDATA)>

<!ELEMENT aaa-termcode-reverse-summary-list (aaa-termcode-radius-termcause |
aaa-termcode-custom-mapping | aaa-termcode-mapping-count | aaa-termcode-usage-count
 | aaa-termcode-type)*>

<!ELEMENT aaa-termcode-summary-list (aaa-termcode-custom-mapping |
aaa-termcode-mapping-count | aaa-termcode-usage-count | aaa-termcode-type)*>

<!ELEMENT aaa-termcode-type (#PCDATA)>

<!ELEMENT aaa-termcode-usage-count (#PCDATA)>

<!ELEMENT aaa-test-result (aaa-test-status | radius-server-attribute-name |
radius-server-attribute-value | terminate-attribute-name |
terminate-attribute-value)*>

<!ELEMENT aaa-test-status (#PCDATA)>

<!ELEMENT aborts (#PCDATA)>

<!ELEMENT accepts (#PCDATA)>

<!ELEMENT access-profile (#PCDATA)>

<!ELEMENT accounting-bad-authenticators (#PCDATA)>

<!ELEMENT accounting-interim-interval (#PCDATA)>

<!ELEMENT accounting-interim-requests (#PCDATA)>

<!ELEMENT accounting-interim-response (#PCDATA)>

<!ELEMENT accounting-interim-responses (#PCDATA)>

<!ELEMENT accounting-interim-send-failed (#PCDATA)>

<!ELEMENT accounting-interim-sent-successfully (#PCDATA)>

<!ELEMENT accounting-malformed-response (#PCDATA)>

<!ELEMENT accounting-packets-dropped (#PCDATA)>

<!ELEMENT accounting-port (#PCDATA)>

<!ELEMENT accounting-requests-pending (#PCDATA)>

<!ELEMENT accounting-response-failures (#PCDATA)>

<!ELEMENT accounting-response-success (#PCDATA)>

<!ELEMENT accounting-retransmissions (#PCDATA)>

<!ELEMENT accounting-rollover-requests (#PCDATA)>

<!ELEMENT accounting-session-id (#PCDATA)>

<!ELEMENT accounting-start-requests (#PCDATA)>
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<!ELEMENT accounting-start-response (#PCDATA)>

<!ELEMENT accounting-start-responses (#PCDATA)>

<!ELEMENT accounting-start-send-failed (#PCDATA)>

<!ELEMENT accounting-start-sent-successfully (#PCDATA)>

<!ELEMENT accounting-state (#PCDATA)>

<!ELEMENT accounting-status (#PCDATA)>

<!ELEMENT accounting-stop-requests (#PCDATA)>

<!ELEMENT accounting-stop-response (#PCDATA)>

<!ELEMENT accounting-timeouts (#PCDATA)>

<!ELEMENT accounting-unknown-responses (#PCDATA)>

<!ELEMENT address-assignment-pool-entry (ip-address | hardware-address | host-name
 | subscriber-type)*>

<!ELEMENT address-assignment-pool-table (address-assignment-pool-entry)*>
<!ATTLIST address-assignment-pool-table junos:style CDATA #IMPLIED>

<!ELEMENT address-assignment-pool-table-details (address-assignment-pool-table)*>

<!ELEMENT assignment-type (#PCDATA)>

<!ELEMENT auth-pending-entry (index | auth-status | profile-name | user-name)*>

<!ELEMENT auth-pending-table (auth-pending-entry)*>
<!ATTLIST auth-pending-table junos:style CDATA #IMPLIED>

<!ELEMENT auth-pending-table-details (auth-pending-table-info |
auth-pending-table)*>

<!ELEMENT auth-pending-table-info (auth-pending-total-entries)*>

<!ELEMENT auth-pending-total-entries (#PCDATA)>

<!ELEMENT auth-state (#PCDATA)>

<!ELEMENT auth-statistics (total-statistics | radius-auth-statistics |
ldap-auth-statistics | securid-auth-statistics | local-auth-statistics)*>

<!ELEMENT auth-status (#PCDATA)>

<!ELEMENT authd-memory-pool-information (memory-pool-name | node-size | pool-size
 | total-allocation | largest-allocation | current-allocation | number-of-grows
| number-of-fails | number-of-oversize-allocations)*>

<!ELEMENT authd-message (message)*>

<!ELEMENT authentication-bad-authenticators (#PCDATA)>

<!ELEMENT authentication-challenge-requests (#PCDATA)>

<!ELEMENT authentication-challenge-responses (#PCDATA)>
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<!ELEMENT authentication-malformed-responses (#PCDATA)>

<!ELEMENT authentication-packets-dropped (#PCDATA)>

<!ELEMENT authentication-port (#PCDATA)>

<!ELEMENT authentication-requests (#PCDATA)>

<!ELEMENT authentication-requests-pending (#PCDATA)>

<!ELEMENT authentication-retransmissions (#PCDATA)>

<!ELEMENT authentication-rollover-requests (#PCDATA)>

<!ELEMENT authentication-timeouts (#PCDATA)>

<!ELEMENT authentication-unknown-responses (#PCDATA)>

<!ELEMENT available-status (#PCDATA)>

<!ELEMENT challenges (#PCDATA)>

<!ELEMENT client-name (#PCDATA)>

<!ELEMENT client-type (#PCDATA)>

<!ELEMENT current-allocation (#PCDATA)>

<!ELEMENT current-outstanding (#PCDATA)>

<!ELEMENT default-used (#PCDATA)>

<!ELEMENT domain-map-statistics (matched-domains | unmatched-domains |
missing-domains | stripped-username | default-used)*>

<!ELEMENT fail-outstanding (#PCDATA)>

<!ELEMENT failure-responses (#PCDATA)>

<!ELEMENT final-stats-error-rcvd (#PCDATA)>

<!ELEMENT final-stats-rcvd (#PCDATA)>

<!ELEMENT final-stats-retry-count (#PCDATA)>

<!ELEMENT final-stats-sent (#PCDATA)>

<!ELEMENT gx-plus-active-config-state (#PCDATA)>

<!ELEMENT gx-plus-config-state (#PCDATA)>

<!ELEMENT gx-plus-counter-name (#PCDATA)>

<!ELEMENT gx-plus-counter-value (#PCDATA)>

<!ELEMENT gx-plus-diameter-config-state (#PCDATA)>

<!ELEMENT gx-plus-downstream-category (#PCDATA)>

<!ELEMENT gx-plus-downstream-counter-name (#PCDATA)>
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<!ELEMENT gx-plus-downstream-counter-value (#PCDATA)>

<!ELEMENT gx-plus-downstream-stats-data (gx-plus-downstream-category |
gx-plus-downstream-counter-name | gx-plus-downstream-counter-value)*>

<!ELEMENT gx-plus-downstream-stats-table (gx-plus-downstream-stats-data)*>

<!ELEMENT gx-plus-engine-state (#PCDATA)>

<!ELEMENT gx-plus-pending-logout-count (#PCDATA)>

<!ELEMENT gx-plus-pending-prov-count (#PCDATA)>

<!ELEMENT gx-plus-prov-state (#PCDATA)>

<!ELEMENT gx-plus-state-information (gx-plus-engine-state | gx-plus-config-state
 | gx-plus-active-config-state | gx-plus-diameter-config-state |
gx-plus-total-prov-count | gx-plus-pending-prov-count |
gx-plus-pending-logout-count)*>

<!ELEMENT gx-plus-statistics-data (gx-plus-counter-name | gx-plus-counter-value)*>

<!ELEMENT gx-plus-statistics-information (gx-plus-statistics-table |
gx-plus-sync-event-stats-table | gx-plus-sync-event-de-stats-table |
gx-plus-upstream-stats-table | gx-plus-upstream-de-stats-table |
gx-plus-downstream-stats-table | gx-plus-statistics-no-counters |
gx-plus-statistics-message)*>

<!ELEMENT gx-plus-statistics-message (#PCDATA)>

<!ELEMENT gx-plus-statistics-no-counters (#PCDATA)>

<!ELEMENT gx-plus-statistics-table (gx-plus-statistics-data)*>

<!ELEMENT gx-plus-sync-event (#PCDATA)>

<!ELEMENT gx-plus-sync-event-counter-name (#PCDATA)>

<!ELEMENT gx-plus-sync-event-counter-value (#PCDATA)>

<!ELEMENT gx-plus-sync-event-de (#PCDATA)>

<!ELEMENT gx-plus-sync-event-de-counter-name (#PCDATA)>

<!ELEMENT gx-plus-sync-event-de-counter-value (#PCDATA)>

<!ELEMENT gx-plus-sync-event-de-stats-data (gx-plus-sync-event-de |
gx-plus-sync-event-de-counter-name | gx-plus-sync-event-de-counter-value)*>

<!ELEMENT gx-plus-sync-event-de-stats-table (gx-plus-sync-event-de-stats-data)*>

<!ELEMENT gx-plus-sync-event-name (#PCDATA)>

<!ELEMENT gx-plus-sync-event-stats-data (gx-plus-sync-event |
gx-plus-sync-event-counter-name | gx-plus-sync-event-counter-value)*>

<!ELEMENT gx-plus-sync-event-stats-table (gx-plus-sync-event-stats-data)*>

<!ELEMENT gx-plus-sync-event-timeout (#PCDATA)>

<!ELEMENT gx-plus-sync-state-data (gx-plus-sync-event-name |
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gx-plus-sync-event-timeout)*>

<!ELEMENT gx-plus-sync-state-information (gx-plus-sync-state-data |
gx-plus-sync-state-no-events | gx-plus-sync-state-message)*>

<!ELEMENT gx-plus-sync-state-message (#PCDATA)>

<!ELEMENT gx-plus-sync-state-no-events (#PCDATA)>

<!ELEMENT gx-plus-total-prov-count (#PCDATA)>

<!ELEMENT gx-plus-upstream-category (#PCDATA)>

<!ELEMENT gx-plus-upstream-counter-name (#PCDATA)>

<!ELEMENT gx-plus-upstream-counter-value (#PCDATA)>

<!ELEMENT gx-plus-upstream-de-category (#PCDATA)>

<!ELEMENT gx-plus-upstream-de-counter-name (#PCDATA)>

<!ELEMENT gx-plus-upstream-de-counter-value (#PCDATA)>

<!ELEMENT gx-plus-upstream-de-stats-data (gx-plus-upstream-de-category |
gx-plus-upstream-de-counter-name | gx-plus-upstream-de-counter-value)*>

<!ELEMENT gx-plus-upstream-de-stats-table (gx-plus-upstream-de-stats-data)*>

<!ELEMENT gx-plus-upstream-stats-data (gx-plus-upstream-category |
gx-plus-upstream-counter-name | gx-plus-upstream-counter-value)*>

<!ELEMENT gx-plus-upstream-stats-table (gx-plus-upstream-stats-data)*>

<!ELEMENT hardware-address (#PCDATA)>

<!ELEMENT host-name (#PCDATA)>

<!ELEMENT index (#PCDATA)>

<!ELEMENT interim-updates-error-rcvd (#PCDATA)>

<!ELEMENT interim-updates-rcvd (#PCDATA)>

<!ELEMENT interim-updates-sent (#PCDATA)>

<!ELEMENT internal-errors (#PCDATA)>

<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT ip-address-assigned (#PCDATA)>

<!ELEMENT ipv6-address-assigned (#PCDATA)>

<!ELEMENT ipv6-prefix-assigned (#PCDATA)>

<!ELEMENT largest-allocation (#PCDATA)>

<!ELEMENT ldap-auth-statistics (total-requests | success-responses |
failure-responses)*>

<!ELEMENT ldap-failures (#PCDATA)>
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<!ELEMENT libstats-all-egress-db-lookup-error (#PCDATA)>
<!ELEMENT libstats-all-egress-general-error (#PCDATA)>
<!ELEMENT libstats-all-egress-ipc-error (#PCDATA)>
<!ELEMENT libstats-all-egress-kernel-error (#PCDATA)>
<!ELEMENT libstats-all-egress-memory-error (#PCDATA)>
<!ELEMENT libstats-all-egress-msg-types (#PCDATA)>
<!ELEMENT libstats-all-egress-validation-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-db-lookup-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-general-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-ipc-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-kernel-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-memory-error (#PCDATA)>
<!ELEMENT libstats-all-ingress-msg-types (#PCDATA)>
<!ELEMENT libstats-all-ingress-validation-error (#PCDATA)>
<!ELEMENT libstats-final-egress-db-lookup-error (#PCDATA)>
<!ELEMENT libstats-final-egress-general-error (#PCDATA)>
<!ELEMENT libstats-final-egress-ipc-error (#PCDATA)>
<!ELEMENT libstats-final-egress-kernel-error (#PCDATA)>
<!ELEMENT libstats-final-egress-memory-error (#PCDATA)>
<!ELEMENT libstats-final-egress-subs (#PCDATA)>
<!ELEMENT libstats-final-egress-validation-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-db-lookup-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-general-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-ipc-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-kernel-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-memory-error (#PCDATA)>
<!ELEMENT libstats-final-ingress-subs (#PCDATA)>
<!ELEMENT libstats-final-ingress-validation-error (#PCDATA)>
<!ELEMENT libstats-interim-egress-db-lookup-error (#PCDATA)>
<!ELEMENT libstats-interim-egress-general-error (#PCDATA)>
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<!ELEMENT libstats-interim-egress-ipc-error (#PCDATA)>

<!ELEMENT libstats-interim-egress-kernel-error (#PCDATA)>

<!ELEMENT libstats-interim-egress-memory-error (#PCDATA)>

<!ELEMENT libstats-interim-egress-subs (#PCDATA)>

<!ELEMENT libstats-interim-egress-validation-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-db-lookup-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-general-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-ipc-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-kernel-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-memory-error (#PCDATA)>

<!ELEMENT libstats-interim-ingress-subs (#PCDATA)>

<!ELEMENT libstats-interim-ingress-validation-error (#PCDATA)>

<!ELEMENT link-name (#PCDATA)>

<!ELEMENT local-auth-statistics (total-requests | success-responses |
failure-responses)*>

<!ELEMENT local-failures (#PCDATA)>

<!ELEMENT logical-system-routing-instance (#PCDATA)>

<!ELEMENT matched-domains (#PCDATA)>

<!ELEMENT max-outstanding (#PCDATA)>

<!ELEMENT memory-pool-name (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT missing-domains (#PCDATA)>

<!ELEMENT multi-accounting-session-id (#PCDATA)>

<!ELEMENT multistack-requests (#PCDATA)>

<!ELEMENT multistack-suppressions (#PCDATA)>

<!ELEMENT no-matches (#PCDATA)>

<!ELEMENT node-secret-file (#PCDATA)>

<!ELEMENT node-secret-file-table (node-secret-file-table-entry)*>

<!ELEMENT node-secret-file-table-entry (server-name | node-secret-file)*>

<!ELEMENT node-size (#PCDATA)>

<!ELEMENT number-of-fails (#PCDATA)>
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<!ELEMENT number-of-grows (#PCDATA)>

<!ELEMENT number-of-oversize-allocations (#PCDATA)>

<!ELEMENT out-of-addresses (#PCDATA)>

<!ELEMENT out-of-memory (#PCDATA)>

<!ELEMENT peak-outstanding (#PCDATA)>

<!ELEMENT pool-name (#PCDATA)>

<!ELEMENT pool-size (#PCDATA)>

<!ELEMENT pool-usage (#PCDATA)>

<!ELEMENT processed-ok (#PCDATA)>

<!ELEMENT processing-error (#PCDATA)>

<!ELEMENT profile (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT provisioning-type (#PCDATA)>

<!ELEMENT radius-auth-statistics (total-requests | success-responses |
failure-responses)*>

<!ELEMENT radius-failures (#PCDATA)>

<!ELEMENT radius-server-attribute-name (#PCDATA)>

<!ELEMENT radius-server-attribute-value (#PCDATA)>

<!ELEMENT radius-statistics-error (#PCDATA)>

<!ELEMENT re-authentication-aborts (#PCDATA)>

<!ELEMENT re-authentication-requests (#PCDATA)>

<!ELEMENT re-authentication-responses (#PCDATA)>

<!ELEMENT rejects (#PCDATA)>

<!ELEMENT rejects-access-profile-config-unavailable (#PCDATA)>

<!ELEMENT rejects-internal-failure (#PCDATA)>

<!ELEMENT rejects-invalid-credentials (#PCDATA)>

<!ELEMENT rejects-license-unavailable (#PCDATA)>

<!ELEMENT rejects-malformed-reply (#PCDATA)>

<!ELEMENT rejects-malformed-request (#PCDATA)>

<!ELEMENT rejects-no-build-auth-request (#PCDATA)>

<!ELEMENT rejects-no-client-record (#PCDATA)>
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<!ELEMENT rejects-no-client-request (#PCDATA)>

<!ELEMENT rejects-no-create-handle (#PCDATA)>

<!ELEMENT rejects-no-queue-request (#PCDATA)>

<!ELEMENT rejects-no-server (#PCDATA)>

<!ELEMENT rejects-no-server-configured (#PCDATA)>

<!ELEMENT rejects-queue-request-deleted (#PCDATA)>

<!ELEMENT rejects-redirect-requested (#PCDATA)>

<!ELEMENT requested-final-stats (#PCDATA)>

<!ELEMENT requests (#PCDATA)>

<!ELEMENT securid-auth-statistics (total-requests | success-responses |
failure-responses)*>

<!ELEMENT server-address (#PCDATA)>

<!ELEMENT server-name (#PCDATA)>

<!ELEMENT service-accounting-protocol (#PCDATA)>

<!ELEMENT service-accounting-session-id (#PCDATA)>

<!ELEMENT service-accounting-state (#PCDATA)>

<!ELEMENT service-creates (#PCDATA)>

<!ELEMENT service-deletes (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT service-quota (#PCDATA)>

<!ELEMENT service-session-id (#PCDATA)>

<!ELEMENT service-state (#PCDATA)>

<!ELEMENT service-timeouts (#PCDATA)>

<!ELEMENT service-type (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-uptime (#PCDATA)>

<!ELEMENT silent-drops (#PCDATA)>

<!ELEMENT stats-timer-fired (#PCDATA)>

<!ELEMENT stripped-user-name (#PCDATA)>

<!ELEMENT stripped-username (#PCDATA)>

<!ELEMENT subscriber-type (#PCDATA)>
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<!ELEMENT success-responses (#PCDATA)>
<!ELEMENT target-logical-system-routing-instance (#PCDATA)>
<!ELEMENT terminate-attribute-name (#PCDATA)>
<!ELEMENT terminate-attribute-value (#PCDATA)>
<!ELEMENT time-only-info-sent (#PCDATA)>
<!ELEMENT timeouts (#PCDATA)>
<!ELEMENT total-addresses (#PCDATA)>
<!ELEMENT total-allocation (#PCDATA)>
<!ELEMENT total-number-of-subscribers (#PCDATA)>
<!ELEMENT total-requests (#PCDATA)>
<!ELEMENT total-responses (#PCDATA)>
<!ELEMENT total-statistics (total-requests | total-responses)*>
<!ELEMENT unmatched-domains (#PCDATA)>
<!ELEMENT used-addresses (#PCDATA)>
<!ELEMENT user-name (#PCDATA)>
```


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CHAPTER 69

DTD for BFD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-bfd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
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<!-- junos-bfd.dtd -->

<!ELEMENT adaptation-disabled (#PCDATA)>

<!ELEMENT adaptive-asynchronous-transmission-interval (#PCDATA)>

<!ELEMENT adaptive-reception-interval (#PCDATA)>

<!ELEMENT authentication (#PCDATA)>

<!ELEMENT bfd-client (client-name | client-transmission-interval |
client-reception-interval | client-multiplier | client-holddown-interval |
client-state | client-authentication | client-keychain | client-algorithm |
client-authentication-loose)*>

<!ELEMENT bfd-replication (bfd-replication-session-entry)*>

<!ELEMENT bfd-replication-session-entry (session-neighbor | session-interface |
local-discriminator | replication-state)*>

<!ELEMENT bfd-session (session-state | session-interface | session-neighbor |
session-detection-time | session-transmission-interval |
session-adaptive-multiplier | bfd-client | session-up-time | previous-up-time |
session-down-time | previous-down-time | local-diagnostic | remote-diagnostic |
remote-state | v0-remote-state | remote-listen | session-version |
logical-system-id | route-table-index | minimum-asynchronous-interval |
minimum-slow-interval | adaptive-asynchronous-transmission-interval |
adaptive-reception-interval | minimum-transmission-interval |
threshold-transmission-interval | minimum-reception-interval | detection-multiplier
 | threshold-detection-time | neighbor-minimum-transmission-interval |
neighbor-minimum-reception-interval | neighbor-session-multiplier | issu-state |
 original-transmission-interval | original-reception-interval | local-discriminator
```

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```
 | remote-discriminator | echo-mode-desired | echo-mode-state | no-absorb |
no-refresh | update-adjacency | update-transmit | neighbor-fate | replicated |
holddown-timer | adaptation-disabled | l2vpn-local-site-id | l2vpn-remote-site-id
 | l2ckt-neighbor-address | l2ckt-vc-id | tunnel-name | tunnel-path | tunnel-prefix
 | tunnel-prefix-length | tunnel-type | tunnel-destination | multihop-time-to-live
 | multihop | multihop-routing-table-index | multihop-local-address |
authentication | session-keychain | session-algorithm |
session-authentication-loose)*>

<!ELEMENT bfd-session-information (bfd-session | sessions | clients |
cumulative-transmission-rate | cumulative-reception-rate | error-value)*>
<!ATTLIST bfd-session-information junos:style CDATA #IMPLIED>

<!ELEMENT client-algorithm (#PCDATA)>

<!ELEMENT client-authentication (#PCDATA)>

<!ELEMENT client-authentication-loose (#PCDATA)>

<!ELEMENT client-holddown-interval (#PCDATA)>

<!ELEMENT client-keychain (#PCDATA)>

<!ELEMENT client-multiplier (#PCDATA)>

<!ELEMENT client-name (#PCDATA)>

<!ELEMENT client-reception-interval (#PCDATA)>

<!ELEMENT client-state (#PCDATA)>

<!ELEMENT client-transmission-interval (#PCDATA)>

<!ELEMENT clients (#PCDATA)>

<!ELEMENT cumulative-reception-rate (#PCDATA)>

<!ELEMENT cumulative-transmission-rate (#PCDATA)>

<!ELEMENT detection-multiplier (#PCDATA)>

<!ELEMENT echo-mode-desired (#PCDATA)>

<!ELEMENT echo-mode-state (#PCDATA)>

<!ELEMENT error-value (#PCDATA)>

<!ELEMENT holddown-timer (#PCDATA)>

<!ELEMENT issu-state (#PCDATA)>

<!ELEMENT l2ckt-neighbor-address (#PCDATA)>

<!ELEMENT l2ckt-vc-id (#PCDATA)>

<!ELEMENT l2vpn-local-site-id (#PCDATA)>

<!ELEMENT l2vpn-remote-site-id (#PCDATA)>

<!ELEMENT local-diagnostic (#PCDATA)>
```


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```
<!ELEMENT local-discriminator (#PCDATA)>
<!ELEMENT logical-system-id (#PCDATA)>
<!ELEMENT minimum-asynchronous-interval (#PCDATA)>
<!ELEMENT minimum-reception-interval (#PCDATA)>
<!ELEMENT minimum-slow-interval (#PCDATA)>
<!ELEMENT minimum-transmission-interval (#PCDATA)>
<!ELEMENT multihop (#PCDATA)>
<!ELEMENT multihop-local-address (#PCDATA)>
<!ELEMENT multihop-routing-table-index (#PCDATA)>
<!ELEMENT multihop-time-to-live (#PCDATA)>
<!ELEMENT neighbor-fate (#PCDATA)>
<!ELEMENT neighbor-minimum-reception-interval (#PCDATA)>
<!ELEMENT neighbor-minimum-transmission-interval (#PCDATA)>
<!ELEMENT neighbor-session-multiplier (#PCDATA)>
<!ELEMENT no-absorb (#PCDATA)>
<!ELEMENT no-refresh (#PCDATA)>
<!ELEMENT original-reception-interval (#PCDATA)>
<!ELEMENT original-transmission-interval (#PCDATA)>
<!ELEMENT previous-down-time (#PCDATA)>
<!ELEMENT previous-up-time (#PCDATA)>
<!ELEMENT remote-diagnostic (#PCDATA)>
<!ELEMENT remote-discriminator (#PCDATA)>
<!ELEMENT remote-listen (#PCDATA)>
<!ELEMENT remote-state (#PCDATA)>
<!ELEMENT replicated (#PCDATA)>
<!ELEMENT replication-state (#PCDATA)>
<!ELEMENT route-table-index (#PCDATA)>
<!ELEMENT session-adaptive-multiplier (#PCDATA)>
<!ELEMENT session-algorithm (#PCDATA)>
<!ELEMENT session-authentication-loose (#PCDATA)>
<!ELEMENT session-detection-time (#PCDATA)>
```

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```
<!ELEMENT session-down-time (#PCDATA)>
<!ELEMENT session-interface (#PCDATA)>
<!ELEMENT session-keychain (#PCDATA)>
<!ELEMENT session-neighbor (#PCDATA)>
<!ELEMENT session-state (#PCDATA)>
<!ELEMENT session-transmission-interval (#PCDATA)>
<!ELEMENT session-up-time (#PCDATA)>
<!ELEMENT session-version (#PCDATA)>
<!ELEMENT sessions (#PCDATA)>
<!ELEMENT threshold-detection-time (#PCDATA)>
<!ELEMENT threshold-transmission-interval (#PCDATA)>
<!ELEMENT tunnel-destination (#PCDATA)>
<!ELEMENT tunnel-name (#PCDATA)>
<!ELEMENT tunnel-path (#PCDATA)>
<!ELEMENT tunnel-prefix (#PCDATA)>
<!ELEMENT tunnel-prefix-length (#PCDATA)>
<!ELEMENT tunnel-type (#PCDATA)>
<!ELEMENT update-adjacency (#PCDATA)>
<!ELEMENT update-transmit (#PCDATA)>
<!ELEMENT v0-remote-state (#PCDATA)>
```


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CHAPTER 70

DTD for CFM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-cfm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-cfm.dtd -->

<!ELEMENT cfm-accu-loss-far-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-loss-far-end-cir-loss-stats-percent (#PCDATA)>

<!ELEMENT cfm-accu-loss-far-end-eir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-loss-far-end-eir-loss-stats-percent (#PCDATA)>

<!ELEMENT cfm-accu-loss-near-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-loss-near-end-cir-loss-stats-percent (#PCDATA)>

<!ELEMENT cfm-accu-loss-near-end-eir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-loss-near-end-eir-loss-stats-percent (#PCDATA)>

<!ELEMENT cfm-accu-tx-far-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-tx-far-end-eir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-tx-near-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-accu-tx-near-end-eir-loss-stats (#PCDATA)>

<!ELEMENT cfm-action-profile-name (#PCDATA)>

<!ELEMENT cfm-ap-action-name (#PCDATA)>

<!ELEMENT cfm-ap-action-time (#PCDATA)>
```

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```
<!ELEMENT cfm-ap-last-event (#PCDATA)>

<!ELEMENT cfm-ap-last-event-cleared-time (#PCDATA)>

<!ELEMENT cfm-average-oneway-bkwd-delay-variation (#PCDATA)>

<!ELEMENT cfm-average-oneway-fwd-delay-variation (#PCDATA)>

<!ELEMENT cfm-average-twoway-delay (#PCDATA)>

<!ELEMENT cfm-average-twoway-delay-variation (#PCDATA)>

<!ELEMENT cfm-client-session-id (#PCDATA)>

<!ELEMENT cfm-connection-protection-tlv-frr-flag (#PCDATA)>

<!ELEMENT cfm-connection-protection-tlv-prefer-me (#PCDATA)>

<!ELEMENT cfm-connection-protection-tlv-protection-in-use (#PCDATA)>

<!ELEMENT cfm-connection-protection-tlv-status (#PCDATA)>

<!ELEMENT cfm-continuity-check-interval (#PCDATA)>
<!ATTLIST cfm-continuity-check-interval junos:format CDATA #IMPLIED>

<!ELEMENT cfm-continuity-check-loss-threshold (#PCDATA)>

<!ELEMENT cfm-continuity-check-status (#PCDATA)>

<!ELEMENT cfm-counters-route-socket-operations
(cfm-route-socket-message-counters)*>

<!ELEMENT cfm-counters-route-socket-received (cfm-route-socket-message-counters)*>

<!ELEMENT cfm-cross-connect-session (cfm-session-defect-type |
cfm-session-defect-description | cfm-level | cfm-maintenance-domain-name |
cfm-maintenance-domain-name-format | cfm-maintenance-association-name |
cfm-maintenance-association-name-format | cfm-mep-identifier |
cfm-continuity-check-interval)*>

<!ELEMENT cfm-cross-connect-session-count (#PCDATA)>

<!ELEMENT cfm-cross-connect-sessions (cfm-cross-connect-session-count |
cfm-cross-connect-session)*>

<!ELEMENT cfm-default-maintenance-domain-mhf (#PCDATA)>

<!ELEMENT cfm-defect-cross-connect-ccm (#PCDATA)>

<!ELEMENT cfm-defect-error-ccm (#PCDATA)>

<!ELEMENT cfm-defect-mac-status (#PCDATA)>

<!ELEMENT cfm-defect-rdi-in-some-mep (#PCDATA)>

<!ELEMENT cfm-defect-remote-mep-no-ccm (#PCDATA)>

<!ELEMENT cfm-delay-statistics (cfm-entry)*>

<!ELEMENT cfm-delay-variation-weight (#PCDATA)>
```


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```
<!ELEMENT cfm-delay-weight (#PCDATA)>

<!ELEMENT cfm-dfwd-connection-state (#PCDATA)>

<!ELEMENT cfm-dfwd-nh-to-delete (#PCDATA)>

<!ELEMENT cfm-dfwd-pending-transactions (cfm-dfwd-transaction)*>

<!ELEMENT cfm-dfwd-policer-instance (cfm-policer-instance-name | cfm-policer-name
 | cfm-policer-instance-reference-count)*>

<!ELEMENT cfm-dfwd-policer-instance-info (cfm-dfwd-policer-instance)*>

<!ELEMENT cfm-dfwd-reconnect-count (#PCDATA)>

<!ELEMENT cfm-dfwd-requests-accepted (#PCDATA)>

<!ELEMENT cfm-dfwd-requests-lost (#PCDATA)>

<!ELEMENT cfm-dfwd-requests-rejected (#PCDATA)>

<!ELEMENT cfm-dfwd-requests-sent (#PCDATA)>

<!ELEMENT cfm-dfwd-transaction (cfm-dfwd-transaction-id | cfm-dfwd-nh-to-delete)*>

<!ELEMENT cfm-dfwd-transaction-id (#PCDATA)>

<!ELEMENT cfm-dmm-received (#PCDATA)>

<!ELEMENT cfm-dmm-received-invalid (#PCDATA)>

<!ELEMENT cfm-dmm-sent (#PCDATA)>

<!ELEMENT cfm-dmm-skipped-for-threshold-hit (#PCDATA)>

<!ELEMENT cfm-dmm-skipped-for-threshold-hit-window (#PCDATA)>

<!ELEMENT cfm-dmr-fc-mismatch (#PCDATA)>

<!ELEMENT cfm-dmr-invalid-time-stamp (#PCDATA)>

<!ELEMENT cfm-dmr-out-of-sequence (#PCDATA)>

<!ELEMENT cfm-dmr-received (#PCDATA)>

<!ELEMENT cfm-dmr-received-invalid (#PCDATA)>

<!ELEMENT cfm-dmr-sent (#PCDATA)>

<!ELEMENT cfm-entry (cfm-interface-entry | cfm-interface-sessions |
cfm-mep-database-session | cfm-mep-database-continuity-check |
cfm-mep-database-interface | cfm-local-mep | cfm-local-mep-defects |
cfm-local-mep-statistics | cfm-remote-meps | cfm-cross-connect-sessions |
cfm-error-sessions | cfm-mep-statistics-mep-summary |
cfm-local-mep-packet-statistics | cfm-remote-mep-brief-summary |
cfm-ethdm-delay-entry | cfm-ethdm-oneway-delay-summary |
cfm-ethdm-twoway-delay-summary | cfm-client-session-id | cfm-ethlm-loss-entry |
cfm-ethlm-cir-loss-summary | cfm-ethlm-eir-loss-summary | cfm-iter-mep-summary |
 cfm-iter-info | cfm-iter-ethdm-entry | cfm-iter-ethlm-entry |
cfm-iter-eth-sfl-entry)*>
```

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```
<!ELEMENT cfm-error-session (cfm-session-defect-type |
cfm-session-defect-description | cfm-level | cfm-maintenance-domain-name |
cfm-maintenance-domain-name-format | cfm-maintenance-association-name |
cfm-maintenance-association-name-format | cfm-continuity-check-interval |
cfm-mep-identifier)*>

<!ELEMENT cfm-error-session-count (#PCDATA)>

<!ELEMENT cfm-error-sessions (cfm-error-session-count | cfm-error-session)*>

<!ELEMENT cfm-ethdm-average-oneway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-average-oneway-delay-variation (#PCDATA)>

<!ELEMENT cfm-ethdm-average-twoway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-average-twoway-delay-variation (#PCDATA)>

<!ELEMENT cfm-ethdm-bestcase-oneway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-bestcase-twoway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-delay-entry (cfm-ethdm-delay-entry-index |
cfm-ethdm-oneway-delay | cfm-ethdm-twoway-delay)*>

<!ELEMENT cfm-ethdm-delay-entry-index (#PCDATA)>

<!ELEMENT cfm-ethdm-oneway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-oneway-delay-summary (cfm-ethdm-average-oneway-delay |
cfm-ethdm-average-oneway-delay-variation | cfm-ethdm-bestcase-oneway-delay |
cfm-ethdm-worstcase-oneway-delay)*>

<!ELEMENT cfm-ethdm-twoway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-twoway-delay-summary (cfm-ethdm-average-twoway-delay |
cfm-ethdm-average-twoway-delay-variation | cfm-ethdm-bestcase-twoway-delay |
cfm-ethdm-worstcase-twoway-delay)*>

<!ELEMENT cfm-ethdm-worstcase-oneway-delay (#PCDATA)>

<!ELEMENT cfm-ethdm-worstcase-twoway-delay (#PCDATA)>

<!ELEMENT cfm-ethlm-average-far-end-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-average-far-end-cir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-average-far-end-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-average-far-end-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-average-near-end-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-average-near-end-cir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-average-near-end-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-average-near-end-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-cir-loss-summary (cfm-ethlm-average-near-end-cir-loss |
cfm-ethlm-average-near-end-cir-loss-ratio | cfm-ethlm-average-far-end-cir-loss |
```


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```
 cfm-ethlm-average-far-end-cir-loss-ratio | cfm-ethlm-near-end-best-case-cir-loss
 | cfm-ethlm-near-end-best-case-cir-loss-ratio |
cfm-ethlm-near-end-worst-case-cir-loss |
cfm-ethlm-near-end-worst-case-cir-loss-ratio | cfm-ethlm-far-end-best-case-cir-loss
 | cfm-ethlm-far-end-best-case-cir-loss-ratio |
cfm-ethlm-far-end-worst-case-cir-loss |
cfm-ethlm-far-end-worst-case-cir-loss-ratio)*>

<!ELEMENT cfm-ethlm-eir-loss-summary (cfm-ethlm-average-near-end-eir-loss |
cfm-ethlm-average-near-end-eir-loss-ratio | cfm-ethlm-average-far-end-eir-loss |
 cfm-ethlm-average-far-end-eir-loss-ratio | cfm-ethlm-near-end-best-case-eir-loss
 | cfm-ethlm-near-end-best-case-eir-loss-ratio |
cfm-ethlm-near-end-worst-case-eir-loss |
cfm-ethlm-near-end-worst-case-eir-loss-ratio | cfm-ethlm-far-end-best-case-eir-loss
 | cfm-ethlm-far-end-best-case-eir-loss-ratio |
cfm-ethlm-far-end-worst-case-eir-loss |
cfm-ethlm-far-end-worst-case-eir-loss-ratio)*>

<!ELEMENT cfm-ethlm-far-end-best-case-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-best-case-cir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-best-case-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-best-case-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-cir-frame-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-cir-frame-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-eir-frame-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-eir-frame-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-total-cir-tx (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-total-eir-tx (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-worst-case-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-worst-case-cir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-worst-case-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-far-end-worst-case-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-loss-entry (cfm-ethlm-loss-entry-index |
cfm-ethlm-near-end-cir-frame-loss | cfm-ethlm-near-end-total-cir-tx |
cfm-ethlm-far-end-cir-frame-loss | cfm-ethlm-far-end-total-cir-tx |
cfm-ethlm-near-end-eir-frame-loss | cfm-ethlm-near-end-total-eir-tx |
cfm-ethlm-far-end-eir-frame-loss | cfm-ethlm-far-end-total-eir-tx |
cfm-ethlm-near-end-cir-frame-loss-ratio | cfm-ethlm-far-end-cir-frame-loss-ratio
 | cfm-ethlm-near-end-eir-frame-loss-ratio |
cfm-ethlm-far-end-eir-frame-loss-ratio)*>

<!ELEMENT cfm-ethlm-loss-entry-index (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-best-case-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-best-case-cir-loss-ratio (#PCDATA)>
```

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<!ELEMENT cfm-ethlm-near-end-best-case-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-best-case-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-cir-frame-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-cir-frame-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-eir-frame-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-eir-frame-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-total-cir-tx (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-total-eir-tx (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-worst-case-cir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-worst-case-cir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-worst-case-eir-loss (#PCDATA)>

<!ELEMENT cfm-ethlm-near-end-worst-case-eir-loss-ratio (#PCDATA)>

<!ELEMENT cfm-filter (cfm-filter-name | cfm-filter-state | cfm-filter-term-count
 | cfm-filter-term-attachment)*>
<!ATTLIST cfm-filter junos:style CDATA #IMPLIED>

<!ELEMENT cfm-filter-action (#PCDATA)>

<!ELEMENT cfm-filter-name (#PCDATA)>

<!ELEMENT cfm-filter-state (#PCDATA)>

<!ELEMENT cfm-filter-term (cfm-filter-term-name | cfm-filter-term-id |
cfm-filter-term-state | cfm-filter-term-key | cfm-filter-term-action |
cfm-filter-term-action-details | cfm-flood-nexthop-components |
cfm-policer-instance-name)*>
<!ATTLIST cfm-filter-term junos:style CDATA #IMPLIED>

<!ELEMENT cfm-filter-term-action (#PCDATA)>

<!ELEMENT cfm-filter-term-action-details (#PCDATA)>

<!ELEMENT cfm-filter-term-attachment (#PCDATA)>

<!ELEMENT cfm-filter-term-count (#PCDATA)>

<!ELEMENT cfm-filter-term-id (#PCDATA)>

<!ELEMENT cfm-filter-term-key (#PCDATA)>

<!ELEMENT cfm-filter-term-name (#PCDATA)>

<!ELEMENT cfm-filter-term-state (#PCDATA)>

<!ELEMENT cfm-firewall-filter-instance-information (cfm-instance-name | cfm-filter
 | cfm-filter-term)*>
<!ATTLIST cfm-firewall-filter-instance-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-firewall-filter-interface-information (cfm-interface-name |
```


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```
cfm-instance-name | cfm-filter | cfm-filter-term)*>
<!ATTLIST cfm-firewall-filter-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-flood-instance-information (cfm-instance-name |
cfm-num-active-customer-endpoint-iffs | cfm-num-active-vpn-endpoint-iffs |
cfm-flood-maintenance-domain-level)*>
<!ATTLIST cfm-flood-instance-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-flood-interface-information (cfm-interface-name | cfm-instance-name
 | cfm-flood-maintenance-domain-level)*>
<!ATTLIST cfm-flood-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-flood-maintenance-domain-level (cfm-level | cfm-local-mep-direction
 | cfm-filter-action | cfm-nexthop-type | cfm-nexthop-index |
cfm-flood-nexthop-components)*>
<!ATTLIST cfm-flood-maintenance-domain-level junos:style CDATA #IMPLIED>

<!ELEMENT cfm-flood-nexthop-components (cfm-interface-name | cfm-interface-type
| cfm-interface-nexthop-type | cfm-interface-nexthop-index)*>

<!ELEMENT cfm-forwarding-table-filtering-simulation (#PCDATA)>

<!ELEMENT cfm-gres-flood-resynchronization (#PCDATA)>

<!ELEMENT cfm-hardware-assist-flooding (#PCDATA)>

<!ELEMENT cfm-hw-timestamping (#PCDATA)>

<!ELEMENT cfm-instance-mip-information (cfm-instance-name |
cfm-maintenance-domain-mhf | cfm-maintenance-association-mhf |
cfm-default-maintenance-domain-mhf | cfm-interface-mip-information)*>

<!ELEMENT cfm-instance-name (#PCDATA)>

<!ELEMENT cfm-interface (cfm-interface-snapshot | cfm-entry)*>

<!ELEMENT cfm-interface-continuity-check (cfm-continuity-check-status |
cfm-continuity-check-interval | cfm-continuity-check-loss-threshold)*>

<!ELEMENT cfm-interface-entry (cfm-interface-name | cfm-interface-status |
cfm-interface-link-status)*>

<!ELEMENT cfm-interface-link-status (#PCDATA)>

<!ELEMENT cfm-interface-local-mep-defects (cfm-defect-remote-mep-no-ccm |
cfm-defect-error-ccm | cfm-defect-cross-connect-ccm | cfm-defect-rdi-in-some-mep
 | cfm-defect-mac-status)*>

<!ELEMENT cfm-interface-local-mep-info (cfm-local-mep-identifier |
cfm-local-mep-direction | cfm-local-mep-mac-address | cfm-local-mep-status)*>

<!ELEMENT cfm-interface-local-mep-statistics (cfm-total-ccm-sent |
cfm-out-of-sequence-ccm-received | cfm-lbm-sent | cfm-lbr-sent | cfm-lbr-received
 | cfm-lbr-received-out-of-order | cfm-lbr-bad-msdu | cfm-total-ltm-sent |
cfm-total-ltm-received | cfm-total-ltr-sent | cfm-total-ltr-received |
cfm-next-ltm-sequence-number | cfm-onedm-sent | cfm-onedm-received |
cfm-onedm-received-invalid | cfm-onedm-received-outofsync | cfm-dmm-sent |
cfm-dmm-received | cfm-dmm-received-invalid | cfm-dmr-sent | cfm-dmr-received |
cfm-dmr-received-invalid | cfm-lmm-sent | cfm-lmm-received |
cfm-lmm-received-invalid | cfm-lmr-sent | cfm-lmr-received |
cfm-lmr-received-invalid)*>
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<!ELEMENT cfm-interface-local-mep-tlv-info (cfm-local-mep-interface-status-tlv |
 cfm-local-mep-port-status-tlv | cfm-local-mep-connection-protection-tlv |
cfm-local-mep-loss-threshold-tlv)*>

<!ELEMENT cfm-interface-mip-information (cfm-interface-name | cfm-level)*>

<!ELEMENT cfm-interface-name (#PCDATA)>

<!ELEMENT cfm-interface-nexthop-index (#PCDATA)>

<!ELEMENT cfm-interface-nexthop-type (#PCDATA)>

<!ELEMENT cfm-interface-remote-meps (cfm-remote-mep-count | cfm-remote-mep)*>
<!ATTLIST cfm-interface-remote-meps junos:style CDATA #IMPLIED>

<!ELEMENT cfm-interface-session (cfm-interface-session-identifier |
cfm-interface-continuity-check | cfm-interface-local-mep-tlv-info |
cfm-interface-local-mep-info | cfm-interface-local-mep-defects |
cfm-interface-local-mep-statistics | cfm-interface-remote-meps)*>

<!ELEMENT cfm-interface-session-identifier (cfm-level | cfm-maintenance-domain-name
 | cfm-maintenance-domain-name-format | cfm-maintenance-association-name |
cfm-maintenance-association-name-format)*>

<!ELEMENT cfm-interface-session-snapshot (cfm-level | cfm-mep-identifier |
cfm-remote-mep-count)*>

<!ELEMENT cfm-interface-sessions (cfm-interface-session)*>

<!ELEMENT cfm-interface-snapshot (cfm-interface-name | cfm-interface-link-status
 | cfm-interface-status | cfm-interface-session-snapshot)*>
<!ATTLIST cfm-interface-snapshot junos:style CDATA #IMPLIED>

<!ELEMENT cfm-interface-status (#PCDATA)>

<!ELEMENT cfm-interface-type (#PCDATA)>

<!ELEMENT cfm-internal-instance-state (#PCDATA)>

<!ELEMENT cfm-internal-interface-state (#PCDATA)>

<!ELEMENT cfm-internal-session-state (#PCDATA)>

<!ELEMENT cfm-iter-eth-sfl-entry (sfl-measurement-packets-sent |
sfl-measurement-packets-skipped-for-threshold-hit |
sfl-measurement-packets-skipped-for-threshold-hit-window |
sfl-measurement-packets-received | sfl-measurement-packets-out-of-sequence |
sfl-measurement-packets-fc-mismatch | sfl-measurement-cir-packets-sent |
sfl-measurement-eir-packets-sent | sfl-measurement-cir-packets-received |
sfl-measurement-eir-packets-received | sfl-measurement-cir-loss-count |
sfl-measurement-cir-loss-percent | sfl-measurement-eir-loss-count |
sfl-measurement-eir-loss-percent | sfl-measurement-loss-count |
sfl-measurement-loss-percent)*>

<!ELEMENT cfm-iter-ethdm-entry (cfm-delay-weight | cfm-delay-variation-weight |
cfm-dmm-sent | cfm-dmm-skipped-for-threshold-hit |
cfm-dmm-skipped-for-threshold-hit-window | cfm-dmr-received |
cfm-dmr-out-of-sequence | cfm-dmr-fc-mismatch | cfm-dmr-invalid-time-stamp |
cfm-average-twoway-delay | cfm-average-twoway-delay-variation |
cfm-average-oneway-fwd-delay-variation | cfm-average-oneway-bkwd-delay-variation
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 | cfm-weighted-average-twoway-delay | cfm-weighted-average-twoway-delay-variation
 | cfm-weighted-average-oneway-fwd-delay-variation |
cfm-weighted-average-oneway-bkwd-delay-variation)*>

<!ELEMENT cfm-iter-ethlm-entry (cfm-lmm-sent | cfm-lmm-skipped-for-threshold-hit
 | cfm-lmm-skipped-for-threshold-hit-window | cfm-lmr-received | cfm-lmr-out-of-seq
 | cfm-lmr-fc-mismatch | cfm-accu-tx-near-end-cir-loss-stats |
cfm-accu-tx-far-end-cir-loss-stats | cfm-accu-tx-near-end-eir-loss-stats |
cfm-accu-tx-far-end-eir-loss-stats | cfm-accu-loss-near-end-cir-loss-stats |
cfm-accu-loss-near-end-cir-loss-stats-percent |
cfm-accu-loss-far-end-cir-loss-stats | cfm-accu-loss-far-end-cir-loss-stats-percent
 | cfm-accu-loss-near-end-eir-loss-stats |
cfm-accu-loss-near-end-eir-loss-stats-percent |
cfm-accu-loss-far-end-eir-loss-stats | cfm-accu-loss-far-end-eir-loss-stats-percent
 | cfm-last-measured-near-end-cir-loss-stats |
cfm-last-measured-far-end-cir-loss-stats |
cfm-last-measured-near-end-eir-loss-stats |
cfm-last-measured-far-end-eir-loss-stats)*>

<!ELEMENT cfm-iter-info (cfm-iterator-name | cfm-iterator-identifier |
cfm-iterator-cycle-time | cfm-iteration-period | cfm-iterator-status |
cfm-iterator-forever-status | cfm-iteration-current-count |
cfm-iteration-remaining-count | cfm-iterator-counter-reset-time |
cfm-iterator-counter-reset-reason)*>

<!ELEMENT cfm-iter-mep-summary (cfm-level | cfm-maintenance-domain-name |
cfm-maintenance-association-name | cfm-local-mep-identifier |
cfm-remote-mep-identifier | cfm-remote-mep-mac-address |
cfm-iterator-error-status)*>

<!ELEMENT cfm-iteration-current-count (#PCDATA)>

<!ELEMENT cfm-iteration-period (#PCDATA)>

<!ELEMENT cfm-iteration-remaining-count (#PCDATA)>

<!ELEMENT cfm-iterator-counter-reset-reason (#PCDATA)>

<!ELEMENT cfm-iterator-counter-reset-time (#PCDATA)>

<!ELEMENT cfm-iterator-cycle-time (#PCDATA)>

<!ELEMENT cfm-iterator-error-status (#PCDATA)>

<!ELEMENT cfm-iterator-forever-status (#PCDATA)>

<!ELEMENT cfm-iterator-identifier (#PCDATA)>

<!ELEMENT cfm-iterator-name (#PCDATA)>

<!ELEMENT cfm-iterator-statistics (cfm-entry)*>

<!ELEMENT cfm-iterator-status (#PCDATA)>

<!ELEMENT cfm-last-measured-far-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-last-measured-far-end-eir-loss-stats (#PCDATA)>

<!ELEMENT cfm-last-measured-near-end-cir-loss-stats (#PCDATA)>

<!ELEMENT cfm-last-measured-near-end-eir-loss-stats (#PCDATA)>
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<!ELEMENT cfm-lbm-sent (#PCDATA)>

<!ELEMENT cfm-lbr-bad-msdu (#PCDATA)>

<!ELEMENT cfm-lbr-received (#PCDATA)>

<!ELEMENT cfm-lbr-received-out-of-order (#PCDATA)>

<!ELEMENT cfm-lbr-sent (#PCDATA)>

<!ELEMENT cfm-legend (#PCDATA)>

<!ELEMENT cfm-level (#PCDATA)>

<!ELEMENT cfm-linktrace-path-database (cfm-ltm-request-snapshot |
cfm-ltr-reply-entry)*>

<!ELEMENT cfm-lmm-received (#PCDATA)>

<!ELEMENT cfm-lmm-received-invalid (#PCDATA)>

<!ELEMENT cfm-lmm-sent (#PCDATA)>

<!ELEMENT cfm-lmm-skipped-for-threshold-hit (#PCDATA)>

<!ELEMENT cfm-lmm-skipped-for-threshold-hit-window (#PCDATA)>

<!ELEMENT cfm-lmr-fc-mismatch (#PCDATA)>

<!ELEMENT cfm-lmr-out-of-seq (#PCDATA)>

<!ELEMENT cfm-lmr-received (#PCDATA)>

<!ELEMENT cfm-lmr-received-invalid (#PCDATA)>

<!ELEMENT cfm-lmr-sent (#PCDATA)>

<!ELEMENT cfm-local-mep (cfm-local-mep-identifier | cfm-local-mep-direction |
cfm-local-mep-mac-address | cfm-local-mep-auto-discovery | cfm-local-mep-priority
 | cfm-local-mep-port-status-tlv | cfm-local-mep-interface-status-tlv |
cfm-local-mep-connection-protection-tlv | cfm-local-mep-status)*>

<!ELEMENT cfm-local-mep-auto-discovery (#PCDATA)>

<!ELEMENT cfm-local-mep-connection-protection-tlv
(cfm-connection-protection-tlv-prefer-me |
cfm-connection-protection-tlv-protection-in-use |
cfm-connection-protection-tlv-frr-flag | cfm-connection-protection-tlv-status)*>

<!ELEMENT cfm-local-mep-defects (cfm-defect-remote-mep-no-ccm |
cfm-defect-error-ccm | cfm-defect-cross-connect-ccm | cfm-defect-rdi-in-some-mep
 | cfm-defect-mac-status)*>

<!ELEMENT cfm-local-mep-direction (#PCDATA)>

<!ELEMENT cfm-local-mep-identifier (#PCDATA)>

<!ELEMENT cfm-local-mep-interface-status-tlv (#PCDATA)>

<!ELEMENT cfm-local-mep-loss-threshold-tlv (cfm-loss-threshold-tlv-value |
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cfm-loss-threshold-tlv-flag)*>

<!ELEMENT cfm-local-mep-mac-address (#PCDATA)>

<!ELEMENT cfm-local-mep-packet-statistics (cfm-total-ccm-sent |
cfm-out-of-sequence-ccm-received | cfm-lbm-sent | cfm-lbr-sent | cfm-lbr-received
 | cfm-lbr-received-out-of-order | cfm-lbr-bad-msdu | cfm-total-ltm-sent |
cfm-total-ltm-received | cfm-total-ltr-sent | cfm-total-ltr-received |
cfm-next-ltm-sequence-number | cfm-onedm-sent | cfm-onedm-received |
cfm-onedm-received-invalid | cfm-onedm-received-outofsync | cfm-dmm-sent |
cfm-dmm-received | cfm-dmm-received-invalid | cfm-dmr-sent | cfm-dmr-received |
cfm-dmr-received-invalid | cfm-lmm-sent | cfm-lmm-received |
cfm-lmm-received-invalid | cfm-lmr-sent | cfm-lmr-received |
cfm-lmr-received-invalid)*>

<!ELEMENT cfm-local-mep-port-status-tlv (#PCDATA)>

<!ELEMENT cfm-local-mep-priority (#PCDATA)>

<!ELEMENT cfm-local-mep-statistics (cfm-total-ccm-sent |
cfm-out-of-sequence-ccm-received | cfm-lbm-sent | cfm-lbr-sent | cfm-lbr-received
 | cfm-lbr-received-out-of-order | cfm-lbr-bad-msdu | cfm-total-ltm-sent |
cfm-total-ltm-received | cfm-total-ltr-sent | cfm-total-ltr-received |
cfm-next-ltm-sequence-number | cfm-onedm-sent | cfm-onedm-received |
cfm-onedm-received-invalid | cfm-onedm-received-outofsync | cfm-dmm-sent |
cfm-dmm-received | cfm-dmm-received-invalid | cfm-dmr-sent | cfm-dmr-received |
cfm-dmr-received-invalid | cfm-lmm-sent | cfm-lmm-received |
cfm-lmm-received-invalid | cfm-lmr-sent | cfm-lmr-received |
cfm-lmr-received-invalid)*>

<!ELEMENT cfm-local-mep-status (#PCDATA)>

<!ELEMENT cfm-loss-statistics (cfm-entry)*>

<!ELEMENT cfm-loss-threshold-tlv-flag (#PCDATA)>

<!ELEMENT cfm-loss-threshold-tlv-value (#PCDATA)>

<!ELEMENT cfm-ltm-request-snapshot (cfm-interface-name | cfm-level |
cfm-maintenance-domain-name | cfm-maintenance-association-name |
cfm-local-mep-identifier | cfm-ltm-target-mac-address)*>

<!ELEMENT cfm-ltm-target-mac-address (#PCDATA)>

<!ELEMENT cfm-ltm-transaction-identifier (#PCDATA)>

<!ELEMENT cfm-ltr-mep-mip-mac-address (#PCDATA)>

<!ELEMENT cfm-ltr-next-hop-mac-address (#PCDATA)>

<!ELEMENT cfm-ltr-reply-entry (cfm-ltm-transaction-identifier |
cfm-ltr-request-hop-identifier | cfm-ltr-reply-ttl | cfm-ltr-mep-mip-mac-address
 | cfm-ltr-next-hop-mac-address)*>

<!ELEMENT cfm-ltr-reply-ttl (#PCDATA)>

<!ELEMENT cfm-ltr-request-hop-identifier (#PCDATA)>

<!ELEMENT cfm-maintenance-association-mhf (#PCDATA)>

<!ELEMENT cfm-maintenance-association-name (#PCDATA)>
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<!ELEMENT cfm-maintenance-association-name-format (#PCDATA)>

<!ELEMENT cfm-maintenance-domain-mhf (#PCDATA)>

<!ELEMENT cfm-maintenance-domain-name (#PCDATA)>

<!ELEMENT cfm-maintenance-domain-name-format (#PCDATA)>

<!ELEMENT cfm-mark-connection-protection-tlv (#PCDATA)>

<!ELEMENT cfm-mep-database (cfm-entry)*>

<!ELEMENT cfm-mep-database-continuity-check (cfm-continuity-check-status |
cfm-continuity-check-interval | cfm-continuity-check-loss-threshold)*>

<!ELEMENT cfm-mep-database-interface (cfm-interface-name | cfm-interface-status
| cfm-interface-link-status)*>

<!ELEMENT cfm-mep-database-session (cfm-maintenance-domain-name |
cfm-maintenance-domain-name-format | cfm-level | cfm-maintenance-association-name
 | cfm-maintenance-association-name-format)*>

<!ELEMENT cfm-mep-identifier (#PCDATA)>

<!ELEMENT cfm-mep-statistics (cfm-entry)*>

<!ELEMENT cfm-mep-statistics-mep-summary (cfm-local-mep-identifier |
cfm-local-mep-mac-address | cfm-remote-mep-count)*>

<!ELEMENT cfm-mhf-type (#PCDATA)>

<!ELEMENT cfm-mip-information (cfm-instance-mip-information)*>

<!ELEMENT cfm-next-ltm-sequence-number (#PCDATA)>

<!ELEMENT cfm-nexthop-index (#PCDATA)>

<!ELEMENT cfm-nexthop-information (cfm-nexthop-index | cfm-nexthop-type |
cfm-nexthop-last-operation | cfm-nexthop-last-error | cfm-nexthop-statistics |
cfm-nexthop-reference-count | cfm-nexthop-owner | cfm-level |
cfm-flood-nexthop-components)*>
<!ATTLIST cfm-nexthop-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-nexthop-last-error (#PCDATA)>

<!ELEMENT cfm-nexthop-last-operation (#PCDATA)>

<!ELEMENT cfm-nexthop-owner (#PCDATA)>

<!ELEMENT cfm-nexthop-reference-count (#PCDATA)>

<!ELEMENT cfm-nexthop-statistics (#PCDATA)>

<!ELEMENT cfm-nexthop-type (#PCDATA)>

<!ELEMENT cfm-num-active-customer-endpoint-iffs (#PCDATA)>

<!ELEMENT cfm-num-active-vpn-endpoint-iffs (#PCDATA)>

<!ELEMENT cfm-onedm-received (#PCDATA)>
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<!ELEMENT cfm-onedm-received-invalid (#PCDATA)>

<!ELEMENT cfm-onedm-received-outofsync (#PCDATA)>

<!ELEMENT cfm-onedm-sent (#PCDATA)>

<!ELEMENT cfm-out-of-sequence-ccm-received (#PCDATA)>

<!ELEMENT cfm-policer (cfm-legend | cfm-policer-sessions)*>

<!ELEMENT cfm-policer-drop-count (#PCDATA)>

<!ELEMENT cfm-policer-instance-name (#PCDATA)>

<!ELEMENT cfm-policer-instance-reference-count (#PCDATA)>

<!ELEMENT cfm-policer-maintenance-association-entries
(cfm-policer-maintenance-association-entry)*>

<!ELEMENT cfm-policer-maintenance-association-entry
(cfm-maintenance-association-name | cfm-policer-name | cfm-policer-type |
cfm-policer-scope | cfm-policer-drop-count)*>

<!ELEMENT cfm-policer-maintenance-domain-entry (cfm-maintenance-domain-name |
cfm-level)*>

<!ELEMENT cfm-policer-name (#PCDATA)>

<!ELEMENT cfm-policer-scope (#PCDATA)>

<!ELEMENT cfm-policer-session (cfm-policer-maintenance-domain-entry |
cfm-policer-maintenance-association-entries)*>

<!ELEMENT cfm-policer-sessions (cfm-policer-session)*>

<!ELEMENT cfm-policer-type (#PCDATA)>

<!ELEMENT cfm-ppmd-blocked-count (#PCDATA)>

<!ELEMENT cfm-ppmd-connection-state (#PCDATA)>

<!ELEMENT cfm-ppmd-flow-state (#PCDATA)>

<!ELEMENT cfm-ppmd-job-state (#PCDATA)>

<!ELEMENT cfm-remote-mep (cfm-remote-mep-identifier | cfm-remote-mep-state |
cfm-remote-mep-mac-address | cfm-remote-mep-interface | cfm-remote-mep-type |
cfm-remote-mep-loss-threshold | cfm-remote-mep-rdi | cfm-remote-mep-last-flapped
 | cfm-remote-mep-last-dm-stats-cleared | cfm-remote-mep-last-lm-stats-cleared |
 cfm-remote-mep-continuity | cfm-remote-mep-admin-enable-time |
cfm-remote-mep-oper-down-time | cfm-remote-mep-port-status-tlv |
cfm-remote-mep-interface-status-tlv | cfm-remote-mep-connection-protection-tlv |
 cfm-remote-mep-loss-threshold-tlv)*>

<!ELEMENT cfm-remote-mep-admin-enable-time (#PCDATA)>

<!ELEMENT cfm-remote-mep-ap (cfm-action-profile-name | cfm-ap-last-event |
cfm-ap-action-name | cfm-ap-action-time | cfm-ap-last-event-cleared-time)*>

<!ELEMENT cfm-remote-mep-brief-summary (cfm-remote-mep-identifier |
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cfm-remote-mep-mac-address)*>

<!ELEMENT cfm-remote-mep-connection-protection-tlv
(cfm-connection-protection-tlv-prefer-me |
cfm-connection-protection-tlv-protection-in-use |
cfm-connection-protection-tlv-frr-flag)*>

<!ELEMENT cfm-remote-mep-continuity (#PCDATA)>

<!ELEMENT cfm-remote-mep-count (#PCDATA)>

<!ELEMENT cfm-remote-mep-identifier (#PCDATA)>

<!ELEMENT cfm-remote-mep-interface (#PCDATA)>

<!ELEMENT cfm-remote-mep-interface-status-tlv (#PCDATA)>

<!ELEMENT cfm-remote-mep-last-dm-stats-cleared (#PCDATA)>

<!ELEMENT cfm-remote-mep-last-flapped (#PCDATA)>

<!ELEMENT cfm-remote-mep-last-lm-stats-cleared (#PCDATA)>

<!ELEMENT cfm-remote-mep-loss-threshold (#PCDATA)>

<!ELEMENT cfm-remote-mep-loss-threshold-tlv (cfm-loss-threshold-tlv-value |
cfm-loss-threshold-tlv-flag)*>

<!ELEMENT cfm-remote-mep-mac-address (#PCDATA)>

<!ELEMENT cfm-remote-mep-oper-down-time (#PCDATA)>

<!ELEMENT cfm-remote-mep-port-status-tlv (#PCDATA)>

<!ELEMENT cfm-remote-mep-rdi (#PCDATA)>

<!ELEMENT cfm-remote-mep-state (#PCDATA)>

<!ELEMENT cfm-remote-mep-type (#PCDATA)>

<!ELEMENT cfm-remote-meps (cfm-remote-mep-count | cfm-remote-mep |
cfm-remote-mep-ap)*>
<!ATTLIST cfm-remote-meps junos:style CDATA #IMPLIED>

<!ELEMENT cfm-route-information (cfm-route-prefix | cfm-nexthop-index |
cfm-route-last-operation | cfm-route-last-error | cfm-route-statistics | cfm-level
 | cfm-route-table-index | cfm-route-owner | cfm-flood-nexthop-components)*>
<!ATTLIST cfm-route-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-route-last-error (#PCDATA)>

<!ELEMENT cfm-route-last-operation (#PCDATA)>

<!ELEMENT cfm-route-maintenance-domain-level (cfm-level | cfm-local-mep-direction
 | cfm-transmit-route-prefix | cfm-nexthop-index | cfm-flood-nexthop-components)*>
<!ATTLIST cfm-route-maintenance-domain-level junos:style CDATA #IMPLIED>

<!ELEMENT cfm-route-owner (#PCDATA)>

<!ELEMENT cfm-route-prefix (#PCDATA)>
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<!ELEMENT cfm-route-socket-message-add (#PCDATA)>

<!ELEMENT cfm-route-socket-message-change (#PCDATA)>

<!ELEMENT cfm-route-socket-message-counters (cfm-route-socket-message-type |
cfm-route-socket-message-add | cfm-route-socket-message-change |
cfm-route-socket-message-delete)*>

<!ELEMENT cfm-route-socket-message-delete (#PCDATA)>

<!ELEMENT cfm-route-socket-message-type (#PCDATA)>

<!ELEMENT cfm-route-statistics (#PCDATA)>

<!ELEMENT cfm-route-table-index (#PCDATA)>

<!ELEMENT cfm-session-count (#PCDATA)>

<!ELEMENT cfm-session-created-count (#PCDATA)>

<!ELEMENT cfm-session-defect-description (#PCDATA)>

<!ELEMENT cfm-session-defect-type (#PCDATA)>

<!ELEMENT cfm-session-deleted-count (#PCDATA)>

<!ELEMENT cfm-session-freed-count (#PCDATA)>

<!ELEMENT cfm-shared-interface-filters (#PCDATA)>

<!ELEMENT cfm-token-based-forwarding (#PCDATA)>

<!ELEMENT cfm-total-ccm-sent (#PCDATA)>

<!ELEMENT cfm-total-ltm-received (#PCDATA)>

<!ELEMENT cfm-total-ltm-sent (#PCDATA)>

<!ELEMENT cfm-total-ltr-received (#PCDATA)>

<!ELEMENT cfm-total-ltr-sent (#PCDATA)>

<!ELEMENT cfm-transmit-interface-information (cfm-interface-name |
cfm-instance-name | cfm-route-maintenance-domain-level)*>
<!ATTLIST cfm-transmit-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT cfm-transmit-route-prefix (#PCDATA)>

<!ELEMENT cfm-vpls (#PCDATA)>

<!ELEMENT cfm-weighted-average-oneway-bkwd-delay-variation (#PCDATA)>

<!ELEMENT cfm-weighted-average-oneway-fwd-delay-variation (#PCDATA)>

<!ELEMENT cfm-weighted-average-twoway-delay (#PCDATA)>

<!ELEMENT cfm-weighted-average-twoway-delay-variation (#PCDATA)>

<!ELEMENT cfmd-clear-continuity-measurement (#PCDATA)>

<!ELEMENT cfmd-clear-delay-statistics (#PCDATA)>
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<!ELEMENT cfmd-clear-iterator-statistics (#PCDATA)>

<!ELEMENT cfmd-clear-loss-statistics (#PCDATA)>

<!ELEMENT cfmd-clear-path-database (#PCDATA)>

<!ELEMENT cfmd-clear-policer-statistics (#PCDATA)>

<!ELEMENT cfmd-clear-statistics (#PCDATA)>

<!ELEMENT cfmd-internal-state (cfm-session-count | cfm-session-created-count |
cfm-session-deleted-count | cfm-session-freed-count | cfm-vpls |
cfm-token-based-forwarding | cfm-forwarding-table-filtering-simulation |
cfm-hardware-assist-flooding | cfm-gres-flood-resynchronization |
cfm-shared-interface-filters | cfm-hw-timestamping |
cfm-mark-connection-protection-tlv | cfm-ppmd-connection-state |
cfm-ppmd-flow-state | cfm-ppmd-job-state | cfm-ppmd-blocked-count |
cfm-dfwd-connection-state | cfm-dfwd-reconnect-count | cfm-dfwd-requests-sent |
cfm-dfwd-requests-accepted | cfm-dfwd-requests-rejected | cfm-dfwd-requests-lost
 | cfm-dfwd-pending-transactions | cfm-dfwd-policer-instance-info)*>

<!ELEMENT eaps-action-result (#PCDATA)>

<!ELEMENT sfl-measurement-cir-loss-count (#PCDATA)>

<!ELEMENT sfl-measurement-cir-loss-percent (#PCDATA)>

<!ELEMENT sfl-measurement-cir-packets-received (#PCDATA)>

<!ELEMENT sfl-measurement-cir-packets-sent (#PCDATA)>

<!ELEMENT sfl-measurement-eir-loss-count (#PCDATA)>

<!ELEMENT sfl-measurement-eir-loss-percent (#PCDATA)>

<!ELEMENT sfl-measurement-eir-packets-received (#PCDATA)>

<!ELEMENT sfl-measurement-eir-packets-sent (#PCDATA)>

<!ELEMENT sfl-measurement-loss-count (#PCDATA)>

<!ELEMENT sfl-measurement-loss-percent (#PCDATA)>

<!ELEMENT sfl-measurement-packets-fc-mismatch (#PCDATA)>

<!ELEMENT sfl-measurement-packets-out-of-sequence (#PCDATA)>

<!ELEMENT sfl-measurement-packets-received (#PCDATA)>

<!ELEMENT sfl-measurement-packets-sent (#PCDATA)>

<!ELEMENT sfl-measurement-packets-skipped-for-threshold-hit (#PCDATA)>

<!ELEMENT sfl-measurement-packets-skipped-for-threshold-hit-window (#PCDATA)>
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CHAPTER 71

DTD for Chassis Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-chassis.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
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<!-- junos-chassis.dtd -->

<!ELEMENT ac-actual-feed (#PCDATA)>

<!ELEMENT ac-expect-feed (#PCDATA)>

<!ELEMENT ac-input (#PCDATA)>

<!ELEMENT ac-input-detail (ac-input | ac-expect-feed | ac-actual-feed)*>

<!ELEMENT accurate-statistics (accurate-statistics-information)*>

<!ELEMENT accurate-statistics-information (name)*>

<!ELEMENT act-end-time (#PCDATA)>
<!ATTLIST act-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT act-reason (#PCDATA)>

<!ELEMENT act-start-time (#PCDATA)>
<!ATTLIST act-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT activate-count (#PCDATA)>

<!ELEMENT active-led EMPTY>

<!ELEMENT active-time (#PCDATA)>
<!ATTLIST active-time junos:seconds CDATA #IMPLIED>

<!ELEMENT activity-led (#PCDATA)>

<!ELEMENT actual-power-used (#PCDATA)>
```

```
<!ELEMENT actual-voltage (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT airflow (#PCDATA)>

<!ELEMENT airflow-direction (airflow | direction)*>

<!ELEMENT alarm-indicators (red-led | yellow-led | major-alarm-relay |
minor-alarm-relay)*>

<!ELEMENT altitude (#PCDATA)>
<!ATTLIST altitude junos:format CDATA #IMPLIED>

<!ELEMENT amber-led EMPTY>

<!ELEMENT asic-information (#PCDATA)>

<!ELEMENT asic-name (#PCDATA)>

<!ELEMENT asic-type (#PCDATA)>

<!ELEMENT assembly-flags (#PCDATA)>

<!ELEMENT assembly-identifier (#PCDATA)>

<!ELEMENT assembly-version (#PCDATA)>

<!ELEMENT automatic-switching (#PCDATA)>

<!ELEMENT bad-fan-red-alarm (#PCDATA)>
<!ATTLIST bad-fan-red-alarm junos:celsius CDATA #IMPLIED>

<!ELEMENT bad-fan-yellow-alarm (#PCDATA)>
<!ATTLIST bad-fan-yellow-alarm junos:celsius CDATA #IMPLIED>

<!ELEMENT base-power (#PCDATA)>

<!ELEMENT beacon-name (#PCDATA)>

<!ELEMENT beacon-state (#PCDATA)>

<!ELEMENT bios-date (#PCDATA)>

<!ELEMENT bios-id (#PCDATA)>

<!ELEMENT bios-version (#PCDATA)>

<!ELEMENT blink-led EMPTY>

<!ELEMENT blue-led EMPTY>

<!ELEMENT board-information-record (#PCDATA)>

<!ELEMENT building (#PCDATA)>

<!ELEMENT bus-revision (#PCDATA)>

<!ELEMENT cable-type (#PCDATA)>
```


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```
<!ELEMENT capacity-actual (#PCDATA)>

<!ELEMENT capacity-actual-usage (#PCDATA)>

<!ELEMENT capacity-allocated (#PCDATA)>

<!ELEMENT capacity-load (#PCDATA)>

<!ELEMENT capacity-max (#PCDATA)>

<!ELEMENT capacity-remaining (#PCDATA)>

<!ELEMENT capacity-sys-actual (#PCDATA)>

<!ELEMENT capacity-sys-max (#PCDATA)>

<!ELEMENT capacity-sys-remaining (#PCDATA)>

<!ELEMENT card-detail (#PCDATA)>

<!ELEMENT card-pos (#PCDATA)>

<!ELEMENT card-slot (#PCDATA)>

<!ELEMENT card-slot-num (#PCDATA)>

<!ELEMENT card-type (#PCDATA)>

<!ELEMENT cb (slot | amber-led | green-led | blue-led)*>

<!ELEMENT cb-panel (cb)*>

<!ELEMENT cb-slot (#PCDATA)>

<!ELEMENT ccg (slot | ok-led | fail-led | master-led)*>

<!ELEMENT ccg-panel (ccg)*>

<!ELEMENT cfm-ok-fail-led (red-led | yellow-led | amber-led)*>

<!ELEMENT cfm-service-led (red-led | yellow-led | amber-led)*>

<!ELEMENT chassis (hardware-incomplete | name | version | part-number |
serial-number | model-number | clei-code | description | i2c-information |
chassis-module)*>
<!ATTLIST chassis junos:style CDATA #IMPLIED>

<!ELEMENT chassis-beacon-information (chassis-beacon-item)*>

<!ELEMENT chassis-beacon-item (beacon-name | beacon-state)*>

<!ELEMENT chassis-fabric-card-information-internal (card-pos | card-slot |
card-type | management-status | hw-status | min-chip-id | max-chip-id)*>

<!ELEMENT chassis-fabric-ccpc-incoming-links-header (card-detail | card-slot-num)*>

<!ELEMENT chassis-fabric-ccpc-outgoing-links-header (card-detail | card-slot-num)*>

<!ELEMENT chassis-fabric-chip-down-links-internal (src-chip | src-port | dst-chip
 | dst-port)*>
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<!ELEMENT chassis-fabric-chip-error-links-internal (src-chip | src-port | dst-chip
 | dst-port)*>

<!ELEMENT chassis-fabric-chip-in-links-internal (src-chip | src-port | dst-chip
| dst-port | management-status | hw-status)*>

<!ELEMENT chassis-fabric-chip-information-internal (chip-id | chip-type |
management-status | hw-status)*>

<!ELEMENT chassis-fabric-chip-out-links-internal (src-chip | src-port | dst-chip
 | dst-port | management-status | hw-status)*>

<!ELEMENT chassis-fabric-chip-up-links-internal (src-chip | src-port | dst-chip
| dst-port)*>

<!ELEMENT chassis-fabric-connectivity (device-id | chassis-type |
chassis-fabric-links-header | chassis-fabric-ccpc-incoming-links-header |
chassis-fabric-ccpc-outgoing-links-header | chassis-fabric-links)*>

<!ELEMENT chassis-fabric-information (device-id | chassis-type | management-status
 | hw-status | chassis-fabric-links-header |
chassis-fabric-ccpc-incoming-links-header |
chassis-fabric-ccpc-outgoing-links-header | chassis-fabric-links |
chassis-fabric-information-internal | chassis-fabric-card-information-internal |
 chassis-fabric-chip-information-internal | chassis-fabric-chip-in-links-internal
 | chassis-fabric-chip-out-links-internal | chassis-fabric-chip-up-links-internal
 | chassis-fabric-chip-down-links-internal |
chassis-fabric-chip-error-links-internal)*>

<!ELEMENT chassis-fabric-information-device (device-id | chassis-type |
management-status | hw-status | chassis-fabric-information-internal)*>

<!ELEMENT chassis-fabric-information-internal (chassis-id | min-chip-id |
max-chip-id)*>

<!ELEMENT chassis-fabric-links (src-link | dst-link | hw-status)*>

<!ELEMENT chassis-fabric-links-header (fm-space-tab)*>

<!ELEMENT chassis-fabric-spray-weight-card-information (card-pos | card-slot |
card-type)*>

<!ELEMENT chassis-fabric-spray-weight-chip-information (chip-num | chip-type)*>

<!ELEMENT chassis-fabric-spray-weight-chip-information-internal (chip-id |
chip-type)*>

<!ELEMENT chassis-fabric-spray-weight-cumulative (vpfe-id | spray-cumulative-weight
 | spray-max-links-to-destination | spray-destination-mask)*>

<!ELEMENT chassis-fabric-spray-weight-information (device-id | chassis-type |
chassis-fabric-spray-weight-card-information |
chassis-fabric-spray-weight-chip-information |
chassis-fabric-spray-weights-on-four-links |
chassis-fabric-spray-weights-on-eight-links |
chassis-fabric-spray-weights-on-eight-links-value |
chassis-fabric-spray-weight-cumulative | chassis-fabric-information-internal |
chassis-fabric-spray-weight-chip-information-internal)*>

<!ELEMENT chassis-fabric-spray-weights-on-eight-links (vpfe-id | spray-weight0 |
 spray-weight1 | spray-weight2 | spray-weight3 | spray-weight4 | spray-weight5 |
```


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```
 spray-weight6 | spray-weight7)*>

<!ELEMENT chassis-fabric-spray-weights-on-eight-links-value (vpfe-id |
spray-weight0 | spray-weight1 | spray-weight2 | spray-weight3 | spray-weight4 |
spray-weight5 | spray-weight6 | spray-weight7)*>

<!ELEMENT chassis-fabric-spray-weights-on-four-links (vpfe-id | spray-weight0 |
spray-weight1 | spray-weight2 | spray-weight3)*>

<!ELEMENT chassis-id (#PCDATA)>

<!ELEMENT chassis-inventory (chassis)*>

<!ELEMENT chassis-location (chassis-location-information)*>

<!ELEMENT chassis-location-fpc (chassis-location-fpc-information)*>

<!ELEMENT chassis-location-fpc-information (global-fpc-number | lcc-number |
local-fpc-number)*>

<!ELEMENT chassis-location-information (country-code | postal-code | npa-nxx |
latitude | longitude | altitude | lata | vcoord | hcoord | building | floor |
rack)*>

<!ELEMENT chassis-module (name | version | part-number | serial-number |
model-number | clei-code | description | i2c-information | firmware |
chassis-sub-module | chassis-re-disk-module | chassis-re-usb-module |
chassis-re-dimm-module)*>

<!ELEMENT chassis-pfe-version (chassis-pfe-version-title | fpc-num | pfe-version)*>

<!ELEMENT chassis-pfe-version-title (name)*>

<!ELEMENT chassis-re-dimm-module (name | part-number | die-rev | pcb-rev |
mfr-id)*>

<!ELEMENT chassis-re-disk-module (name | model | serial-number | disk-size |
description)*>

<!ELEMENT chassis-re-usb-module (name | product | product-number | vendor |
description)*>

<!ELEMENT chassis-sub-module (name | version | part-number | serial-number |
model-number | clei-code | description | i2c-information | firmware |
chassis-sub-sub-module)*>

<!ELEMENT chassis-sub-sub-module (name | version | part-number | serial-number |
 model-number | clei-code | description | chassis-sub-sub-sub-module)*>

<!ELEMENT chassis-sub-sub-sub-module (name | version | part-number | serial-number
 | model-number | clei-code | description)*>

<!ELEMENT chassis-type (#PCDATA)>

<!ELEMENT chassis-zones-information (name | driving-fru-name | temperature |
zone-status | comment | fan-missing-cnt | fan-failed-cnt | fan-dutycycle | fru-name
 | cooling-fru-name | fru-temp-status | fru-fan-status | fru-status |
fru-temperature | fru-comment | cooled-frus | cooling-frus)*>

<!ELEMENT chassisd-database-memory-usage (database-memory-usage)*>
```

```
<!ELEMENT chip-id (#PCDATA)>

<!ELEMENT chip-num (#PCDATA)>

<!ELEMENT chip-type (#PCDATA)>

<!ELEMENT class (#PCDATA)>
<!ATTLIST class junos:format CDATA #IMPLIED>

<!ELEMENT clei-code (#PCDATA)>

<!ELEMENT clock-fru (#PCDATA)>

<!ELEMENT clock-state (#PCDATA)>

<!ELEMENT clock-synchronization (clock-fru | mastership-state | signal-type |
switching-mode | line-termination | transmit | validation-interval |
automatic-switching | marked-as-failed-source-list | synchronization-source-list)*>

<!ELEMENT clock-synchronization-information (clock-synchronization)*>

<!ELEMENT cmb-revision (#PCDATA)>

<!ELEMENT comment (#PCDATA)>

<!ELEMENT configured-mode (#PCDATA)>

<!ELEMENT configured-source (source-priority | source-name | deviation |
last-deviation | status)*>

<!ELEMENT configured-source-list (configured-source)*>

<!ELEMENT connected-fpcs (#PCDATA)>
<!ATTLIST connected-fpcs junos:format CDATA #IMPLIED>

<!ELEMENT connectivity-led0 (#PCDATA)>

<!ELEMENT connectivity-led1 (#PCDATA)>

<!ELEMENT connectivity-led2 (#PCDATA)>

<!ELEMENT connectivity-led3 (#PCDATA)>

<!ELEMENT connectivity-led4 (#PCDATA)>

<!ELEMENT connectivity-led5 (#PCDATA)>

<!ELEMENT control-plane-cpu-count (#PCDATA)>

<!ELEMENT controller-asterisk (#PCDATA)>

<!ELEMENT controller-firmware-available (#PCDATA)>

<!ELEMENT controller-guardband (#PCDATA)>

<!ELEMENT controller-information (controller-number | controller-firmware-available
 | controller-maxpower | controller-power | controller-asterisk |
controller-guardband | controller-management | controller-status)*>

<!ELEMENT controller-management (#PCDATA)>
```


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```
<!ELEMENT controller-maxpower (#PCDATA)>

<!ELEMENT controller-number (#PCDATA)>

<!ELEMENT controller-power (#PCDATA)>

<!ELEMENT controller-status (#PCDATA)>

<!ELEMENT cooled-frus (#PCDATA)>

<!ELEMENT cooling-fru-name (#PCDATA)>

<!ELEMENT cooling-frus (#PCDATA)>

<!ELEMENT country-code (#PCDATA)>

<!ELEMENT cpu-background (#PCDATA)>

<!ELEMENT cpu-idle (#PCDATA)>

<!ELEMENT cpu-interrupt (#PCDATA)>

<!ELEMENT cpu-less-info-str (#PCDATA)>

<!ELEMENT cpu-real-time (#PCDATA)>

<!ELEMENT cpu-rom-version (#PCDATA)>

<!ELEMENT cpu-sw-version (#PCDATA)>

<!ELEMENT cpu-system (#PCDATA)>

<!ELEMENT cpu-temperature (#PCDATA)>

<!ELEMENT cpu-total (#PCDATA)>

<!ELEMENT cpu-total-rt (#PCDATA)>

<!ELEMENT cpu-total-ukern (#PCDATA)>

<!ELEMENT cpu-user (#PCDATA)>

<!ELEMENT craft-information (front-panel | recb-panel | mcs-panel | sfm-panel |
pcg-panel | cb-panel | sib-panel | scg-panel | feb-panel | power-supply-panel |
fan-tray-panel | output)*>

<!ELEMENT craft-lcd-led-information (front-panel-lcd | front-panel-title |
display-panel-lcd | display-row-1 | display-row-2 | name)*>

<!ELEMENT current-act (#PCDATA)>

<!ELEMENT current-phase (#PCDATA)>

<!ELEMENT current-phase-status (#PCDATA)>

<!ELEMENT current-source (clock-state | up-time | active-time | deviation |
last-deviation)*>

<!ELEMENT data (#PCDATA)>

<!ELEMENT data-center-fabric-information (#PCDATA)>
```

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```
<!ELEMENT data-plane-cpu-count (#PCDATA)>

<!ELEMENT database-allocated-size (#PCDATA)>

<!ELEMENT database-free-size (#PCDATA)>

<!ELEMENT database-memory-usage (database-size | database-allocated-size |
database-free-size)*>

<!ELEMENT database-size (#PCDATA)>

<!ELEMENT dc-actual-feed (#PCDATA)>

<!ELEMENT dc-current (#PCDATA)>

<!ELEMENT dc-current-string (#PCDATA)>

<!ELEMENT dc-detail (dc-device | dc-voltage | dc-current | dc-power | dc-load)*>

<!ELEMENT dc-detail2 (dc-device2 | dc-voltage-string | dc-current-string |
dc-power-string | dc-load-string)*>

<!ELEMENT dc-device (#PCDATA)>

<!ELEMENT dc-device2 (#PCDATA)>

<!ELEMENT dc-expect-feed (#PCDATA)>

<!ELEMENT dc-in-current-string (#PCDATA)>

<!ELEMENT dc-in-detail2 (dc-in-device2 | dc-in-voltage-string |
dc-in-current-string | dc-in-power-string | dc-in-load-string)*>

<!ELEMENT dc-in-device2 (#PCDATA)>

<!ELEMENT dc-in-load-string (#PCDATA)>

<!ELEMENT dc-in-power-string (#PCDATA)>

<!ELEMENT dc-in-voltage-string (#PCDATA)>

<!ELEMENT dc-information (dc-input | dc-output | dc-detail | dc-in-detail2 |
dc-detail2)*>

<!ELEMENT dc-input (#PCDATA)>

<!ELEMENT dc-input-detail (dc-input | reference-voltage | actual-voltage |
dc-expect-feed | dc-actual-feed)*>

<!ELEMENT dc-load (#PCDATA)>

<!ELEMENT dc-load-string (#PCDATA)>

<!ELEMENT dc-output (#PCDATA)>

<!ELEMENT dc-output-detail (dc-voltage | dc-current | dc-power | dc-load | zone)*>

<!ELEMENT dc-power (#PCDATA)>

<!ELEMENT dc-power-string (#PCDATA)>
```


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```
<!ELEMENT dc-voltage (#PCDATA)>

<!ELEMENT dc-voltage-string (#PCDATA)>

<!ELEMENT delimiter (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT dest-pfe-xc-link (#PCDATA)>

<!ELEMENT destination-error (#PCDATA)>

<!ELEMENT detect-time (#PCDATA)>
<!ATTLIST detect-time junos:seconds CDATA #IMPLIED>

<!ELEMENT deviation (#PCDATA)>

<!ELEMENT device-id (#PCDATA)>

<!ELEMENT die-rev (#PCDATA)>

<!ELEMENT direction (#PCDATA)>

<!ELEMENT disk-size (#PCDATA)>

<!ELEMENT display-line (#PCDATA)>

<!ELEMENT display-panel (display-line)*>

<!ELEMENT display-panel-lcd (display-row-1 | display-row-2)*>

<!ELEMENT display-row-1 (#PCDATA)>

<!ELEMENT display-row-2 (#PCDATA)>

<!ELEMENT driving-fru-name (#PCDATA)>

<!ELEMENT dst-chip (#PCDATA)>

<!ELEMENT dst-link (#PCDATA)>

<!ELEMENT dst-port (#PCDATA)>

<!ELEMENT eeprom-version (#PCDATA)>

<!ELEMENT efuse (name | state)*>

<!ELEMENT environment-component-information (environment-component-item)*>

<!ELEMENT environment-component-item (name | state | temperature-reading |
bus-revision | cmb-revision | fpga-revision | fpga-revision-detail | slave-revision
 | reason | revision | slave-registers-information | fpga-registers |
power-information | frequency | pcg-frequency | time-used | dc-information | load
 | ac-input | pmbus-table | airflow-direction | input-voltage | output-detail |
pdu-information | psm-information)*>

<!ELEMENT environment-information (environment-item)*>

<!ELEMENT environment-item (class | name | status | temperature | comment)*>
```

```
<!ELEMENT error-code (#PCDATA)>

<!ELEMENT even-odd (#PCDATA)>

<!ELEMENT exhaust-a-temperature (#PCDATA)>

<!ELEMENT exhaust-b-temperature (#PCDATA)>

<!ELEMENT exhaust-temperature (#PCDATA)>

<!ELEMENT f13-slot (#PCDATA)>

<!ELEMENT f2-link-state (#PCDATA)>

<!ELEMENT fab-reach-resolute (#PCDATA)>

<!ELEMENT fab-reach-status (#PCDATA)>

<!ELEMENT fab-reachability-action (act-reason | current-act | init-phase |
current-phase | current-phase-status | act-start-time | plane-restart-phase-status
 | plane-restart-start-time | plane-restart-list | plane-timeout-list |
plane-restart-planes-offline | plane-restart-planes-offline-time |
plane-restart-planes-online | plane-restart-planes-online-time |
plane-restart-end-time | plane-fpc-restart-phase-status |
plane-fpc-restart-start-time | fpc-offline-start-time | fpc-offline-list |
fpc-offline-current | fpc-offline-time | fpc-offline-end-time |
fpc-online-start-time | fpc-online-list | fpc-online-current | fpc-online-time |
 fpc-online-end-time | fpc-restart-list | fpc-restart-time |
fpc-offline-timeout-list | fpc-online-timeout-list |
plane-fpc-restart-phase-end-time | fpc-offline-phase-status |
fpc-offline-phase-start-time | fpc-offline-phase-end-time | act-end-time)*>
<!ATTLIST fab-reachability-action junos:style CDATA #IMPLIED>

<!ELEMENT fab-reachability-detect (unreach-dests | detect-time |
unreachability-reason)*>

<!ELEMENT fabric-header (#PCDATA)>

<!ELEMENT fabric-mx-upgrade-bw (fpc-fabric-upgrade-bw-info-item |
fpc-fabric-upgrade-bw-retrain-single-item |
fpc-fabric-upgrade-bw-retrain-summary-item)*>

<!ELEMENT fabric-plane-number (#PCDATA)>

<!ELEMENT fabric-plane-status (#PCDATA)>

<!ELEMENT fail-led EMPTY>

<!ELEMENT failover-count (#PCDATA)>

<!ELEMENT fan-dutycycle (#PCDATA)>

<!ELEMENT fan-failed-cnt (#PCDATA)>

<!ELEMENT fan-high-speed (#PCDATA)>
<!ATTLIST fan-high-speed junos:celsius CDATA #IMPLIED>

<!ELEMENT fan-information (name | status | rpm | rpm-percent | comment |
fan-information-rpm-item | fan-information-percent-rpm-item)*>
<!ATTLIST fan-information junos:style CDATA #IMPLIED>
```


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<!ELEMENT fan-information-percent-rpm-item (name | status | rpm-percent |
comment)*>

<!ELEMENT fan-information-rpm-item (name | status | rpm | comment)*>

<!ELEMENT fan-missing-cnt (#PCDATA)>

<!ELEMENT fan-normal-speed (#PCDATA)>
<!ATTLIST fan-normal-speed junos:celsius CDATA #IMPLIED>

<!ELEMENT fan-tray (slot | red-led | green-led)*>

<!ELEMENT fan-tray-actual-power EMPTY>

<!ELEMENT fan-tray-base-power (#PCDATA)>

<!ELEMENT fan-tray-panel (fan-tray)*>

<!ELEMENT fan-tray-slot (#PCDATA)>

<!ELEMENT fan-tray-type (#PCDATA)>

<!ELEMENT fans (#PCDATA)>

<!ELEMENT fchip-id (#PCDATA)>

<!ELEMENT feb (slot | ok-led | fail-led | active-led)*>

<!ELEMENT feb-active-led (#PCDATA)>

<!ELEMENT feb-fail-led (#PCDATA)>

<!ELEMENT feb-harderror-state (#PCDATA)>

<!ELEMENT feb-led (feb-slot | feb-state | feb-ok-led | feb-fail-led |
feb-active-led | connectivity-led0 | connectivity-led1 | connectivity-led2 |
connectivity-led3 | connectivity-led4 | connectivity-led5)*>

<!ELEMENT feb-led-information (feb-led)*>

<!ELEMENT feb-ok-led (#PCDATA)>

<!ELEMENT feb-panel (feb)*>

<!ELEMENT feb-redundancy-autofailover (#PCDATA)>

<!ELEMENT feb-redundancy-error-information (feb-redundancy-group-errors)*>

<!ELEMENT feb-redundancy-group-description (#PCDATA)>

<!ELEMENT feb-redundancy-group-errors (feb-redundancy-group-name |
feb-redundancy-group-description | feb-redundancy-group-feb-errors)*>

<!ELEMENT feb-redundancy-group-feb-errors (feb-slot | feb-state |
feb-harderror-state | feb-redundancy-group-feb-fpc-errors |
feb-redundancy-group-feb-fabric-plane-errors)*>

<!ELEMENT feb-redundancy-group-feb-fabric-plane-errors (fabric-plane-number |
fabric-plane-status)*>

<!ELEMENT feb-redundancy-group-feb-fpc-errors (fpc-slot | fpc-link-status)*>
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<!ELEMENT feb-redundancy-group-information (feb-redundancy-group-name |
feb-redundancy-group-description | feb-redundancy-group-information-item |
feb-redundancy-autofailover | feb-redundancy-switch-reason)*>

<!ELEMENT feb-redundancy-group-information-item (feb-slot | feb-state |
redundancy-priority | connected-fpcs | redundancy-state |
redundancy-state-description)*>

<!ELEMENT feb-redundancy-group-name (#PCDATA)>

<!ELEMENT feb-redundancy-information (feb-redundancy-group-information)*>

<!ELEMENT feb-redundancy-switch-reason (#PCDATA)>

<!ELEMENT feb-slot (#PCDATA)>

<!ELEMENT feb-state (#PCDATA)>

<!ELEMENT fiber-mode (#PCDATA)>

<!ELEMENT fire-shutdown (#PCDATA)>
<!ATTLIST fire-shutdown junos:celsius CDATA #IMPLIED>

<!ELEMENT firmware (type | firmware-version)*>

<!ELEMENT firmware-action (#PCDATA)>

<!ELEMENT firmware-information (chassis)*>

<!ELEMENT firmware-name (#PCDATA)>

<!ELEMENT firmware-revision (#PCDATA)>

<!ELEMENT firmware-revision-available (#PCDATA)>

<!ELEMENT firmware-status (#PCDATA)>

<!ELEMENT firmware-tag (#PCDATA)>

<!ELEMENT firmware-type (#PCDATA)>

<!ELEMENT firmware-version (#PCDATA)>

<!ELEMENT firmware-version-mismatch (routing-engine-software-version |
jfirmware-version)*>

<!ELEMENT floor (#PCDATA)>

<!ELEMENT fm-cb-slot (#PCDATA)>

<!ELEMENT fm-dest-fabric-destinations-ln (fm-fabric-destination-status)*>

<!ELEMENT fm-dest-fpc-ln (fm-slot | fm-dest-pfe-ln)*>

<!ELEMENT fm-dest-pfe-ln (fm-pfe-slot | fm-dest-plane-ln)*>

<!ELEMENT fm-dest-plane-ln (fm-plane-slot | fm-dest-fabric-destinations-ln)*>

<!ELEMENT fm-fabric-destination-status (#PCDATA)>
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<!ELEMENT fm-fabric-destinations-state (fm-dest-fpc-ln)*>
<!ATTLIST fm-fabric-destinations-state junos:style CDATA #IMPLIED>

<!ELEMENT fm-fabric-reachability-information (fab-reach-status |
fab-reachability-detect | fab-reachability-action | fab-reach-resolute)*>

<!ELEMENT fm-fabric-summary-information (fm-sum-ln)*>
<!ATTLIST fm-fabric-summary-information junos:style CDATA #IMPLIED>

<!ELEMENT fm-first-error-detail (#PCDATA)>

<!ELEMENT fm-first-error-ln (fm-first-error-time | fm-first-error-detail)*>

<!ELEMENT fm-first-error-time (#PCDATA)>
<!ATTLIST fm-first-error-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fm-fpc-line (pfe-slot | fm-pfe-line)*>

<!ELEMENT fm-fpc-ln (slot | fm-pfe-ln)*>

<!ELEMENT fm-fpc-ln1 (fpc-slot1 | fm-pfe-ln1)*>

<!ELEMENT fm-fpc-slot (#PCDATA)>

<!ELEMENT fm-fpc-state-information (fm-fpc-ln | fm-fpc-ln1)*>
<!ATTLIST fm-fpc-state-information junos:style CDATA #IMPLIED>

<!ELEMENT fm-fru-errors (fm-fru-first-error-header | fm-fru-last-error-header |
fm-first-error-ln | fm-last-error-ln)*>
<!ATTLIST fm-fru-errors junos:style CDATA #IMPLIED>

<!ELEMENT fm-fru-first-error-header (#PCDATA)>

<!ELEMENT fm-fru-last-error-header (#PCDATA)>

<!ELEMENT fm-last-error-detail (#PCDATA)>

<!ELEMENT fm-last-error-ln (fm-last-error-time | fm-last-error-detail)*>

<!ELEMENT fm-last-error-time (#PCDATA)>
<!ATTLIST fm-last-error-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fm-link-ln (link | link-fm-state)*>

<!ELEMENT fm-pfe-core-ln (sib-slot | sib-core | sib-plane | pfe-core-link-state)*>

<!ELEMENT fm-pfe-line (fpc-pfe-unreach-dests)*>

<!ELEMENT fm-pfe-ln (pfe-slot | fm-sib-ln | fm-plane-ln | fm-link-ln)*>

<!ELEMENT fm-pfe-ln1 (pfe-slot1 | fm-pfe-core-ln)*>

<!ELEMENT fm-pfe-slot (#PCDATA)>

<!ELEMENT fm-plane-ln (plane-slot | plane-fm-state)*>

<!ELEMENT fm-plane-location (plane-slot | cb-slot | plane | sib-f13-slot |
sib-f2-slot | sib-l-slot | sib-slot | planes)*>

<!ELEMENT fm-plane-location-information (fm-plane-location)*>
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```
<!ELEMENT fm-plane-slot (#PCDATA)>

<!ELEMENT fm-plane-state-information (fabric-header | fmp-plane)*>
<!ATTLIST fm-plane-state-information junos:style CDATA #IMPLIED>

<!ELEMENT fm-sib-ln (sib-slot | sib-fm-state)*>

<!ELEMENT fm-sib-state-information (fms-sib-ln | fms-sib-ln1)*>
<!ATTLIST fm-sib-state-information junos:style CDATA #IMPLIED>

<!ELEMENT fm-slot (#PCDATA)>

<!ELEMENT fm-space-tab (#PCDATA)>

<!ELEMENT fm-state-information (fm-state-item)*>

<!ELEMENT fm-state-item (plane-slot | state | up-time)*>

<!ELEMENT fm-sum-ln (fru-name-slot | fru-state | fru-error)*>

<!ELEMENT fm-topo-dbl-line (#PCDATA)>

<!ELEMENT fm-topo-fail-msg (#PCDATA)>

<!ELEMENT fm-topo-link (fm-topo-sib | fm-topo-dbl-line | fm-topo-fail-msg |
fm-topo-link-details | fm-topo-link-information | fm-topo-link-information-sgl)*>
<!ATTLIST fm-topo-link junos:style CDATA #IMPLIED>

<!ELEMENT fm-topo-link-des (fm-topo-link-des-in | fm-topo-link-des-out |
hsl2-state-des)*>

<!ELEMENT fm-topo-link-des-in (#PCDATA)>

<!ELEMENT fm-topo-link-des-out (#PCDATA)>

<!ELEMENT fm-topo-link-destination (fm-topo-link-out | link-state-destination)*>

<!ELEMENT fm-topo-link-detail-message (#PCDATA)>

<!ELEMENT fm-topo-link-details (fm-topo-link-type | fm-topo-sib-source |
fm-topo-sib-dest | source-pfe-xc-link | dest-pfe-xc-link | vcsel-status |
hsl2-channel | hsl2-status | fm-topo-link-in-out | fm-topo-link-details-head-lcc
 | fm-topo-link-details-lcc | fm-topo-link-details-head-sfc |
fm-topo-link-details-sfc)*>

<!ELEMENT fm-topo-link-details-head-lcc (fm-topo-sib-source | fm-topo-sib-dest)*>

<!ELEMENT fm-topo-link-details-head-sfc (fm-topo-sib-source | fm-topo-sib-dest)*>

<!ELEMENT fm-topo-link-details-lcc (source-pfe-xc-link | dest-pfe-xc-link |
vcsel-status | hsl2-channel | hsl2-status)*>

<!ELEMENT fm-topo-link-details-sfc (source-pfe-xc-link | dest-pfe-xc-link |
vcsel-status | hsl2-channel | hsl2-status)*>

<!ELEMENT fm-topo-link-fail (fm-topo-sib | fm-topo-fail-msg)*>

<!ELEMENT fm-topo-link-fail-sgl (fm-topo-sib | fm-topo-fail-msg)*>

<!ELEMENT fm-topo-link-fchip (fm-topo-link-fchipnum | fm-topo-link-fcore)*>
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<!ELEMENT fm-topo-link-fchipnum (#PCDATA)>

<!ELEMENT fm-topo-link-fcore (fm-topo-link-fcorenum | fm-topo-link-detail-message
 | fm-topo-link-source | fm-topo-link-destination)*>

<!ELEMENT fm-topo-link-fcorenum (#PCDATA)>

<!ELEMENT fm-topo-link-header-message (#PCDATA)>

<!ELEMENT fm-topo-link-in (#PCDATA)>

<!ELEMENT fm-topo-link-in-out (fm-topo-link-type)*>

<!ELEMENT fm-topo-link-information (fm-topo-sib | fm-topo-dbl-line |
fm-topo-link-fail | fm-topo-link-details)*>

<!ELEMENT fm-topo-link-information-sgl (fm-topo-link-fail-sgl |
fm-topo-link-details)*>

<!ELEMENT fm-topo-link-io (fm-topo-link-header-message | fm-topo-link-sib)*>

<!ELEMENT fm-topo-link-msg (#PCDATA)>

<!ELEMENT fm-topo-link-out (#PCDATA)>

<!ELEMENT fm-topo-link-sib (fm-topo-link-sibnum | fm-topo-link-sib-message |
fm-topo-link-fchip)*>

<!ELEMENT fm-topo-link-sib-message (#PCDATA)>

<!ELEMENT fm-topo-link-sibnum (#PCDATA)>

<!ELEMENT fm-topo-link-source (fm-topo-link-in | link-state-source)*>

<!ELEMENT fm-topo-link-src (fm-topo-link-src-in | fm-topo-link-src-out |
hsl2-state-src)*>

<!ELEMENT fm-topo-link-src-des (fm-topo-link-msg | fm-topo-link-src |
fm-topo-link-des)*>

<!ELEMENT fm-topo-link-src-in (#PCDATA)>

<!ELEMENT fm-topo-link-src-out (#PCDATA)>

<!ELEMENT fm-topo-link-type (#PCDATA)>

<!ELEMENT fm-topo-map (fm-topo-map-ln)*>

<!ELEMENT fm-topo-map-ln (fm-fpc-slot | fm-pfe-slot | fm-cb-slot | port |
link-state)*>

<!ELEMENT fm-topo-sib (#PCDATA)>

<!ELEMENT fm-topo-sib-dest (#PCDATA)>

<!ELEMENT fm-topo-sib-source (#PCDATA)>

<!ELEMENT fm-topology (fm-topo-link-src-des | fm-topo-link-io | fm-topo-link |
fm-topo-map)*>

<!ELEMENT fm-unreachable-dest-information (slot | fm-fpc-line)*>
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<!ATTLIST fm-unreachable-dest-information junos:style CDATA #IMPLIED>

<!ELEMENT fmp-plane (slot | state | up-time | comment | sib-name | sib-f13-name
| sib-f2-name | sibs-slot | sibs2-slot | plane-state | even-odd | sibl-slot |
lcc-slot | f13-slot | sibl-link-state | sgasic-number | sgasic-port-number |
sgasic-port-link-state | lcc-sgasic-number | lcc-sgasic-port-number |
lcc-sgasic-port-link-state | f2-link-state | lcc-pfe-slot | lcc-fpc-slot |
lcc-pfe-link-state | lcc-sib-link-state | fru-name | fru-slot | pfe-slot |
pfe-link-status)*>

<!ELEMENT fms-core-fpc-ln (slot | fms-core-pfe-ln)*>

<!ELEMENT fms-core-ln (sib-core | sib-plane | sib-fms-core-state |
fms-core-fpc-ln)*>

<!ELEMENT fms-core-pfe-link-state (#PCDATA)>

<!ELEMENT fms-core-pfe-ln (pfe-slot | fms-core-pfe-link-state)*>

<!ELEMENT fms-fpc-ln (slot | fms-pfe-ln)*>

<!ELEMENT fms-lcc-link-state (#PCDATA)>

<!ELEMENT fms-lcc-ln (lcc-slot | fms-lcc-link-state)*>

<!ELEMENT fms-pfe-link-state (#PCDATA)>

<!ELEMENT fms-pfe-ln (pfe-slot | fms-pfe-link-state)*>

<!ELEMENT fms-scc-link-state (#PCDATA)>

<!ELEMENT fms-scc-ln (fms-scc-link-state)*>

<!ELEMENT fms-sib-ln (sib-slot | sib-fm-state | fms-fpc-ln | fms-lcc-ln |
fms-scc-ln)*>

<!ELEMENT fms-sib-ln1 (sib-slot | sib-fms-state1 | fms-core-ln)*>

<!ELEMENT fpc (slot | logical-slot | state | description | error-code | temperature
 | cpu-total | cpu-interrupt | cpu-less-info-str | memory-dram-size |
memory-sram-size | memory-sdram-size | memory-rldram-size | memory-ddr-dram-size
 | memory-notification-sdram-size | memory-heap-utilization |
memory-buffer-utilization | asic-information | start-time | up-time | comment |
pic | pic-detail | max-power-consumption | red-led | green-led)*>

<!ELEMENT fpc-fab-state (#PCDATA)>

<!ELEMENT fpc-fabric-retrain-state (#PCDATA)>

<!ELEMENT fpc-fabric-retrain-summary (#PCDATA)>

<!ELEMENT fpc-fabric-upgrade-bw-info-item (fpc-slot-num | fpc-fab-state)*>

<!ELEMENT fpc-fabric-upgrade-bw-retrain-single-item (fpc-fabric-retrain-state)*>

<!ELEMENT fpc-fabric-upgrade-bw-retrain-summary-item (fpc-fabric-retrain-summary)*>

<!ELEMENT fpc-feb-connectivity (fpc-feb-connectivity-item)*>

<!ELEMENT fpc-feb-connectivity-item (fpc-slot | fpc-type | fpc-state | feb-slot
| no-feb-slot | feb-state | fpc-link-status)*>
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<!ELEMENT fpc-firmware-version (#PCDATA)>

<!ELEMENT fpc-information (fpc | fpc-slot | fpc-power-limit | fpc-priority |
fpc-power | fpc-status | fpc-firmware-version)*>
<!ATTLIST fpc-information junos:style CDATA #IMPLIED>

<!ELEMENT fpc-link-status (#PCDATA)>

<!ELEMENT fpc-num (#PCDATA)>

<!ELEMENT fpc-number (#PCDATA)>

<!ELEMENT fpc-offline-current (#PCDATA)>

<!ELEMENT fpc-offline-end-time (#PCDATA)>
<!ATTLIST fpc-offline-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-offline-list (#PCDATA)>

<!ELEMENT fpc-offline-phase-end-time (#PCDATA)>
<!ATTLIST fpc-offline-phase-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-offline-phase-start-time (#PCDATA)>
<!ATTLIST fpc-offline-phase-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-offline-phase-status (#PCDATA)>

<!ELEMENT fpc-offline-start-time (#PCDATA)>
<!ATTLIST fpc-offline-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-offline-time (#PCDATA)>
<!ATTLIST fpc-offline-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-offline-timeout-list (#PCDATA)>

<!ELEMENT fpc-online-current (#PCDATA)>

<!ELEMENT fpc-online-end-time (#PCDATA)>
<!ATTLIST fpc-online-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-online-list (#PCDATA)>

<!ELEMENT fpc-online-start-time (#PCDATA)>
<!ATTLIST fpc-online-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-online-time (#PCDATA)>
<!ATTLIST fpc-online-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-online-timeout-list (#PCDATA)>

<!ELEMENT fpc-panel (fpc)*>

<!ELEMENT fpc-pfe-unreach-dests (#PCDATA)>

<!ELEMENT fpc-power (#PCDATA)>

<!ELEMENT fpc-power-limit (#PCDATA)>

<!ELEMENT fpc-priority (#PCDATA)>
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<!ELEMENT fpc-restart-list (#PCDATA)>

<!ELEMENT fpc-restart-time (#PCDATA)>
<!ATTLIST fpc-restart-time junos:seconds CDATA #IMPLIED>

<!ELEMENT fpc-slot (#PCDATA)>

<!ELEMENT fpc-slot-num (#PCDATA)>

<!ELEMENT fpc-slot1 (#PCDATA)>

<!ELEMENT fpc-state (#PCDATA)>

<!ELEMENT fpc-status (#PCDATA)>

<!ELEMENT fpc-type (#PCDATA)>

<!ELEMENT fpga-registers (fpga-registers-name | fpga-registers-value)*>

<!ELEMENT fpga-registers-name (#PCDATA)>

<!ELEMENT fpga-registers-value (#PCDATA)>

<!ELEMENT fpga-revision (#PCDATA)>

<!ELEMENT fpga-revision-detail (fpga-revision-name | fpga-revision-value)*>

<!ELEMENT fpga-revision-name (#PCDATA)>

<!ELEMENT fpga-revision-value (#PCDATA)>

<!ELEMENT frequency (#PCDATA)>

<!ELEMENT front-panel (display-panel | re-panel | alarm-indicators | fpc-panel |
 sib-panel | ccg-panel | fan-tray-panel | power-supply-panel)*>

<!ELEMENT front-panel-lcd (front-panel-title | display-panel-lcd | system-led |
interface-led)*>

<!ELEMENT front-panel-title (name | delimiter)*>

<!ELEMENT fru (slot | state | up-time | comment)*>

<!ELEMENT fru-comment (#PCDATA)>

<!ELEMENT fru-error (#PCDATA)>

<!ELEMENT fru-fan-status (#PCDATA)>

<!ELEMENT fru-information (fru)*>
<!ATTLIST fru-information junos:style CDATA #IMPLIED>

<!ELEMENT fru-name (#PCDATA)>

<!ELEMENT fru-name-slot (#PCDATA)>

<!ELEMENT fru-power-on-sequence (sequence)*>

<!ELEMENT fru-reason (#PCDATA)>

<!ELEMENT fru-slot (#PCDATA)>
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<!ELEMENT fru-state (#PCDATA)>

<!ELEMENT fru-status (#PCDATA)>

<!ELEMENT fru-temp-status (#PCDATA)>

<!ELEMENT fru-temperature (#PCDATA)>
<!ATTLIST fru-temperature junos:celsius CDATA #IMPLIED>

<!ELEMENT global-fpc-number (#PCDATA)>

<!ELEMENT green-led EMPTY>

<!ELEMENT ha-led (red-led | yellow-led | amber-led)*>

<!ELEMENT hardware-incomplete EMPTY>

<!ELEMENT hcoord (#PCDATA)>

<!ELEMENT hours-used (#PCDATA)>

<!ELEMENT hsl2-channel (#PCDATA)>

<!ELEMENT hsl2-state-des (#PCDATA)>

<!ELEMENT hsl2-state-src (#PCDATA)>

<!ELEMENT hsl2-status (#PCDATA)>

<!ELEMENT hw-status (#PCDATA)>

<!ELEMENT i2c-data (#PCDATA)>

<!ELEMENT i2c-identifier (#PCDATA)>

<!ELEMENT i2c-information (jedec-code | eeprom-version | part-number |
serial-number | model-number | clei-code | assembly-identifier | assembly-version
 | manufacture-date | assembly-flags | i2c-version | i2c-identifier | i2c-data |
 board-information-record)*>

<!ELEMENT i2c-version (#PCDATA)>

<!ELEMENT in-service-upgrade-fru-status (fru-name | fru-status | fru-reason |
in-service-upgrade-pic-status)*>

<!ELEMENT in-service-upgrade-pic-status (fru-name | fru-status | fru-reason)*>

<!ELEMENT in-service-upgrade-status (in-service-upgrade-fru-status)*>

<!ELEMENT init-phase (#PCDATA)>

<!ELEMENT input-voltage (voltage-name | voltage-value)*>

<!ELEMENT intake-temperature (#PCDATA)>

<!ELEMENT interface-asterisk (#PCDATA)>

<!ELEMENT interface-class (#PCDATA)>

<!ELEMENT interface-class-detail (#PCDATA)>
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<!ELEMENT interface-detail-asterisk (#PCDATA)>

<!ELEMENT interface-display-title (#PCDATA)>

<!ELEMENT interface-enabled (#PCDATA)>

<!ELEMENT interface-enabled-detail (#PCDATA)>

<!ELEMENT interface-information (interface-name | interface-enabled |
interface-status | interface-power-limit | interface-priority | interface-power
| interface-asterisk | interface-class)*>

<!ELEMENT interface-information-detail (interface-name-detail |
interface-enabled-detail | interface-status-detail | interface-power-limit-detail
 | interface-priority-detail | interface-power-detail | interface-detail-asterisk
 | interface-class-detail | interface-mode-detail)*>

<!ELEMENT interface-led (interface-display-title | interface-led-display)*>
<!ATTLIST interface-led junos:style CDATA #IMPLIED>

<!ELEMENT interface-led-display (interface-name | led-status | activity-led)*>

<!ELEMENT interface-mode-detail (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-name-detail (#PCDATA)>

<!ELEMENT interface-power (#PCDATA)>

<!ELEMENT interface-power-detail (#PCDATA)>

<!ELEMENT interface-power-limit (#PCDATA)>

<!ELEMENT interface-power-limit-detail (#PCDATA)>

<!ELEMENT interface-priority (#PCDATA)>

<!ELEMENT interface-priority-detail (#PCDATA)>

<!ELEMENT interface-status (#PCDATA)>

<!ELEMENT interface-status-detail (#PCDATA)>

<!ELEMENT ioc-npc-connectivity (ioc-npc-connectivity-item)*>

<!ELEMENT ioc-npc-connectivity-item (ioc-slot | ioc-type | ioc-state | npc-slot
| no-npc-slot | npc-state | fpc-link-status)*>

<!ELEMENT ioc-slot (#PCDATA)>

<!ELEMENT ioc-state (#PCDATA)>

<!ELEMENT ioc-type (#PCDATA)>

<!ELEMENT jedec-code (#PCDATA)>

<!ELEMENT jfirmware-version (#PCDATA)>

<!ELEMENT last-deviation (#PCDATA)>
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<!ELEMENT last-reboot-reason (#PCDATA)>

<!ELEMENT lata (#PCDATA)>

<!ELEMENT latitude (#PCDATA)>

<!ELEMENT lcc (slot | state | up-time | comment)*>

<!ELEMENT lcc-fpc-slot (#PCDATA)>

<!ELEMENT lcc-information (lcc)*>
<!ATTLIST lcc-information junos:style CDATA #IMPLIED>

<!ELEMENT lcc-number (#PCDATA)>

<!ELEMENT lcc-pfe-link-state (#PCDATA)>

<!ELEMENT lcc-pfe-slot (#PCDATA)>

<!ELEMENT lcc-sgasic-number (#PCDATA)>

<!ELEMENT lcc-sgasic-port-link-state (#PCDATA)>

<!ELEMENT lcc-sgasic-port-number (#PCDATA)>

<!ELEMENT lcc-sib-link-state (#PCDATA)>

<!ELEMENT lcc-slot (#PCDATA)>

<!ELEMENT led-off EMPTY>

<!ELEMENT led-status (#PCDATA)>

<!ELEMENT line-card-actual-power EMPTY>

<!ELEMENT line-card-poe-power (#PCDATA)>

<!ELEMENT line-card-power (#PCDATA)>

<!ELEMENT line-card-priority (#PCDATA)>

<!ELEMENT line-card-slot (#PCDATA)>

<!ELEMENT line-card-type (#PCDATA)>

<!ELEMENT line-termination (#PCDATA)>

<!ELEMENT link (#PCDATA)>

<!ELEMENT link-fm-state (#PCDATA)>

<!ELEMENT link-state (#PCDATA)>

<!ELEMENT link-state-destination (#PCDATA)>

<!ELEMENT link-state-source (#PCDATA)>

<!ELEMENT load (#PCDATA)>

<!ELEMENT load-average-fifteen (#PCDATA)>
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<!ELEMENT load-average-five (#PCDATA)>
<!ELEMENT load-average-one (#PCDATA)>
<!ELEMENT local-fpc-number (#PCDATA)>
<!ELEMENT logical-slot (#PCDATA)>
<!ELEMENT longitude (#PCDATA)>
<!ELEMENT major-alarm-relay EMPTY>
<!ELEMENT management-status (#PCDATA)>
<!ELEMENT manufacture-date (#PCDATA)>
<!ELEMENT marked-as-failed-source (source-name)*>
<!ELEMENT marked-as-failed-source-list (marked-as-failed-source)*>
<!ELEMENT master-led EMPTY>
<!ELEMENT mastership-priority (#PCDATA)>
<!ELEMENT mastership-state (#PCDATA)>
<!ELEMENT max-chip-id (#PCDATA)>
<!ELEMENT max-power-consumption (#PCDATA)>
<!ELEMENT max-power-exceeded-controller EMPTY>
<!ELEMENT max-power-exceeded-interface EMPTY>
<!ELEMENT mcs (slot | amber-led | green-led | blue-led)*>
<!ELEMENT mcs-panel (mcs)*>
<!ELEMENT memory-buffer-utilization (#PCDATA)>
<!ELEMENT memory-control-plane (#PCDATA)>
<!ELEMENT memory-control-plane-used (#PCDATA)>
<!ELEMENT memory-control-plane-util (#PCDATA)>
<!ELEMENT memory-data-plane (#PCDATA)>
<!ELEMENT memory-data-plane-used (#PCDATA)>
<!ELEMENT memory-data-plane-util (#PCDATA)>
<!ELEMENT memory-ddr-dram-size (#PCDATA)>
<!ELEMENT memory-dram-size (#PCDATA)>
<!ELEMENT memory-heap-utilization (#PCDATA)>
<!ELEMENT memory-notification-sdram-size (#PCDATA)>
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<!ELEMENT memory-rldram-size (#PCDATA)>

<!ELEMENT memory-sdram-size (#PCDATA)>

<!ELEMENT memory-sram-size (#PCDATA)>

<!ELEMENT memory-system-total (#PCDATA)>

<!ELEMENT memory-system-total-used (#PCDATA)>

<!ELEMENT memory-system-total-util (#PCDATA)>

<!ELEMENT mfr-id (#PCDATA)>

<!ELEMENT min-chip-id (#PCDATA)>

<!ELEMENT minor-alarm-relay EMPTY>

<!ELEMENT model (#PCDATA)>

<!ELEMENT model-number (#PCDATA)>

<!ELEMENT mpim1-led (green-led | led-off)*>

<!ELEMENT mpim2-led (green-led | led-off)*>

<!ELEMENT multi-routing-engine-item (re-name | chassis-location-information |
chassisd-database-memory-usage | chassis-inventory | environment-information |
fpc-information | fm-topology | spmb-information | sib-information |
fm-fpc-state-information | fm-sib-state-information | scb-information |
route-engine-information | firmware-information | system-firmware-information |
system-firmware-compatibility-information | power-budget-information)*>

<!ELEMENT multi-routing-engine-results (multi-routing-engine-item)*>

<!ELEMENT name (#PCDATA)>

<!ELEMENT network-services (network-services-information)*>

<!ELEMENT network-services-information (name)*>

<!ELEMENT no-feb-slot EMPTY>

<!ELEMENT no-npc-slot EMPTY>

<!ELEMENT notification-information (fpc-number | notification-status)*>

<!ELEMENT notification-status (#PCDATA)>

<!ELEMENT npa-nxx (#PCDATA)>

<!ELEMENT npc-slot (#PCDATA)>

<!ELEMENT npc-state (#PCDATA)>

<!ELEMENT ok-led EMPTY>

<!ELEMENT output (#PCDATA)>

<!ELEMENT output-current (#PCDATA)>
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<!ELEMENT output-detail (output-voltage | output-current)*>

<!ELEMENT output-voltage (#PCDATA)>

<!ELEMENT part-number (#PCDATA)>

<!ELEMENT pcb-rev (#PCDATA)>

<!ELEMENT pcg (slot | amber-led | green-led | blue-led)*>

<!ELEMENT pcg-frequency (pcg-frequency-setting | pcg-frequency-measurement)*>

<!ELEMENT pcg-frequency-measurement (#PCDATA)>

<!ELEMENT pcg-frequency-setting (#PCDATA)>

<!ELEMENT pcg-panel (pcg)*>

<!ELEMENT pdu (slot | red-led | green-led | psm)*>

<!ELEMENT pdu-firmware (firmware-name | firmware-version)*>

<!ELEMENT pdu-information (pdu-status | efuse | hours-used | pdu-firmware)*>

<!ELEMENT pdu-status (#PCDATA)>

<!ELEMENT pem-capacity-detail (capacity-actual | capacity-max)*>

<!ELEMENT pfe-core-link-state (#PCDATA)>

<!ELEMENT pfe-link-status (#PCDATA)>

<!ELEMENT pfe-num (#PCDATA)>

<!ELEMENT pfe-slot (#PCDATA)>

<!ELEMENT pfe-slot1 (#PCDATA)>

<!ELEMENT pfe-version (pfe-num | pfe-version-string)*>

<!ELEMENT pfe-version-string (#PCDATA)>

<!ELEMENT physical-slot (#PCDATA)>

<!ELEMENT pic (pic-slot | pic-type | pic-state | comment)*>

<!ELEMENT pic-channelization-mode (#PCDATA)>

<!ELEMENT pic-clock-sync (#PCDATA)>

<!ELEMENT pic-detail (slot | pic-slot | pic-type | asic-type | comment |
pic-version | state | cpu-total | cpu-interrupt | memory-buffer-utilization |
memory-heap-utilization | memory-dram-size | cpu-sw-version | cpu-rom-version |
up-time | pic-package | pic-clock-sync | pic-multirate-mode |
pic-channelization-mode | configured-mode | port-information)*>

<!ELEMENT pic-multirate-mode (#PCDATA)>

<!ELEMENT pic-package (#PCDATA)>

<!ELEMENT pic-slot (#PCDATA)>
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<!ELEMENT pic-state (#PCDATA)>

<!ELEMENT pic-type (#PCDATA)>

<!ELEMENT pic-version (#PCDATA)>

<!ELEMENT plane (#PCDATA)>

<!ELEMENT plane-fm-state (#PCDATA)>

<!ELEMENT plane-fpc-restart-phase-end-time (#PCDATA)>
<!ATTLIST plane-fpc-restart-phase-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-fpc-restart-phase-status (#PCDATA)>

<!ELEMENT plane-fpc-restart-start-time (#PCDATA)>
<!ATTLIST plane-fpc-restart-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-restart-end-time (#PCDATA)>
<!ATTLIST plane-restart-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-restart-list (#PCDATA)>

<!ELEMENT plane-restart-phase-status (#PCDATA)>

<!ELEMENT plane-restart-planes-offline (#PCDATA)>

<!ELEMENT plane-restart-planes-offline-time (#PCDATA)>
<!ATTLIST plane-restart-planes-offline-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-restart-planes-online (#PCDATA)>

<!ELEMENT plane-restart-planes-online-time (#PCDATA)>
<!ATTLIST plane-restart-planes-online-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-restart-start-time (#PCDATA)>
<!ATTLIST plane-restart-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT plane-slot (#PCDATA)>

<!ELEMENT plane-state (#PCDATA)>

<!ELEMENT plane-timeout-list (#PCDATA)>

<!ELEMENT planes (#PCDATA)>

<!ELEMENT pmbus-actual-current (#PCDATA)>

<!ELEMENT pmbus-actual-voltage (#PCDATA)>

<!ELEMENT pmbus-calculated-power (#PCDATA)>

<!ELEMENT pmbus-device-name (#PCDATA)>

<!ELEMENT pmbus-expected-voltage (#PCDATA)>

<!ELEMENT pmbus-table (pmbus-table-entry)*>

<!ELEMENT pmbus-table-entry (pmbus-device-name | pmbus-expected-voltage |
pmbus-actual-voltage | pmbus-actual-current | pmbus-calculated-power)*>
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<!ELEMENT poe (interface-information | interface-information-detail |
notification-information | controller-information | poe-error |
telemetries-information | telemetries-information-detail | fpc-information)*>

<!ELEMENT poe-error (max-power-exceeded-interface | max-power-exceeded-controller
 | poe-software-upgrade-controller | poe-software-upgrade-reboot)*>

<!ELEMENT poe-software-upgrade-controller EMPTY>

<!ELEMENT poe-software-upgrade-reboot EMPTY>

<!ELEMENT port (port-number | cable-type | fiber-mode | sfp-vendor-name |
sfp-vendor-pno | wavelength | port-information-two)*>

<!ELEMENT port-information (port)*>

<!ELEMENT port-information-two (sfp-vendor-fw-ver)*>

<!ELEMENT port-number (#PCDATA)>

<!ELEMENT postal-code (#PCDATA)>

<!ELEMENT power-available-redundant-case (#PCDATA)>

<!ELEMENT power-budget-information (psu-slot | psu-type | power-supplied-psu |
power-supply-state | total-power-supplied | base-power | psu-redundancy-config |
 line-card-slot | line-card-type | line-card-power | line-card-actual-power |
line-card-priority | fan-tray-slot | fan-tray-type | fan-tray-base-power |
fan-tray-actual-power | actual-power-used | power-available-redundant-case |
total-power-available | total-poe-power-allocated | line-card-poe-power)*>
<!ATTLIST power-budget-information junos:style CDATA #IMPLIED>

<!ELEMENT power-information (power-title | voltage-title | voltage)*>

<!ELEMENT power-management (power-mgmt-device | power-mgmt-low-power |
power-mgmt-high-power | power-mgmt-heat | power-mgmt-state)*>

<!ELEMENT power-management-information (power-management)*>

<!ELEMENT power-mgmt-device (#PCDATA)>

<!ELEMENT power-mgmt-heat (#PCDATA)>

<!ELEMENT power-mgmt-high-power (#PCDATA)>

<!ELEMENT power-mgmt-low-power (#PCDATA)>

<!ELEMENT power-mgmt-state (#PCDATA)>

<!ELEMENT power-state (#PCDATA)>

<!ELEMENT power-supplied-psu (#PCDATA)>

<!ELEMENT power-supply (slot | amber-led | green-led | blue-led)*>

<!ELEMENT power-supply-panel (power-supply | pdu)*>

<!ELEMENT power-supply-state (#PCDATA)>

<!ELEMENT power-title (power-type | power-state)*>
```


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```
<!ELEMENT power-type (#PCDATA)>

<!ELEMENT power-usage-fru-item (name | dc-power)*>

<!ELEMENT power-usage-information (capacity-actual | capacity-max |
capacity-allocated | capacity-remaining | capacity-actual-usage | capacity-load
| zone | power-usage-item | power-usage-system | power-usage-total |
power-usage-voltage-total | power-usage-pdu-item | power-usage-fru-item)*>

<!ELEMENT power-usage-item (name | status | state | ac-input-detail |
dc-input-detail | dc-output-detail | pem-capacity-detail)*>

<!ELEMENT power-usage-pdu-item (slot | dc-power | power-usage-psm-item)*>

<!ELEMENT power-usage-psm-input (name | dc-voltage | dc-power)*>

<!ELEMENT power-usage-psm-item (slot | power-usage-psm-input)*>

<!ELEMENT power-usage-system (power-usage-zone-information | capacity-sys-actual
 | capacity-sys-max | capacity-sys-remaining)*>

<!ELEMENT power-usage-total (dc-power)*>

<!ELEMENT power-usage-voltage-total (dc-power)*>

<!ELEMENT power-usage-zone-information (zone | capacity-actual | capacity-max |
capacity-remaining | capacity-allocated | capacity-actual-usage)*>

<!ELEMENT product (#PCDATA)>

<!ELEMENT product-number (#PCDATA)>

<!ELEMENT psd (slot | description | state | up-time | comment)*>

<!ELEMENT psd-information (psd)*>
<!ATTLIST psd-information junos:style CDATA #IMPLIED>

<!ELEMENT psm (slot | red-led | green-led)*>

<!ELEMENT psm-information (psm-status | temperature | hours-used |
firmware-version)*>

<!ELEMENT psm-status (dc-input | fans | dc-output)*>

<!ELEMENT psu-redundancy-config (#PCDATA)>

<!ELEMENT psu-slot (#PCDATA)>

<!ELEMENT psu-type (#PCDATA)>

<!ELEMENT rack (#PCDATA)>

<!ELEMENT re (slot | ok-led | fail-led | master-led)*>

<!ELEMENT re-name (#PCDATA)>

<!ELEMENT re-panel (re)*>

<!ELEMENT read-register (cb-slot | fchip-id | address | data)*>
```

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```
<!ELEMENT reason (#PCDATA)>

<!ELEMENT recb-panel (ha-led | rps-led | mpim1-led | mpim2-led | storage-led |
sfb-led | cfm-ok-fail-led | cfm-service-led | sysio-status-led)*>

<!ELEMENT red-alarm (#PCDATA)>
<!ATTLIST red-alarm junos:celsius CDATA #IMPLIED>

<!ELEMENT red-led EMPTY>

<!ELEMENT redundancy-priority (#PCDATA)>

<!ELEMENT redundancy-state (#PCDATA)>

<!ELEMENT redundancy-state-description (#PCDATA)>

<!ELEMENT reference-voltage (#PCDATA)>

<!ELEMENT reset-count (#PCDATA)>

<!ELEMENT revision (revision-name | revision-number)*>

<!ELEMENT revision-name (#PCDATA)>

<!ELEMENT revision-number (#PCDATA)>

<!ELEMENT route-engine (description | slot | physical-slot | mastership-state |
mastership-priority | status | model | temperature | cpu-temperature |
memory-dram-size | memory-buffer-utilization | memory-system-total |
memory-system-total-used | memory-system-total-util | memory-control-plane |
memory-control-plane-used | memory-control-plane-util | memory-data-plane |
memory-data-plane-used | memory-data-plane-util | control-plane-cpu-count |
data-plane-cpu-count | cpu-user | cpu-real-time | cpu-background | cpu-system |
cpu-interrupt | cpu-idle | serial-number | start-time | up-time |
last-reboot-reason | load-average-one | load-average-five | load-average-fifteen
 | bios-version | bios-date | bios-id)*>

<!ELEMENT route-engine-information (route-engine)*>

<!ELEMENT routing-engine-software-version (#PCDATA)>

<!ELEMENT rpm (#PCDATA)>

<!ELEMENT rpm-percent (#PCDATA)>

<!ELEMENT rps-led (red-led | green-led | led-off)*>

<!ELEMENT scb (slot | state | failover-count | reset-count | activate-count |
temperature | intake-temperature | exhaust-temperature | exhaust-a-temperature |
 exhaust-b-temperature | spp-temperature | spr-temperature | cpu-total |
cpu-total-ukern | cpu-total-rt | cpu-interrupt | memory-dram-size |
memory-sram-size | memory-rldram-size | memory-ddr-dram-size |
memory-heap-utilization | memory-buffer-utilization | asic-name | asic-information
 | start-time | up-time | comment | max-power-consumption)*>

<!ELEMENT scb-information (scb-type | scb)*>
<!ATTLIST scb-information junos:style CDATA #IMPLIED>

<!ELEMENT scb-type (#PCDATA)>

<!ELEMENT scg (slot | amber-led | green-led | blue-led)*>
```


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```
<!ELEMENT scg-panel (scg)*>

<!ELEMENT sequence (#PCDATA)>

<!ELEMENT serial-number (#PCDATA)>

<!ELEMENT sfb-led (red-led | yellow-led | amber-led | blink-led)*>

<!ELEMENT sfm (slot | amber-led | green-led | blue-led)*>

<!ELEMENT sfm-panel (sfm)*>

<!ELEMENT sfp-vendor-fw-ver (#PCDATA)>

<!ELEMENT sfp-vendor-name (#PCDATA)>

<!ELEMENT sfp-vendor-pno (#PCDATA)>

<!ELEMENT sgasic-number (#PCDATA)>

<!ELEMENT sgasic-port-link-state (#PCDATA)>

<!ELEMENT sgasic-port-number (#PCDATA)>

<!ELEMENT sib (slot | temperature | start-time | slot-type | state | sib-type |
destination-error | up-time | comment | sib-link-state | sib-link-errors |
sib-errors | ok-led | fail-led | active-led)*>

<!ELEMENT sib-core (#PCDATA)>

<!ELEMENT sib-errors (#PCDATA)>

<!ELEMENT sib-f13-name (#PCDATA)>

<!ELEMENT sib-f13-slot (#PCDATA)>

<!ELEMENT sib-f2-name (#PCDATA)>

<!ELEMENT sib-f2-slot (#PCDATA)>

<!ELEMENT sib-fm-state (#PCDATA)>

<!ELEMENT sib-fms-core-state (#PCDATA)>

<!ELEMENT sib-fms-state1 (#PCDATA)>

<!ELEMENT sib-information (sib | use-cli-info)*>
<!ATTLIST sib-information junos:style CDATA #IMPLIED>

<!ELEMENT sib-l-slot (#PCDATA)>

<!ELEMENT sib-link-errors (#PCDATA)>

<!ELEMENT sib-link-state (#PCDATA)>

<!ELEMENT sib-name (#PCDATA)>

<!ELEMENT sib-panel (sib)*>

<!ELEMENT sib-plane (#PCDATA)>
```

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<!ELEMENT sib-slot (#PCDATA)>

<!ELEMENT sib-type (#PCDATA)>

<!ELEMENT sibl-link-state (#PCDATA)>

<!ELEMENT sibl-slot (#PCDATA)>

<!ELEMENT sibs-slot (#PCDATA)>

<!ELEMENT sibs2-slot (#PCDATA)>

<!ELEMENT signal-type (#PCDATA)>

<!ELEMENT slave-registers (slave-registers-name | slave-registers-value)*>

<!ELEMENT slave-registers-information (slave-registers-title | slave-registers)*>

<!ELEMENT slave-registers-name (#PCDATA)>

<!ELEMENT slave-registers-title (#PCDATA)>

<!ELEMENT slave-registers-value (#PCDATA)>

<!ELEMENT slave-revision (#PCDATA)>

<!ELEMENT slot (#PCDATA)>

<!ELEMENT slot-type (#PCDATA)>

<!ELEMENT source-name (#PCDATA)>

<!ELEMENT source-pfe-xc-link (#PCDATA)>

<!ELEMENT source-priority (#PCDATA)>

<!ELEMENT spmb (slot | state | cpu-total | cpu-interrupt | memory-heap-utilization
 | memory-buffer-utilization | start-time | up-time)*>

<!ELEMENT spmb-information (spmb)*>
<!ATTLIST spmb-information junos:style CDATA #IMPLIED>

<!ELEMENT spp-temperature (#PCDATA)>

<!ELEMENT spr-temperature (#PCDATA)>

<!ELEMENT spray-cumulative-weight (#PCDATA)>

<!ELEMENT spray-destination-mask (#PCDATA)>

<!ELEMENT spray-max-links-to-destination (#PCDATA)>

<!ELEMENT spray-weight0 (#PCDATA)>

<!ELEMENT spray-weight1 (#PCDATA)>

<!ELEMENT spray-weight2 (#PCDATA)>

<!ELEMENT spray-weight3 (#PCDATA)>
```


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```
<!ELEMENT spray-weight4 (#PCDATA)>

<!ELEMENT spray-weight5 (#PCDATA)>

<!ELEMENT spray-weight6 (#PCDATA)>

<!ELEMENT spray-weight7 (#PCDATA)>

<!ELEMENT src-chip (#PCDATA)>

<!ELEMENT src-link (#PCDATA)>

<!ELEMENT src-port (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT state (#PCDATA)>

<!ELEMENT status (#PCDATA)>

<!ELEMENT storage-led (green-led | led-off)*>

<!ELEMENT switching-mode (#PCDATA)>

<!ELEMENT synchronization-source-list (current-source | configured-source-list)*>

<!ELEMENT sysio-status-led (red-led | yellow-led | amber-led | blink-led)*>

<!ELEMENT system-firmware (firmware-name | firmware-type | firmware-tag |
firmware-revision | firmware-revision-available | firmware-status |
system-sub-module-firmware-list)*>

<!ELEMENT system-firmware-compatibility (firmware-name | firmware-type |
firmware-tag | firmware-revision | firmware-revision-available | firmware-status
 | firmware-action | system-sub-module-firmware-compatibility-list)*>

<!ELEMENT system-firmware-compatibility-information (firmware-version-mismatch |
 system-firmware-compatibility)*>

<!ELEMENT system-firmware-information (system-firmware)*>

<!ELEMENT system-led (system-led-display)*>

<!ELEMENT system-led-display (name | led-status)*>

<!ELEMENT system-sub-module-firmware (firmware-name | firmware-type | firmware-tag
 | firmware-revision | firmware-revision-available | firmware-status)*>

<!ELEMENT system-sub-module-firmware-compatibility (firmware-name | firmware-type
 | firmware-tag | firmware-revision | firmware-revision-available | firmware-status
 | firmware-action)*>

<!ELEMENT system-sub-module-firmware-compatibility-list
(system-sub-module-firmware-compatibility)*>

<!ELEMENT system-sub-module-firmware-list (system-sub-module-firmware)*>

<!ELEMENT telemetries-index (#PCDATA)>

<!ELEMENT telemetries-index-detail (#PCDATA)>
```

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```
<!ELEMENT telemetries-information (telemetries-interface-name | telemetries-index
 | telemetries-timestamp | telemetries-power | telemetries-voltage)*>

<!ELEMENT telemetries-information-detail (telemetries-index-detail |
telemetries-timestamp-detail | telemetries-power-detail |
telemetries-voltage-detail)*>

<!ELEMENT telemetries-interface-name (#PCDATA)>

<!ELEMENT telemetries-power (#PCDATA)>

<!ELEMENT telemetries-power-detail (#PCDATA)>

<!ELEMENT telemetries-timestamp (#PCDATA)>

<!ELEMENT telemetries-timestamp-detail (#PCDATA)>

<!ELEMENT telemetries-voltage (#PCDATA)>

<!ELEMENT telemetries-voltage-detail (#PCDATA)>

<!ELEMENT temperature (#PCDATA)>
<!ATTLIST temperature junos:celsius CDATA #IMPLIED>
<!ATTLIST temperature junos:celsius CDATA #IMPLIED>
<!ATTLIST temperature junos:celsius CDATA #IMPLIED>

<!ELEMENT temperature-name (#PCDATA)>

<!ELEMENT temperature-reading (temperature-name | temperature)*>

<!ELEMENT temperature-threshold (name | fan-normal-speed | fan-high-speed |
yellow-alarm | bad-fan-yellow-alarm | red-alarm | bad-fan-red-alarm | fire-shutdown
 | temperature-threshold-information-item)*>

<!ELEMENT temperature-threshold-information (temperature-threshold)*>

<!ELEMENT temperature-threshold-information-item (#PCDATA)>

<!ELEMENT time-used (#PCDATA)>
<!ATTLIST time-used junos:seconds CDATA #IMPLIED>

<!ELEMENT total-poe-power-allocated (#PCDATA)>

<!ELEMENT total-power-available (#PCDATA)>

<!ELEMENT total-power-supplied (#PCDATA)>

<!ELEMENT transmit (#PCDATA)>

<!ELEMENT type (#PCDATA)>

<!ELEMENT unreach-dests (#PCDATA)>

<!ELEMENT unreachability-reason (#PCDATA)>

<!ELEMENT up-time (#PCDATA)>
<!ATTLIST up-time junos:seconds CDATA #IMPLIED>

<!ELEMENT use-cli-info (#PCDATA)>
```


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```
<!ELEMENT validation-interval (#PCDATA)>

<!ELEMENT vcoord (#PCDATA)>

<!ELEMENT vcsel-status (#PCDATA)>

<!ELEMENT vendor (#PCDATA)>

<!ELEMENT version (#PCDATA)>

<!ELEMENT voltage (reference-voltage | actual-voltage)*>

<!ELEMENT voltage-name (#PCDATA)>

<!ELEMENT voltage-title (#PCDATA)>

<!ELEMENT voltage-value (#PCDATA)>

<!ELEMENT vpfe-id (#PCDATA)>

<!ELEMENT wavelength (#PCDATA)>

<!ELEMENT write-register (cb-slot | fchip-id | address | data)*>

<!ELEMENT xf-address (#PCDATA)>

<!ELEMENT xf-data (#PCDATA)>

<!ELEMENT xf-mode (#PCDATA)>

<!ELEMENT xf-read-register (xfchip-id | xf-address | xf-data)*>

<!ELEMENT xf-show-summary (xfchip-id | xf-mode)*>

<!ELEMENT xf-write-register (xfchip-id | xf-address | xf-data)*>

<!ELEMENT xfchip-id (#PCDATA)>

<!ELEMENT yellow-alarm (#PCDATA)>
<!ATTLIST yellow-alarm junos:celsius CDATA #IMPLIED>

<!ELEMENT yellow-led EMPTY>

<!ELEMENT zone (#PCDATA)>

<!ELEMENT zone-status (#PCDATA)>
```

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CHAPTER 72

DTD for Clock Synchronization Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-clksyncd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-clksyncd.dtd -->

<!ELEMENT acbc-primary-slot (#PCDATA)>

<!ELEMENT acbc-secondary-slot (#PCDATA)>

<!ELEMENT ack-reply-bitmap (#PCDATA)>

<!ELEMENT agentsmith-dpc-bitmap (#PCDATA)>

<!ELEMENT change-hold-interval (#PCDATA)>

<!ELEMENT clock-failure-reason (#PCDATA)>

<!ELEMENT clock-flags (#PCDATA)>

<!ELEMENT clock-ineligible-reason (#PCDATA)>

<!ELEMENT clock-lock-information (#PCDATA)>

<!ELEMENT clock-mode (#PCDATA)>

<!ELEMENT clock-state (#PCDATA)>

<!ELEMENT clock-status (#PCDATA)>

<!ELEMENT clock-synchronization (clock-status | clock-lock-information |
clock-ineligible-reason | clock-synchronization-source)*>
```

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```
<!ELEMENT clock-synchronization-clear-gencfg (#PCDATA)>

<!ELEMENT clock-synchronization-clear-output (#PCDATA)>

<!ELEMENT clock-synchronization-cpld-information (cpld-primary-mic |
cpld-secondary-mic)*>

<!ELEMENT clock-synchronization-esmc-transmit (esmc-transmit-interface-name |
esmc-transmit-interface-status)*>
<!ATTLIST clock-synchronization-esmc-transmit junos:style CDATA #IMPLIED>

<!ELEMENT clock-synchronization-esmc-transmit-information
(clock-synchronization-esmc-transmit)*>

<!ELEMENT clock-synchronization-fpga-information (acbc-primary-slot |
acbc-secondary-slot)*>

<!ELEMENT clock-synchronization-gencfg (primary-index | secondary-index |
primary-type | secondary-type | primary-quality-level | secondary-quality-level
| primary-state | secondary-state | clock-flags | feature-mode)*>

<!ELEMENT clock-synchronization-global-information (network-option | clock-mode
| quality-mode | selection-mode | switchover-mode | change-hold-interval |
switchover-hold-interval | reboot-hold-interval | master-status |
agentsmith-dpc-bitmap | zarlink-support-dpc-bitmap |
fpga-support-synchronous-ethernet)*>
<!ATTLIST clock-synchronization-global-information junos:style CDATA #IMPLIED>

<!ELEMENT clock-synchronization-interface-name (#PCDATA)>

<!ELEMENT clock-synchronization-interface-statistics
(clock-synchronization-interface-name | interface-receive-esmc-count |
interface-transmit-esmc-count | interface-receive-esmc-drop-count |
interface-esmc-ineligible-drop-count | interface-adjacency-create-count)*>

<!ELEMENT clock-synchronization-ref-monitor (zarlink-fail-bitmap | ack-reply-bitmap
 | reference-must-mask | current-event-context | current-sequence-number |
current-reference-index | next-function)*>

<!ELEMENT clock-synchronization-source (source-priority | source-quality-level |
 esmc-quality-level | source-interface-name | source-interface-status |
source-interface-index | clock-state | interface-configuration-flags |
interface-flags | source-clock-type | source-clock-event |
interface-ineligible-reason | clock-failure-reason |
interface-hold-interval-expiry)*>
<!ATTLIST clock-synchronization-source junos:style CDATA #IMPLIED>

<!ELEMENT clock-synchronization-statistics
(clock-synchronization-interface-statistics)*>
<!ATTLIST clock-synchronization-statistics junos:style CDATA #IMPLIED>

<!ELEMENT clock-synchronization-zarlink (#PCDATA)>

<!ELEMENT cpld-primary-mic (#PCDATA)>

<!ELEMENT cpld-secondary-mic (#PCDATA)>

<!ELEMENT current-event-context (#PCDATA)>

<!ELEMENT current-reference-index (#PCDATA)>
```


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```
<!ELEMENT current-sequence-number (#PCDATA)>
<!ELEMENT esmc-quality-level (#PCDATA)>
<!ELEMENT esmc-transmit-interface-name (#PCDATA)>
<!ELEMENT esmc-transmit-interface-status (#PCDATA)>
<!ELEMENT feature-mode (#PCDATA)>
<!ELEMENT fpga-support-synchronous-ethernet (#PCDATA)>
<!ELEMENT hybrid-config-header EMPTY>
<!ELEMENT hybrid-configured-mode (#PCDATA)>
<!ELEMENT hybrid-lock-state (#PCDATA)>
<!ELEMENT hybrid-lock-state-description (#PCDATA)>
<!ELEMENT hybrid-operating-mode (#PCDATA)>
<!ELEMENT hybrid-ptp-clock-source-ip (#PCDATA)>
<!ELEMENT hybrid-ptp-clock-total-interfaces-mapped (#PCDATA)>
<!ELEMENT hybrid-ptp-reference (#PCDATA)>
<!ELEMENT hybrid-synchronous-ethernet-reference (#PCDATA)>
<!ELEMENT hybrid-synchronous-ethernet-source (#PCDATA)>
<!ELEMENT interface-adjacency-create-count (#PCDATA)>
<!ELEMENT interface-configuration-flags (#PCDATA)>
<!ELEMENT interface-esmc-ineligible-drop-count (#PCDATA)>
<!ELEMENT interface-flags (#PCDATA)>
<!ELEMENT interface-hold-interval-expiry (#PCDATA)>
<!ELEMENT interface-ineligible-reason (#PCDATA)>
<!ELEMENT interface-receive-esmc-count (#PCDATA)>
<!ELEMENT interface-receive-esmc-drop-count (#PCDATA)>
<!ELEMENT interface-transmit-esmc-count (#PCDATA)>
<!ELEMENT master (#PCDATA)>
<!ELEMENT master-status (#PCDATA)>
<!ELEMENT network-option (#PCDATA)>
<!ELEMENT next-function (#PCDATA)>
<!ELEMENT primary-index (#PCDATA)>
<!ELEMENT primary-quality-level (#PCDATA)>
```

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```
<!ELEMENT primary-state (#PCDATA)>

<!ELEMENT primary-type (#PCDATA)>

<!ELEMENT ptp-acceptable-masters (ptp-acceptable-table-local-ip |
ptp-acceptable-table-status | ptp-acceptable-table-maximum-size |
ptp-acceptable-table-current-size | ptp-acceptable-table-entry-address |
ptp-acceptable-table-entry-info)*>
<!ATTLIST ptp-acceptable-masters junos:style CDATA #IMPLIED>

<!ELEMENT ptp-acceptable-table-current-size (#PCDATA)>

<!ELEMENT ptp-acceptable-table-entry-address (#PCDATA)>

<!ELEMENT ptp-acceptable-table-entry-info (#PCDATA)>

<!ELEMENT ptp-acceptable-table-local-ip (#PCDATA)>

<!ELEMENT ptp-acceptable-table-maximum-size (#PCDATA)>

<!ELEMENT ptp-acceptable-table-status (#PCDATA)>

<!ELEMENT ptp-announce-interval (#PCDATA)>

<!ELEMENT ptp-announce-timeout (#PCDATA)>

<!ELEMENT ptp-bmc-announce-steps-removed (#PCDATA)>

<!ELEMENT ptp-bmc-announce-time-source (#PCDATA)>

<!ELEMENT ptp-bmc-announce-utc-offset (#PCDATA)>

<!ELEMENT ptp-bmc-clock-identity (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-clock-accuracy (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-clock-class (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-clock-variance (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-identity (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-priority1 (#PCDATA)>

<!ELEMENT ptp-bmc-grandmaster-priority2 (#PCDATA)>

<!ELEMENT ptp-bmc-header-flags (#PCDATA)>

<!ELEMENT ptp-bmc-header-mean-interval (#PCDATA)>

<!ELEMENT ptp-bmc-header-source-clock-identity (#PCDATA)>

<!ELEMENT ptp-bmc-header-source-clock-port-number (#PCDATA)>

<!ELEMENT ptp-bmc-ifl-index (#PCDATA)>

<!ELEMENT ptp-bmc-information (ptp-bmc-ip-address | ptp-bmc-slot |
ptp-bmc-ifl-index | ptp-bmc-stream-handle | ptp-bmc-clock-identity |
ptp-bmc-port-number | ptp-bmc-announce-utc-offset | ptp-bmc-announce-time-source
 | ptp-bmc-announce-steps-removed | ptp-bmc-grandmaster-identity |
```


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```
ptp-bmc-grandmaster-clock-class | ptp-bmc-grandmaster-clock-accuracy |
ptp-bmc-grandmaster-clock-variance | ptp-bmc-grandmaster-priority1 |
ptp-bmc-grandmaster-priority2 | ptp-bmc-receive-port-clock-identity |
ptp-bmc-receive-port-number | ptp-bmc-header-flags |
ptp-bmc-header-source-clock-identity | ptp-bmc-header-source-clock-port-number |
 ptp-bmc-header-mean-interval)*>
<!ATTLIST ptp-bmc-information junos:style CDATA #IMPLIED>

<!ELEMENT ptp-bmc-ip-address (#PCDATA)>

<!ELEMENT ptp-bmc-port-number (#PCDATA)>

<!ELEMENT ptp-bmc-receive-port-clock-identity (#PCDATA)>

<!ELEMENT ptp-bmc-receive-port-number (#PCDATA)>

<!ELEMENT ptp-bmc-slot (#PCDATA)>

<!ELEMENT ptp-bmc-stream-handle (#PCDATA)>

<!ELEMENT ptp-calendar-time (#PCDATA)>

<!ELEMENT ptp-clock (ptp-clock-accuracy | ptp-slot-number-string | ptp-two-step-clk
 | ptp-clock-id-default | ptp-number-of-ports | ptp-clock-class |
ptp-clock-variance | ptp-clock-priority1 | ptp-clock-priority2 |
ptp-clock-slave-only | ptp-clock-default-utc-offset | ptp-clock-default-leap-59
| ptp-clock-default-leap-61 | ptp-clock-default-time-tracable |
ptp-clock-default-freq-tracable | ptp-clock-default-time-source |
ptp-clock-delay-request-send-time | ptp-clock-steps-removed | ptp-clock-parent-id
 | ptp-gmc-id | ptp-gmc-class | ptp-gmc-accuracy | ptp-gmc-variance |
ptp-gmc-priority1 | ptp-gmc-priority2 | ptp-clock-global-utc-offset |
ptp-clock-global-leap-59 | ptp-clock-global-leap-61 |
ptp-clock-global-time-tracable | ptp-clock-global-freq-tracable |
ptp-clock-global-time-scale | ptp-clock-global-time-source)*>
<!ATTLIST ptp-clock junos:style CDATA #IMPLIED>

<!ELEMENT ptp-clock-accuracy (#PCDATA)>

<!ELEMENT ptp-clock-class (#PCDATA)>

<!ELEMENT ptp-clock-class-value (#PCDATA)>

<!ELEMENT ptp-clock-default-freq-tracable (#PCDATA)>

<!ELEMENT ptp-clock-default-leap-59 (#PCDATA)>

<!ELEMENT ptp-clock-default-leap-61 (#PCDATA)>

<!ELEMENT ptp-clock-default-time-source (#PCDATA)>

<!ELEMENT ptp-clock-default-time-tracable (#PCDATA)>

<!ELEMENT ptp-clock-default-utc-offset (#PCDATA)>

<!ELEMENT ptp-clock-delay-request-send-time (#PCDATA)>

<!ELEMENT ptp-clock-global-freq-tracable (#PCDATA)>

<!ELEMENT ptp-clock-global-leap-59 (#PCDATA)>

<!ELEMENT ptp-clock-global-leap-61 (#PCDATA)>
```

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```
<!ELEMENT ptp-clock-global-time-scale (#PCDATA)>

<!ELEMENT ptp-clock-global-time-source (#PCDATA)>

<!ELEMENT ptp-clock-global-time-tracable (#PCDATA)>

<!ELEMENT ptp-clock-global-utc-offset (#PCDATA)>

<!ELEMENT ptp-clock-id (#PCDATA)>

<!ELEMENT ptp-clock-id-default (#PCDATA)>

<!ELEMENT ptp-clock-identity (#PCDATA)>

<!ELEMENT ptp-clock-log-variance (#PCDATA)>

<!ELEMENT ptp-clock-mode (#PCDATA)>

<!ELEMENT ptp-clock-parent-id (#PCDATA)>

<!ELEMENT ptp-clock-priority1 (#PCDATA)>

<!ELEMENT ptp-clock-priority2 (#PCDATA)>

<!ELEMENT ptp-clock-quality (#PCDATA)>

<!ELEMENT ptp-clock-slave-only (#PCDATA)>

<!ELEMENT ptp-clock-source (ptp-clock-source-ip | ptp-clock-source-local-interface
 | ptp-clock-source-local-ip-address | ptp-clock-source-preference)*>
<!ATTLIST ptp-clock-source junos:style CDATA #IMPLIED>

<!ELEMENT ptp-clock-source-ip (#PCDATA)>

<!ELEMENT ptp-clock-source-local-interface (#PCDATA)>

<!ELEMENT ptp-clock-source-local-ip-address (#PCDATA)>

<!ELEMENT ptp-clock-source-preference (#PCDATA)>

<!ELEMENT ptp-clock-statistics-in-discards (#PCDATA)>

<!ELEMENT ptp-clock-statistics-in-errors (#PCDATA)>

<!ELEMENT ptp-clock-statistics-in-unicast-packets (#PCDATA)>

<!ELEMENT ptp-clock-statistics-in-unknown-protocols (#PCDATA)>

<!ELEMENT ptp-clock-statistics-out-discards (#PCDATA)>

<!ELEMENT ptp-clock-statistics-out-errors (#PCDATA)>

<!ELEMENT ptp-clock-statistics-out-unicast-packets (#PCDATA)>

<!ELEMENT ptp-clock-stepping (#PCDATA)>

<!ELEMENT ptp-clock-steps-removed (#PCDATA)>

<!ELEMENT ptp-clock-stream-handle (#PCDATA)>
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<!ELEMENT ptp-clock-variance (#PCDATA)>

<!ELEMENT ptp-convert-clock-class (#PCDATA)>

<!ELEMENT ptp-converted-esmc-quality-level (#PCDATA)>

<!ELEMENT ptp-delay-mechanism (#PCDATA)>

<!ELEMENT ptp-delay-request (#PCDATA)>

<!ELEMENT ptp-delay-response (#PCDATA)>

<!ELEMENT ptp-domain (#PCDATA)>

<!ELEMENT ptp-foreign-master-clock-id (#PCDATA)>

<!ELEMENT ptp-foreign-master-current-messages (#PCDATA)>

<!ELEMENT ptp-foreign-master-messages (#PCDATA)>

<!ELEMENT ptp-foreign-master-title-string (#PCDATA)>

<!ELEMENT ptp-fsm-header-string (#PCDATA)>

<!ELEMENT ptp-global-information (ptp-clock-mode | ptp-domain | ptp-priority1 |
ptp-priority2 | ptp-announce-timeout | ptp-clock-stepping | ptp-transport | master
 | ptp-uni-neg | ptp-convert-clock-class | ptp-converted-esmc-quality-level |
ptp-total-ports | ptp-slave-delay-request-string |
ptp-slave-announce-interval-string | ptp-master-delay-request-string |
ptp-master-announce-interval-string | ptp-slave-synchronization-interval-string
| ptp-master-synchronization-interval-string | ptp-slave-count |
ptp-master-count)*>
<!ATTLIST ptp-global-information junos:style CDATA #IMPLIED>

<!ELEMENT ptp-gmc-accuracy (#PCDATA)>

<!ELEMENT ptp-gmc-class (#PCDATA)>

<!ELEMENT ptp-gmc-id (#PCDATA)>

<!ELEMENT ptp-gmc-priority1 (#PCDATA)>

<!ELEMENT ptp-gmc-priority2 (#PCDATA)>

<!ELEMENT ptp-gmc-variance (#PCDATA)>

<!ELEMENT ptp-hybrid-mapping (ptp-hybrid-mapping-group)*>
<!ATTLIST ptp-hybrid-mapping junos:style CDATA #IMPLIED>

<!ELEMENT ptp-hybrid-mapping-group (hybrid-ptp-clock-source-ip |
hybrid-ptp-clock-total-interfaces-mapped | hybrid-synchronous-ethernet-source |
hybrid-config-header)*>

<!ELEMENT ptp-hybrid-status (hybrid-configured-mode | hybrid-operating-mode |
hybrid-ptp-reference | hybrid-synchronous-ethernet-reference | hybrid-lock-state
 | hybrid-lock-state-description)*>
<!ATTLIST ptp-hybrid-status junos:style CDATA #IMPLIED>

<!ELEMENT ptp-last-tod-update (tod-update-time | tod-recv-count | tod-recv-fail
| tod-recv-unhandled | tod-send-count | tod-send-fail | tod-ack-send-count |
tod-ack-send-fail)*>
```

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<!ATTLIST ptp-last-tod-update junos:style CDATA #IMPLIED>

<!ELEMENT ptp-lock-status (ptp-spll-lock-state | ptp-spll-lock-state-string |
ptp-spll-phase-offset | ptp-spll-error-flag | ptp-fsm-header-string |
ptp-primary-reference-state | ptp-secondary-reference-state | ptp-slave-ifl-index
 | ptp-master-ip-address)*>
<!ATTLIST ptp-lock-status junos:style CDATA #IMPLIED>

<!ELEMENT ptp-master (ptp-master-interface-name | ptp-master-interface-status |
ptp-master-local-ip | ptp-master-local-status | ptp-master-total-slaves |
ptp-master-remote-ip | ptp-master-remote-status)*>
<!ATTLIST ptp-master junos:style CDATA #IMPLIED>

<!ELEMENT ptp-master-announce-interval-string (#PCDATA)>

<!ELEMENT ptp-master-count (#PCDATA)>

<!ELEMENT ptp-master-delay-request-string (#PCDATA)>

<!ELEMENT ptp-master-interface-name (#PCDATA)>

<!ELEMENT ptp-master-interface-status (#PCDATA)>

<!ELEMENT ptp-master-ip-address (#PCDATA)>

<!ELEMENT ptp-master-local-ip (#PCDATA)>

<!ELEMENT ptp-master-local-status (#PCDATA)>

<!ELEMENT ptp-master-remote-ip (#PCDATA)>

<!ELEMENT ptp-master-remote-status (#PCDATA)>

<!ELEMENT ptp-master-synchronization-interval-string (#PCDATA)>

<!ELEMENT ptp-master-total-slaves (#PCDATA)>

<!ELEMENT ptp-mean-path-delay-high (#PCDATA)>

<!ELEMENT ptp-mean-path-delay-low (#PCDATA)>

<!ELEMENT ptp-number-of-ports (#PCDATA)>

<!ELEMENT ptp-op-mode (#PCDATA)>

<!ELEMENT ptp-port (ptp-port-information)*>

<!ELEMENT ptp-port-information (ptp-clock-stream-handle | ptp-delay-request |
ptp-announce-interval | ptp-announce-timeout | ptp-synchronization-interval |
ptp-port-local-ip | ptp-port-remote-ip | ptp-clock-id | ptp-port-state |
ptp-mean-path-delay-high | ptp-mean-path-delay-low | ptp-delay-mechanism |
ptp-port-number | ptp-op-mode | ptp-foreign-master-title-string |
ptp-foreign-master-clock-id | ptp-foreign-master-messages |
ptp-foreign-master-current-messages)*>
<!ATTLIST ptp-port-information junos:style CDATA #IMPLIED>

<!ELEMENT ptp-port-local-ip (#PCDATA)>

<!ELEMENT ptp-port-number (#PCDATA)>

<!ELEMENT ptp-port-remote-ip (#PCDATA)>
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<!ELEMENT ptp-port-state (#PCDATA)>

<!ELEMENT ptp-primary-reference-state (#PCDATA)>

<!ELEMENT ptp-priority1 (#PCDATA)>

<!ELEMENT ptp-priority2 (#PCDATA)>

<!ELEMENT ptp-quality-level-mapping (synchronous-ethernet-quality-level |
ptp-clock-class-value)*>
<!ATTLIST ptp-quality-level-mapping junos:style CDATA #IMPLIED>

<!ELEMENT ptp-secondary-reference-state (#PCDATA)>

<!ELEMENT ptp-seconds-elapsed (#PCDATA)>

<!ELEMENT ptp-slave (ptp-slave-interface-name | ptp-slave-interface-status |
ptp-slave-local-ip | ptp-slave-local-status | ptp-slave-total-masters |
ptp-slave-clock-source-ip | ptp-slave-clock-source-flags)*>
<!ATTLIST ptp-slave junos:style CDATA #IMPLIED>

<!ELEMENT ptp-slave-announce-interval-string (#PCDATA)>

<!ELEMENT ptp-slave-clock-source-flags (#PCDATA)>

<!ELEMENT ptp-slave-clock-source-ip (#PCDATA)>

<!ELEMENT ptp-slave-count (#PCDATA)>

<!ELEMENT ptp-slave-delay-request-string (#PCDATA)>

<!ELEMENT ptp-slave-ifl-index (#PCDATA)>

<!ELEMENT ptp-slave-interface-name (#PCDATA)>

<!ELEMENT ptp-slave-interface-status (#PCDATA)>

<!ELEMENT ptp-slave-local-ip (#PCDATA)>

<!ELEMENT ptp-slave-local-status (#PCDATA)>

<!ELEMENT ptp-slave-synchronization-interval-string (#PCDATA)>

<!ELEMENT ptp-slave-total-masters (#PCDATA)>

<!ELEMENT ptp-slot-number-string (#PCDATA)>

<!ELEMENT ptp-spll-error-flag (#PCDATA)>

<!ELEMENT ptp-spll-lock-state (#PCDATA)>

<!ELEMENT ptp-spll-lock-state-string (#PCDATA)>

<!ELEMENT ptp-spll-phase-offset (#PCDATA)>

<!ELEMENT ptp-statistics (ptp-clock-stream-handle | ptp-statistics-local-ip |
ptp-statistics-remote-ip | ptp-clock-statistics-in-unicast-packets |
ptp-clock-statistics-in-discards | ptp-clock-statistics-in-errors |
ptp-clock-statistics-in-unknown-protocols |
ptp-clock-statistics-out-unicast-packets | ptp-clock-statistics-out-discards |
```

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```
ptp-clock-statistics-out-errors)*>
<!ATTLIST ptp-statistics junos:style CDATA #IMPLIED>

<!ELEMENT ptp-statistics-local-ip (#PCDATA)>

<!ELEMENT ptp-statistics-remote-ip (#PCDATA)>

<!ELEMENT ptp-synchronization-interval (#PCDATA)>

<!ELEMENT ptp-thread-entry-function-pointer (#PCDATA)>

<!ELEMENT ptp-thread-id (#PCDATA)>

<!ELEMENT ptp-thread-name (#PCDATA)>

<!ELEMENT ptp-thread-priority (#PCDATA)>

<!ELEMENT ptp-thread-total (#PCDATA)>

<!ELEMENT ptp-threads (ptp-thread-id | ptp-thread-name |
ptp-thread-entry-function-pointer | ptp-thread-priority | ptp-thread-total)*>
<!ATTLIST ptp-threads junos:style CDATA #IMPLIED>

<!ELEMENT ptp-time (ptp-seconds-elapsed | ptp-calendar-time)*>
<!ATTLIST ptp-time junos:style CDATA #IMPLIED>

<!ELEMENT ptp-total-ports (#PCDATA)>

<!ELEMENT ptp-transport (#PCDATA)>

<!ELEMENT ptp-two-step-clk (#PCDATA)>

<!ELEMENT ptp-uni-neg (#PCDATA)>

<!ELEMENT ptp-version (#PCDATA)>

<!ELEMENT ptp-zarlink-config (ptp-version | ptp-domain | ptp-priority1 |
ptp-priority2 | ptp-clock-mode | ptp-delay-request | ptp-announce-timeout |
ptp-announce-interval | ptp-synchronization-interval | ptp-clock-stepping |
ptp-clock-accuracy | ptp-clock-quality | ptp-clock-log-variance |
ptp-clock-identity | ptp-delay-response)*>
<!ATTLIST ptp-zarlink-config junos:style CDATA #IMPLIED>

<!ELEMENT quality-mode (#PCDATA)>

<!ELEMENT reboot-hold-interval (#PCDATA)>

<!ELEMENT reference-must-mask (#PCDATA)>

<!ELEMENT secondary-index (#PCDATA)>

<!ELEMENT secondary-quality-level (#PCDATA)>

<!ELEMENT secondary-state (#PCDATA)>

<!ELEMENT secondary-type (#PCDATA)>

<!ELEMENT selection-mode (#PCDATA)>

<!ELEMENT source-clock-event (#PCDATA)>
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```
<!ELEMENT source-clock-type (#PCDATA)>

<!ELEMENT source-interface-index (#PCDATA)>

<!ELEMENT source-interface-name (#PCDATA)>

<!ELEMENT source-interface-status (#PCDATA)>

<!ELEMENT source-priority (#PCDATA)>

<!ELEMENT source-quality-level (#PCDATA)>

<!ELEMENT switchover-hold-interval (#PCDATA)>

<!ELEMENT switchover-mode (#PCDATA)>

<!ELEMENT synchronous-ethernet-quality-level (#PCDATA)>

<!ELEMENT tod-ack-send-count (#PCDATA)>

<!ELEMENT tod-ack-send-fail (#PCDATA)>

<!ELEMENT tod-recv-count (#PCDATA)>

<!ELEMENT tod-recv-fail (#PCDATA)>

<!ELEMENT tod-recv-unhandled (#PCDATA)>

<!ELEMENT tod-send-count (#PCDATA)>

<!ELEMENT tod-send-fail (#PCDATA)>

<!ELEMENT tod-update-time (#PCDATA)>

<!ELEMENT zarlink-fail-bitmap (#PCDATA)>

<!ELEMENT zarlink-support-dpc-bitmap (#PCDATA)>
```

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CHAPTER 73

DTD for Class-of-Service Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-cos.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-cos.dtd -->

<!ELEMENT adaptive-shaper (adaptive-shaper-name | table-index | trigger-item)*>

<!ELEMENT adaptive-shaper-name (#PCDATA)>

<!ELEMENT adaptive-shaping-rate (#PCDATA)>

<!ELEMENT adjust-minimum (#PCDATA)>

<!ELEMENT adjusting-application-name (#PCDATA)>

<!ELEMENT adjustment-overhead-accounting-mode (#PCDATA)>

<!ELEMENT adjustment-shape-value (#PCDATA)>

<!ELEMENT adjustment-target (#PCDATA)>

<!ELEMENT adjustment-type (#PCDATA)>

<!ELEMENT adjustment-value (#PCDATA)>

<!ELEMENT alias-map (alias-map-item)*>

<!ELEMENT alias-map-item (code-point-bits | code-point-alias)*>

<!ELEMENT atm-service (#PCDATA)>

<!ELEMENT burst-size (#PCDATA)>

<!ELEMENT cell-overhead (#PCDATA)>
```

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```
<!ELEMENT channel (virtual-channel-name | scheduler-map-name | channel-shaping-rate
 | adjustment-shape-value)*>

<!ELEMENT channel-shaping-rate (#PCDATA)>

<!ELEMENT chassis-scheduler-map-index (#PCDATA)>

<!ELEMENT chassis-scheduler-map-name (#PCDATA)>

<!ELEMENT classifier (classifier-name | code-point-type | table-index |
classifier-map)*>

<!ELEMENT classifier-map (classifier-map-item)*>

<!ELEMENT classifier-map-item (code-point | fc-name | loss-priority |
cntag-present)*>

<!ELEMENT classifier-name (#PCDATA)>

<!ELEMENT classifier-table (table-index | number-of-entries | table-type |
classifier-table-entry)*>

<!ELEMENT classifier-table-entry (table-index | code-point | fc-queue-number |
loss-priority)*>

<!ELEMENT classifier-table-map (table-index | table-type | logical-interface |
logical-interface-index)*>

<!ELEMENT cls-md-map (multidest-classifier-name | multidest-classifier-type |
multidest-classifier-index)*>
<!ATTLIST cls-md-map junos:style CDATA #IMPLIED>

<!ELEMENT cntag-present (#PCDATA)>

<!ELEMENT code-point (#PCDATA)>

<!ELEMENT code-point-alias (#PCDATA)>

<!ELEMENT code-point-bits (#PCDATA)>

<!ELEMENT code-point-map (code-point-type | alias-map)*>

<!ELEMENT code-point-type (#PCDATA)>

<!ELEMENT configured-shaping-rate (#PCDATA)>

<!ELEMENT congestion-notification-id (#PCDATA)>

<!ELEMENT congestion-notification-map (congestion-notification-map-item)*>

<!ELEMENT congestion-notification-map-item (pfc-priority | pfc-enable-state)*>

<!ELEMENT congestion-notification-name (#PCDATA)>

<!ELEMENT congestion-notification-type (#PCDATA)>

<!ELEMENT cos-adaptive-shaper-information (adaptive-shaper)*>

<!ELEMENT cos-classifier-information (classifier)*>

<!ELEMENT cos-classifier-table-information (classifier-table)*>
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```
<!ELEMENT cos-classifier-table-map-information (classifier-table-map)*>

<!ELEMENT cos-code-point-map-information (code-point-map)*>

<!ELEMENT cos-congestion-notification (congestion-notification-type |
congestion-notification-name | congestion-notification-id |
congestion-notification-map)*>

<!ELEMENT cos-congestion-notification-information (cos-congestion-notification)*>

<!ELEMENT cos-drop-profile-information (drop-profile)*>

<!ELEMENT cos-fabric-scheduler-map-information (fabric-scheduler-map)*>

<!ELEMENT cos-fabric-scheduler-map-table-information (fabric-scheduler-map-table)*>

<!ELEMENT cos-forwarding-class-information (fc-map)*>

<!ELEMENT cos-forwarding-class-map-information (fc-map)*>

<!ELEMENT cos-forwarding-class-map-interface-table-information
(forwarding-class-queue-table-map)*>

<!ELEMENT cos-forwarding-class-map-table-information
(forwarding-class-queue-table)*>

<!ELEMENT cos-forwarding-class-set-information (forwarding-class-set)*>

<!ELEMENT cos-fragmentation-map-information (fragmentation-map)*>

<!ELEMENT cos-information (cos-forwarding-class-information |
cos-forwarding-class-map-information | cos-classifier-information |
cos-loss-priority-map-information | cos-drop-profile-information |
cos-rewrite-information | cos-loss-priority-rewrite-information |
cos-code-point-map-information | cos-fragmentation-map-information |
cos-translation-table-map-information | cos-multi-destination-information |
cos-forwarding-class-set-information)*>

<!ELEMENT cos-interface-information (interface-map)*>

<!ELEMENT cos-interface-set-information (interface-set-map)*>

<!ELEMENT cos-l2tp-session-information (l2tp-session-map)*>

<!ELEMENT cos-loss-priority-map-information (loss-priority-map)*>

<!ELEMENT cos-loss-priority-map-table-binding-information
(loss-priority-map-table-binding)*>

<!ELEMENT cos-loss-priority-map-table-information (loss-priority-map-table)*>

<!ELEMENT cos-loss-priority-rewrite-information (loss-priority-rewrite)*>

<!ELEMENT cos-loss-priority-rewrite-table-binding-information
(loss-priority-rewrite-table-binding)*>

<!ELEMENT cos-loss-priority-rewrite-table-information
(loss-priority-rewrite-table)*>

<!ELEMENT cos-multi-destination-information (sm-md-map | fc-md-map | cls-md-map)*>
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```
<!ELEMENT cos-policer-table-map-information (policer-table-map)*>

<!ELEMENT cos-red-information (red)*>

<!ELEMENT cos-rewrite-information (rewrite)*>

<!ELEMENT cos-rewrite-table-information (rewrite-table)*>

<!ELEMENT cos-rewrite-table-map-information (rewrite-table-map)*>

<!ELEMENT cos-routing-instance-information (routing-instance-map)*>

<!ELEMENT cos-scheduler-map-information (scheduler-map)*>

<!ELEMENT cos-scheduler-map-table-information (policy)*>

<!ELEMENT cos-shaper-table-map-information (shaper-table-map)*>

<!ELEMENT cos-table-information (cos-classifier-table-information |
cos-classifier-table-map-information | cos-loss-priority-map-table-information |
 cos-loss-priority-map-table-binding-information |
cos-scheduler-map-table-information | cos-red-information |
cos-rewrite-table-information | cos-rewrite-table-map-information |
cos-loss-priority-rewrite-table-information |
cos-loss-priority-rewrite-table-binding-information |
cos-policer-table-map-information | cos-shaper-table-map-information)*>

<!ELEMENT cos-traffic-control-profile-information (traffic-control-profile)*>

<!ELEMENT cos-translation-table-information (translation-table)*>

<!ELEMENT cos-translation-table-map-information (translation-table)*>

<!ELEMENT cos-translation-table-mapping-information (translation-table-mapping)*>

<!ELEMENT cos-virtual-channel-group-information (virtual-channel-group)*>

<!ELEMENT cos-virtual-channel-information (virtual-channel)*>

<!ELEMENT delay-buffer-rate (#PCDATA)>

<!ELEMENT dest-fpc-index (#PCDATA)>

<!ELEMENT drop-bps-high (#PCDATA)>

<!ELEMENT drop-bps-low (#PCDATA)>

<!ELEMENT drop-bytes-high (#PCDATA)>

<!ELEMENT drop-bytes-low (#PCDATA)>

<!ELEMENT drop-pkts-high (#PCDATA)>

<!ELEMENT drop-pkts-low (#PCDATA)>

<!ELEMENT drop-pps-high (#PCDATA)>

<!ELEMENT drop-pps-low (#PCDATA)>

<!ELEMENT drop-profile (profile-name | profile-type | table-index | profile-map)*>
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<!ELEMENT drop-profile-map-set-type (#PCDATA)>

<!ELEMENT drop-statistics (drop-pkts-high | drop-pkts-low | drop-bytes-high |
drop-bytes-low | drop-pps-high | drop-pps-low | drop-bps-high | drop-bps-low)*>

<!ELEMENT encapsulation-overhead (#PCDATA)>

<!ELEMENT excess-rate (#PCDATA)>

<!ELEMENT excess-rate-high (#PCDATA)>

<!ELEMENT excess-rate-low (#PCDATA)>

<!ELEMENT fabric-queue-information (fpc-queue-information)*>

<!ELEMENT fabric-scheduler (fabric-scheduler-name | fabric-scheduler-index |
fabric-scheduler-drop-profile-ln-index | fabric-scheduler-drop-profile-ln |
fabric-scheduler-drop-profile-lt-index | fabric-scheduler-drop-profile-lt |
fabric-scheduler-drop-profile-hn-index | fabric-scheduler-drop-profile-hn |
fabric-scheduler-drop-profile-ht-index | fabric-scheduler-drop-profile-ht)*>

<!ELEMENT fabric-scheduler-drop-profile-hn (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-hn-index (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-ht (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-ht-index (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-ln (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-ln-index (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-lt (#PCDATA)>

<!ELEMENT fabric-scheduler-drop-profile-lt-index (#PCDATA)>

<!ELEMENT fabric-scheduler-index (#PCDATA)>

<!ELEMENT fabric-scheduler-map (fabric-scheduler-priority | fabric-scheduler)*>

<!ELEMENT fabric-scheduler-map-table (fabric-scheduler-priority |
fabric-scheduler-queues | fabric-scheduler-table)*>

<!ELEMENT fabric-scheduler-name (#PCDATA)>

<!ELEMENT fabric-scheduler-priority (#PCDATA)>

<!ELEMENT fabric-scheduler-queues (#PCDATA)>

<!ELEMENT fabric-scheduler-table (fabric-scheduler-index |
fabric-scheduler-drop-profile-hn-index | fabric-scheduler-drop-profile-ln-index
| fabric-scheduler-drop-profile-ht-index |
fabric-scheduler-drop-profile-lt-index)*>

<!ELEMENT fc-map (fc-map-item)*>
<!ATTLIST fc-map junos:style CDATA #IMPLIED>

<!ELEMENT fc-map-item (fc-name | fc-number | fc-queue-number | fc-rqueue-number
| fc-priority | fc-policing-priority | fc-spu-priority)*>
```

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```
<!ELEMENT fc-md-map (fc-name | fc-queue-number)*>

<!ELEMENT fc-name (#PCDATA)>

<!ELEMENT fc-number (#PCDATA)>

<!ELEMENT fc-policing-priority (#PCDATA)>

<!ELEMENT fc-priority (#PCDATA)>

<!ELEMENT fc-queue-number (#PCDATA)>

<!ELEMENT fc-rqueue-number (#PCDATA)>

<!ELEMENT fc-spu-priority (#PCDATA)>

<!ELEMENT fill-level (#PCDATA)>

<!ELEMENT forwarding-class-map-index (#PCDATA)>

<!ELEMENT forwarding-class-map-name (#PCDATA)>

<!ELEMENT forwarding-class-queue-table (table-index | number-of-entries |
forwarding-class-queue-table-entry)*>

<!ELEMENT forwarding-class-queue-table-entry (fc-number | fc-queue-number |
fc-rqueue-number)*>

<!ELEMENT forwarding-class-queue-table-map (logical-interface |
logical-interface-index | table-index)*>

<!ELEMENT forwarding-class-set (forwarding-class-set-entry)*>
<!ATTLIST forwarding-class-set junos:style CDATA #IMPLIED>

<!ELEMENT forwarding-class-set-attachment (forwarding-class-set-name | table-index
 | output-traffic-control-profile-name | output-traffic-control-profile-index)*>

<!ELEMENT forwarding-class-set-entry (forwarding-class-set-name |
forwarding-class-set-type | forwarding-class-set-index | fc-map)*>

<!ELEMENT forwarding-class-set-index (#PCDATA)>

<!ELEMENT forwarding-class-set-name (#PCDATA)>

<!ELEMENT forwarding-class-set-type (#PCDATA)>

<!ELEMENT fpc-queue-information (dest-fpc-index | src-fpc-index | total-statistics
 | tx-statistics | drop-statistics)*>

<!ELEMENT fragment-map (fc-name | fragment-threshold | no-fragmentation |
fragment-multilink-class)*>
<!ATTLIST fragment-map junos:style CDATA #IMPLIED>

<!ELEMENT fragment-multilink-class (#PCDATA)>

<!ELEMENT fragment-threshold (#PCDATA)>

<!ELEMENT fragmentation-map (fragmentation-map-name | fragmentation-map-index |
fragment-map)*>
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<!ELEMENT fragmentation-map-index (#PCDATA)>

<!ELEMENT fragmentation-map-name (#PCDATA)>

<!ELEMENT from-code-point (#PCDATA)>

<!ELEMENT guaranteed-rate (#PCDATA)>

<!ELEMENT guaranteed-rate-burst (#PCDATA)>

<!ELEMENT high-drop-profile-identifier (#PCDATA)>

<!ELEMENT i-logical-index (#PCDATA)>

<!ELEMENT i-logical-map (i-logical-name | i-logical-index |
interface-has-dedicated-queues | i-logical-objects | policer-bandwidth |
policer-burst | shaper-bandwidth | shaper-burst | shaping-rate | burst-size |
input-shaping-rate | input-burst-size | adjusting-application-name |
adjustment-type | configured-shaping-rate | adjustment-value |
adjustment-overhead-accounting-mode | adjustment-target)*>

<!ELEMENT i-logical-name (#PCDATA)>

<!ELEMENT i-logical-object-index (#PCDATA)>

<!ELEMENT i-logical-object-name (#PCDATA)>

<!ELEMENT i-logical-object-subtype (#PCDATA)>

<!ELEMENT i-logical-object-type (#PCDATA)>

<!ELEMENT i-logical-objects (i-logical-object-type | i-logical-object-name |
i-logical-object-subtype | i-logical-object-index)*>

<!ELEMENT input-burst-size (#PCDATA)>

<!ELEMENT input-scheduler-map-index (#PCDATA)>

<!ELEMENT input-scheduler-map-name (#PCDATA)>

<!ELEMENT input-shaping-rate (#PCDATA)>

<!ELEMENT input-traffic-control-profile-index (#PCDATA)>

<!ELEMENT input-traffic-control-profile-name (#PCDATA)>

<!ELEMENT instance-reference-count (#PCDATA)>

<!ELEMENT interface (#PCDATA)>

<!ELEMENT interface-congestion-notification-map (#PCDATA)>

<!ELEMENT interface-congestion-notification-map-index (#PCDATA)>

<!ELEMENT interface-has-dedicated-queues (#PCDATA)>

<!ELEMENT interface-index (#PCDATA)>

<!ELEMENT interface-input-shaping-rate (#PCDATA)>

<!ELEMENT interface-map (interface-name | interface-index |
```

```
interface-queues-supported | interface-queues-in-use |
interface-total-queues-created | interface-shaping-rate | scheduler-map-name |
scheduler-map-index | interface-input-shaping-rate | input-scheduler-map-name |
input-scheduler-map-index | chassis-scheduler-map-name |
chassis-scheduler-map-index | input-traffic-control-profile-name |
input-traffic-control-profile-index | output-traffic-control-profile-name |
output-traffic-control-profile-index | forwarding-class-map-name |
forwarding-class-map-index | interface-congestion-notification-map |
interface-congestion-notification-map-index | forwarding-class-set-attachment |
i-logical-map)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-queues-in-use (#PCDATA)>

<!ELEMENT interface-queues-supported (#PCDATA)>

<!ELEMENT interface-set-index (#PCDATA)>

<!ELEMENT interface-set-map (interface-set-name | interface-set-index |
interface-name | interface-index | interface-queues-supported |
interface-queues-in-use | output-traffic-control-profile-name |
output-traffic-control-profile-index | input-traffic-control-profile-name |
input-traffic-control-profile-index | adjusting-application-name | adjustment-type
 | configured-shaping-rate | adjustment-value | adjustment-target)*>

<!ELEMENT interface-set-name (#PCDATA)>

<!ELEMENT interface-shaping-rate (#PCDATA)>

<!ELEMENT interface-total-queues-created (#PCDATA)>

<!ELEMENT l2tp-session-index (#PCDATA)>

<!ELEMENT l2tp-session-map (interface-name | interface-index |
interface-queues-supported | interface-queues-in-use | l2tp-session-username |
l2tp-session-index | traffic-control-profile-name | traffic-control-profile-index
 | scheduler-map-name | scheduler-map-index | shaping-rate | guaranteed-rate |
delay-buffer-rate | encapsulation-overhead | cell-overhead)*>

<!ELEMENT l2tp-session-username (#PCDATA)>

<!ELEMENT logical-interface (#PCDATA)>

<!ELEMENT logical-interface-index (#PCDATA)>

<!ELEMENT loss-priority (#PCDATA)>

<!ELEMENT loss-priority-map (loss-priority-map-name | code-point-type | table-index
 | loss-priority-map-table)*>

<!ELEMENT loss-priority-map-item (code-point | loss-priority)*>

<!ELEMENT loss-priority-map-name (#PCDATA)>

<!ELEMENT loss-priority-map-table (loss-priority-map-item | table-index |
number-of-entries | table-type | loss-priority-map-table-entry)*>

<!ELEMENT loss-priority-map-table-binding (table-index | table-type |
logical-interface | logical-interface-index)*>
```


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```
<!ELEMENT loss-priority-map-table-entry (table-index | code-point |
loss-priority)*>

<!ELEMENT loss-priority-rewrite (loss-priority-rewrite-name | code-point-type |
table-index | loss-priority-rewrite-table)*>

<!ELEMENT loss-priority-rewrite-item (loss-priority | code-point)*>

<!ELEMENT loss-priority-rewrite-name (#PCDATA)>

<!ELEMENT loss-priority-rewrite-table (loss-priority-rewrite-item | table-index
| number-of-entries | table-type | loss-priority-rewrite-table-entry)*>

<!ELEMENT loss-priority-rewrite-table-binding (table-index | table-type |
logical-interface | logical-interface-index)*>

<!ELEMENT loss-priority-rewrite-table-entry (table-index | loss-priority |
code-point)*>

<!ELEMENT low-drop-profile-identifier (#PCDATA)>

<!ELEMENT medium-drop-profile-identifier (#PCDATA)>

<!ELEMENT medium-high-drop-profile-identifier (#PCDATA)>

<!ELEMENT medium-low-drop-profile-identifier (#PCDATA)>

<!ELEMENT multidest-classifier-index (#PCDATA)>

<!ELEMENT multidest-classifier-name (#PCDATA)>

<!ELEMENT multidest-classifier-type (#PCDATA)>

<!ELEMENT no-fragmentation EMPTY>

<!ELEMENT number-of-entries (#PCDATA)>

<!ELEMENT output-traffic-control-profile-index (#PCDATA)>

<!ELEMENT output-traffic-control-profile-name (#PCDATA)>

<!ELEMENT overhead-accounting-mode (#PCDATA)>

<!ELEMENT overhead-bytes (#PCDATA)>

<!ELEMENT p-interface (#PCDATA)>

<!ELEMENT p-interface-index (#PCDATA)>

<!ELEMENT pfc-enable-state (#PCDATA)>

<!ELEMENT pfc-priority (#PCDATA)>

<!ELEMENT policer-bandwidth (#PCDATA)>

<!ELEMENT policer-burst (#PCDATA)>

<!ELEMENT policer-table-map (p-interface | p-interface-index | policer-bandwidth
 | policer-burst)*>

<!ELEMENT policy (interface | interface-index | policy-index | policy-type |
```

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```
policy-number-of-queues | traffic-control-profile-name |
traffic-control-profile-index | policy-entry)*>

<!ELEMENT policy-buffer-size-multi-destination-buffers (#PCDATA)>

<!ELEMENT policy-buffer-size-percentage (#PCDATA)>

<!ELEMENT policy-buffer-size-remainder (#PCDATA)>

<!ELEMENT policy-buffer-size-temporal (#PCDATA)>

<!ELEMENT policy-entry (table-index | policy-entry-identifier | fc-number |
fc-queue-number | policy-transmit-rate | policy-transmit-rate-percentage |
policy-transmit-rate-remainder | policy-buffer-size-temporal |
policy-buffer-size-multi-destination-buffers | policy-buffer-size-percentage |
policy-buffer-size-remainder | policy-scheduling-priority | policy-excess-priority
 | policy-excess-rate-proportional | policy-excess-rate-percentage |
policy-shaping-rate | policy-shaping-rate-percentage | policy-packet-loss-profile
 | policy-exact)*>

<!ELEMENT policy-entry-identifier (#PCDATA)>

<!ELEMENT policy-exact (#PCDATA)>

<!ELEMENT policy-excess-priority (#PCDATA)>

<!ELEMENT policy-excess-rate-percentage (#PCDATA)>

<!ELEMENT policy-excess-rate-proportional (#PCDATA)>

<!ELEMENT policy-index (#PCDATA)>

<!ELEMENT policy-number-of-queues (#PCDATA)>

<!ELEMENT policy-packet-loss-profile (high-drop-profile-identifier |
medium-drop-profile-identifier | low-drop-profile-identifier |
medium-high-drop-profile-identifier | medium-low-drop-profile-identifier |
tcp-high-drop-profile-identifier | tcp-low-drop-profile-identifier)*>

<!ELEMENT policy-scheduling-priority (#PCDATA)>

<!ELEMENT policy-shaping-rate (#PCDATA)>

<!ELEMENT policy-shaping-rate-percentage (#PCDATA)>

<!ELEMENT policy-transmit-rate (#PCDATA)>

<!ELEMENT policy-transmit-rate-percentage (#PCDATA)>

<!ELEMENT policy-transmit-rate-remainder (#PCDATA)>

<!ELEMENT policy-type (#PCDATA)>

<!ELEMENT probability (#PCDATA)>

<!ELEMENT profile-map (profile-map-item)*>

<!ELEMENT profile-map-item (fill-level | probability)*>
<!ATTLIST profile-map-item junos:style CDATA #IMPLIED>

<!ELEMENT profile-name (#PCDATA)>
```


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```
<!ELEMENT profile-type (#PCDATA)>

<!ELEMENT red (red-drop-profile-identifier | number-of-entries | red-entry)*>

<!ELEMENT red-drop-probability (#PCDATA)>

<!ELEMENT red-drop-profile-identifier (#PCDATA)>

<!ELEMENT red-entry (red-entry-index | red-fullness | red-drop-probability)*>
<!ATTLIST red-entry junos:style CDATA #IMPLIED>

<!ELEMENT red-entry-index (#PCDATA)>

<!ELEMENT red-fullness (#PCDATA)>

<!ELEMENT rewrite (rewrite-name | code-point-type | table-index | rewrite-map)*>

<!ELEMENT rewrite-high-codepoint (#PCDATA)>

<!ELEMENT rewrite-high-enable-state (#PCDATA)>

<!ELEMENT rewrite-low-codepoint (#PCDATA)>

<!ELEMENT rewrite-low-enable-state (#PCDATA)>

<!ELEMENT rewrite-map (rewrite-map-item)*>

<!ELEMENT rewrite-map-item (code-point | fc-name | loss-priority)*>

<!ELEMENT rewrite-medium-codepoint (#PCDATA)>

<!ELEMENT rewrite-medium-enable-state (#PCDATA)>

<!ELEMENT rewrite-medium-high-codepoint (#PCDATA)>

<!ELEMENT rewrite-medium-high-enable-state (#PCDATA)>

<!ELEMENT rewrite-medium-low-codepoint (#PCDATA)>

<!ELEMENT rewrite-medium-low-enable-state (#PCDATA)>

<!ELEMENT rewrite-name (#PCDATA)>

<!ELEMENT rewrite-table (table-index | number-of-entries | table-type |
rewrite-table-entry)*>

<!ELEMENT rewrite-table-entry (fc-queue-number | rewrite-low-codepoint |
rewrite-low-enable-state | rewrite-high-codepoint | rewrite-high-enable-state |
rewrite-medium-codepoint | rewrite-medium-enable-state |
rewrite-medium-low-codepoint | rewrite-medium-low-enable-state |
rewrite-medium-high-codepoint | rewrite-medium-high-enable-state)*>
<!ATTLIST rewrite-table-entry junos:style CDATA #IMPLIED>

<!ELEMENT rewrite-table-map (table-index | table-type | logical-interface |
logical-interface-index)*>

<!ELEMENT routing-instance-map (routing-instance-name | i-logical-map)*>

<!ELEMENT routing-instance-name (#PCDATA)>
```

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```
<!ELEMENT s-interface (#PCDATA)>

<!ELEMENT s-interface-index (#PCDATA)>

<!ELEMENT scheduler (fc-name | scheduler-name | scheduler-index | scheduler-tx-rate
 | scheduler-tx-limit | scheduler-buffer-size | scheduler-buffer-limit |
scheduler-priority | scheduler-excess-priority | scheduler-shaping-rate |
scheduler-shaping-rate-burst | scheduler-excess-rate | scheduler-adjust-minimum
| scheduler-adjust-percent | scheduler-drop-profile-ln-index |
scheduler-drop-profile-ln | scheduler-drop-profile-lt-index |
scheduler-drop-profile-lt | scheduler-drop-profile-hn-index |
scheduler-drop-profile-hn | scheduler-drop-profile-ht-index |
scheduler-drop-profile-ht | scheduler-drop-profile-la-index |
scheduler-drop-profile-la | scheduler-drop-profile-mla-index |
scheduler-drop-profile-mla | scheduler-drop-profile-mha-index |
scheduler-drop-profile-mha | scheduler-drop-profile-ma-index |
scheduler-drop-profile-ma | scheduler-drop-profile-ha-index |
scheduler-drop-profile-ha | drop-profile-map-set-type)*>

<!ELEMENT scheduler-adjust-minimum (#PCDATA)>

<!ELEMENT scheduler-adjust-percent (#PCDATA)>

<!ELEMENT scheduler-buffer-limit (#PCDATA)>

<!ELEMENT scheduler-buffer-size (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ha (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ha-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-hn (#PCDATA)>

<!ELEMENT scheduler-drop-profile-hn-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ht (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ht-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-la (#PCDATA)>

<!ELEMENT scheduler-drop-profile-la-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ln (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ln-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-lt (#PCDATA)>

<!ELEMENT scheduler-drop-profile-lt-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ma (#PCDATA)>

<!ELEMENT scheduler-drop-profile-ma-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-mha (#PCDATA)>

<!ELEMENT scheduler-drop-profile-mha-index (#PCDATA)>

<!ELEMENT scheduler-drop-profile-mla (#PCDATA)>
```


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```
<!ELEMENT scheduler-drop-profile-mla-index (#PCDATA)>

<!ELEMENT scheduler-excess-priority (#PCDATA)>

<!ELEMENT scheduler-excess-rate (#PCDATA)>

<!ELEMENT scheduler-index (#PCDATA)>

<!ELEMENT scheduler-map (scheduler-map-name | scheduler-map-index | scheduler)*>

<!ELEMENT scheduler-map-index (#PCDATA)>

<!ELEMENT scheduler-map-name (#PCDATA)>

<!ELEMENT scheduler-name (#PCDATA)>

<!ELEMENT scheduler-priority (#PCDATA)>

<!ELEMENT scheduler-shaping-rate (#PCDATA)>

<!ELEMENT scheduler-shaping-rate-burst (#PCDATA)>

<!ELEMENT scheduler-tx-limit (#PCDATA)>

<!ELEMENT scheduler-tx-rate (#PCDATA)>

<!ELEMENT shaper-bandwidth (#PCDATA)>

<!ELEMENT shaper-burst (#PCDATA)>

<!ELEMENT shaper-table-map (s-interface | s-interface-index | shaper-bandwidth |
 shaper-burst)*>

<!ELEMENT shaping-rate (#PCDATA)>

<!ELEMENT shaping-rate-burst (#PCDATA)>

<!ELEMENT shaping-rate-excess-high (#PCDATA)>

<!ELEMENT shaping-rate-excess-high-burst (#PCDATA)>

<!ELEMENT shaping-rate-excess-low (#PCDATA)>

<!ELEMENT shaping-rate-excess-low-burst (#PCDATA)>

<!ELEMENT shaping-rate-priority-high (#PCDATA)>

<!ELEMENT shaping-rate-priority-high-burst (#PCDATA)>

<!ELEMENT shaping-rate-priority-low (#PCDATA)>

<!ELEMENT shaping-rate-priority-low-burst (#PCDATA)>

<!ELEMENT shaping-rate-priority-medium (#PCDATA)>

<!ELEMENT shaping-rate-priority-medium-burst (#PCDATA)>

<!ELEMENT sm-md-map (scheduler-map-name | scheduler-map-index)*>

<!ELEMENT src-fpc-index (#PCDATA)>
```

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```
<!ELEMENT table-index (#PCDATA)>

<!ELEMENT table-type (#PCDATA)>

<!ELEMENT tcp-high-drop-profile-identifier (#PCDATA)>

<!ELEMENT tcp-low-drop-profile-identifier (#PCDATA)>

<!ELEMENT to-code-point (#PCDATA)>

<!ELEMENT total-bps-high (#PCDATA)>

<!ELEMENT total-bps-low (#PCDATA)>

<!ELEMENT total-bytes-high (#PCDATA)>

<!ELEMENT total-bytes-low (#PCDATA)>

<!ELEMENT total-pkts-high (#PCDATA)>

<!ELEMENT total-pkts-low (#PCDATA)>

<!ELEMENT total-pps-high (#PCDATA)>

<!ELEMENT total-pps-low (#PCDATA)>

<!ELEMENT total-statistics (total-pkts-high | total-pkts-low | total-bytes-high
| total-bytes-low | total-pps-high | total-pps-low | total-bps-high |
total-bps-low)*>

<!ELEMENT traffic-control-profile (traffic-control-profile-name |
scheduler-map-name | atm-service | shaping-rate | shaping-rate-burst |
shaping-rate-priority-high | shaping-rate-priority-high-burst |
shaping-rate-priority-medium | shaping-rate-priority-medium-burst |
shaping-rate-priority-low | shaping-rate-priority-low-burst |
shaping-rate-excess-high | shaping-rate-excess-high-burst | shaping-rate-excess-low
 | shaping-rate-excess-low-burst | traffic-control-profile-index |
traffic-control-profile-instance | guaranteed-rate | guaranteed-rate-burst |
delay-buffer-rate | excess-rate | excess-rate-high | excess-rate-low |
overhead-bytes | overhead-accounting-mode | adjust-minimum)*>

<!ELEMENT traffic-control-profile-index (#PCDATA)>

<!ELEMENT traffic-control-profile-instance (traffic-control-profile-instance-name
 | traffic-control-profile-instance-index | instance-reference-count)*>

<!ELEMENT traffic-control-profile-instance-index (#PCDATA)>

<!ELEMENT traffic-control-profile-instance-name (#PCDATA)>

<!ELEMENT traffic-control-profile-name (#PCDATA)>

<!ELEMENT translation-table (translation-table-name | translation-table-type |
table-index | translation-table-map | number-of-entries |
translation-table-entry)*>

<!ELEMENT translation-table-entry (table-index | from-code-point | to-code-point)*>

<!ELEMENT translation-table-map (translation-table-map-item)*>

<!ELEMENT translation-table-map-item (from-code-point | to-code-point)*>
```


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```
<!ELEMENT translation-table-mapping (table-index | translation-table-type |
logical-interface | logical-interface-index)*>

<!ELEMENT translation-table-name (#PCDATA)>

<!ELEMENT translation-table-type (#PCDATA)>

<!ELEMENT trigger-item (trigger-type | adaptive-shaping-rate)*>

<!ELEMENT trigger-type (#PCDATA)>

<!ELEMENT tx-bps-high (#PCDATA)>

<!ELEMENT tx-bps-low (#PCDATA)>

<!ELEMENT tx-bytes-high (#PCDATA)>

<!ELEMENT tx-bytes-low (#PCDATA)>

<!ELEMENT tx-pkts-high (#PCDATA)>

<!ELEMENT tx-pkts-low (#PCDATA)>

<!ELEMENT tx-pps-high (#PCDATA)>

<!ELEMENT tx-pps-low (#PCDATA)>

<!ELEMENT tx-statistics (tx-pkts-high | tx-pkts-low | tx-bytes-high | tx-bytes-low
 | tx-pps-high | tx-pps-low | tx-bps-high | tx-bps-low)*>

<!ELEMENT virtual-channel (virtual-channel-name | table-index)*>

<!ELEMENT virtual-channel-group (virtual-channel-group-name | table-index |
channel)*>

<!ELEMENT virtual-channel-group-name (#PCDATA)>

<!ELEMENT virtual-channel-name (#PCDATA)>
```

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CHAPTER 74

DTD for Database Replication Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-database-replication.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-database-replication.dtd -->

<!ELEMENT database-replication-statistics-information (dropped-connections-total
 | max-buffer-count | msg-received-bytes | msgs-received-total | msg-sent-bytes
| msgs-sent-total | queue-full-total | queue-max-size)*>

<!ELEMENT database-replication-summary-information
(replication-graceful-restart-type | replication-mastership-type |
replication-connection-type | replication-database-type | replication-queue-type)*>

<!ELEMENT dropped-connections-total (#PCDATA)>

<!ELEMENT max-buffer-count (#PCDATA)>

<!ELEMENT msg-received-bytes (#PCDATA)>

<!ELEMENT msg-sent-bytes (#PCDATA)>

<!ELEMENT msgs-received-total (#PCDATA)>

<!ELEMENT msgs-sent-total (#PCDATA)>

<!ELEMENT queue-full-total (#PCDATA)>

<!ELEMENT queue-max-size (#PCDATA)>

<!ELEMENT replication-connection-type (#PCDATA)>
```

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```
<!ELEMENT replication-database-type (#PCDATA)>

<!ELEMENT replication-graceful-restart-type (#PCDATA)>

<!ELEMENT replication-mastership-type (#PCDATA)>

<!ELEMENT replication-queue-type (#PCDATA)>
```


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CHAPTER 75

DTD for DCD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dcd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dcd.dtd -->

<!ELEMENT bundle-information (bundle-name | redundancy-mode |
n-distribution-interfaces | row)*>

<!ELEMENT bundle-name (#PCDATA)>

<!ELEMENT dcd-resource-usage (time-information)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT link-status (#PCDATA)>

<!ELEMENT n-backup-distributions (#PCDATA)>

<!ELEMENT n-distribution-interfaces (#PCDATA)>

<!ELEMENT n-primary-distributions (#PCDATA)>

<!ELEMENT physical-intf-name (#PCDATA)>

<!ELEMENT rebalance-interface (rebalance-operation-status)*>

<!ELEMENT rebalance-operation-status (interface-name)*>

<!ELEMENT redundancy-mode (#PCDATA)>

<!ELEMENT row (physical-intf-name | link-status | n-primary-distributions |
n-backup-distributions)*>

<!ELEMENT status-info (#PCDATA)>
```

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```
<!ELEMENT system-time (#PCDATA)>

<!ELEMENT system-time-msec (#PCDATA)>

<!ELEMENT targeting-information (bundle-information)*>

<!ELEMENT time-information (user-time-sec | user-time-msec | system-time |
system-time-msec)*>

<!ELEMENT trace-interface (trace-operation-status)*>

<!ELEMENT trace-operation-status (status-info)*>

<!ELEMENT user-time-msec (#PCDATA)>

<!ELEMENT user-time-sec (#PCDATA)>
```


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CHAPTER 76

DTD for Dynamic Flow Capture Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dfc.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dfc.dtd -->

<!ELEMENT active-criteria (#PCDATA)>

<!ELEMENT active-criteria-dynamic (#PCDATA)>

<!ELEMENT active-criteria-dynamic-ipv4 (#PCDATA)>

<!ELEMENT active-criteria-dynamic-ipv6 (#PCDATA)>

<!ELEMENT active-criteria-ipv4 (#PCDATA)>

<!ELEMENT active-criteria-ipv6 (#PCDATA)>

<!ELEMENT active-criteria-static (#PCDATA)>

<!ELEMENT active-criteria-static-ipv4 (#PCDATA)>

<!ELEMENT active-criteria-static-ipv6 (#PCDATA)>

<!ELEMENT add-request-peak-rate (#PCDATA)>

<!ELEMENT add-request-rate (#PCDATA)>

<!ELEMENT average-bandwidth (#PCDATA)>

<!ELEMENT average-bandwidth-ipv6 (#PCDATA)>

<!ELEMENT bandwidth (#PCDATA)>
```

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```
<!ELEMENT bandwidth-all (#PCDATA)>

<!ELEMENT capture-group-id (#PCDATA)>

<!ELEMENT congestion-notifications (#PCDATA)>

<!ELEMENT content-destination-id (#PCDATA)>

<!ELEMENT content-destination-information (capture-group-id |
content-destination-id | criteria | bandwidth | average-bandwidth | matched-packets
 | matched-bytes | dropped-packets | congestion-notifications |
average-bandwidth-ipv6)*>
<!ATTLIST content-destination-information junos:style CDATA #IMPLIED>

<!ELEMENT control-protocol-requests (#PCDATA)>

<!ELEMENT control-protocol-requests-add (#PCDATA)>

<!ELEMENT control-protocol-requests-add-failed (#PCDATA)>

<!ELEMENT control-protocol-requests-delete (#PCDATA)>

<!ELEMENT control-protocol-requests-delete-failed (#PCDATA)>

<!ELEMENT control-protocol-requests-list (#PCDATA)>

<!ELEMENT control-protocol-requests-list-failed (#PCDATA)>

<!ELEMENT control-protocol-requests-noop (#PCDATA)>

<!ELEMENT control-protocol-requests-noop-failed (#PCDATA)>

<!ELEMENT control-protocol-requests-refresh (#PCDATA)>

<!ELEMENT control-protocol-requests-refresh-failed (#PCDATA)>

<!ELEMENT control-source-id (#PCDATA)>

<!ELEMENT control-source-information (capture-group-id | control-source-id |
criteria-added | criteria-add-failed | active-criteria | active-criteria-ipv4 |
active-criteria-ipv6 | active-criteria-static | active-criteria-static-ipv4 |
active-criteria-static-ipv6 | active-criteria-dynamic |
active-criteria-dynamic-ipv4 | active-criteria-dynamic-ipv6 |
control-protocol-requests | control-protocol-requests-add |
control-protocol-requests-delete | control-protocol-requests-list |
control-protocol-requests-refresh | control-protocol-requests-noop |
control-protocol-requests-add-failed | control-protocol-requests-delete-failed |
 control-protocol-requests-list-failed | control-protocol-requests-refresh-failed
 | control-protocol-requests-noop-failed | add-request-rate | add-request-peak-rate
 | bandwidth-all | notifications | notifications-restart | notifications-rollover
 | notifications-noop | notifications-timeout | notifications-congestion |
notifications-congestion-delete | notifications-dups-dropped | criteria-deleted
| criteria-deleted-timeout-idle | criteria-deleted-timeout-total |
criteria-deleted-packets | criteria-deleted-bytes | sequence-number)*>
<!ATTLIST control-source-information junos:style CDATA #IMPLIED>

<!ELEMENT criteria (#PCDATA)>

<!ELEMENT criteria-add-failed (#PCDATA)>
```


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```
<!ELEMENT criteria-added (#PCDATA)>

<!ELEMENT criteria-deleted (#PCDATA)>

<!ELEMENT criteria-deleted-bytes (#PCDATA)>

<!ELEMENT criteria-deleted-packets (#PCDATA)>

<!ELEMENT criteria-deleted-timeout-idle (#PCDATA)>

<!ELEMENT criteria-deleted-timeout-total (#PCDATA)>

<!ELEMENT dfc-information (control-source-information |
content-destination-information | dfc-statistics-information)*>

<!ELEMENT dfc-statistics-information (capture-group-id |
input-packets-control-protocol | input-packets-cap-data |
input-packets-cap-data-ipv4 | input-packets-cap-data-ipv6 |
input-packets-control-iri | input-packets-control-protocol-not-ip |
input-packets-control-protocol-not-udp |
input-packets-control-protocol-invalid-dest-ip |
input-packets-control-protocol-drop-other |
input-packets-control-protocol-drop-no-memory |
input-packets-control-protocol-drop-unauthorized |
input-packets-control-protocol-drop-bad-req |
input-packets-control-protocol-drop-unknown-control-source |
input-packets-control-protocol-drop-not-dtcp |
input-packets-control-protocol-drop-bad-cmdline |
input-packets-control-protocol-drop-bandwidth-exceeded |
input-packets-control-protocol-drop-rate-bandwidth-exceeded |
input-packets-drop-unknown | input-packets-drop-cap-data-not-ipv4-or-ipv6 |
input-packets-drop-cap-data-too-small | input-packets-drop-cap-data-drop |
input-packets-drop-cap-data-nomatch | input-packets-drop-bandwidth-exceeded |
input-packets-drop-rate-bandwidth-exceeded | output-packets-control-protocol |
output-packets-cap-data | output-packets-drop-control-protocol |
output-packets-drop-cap-data | flowstats-active-cache-entries-count |
flowstats-active-cache-usage-percentage | flowstats-cache-entries-allocated |
flowstats-control-source-count | flowstats-content-destination-count |
flowstats-criteria-count | flowstats-maximum-criteria-matching-flow |
flowstats-purged-flows | flowstats-maximum-filter-matching-packet)*>

<!ELEMENT dropped-packets (#PCDATA)>

<!ELEMENT flowstats-active-cache-entries-count (#PCDATA)>

<!ELEMENT flowstats-active-cache-usage-percentage (#PCDATA)>

<!ELEMENT flowstats-cache-entries-allocated (#PCDATA)>

<!ELEMENT flowstats-content-destination-count (#PCDATA)>

<!ELEMENT flowstats-control-source-count (#PCDATA)>

<!ELEMENT flowstats-criteria-count (#PCDATA)>

<!ELEMENT flowstats-maximum-criteria-matching-flow (#PCDATA)>

<!ELEMENT flowstats-maximum-filter-matching-packet (#PCDATA)>

<!ELEMENT flowstats-purged-flows (#PCDATA)>
```

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```
<!ELEMENT input-packets-cap-data (#PCDATA)>
<!ELEMENT input-packets-cap-data-ipv4 (#PCDATA)>
<!ELEMENT input-packets-cap-data-ipv6 (#PCDATA)>
<!ELEMENT input-packets-control-iri (#PCDATA)>
<!ELEMENT input-packets-control-protocol (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-bad-cmdline (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-bad-req (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-bandwidth-exceeded (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-no-memory (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-not-dtcp (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-other (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-rate-bandwidth-exceeded (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-unauthorized (#PCDATA)>
<!ELEMENT input-packets-control-protocol-drop-unknown-control-source (#PCDATA)>
<!ELEMENT input-packets-control-protocol-invalid-dest-ip (#PCDATA)>
<!ELEMENT input-packets-control-protocol-not-ip (#PCDATA)>
<!ELEMENT input-packets-control-protocol-not-udp (#PCDATA)>
<!ELEMENT input-packets-drop-bandwidth-exceeded (#PCDATA)>
<!ELEMENT input-packets-drop-cap-data-drop (#PCDATA)>
<!ELEMENT input-packets-drop-cap-data-nomatch (#PCDATA)>
<!ELEMENT input-packets-drop-cap-data-not-ipv4-or-ipv6 (#PCDATA)>
<!ELEMENT input-packets-drop-cap-data-too-small (#PCDATA)>
<!ELEMENT input-packets-drop-rate-bandwidth-exceeded (#PCDATA)>
<!ELEMENT input-packets-drop-unknown (#PCDATA)>
<!ELEMENT matched-bytes (#PCDATA)>
<!ELEMENT matched-packets (#PCDATA)>
<!ELEMENT notifications (#PCDATA)>
<!ELEMENT notifications-congestion (#PCDATA)>
<!ELEMENT notifications-congestion-delete (#PCDATA)>
<!ELEMENT notifications-dups-dropped (#PCDATA)>
<!ELEMENT notifications-noop (#PCDATA)>
```


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```
<!ELEMENT notifications-restart (#PCDATA)>

<!ELEMENT notifications-rollover (#PCDATA)>

<!ELEMENT notifications-timeout (#PCDATA)>

<!ELEMENT output-packets-cap-data (#PCDATA)>

<!ELEMENT output-packets-control-protocol (#PCDATA)>

<!ELEMENT output-packets-drop-cap-data (#PCDATA)>

<!ELEMENT output-packets-drop-control-protocol (#PCDATA)>

<!ELEMENT sequence-number (#PCDATA)>
```

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CHAPTER 77

DTD for DHCP Relay Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dhcp-relay.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dhcp-relay.dtd -->

<!ELEMENT allocated-address (#PCDATA)>

<!ELEMENT allocated-prefix (#PCDATA)>

<!ELEMENT alt-client-id (#PCDATA)>

<!ELEMENT alt-client-id-len (#PCDATA)>

<!ELEMENT antispoof-filter-action (#PCDATA)>

<!ELEMENT antispoof-filter-flags (#PCDATA)>

<!ELEMENT antispoof-filter-name (#PCDATA)>

<!ELEMENT antispoof-filter-owner (#PCDATA)>

<!ELEMENT antispoof-filter-parent (#PCDATA)>

<!ELEMENT antispoof-filter-state (#PCDATA)>

<!ELEMENT antispoof-filter-term-id (#PCDATA)>

<!ELEMENT antispoof-filter-type (#PCDATA)>

<!ELEMENT auth-client-limit (#PCDATA)>

<!ELEMENT auth-relay-server-group (#PCDATA)>

<!ELEMENT authentication-num-servers (#PCDATA)>
```

```
<!ELEMENT binding-count (#PCDATA)>

<!ELEMENT binding-summary (binding-count | init-count | bound-count |
selecting-count | requesting-count | renewing-count | rebinding-count |
releasing-count | restore-count)*>

<!ELEMENT bootp-relay-address (#PCDATA)>

<!ELEMENT bound-count (#PCDATA)>

<!ELEMENT bridge-domain (#PCDATA)>

<!ELEMENT client-duid (#PCDATA)>

<!ELEMENT client-id (#PCDATA)>

<!ELEMENT client-id-len (#PCDATA)>

<!ELEMENT client-info (#PCDATA)>

<!ELEMENT client-option-data (#PCDATA)>

<!ELEMENT client-option-len (#PCDATA)>

<!ELEMENT client-option-type (#PCDATA)>

<!ELEMENT client-stale-count (#PCDATA)>

<!ELEMENT demux-interface-name (#PCDATA)>

<!ELEMENT dhcp-binding (allocated-address | mac-address | lease-expires |
lease-start-time | lease-end-time | last-packet-received-time | lease-state |
interface-name | vlan-id | svlan-id | demux-interface-name | server-ip-address |
 server-interface-name | bootp-relay-address | previous-bootp-relay-address |
session-id | pool-name | profile-name | liveness-detection-state |
dhcp-lease-binding-type | client-id-len | client-id | alt-client-id-len |
alt-client-id | client-option-type | client-option-len | client-option-data |
option-82-length-from-client | option-82-data-from-client | hardware-type |
logical-system-routing-instance | bridge-domain | client-info |
retail-logical-system-routing-instance | retail-bridge-domain |
wholesale-logical-system-routing-instance | wholesale-bridge-domain |
antispoof-filter-name | antispoof-filter-flags | antispoof-filter-state |
antispoof-filter-type | antispoof-filter-term-id | antispoof-filter-action |
antispoof-filter-parent | antispoof-filter-owner | authentication-num-servers |
client-stale-count | auth-client-limit | auth-relay-server-group)*>

<!ELEMENT dhcp-lease-binding-type (#PCDATA)>

<!ELEMENT dhcp-relay-binding-information (binding-summary | dhcp-binding)*>
<!ATTLIST dhcp-relay-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcp-relay-statistics-information (dropped-packet-total |
dropped-packet-bad-hardware | dropped-packet-bootp-packet |
dropped-packet-bad-bootp-opcode | dropped-packet-bad-options |
dropped-packet-invalid-server-address | dropped-packet-no-addresses |
dropped-packet-no-interface-cfg | dropped-packet-no-local-address |
dropped-packet-too-short | dropped-packet-send-error | dropped-packet-option-60
| dropped-packet-option-82 | dropped-packet-authentication |
dropped-packet-dynamic-profile | dropped-packet-license |
dropped-packet-bad-dhcp-opcode | dropped-packet-no-options |
dropped-packet-hop-limit | dropped-packet-ttl-expired |
```


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```
dropped-packet-bad-udp-checksum | dropped-packet-inactive-vlan |
dropped-packet-event-rate-analyzer | dropped-packet-dhcp-service-total |
message-table | forwarded-packets-total | forwarded-bootrequest-packets |
forwarded-bootreply-packets)*>

<!ELEMENT dhcpv6-binding (allocated-address | allocated-prefix | client-duid |
client-id-len | client-id | alt-client-id-len | alt-client-id | lease-expires |
lease-start-time | lease-end-time | last-packet-received-time | lease-state |
interface-name | vlan-id | svlan-id | demux-interface-name | server-ip-address |
 next-hop-server-facing-relay | session-id | server-interface-name |
v6-relay-address | previous-v6-relay-address | pool-name | profile-name |
liveness-detection-state | dhcpv6-server-id | dhcp-lease-binding-type |
client-option-type | client-option-len | client-option-data |
option-18-length-from-client | option-18-data-from-client | hardware-type |
logical-system-routing-instance | bridge-domain | authentication-num-servers |
client-stale-count | auth-client-limit | auth-relay-server-group)*>

<!ELEMENT dhcpv6-binding-count (#PCDATA)>

<!ELEMENT dhcpv6-binding-summary (dhcpv6-binding-count | dhcpv6-init-count |
dhcpv6-bound-count | dhcpv6-selecting-count | dhcpv6-requesting-count |
dhcpv6-renewing-count | dhcpv6-rebinding-count | dhcpv6-releasing-count |
dhcpv6-restore-count)*>

<!ELEMENT dhcpv6-bound-count (#PCDATA)>

<!ELEMENT dhcpv6-init-count (#PCDATA)>

<!ELEMENT dhcpv6-message (dhcpv6-message-name | dhcpv6-message-count)*>

<!ELEMENT dhcpv6-message-count (#PCDATA)>

<!ELEMENT dhcpv6-message-direction (#PCDATA)>

<!ELEMENT dhcpv6-message-name (#PCDATA)>

<!ELEMENT dhcpv6-message-table (dhcpv6-message-direction | dhcpv6-message)*>

<!ELEMENT dhcpv6-rebinding-count (#PCDATA)>

<!ELEMENT dhcpv6-relay-binding-information (dhcpv6-binding-summary |
dhcpv6-binding)*>
<!ATTLIST dhcpv6-relay-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcpv6-relay-statistics-information (v6-dropped-packet-total |
v6-dropped-packet-no-safd | v6-dropped-packet-no-routing-instance |
v6-dropped-packet-bad-send | v6-dropped-packet-short-packet |
v6-dropped-packet-bad-msgtype | v6-dropped-packet-bad-options |
v6-dropped-packet-bad-srcaddress | v6-dropped-packet-relay-hop-count |
v6-dropped-packet-relay-bad-udp-checksum | v6-dropped-packet-no-client-id |
v6-dropped-packet-strict-reconfigure | v6-dropped-packet-inactive-vlan |
v6-dropped-packet-event-rate-analyzer | dhcpv6-message-table)*>

<!ELEMENT dhcpv6-releasing-count (#PCDATA)>

<!ELEMENT dhcpv6-renewing-count (#PCDATA)>

<!ELEMENT dhcpv6-requesting-count (#PCDATA)>

<!ELEMENT dhcpv6-restore-count (#PCDATA)>
```

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```
<!ELEMENT dhcpv6-selecting-count (#PCDATA)>
<!ELEMENT dhcpv6-server-id (#PCDATA)>
<!ELEMENT dropped-packet-authentication (#PCDATA)>
<!ELEMENT dropped-packet-bad-bootp-opcode (#PCDATA)>
<!ELEMENT dropped-packet-bad-dhcp-opcode (#PCDATA)>
<!ELEMENT dropped-packet-bad-hardware (#PCDATA)>
<!ELEMENT dropped-packet-bad-options (#PCDATA)>
<!ELEMENT dropped-packet-bad-udp-checksum (#PCDATA)>
<!ELEMENT dropped-packet-bootp-packet (#PCDATA)>
<!ELEMENT dropped-packet-dhcp-service-total (#PCDATA)>
<!ELEMENT dropped-packet-dynamic-profile (#PCDATA)>
<!ELEMENT dropped-packet-event-rate-analyzer (#PCDATA)>
<!ELEMENT dropped-packet-hop-limit (#PCDATA)>
<!ELEMENT dropped-packet-inactive-vlan (#PCDATA)>
<!ELEMENT dropped-packet-invalid-server-address (#PCDATA)>
<!ELEMENT dropped-packet-license (#PCDATA)>
<!ELEMENT dropped-packet-no-addresses (#PCDATA)>
<!ELEMENT dropped-packet-no-interface-cfg (#PCDATA)>
<!ELEMENT dropped-packet-no-local-address (#PCDATA)>
<!ELEMENT dropped-packet-no-options (#PCDATA)>
<!ELEMENT dropped-packet-option-60 (#PCDATA)>
<!ELEMENT dropped-packet-option-82 (#PCDATA)>
<!ELEMENT dropped-packet-send-error (#PCDATA)>
<!ELEMENT dropped-packet-too-short (#PCDATA)>
<!ELEMENT dropped-packet-total (#PCDATA)>
<!ELEMENT dropped-packet-ttl-expired (#PCDATA)>
<!ELEMENT forwarded-bootreply-packets (#PCDATA)>
<!ELEMENT forwarded-bootrequest-packets (#PCDATA)>
<!ELEMENT forwarded-packets-total (#PCDATA)>
<!ELEMENT hardware-type (#PCDATA)>
<!ELEMENT init-count (#PCDATA)>
```


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```
<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT last-packet-received-time (#PCDATA)>
<!ATTLIST last-packet-received-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-end-time (#PCDATA)>
<!ATTLIST lease-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-expires (#PCDATA)>

<!ELEMENT lease-start-time (#PCDATA)>
<!ATTLIST lease-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-state (#PCDATA)>

<!ELEMENT liveness-detection-state (#PCDATA)>

<!ELEMENT logical-system-routing-instance (#PCDATA)>

<!ELEMENT mac-address (#PCDATA)>

<!ELEMENT message (message-name | message-count)*>

<!ELEMENT message-count (#PCDATA)>

<!ELEMENT message-direction (#PCDATA)>

<!ELEMENT message-name (#PCDATA)>

<!ELEMENT message-table (message-direction | message)*>

<!ELEMENT next-hop-server-facing-relay (#PCDATA)>

<!ELEMENT option-18-data-from-client (#PCDATA)>

<!ELEMENT option-18-length-from-client (#PCDATA)>

<!ELEMENT option-82-data-from-client (#PCDATA)>

<!ELEMENT option-82-length-from-client (#PCDATA)>

<!ELEMENT pool-name (#PCDATA)>

<!ELEMENT previous-bootp-relay-address (#PCDATA)>

<!ELEMENT previous-v6-relay-address (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT rebinding-count (#PCDATA)>

<!ELEMENT releasing-count (#PCDATA)>

<!ELEMENT renewing-count (#PCDATA)>

<!ELEMENT requesting-count (#PCDATA)>

<!ELEMENT restore-count (#PCDATA)>

<!ELEMENT retail-bridge-domain (#PCDATA)>
```

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```
<!ELEMENT retail-logical-system-routing-instance (#PCDATA)>
<!ELEMENT selecting-count (#PCDATA)>
<!ELEMENT server-interface-name (#PCDATA)>
<!ELEMENT server-ip-address (#PCDATA)>
<!ELEMENT session-id (#PCDATA)>
<!ELEMENT svlan-id (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-msgtype (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-options (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-send (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-srcaddress (#PCDATA)>
<!ELEMENT v6-dropped-packet-event-rate-analyzer (#PCDATA)>
<!ELEMENT v6-dropped-packet-inactive-vlan (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-client-id (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-routing-instance (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-safd (#PCDATA)>
<!ELEMENT v6-dropped-packet-relay-bad-udp-checksum (#PCDATA)>
<!ELEMENT v6-dropped-packet-relay-hop-count (#PCDATA)>
<!ELEMENT v6-dropped-packet-short-packet (#PCDATA)>
<!ELEMENT v6-dropped-packet-strict-reconfigure (#PCDATA)>
<!ELEMENT v6-dropped-packet-total (#PCDATA)>
<!ELEMENT v6-relay-address (#PCDATA)>
<!ELEMENT vlan-id (#PCDATA)>
<!ELEMENT wholesale-bridge-domain (#PCDATA)>
<!ELEMENT wholesale-logical-system-routing-instance (#PCDATA)>
```


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CHAPTER 78

DTD for DHCP Server Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dhcp-server.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dhcp-server.dtd -->

<!ELEMENT allocated-address (#PCDATA)>

<!ELEMENT allocated-prefix (#PCDATA)>

<!ELEMENT alt-client-id (#PCDATA)>

<!ELEMENT alt-client-id-len (#PCDATA)>

<!ELEMENT antispoof-filter-action (#PCDATA)>

<!ELEMENT antispoof-filter-flags (#PCDATA)>

<!ELEMENT antispoof-filter-name (#PCDATA)>

<!ELEMENT antispoof-filter-owner (#PCDATA)>

<!ELEMENT antispoof-filter-parent (#PCDATA)>

<!ELEMENT antispoof-filter-state (#PCDATA)>

<!ELEMENT antispoof-filter-term-id (#PCDATA)>

<!ELEMENT antispoof-filter-type (#PCDATA)>

<!ELEMENT auth-client-limit (#PCDATA)>

<!ELEMENT auth-relay-server-group (#PCDATA)>

<!ELEMENT authentication-num-servers (#PCDATA)>
```

```
<!ELEMENT binding-count (#PCDATA)>

<!ELEMENT binding-summary (binding-count | init-count | bound-count |
selecting-count | requesting-count | renewing-count | releasing-count |
restore-count)*>

<!ELEMENT bootp-relay-address (#PCDATA)>

<!ELEMENT bound-count (#PCDATA)>

<!ELEMENT bridge-domain (#PCDATA)>

<!ELEMENT client-duid (#PCDATA)>

<!ELEMENT client-id (#PCDATA)>

<!ELEMENT client-id-len (#PCDATA)>

<!ELEMENT client-info (#PCDATA)>

<!ELEMENT client-option-data (#PCDATA)>

<!ELEMENT client-option-len (#PCDATA)>

<!ELEMENT client-option-type (#PCDATA)>

<!ELEMENT client-stale-count (#PCDATA)>

<!ELEMENT delegated-pool-name (#PCDATA)>

<!ELEMENT demux-interface-name (#PCDATA)>

<!ELEMENT dhcp-binding (allocated-address | mac-address | lease-expires |
lease-start-time | lease-end-time | last-packet-received-time | lease-state |
interface-name | vlan-id | svlan-id | demux-interface-name | server-ip-address |
 bootp-relay-address | previous-bootp-relay-address | session-id | pool-name |
profile-name | liveness-detection-state | dhcp-lease-binding-type | client-id-len
 | client-id | alt-client-id-len | alt-client-id | client-option-type |
client-option-len | client-option-data | option-82-length-from-client |
option-82-data-from-client | hardware-type | logical-system-routing-instance |
bridge-domain | client-info | retail-logical-system-routing-instance |
retail-bridge-domain | wholesale-logical-system-routing-instance |
wholesale-bridge-domain | antispoof-filter-name | antispoof-filter-flags |
antispoof-filter-state | antispoof-filter-type | antispoof-filter-term-id |
antispoof-filter-action | antispoof-filter-parent | antispoof-filter-owner |
authentication-num-servers | client-stale-count | auth-client-limit |
auth-relay-server-group)*>

<!ELEMENT dhcp-lease-binding-type (#PCDATA)>

<!ELEMENT dhcp-server-binding-information (binding-summary | dhcp-binding)*>
<!ATTLIST dhcp-server-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcp-server-statistics-information (dropped-packet-total |
dropped-packet-bad-hardware | dropped-packet-bootp-packet |
dropped-packet-bad-bootp-opcode | dropped-packet-bad-options |
dropped-packet-invalid-server-address | dropped-packet-no-addresses |
dropped-packet-no-interface-cfg | dropped-packet-no-local-address |
dropped-packet-too-short | dropped-packet-send-error | dropped-packet-option-60
| dropped-packet-option-82 | dropped-packet-authentication |
dropped-packet-dynamic-profile | dropped-packet-license |
```


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```
dropped-packet-bad-dhcp-opcode | dropped-packet-no-options |
dropped-packet-hop-limit | dropped-packet-ttl-expired |
dropped-packet-bad-udp-checksum | dropped-packet-inactive-vlan |
dropped-packet-event-rate-analyzer | dropped-packet-dhcp-service-total |
message-table | forwarded-packets-total | forwarded-bootrequest-packets |
forwarded-bootreply-packets)*>

<!ELEMENT dhcpv6-binding (allocated-address | allocated-prefix | client-duid |
client-id-len | client-id | alt-client-id-len | alt-client-id | lease-expires |
lease-start-time | lease-end-time | last-packet-received-time | lease-state |
interface-name | vlan-id | svlan-id | demux-interface-name | server-ip-address |
 session-id | pool-name | delegated-pool-name | profile-name |
liveness-detection-state | dhcpv6-server-id | dhcp-lease-binding-type |
logical-system-routing-instance | bridge-domain | client-info |
retail-logical-system-routing-instance | retail-bridge-domain |
wholesale-logical-system-routing-instance | wholesale-bridge-domain |
authentication-num-servers | client-stale-count | auth-client-limit |
auth-relay-server-group)*>

<!ELEMENT dhcpv6-binding-count (#PCDATA)>

<!ELEMENT dhcpv6-binding-summary (dhcpv6-binding-count | dhcpv6-init-count |
dhcpv6-bound-count | dhcpv6-selecting-count | dhcpv6-requesting-count |
dhcpv6-renewing-count | dhcpv6-releasing-count | dhcpv6-restore-count)*>

<!ELEMENT dhcpv6-bound-count (#PCDATA)>

<!ELEMENT dhcpv6-init-count (#PCDATA)>

<!ELEMENT dhcpv6-message (dhcpv6-message-name | dhcpv6-message-count)*>

<!ELEMENT dhcpv6-message-count (#PCDATA)>

<!ELEMENT dhcpv6-message-direction (#PCDATA)>

<!ELEMENT dhcpv6-message-name (#PCDATA)>

<!ELEMENT dhcpv6-message-table (dhcpv6-message-direction | dhcpv6-message)*>

<!ELEMENT dhcpv6-releasing-count (#PCDATA)>

<!ELEMENT dhcpv6-renewing-count (#PCDATA)>

<!ELEMENT dhcpv6-requesting-count (#PCDATA)>

<!ELEMENT dhcpv6-restore-count (#PCDATA)>

<!ELEMENT dhcpv6-selecting-count (#PCDATA)>

<!ELEMENT dhcpv6-server-binding-information (dhcpv6-binding-summary |
dhcpv6-binding)*>
<!ATTLIST dhcpv6-server-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcpv6-server-id (#PCDATA)>

<!ELEMENT dhcpv6-server-statistics-information (v6-dropped-packet-total |
v6-dropped-packet-no-safd | v6-dropped-packet-bad-send |
v6-dropped-packet-short-packet | v6-dropped-packet-bad-msgtype |
v6-dropped-packet-bad-options | v6-dropped-packet-bad-srcaddress |
v6-dropped-packet-relay-hop-count | v6-dropped-packet-no-client-id |
v6-dropped-packet-strict-reconfigure | v6-dropped-packet-authentication |
```

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```
v6-dropped-packet-dynamic-profile | v6-dropped-packet-license |
v6-dropped-packet-inactive-vlan | v6-dropped-packet-event-rate-analyzer |
v6-dropped-packet-dhcpv6-service-total | dhcpv6-message-table)*>

<!ELEMENT dropped-packet-authentication (#PCDATA)>

<!ELEMENT dropped-packet-bad-bootp-opcode (#PCDATA)>

<!ELEMENT dropped-packet-bad-dhcp-opcode (#PCDATA)>

<!ELEMENT dropped-packet-bad-hardware (#PCDATA)>

<!ELEMENT dropped-packet-bad-options (#PCDATA)>

<!ELEMENT dropped-packet-bad-udp-checksum (#PCDATA)>

<!ELEMENT dropped-packet-bootp-packet (#PCDATA)>

<!ELEMENT dropped-packet-dhcp-service-total (#PCDATA)>

<!ELEMENT dropped-packet-dynamic-profile (#PCDATA)>

<!ELEMENT dropped-packet-event-rate-analyzer (#PCDATA)>

<!ELEMENT dropped-packet-hop-limit (#PCDATA)>

<!ELEMENT dropped-packet-inactive-vlan (#PCDATA)>

<!ELEMENT dropped-packet-invalid-server-address (#PCDATA)>

<!ELEMENT dropped-packet-license (#PCDATA)>

<!ELEMENT dropped-packet-no-addresses (#PCDATA)>

<!ELEMENT dropped-packet-no-interface-cfg (#PCDATA)>

<!ELEMENT dropped-packet-no-local-address (#PCDATA)>

<!ELEMENT dropped-packet-no-options (#PCDATA)>

<!ELEMENT dropped-packet-option-60 (#PCDATA)>

<!ELEMENT dropped-packet-option-82 (#PCDATA)>

<!ELEMENT dropped-packet-send-error (#PCDATA)>

<!ELEMENT dropped-packet-too-short (#PCDATA)>

<!ELEMENT dropped-packet-total (#PCDATA)>

<!ELEMENT dropped-packet-ttl-expired (#PCDATA)>

<!ELEMENT forwarded-bootreply-packets (#PCDATA)>

<!ELEMENT forwarded-bootrequest-packets (#PCDATA)>

<!ELEMENT forwarded-packets-total (#PCDATA)>

<!ELEMENT hardware-type (#PCDATA)>

<!ELEMENT init-count (#PCDATA)>
```


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```
<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT last-packet-received-time (#PCDATA)>
<!ATTLIST last-packet-received-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-end-time (#PCDATA)>
<!ATTLIST lease-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-expires (#PCDATA)>

<!ELEMENT lease-start-time (#PCDATA)>
<!ATTLIST lease-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-state (#PCDATA)>

<!ELEMENT liveness-detection-state (#PCDATA)>

<!ELEMENT logical-system-routing-instance (#PCDATA)>

<!ELEMENT mac-address (#PCDATA)>

<!ELEMENT message (message-name | message-count)*>

<!ELEMENT message-count (#PCDATA)>

<!ELEMENT message-direction (#PCDATA)>

<!ELEMENT message-name (#PCDATA)>

<!ELEMENT message-table (message-direction | message)*>

<!ELEMENT option-82-data-from-client (#PCDATA)>

<!ELEMENT option-82-length-from-client (#PCDATA)>

<!ELEMENT pool-name (#PCDATA)>

<!ELEMENT previous-bootp-relay-address (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT releasing-count (#PCDATA)>

<!ELEMENT renewing-count (#PCDATA)>

<!ELEMENT requesting-count (#PCDATA)>

<!ELEMENT restore-count (#PCDATA)>

<!ELEMENT retail-bridge-domain (#PCDATA)>

<!ELEMENT retail-logical-system-routing-instance (#PCDATA)>

<!ELEMENT selecting-count (#PCDATA)>

<!ELEMENT server-ip-address (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT svlan-id (#PCDATA)>
```

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```
<!ELEMENT v6-dropped-packet-authentication (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-msgtype (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-options (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-send (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-srcaddress (#PCDATA)>
<!ELEMENT v6-dropped-packet-dhcpv6-service-total (#PCDATA)>
<!ELEMENT v6-dropped-packet-dynamic-profile (#PCDATA)>
<!ELEMENT v6-dropped-packet-event-rate-analyzer (#PCDATA)>
<!ELEMENT v6-dropped-packet-inactive-vlan (#PCDATA)>
<!ELEMENT v6-dropped-packet-license (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-client-id (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-safd (#PCDATA)>
<!ELEMENT v6-dropped-packet-relay-hop-count (#PCDATA)>
<!ELEMENT v6-dropped-packet-short-packet (#PCDATA)>
<!ELEMENT v6-dropped-packet-strict-reconfigure (#PCDATA)>
<!ELEMENT v6-dropped-packet-total (#PCDATA)>
<!ELEMENT vlan-id (#PCDATA)>
<!ELEMENT wholesale-bridge-domain (#PCDATA)>
<!ELEMENT wholesale-logical-system-routing-instance (#PCDATA)>
```


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CHAPTER 79

DTD for DHCP Service Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dhcp-service.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dhcp-service.dtd -->

<!ELEMENT dhcp-service-statistics-information (dropped-packet-dhcp-service-total
 | dropped-packet-read-error | dropped-packet-bad-ip-header |
dropped-packet-short-packet | dropped-packet-no-interface |
dropped-packet-no-routing-instance | dropped-packet-no-mem |
dropped-packet-recovery-in-progress)*>

<!ELEMENT dhcp-service-statistics-interface-information (dropped-packet-total |
dropped-packet-bad-hardware | dropped-packet-bootp-packet |
dropped-packet-bad-bootp-opcode | dropped-packet-bad-options |
dropped-packet-invalid-server-address | dropped-packet-no-addresses |
dropped-packet-no-interface-cfg | dropped-packet-no-local-address |
dropped-packet-too-short | dropped-packet-send-error | dropped-packet-option-60
| dropped-packet-option-82 | dropped-packet-authentication |
dropped-packet-dynamic-profile | dropped-packet-license |
dropped-packet-bad-dhcp-opcode | dropped-packet-no-options |
dropped-packet-hop-limit | dropped-packet-ttl-expired |
dropped-packet-bad-udp-checksum | dropped-packet-inactive-vlan |
dropped-packet-event-rate-analyzer | message-table | forwarded-packets-total |
forwarded-bootrequest-packets | forwarded-bootreply-packets)*>

<!ELEMENT dhcpv6-message (dhcpv6-message-name | dhcpv6-message-count)*>

<!ELEMENT dhcpv6-message-count (#PCDATA)>

<!ELEMENT dhcpv6-message-direction (#PCDATA)>

<!ELEMENT dhcpv6-message-name (#PCDATA)>

<!ELEMENT dhcpv6-message-table (dhcpv6-message-direction | dhcpv6-message)*>
```

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```
<!ELEMENT dhcpv6-service-statistics-information
(v6-dropped-packet-dhcpv6-service-total | v6-dropped-packet-read-error |
v6-dropped-packet-bad-ip-header | v6-dropped-packet-short-packet |
v6-dropped-packet-no-interface | v6-dropped-packet-no-safd |
v6-dropped-packet-no-routing-instance | v6-dropped-packet-no-mem |
v6-dropped-packet-recovery-in-progress)*>

<!ELEMENT dhcpv6-service-statistics-interface-information (v6-dropped-packet-total
 | v6-dropped-packet-no-safd | v6-dropped-packet-bad-send |
v6-dropped-packet-short-packet | v6-dropped-packet-bad-msgtype |
v6-dropped-packet-bad-options | v6-dropped-packet-bad-srcaddress |
v6-dropped-packet-relay-hop-count | v6-dropped-packet-no-client-id |
v6-dropped-packet-strict-reconfigure | v6-dropped-packet-authentication |
v6-dropped-packet-dynamic-profile | v6-dropped-packet-license |
v6-dropped-packet-inactive-vlan | v6-dropped-packet-event-rate-analyzer |
dhcpv6-message-table)*>

<!ELEMENT dropped-packet-authentication (#PCDATA)>

<!ELEMENT dropped-packet-bad-bootp-opcode (#PCDATA)>

<!ELEMENT dropped-packet-bad-dhcp-opcode (#PCDATA)>

<!ELEMENT dropped-packet-bad-hardware (#PCDATA)>

<!ELEMENT dropped-packet-bad-ip-header (#PCDATA)>

<!ELEMENT dropped-packet-bad-options (#PCDATA)>

<!ELEMENT dropped-packet-bad-udp-checksum (#PCDATA)>

<!ELEMENT dropped-packet-bootp-packet (#PCDATA)>

<!ELEMENT dropped-packet-dhcp-service-total (#PCDATA)>

<!ELEMENT dropped-packet-dynamic-profile (#PCDATA)>

<!ELEMENT dropped-packet-event-rate-analyzer (#PCDATA)>

<!ELEMENT dropped-packet-hop-limit (#PCDATA)>

<!ELEMENT dropped-packet-inactive-vlan (#PCDATA)>

<!ELEMENT dropped-packet-invalid-server-address (#PCDATA)>

<!ELEMENT dropped-packet-license (#PCDATA)>

<!ELEMENT dropped-packet-no-addresses (#PCDATA)>

<!ELEMENT dropped-packet-no-interface (#PCDATA)>

<!ELEMENT dropped-packet-no-interface-cfg (#PCDATA)>

<!ELEMENT dropped-packet-no-local-address (#PCDATA)>

<!ELEMENT dropped-packet-no-mem (#PCDATA)>

<!ELEMENT dropped-packet-no-options (#PCDATA)>

<!ELEMENT dropped-packet-no-routing-instance (#PCDATA)>
```


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```
<!ELEMENT dropped-packet-option-60 (#PCDATA)>
<!ELEMENT dropped-packet-option-82 (#PCDATA)>
<!ELEMENT dropped-packet-read-error (#PCDATA)>
<!ELEMENT dropped-packet-recovery-in-progress (#PCDATA)>
<!ELEMENT dropped-packet-send-error (#PCDATA)>
<!ELEMENT dropped-packet-short-packet (#PCDATA)>
<!ELEMENT dropped-packet-too-short (#PCDATA)>
<!ELEMENT dropped-packet-total (#PCDATA)>
<!ELEMENT dropped-packet-ttl-expired (#PCDATA)>
<!ELEMENT forwarded-bootreply-packets (#PCDATA)>
<!ELEMENT forwarded-bootrequest-packets (#PCDATA)>
<!ELEMENT forwarded-packets-total (#PCDATA)>
<!ELEMENT message (message-name | message-count)*>
<!ELEMENT message-count (#PCDATA)>
<!ELEMENT message-direction (#PCDATA)>
<!ELEMENT message-name (#PCDATA)>
<!ELEMENT message-table (message-direction | message)*>
<!ELEMENT v6-dropped-packet-authentication (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-ip-header (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-msgtype (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-options (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-send (#PCDATA)>
<!ELEMENT v6-dropped-packet-bad-srcaddress (#PCDATA)>
<!ELEMENT v6-dropped-packet-dhcpv6-service-total (#PCDATA)>
<!ELEMENT v6-dropped-packet-dynamic-profile (#PCDATA)>
<!ELEMENT v6-dropped-packet-event-rate-analyzer (#PCDATA)>
<!ELEMENT v6-dropped-packet-inactive-vlan (#PCDATA)>
<!ELEMENT v6-dropped-packet-license (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-client-id (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-interface (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-mem (#PCDATA)>
```

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```
<!ELEMENT v6-dropped-packet-no-routing-instance (#PCDATA)>
<!ELEMENT v6-dropped-packet-no-safd (#PCDATA)>
<!ELEMENT v6-dropped-packet-read-error (#PCDATA)>
<!ELEMENT v6-dropped-packet-recovery-in-progress (#PCDATA)>
<!ELEMENT v6-dropped-packet-relay-hop-count (#PCDATA)>
<!ELEMENT v6-dropped-packet-short-packet (#PCDATA)>
<!ELEMENT v6-dropped-packet-strict-reconfigure (#PCDATA)>
<!ELEMENT v6-dropped-packet-total (#PCDATA)>
```


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CHAPTER 80

DTD for DHCP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dhcp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dhcp.dtd -->

<!ELEMENT active-lease-count (#PCDATA)>

<!ELEMENT address-count (#PCDATA)>

<!ELEMENT address-pool-excluded-address (#PCDATA)>

<!ELEMENT address-pool-high-address (#PCDATA)>

<!ELEMENT address-pool-low-address (#PCDATA)>

<!ELEMENT address-pool-name (#PCDATA)>

<!ELEMENT allocated-address (#PCDATA)>

<!ELEMENT assigned-lease-count (#PCDATA)>

<!ELEMENT bootp-dropped-packets (#PCDATA)>

<!ELEMENT bootp-dropped-packets-badaddr (#PCDATA)>

<!ELEMENT bootp-dropped-packets-badread (#PCDATA)>

<!ELEMENT bootp-dropped-packets-badsend (#PCDATA)>

<!ELEMENT bootp-dropped-packets-nointerface (#PCDATA)>

<!ELEMENT bootp-dropped-packets-nolocaladdr (#PCDATA)>

<!ELEMENT bootp-dropped-packets-noroute (#PCDATA)>
```

```
<!ELEMENT bootp-dropped-packets-nortinst (#PCDATA)>

<!ELEMENT bootp-forwarded-packets (#PCDATA)>

<!ELEMENT bootp-lease-length (#PCDATA)>

<!ELEMENT bootp-received-packets (#PCDATA)>

<!ELEMENT bootp-relay-address (#PCDATA)>

<!ELEMENT client-identifier (hex-data | hex-data-line | printable-data-line)*>

<!ELEMENT conflict-address (#PCDATA)>

<!ELEMENT conflict-count (#PCDATA)>

<!ELEMENT default-lease-time (#PCDATA)>

<!ELEMENT detection-method (#PCDATA)>

<!ELEMENT detection-time (#PCDATA)>

<!ELEMENT dhcp-binding (allocated-address | mac-address | dhcp-lease-binding-type
 | lease-end-time | lease-state | dhcp-option-table | address-pool-name |
interface-name | bootp-relay-address | dhcp-lease-information |
client-identifier)*>

<!ELEMENT dhcp-binding-information (dhcp-binding)*>
<!ATTLIST dhcp-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcp-conflict (detection-time | detection-method | conflict-address)*>

<!ELEMENT dhcp-conflict-information (dhcp-conflict)*>

<!ELEMENT dhcp-global-information (dhcp-lease-time-information | dhcp-option-table
 | bootp-lease-length)*>

<!ELEMENT dhcp-lease-binding-type (#PCDATA)>

<!ELEMENT dhcp-lease-information (dhcp-lease-type | lease-start-time |
lease-end-time | lease-state)*>

<!ELEMENT dhcp-lease-time-information (default-lease-time | minimum-lease-time |
 maximum-lease-time)*>

<!ELEMENT dhcp-lease-type (#PCDATA)>

<!ELEMENT dhcp-option (dhcp-option-code | dhcp-option-name | dhcp-option-type |
dhcp-option-value)*>

<!ELEMENT dhcp-option-code (#PCDATA)>

<!ELEMENT dhcp-option-name (#PCDATA)>

<!ELEMENT dhcp-option-table (dhcp-option)*>

<!ELEMENT dhcp-option-type (#PCDATA)>

<!ELEMENT dhcp-option-value (#PCDATA)>

<!ELEMENT dhcp-pool (address-pool-name | address-pool-low-address |
```


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```
address-pool-high-address | address-pool-excluded-address |
dhcp-lease-time-information | dhcp-option-table | address-count |
assigned-lease-count | active-lease-count | offered-lease-count |
expired-lease-count | conflict-count | exclusion-count)*>

<!ELEMENT dhcp-pool-information (dhcp-pool)*>
<!ATTLIST dhcp-pool-information junos:style CDATA #IMPLIED>

<!ELEMENT dhcp-statistics-information (dropped-packet-total |
dropped-packet-bad-hardware | dropped-packet-bad-opcode |
dropped-packet-bad-options | dropped-packet-invalid-server-address |
dropped-packet-no-addresses | dropped-packet-no-interface |
dropped-packet-no-routing-instance | dropped-packet-no-local-address |
dropped-packet-too-short | dropped-packet-read-error | dropped-packet-send-error
 | message-table)*>

<!ELEMENT dropped-packet-bad-hardware (#PCDATA)>

<!ELEMENT dropped-packet-bad-opcode (#PCDATA)>

<!ELEMENT dropped-packet-bad-options (#PCDATA)>

<!ELEMENT dropped-packet-invalid-server-address (#PCDATA)>

<!ELEMENT dropped-packet-no-addresses (#PCDATA)>

<!ELEMENT dropped-packet-no-interface (#PCDATA)>

<!ELEMENT dropped-packet-no-local-address (#PCDATA)>

<!ELEMENT dropped-packet-no-routing-instance (#PCDATA)>

<!ELEMENT dropped-packet-read-error (#PCDATA)>

<!ELEMENT dropped-packet-send-error (#PCDATA)>

<!ELEMENT dropped-packet-too-short (#PCDATA)>

<!ELEMENT dropped-packet-total (#PCDATA)>

<!ELEMENT exclusion-count (#PCDATA)>

<!ELEMENT expired-lease-count (#PCDATA)>

<!ELEMENT helper-statistics (relay-information)*>

<!ELEMENT hex-data (#PCDATA)>

<!ELEMENT hex-data-line (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT lease-end-time (#PCDATA)>
<!ATTLIST lease-end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-start-time (#PCDATA)>
<!ATTLIST lease-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT lease-state (#PCDATA)>

<!ELEMENT mac-address (#PCDATA)>
```

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```
<!ELEMENT maximum-lease-time (#PCDATA)>

<!ELEMENT message (message-name | message-count)*>

<!ELEMENT message-count (#PCDATA)>

<!ELEMENT message-direction (#PCDATA)>

<!ELEMENT message-name (#PCDATA)>

<!ELEMENT message-table (message-direction | message)*>

<!ELEMENT minimum-lease-time (#PCDATA)>

<!ELEMENT offered-lease-count (#PCDATA)>

<!ELEMENT printable-data-line (#PCDATA)>

<!ELEMENT relay-information (bootp-received-packets | bootp-forwarded-packets |
bootp-dropped-packets | bootp-dropped-packets-nointerface |
bootp-dropped-packets-nortinst | bootp-dropped-packets-badread |
bootp-dropped-packets-badsend | bootp-dropped-packets-badaddr |
bootp-dropped-packets-nolocaladdr | bootp-dropped-packets-noroute)*>
```


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CHAPTER 81

DTD for Dialer Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dood.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dood.dtd -->

<!ELEMENT activation-delay (#PCDATA)>

<!ELEMENT activation-delay-elapsed (#PCDATA)>

<!ELEMENT backup EMPTY>

<!ELEMENT call-idle-timeout (#PCDATA)>

<!ELEMENT callback-wait-period (#PCDATA)>

<!ELEMENT callback-wait-period-elapsed (#PCDATA)>

<!ELEMENT deactivation-delay (#PCDATA)>

<!ELEMENT deactivation-delay-elapsed (#PCDATA)>

<!ELEMENT default-activation-delay (#PCDATA)>

<!ELEMENT default-callback-wait-period (#PCDATA)>

<!ELEMENT default-deactivation-delay (#PCDATA)>

<!ELEMENT default-idle-timeout (#PCDATA)>

<!ELEMENT default-initial-route-check (#PCDATA)>

<!ELEMENT default-load-interval (#PCDATA)>

<!ELEMENT default-load-threshold (#PCDATA)>
```

```
<!ELEMENT default-pool-priority (#PCDATA)>

<!ELEMENT default-redial-delay (#PCDATA)>

<!ELEMENT dial-string (#PCDATA)>

<!ELEMENT dial-string-list (dial-string)*>
<!ATTLIST dial-string-list junos:style CDATA #IMPLIED>

<!ELEMENT dialer-defaults-information (default-idle-timeout |
default-activation-delay | default-deactivation-delay | default-initial-route-check
 | default-pool-priority | default-load-threshold | default-load-interval |
default-redial-delay | default-callback-wait-period)*>

<!ELEMENT dialer-info (dialer-interface-name | dialer-interface-state |
dialer-interface-flags)*>

<!ELEMENT dialer-interface (dialer-interface-name | dialer-interface-state |
dialer-interface-flags | pool-id | primary-interface | dial-string-list |
sub-interface-list | watch-list | activation-delay | deactivation-delay |
activation-delay-elapsed | deactivation-delay-elapsed | call-idle-timeout |
initial-route-check | redial-delay | callback-wait-period |
callback-wait-period-elapsed | load-threshold | load-interval)*>

<!ELEMENT dialer-interface-flags (backup | multilink | watchlist |
interesting-detected)*>

<!ELEMENT dialer-interface-information (dialer-interface)*>
<!ATTLIST dialer-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT dialer-interface-name (#PCDATA)>

<!ELEMENT dialer-interface-state (#PCDATA)>

<!ELEMENT dialer-pool (pool-id | pool-member-list)*>

<!ELEMENT dialer-pool-information (dialer-pool)*>
<!ATTLIST dialer-pool-information junos:style CDATA #IMPLIED>

<!ELEMENT initial-route-check (#PCDATA)>

<!ELEMENT interesting-detected EMPTY>

<!ELEMENT load-interval (#PCDATA)>

<!ELEMENT load-threshold (#PCDATA)>

<!ELEMENT multilink EMPTY>

<!ELEMENT pool-id (#PCDATA)>

<!ELEMENT pool-member-list (dialer-info | sub-info)*>

<!ELEMENT pool-priority (#PCDATA)>

<!ELEMENT primary-interface (#PCDATA)>

<!ELEMENT redial-delay (#PCDATA)>

<!ELEMENT sub-info (sub-interface-name | sub-interface-flags | pool-priority)*>
```


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```
<!ELEMENT sub-interface-flags (#PCDATA)>

<!ELEMENT sub-interface-list (sub-interface-name)*>
<!ATTLIST sub-interface-list junos:style CDATA #IMPLIED>

<!ELEMENT sub-interface-name (#PCDATA)>

<!ELEMENT watch-list (watch-route)*>
<!ATTLIST watch-list junos:style CDATA #IMPLIED>

<!ELEMENT watch-route (#PCDATA)>

<!ELEMENT watchlist EMPTY>
```

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CHAPTER 82

DTD for Dynamic Configuration Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-dynamic-configuration.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-dynamic-configuration.dtd -->

<!ELEMENT access-profile-name (#PCDATA)>

<!ELEMENT accounting-interval (#PCDATA)>

<!ELEMENT accounting-session-id (#PCDATA)>

<!ELEMENT accounting-time-quota (#PCDATA)>

<!ELEMENT accounting-type (#PCDATA)>

<!ELEMENT accounting-volume-quota (#PCDATA)>

<!ELEMENT ack-received (#PCDATA)>

<!ELEMENT ack-sent (#PCDATA)>

<!ELEMENT action (#PCDATA)>

<!ELEMENT address-pool (#PCDATA)>

<!ELEMENT advisory-options-downstream-rate (#PCDATA)>

<!ELEMENT advisory-options-upstream-rate (#PCDATA)>

<!ELEMENT agent-circuit-id (#PCDATA)>
```

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```
<!ELEMENT agent-remote-id (#PCDATA)>

<!ELEMENT aggregate-type (#PCDATA)>

<!ELEMENT attribute-name (#PCDATA)>

<!ELEMENT attribute-value (#PCDATA)>

<!ELEMENT backpressure (#PCDATA)>

<!ELEMENT calling-station-id (#PCDATA)>

<!ELEMENT client-session-info (accounting-session-id | client-session-type |
jsrc-session-id | address-pool | interface | ip-address | ip-address-mask |
primary-dns-address | secondary-dns-address | ipv6-address | ipv6-prefix |
ipv6-network-prefix-len | ipv6-interface-address | ipv6-primary-dns-address |
ipv6-secondary-dns-address | logical-system | profile | profile-version |
mac-address | nas-port-type | routing-instance | access-profile-name | session-id
 | state | user-name | login-time | l2tp-local-ip-address | l2tp-local-session-id
 | l2tp-local-tunnel-id | l2tp-remote-ip-address | l2tp-remote-session-id |
l2tp-remote-tunnel-id | l2tp-tunnel-group-id | l2tp-ppp-profile-name | dhcp-option
 | dynamic-configuration-info | session-ids | dhcp-gi-address | ifl-type |
service-bundle | nas-ipv6-address | login-ipv6-host | delegated-ipv6-prefix |
framed-interface-id | framed-ipv4-pool | framed-ipv6-pool | delegated-ipv6-pool
| aggregate-type | logical-interface | accounting-type | accounting-interval |
config-bits | vlan-tag | svlan-tag | service-type | framed-protocol |
calling-station-id | primary-ipv6-dns-address | secondary-ipv6-dns-address |
dsl-forum-attributes | advisory-options-upstream-rate |
advisory-options-downstream-rate | agent-circuit-id | agent-remote-id)*>

<!ELEMENT client-session-type (#PCDATA)>

<!ELEMENT collect-perf (#PCDATA)>

<!ELEMENT config-bits (#PCDATA)>

<!ELEMENT connection (peer-name | connection-status | socket | queue)*>

<!ELEMENT connection-status (#PCDATA)>

<!ELEMENT consumer-message-counters (msg-received | ack-sent | nak-sent)*>

<!ELEMENT consumer-received (#PCDATA)>

<!ELEMENT consumer-sent (#PCDATA)>

<!ELEMENT count (#PCDATA)>

<!ELEMENT cur-index (#PCDATA)>

<!ELEMENT delegated-ipv6-pool (#PCDATA)>

<!ELEMENT delegated-ipv6-prefix (#PCDATA)>

<!ELEMENT dhcp-gi-address (#PCDATA)>

<!ELEMENT dhcp-option (#PCDATA)>

<!ELEMENT dsl-forum-attributes (#PCDATA)>

<!ELEMENT dynamic-configuration-attribute (attribute-name | attribute-value)*>
```


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```
<!ELEMENT dynamic-configuration-info (dynamic-configuration-attribute)*>

<!ELEMENT dynamic-configuration-information (session-ids | client-session-info |
 service-session-info | results | profile-results)*>

<!ELEMENT entry-delta-microseconds (#PCDATA)>

<!ELEMENT entry-delta-microseconds-perf (#PCDATA)>

<!ELEMENT entry-delta-seconds (#PCDATA)>

<!ELEMENT entry-delta-seconds-perf (#PCDATA)>

<!ELEMENT failure (#PCDATA)>

<!ELEMENT failure-reason (#PCDATA)>

<!ELEMENT framed-interface-id (#PCDATA)>

<!ELEMENT framed-ipv4-pool (#PCDATA)>

<!ELEMENT framed-ipv6-pool (#PCDATA)>

<!ELEMENT framed-protocol (#PCDATA)>

<!ELEMENT frozen (#PCDATA)>

<!ELEMENT hash (#PCDATA)>

<!ELEMENT ifl-type (#PCDATA)>

<!ELEMENT index (#PCDATA)>

<!ELEMENT index-perf (#PCDATA)>

<!ELEMENT interface (#PCDATA)>

<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT ip-address-mask (#PCDATA)>

<!ELEMENT ipc-errors (#PCDATA)>

<!ELEMENT ipc-received (#PCDATA)>

<!ELEMENT ipc-sent (#PCDATA)>

<!ELEMENT ipv6-address (#PCDATA)>

<!ELEMENT ipv6-interface-address (#PCDATA)>

<!ELEMENT ipv6-network-prefix-len (#PCDATA)>

<!ELEMENT ipv6-prefix (#PCDATA)>

<!ELEMENT ipv6-primary-dns-address (#PCDATA)>

<!ELEMENT ipv6-secondary-dns-address (#PCDATA)>

<!ELEMENT ivol-ctxsw-perf (#PCDATA)>
```

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```
<!ELEMENT jsrc-session-id (#PCDATA)>
<!ELEMENT l2tp-local-ip-address (#PCDATA)>
<!ELEMENT l2tp-local-session-id (#PCDATA)>
<!ELEMENT l2tp-local-tunnel-id (#PCDATA)>
<!ELEMENT l2tp-ppp-profile-name (#PCDATA)>
<!ELEMENT l2tp-remote-ip-address (#PCDATA)>
<!ELEMENT l2tp-remote-session-id (#PCDATA)>
<!ELEMENT l2tp-remote-tunnel-id (#PCDATA)>
<!ELEMENT l2tp-tunnel-group-id (#PCDATA)>
<!ELEMENT log-name (#PCDATA)>
<!ELEMENT log-prefix (#PCDATA)>
<!ELEMENT log-prefix-perf (#PCDATA)>
<!ELEMENT logged-data (#PCDATA)>
<!ELEMENT logged-data-perf (#PCDATA)>
<!ELEMENT logical-interface (#PCDATA)>
<!ELEMENT logical-system (#PCDATA)>
<!ELEMENT login-ipv6-host (#PCDATA)>
<!ELEMENT login-time (#PCDATA)>
<!ELEMENT mac-address (#PCDATA)>
<!ELEMENT max-data (#PCDATA)>
<!ELEMENT max-entries (#PCDATA)>
<!ELEMENT max-msg-pending (#PCDATA)>
<!ELEMENT msg-complete (#PCDATA)>
<!ELEMENT msg-held (#PCDATA)>
<!ELEMENT msg-pending (#PCDATA)>
<!ELEMENT msg-posted (#PCDATA)>
<!ELEMENT msg-received (#PCDATA)>
<!ELEMENT msg-sent (#PCDATA)>
<!ELEMENT nak-received (#PCDATA)>
<!ELEMENT nak-sent (#PCDATA)>
```


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```
<!ELEMENT name (#PCDATA)>

<!ELEMENT nas-ipv6-address (#PCDATA)>

<!ELEMENT nas-port-type (#PCDATA)>

<!ELEMENT number (#PCDATA)>

<!ELEMENT peer-name (#PCDATA)>

<!ELEMENT performance-counters (socket-received | socket-sent | socket-errors |
ipc-received | ipc-sent | ipc-errors)*>

<!ELEMENT primary-dns-address (#PCDATA)>

<!ELEMENT primary-ipv6-dns-address (#PCDATA)>

<!ELEMENT process-id (#PCDATA)>

<!ELEMENT process-id-perf (#PCDATA)>

<!ELEMENT producer-message-counters (msg-sent | ack-received | nak-received |
backpressure)*>

<!ELEMENT producer-received (#PCDATA)>

<!ELEMENT producer-sent (#PCDATA)>

<!ELEMENT profile (#PCDATA)>

<!ELEMENT profile-action (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT profile-results (profile-name | profile-action | session-id |
session-type | request-result | failure-reason | config-bits)*>
<!ATTLIST profile-results junos:style CDATA #IMPLIED>

<!ELEMENT profile-version (#PCDATA)>

<!ELEMENT queue (msg-complete | msg-posted | msg-pending | max-msg-pending |
msg-held)*>

<!ELEMENT request-result (#PCDATA)>

<!ELEMENT results (action | session-type | session-id | success | failure)*>
<!ATTLIST results junos:style CDATA #IMPLIED>

<!ELEMENT role (#PCDATA)>

<!ELEMENT routing-instance (#PCDATA)>

<!ELEMENT running-time-microseconds (#PCDATA)>

<!ELEMENT running-time-microseconds-perf (#PCDATA)>

<!ELEMENT running-time-seconds (#PCDATA)>

<!ELEMENT running-time-seconds-perf (#PCDATA)>

<!ELEMENT secondary-dns-address (#PCDATA)>
```

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```
<!ELEMENT secondary-ipv6-dns-address (#PCDATA)>

<!ELEMENT service-activation-time (#PCDATA)>

<!ELEMENT service-bundle (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT service-session-info (session-id | start-time | service-name |
accounting-session-id | accounting-type | accounting-interval |
accounting-volume-quota | accounting-time-quota | state |
dynamic-configuration-info | config-bits | service-activation-time)*>

<!ELEMENT service-type (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-ids (session-id)*>
<!ATTLIST session-ids junos:style CDATA #IMPLIED>

<!ELEMENT session-type (#PCDATA)>

<!ELEMENT shm-ipc-statistics (user | failure-reason)*>

<!ELEMENT socket (consumer-received | consumer-sent | producer-received |
producer-sent)*>

<!ELEMENT socket-errors (#PCDATA)>

<!ELEMENT socket-received (#PCDATA)>

<!ELEMENT socket-sent (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT state (#PCDATA)>

<!ELEMENT status (#PCDATA)>

<!ELEMENT success EMPTY>

<!ELEMENT svlan-tag (#PCDATA)>

<!ELEMENT system-cpu-microseconds-perf (#PCDATA)>

<!ELEMENT system-cpu-seconds-perf (#PCDATA)>

<!ELEMENT system-time-microseconds (#PCDATA)>

<!ELEMENT system-time-microseconds-perf (#PCDATA)>

<!ELEMENT system-time-seconds (#PCDATA)>

<!ELEMENT system-time-seconds-perf (#PCDATA)>

<!ELEMENT thread-id (#PCDATA)>

<!ELEMENT thread-id-perf (#PCDATA)>
```


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```
<!ELEMENT tracelog-data (tracelog-entry)*>

<!ELEMENT tracelog-data-performance (tracelog-entry-performance)*>

<!ELEMENT tracelog-entry (log-prefix | index | process-id | thread-id |
entry-delta-seconds | entry-delta-microseconds | running-time-seconds |
running-time-microseconds | system-time-seconds | system-time-microseconds |
logged-data)*>

<!ELEMENT tracelog-entry-performance (log-prefix-perf | index-perf |
process-id-perf | thread-id-perf | entry-delta-seconds-perf |
entry-delta-microseconds-perf | running-time-seconds-perf |
running-time-microseconds-perf | user-cpu-seconds-perf | user-cpu-microseconds-perf
 | system-cpu-seconds-perf | system-cpu-microseconds-perf |
system-time-seconds-perf | system-time-microseconds-perf | vol-ctxsw-perf |
ivol-ctxsw-perf | logged-data-perf)*>

<!ELEMENT tracelog-information (tracelog-status-info)*>

<!ELEMENT tracelog-status-info (log-name | max-entries | cur-index | max-data |
wrap-cnt | wrapable | frozen | collect-perf)*>

<!ELEMENT uid (number | count | hash)*>

<!ELEMENT uid-show (uid)*>

<!ELEMENT user (name | role | status | performance-counters |
producer-message-counters | consumer-message-counters | connection)*>

<!ELEMENT user-cpu-microseconds-perf (#PCDATA)>

<!ELEMENT user-cpu-seconds-perf (#PCDATA)>

<!ELEMENT user-name (#PCDATA)>

<!ELEMENT vlan-tag (#PCDATA)>

<!ELEMENT vol-ctxsw-perf (#PCDATA)>

<!ELEMENT wrap-cnt (#PCDATA)>

<!ELEMENT wrapable (#PCDATA)>
```

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CHAPTER 83

DTD for Firewall Filter Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-filter.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-filter.dtd -->

<!ELEMENT action-name (#PCDATA)>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT counter (counter-name | byte-count | packet-count)*>

<!ELEMENT counter-name (#PCDATA)>

<!ELEMENT destination-address (#PCDATA)>

<!ELEMENT filter-information (filter-name | counter | policer | filter-version)*>

<!ELEMENT filter-name (#PCDATA)>

<!ELEMENT filter-version (filter-name | version)*>

<!ELEMENT firewall-db-object-config (#PCDATA)>

<!ELEMENT firewall-db-object-counts (firewall-db-object-type |
firewall-db-object-dynamic | firewall-db-object-config |
firewall-db-object-kernel)*>

<!ELEMENT firewall-db-object-dynamic (#PCDATA)>

<!ELEMENT firewall-db-object-information (firewall-db-object-counts)*>

<!ELEMENT firewall-db-object-kernel (#PCDATA)>

<!ELEMENT firewall-db-object-type (#PCDATA)>
```

```
<!ELEMENT firewall-debug-information (firewall-debug-str)*>

<!ELEMENT firewall-debug-str (#PCDATA)>

<!ELEMENT firewall-emalloc-information (firewall-emalloc-stats)*>

<!ELEMENT firewall-emalloc-max-alloced (#PCDATA)>

<!ELEMENT firewall-emalloc-num-times (#PCDATA)>

<!ELEMENT firewall-emalloc-phase (#PCDATA)>

<!ELEMENT firewall-emalloc-stats (firewall-emalloc-phase | firewall-emalloc-type
 | firewall-emalloc-num-times | firewall-emalloc-max-alloced)*>

<!ELEMENT firewall-emalloc-type (#PCDATA)>

<!ELEMENT firewall-information (filter-information)*>

<!ELEMENT firewall-log-information (log-information)*>

<!ELEMENT firewall-prefix-action-information (filter-name | counter | policer)*>

<!ELEMENT icmp-code (#PCDATA)>

<!ELEMENT icmp-type (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT log-information (time | filter-name | action-name | interface-name |
protocol-name | source-address | destination-address | packet-length | icmp-type
 | icmp-code)*>
<!ATTLIST log-information junos:style CDATA #IMPLIED>

<!ELEMENT packet-count (#PCDATA)>

<!ELEMENT packet-length (#PCDATA)>

<!ELEMENT policer (policer-name | packet-count | byte-count)*>

<!ELEMENT policer-name (#PCDATA)>

<!ELEMENT protocol-name (#PCDATA)>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT time (#PCDATA)>

<!ELEMENT version (#PCDATA)>
```


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CHAPTER 84

DTD for J20 GGSN Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ggsn.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
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<!-- junos-ggsn.dtd -->

<!ELEMENT accounting-failure (#PCDATA)>

<!ELEMENT activation-bearer-ctrl-accept (#PCDATA)>

<!ELEMENT activation-bearer-ctrl-downgrade (#PCDATA)>

<!ELEMENT activation-bearer-ctrl-reject (#PCDATA)>

<!ELEMENT activation-bearer-ctrl-upgrade (#PCDATA)>

<!ELEMENT activation-no-bearer-ctrl-accept (#PCDATA)>

<!ELEMENT activation-no-bearer-ctrl-downgrade (#PCDATA)>

<!ELEMENT activation-no-bearer-ctrl-reject (#PCDATA)>

<!ELEMENT active-predifened-charging-rulbases (#PCDATA)>

<!ELEMENT active-predifened-charging-rules (#PCDATA)>

<!ELEMENT active-sessions (#PCDATA)>

<!ELEMENT active-time (#PCDATA)>

<!ELEMENT active-tunnels (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT apn-name (#PCDATA)>
```

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```
<!ELEMENT apn-pdp-context-deletion-results (apn-name | user-category |
interface-pdp-context-deletion-information)*>

<!ELEMENT apn-statistics (name | pdp-context-statistics | gtp-error-statistics |
 uplink | downlink | ggsn-pdp-per-user-category | radius-statistics-information
| rulespace-based-charging-statistics | signalling | tft-filter-count |
neighbor-solicitation-req-received | neighbor-solicitation-req-responded |
router-solicitation-req-received | router-solicitation-req-responded)*>

<!ELEMENT apn-statistics-information (apn-statistics | sbcc-statistics-information
 | service-based-charging-for-gx)*>

<!ELEMENT authentication-failure (#PCDATA)>

<!ELEMENT authorization-discard-information (authorization-discard-statistics)*>

<!ELEMENT authorization-discard-statistics (service-class-source | packets |
bytes)*>

<!ELEMENT authorization-failure (#PCDATA)>

<!ELEMENT billing-gateway (address | time-connected)*>

<!ELEMENT bytes (#PCDATA)>

<!ELEMENT bytes-ipv6 (#PCDATA)>

<!ELEMENT call-trace (imsi | msisdn | time-started | nsapi-information)*>

<!ELEMENT call-trace-information (number-enabled | number-active | call-trace)*>

<!ELEMENT ccas-authorization-failure (#PCDATA)>

<!ELEMENT ccas-cc-not-applicable (#PCDATA)>

<!ELEMENT ccas-identifier (#PCDATA)>

<!ELEMENT ccas-information (ccas-statistics)*>

<!ELEMENT ccas-start-request (#PCDATA)>

<!ELEMENT ccas-start-request-failed (#PCDATA)>

<!ELEMENT ccas-statistics (ccas-identifier | ccas-start-request |
ccas-start-request-failed | ccas-update-request | ccas-update-request-failed |
ccas-stop-request | ccas-stop-request-failed | ccas-user-service-denied |
ccas-user-unknown | ccas-authorization-failure | ccas-cc-not-applicable)*>

<!ELEMENT ccas-stop-request (#PCDATA)>

<!ELEMENT ccas-stop-request-failed (#PCDATA)>

<!ELEMENT ccas-update-request (#PCDATA)>

<!ELEMENT ccas-update-request-failed (#PCDATA)>

<!ELEMENT ccas-user-service-denied (#PCDATA)>

<!ELEMENT ccas-user-unknown (#PCDATA)>

<!ELEMENT ccr-identifier (#PCDATA)>
```


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```
<!ELEMENT ccr-statistics (ccr-identifier | authorization-failure |
authentication-failure | session-failure)*>

<!ELEMENT charging-identifier (#PCDATA)>

<!ELEMENT charging-statistics-information (encoded-cdrs | failed-encoded-cdrs |
generated-ftp-cdrs | generated-gtpp-cdrs | gtpp-log-cdrs | gtpp-send-attempted-cdrs
 | gtpp-send-failed-cdrs)*>

<!ELEMENT control-rx-packets (#PCDATA)>

<!ELEMENT control-tx-packets (#PCDATA)>

<!ELEMENT cpu-id (#PCDATA)>

<!ELEMENT cpu-info (cpu-id | cpu-load)*>

<!ELEMENT cpu-load (#PCDATA)>

<!ELEMENT create-request-received (#PCDATA)>

<!ELEMENT create-response-transmitted (#PCDATA)>

<!ELEMENT created-tunnels (#PCDATA)>

<!ELEMENT credit-start-request-attempted (#PCDATA)>

<!ELEMENT credit-start-request-failed (#PCDATA)>

<!ELEMENT credit-stop-request-attempted (#PCDATA)>

<!ELEMENT credit-stop-request-failed (#PCDATA)>

<!ELEMENT credit-update-request-attempted (#PCDATA)>

<!ELEMENT credit-update-request-failed (#PCDATA)>

<!ELEMENT daemon-name (#PCDATA)>

<!ELEMENT das-identifier (#PCDATA)>

<!ELEMENT das-information (das-statistics)*>

<!ELEMENT das-statistics (das-identifier | request)*>

<!ELEMENT data-record-transfer-statistics (request-transmitted | response-received
 | request-accepted | error-no-resources | error-service-unsupported |
error-system-failure | error-invalid-request-format | error-version-unsupported
| error-request-unfulfilled | error-decoding-error | error-already-fulfilled |
error-duplicate-packet-fulfilled | send-data-record-packet)*>

<!ELEMENT data-rx-packets (#PCDATA)>

<!ELEMENT data-tx-packets (#PCDATA)>

<!ELEMENT default-apn-invalid (#PCDATA)>

<!ELEMENT default-apn-selected (#PCDATA)>

<!ELEMENT delete-request-received (#PCDATA)>
```

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```
<!ELEMENT delete-request-transmitted (#PCDATA)>

<!ELEMENT delete-response-received (#PCDATA)>

<!ELEMENT delete-response-transmitted (#PCDATA)>

<!ELEMENT destination-port-range (#PCDATA)>

<!ELEMENT diffserv-code-point (#PCDATA)>

<!ELEMENT discard-rx-packets (#PCDATA)>

<!ELEMENT discard-tx-packets (#PCDATA)>

<!ELEMENT discarded-downlink (#PCDATA)>

<!ELEMENT discarded-uplink (#PCDATA)>

<!ELEMENT downlink (packets | packets-ipv6 | bytes | bytes-ipv6 | dropped-packets
 | dropped-packets-ipv6 | dropped-bytes | dropped-bytes-ipv6)*>

<!ELEMENT downlink-bitrate (#PCDATA)>

<!ELEMENT downlink-bytes (#PCDATA)>

<!ELEMENT downlink-packets (#PCDATA)>

<!ELEMENT downlink-statistics (#PCDATA)>

<!ELEMENT dropped-bytes (#PCDATA)>

<!ELEMENT dropped-bytes-ipv6 (#PCDATA)>

<!ELEMENT dropped-packets (#PCDATA)>

<!ELEMENT dropped-packets-ipv6 (#PCDATA)>

<!ELEMENT duration-time (#PCDATA)>

<!ELEMENT dynamic-charging-rules (#PCDATA)>

<!ELEMENT echo-request-statistics (request-received | request-transmitted |
response-received | response-transmitted)*>

<!ELEMENT encoded-cdrs (#PCDATA)>

<!ELEMENT error-access-denied (#PCDATA)>

<!ELEMENT error-already-activated (#PCDATA)>

<!ELEMENT error-already-fulfilled (#PCDATA)>

<!ELEMENT error-authentication-failed (#PCDATA)>

<!ELEMENT error-decoding-error (#PCDATA)>

<!ELEMENT error-duplicate-packet-fulfilled (#PCDATA)>

<!ELEMENT error-indication-received (#PCDATA)>
```


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```
<!ELEMENT error-indication-transmitted (#PCDATA)>
<!ELEMENT error-invalid-request-format (#PCDATA)>
<!ELEMENT error-invalid-request-format-when-delete (#PCDATA)>
<!ELEMENT error-invalid-request-format-when-update (#PCDATA)>
<!ELEMENT error-mandatory-ie-invalid (#PCDATA)>
<!ELEMENT error-mandatory-ie-invalid-when-delete (#PCDATA)>
<!ELEMENT error-mandatory-ie-invalid-when-update (#PCDATA)>
<!ELEMENT error-mandatory-ie-missing (#PCDATA)>
<!ELEMENT error-mandatory-ie-missing-when-delete (#PCDATA)>
<!ELEMENT error-mandatory-ie-missing-when-update (#PCDATA)>
<!ELEMENT error-no-dynamic-address-available (#PCDATA)>
<!ELEMENT error-no-memory (#PCDATA)>
<!ELEMENT error-no-resources (#PCDATA)>
<!ELEMENT error-optional-ie-invalid (#PCDATA)>
<!ELEMENT error-optional-ie-invalid-when-delete (#PCDATA)>
<!ELEMENT error-optional-ie-invalid-when-update (#PCDATA)>
<!ELEMENT error-packet-filter-semantic (#PCDATA)>
<!ELEMENT error-packet-filter-semantic-when-update (#PCDATA)>
<!ELEMENT error-packet-filter-syntax (#PCDATA)>
<!ELEMENT error-packet-filter-syntax-when-update (#PCDATA)>
<!ELEMENT error-reference-invalid (#PCDATA)>
<!ELEMENT error-reference-invalid-when-delete (#PCDATA)>
<!ELEMENT error-reference-invalid-when-update (#PCDATA)>
<!ELEMENT error-request-unfulfilled (#PCDATA)>
<!ELEMENT error-service-unsupported (#PCDATA)>
<!ELEMENT error-system-failure (#PCDATA)>
<!ELEMENT error-system-failure-when-update (#PCDATA)>
<!ELEMENT error-tft-error-semantic (#PCDATA)>
<!ELEMENT error-tft-error-semantic-when-update (#PCDATA)>
<!ELEMENT error-tft-error-syntax (#PCDATA)>
<!ELEMENT error-tft-error-syntax-when-update (#PCDATA)>
```

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```
<!ELEMENT error-unknown-apn (#PCDATA)>

<!ELEMENT error-unknown-pdp-address-or-type (#PCDATA)>

<!ELEMENT error-version-unsupported (#PCDATA)>

<!ELEMENT evaluation-precedence (#PCDATA)>

<!ELEMENT external-address (#PCDATA)>

<!ELEMENT external-credit-update (#PCDATA)>

<!ELEMENT external-credit-update-no-match (#PCDATA)>

<!ELEMENT external-prs-update (#PCDATA)>

<!ELEMENT external-prs-update-no-match (#PCDATA)>

<!ELEMENT external-update-failed (#PCDATA)>

<!ELEMENT failed-encoded-cdrs (#PCDATA)>

<!ELEMENT flow-label (#PCDATA)>

<!ELEMENT gate-discarded-downlink (#PCDATA)>

<!ELEMENT gate-discarded-uplink (#PCDATA)>

<!ELEMENT generated-ftp-cdrs (#PCDATA)>

<!ELEMENT generated-gtpp-cdrs (#PCDATA)>

<!ELEMENT ggsn-interface (service-interface | weighted-pdp-context-load-in-payload
 | weighted-pdp-context-load-in-control | external-address | internal-address |
operating-function | hardware-version | software-version | pdp | resources |
tft-statistics | time-started | sbcc-statistics-information)*>

<!ELEMENT ggsn-interface-information (ggsn-interface)*>

<!ELEMENT ggsn-pdp-per-user-category (user-category-line)*>

<!ELEMENT ggsn-statistics (time-started | pdp-context-statistics |
interface-pdp-context-statistics-information | subscriber-count | uplink | downlink
 | tft-filter-count | wlan-pdp-context-activation-procedures |
wlan-processed-uplink-bytes | wlan-dropped-uplink-packets |
wlan-processed-uplink-packets | wlan-completed-pdp-context-activations |
wlan-active-pdp-contexts | wlan-processed-downlink-bytes |
wlan-dropped-downlink-packets | wlan-processed-downlink-packets |
weighted-pdp-context-load | sbcc-statistics-information |
charging-statistics-information | radius-statistics-information)*>

<!ELEMENT gi-diffserv-code-point (#PCDATA)>

<!ELEMENT gn-diffserv-code-point (#PCDATA)>

<!ELEMENT gtp-error-statistics (request-accepted | error-indication-received |
error-indication-transmitted | error-version-unsupported |
error-invalid-request-format | error-invalid-request-format-when-update |
error-invalid-request-format-when-delete | error-no-resources |
error-no-dynamic-address-available | error-no-memory | error-unknown-apn |
```


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```
error-unknown-pdp-address-or-type | error-authentication-failed |
error-system-failure | error-system-failure-when-update | error-tft-error-semantic
 | error-tft-error-semantic-when-update | error-tft-error-syntax |
error-tft-error-syntax-when-update | error-packet-filter-semantic |
error-packet-filter-semantic-when-update | error-packet-filter-syntax |
error-packet-filter-syntax-when-update | error-mandatory-ie-missing |
error-mandatory-ie-missing-when-update | error-mandatory-ie-missing-when-delete
| error-mandatory-ie-invalid | error-mandatory-ie-invalid-when-update |
error-mandatory-ie-invalid-when-delete | error-optional-ie-invalid |
error-optional-ie-invalid-when-update | error-optional-ie-invalid-when-delete |
error-reference-invalid | error-reference-invalid-when-update |
error-reference-invalid-when-delete | error-service-unsupported |
error-already-activated | error-access-denied)*>

<!ELEMENT gtp-prime-error-statistics (error-mandatory-ie-missing |
error-mandatory-ie-invalid | error-optional-ie-invalid | error-reference-invalid)*>

<!ELEMENT gtp-prime-statistics (service-interface | echo-request-statistics |
version-unsupported-statistics | node-alive-request-statistics |
redirection-request-statistics | data-record-transfer-statistics |
gtp-prime-error-statistics)*>

<!ELEMENT gtp-prime-statistics-information (billing-gateway |
gtp-prime-statistics)*>

<!ELEMENT gtp-statistics (service-interface | uplink-packets | uplink-bytes |
downlink-packets | downlink-bytes | dropped-packets | active-tunnels |
created-tunnels | echo-request-statistics | version-unsupported-statistics |
pdp-request-statistics | gtp-error-statistics)*>

<!ELEMENT gtp-statistics-information (gtp-statistics)*>

<!ELEMENT gtpp-log-cdrs (#PCDATA)>

<!ELEMENT gtpp-send-attempted-cdrs (#PCDATA)>

<!ELEMENT gtpp-send-failed-cdrs (#PCDATA)>

<!ELEMENT hardware-version (#PCDATA)>

<!ELEMENT ims-dedicated-completed-activation (#PCDATA)>

<!ELEMENT ims-dedicated-failed-activation (#PCDATA)>

<!ELEMENT ims-general-active-failed-activation (#PCDATA)>

<!ELEMENT ims-general-completed-activation (#PCDATA)>

<!ELEMENT ims-general-failed-activation (#PCDATA)>

<!ELEMENT ims-signalling-packets-drops (#PCDATA)>

<!ELEMENT imsi (#PCDATA)>

<!ELEMENT incoming (packets | bytes)*>

<!ELEMENT inspection-information (packet-inspection)*>

<!ELEMENT interface-action (#PCDATA)>

<!ELEMENT interface-action-results (interface-action | service-interface |
```

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```
daemon-name)*>

<!ELEMENT interface-pdp-context-deletion (pdp-deleted | service-interface)*>

<!ELEMENT interface-pdp-context-deletion-information
(interface-pdp-context-deletion)*>

<!ELEMENT interface-pdp-context-statistics (service-interface |
pdp-context-statistics)*>

<!ELEMENT interface-pdp-context-statistics-information
(interface-pdp-context-statistics)*>

<!ELEMENT internal-address (#PCDATA)>

<!ELEMENT l2tp-tunnel-packet-statistics (control-tx-packets | control-rx-packets
 | data-tx-packets | data-rx-packets | discard-tx-packets | discard-rx-packets)*>

<!ELEMENT l2tp-tunnel-statistics (local-tid | remote-tid | local-ip | remote-ip
| active-sessions | l2tp-tunnel-packet-statistics)*>

<!ELEMENT l2tp-tunnel-statistics-information (l2tp-tunnel-statistics)*>

<!ELEMENT local-ip (#PCDATA)>

<!ELEMENT local-tid (#PCDATA)>

<!ELEMENT logical-apn-statistics (name | pdp-attempted-activation | pdp-blocked
| default-apn-selected | default-apn-invalid | username-based-apn-selected |
username-based-apn-invalid)*>

<!ELEMENT logical-apn-statistics-information (logical-apn-statistics)*>

<!ELEMENT maximum-tft-filter-depth (#PCDATA)>

<!ELEMENT mean-tft-filter-depth (#PCDATA)>

<!ELEMENT memory-total (#PCDATA)>

<!ELEMENT memory-used (#PCDATA)>

<!ELEMENT mobile-user (imsi | msisdn | pdp-context-information)*>

<!ELEMENT mobile-user-information (mobile-user)*>

<!ELEMENT modification-bearer-ctrl-accept (#PCDATA)>

<!ELEMENT modification-bearer-ctrl-deactivate (#PCDATA)>

<!ELEMENT modification-bearer-ctrl-downgrade (#PCDATA)>

<!ELEMENT modification-bearer-ctrl-upgrade (#PCDATA)>

<!ELEMENT modification-no-bearer-ctrl-accept (#PCDATA)>

<!ELEMENT modification-no-bearer-ctrl-deactivate (#PCDATA)>

<!ELEMENT modification-no-bearer-ctrl-downgrade (#PCDATA)>

<!ELEMENT msisdn (#PCDATA)>
```


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```
<!ELEMENT name (#PCDATA)>

<!ELEMENT neighbor-solicitation-req-received (#PCDATA)>

<!ELEMENT neighbor-solicitation-req-responded (#PCDATA)>

<!ELEMENT node-action (#PCDATA)>

<!ELEMENT node-action-results (node-action)*>

<!ELEMENT node-alive-request-statistics (request-received | request-transmitted
| response-received | response-transmitted)*>

<!ELEMENT nsapi (#PCDATA)>

<!ELEMENT nsapi-information (nsapi)*>

<!ELEMENT nsapi-linked (#PCDATA)>

<!ELEMENT number-active (#PCDATA)>

<!ELEMENT number-enabled (#PCDATA)>

<!ELEMENT operating-function (#PCDATA)>

<!ELEMENT outgoing (packets | bytes)*>

<!ELEMENT packet-filter (evaluation-precedence | source-address | source-mask |
source-port-range | destination-port-range | diffserv-code-point | flow-label |
spi | protocol)*>

<!ELEMENT packet-filter-information (packet-filter)*>

<!ELEMENT packet-inspection (#PCDATA)>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT packets-ipv6 (#PCDATA)>

<!ELEMENT pdp (pdp-state | pdp-assigned | pdp-capacity)*>

<!ELEMENT pdp-active (#PCDATA)>

<!ELEMENT pdp-active-background (#PCDATA)>

<!ELEMENT pdp-active-conversational (#PCDATA)>

<!ELEMENT pdp-active-imsi (#PCDATA)>

<!ELEMENT pdp-active-interactive (#PCDATA)>

<!ELEMENT pdp-active-ipv6 (#PCDATA)>

<!ELEMENT pdp-active-l2tp-sessions (#PCDATA)>

<!ELEMENT pdp-active-l2tp-tunnels (#PCDATA)>

<!ELEMENT pdp-active-msisdn (#PCDATA)>

<!ELEMENT pdp-active-streaming (#PCDATA)>
```

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```
<!ELEMENT pdp-apn-by-logical-apn-default (#PCDATA)>
<!ELEMENT pdp-apn-by-logical-apn-selection (#PCDATA)>
<!ELEMENT pdp-assigned (#PCDATA)>
<!ELEMENT pdp-assigned-msisdn (#PCDATA)>
<!ELEMENT pdp-assigned-shared-msisdn (#PCDATA)>
<!ELEMENT pdp-attempted-activation (#PCDATA)>
<!ELEMENT pdp-attempted-activation-dhcp (#PCDATA)>
<!ELEMENT pdp-attempted-activation-dynamic (#PCDATA)>
<!ELEMENT pdp-attempted-activation-ipv6 (#PCDATA)>
<!ELEMENT pdp-attempted-activation-local-pool (#PCDATA)>
<!ELEMENT pdp-attempted-activation-radius (#PCDATA)>
<!ELEMENT pdp-attempted-authentication-activation (#PCDATA)>
<!ELEMENT pdp-attempted-deactivation (#PCDATA)>
<!ELEMENT pdp-attempted-mobile-activation (#PCDATA)>
<!ELEMENT pdp-attempted-mobile-deactivation (#PCDATA)>
<!ELEMENT pdp-attempted-mobile-sgsn-update (#PCDATA)>
<!ELEMENT pdp-attempted-node-deactivation (#PCDATA)>
<!ELEMENT pdp-blocked (#PCDATA)>
<!ELEMENT pdp-capacity (#PCDATA)>
<!ELEMENT pdp-completed-activation (#PCDATA)>
<!ELEMENT pdp-completed-activation-dhcp (#PCDATA)>
<!ELEMENT pdp-completed-activation-dynamic (#PCDATA)>
<!ELEMENT pdp-completed-activation-ipv6 (#PCDATA)>
<!ELEMENT pdp-completed-activation-local-pool (#PCDATA)>
<!ELEMENT pdp-completed-activation-radius (#PCDATA)>
<!ELEMENT pdp-completed-authentication-activation (#PCDATA)>
<!ELEMENT pdp-completed-deactivation (#PCDATA)>
<!ELEMENT pdp-completed-idle-deactivation (#PCDATA)>
<!ELEMENT pdp-completed-mobile-activation (#PCDATA)>
<!ELEMENT pdp-completed-mobile-deactivation (#PCDATA)>
<!ELEMENT pdp-completed-mobile-sgsn-update (#PCDATA)>
```


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```
<!ELEMENT pdp-completed-node-deactivation (#PCDATA)>

<!ELEMENT pdp-completed-session-deactivation (#PCDATA)>

<!ELEMENT pdp-context (nsapi | nsapi-linked | apn-name | sgsn-address | address
| charging-identifier | quality-of-service | traffic-flow-template-information)*>

<!ELEMENT pdp-context-deletion-results (mobile-user)*>

<!ELEMENT pdp-context-information (pdp-context)*>

<!ELEMENT pdp-context-statistics (pdp-active | pdp-active-conversational |
pdp-active-streaming | pdp-active-interactive | pdp-active-background |
pdp-active-ipv6 | pdp-active-imsi | pdp-active-msisdn | pdp-blocked |
pdp-apn-by-logical-apn-selection | pdp-apn-by-logical-apn-default |
pdp-assigned-msisdn | pdp-assigned-shared-msisdn | pdp-attempted-activation |
pdp-attempted-activation-ipv6 | pdp-completed-activation |
pdp-completed-activation-ipv6 | pdp-attempted-activation-dhcp |
pdp-completed-activation-dhcp | pdp-attempted-activation-radius |
pdp-completed-activation-radius | pdp-attempted-activation-local-pool |
pdp-completed-activation-local-pool | pdp-attempted-activation-dynamic |
pdp-completed-activation-dynamic | pdp-attempted-mobile-activation |
pdp-completed-mobile-activation | pdp-attempted-deactivation |
pdp-completed-deactivation | pdp-attempted-node-deactivation |
pdp-completed-node-deactivation | pdp-completed-idle-deactivation |
pdp-completed-session-deactivation | pdp-attempted-mobile-deactivation |
pdp-completed-mobile-deactivation | pdp-attempted-authentication-activation |
pdp-completed-authentication-activation | pdp-attempted-mobile-sgsn-update |
pdp-completed-mobile-sgsn-update | pdp-created | pdp-created-ipv6 |
pdp-create-failed | pdp-create-failed-ipv6 | pdp-secondary-created |
pdp-secondary-created-ipv6 | pdp-secondary-create-failed |
pdp-secondary-attempted-ipv6 | pdp-secondary-completed-ipv6 | pdp-last-create |
pdp-secondary-create-failed-ipv6 | pdp-updates | pdp-update-failed | pdp-deleted
 | pdp-deleted-by-idle-supervision | pdp-deleted-by-session-supervision |
pdp-deleted-by-command | pdp-deleted-by-failure | pdp-delete-failed |
pdp-last-delete | pdp-successful-deactivations | pdp-failed-deactivations |
pdp-maximum | pdp-minimum | pdp-mean | pdp-active-l2tp-tunnels |
pdp-active-l2tp-sessions | pdp-maximum-active-l2tp-tunnels |
pdp-maximum-active-l2tp-sessions | ims-dedicated-completed-activation |
ims-dedicated-failed-activation | ims-general-completed-activation |
ims-general-failed-activation | ims-general-active-failed-activation |
ims-signalling-packets-drops)*>

<!ELEMENT pdp-create-failed (#PCDATA)>

<!ELEMENT pdp-create-failed-ipv6 (#PCDATA)>

<!ELEMENT pdp-created (#PCDATA)>

<!ELEMENT pdp-created-ipv6 (#PCDATA)>

<!ELEMENT pdp-delete-failed (#PCDATA)>

<!ELEMENT pdp-deleted (#PCDATA)>

<!ELEMENT pdp-deleted-by-command (#PCDATA)>

<!ELEMENT pdp-deleted-by-failure (#PCDATA)>

<!ELEMENT pdp-deleted-by-idle-supervision (#PCDATA)>
```

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```
<!ELEMENT pdp-deleted-by-session-supervision (#PCDATA)>

<!ELEMENT pdp-diagnostics-per-apn (pdp-id)*>

<!ELEMENT pdp-failed-deactivations (#PCDATA)>

<!ELEMENT pdp-id (#PCDATA)>

<!ELEMENT pdp-initiated-deactivation (#PCDATA)>

<!ELEMENT pdp-last-create (#PCDATA)>
<!ATTLIST pdp-last-create junos:seconds CDATA #IMPLIED>

<!ELEMENT pdp-last-delete (#PCDATA)>
<!ATTLIST pdp-last-delete junos:seconds CDATA #IMPLIED>

<!ELEMENT pdp-maximum (#PCDATA)>

<!ELEMENT pdp-maximum-active-l2tp-sessions (#PCDATA)>

<!ELEMENT pdp-maximum-active-l2tp-tunnels (#PCDATA)>

<!ELEMENT pdp-mean (#PCDATA)>

<!ELEMENT pdp-minimum (#PCDATA)>

<!ELEMENT pdp-request-statistics (create-request-received |
create-response-transmitted | update-request-received | update-request-transmitted
 | update-response-received | update-response-transmitted | delete-request-received
 | delete-request-transmitted | delete-response-received |
delete-response-transmitted)*>

<!ELEMENT pdp-secondary-attempted-ipv6 (#PCDATA)>

<!ELEMENT pdp-secondary-completed-ipv6 (#PCDATA)>

<!ELEMENT pdp-secondary-create-failed (#PCDATA)>

<!ELEMENT pdp-secondary-create-failed-ipv6 (#PCDATA)>

<!ELEMENT pdp-secondary-created (#PCDATA)>

<!ELEMENT pdp-secondary-created-ipv6 (#PCDATA)>

<!ELEMENT pdp-state (#PCDATA)>

<!ELEMENT pdp-successful-deactivations (#PCDATA)>

<!ELEMENT pdp-update-failed (#PCDATA)>

<!ELEMENT pdp-updates (#PCDATA)>

<!ELEMENT pras-identifier (#PCDATA)>

<!ELEMENT pras-information (pras-statistics)*>

<!ELEMENT pras-start-request (#PCDATA)>

<!ELEMENT pras-start-request-failed (#PCDATA)>
```


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```
<!ELEMENT pras-statistics (pras-identifier | pras-start-request |
pras-start-request-failed | pras-update-request | pras-update-request-failed |
pras-stop-request | pras-stop-request-failed | pras-user-service-denied |
pras-user-unknown)*>

<!ELEMENT pras-stop-request (#PCDATA)>

<!ELEMENT pras-stop-request-failed (#PCDATA)>

<!ELEMENT pras-update-request (#PCDATA)>

<!ELEMENT pras-update-request-failed (#PCDATA)>

<!ELEMENT pras-user-service-denied (#PCDATA)>

<!ELEMENT pras-user-unknown (#PCDATA)>

<!ELEMENT prepaid-context (#PCDATA)>

<!ELEMENT prepaid-pdp-creates-attempted (#PCDATA)>

<!ELEMENT prepaid-pdp-creates-failed (#PCDATA)>

<!ELEMENT prepaid-request (#PCDATA)>

<!ELEMENT prepaid-user (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT quality-of-service (gi-diffserv-code-point | gn-diffserv-code-point |
downlink-bitrate)*>

<!ELEMENT radius-authentication-failure (#PCDATA)>

<!ELEMENT radius-statistics-information (radius-authentication-failure |
accounting-failure)*>

<!ELEMENT rate-group-identifier (#PCDATA)>

<!ELEMENT rate-group-information (rate-group-statistics)*>

<!ELEMENT rate-group-statistics (rate-group-identifier | transactions-start |
transactions-success)*>

<!ELEMENT rating-initial-request-attempted (#PCDATA)>

<!ELEMENT rating-initial-request-failed (#PCDATA)>

<!ELEMENT rating-request (#PCDATA)>

<!ELEMENT rating-update-request-attempted (#PCDATA)>

<!ELEMENT rating-update-request-failed (#PCDATA)>

<!ELEMENT redirection-request-statistics (request-received | request-transmitted
 | response-received | response-transmitted)*>

<!ELEMENT remote-ip (#PCDATA)>

<!ELEMENT remote-tid (#PCDATA)>
```

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```
<!ELEMENT request (#PCDATA)>

<!ELEMENT request-accepted (#PCDATA)>

<!ELEMENT request-received (#PCDATA)>

<!ELEMENT request-transmitted (#PCDATA)>

<!ELEMENT resources (cpu-info | memory-total | memory-used)*>

<!ELEMENT response-received (#PCDATA)>

<!ELEMENT response-transmitted (#PCDATA)>

<!ELEMENT router-solicitation-req-received (#PCDATA)>

<!ELEMENT router-solicitation-req-responded (#PCDATA)>

<!ELEMENT rs-identifier (#PCDATA)>

<!ELEMENT rs-statistics (rs-identifier | uplink-statistics | downlink-statistics
 | service-instances | discarded-uplink | discarded-downlink |
gate-discarded-uplink | gate-discarded-downlink)*>

<!ELEMENT rulespace-based-charging-statistics (rs-statistics)*>

<!ELEMENT sbcc-statistics-information (prepaid-request | rating-request |
prepaid-user | prepaid-context | prepaid-pdp-creates-attempted |
prepaid-pdp-creates-failed | pdp-initiated-deactivation |
credit-start-request-attempted | credit-start-request-failed |
rating-initial-request-attempted | rating-initial-request-failed |
rating-update-request-attempted | rating-update-request-failed |
credit-update-request-attempted | credit-update-request-failed |
credit-stop-request-attempted | credit-stop-request-failed | external-prs-update
 | external-prs-update-no-match | external-credit-update |
external-credit-update-no-match | external-update-failed | duration-time |
activation-bearer-ctrl-accept | activation-bearer-ctrl-reject |
activation-bearer-ctrl-upgrade | activation-bearer-ctrl-downgrade |
modification-bearer-ctrl-accept | modification-bearer-ctrl-deactivate |
modification-bearer-ctrl-upgrade | modification-bearer-ctrl-downgrade |
activation-no-bearer-ctrl-accept | activation-no-bearer-ctrl-reject |
activation-no-bearer-ctrl-downgrade | modification-no-bearer-ctrl-accept |
modification-no-bearer-ctrl-deactivate | modification-no-bearer-ctrl-downgrade |
 das-information | pras-information | ccas-information | service-class-information
 | service-identifier-information | rate-group-information |
authorization-discard-information)*>

<!ELEMENT send-data-record-packet (#PCDATA)>

<!ELEMENT service-based-charging-for-gx (ccr-statistics | dynamic-charging-rules
 | active-predifened-charging-rules | active-predifened-charging-rulbases)*>

<!ELEMENT service-class-identifier (#PCDATA)>

<!ELEMENT service-class-information (service-class-statistics)*>

<!ELEMENT service-class-source (#PCDATA)>

<!ELEMENT service-class-statistics (service-class-identifier | uplink-bytes |
downlink-bytes | active-time)*>
```


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```
<!ELEMENT service-id-identifier (#PCDATA)>

<!ELEMENT service-id-information (service-id-statistics)*>

<!ELEMENT service-id-statistics (service-id-identifier | uplink-bytes |
downlink-bytes | transactions-charged | transactions-failed | transactions-start
 | transactions-success)*>

<!ELEMENT service-identifier-information (#PCDATA)>

<!ELEMENT service-instances (#PCDATA)>

<!ELEMENT service-interface (#PCDATA)>

<!ELEMENT session-failure (#PCDATA)>

<!ELEMENT sgsn-address (#PCDATA)>

<!ELEMENT sgsn-statistics (address | pdp-context-statistics | uplink | downlink
| gtp-error-statistics)*>

<!ELEMENT sgsn-statistics-information (sgsn-statistics)*>

<!ELEMENT signalling (incoming | outgoing)*>

<!ELEMENT software-action-message (#PCDATA)>

<!ELEMENT software-action-results (software-action-message)*>

<!ELEMENT software-version (#PCDATA)>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT source-mask (#PCDATA)>

<!ELEMENT source-port-range (#PCDATA)>

<!ELEMENT spi (#PCDATA)>

<!ELEMENT subscriber-count (#PCDATA)>

<!ELEMENT tft-filter-count (#PCDATA)>

<!ELEMENT tft-statistics (maximum-tft-filter-depth | mean-tft-filter-depth)*>

<!ELEMENT time-connected (#PCDATA)>
<!ATTLIST time-connected junos:seconds CDATA #IMPLIED>

<!ELEMENT time-started (#PCDATA)>
<!ATTLIST time-started junos:seconds CDATA #IMPLIED>

<!ELEMENT traffic-flow-template (packet-filter-information)*>

<!ELEMENT traffic-flow-template-information (traffic-flow-template)*>

<!ELEMENT transactions-charged (#PCDATA)>

<!ELEMENT transactions-failed (#PCDATA)>

<!ELEMENT transactions-start (#PCDATA)>
```

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```
<!ELEMENT transactions-success (#PCDATA)>

<!ELEMENT update-request-received (#PCDATA)>

<!ELEMENT update-request-transmitted (#PCDATA)>

<!ELEMENT update-response-received (#PCDATA)>

<!ELEMENT update-response-transmitted (#PCDATA)>

<!ELEMENT uplink (packets | packets-ipv6 | bytes | bytes-ipv6 | dropped-packets
| dropped-packets-ipv6 | dropped-bytes | dropped-bytes-ipv6)*>

<!ELEMENT uplink-bytes (#PCDATA)>

<!ELEMENT uplink-packets (#PCDATA)>

<!ELEMENT uplink-statistics (#PCDATA)>

<!ELEMENT user-category (#PCDATA)>

<!ELEMENT user-category-line (user-category | pdp-active)*>

<!ELEMENT username-based-apn-invalid (#PCDATA)>

<!ELEMENT username-based-apn-selected (#PCDATA)>

<!ELEMENT version-unsupported-received (#PCDATA)>

<!ELEMENT version-unsupported-statistics (version-unsupported-received |
version-unsupported-transmitted)*>

<!ELEMENT version-unsupported-transmitted (#PCDATA)>

<!ELEMENT weighted-pdp-context-load (weighted-pdp-context-load-in-control |
weighted-pdp-context-load-in-payload)*>

<!ELEMENT weighted-pdp-context-load-in-control (#PCDATA)>

<!ELEMENT weighted-pdp-context-load-in-payload (#PCDATA)>

<!ELEMENT wlan-active-pdp-contexts (#PCDATA)>

<!ELEMENT wlan-completed-pdp-context-activations (#PCDATA)>

<!ELEMENT wlan-dropped-downlink-packets (#PCDATA)>

<!ELEMENT wlan-dropped-uplink-packets (#PCDATA)>

<!ELEMENT wlan-pdp-context-activation-procedures (#PCDATA)>

<!ELEMENT wlan-processed-downlink-bytes (#PCDATA)>

<!ELEMENT wlan-processed-downlink-packets (#PCDATA)>

<!ELEMENT wlan-processed-uplink-bytes (#PCDATA)>

<!ELEMENT wlan-processed-uplink-packets (#PCDATA)>
```


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CHAPTER 85

DTD for GRES Test Point Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-gres-test-point.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-gres-test-point.dtd -->

<!ELEMENT actions (trigger-after | delay | trigger-count | hold-database |
kernel-panic | daemon-restart)*>

<!ELEMENT daemon-restart EMPTY>

<!ELEMENT delay (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT gres-test-point-error (message)*>

<!ELEMENT gres-test-point-information (gres-test-point-list |
gres-test-point-error)*>
<!ATTLIST gres-test-point-information junos:style CDATA #IMPLIED>

<!ELEMENT gres-test-point-list (test-point)*>

<!ELEMENT hit-count (#PCDATA)>

<!ELEMENT hold-database (#PCDATA)>

<!ELEMENT id (#PCDATA)>

<!ELEMENT kernel-panic EMPTY>

<!ELEMENT message (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT test-point (id | description | state | hit-count | actions)*>
```

```
<!ELEMENT trigger-after (#PCDATA)>

<!ELEMENT trigger-count (#PCDATA)>
```


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CHAPTER 86

DTD for UDP Fowarding Helper Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-helper.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-helper.dtd -->

<!ELEMENT dropped-packets (#PCDATA)>

<!ELEMENT dropped-packets-badaddr (#PCDATA)>

<!ELEMENT dropped-packets-badread (#PCDATA)>

<!ELEMENT dropped-packets-badsend (#PCDATA)>

<!ELEMENT dropped-packets-nointerface (#PCDATA)>

<!ELEMENT dropped-packets-nolocaladdr (#PCDATA)>

<!ELEMENT dropped-packets-noroute (#PCDATA)>

<!ELEMENT dropped-packets-nortinst (#PCDATA)>

<!ELEMENT forwarded-packets (#PCDATA)>

<!ELEMENT helper-statistics-information (helper-statistics-service-information)*>

<!ELEMENT helper-statistics-service-information (service-name | received-packets
 | forwarded-packets | dropped-packets | dropped-packets-nointerface |
dropped-packets-nortinst | dropped-packets-badread | dropped-packets-badsend |
dropped-packets-badaddr | dropped-packets-nolocaladdr | dropped-packets-noroute)*>

<!ELEMENT received-packets (#PCDATA)>
```

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```
<!ELEMENT service-name (#PCDATA)>
```


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CHAPTER 87

DTD for ICCP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-iccpd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-iccpd.dtd -->

<!ELEMENT client-name (#PCDATA)>

<!ELEMENT client-rg-groups (#PCDATA)>

<!ELEMENT iccp-client (client-name | client-rg-groups)*>

<!ELEMENT iccp-information (iccp-peer | iccp-client)*>

<!ELEMENT iccp-peer (peer-address | peer-conn-state-information | rg-groups)*>

<!ELEMENT peer-address (#PCDATA)>

<!ELEMENT peer-conn-bfd-state (#PCDATA)>

<!ELEMENT peer-conn-state (peer-conn-tcp-state | peer-conn-bfd-state)*>

<!ELEMENT peer-conn-state-information (peer-conn-state)*>

<!ELEMENT peer-conn-tcp-state (#PCDATA)>

<!ELEMENT redundancy-group (#PCDATA)>

<!ELEMENT rg-group-entry (redundancy-group | rg-state)*>

<!ELEMENT rg-groups (rg-group-entry)*>

<!ELEMENT rg-state (#PCDATA)>
```

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CHAPTER 88

DTD for IDP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-idp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-idp.dtd -->

<!ELEMENT active-sessions (#PCDATA)>

<!ELEMENT attack-id (#PCDATA)>

<!ELEMENT attack-name (#PCDATA)>

<!ELEMENT attack-service-name (#PCDATA)>

<!ELEMENT auxiliary-flow (#PCDATA)>

<!ELEMENT average-latency-time (#PCDATA)>
<!ATTLIST average-latency-time junos:seconds CDATA #IMPLIED>

<!ELEMENT average-time (#PCDATA)>

<!ELEMENT cache-entries (#PCDATA)>

<!ELEMENT clear-idp-ssl-session-cache-information
(cleared-ssl-session-cache-count)*>

<!ELEMENT cleared-ssl-session-cache-count (#PCDATA)>

<!ELEMENT connections-per-sec (#PCDATA)>

<!ELEMENT context-direction (#PCDATA)>

<!ELEMENT context-name (#PCDATA)>

<!ELEMENT context-value (#PCDATA)>
```

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```
<!ELEMENT context-values-per-tick (#PCDATA)>

<!ELEMENT contexts-per-tick (#PCDATA)>

<!ELEMENT current-icmp-flow-count (#PCDATA)>

<!ELEMENT current-other-flow-count (#PCDATA)>

<!ELEMENT current-tcp-flow-count (#PCDATA)>

<!ELEMENT current-udp-flow-count (#PCDATA)>

<!ELEMENT date-time (#PCDATA)>
<!ATTLIST date-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ddos-application (#PCDATA)>

<!ELEMENT ddos-context (#PCDATA)>

<!ELEMENT desc (#PCDATA)>

<!ELEMENT destination-address (#PCDATA)>

<!ELEMENT destination-port (#PCDATA)>

<!ELEMENT detector-version (#PCDATA)>

<!ELEMENT direction (#PCDATA)>

<!ELEMENT from-zone (#PCDATA)>

<!ELEMENT fw-service (#PCDATA)>

<!ELEMENT get-idp-addos-application-information (idp-addos-application)*>

<!ELEMENT get-idp-ssl-session-cache-information (idp-ssl-session-cache-count |
idp-ssl-session-cache-entry)*>

<!ELEMENT icmp-packet-count (#PCDATA)>

<!ELEMENT icmp-session-count (#PCDATA)>

<!ELEMENT id (#PCDATA)>

<!ELEMENT idp-addos-application (to-zone | destination-address | ddos-application
 | connections-per-sec | ddos-context | contexts-per-tick | context-value |
context-values-per-tick)*>
<!ATTLIST idp-addos-application junos:style CDATA #IMPLIED>

<!ELEMENT idp-anomaly (attack-service-name | service-id | attack-name |
attack-id)*>

<!ELEMENT idp-anomaly-list (idp-anomaly)*>

<!ELEMENT idp-application (#PCDATA)>

<!ELEMENT idp-application-statistics (name | value)*>

<!ELEMENT idp-application-statistics-information (idp-application-statistics)*>

<!ELEMENT idp-application-system-cache-information
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```
(idp-application-system-cache-pic)*>

<!ELEMENT idp-application-system-cache-pic (pic-name |
idp-application-system-cache-statistics)*>

<!ELEMENT idp-application-system-cache-statistics (virtual-system-identifier |
ip-address | ipv6-address | port | protocol | idp-service | idp-application)*>

<!ELEMENT idp-attack-description (#PCDATA)>

<!ELEMENT idp-attack-description-information (idp-attack-description)*>

<!ELEMENT idp-attack-detail-category (#PCDATA)>

<!ELEMENT idp-attack-detail-direction (#PCDATA)>

<!ELEMENT idp-attack-detail-falsepos (#PCDATA)>

<!ELEMENT idp-attack-detail-information (idp-attack-detail-name |
idp-attack-detail-severity | idp-attack-detail-category |
idp-attack-detail-recommended | idp-attack-detail-recoact | idp-attack-detail-type
 | idp-attack-detail-direction | idp-attack-detail-falsepos |
idp-attack-detail-service)*>

<!ELEMENT idp-attack-detail-name (#PCDATA)>

<!ELEMENT idp-attack-detail-recoact (#PCDATA)>

<!ELEMENT idp-attack-detail-recommended (#PCDATA)>

<!ELEMENT idp-attack-detail-service (#PCDATA)>

<!ELEMENT idp-attack-detail-severity (#PCDATA)>

<!ELEMENT idp-attack-detail-type (#PCDATA)>

<!ELEMENT idp-attack-groups (name)*>

<!ELEMENT idp-attack-information (idp-attack-statistics)*>

<!ELEMENT idp-attack-statistics (name | value)*>

<!ELEMENT idp-attacks-list (name)*>

<!ELEMENT idp-cache-aggregate-statistics (total-memory-used | cache-entries |
single-rules | multiple-rules)*>

<!ELEMENT idp-cache-rule (rule-pointer | rule-number | idp-service | protocol |
direction | auxiliary-flow | line-separator | memory-bytes)*>

<!ELEMENT idp-cache-rule-statistics (idp-cache-rule)*>

<!ELEMENT idp-cache-service (idp-service | memory-in-kb)*>

<!ELEMENT idp-cache-service-memory-statistics (idp-cache-service)*>

<!ELEMENT idp-cache-statistics (idp-cache-rule-statistics |
idp-cache-service-memory-statistics | idp-cache-aggregate-statistics)*>

<!ELEMENT idp-context-list (idp-contexts)*>
```

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```
<!ELEMENT idp-contexts (service-name | context-name | offset-id |
context-direction)*>

<!ELEMENT idp-counter-information (idp-counter-statistics)*>

<!ELEMENT idp-counter-statistics (name | value)*>

<!ELEMENT idp-detail-status-information (idp-status-detail-per-spu-information)*>

<!ELEMENT idp-detector-version (#PCDATA)>

<!ELEMENT idp-detector-versions (#PCDATA)>

<!ELEMENT idp-forwarding-process-mode (#PCDATA)>

<!ELEMENT idp-icmp-flow-count (current-icmp-flow-count | maximum-icmp-flow-count
 | maximum-icmp-flow-count-time | date-time)*>

<!ELEMENT idp-kbits-per-second (#PCDATA)>

<!ELEMENT idp-kbits-per-second-information (idp-kbits-per-second |
idp-peak-kbits-per-second | date-time)*>

<!ELEMENT idp-kbits-spu-per-second-information (idp-kbits-per-second |
idp-peak-kbits-per-second | date-time)*>

<!ELEMENT idp-latency (minimum-latency-time | maximum-latency-time |
average-latency-time)*>

<!ELEMENT idp-lsys-policy-association (idp-lsys-policy-association-entry)*>

<!ELEMENT idp-lsys-policy-association-entry (idp-policy-name |
logical-system-name)*>

<!ELEMENT idp-memory-information (idp-memory-per-spu-information)*>

<!ELEMENT idp-memory-per-spu-information (pic-name |
total-idp-data-plane-memory-in-mb | total-idp-data-plane-memory-used-in-mb |
total-idp-data-plane-memory-used-in-kb |
total-idp-data-plane-memory-used-in-percentage |
total-idp-data-plane-memory-available-in-mb |
total-idp-data-plane-memory-available-in-kb |
total-idp-data-plane-memory-available-in-percentage)*>

<!ELEMENT idp-mode (idp-forwarding-process-mode)*>

<!ELEMENT idp-other-flow-count (current-other-flow-count | maximum-other-flow-count
 | maximum-other-flow-count-time | date-time)*>

<!ELEMENT idp-packet-count (icmp-packet-count | tcp-packet-count | udp-packet-count
 | other-packet-count)*>

<!ELEMENT idp-packets-per-second (#PCDATA)>

<!ELEMENT idp-packets-per-second-information (idp-packets-per-second |
idp-peak-packets-per-second | date-time)*>

<!ELEMENT idp-packets-spu-per-second-information (idp-packets-per-second |
idp-peak-packets-per-second | date-time)*>

<!ELEMENT idp-peak-kbits-per-second (#PCDATA)>
```


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```
<!ELEMENT idp-peak-packets-per-second (#PCDATA)>

<!ELEMENT idp-policy (policy-load-templates)*>

<!ELEMENT idp-policy-commit-status (policy-commit-status-detail)*>

<!ELEMENT idp-policy-list-entry (id | policy-name | sessions | memory |
idp-detector-versions)*>

<!ELEMENT idp-policy-load-result (#PCDATA)>

<!ELEMENT idp-policy-name (#PCDATA)>

<!ELEMENT idp-policy-template-information (#PCDATA)>

<!ELEMENT idp-predefined-attack-groups (idp-attack-groups)*>

<!ELEMENT idp-predefined-attacks (idp-attacks-list)*>

<!ELEMENT idp-protocol-list (idp-protocols)*>

<!ELEMENT idp-protocols (protocol-name | protocol-type | port-number |
line-seperator | scope)*>

<!ELEMENT idp-qmodule (name | minimum-time | maximum-time | average-time |
number-of-packets | number-of-packets-dropped | number-of-error-packets)*>

<!ELEMENT idp-qmodule-information (idp-qmodule)*>

<!ELEMENT idp-recent-security-package-information
(recent-security-package-version)*>

<!ELEMENT idp-rule-information (idp-rule-name | idp-rulebase-type)*>

<!ELEMENT idp-rule-name (#PCDATA)>

<!ELEMENT idp-rulebase (idp-rule-information)*>

<!ELEMENT idp-rulebase-type (idp-rulebase-type-name | number-of-rules)*>

<!ELEMENT idp-rulebase-type-name (#PCDATA)>

<!ELEMENT idp-security-package-information (security-package-version |
detector-version | policy-template-version)*>

<!ELEMENT idp-service (#PCDATA)>

<!ELEMENT idp-session (session-identifier | source-address | source-port |
destination-address | destination-port | from-zone | to-zone | protocol |
idp-service | fw-service | timeout | maximum-timeout)*>

<!ELEMENT idp-session-count (icmp-session-count | tcp-session-count |
udp-session-count | other-session-count)*>

<!ELEMENT idp-session-information (idp-session)*>

<!ELEMENT idp-session-summary-information (idp-session-summary-per-pic-information
 | total-sessions)*>

<!ELEMENT idp-session-summary-per-pic-information (pic-name | maximum-sessions |
```

```
 active-sessions)*>

<!ELEMENT idp-sigdb-version (#PCDATA)>

<!ELEMENT idp-spu-icmp-flow-count (current-icmp-flow-count |
maximum-icmp-flow-count | maximum-icmp-flow-count-time | date-time)*>

<!ELEMENT idp-spu-latency (minimum-latency-time | maximum-latency-time |
average-latency-time)*>

<!ELEMENT idp-spu-other-flow-count (current-other-flow-count |
maximum-other-flow-count | maximum-other-flow-count-time | date-time)*>

<!ELEMENT idp-spu-packet-count (icmp-packet-count | tcp-packet-count |
udp-packet-count | other-packet-count)*>

<!ELEMENT idp-spu-session-count (icmp-session-count | tcp-session-count |
udp-session-count | other-session-count)*>

<!ELEMENT idp-spu-ssl-session-information (ssl-session-count)*>

<!ELEMENT idp-spu-tcp-flow-count (current-tcp-flow-count | maximum-tcp-flow-count
 | maximum-tcp-flow-count-time | date-time)*>

<!ELEMENT idp-spu-udp-flow-count (current-udp-flow-count | maximum-udp-flow-count
 | maximum-udp-flow-count-time | date-time)*>

<!ELEMENT idp-spu-uptime (pic-name | idp-status | date-time | time-length)*>

<!ELEMENT idp-ssl-key-count (#PCDATA)>

<!ELEMENT idp-ssl-key-information (idp-ssl-key-count | idp-ssl-per-key-information
 | idp-ssl-port-per-key-information)*>

<!ELEMENT idp-ssl-per-key-information (key-name | destination-address)*>

<!ELEMENT idp-ssl-port-per-key-information (key-name | destination-address |
destination-port)*>

<!ELEMENT idp-ssl-session-cache-count (#PCDATA)>

<!ELEMENT idp-ssl-session-cache-entry (ssl-session-identifier)*>

<!ELEMENT idp-ssl-session-information (ssl-session-count)*>

<!ELEMENT idp-status (#PCDATA)>

<!ELEMENT idp-status-detail-per-spu-information (idp-spu-uptime |
idp-packets-spu-per-second-information | idp-kbits-spu-per-second-information |
idp-spu-latency | idp-spu-packet-count | idp-spu-icmp-flow-count |
idp-spu-tcp-flow-count | idp-spu-udp-flow-count | idp-spu-other-flow-count |
idp-spu-session-count | idp-spu-ssl-session-information)*>

<!ELEMENT idp-status-information (idp-uptime | idp-packets-per-second-information
 | idp-kbits-per-second-information | idp-latency | idp-packet-count |
idp-icmp-flow-count | idp-tcp-flow-count | idp-udp-flow-count |
idp-other-flow-count | idp-session-count | idp-ssl-session-information)*>

<!ELEMENT idp-storage-cleanup-dfa-cache (#PCDATA)>

<!ELEMENT idp-storage-cleanup-secdb (#PCDATA)>
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<!ELEMENT idp-subscriber-policy-list (idp-subscriber-policy-per-pic-information)*>

<!ELEMENT idp-subscriber-policy-per-pic-information (pic-name |
idp-policy-list-entry)*>

<!ELEMENT idp-tcp-flow-count (current-tcp-flow-count | maximum-tcp-flow-count |
maximum-tcp-flow-count-time | date-time)*>

<!ELEMENT idp-udp-flow-count (current-udp-flow-count | maximum-udp-flow-count |
maximum-udp-flow-count-time | date-time)*>

<!ELEMENT idp-uptime (idp-status | date-time | time-length)*>

<!ELEMENT idp-version-information (idp-policy-name | idp-detector-version |
idp-sigdb-version)*>

<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT ipv6-address (#PCDATA)>

<!ELEMENT key-name (#PCDATA)>

<!ELEMENT key-number (#PCDATA)>

<!ELEMENT line-separator (#PCDATA)>

<!ELEMENT line-seperator (#PCDATA)>

<!ELEMENT logical-system-name (#PCDATA)>

<!ELEMENT maximum-icmp-flow-count (#PCDATA)>

<!ELEMENT maximum-icmp-flow-count-time (#PCDATA)>
<!ATTLIST maximum-icmp-flow-count-time junos:seconds CDATA #IMPLIED>
<!ATTLIST maximum-icmp-flow-count-time junos:seconds CDATA #IMPLIED>

<!ELEMENT maximum-latency-time (#PCDATA)>
<!ATTLIST maximum-latency-time junos:seconds CDATA #IMPLIED>

<!ELEMENT maximum-other-flow-count (#PCDATA)>

<!ELEMENT maximum-other-flow-count-time (#PCDATA)>
<!ATTLIST maximum-other-flow-count-time junos:seconds CDATA #IMPLIED>
<!ATTLIST maximum-other-flow-count-time junos:seconds CDATA #IMPLIED>

<!ELEMENT maximum-sessions (#PCDATA)>

<!ELEMENT maximum-tcp-flow-count (#PCDATA)>

<!ELEMENT maximum-tcp-flow-count-time (#PCDATA)>
<!ATTLIST maximum-tcp-flow-count-time junos:seconds CDATA #IMPLIED>
<!ATTLIST maximum-tcp-flow-count-time junos:seconds CDATA #IMPLIED>

<!ELEMENT maximum-time (#PCDATA)>

<!ELEMENT maximum-timeout (#PCDATA)>

<!ELEMENT maximum-udp-flow-count (#PCDATA)>

<!ELEMENT maximum-udp-flow-count-time (#PCDATA)>
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```
<!ATTLIST maximum-udp-flow-count-time junos:seconds CDATA #IMPLIED>
<!ATTLIST maximum-udp-flow-count-time junos:seconds CDATA #IMPLIED>

<!ELEMENT memory (#PCDATA)>

<!ELEMENT memory-bytes (#PCDATA)>

<!ELEMENT memory-in-kb (#PCDATA)>

<!ELEMENT minimum-latency-time (#PCDATA)>
<!ATTLIST minimum-latency-time junos:seconds CDATA #IMPLIED>

<!ELEMENT minimum-time (#PCDATA)>

<!ELEMENT multiple-rules (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT number-of-error-packets (#PCDATA)>

<!ELEMENT number-of-packets (#PCDATA)>

<!ELEMENT number-of-packets-dropped (#PCDATA)>

<!ELEMENT number-of-rules (#PCDATA)>

<!ELEMENT offset-id (#PCDATA)>

<!ELEMENT other-packet-count (#PCDATA)>

<!ELEMENT other-session-count (#PCDATA)>

<!ELEMENT pic-name (#PCDATA)>

<!ELEMENT policy-commit-status-detail (#PCDATA)>

<!ELEMENT policy-load-templates (desc)*>

<!ELEMENT policy-name (#PCDATA)>

<!ELEMENT policy-template-version (#PCDATA)>

<!ELEMENT port (#PCDATA)>

<!ELEMENT port-number (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT protocol-name (#PCDATA)>

<!ELEMENT protocol-type (#PCDATA)>

<!ELEMENT recent-security-package-version (#PCDATA)>

<!ELEMENT request-idp-policy-load (idp-policy-load-result)*>

<!ELEMENT request-idp-ssl-key-add (#PCDATA)>

<!ELEMENT request-idp-ssl-key-delete (key-number | server-number)*>

<!ELEMENT request-idp-storage-cleanup (idp-storage-cleanup-secdb |
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```
idp-storage-cleanup-dfa-cache)*>

<!ELEMENT rule-number (#PCDATA)>

<!ELEMENT rule-pointer (#PCDATA)>

<!ELEMENT scope (#PCDATA)>

<!ELEMENT secpack-download-policy-template-detail (#PCDATA)>

<!ELEMENT secpack-download-policy-template-file
(secpack-download-policy-template-file-detail)*>

<!ELEMENT secpack-download-policy-template-file-detail (#PCDATA)>

<!ELEMENT secpack-download-policy-template-result
(secpack-download-policy-template-detail)*>

<!ELEMENT secpack-download-status (secpack-download-status-detail)*>

<!ELEMENT secpack-download-status-detail (#PCDATA)>

<!ELEMENT secpack-status-detail (#PCDATA)>

<!ELEMENT secpack-update-policy-template-detail (#PCDATA)>

<!ELEMENT secpack-update-policy-template-result
(secpack-update-policy-template-detail)*>

<!ELEMENT secpack-update-status (secpack-status-detail)*>

<!ELEMENT security-package-version (#PCDATA)>

<!ELEMENT server-number (#PCDATA)>

<!ELEMENT service-id (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT session-identifier (#PCDATA)>

<!ELEMENT sessions (#PCDATA)>

<!ELEMENT single-rules (#PCDATA)>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT source-port (#PCDATA)>

<!ELEMENT ssl-session-count (#PCDATA)>

<!ELEMENT ssl-session-identifier (#PCDATA)>

<!ELEMENT tcp-packet-count (#PCDATA)>

<!ELEMENT tcp-session-count (#PCDATA)>

<!ELEMENT time-length (#PCDATA)>
<!ATTLIST time-length junos:seconds CDATA #IMPLIED>

<!ELEMENT timeout (#PCDATA)>
```

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```
<!ELEMENT to-zone (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-available-in-kb (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-available-in-mb (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-available-in-percentage (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-in-mb (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-used-in-kb (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-used-in-mb (#PCDATA)>
<!ELEMENT total-idp-data-plane-memory-used-in-percentage (#PCDATA)>
<!ELEMENT total-memory-used (#PCDATA)>
<!ELEMENT total-sessions (#PCDATA)>
<!ELEMENT udp-packet-count (#PCDATA)>
<!ELEMENT udp-session-count (#PCDATA)>
<!ELEMENT value (#PCDATA)>
<!ELEMENT virtual-system-identifier (#PCDATA)>
```


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CHAPTER 89

DTD for ILMI Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ilmi.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ilmi.dtd -->

<!ELEMENT asn-parse-errors (#PCDATA)>

<!ELEMENT atm-vci (#PCDATA)>

<!ELEMENT atm-vpi (#PCDATA)>

<!ELEMENT bad-community-names (#PCDATA)>

<!ELEMENT bad-community-uses (#PCDATA)>

<!ELEMENT bad-values (#PCDATA)>

<!ELEMENT bad-versions (#PCDATA)>

<!ELEMENT general-errors (#PCDATA)>

<!ELEMENT get-nexts (#PCDATA)>

<!ELEMENT get-requests (#PCDATA)>

<!ELEMENT get-responses (#PCDATA)>

<!ELEMENT ilmi-information (ilmi-interface-information)*>

<!ELEMENT ilmi-input-statistics (packets | bad-versions | bad-community-names |
bad-community-uses | asn-parse-errors | too-bigs | no-such-names | bad-values |
read-onlys | general-errors | total-request-varbinds | total-set-varbinds |
get-requests | get-nexts | set-requests | get-responses | traps | silent-drops |
 proxy-drops)*>
```

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```
<!ELEMENT ilmi-interface-information (interface-name | atm-vpi | atm-vci |
peer-ipaddr | peer-interface-name)*>

<!ELEMENT ilmi-output-statistics (packets | too-bigs | no-such-names | bad-values
 | general-errors | get-requests | get-nexts | set-requests | get-responses |
traps)*>

<!ELEMENT ilmi-statistics (ilmi-input-statistics | ilmi-output-statistics)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT no-such-names (#PCDATA)>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT peer-interface-name (#PCDATA)>

<!ELEMENT peer-ipaddr (#PCDATA)>

<!ELEMENT proxy-drops (#PCDATA)>

<!ELEMENT read-onlys (#PCDATA)>

<!ELEMENT set-requests (#PCDATA)>

<!ELEMENT silent-drops (#PCDATA)>

<!ELEMENT too-bigs (#PCDATA)>

<!ELEMENT total-request-varbinds (#PCDATA)>

<!ELEMENT total-set-varbinds (#PCDATA)>

<!ELEMENT traps (#PCDATA)>
```


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CHAPTER 90

DTD for Interface Metadata Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-interface-metadata.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-interface-metadata.dtd -->

<!ELEMENT channels (subunit)*>

<!ELEMENT flag (#PCDATA)>

<!ELEMENT interface (name | long | pics-per-slot | ports-per-slot | max-mtu |
flag | channels | max-channelization | product)*>

<!ELEMENT interface-metadata-information (interface)*>

<!ELEMENT long (#PCDATA)>

<!ELEMENT max-channelization (#PCDATA)>

<!ELEMENT max-mtu (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT pics-per-slot (#PCDATA)>

<!ELEMENT ports-per-slot (#PCDATA)>

<!ELEMENT product (#PCDATA)>

<!ELEMENT subunit (#PCDATA)>
```

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CHAPTER 91

DTD for Interfaces Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-interface.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-interface.dtd -->

<!ELEMENT ac-name (#PCDATA)>

<!ELEMENT ac-name-config (#PCDATA)>

<!ELEMENT ac-name-session (#PCDATA)>

<!ELEMENT activation-delay (#PCDATA)>

<!ELEMENT activation-delay-elapsed (#PCDATA)>

<!ELEMENT active-alarms (type | interface-alarms)*>

<!ELEMENT active-alarms-otn (type-otn | interface-alarms)*>

<!ELEMENT active-bundle-links (#PCDATA)>

<!ELEMENT active-defects (type | interface-alarms)*>

<!ELEMENT active-defects-otn (type-otn | interface-alarms)*>

<!ELEMENT active-sessions (#PCDATA)>

<!ELEMENT address-family (compression-device-name | address-family-name |
multilink-bundle-name | as-bundle-name | ae-bundle-name | es-sa-name |
es-sa-fail-count | es-sa-xmt-seq-num | es-sa-recv-seq-num | mtu | maximum-labels
 | address-family-flags | address-family-unnumbered | arp-respond-any-local-address
 | pppoe-underlying-information | generation | route-table | filter-information
| policer-information | interface-address | mac-validate-statistics |
route-rpf-statistics | destination-class-statistics | source-class-statistics)*>
```

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```
<!ELEMENT address-family-flags (ifff-none | ifff-primary | ifff-redirects |
ifff-no-redirects | ifff-no-neighbor-learn | ifff-targeted-broadcast |
ifff-sendbcast-pkt-to-re | ifff-hard-down | ifff-down | ifff-up | ifff-func1 |
ifff-func2 | ifff-is-primary | ifff-recv-options | ifff-recv-ttl-exceeded |
ifff-dst-class-usage | ifff-src-class-input | ifff-src-class-output |
ifff-mtu-user-conf | ifff-mac-validate-strict | ifff-mac-validate-loose |
ifff-rpf-check | ifff-rpf-loose-mode | ifff-sample-input | ifff-sample-output |
ifff-no-asynch-notification | ifff-negotiate-address | ifff-port-mode-trunk |
ifff-mtu-protocol-adj | ifff-unnumbered | ifff-tcc-mpls | ifff-tcc-inet |
ifff-tcc-inet6 | ifff-tcc-iso | ifff-port-mode-isid-trunk | generic-value)*>

<!ELEMENT address-family-name (#PCDATA)>

<!ELEMENT address-family-unnumbered (unnumbered-family-donor-interface-name |
unnumbered-family-donor-interface-index |
unnumbered-family-preferred-source-address)*>

<!ELEMENT admin-state (#PCDATA)>

<!ELEMENT admin-status (#PCDATA)>
<!ATTLIST admin-status junos:format CDATA #IMPLIED>

<!ELEMENT adsl-annex-type (#PCDATA)>

<!ELEMENT adsl-last-fail-code (#PCDATA)>

<!ELEMENT adsl-seconds-in-showtime (#PCDATA)>

<!ELEMENT adsl-subfunction (#PCDATA)>

<!ELEMENT ae-bundle-name (#PCDATA)>

<!ELEMENT aged-packets (#PCDATA)>

<!ELEMENT agent-circuit-id (#PCDATA)>

<!ELEMENT agent-remote-id (#PCDATA)>

<!ELEMENT alarm-not-present EMPTY>

<!ELEMENT alternate-physical-address (#PCDATA)>

<!ELEMENT apd-supply-fault-alarm (#PCDATA)>

<!ELEMENT arp-respond-any-local-address (#PCDATA)>

<!ELEMENT as-bundle-name (#PCDATA)>

<!ELEMENT atm-cos-information (vc-cos-mode | atm-cos-queue)*>
<!ATTLIST atm-cos-information junos:style CDATA #IMPLIED>

<!ELEMENT atm-cos-plp-statistics (atm-plp0-output-bytes | atm-plp1-output-bytes
| atm-plp0-output-packets | atm-plp1-output-packets | atm-plp0-byte-drops |
atm-plp1-byte-drops | atm-plp0-packet-drops | atm-plp1-packet-drops)*>

<!ELEMENT atm-cos-queue (atm-cos-queue-parameters | atm-cos-queue-statistics |
atm-cos-plp-statistics)*>

<!ELEMENT atm-cos-queue-parameters (cos-forwarding-class-name | cos-queue-number
 | scheduling-priority | transmit-weight-cells | transmit-weight-percent |
epd-threshold | epd-threshold-plp0 | epd-threshold-plp1 |
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linear-red-drop-profile)*>

<!ELEMENT atm-cos-queue-statistics (atm-output-bytes | atm-output-packets |
atm-packet-drops)*>

<!ELEMENT atm-defects (media-alarm)*>

<!ELEMENT atm-e3-framing (#PCDATA)>

<!ELEMENT atm-encapsulation (#PCDATA)>

<!ELEMENT atm-hcs-state (#PCDATA)>

<!ELEMENT atm-information (plcp-defects | atm-defects | plcp-statistics |
atm-hcs-state | atm-loss-of-cell | atm-statistics)*>

<!ELEMENT atm-input-policer (#PCDATA)>

<!ELEMENT atm-input-policer-information (atm-input-policer)*>

<!ELEMENT atm-input-policer-statistics (atm-policer-traffic-count-cells |
atm-policer-traffic-discard-cells | atm-policer-traffic-discard-tag-cells)*>

<!ELEMENT atm-line-build-out (#PCDATA)>

<!ELEMENT atm-loss-of-cell (#PCDATA)>

<!ELEMENT atm-output-bytes (#PCDATA)>

<!ELEMENT atm-output-packets (#PCDATA)>

<!ELEMENT atm-packet-drops (#PCDATA)>

<!ELEMENT atm-plp0-byte-drops (#PCDATA)>

<!ELEMENT atm-plp0-output-bytes (#PCDATA)>

<!ELEMENT atm-plp0-output-packets (#PCDATA)>

<!ELEMENT atm-plp0-packet-drops (#PCDATA)>

<!ELEMENT atm-plp1-byte-drops (#PCDATA)>

<!ELEMENT atm-plp1-output-bytes (#PCDATA)>

<!ELEMENT atm-plp1-output-packets (#PCDATA)>

<!ELEMENT atm-plp1-packet-drops (#PCDATA)>

<!ELEMENT atm-policer-statistics (non-conform-clp0-cells | non-conform-clp1-cells
 | tagged-cells)*>

<!ELEMENT atm-policer-traffic-count-cells (#PCDATA)>

<!ELEMENT atm-policer-traffic-discard-cells (#PCDATA)>

<!ELEMENT atm-policer-traffic-discard-tag-cells (#PCDATA)>

<!ELEMENT atm-statistics (uncorrectable-hcs-errors | correctable-hcs-errors |
tx-cell-fifo-overruns | rx-cell-fifo-overruns | rx-cell-fifo-underruns |
rx-cell-count | tx-cell-count | tx-idle-cell-count | vc-queue-drops | no-buffers
```

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 | length-errors | timeouts | bundle-timeouts | rx-invalid-vcs | bad-crcs |
oam-cell-no-buffers)*>

<!ELEMENT atm-tm-cbr EMPTY>

<!ELEMENT atm-tm-rtvbr EMPTY>

<!ELEMENT atm-tm-vbr EMPTY>

<!ELEMENT atu-c-country-code (#PCDATA)>

<!ELEMENT atu-c-vendor-id (#PCDATA)>

<!ELEMENT atu-c-vendor-specific (#PCDATA)>

<!ELEMENT atu-r-country-code (#PCDATA)>

<!ELEMENT atu-r-vendor-id (#PCDATA)>

<!ELEMENT atu-r-vendor-specific (#PCDATA)>

<!ELEMENT auto-negotiation (#PCDATA)>

<!ELEMENT auto-reconnect (#PCDATA)>

<!ELEMENT autonegotiation-status (#PCDATA)>

<!ELEMENT backup EMPTY>

<!ELEMENT bad-crcs (#PCDATA)>

<!ELEMENT bad-hardware-length-count (#PCDATA)>

<!ELEMENT bad-packet-length-count (#PCDATA)>

<!ELEMENT bad-protocol-count (#PCDATA)>

<!ELEMENT bad-protocol-length-count (#PCDATA)>

<!ELEMENT bandwidth (#PCDATA)>

<!ELEMENT baud-rate (#PCDATA)>

<!ELEMENT ber-sd (#PCDATA)>

<!ELEMENT ber-sf (#PCDATA)>

<!ELEMENT ber-threshold (ber-sd | ber-sf)*>

<!ELEMENT bipe-count (#PCDATA)>

<!ELEMENT bipe-seconds (#PCDATA)>

<!ELEMENT bit-error-seconds (#PCDATA)>

<!ELEMENT bpdu-error (#PCDATA)>

<!ELEMENT bridge-iff-properties (svlan-ethertype | eth-switching-flags)*>

<!ELEMENT buffer-to-buffer-credit-recovery-lost-frames (#PCDATA)>
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```
<!ELEMENT buffer-to-buffer-credit-recovery-lost-rrdys (#PCDATA)>
<!ELEMENT bundle (multilink-frames | network-frames | network-v6-frames)*>
<!ELEMENT bundle-class (#PCDATA)>
<!ELEMENT bundle-detail (fragments | non-fragments | lfi)*>
<!ELEMENT bundle-timeouts (#PCDATA)>
<!ELEMENT burst (#PCDATA)>
<!ELEMENT call-direction (#PCDATA)>
<!ELEMENT call-duration (#PCDATA)>
<!ELEMENT call-idle-timeout (#PCDATA)>
<!ELEMENT call-status (#PCDATA)>
<!ELEMENT callback-wait-period (#PCDATA)>
<!ELEMENT callback-wait-period-elapsed (#PCDATA)>
<!ELEMENT cam-destination-filter-count (#PCDATA)>
<!ELEMENT cam-source-filter-count (#PCDATA)>
<!ELEMENT carrier-transitions (#PCDATA)>
<!ELEMENT cascade-port (#PCDATA)>
<!ELEMENT cds1-information (interface-tx-queue)*>
<!ELEMENT cdvt (#PCDATA)>
<!ELEMENT ce-counter-bytes (#PCDATA)>
<!ELEMENT ce-counter-count (#PCDATA)>
<!ELEMENT ce-counter-name (#PCDATA)>
<!ELEMENT ce-counter-packets (#PCDATA)>
<!ELEMENT ce-excessive-packet-loss-rate-sample-period (#PCDATA)>
<!ELEMENT ce-excessive-packet-loss-rate-threshold (#PCDATA)>
<!ELEMENT ce-idle-pattern (#PCDATA)>
<!ELEMENT ce-jitter-buffer-auto-adjust (#PCDATA)>
<!ELEMENT ce-jitter-buffer-latency (#PCDATA)>
<!ELEMENT ce-jitter-buffer-packets (#PCDATA)>
<!ELEMENT ce-octet-aligned (#PCDATA)>
<!ELEMENT ce-packetization-latency (#PCDATA)>
<!ELEMENT ce-payload-size (#PCDATA)>
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<!ELEMENT cell-bundle-size (#PCDATA)>

<!ELEMENT cell-bundle-timeout (#PCDATA)>

<!ELEMENT cell-timeout-count (#PCDATA)>

<!ELEMENT cesopsn-information (ce-packetization-latency | ce-idle-pattern |
ce-jitter-buffer-packets | ce-jitter-buffer-latency | ce-jitter-buffer-auto-adjust
 | ce-excessive-packet-loss-rate-sample-period |
ce-excessive-packet-loss-rate-threshold)*>

<!ELEMENT chap-state (#PCDATA)>

<!ELEMENT chassis-queue-counters (interface-chassis-cos-summary | queue)*>
<!ATTLIST chassis-queue-counters junos:style CDATA #IMPLIED>

<!ELEMENT checksum-fault-alarm (#PCDATA)>

<!ELEMENT class (class-info | multilink-frames | network-frames)*>

<!ELEMENT class-2-discards (#PCDATA)>

<!ELEMENT class-3-discards (#PCDATA)>

<!ELEMENT class-detail (class-info | fragments | non-fragments)*>

<!ELEMENT class-f-discards (#PCDATA)>

<!ELEMENT class-info (multilink-class-id)*>

<!ELEMENT clock-mode (#PCDATA)>

<!ELEMENT clock-rate (#PCDATA)>

<!ELEMENT clocking (#PCDATA)>

<!ELEMENT clocking-mode (clock-mode)*>

<!ELEMENT clocking-rate (clock-rate)*>

<!ELEMENT compression-device-name (#PCDATA)>

<!ELEMENT control-memory-error (#PCDATA)>

<!ELEMENT controller (name | admin-status | oper-status)*>

<!ELEMENT copy-tos-to-outer-ip-header (#PCDATA)>

<!ELEMENT correctable-hcs-errors (#PCDATA)>

<!ELEMENT cos-direction (#PCDATA)>

<!ELEMENT cos-forwarding-class-name (#PCDATA)>

<!ELEMENT cos-header EMPTY>

<!ELEMENT cos-information (cos-stream-information)*>

<!ELEMENT cos-queue-bandwidth (#PCDATA)>
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<!ELEMENT cos-queue-bandwidth-bps (#PCDATA)>

<!ELEMENT cos-queue-bandwidth-bps-remainder (#PCDATA)>

<!ELEMENT cos-queue-bandwidth-remainder (#PCDATA)>

<!ELEMENT cos-queue-buffer (#PCDATA)>

<!ELEMENT cos-queue-buffer-bytes (#PCDATA)>

<!ELEMENT cos-queue-buffer-remainder (#PCDATA)>

<!ELEMENT cos-queue-configuration (cos-queue-number | cos-queue-forwarding-class
 | cos-queue-bandwidth | cos-queue-bandwidth-remainder | cos-queue-bandwidth-bps
 | cos-queue-bandwidth-bps-remainder | cos-queue-buffer |
cos-queue-buffer-remainder | cos-queue-buffer-bytes | cos-queue-priority |
cos-queue-limit)*>

<!ELEMENT cos-queue-forwarding-class (#PCDATA)>

<!ELEMENT cos-queue-limit (#PCDATA)>

<!ELEMENT cos-queue-number (#PCDATA)>

<!ELEMENT cos-queue-priority (#PCDATA)>

<!ELEMENT cos-stream-information (cos-direction | cos-queue-configuration)*>

<!ELEMENT crc (#PCDATA)>

<!ELEMENT crtp (crtp-sessions | crtp-statistics)*>

<!ELEMENT crtp-sessions (input-frames | output-frames)*>

<!ELEMENT crtp-statistics (name | input-frames | input-fps | input-bytes |
input-bps | output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT ct3-information (interface-tx-queue)*>

<!ELEMENT cts (#PCDATA)>

<!ELEMENT cts-polarity (#PCDATA)>

<!ELEMENT current-differential-delay (#PCDATA)>

<!ELEMENT current-physical-address (#PCDATA)>

<!ELEMENT data-memory-error (#PCDATA)>

<!ELEMENT data-signal (rx-clock)*>

<!ELEMENT dcd (#PCDATA)>

<!ELEMENT dcd-polarity (#PCDATA)>

<!ELEMENT dce-loopback-override (#PCDATA)>

<!ELEMENT dcu-class-bps (#PCDATA)>

<!ELEMENT dcu-class-bytes (#PCDATA)>
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<!ELEMENT dcu-class-name (#PCDATA)>

<!ELEMENT dcu-class-packets (#PCDATA)>

<!ELEMENT dcu-class-pps (#PCDATA)>

<!ELEMENT deactivation-delay (#PCDATA)>

<!ELEMENT deactivation-delay-elapsed (#PCDATA)>

<!ELEMENT default-vlan-id (#PCDATA)>

<!ELEMENT demux-inet-prefix (#PCDATA)>

<!ELEMENT demux-inet-prefix-count (#PCDATA)>

<!ELEMENT demux-inet-prefix-type (#PCDATA)>

<!ELEMENT demux-inet6-prefix (#PCDATA)>

<!ELEMENT demux-inet6-prefix-count (#PCDATA)>

<!ELEMENT demux-inet6-prefix-type (#PCDATA)>

<!ELEMENT demux-information (demux-interface)*>

<!ELEMENT demux-interface (demux-underlying-interface-name |
demux-underlying-interface-index | demux-inet-prefix-type | demux-inet-prefix-count
 | demux-inet-prefix | demux-inet6-prefix-type | demux-inet6-prefix-count |
demux-inet6-prefix)*>

<!ELEMENT demux-table-type (#PCDATA)>

<!ELEMENT demux-underlying-interface-index (#PCDATA)>

<!ELEMENT demux-underlying-interface-name (#PCDATA)>

<!ELEMENT denied-count (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT destination-class (dcu-class-name | dcu-class-packets | dcu-class-bytes
 | dcu-class-pps | dcu-class-bps)*>

<!ELEMENT destination-class-statistics (destination-class)*>

<!ELEMENT destination-mask (#PCDATA)>

<!ELEMENT destination-slot (#PCDATA)>

<!ELEMENT dial-string (#PCDATA)>

<!ELEMENT dial-string-list (dial-string)*>
<!ATTLIST dial-string-list junos:style CDATA #IMPLIED>

<!ELEMENT dialer-information (dialer-interface | dialer-time-to-disconnect)*>

<!ELEMENT dialer-interface (dialer-interface-name | dialer-interface-state |
dialer-interface-flags | pool-id | primary-interface | dial-string-list |
sub-interface-list | watch-list | activation-delay | deactivation-delay |
activation-delay-elapsed | deactivation-delay-elapsed | call-idle-timeout |
```


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initial-route-check | redial-delay | callback-wait-period |
callback-wait-period-elapsed | load-threshold | load-interval)*>

<!ELEMENT dialer-interface-flags (backup | multilink | watchlist |
interesting-detected)*>

<!ELEMENT dialer-interface-information (dialer-interface)*>
<!ATTLIST dialer-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT dialer-interface-name (#PCDATA)>

<!ELEMENT dialer-interface-state (#PCDATA)>

<!ELEMENT dialer-time-to-disconnect (#PCDATA)>

<!ELEMENT disabled-bundle-links (#PCDATA)>

<!ELEMENT dlci (#PCDATA)>

<!ELEMENT dlci-active (#PCDATA)>

<!ELEMENT dlci-inactive (#PCDATA)>

<!ELEMENT dlci-statistics (dlci-active | dlci-inactive)*>

<!ELEMENT docsis-bpi (#PCDATA)>

<!ELEMENT docsis-information (docsis-status-information | docsis-media-properties
 | docsis-security-properties)*>

<!ELEMENT docsis-media-properties (downstream-buffers-used |
downstream-buffers-free | upstream-buffers-used | upstream-buffers-free |
request-opportunity-burst | physical-burst | tuner-frequency | standard-short-grant
 | standard-long-grant)*>

<!ELEMENT docsis-mode (#PCDATA)>

<!ELEMENT docsis-security-properties (docsis-bpi | encryption-algorithm |
key-length)*>

<!ELEMENT docsis-state (#PCDATA)>

<!ELEMENT docsis-status-information (docsis-state | docsis-mode |
docsis-upstream-speed | downstream-scanning | ranging | signal-to-noise-ratio |
power)*>

<!ELEMENT docsis-upstream-speed (#PCDATA)>

<!ELEMENT down EMPTY>

<!ELEMENT down-count (#PCDATA)>

<!ELEMENT down-hold-time (#PCDATA)>

<!ELEMENT down-time (#PCDATA)>

<!ELEMENT downstream-buffers-free (#PCDATA)>

<!ELEMENT downstream-buffers-used (#PCDATA)>

<!ELEMENT downstream-scanning (#PCDATA)>
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<!ELEMENT drop-timeout (#PCDATA)>

<!ELEMENT dropped-count (#PCDATA)>

<!ELEMENT ds0-bert-algorithm (#PCDATA)>

<!ELEMENT ds0-bert-bit-count (#PCDATA)>

<!ELEMENT ds0-bert-elapsed (#PCDATA)>

<!ELEMENT ds0-bert-error-bit-count (#PCDATA)>

<!ELEMENT ds0-bert-error-rate (#PCDATA)>

<!ELEMENT ds0-bert-induced-error-rate (#PCDATA)>

<!ELEMENT ds0-bert-information (ds0-bert-period | ds0-bert-elapsed |
ds0-bert-status | ds0-bert-algorithm | ds0-bert-error-rate |
ds0-bert-induced-error-rate | ds0-bert-bit-count | ds0-bert-error-bit-count |
ds0-bert-los-status | ds0-bert-los-count | ds0-bert-los-seconds)*>

<!ELEMENT ds0-bert-los-count (#PCDATA)>

<!ELEMENT ds0-bert-los-seconds (#PCDATA)>

<!ELEMENT ds0-bert-los-status (#PCDATA)>

<!ELEMENT ds0-bert-period (#PCDATA)>

<!ELEMENT ds0-bert-status (#PCDATA)>

<!ELEMENT ds0-byte-encoding (#PCDATA)>

<!ELEMENT ds0-data-inversion (#PCDATA)>

<!ELEMENT ds1-alarm-ais EMPTY>

<!ELEMENT ds1-alarm-crc-major EMPTY>

<!ELEMENT ds1-alarm-crc-minor EMPTY>

<!ELEMENT ds1-alarm-lof EMPTY>

<!ELEMENT ds1-alarm-los EMPTY>

<!ELEMENT ds1-alarm-ylw EMPTY>

<!ELEMENT ds1-bert-algorithm (#PCDATA)>

<!ELEMENT ds1-bert-bit-count (#PCDATA)>

<!ELEMENT ds1-bert-elapsed (#PCDATA)>

<!ELEMENT ds1-bert-error-bit-count (#PCDATA)>

<!ELEMENT ds1-bert-error-rate (#PCDATA)>

<!ELEMENT ds1-bert-induced-error-rate (#PCDATA)>

<!ELEMENT ds1-bert-information (ds1-bert-period | ds1-bert-elapsed |
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ds1-bert-status | ds1-bert-algorithm | ds1-bert-error-rate |
ds1-bert-induced-error-rate | ds1-bert-bit-count | ds1-bert-error-bit-count |
ds1-bert-los-status | ds1-bert-los-count | ds1-bert-los-seconds)*>

<!ELEMENT ds1-bert-los-count (#PCDATA)>

<!ELEMENT ds1-bert-los-seconds (#PCDATA)>

<!ELEMENT ds1-bert-los-status (#PCDATA)>

<!ELEMENT ds1-bert-period (#PCDATA)>

<!ELEMENT ds1-bert-status (#PCDATA)>

<!ELEMENT ds1-buildout (#PCDATA)>

<!ELEMENT ds1-byte-encoding (#PCDATA)>

<!ELEMENT ds1-crc-alarm-threshold (ds1-crc-alarm-threshold-major |
ds1-crc-alarm-threshold-minor)*>

<!ELEMENT ds1-crc-alarm-threshold-major (#PCDATA)>

<!ELEMENT ds1-crc-alarm-threshold-minor (#PCDATA)>

<!ELEMENT ds1-data-inversion (#PCDATA)>

<!ELEMENT ds1-framing (#PCDATA)>

<!ELEMENT ds1-line-encoding (#PCDATA)>

<!ELEMENT ds1-timeslots (#PCDATA)>

<!ELEMENT ds3-alarm-ais EMPTY>

<!ELEMENT ds3-alarm-exz EMPTY>

<!ELEMENT ds3-alarm-ferf EMPTY>

<!ELEMENT ds3-alarm-idle EMPTY>

<!ELEMENT ds3-alarm-lcv EMPTY>

<!ELEMENT ds3-alarm-lof EMPTY>

<!ELEMENT ds3-alarm-los EMPTY>

<!ELEMENT ds3-alarm-pll EMPTY>

<!ELEMENT ds3-alarm-ylw EMPTY>

<!ELEMENT ds3-bert-algorithm (#PCDATA)>

<!ELEMENT ds3-bert-bit-count (#PCDATA)>

<!ELEMENT ds3-bert-bit-count-overflow (#PCDATA)>

<!ELEMENT ds3-bert-elapsed (#PCDATA)>

<!ELEMENT ds3-bert-error-bit-count (#PCDATA)>
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<!ELEMENT ds3-bert-error-bit-count-overflow (#PCDATA)>

<!ELEMENT ds3-bert-error-rate (#PCDATA)>

<!ELEMENT ds3-bert-induced-error-rate (#PCDATA)>

<!ELEMENT ds3-bert-information (ds3-bert-period | ds3-bert-elapsed |
ds3-bert-status | ds3-bert-algorithm | ds3-bert-error-rate |
ds3-bert-induced-error-rate | ds3-bert-bit-count | ds3-bert-bit-count-overflow |
 ds3-bert-error-bit-count | ds3-bert-error-bit-count-overflow | ds3-bert-los-status
 | ds3-bert-los-count | ds3-bert-los-seconds)*>

<!ELEMENT ds3-bert-los-count (#PCDATA)>

<!ELEMENT ds3-bert-los-seconds (#PCDATA)>

<!ELEMENT ds3-bert-los-status (#PCDATA)>

<!ELEMENT ds3-bert-period (#PCDATA)>

<!ELEMENT ds3-bert-status (#PCDATA)>

<!ELEMENT ds3-long-buildout (#PCDATA)>

<!ELEMENT ds3-mode (#PCDATA)>

<!ELEMENT dsl-alarm-far-locdi EMPTY>

<!ELEMENT dsl-alarm-far-locdni EMPTY>

<!ELEMENT dsl-alarm-far-lof EMPTY>

<!ELEMENT dsl-alarm-far-los EMPTY>

<!ELEMENT dsl-alarm-locdi EMPTY>

<!ELEMENT dsl-alarm-locdni EMPTY>

<!ELEMENT dsl-alarm-lof EMPTY>

<!ELEMENT dsl-alarm-lom EMPTY>

<!ELEMENT dsl-alarm-lop EMPTY>

<!ELEMENT dsl-alarm-los EMPTY>

<!ELEMENT dsl-chipset-information (atu-r-vendor-id | atu-c-vendor-id |
atu-r-vendor-specific | atu-c-vendor-specific | atu-r-country-code |
atu-c-country-code)*>

<!ELEMENT dsl-information (dsl-line-status | dsl-line-operating-mode |
dsl-line-type | adsl-annex-type | adsl-last-fail-code | adsl-subfunction |
adsl-seconds-in-showtime | dsl-chipset-information | dsl-statistics)*>

<!ELEMENT dsl-line-operating-mode (#PCDATA)>

<!ELEMENT dsl-line-status (#PCDATA)>

<!ELEMENT dsl-line-type (#PCDATA)>

<!ELEMENT dsl-statistics (near-end-attainable-bitrate | far-end-attainable-bitrate
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 | near-end-attenuation | far-end-attenuation | near-end-capacity-used |
far-end-capacity-used | near-end-noise-margin | far-end-noise-margin |
near-end-output-power | far-end-output-power | interleaved-rx-cells | fast-rx-cells
 | interleaved-tx-cells | fast-tx-cells | near-end-interleaved-bitrate |
near-end-fast-bitrate | far-end-interleaved-bitrate | far-end-fast-bitrate |
near-end-interleaved-crc | near-end-fast-crc | far-end-interleaved-crc |
far-end-fast-crc | near-end-interleaved-hec | near-end-fast-hec |
far-end-interleaved-hec | far-end-fast-hec | near-end-interleaved-fec |
near-end-fast-fec | far-end-interleaved-fec | far-end-fast-fec |
near-end-interleaved-rx-cells | near-end-fast-rx-cells |
near-end-interleaved-tx-cells | near-end-fast-tx-cells)*>

<!ELEMENT dsr (#PCDATA)>

<!ELEMENT dsr-polarity (#PCDATA)>

<!ELEMENT dsu-compatibility-mode (#PCDATA)>

<!ELEMENT dsu-information (dsu-compatibility-mode | dsu-scrambler | dsu-subrate
| feac-loopback | feac-response | feac-count)*>

<!ELEMENT dsu-scrambler (#PCDATA)>

<!ELEMENT dsu-subrate (#PCDATA)>

<!ELEMENT dtr (#PCDATA)>

<!ELEMENT dtr-circuit (dtr-circuit-mode)*>

<!ELEMENT dtr-circuit-mode (#PCDATA)>

<!ELEMENT dtr-polarity (#PCDATA)>

<!ELEMENT duplex (#PCDATA)>

<!ELEMENT duplicate-protection (#PCDATA)>

<!ELEMENT dynamic-interface-bandwidth (#PCDATA)>

<!ELEMENT dynamic-profile (#PCDATA)>

<!ELEMENT e3-bert-algorithm (#PCDATA)>

<!ELEMENT e3-bert-bit-count (#PCDATA)>

<!ELEMENT e3-bert-bit-count-overflow (#PCDATA)>

<!ELEMENT e3-bert-elapsed (#PCDATA)>

<!ELEMENT e3-bert-error-bit-count (#PCDATA)>

<!ELEMENT e3-bert-error-bit-count-overflow (#PCDATA)>

<!ELEMENT e3-bert-error-rate (#PCDATA)>

<!ELEMENT e3-bert-induced-error-rate (#PCDATA)>

<!ELEMENT e3-bert-information (e3-bert-period | e3-bert-elapsed | e3-bert-status
 | e3-bert-algorithm | e3-bert-error-rate | e3-bert-induced-error-rate |
e3-bert-bit-count | e3-bert-bit-count-overflow | e3-bert-error-bit-count |
e3-bert-error-bit-count-overflow | e3-bert-los-status | e3-bert-los-count |
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e3-bert-los-seconds)*>

<!ELEMENT e3-bert-los-count (#PCDATA)>

<!ELEMENT e3-bert-los-seconds (#PCDATA)>

<!ELEMENT e3-bert-los-status (#PCDATA)>

<!ELEMENT e3-bert-period (#PCDATA)>

<!ELEMENT e3-bert-status (#PCDATA)>

<!ELEMENT e3-data-inversion (#PCDATA)>

<!ELEMENT e3-framing (#PCDATA)>

<!ELEMENT eia530-control-signal (mode | to-dce | from-dce | to-dte | from-dte)*>

<!ELEMENT eia530-signal-polarity (dtr-polarity | rts-polarity | dcd-polarity |
dsr-polarity | cts-polarity | tm-polarity)*>

<!ELEMENT encapsulation (#PCDATA)>

<!ELEMENT encryption-algorithm (#PCDATA)>

<!ELEMENT end-vci (#PCDATA)>

<!ELEMENT epd-threshold (#PCDATA)>

<!ELEMENT epd-threshold-plp0 (#PCDATA)>

<!ELEMENT epd-threshold-plp1 (#PCDATA)>

<!ELEMENT error-code (#PCDATA)>

<!ELEMENT errored-blocks-seconds (#PCDATA)>

<!ELEMENT es-ifd-stats (total-anti-replay-count |
total-authentication-failure-count)*>

<!ELEMENT es-sa-fail-count (#PCDATA)>

<!ELEMENT es-sa-name (#PCDATA)>

<!ELEMENT es-sa-recv-seq-num (#PCDATA)>

<!ELEMENT es-sa-xmt-seq-num (#PCDATA)>

<!ELEMENT eth-switching-flags (eth-switching-flags-value | no-mac-learning-status
 | reflective-relay-status)*>

<!ELEMENT eth-switching-flags-value (#PCDATA)>

<!ELEMENT ether-policer-list (ether-policer-record)*>

<!ELEMENT ether-policer-record (policer-type | out-of-spec-bytes |
out-of-spec-frames)*>

<!ELEMENT ethernet-alarm-lcdp EMPTY>

<!ELEMENT ethernet-alarm-link-down EMPTY>
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<!ELEMENT ethernet-autonegotiation (autonegotiation-status | link-partner-status
 | link-partner-reason | link-partner-duplexity | link-partner-speed | flow-control
 | local-info)*>

<!ELEMENT ethernet-filter-statistics (input-packets | input-reject-count |
input-reject-destination-address-count | input-reject-source-address-count |
output-packets | output-packet-pad-count | output-packet-error-count |
cam-destination-filter-count | cam-source-filter-count)*>
<!ATTLIST ethernet-filter-statistics junos:style CDATA #IMPLIED>

<!ELEMENT ethernet-mac-pfc-statistics (input-mac-pfc-frames | mac-pfc-dot1p |
output-mac-pfc-frames)*>
<!ATTLIST ethernet-mac-pfc-statistics junos:style CDATA #IMPLIED>

<!ELEMENT ethernet-mac-statistics (input-bytes | input-packets | input-unicasts
| input-broadcasts | input-multicasts | input-crc-errors | input-fifo-errors |
input-mac-control-frames | input-mac-pause-frames | input-oversized-frames |
input-undersized-frames | input-jabber-frames | input-fragment-frames |
input-vlan-tagged-frames | input-code-violations | input-policer-frame-drops |
input-policer-byte-drops | output-bytes | output-packets | output-unicasts |
output-broadcasts | output-multicasts | output-crc-errors | output-fifo-errors |
 output-mac-control-frames | output-mac-pause-frames)*>
<!ATTLIST ethernet-mac-statistics junos:style CDATA #IMPLIED>

<!ELEMENT ethernet-pcs-statistics (bit-error-seconds | errored-blocks-seconds)*>
<!ATTLIST ethernet-pcs-statistics junos:style CDATA #IMPLIED>

<!ELEMENT far-end-attainable-bitrate (#PCDATA)>

<!ELEMENT far-end-attenuation (#PCDATA)>

<!ELEMENT far-end-capacity-used (#PCDATA)>

<!ELEMENT far-end-fast-bitrate (#PCDATA)>

<!ELEMENT far-end-fast-crc (#PCDATA)>

<!ELEMENT far-end-fast-fec (#PCDATA)>

<!ELEMENT far-end-fast-hec (#PCDATA)>

<!ELEMENT far-end-interleaved-bitrate (#PCDATA)>

<!ELEMENT far-end-interleaved-crc (#PCDATA)>

<!ELEMENT far-end-interleaved-fec (#PCDATA)>

<!ELEMENT far-end-interleaved-hec (#PCDATA)>

<!ELEMENT far-end-noise-margin (#PCDATA)>

<!ELEMENT far-end-output-power (#PCDATA)>

<!ELEMENT fast-rx-cells (#PCDATA)>

<!ELEMENT fast-tx-cells (#PCDATA)>

<!ELEMENT feac-count (#PCDATA)>

<!ELEMENT feac-loopback (#PCDATA)>
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<!ELEMENT feac-response (#PCDATA)>

<!ELEMENT febe-count (#PCDATA)>

<!ELEMENT febe-seconds (#PCDATA)>

<!ELEMENT fec-corrected-error-ratio (#PCDATA)>

<!ELEMENT fec-corrected-errors (#PCDATA)>

<!ELEMENT fec-mode (#PCDATA)>

<!ELEMENT fec-valid-time (#PCDATA)>

<!ELEMENT ferr-count (#PCDATA)>

<!ELEMENT ferr-seconds (#PCDATA)>

<!ELEMENT fibrechannel-alarm-link-down EMPTY>

<!ELEMENT fibrechannel-mac-statistics (fibrechannel-mac-statistics-generic |
fibrechannel-mac-statistics-received | fibrechannel-mac-statistics-transmitted)*>
<!ATTLIST fibrechannel-mac-statistics junos:style CDATA #IMPLIED>

<!ELEMENT fibrechannel-mac-statistics-generic (link-failures | loss-of-sync |
loss-of-signal | sw-link-resets | buffer-to-buffer-credit-recovery-lost-frames |
 buffer-to-buffer-credit-recovery-lost-rrdys)*>

<!ELEMENT fibrechannel-mac-statistics-received (rx-class-2-frames |
rx-class-3-frames | rx-class-f-frames | rx-class-2-octets | rx-class-3-octets |
rx-class-f-octets | class-2-discards | class-3-discards | class-f-discards |
rx-frames-too-long | rx-frames-too-short | rx-missing-eof | rx-invalid-crcs |
rx-link-resets | rx-link-reset-responses | rx-offlines | rx-not-operationals |
rx-invalid-tx-words | rx-encoding-disparity-errors | rx-delimiter-errors |
rx-input-buffers-full | rx-invalid-ordered-sets | rx-prim-seq-protocol-errors |
rx-other-errors)*>

<!ELEMENT fibrechannel-mac-statistics-transmitted (tx-class-2-frames |
tx-class-3-frames | tx-class-f-frames | tx-class-2-octets | tx-class-3-octets |
tx-class-f-octets | tx-link-resets | tx-link-reset-responses | tx-offlines |
tx-not-operationals | tx-bb-credit-zeroes | tx-other-errors)*>

<!ELEMENT fibrechannel-port-flow-control (fibrechannel-port-flow-control-mode |
fibrechannel-port-flow-control-credits)*>
<!ATTLIST fibrechannel-port-flow-control junos:style CDATA #IMPLIED>

<!ELEMENT fibrechannel-port-flow-control-credits
(fibrechannel-port-flow-control-credits-subject |
fibrechannel-port-flow-control-credits-assigned |
fibrechannel-port-flow-control-credits-available)*>

<!ELEMENT fibrechannel-port-flow-control-credits-assigned (#PCDATA)>

<!ELEMENT fibrechannel-port-flow-control-credits-available (#PCDATA)>

<!ELEMENT fibrechannel-port-flow-control-credits-subject (#PCDATA)>

<!ELEMENT fibrechannel-port-flow-control-mode (#PCDATA)>

<!ELEMENT filter-family (#PCDATA)>
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<!ELEMENT filter-information (filter-family | filter-input |
filter-input-precedence | filter-output | filter-output-precedence)*>

<!ELEMENT filter-input (#PCDATA)>

<!ELEMENT filter-input-precedence (#PCDATA)>

<!ELEMENT filter-output (#PCDATA)>

<!ELEMENT filter-output-precedence (#PCDATA)>

<!ELEMENT flow-control (#PCDATA)>

<!ELEMENT forwarding-class-name (#PCDATA)>

<!ELEMENT fpc-number (#PCDATA)>

<!ELEMENT fragment-buffer-overflow (#PCDATA)>

<!ELEMENT fragment-drop-bytes (#PCDATA)>

<!ELEMENT fragment-drops (#PCDATA)>

<!ELEMENT fragment-threshold (#PCDATA)>

<!ELEMENT fragment-timeout (#PCDATA)>

<!ELEMENT fragments (input-frames | input-fps | input-bytes | input-bps |
output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT framing-errors (#PCDATA)>

<!ELEMENT frequency (#PCDATA)>

<!ELEMENT from-dce (dtr | rts | cts | dcd | dsr | tm)*>

<!ELEMENT from-dte (dtr | rts | cts | dcd | dsr | tm)*>

<!ELEMENT generation (#PCDATA)>

<!ELEMENT generic-value (#PCDATA)>

<!ELEMENT global-fpc-number (#PCDATA)>

<!ELEMENT gre-keepalive-adj-state (#PCDATA)>

<!ELEMENT gre-keepalive-configured (#PCDATA)>

<!ELEMENT hardware-physical-address (#PCDATA)>

<!ELEMENT hardware-token (#PCDATA)>

<!ELEMENT hdlc-giant-threshold (#PCDATA)>

<!ELEMENT hdlc-information (hdlc-rx-bucket-state | hdlc-rx-bit-rate |
hdlc-rx-threshold | hdlc-tx-bit-rate | hdlc-tx-bucket-state | hdlc-tx-threshold
| hdlc-giant-threshold | hdlc-runt-threshold)*>

<!ELEMENT hdlc-runt-threshold (#PCDATA)>
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<!ELEMENT hdlc-rx-bit-rate (#PCDATA)>

<!ELEMENT hdlc-rx-bucket-state (#PCDATA)>

<!ELEMENT hdlc-rx-threshold (#PCDATA)>

<!ELEMENT hdlc-tx-bit-rate (#PCDATA)>

<!ELEMENT hdlc-tx-bucket-state (#PCDATA)>

<!ELEMENT hdlc-tx-threshold (#PCDATA)>

<!ELEMENT high-red (#PCDATA)>

<!ELEMENT hs-link-crc-errors (#PCDATA)>

<!ELEMENT hs-link-fifo-overflows (#PCDATA)>

<!ELEMENT hs-link-fifo-underflows (#PCDATA)>

<!ELEMENT idle-cycle-flag (#PCDATA)>

<!ELEMENT idle-timeout (#PCDATA)>

<!ELEMENT if-auto-mdix (#PCDATA)>

<!ELEMENT if-auto-negotiation (#PCDATA)>

<!ELEMENT if-config-flags (iff-none | iff-hardware-down | iff-down | iff-up |
iff-admin-down | iff-admin-up | iff-link-down | iff-device-down |
iff-point-to-point | iff-point-to-multipoint | plp-to-clp | iff-multiaccess |
iff-change | iff-inverse-arp | iff-no-multicast | iff-multicast | iff-promiscuous
 | iff-all-multicast | iff-snmp-traps | iff-rx-passive | iff-tx-passive |
iff-ccc-down | iff-clear-df | iff-tunnel-reassembly | iff-acfc | iff-pfc | iff-rdd
 | iff-looped | iff-framing-conflict | internal-flags)*>

<!ELEMENT if-device-flags (ifdf-none | ifdf-present | ifdf-running | ifdf-duplex
 | ifdf-down | ifdf-no-carrier | ifdf-error1 | ifdf-error2 | ifdf-no-multicast |
 ifdf-loopback | ifdf-quench | ifdf-recv-all-multicasts | ifdf-promiscuous |
ifdf-link-layer-down | ifdf-loop-detected | ifdf-pfe-gone | generic-value)*>

<!ELEMENT if-flow-control (#PCDATA)>

<!ELEMENT if-media-flags (ifmf-none | ifmf-autoselect | ifmf-scheduler |
ifmf-shared-scheduler | ifmf-keepalives | ifmf-no-keepalives | ifmf-give-up |
ifmf-loose-lcp | ifmf-loose-ncp | ifmf-ppp-acfc | ifmf-ppp-pfc | ifmf-loose-lmi
| ifmf-dce | ifmf-dte | generic-value)*>

<!ELEMENT if-media-type (#PCDATA)>

<!ELEMENT if-remote-fault (#PCDATA)>

<!ELEMENT if-speed-auto-negotiation (#PCDATA)>

<!ELEMENT if-switchover-last-attempt (#PCDATA)>

<!ELEMENT if-switchover-last-time (#PCDATA)>

<!ELEMENT if-switchover-min-max-avg-time (#PCDATA)>

<!ELEMENT if-switchover-total (#PCDATA)>
```


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```
<!ELEMENT if-type (#PCDATA)>

<!ELEMENT if-unidirectional (#PCDATA)>

<!ELEMENT ifa-address-pool (#PCDATA)>

<!ELEMENT ifa-broadcast (#PCDATA)>

<!ELEMENT ifa-destination (#PCDATA)>

<!ELEMENT ifa-flags (ifaf-none | ifaf-primary | ifaf-preferred | ifaf-master-only
 | ifaf-down | ifaf-kernel | ifaf-current-default | ifaf-current-preferred |
ifaf-current-primary | ifaf-duplicate | ifaf-webauth-http | generic-value)*>

<!ELEMENT ifa-local (#PCDATA)>

<!ELEMENT ifa-primary-dns (#PCDATA)>

<!ELEMENT ifa-primary-nbns (#PCDATA)>

<!ELEMENT ifa-secondary-dns (#PCDATA)>

<!ELEMENT ifa-secondary-nbns (#PCDATA)>

<!ELEMENT ifaf-current-default EMPTY>

<!ELEMENT ifaf-current-preferred EMPTY>

<!ELEMENT ifaf-current-primary EMPTY>

<!ELEMENT ifaf-down EMPTY>

<!ELEMENT ifaf-duplicate EMPTY>

<!ELEMENT ifaf-kernel EMPTY>

<!ELEMENT ifaf-master-only EMPTY>

<!ELEMENT ifaf-none EMPTY>

<!ELEMENT ifaf-preferred EMPTY>

<!ELEMENT ifaf-primary EMPTY>

<!ELEMENT ifaf-webauth-http EMPTY>

<!ELEMENT ifd-cell-bundle-size (#PCDATA)>

<!ELEMENT ifd-cell-bundle-timeout (#PCDATA)>

<!ELEMENT ifdf-down EMPTY>

<!ELEMENT ifdf-duplex EMPTY>

<!ELEMENT ifdf-error1 EMPTY>

<!ELEMENT ifdf-error2 EMPTY>

<!ELEMENT ifdf-link-layer-down EMPTY>
```

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```
<!ELEMENT ifdf-loop-detected EMPTY>
<!ELEMENT ifdf-loopback EMPTY>
<!ELEMENT ifdf-no-carrier EMPTY>
<!ELEMENT ifdf-no-multicast EMPTY>
<!ELEMENT ifdf-none EMPTY>
<!ELEMENT ifdf-pfe-gone EMPTY>
<!ELEMENT ifdf-present EMPTY>
<!ELEMENT ifdf-promiscuous EMPTY>
<!ELEMENT ifdf-quench EMPTY>
<!ELEMENT ifdf-recv-all-multicasts EMPTY>
<!ELEMENT ifdf-running EMPTY>
<!ELEMENT iff-acfc EMPTY>
<!ELEMENT iff-admin-down EMPTY>
<!ELEMENT iff-admin-up EMPTY>
<!ELEMENT iff-all-multicast EMPTY>
<!ELEMENT iff-ccc-down EMPTY>
<!ELEMENT iff-change EMPTY>
<!ELEMENT iff-clear-df EMPTY>
<!ELEMENT iff-device-down EMPTY>
<!ELEMENT iff-down EMPTY>
<!ELEMENT iff-framing-conflict EMPTY>
<!ELEMENT iff-hardware-down EMPTY>
<!ELEMENT iff-inverse-arp EMPTY>
<!ELEMENT iff-link-down EMPTY>
<!ELEMENT iff-looped EMPTY>
<!ELEMENT iff-multiaccess EMPTY>
<!ELEMENT iff-multicast EMPTY>
<!ELEMENT iff-no-multicast EMPTY>
<!ELEMENT iff-none EMPTY>
<!ELEMENT iff-pfc EMPTY>
<!ELEMENT iff-point-to-multipoint EMPTY>
```


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```
<!ELEMENT iff-point-to-point EMPTY>
<!ELEMENT iff-ppp-flags-acfc EMPTY>
<!ELEMENT iff-ppp-flags-pfc EMPTY>
<!ELEMENT iff-promiscuous EMPTY>
<!ELEMENT iff-rdd EMPTY>
<!ELEMENT iff-rx-passive EMPTY>
<!ELEMENT iff-snmp-traps EMPTY>
<!ELEMENT iff-tunnel-reassembly EMPTY>
<!ELEMENT iff-tx-passive EMPTY>
<!ELEMENT iff-up EMPTY>
<!ELEMENT ifff-down EMPTY>
<!ELEMENT ifff-dst-class-usage EMPTY>
<!ELEMENT ifff-func1 EMPTY>
<!ELEMENT ifff-func2 EMPTY>
<!ELEMENT ifff-hard-down EMPTY>
<!ELEMENT ifff-is-primary EMPTY>
<!ELEMENT ifff-mac-validate-loose EMPTY>
<!ELEMENT ifff-mac-validate-strict EMPTY>
<!ELEMENT ifff-mtu-protocol-adj EMPTY>
<!ELEMENT ifff-mtu-user-conf EMPTY>
<!ELEMENT ifff-negotiate-address EMPTY>
<!ELEMENT ifff-no-asynch-notification EMPTY>
<!ELEMENT ifff-no-neighbor-learn EMPTY>
<!ELEMENT ifff-no-redirects EMPTY>
<!ELEMENT ifff-none EMPTY>
<!ELEMENT ifff-port-mode-isid-trunk EMPTY>
<!ELEMENT ifff-port-mode-trunk EMPTY>
<!ELEMENT ifff-primary EMPTY>
<!ELEMENT ifff-recv-options EMPTY>
<!ELEMENT ifff-recv-ttl-exceeded EMPTY>
```

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```
<!ELEMENT ifff-redirects EMPTY>
<!ELEMENT ifff-rpf-check EMPTY>
<!ELEMENT ifff-rpf-loose-mode EMPTY>
<!ELEMENT ifff-sample-input EMPTY>
<!ELEMENT ifff-sample-output EMPTY>
<!ELEMENT ifff-sendbcast-pkt-to-re EMPTY>
<!ELEMENT ifff-src-class-input EMPTY>
<!ELEMENT ifff-src-class-output EMPTY>
<!ELEMENT ifff-targeted-broadcast EMPTY>
<!ELEMENT ifff-tcc-inet EMPTY>
<!ELEMENT ifff-tcc-inet6 EMPTY>
<!ELEMENT ifff-tcc-iso EMPTY>
<!ELEMENT ifff-tcc-mpls EMPTY>
<!ELEMENT ifff-unnumbered EMPTY>
<!ELEMENT ifff-up EMPTY>
<!ELEMENT ifl-type (#PCDATA)>
<!ELEMENT ifmf-autoselect EMPTY>
<!ELEMENT ifmf-dce EMPTY>
<!ELEMENT ifmf-dte EMPTY>
<!ELEMENT ifmf-give-up EMPTY>
<!ELEMENT ifmf-keepalives EMPTY>
<!ELEMENT ifmf-loose-lcp EMPTY>
<!ELEMENT ifmf-loose-lmi EMPTY>
<!ELEMENT ifmf-loose-ncp EMPTY>
<!ELEMENT ifmf-no-keepalives EMPTY>
<!ELEMENT ifmf-none EMPTY>
<!ELEMENT ifmf-ppp-acfc EMPTY>
<!ELEMENT ifmf-ppp-pfc EMPTY>
<!ELEMENT ifmf-scheduler EMPTY>
<!ELEMENT ifmf-shared-scheduler EMPTY>
<!ELEMENT ifvc-active EMPTY>
```


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```
<!ELEMENT ifvc-ccc-down EMPTY>

<!ELEMENT ifvc-closed EMPTY>

<!ELEMENT ifvc-configured EMPTY>

<!ELEMENT ifvc-down EMPTY>

<!ELEMENT ifvc-epd (#PCDATA)>

<!ELEMENT ifvc-epd-plp0 (#PCDATA)>

<!ELEMENT ifvc-epd-plp1 (#PCDATA)>

<!ELEMENT ifvc-flags (ifvc-down | ifvc-none | ifvc-active | ifvc-closed |
ifvc-inverse-arp | ifvc-ilmi | ifvc-oam | ifvc-shaping | ifvc-passiveoam |
ifvc-multicast | ifvc-ccc-down | ifvc-configured | ifvc-unconfigured |
generic-value)*>

<!ELEMENT ifvc-ilmi EMPTY>

<!ELEMENT ifvc-inverse-arp EMPTY>

<!ELEMENT ifvc-multicast EMPTY>

<!ELEMENT ifvc-multipoint-destination (multipoint-address)*>

<!ELEMENT ifvc-none EMPTY>

<!ELEMENT ifvc-oam EMPTY>

<!ELEMENT ifvc-passiveoam EMPTY>

<!ELEMENT ifvc-shaping EMPTY>

<!ELEMENT ifvc-unconfigured EMPTY>

<!ELEMENT ifvc-weight (#PCDATA)>

<!ELEMENT ifvp-active EMPTY>

<!ELEMENT ifvp-closed EMPTY>

<!ELEMENT ifvp-down EMPTY>

<!ELEMENT ifvp-flags (ifvp-down | ifvp-none | ifvp-active | ifvp-closed | ifvp-oam
 | ifvp-shaping | ifvp-passiveoam | ifvp-tunnel | generic-value)*>

<!ELEMENT ifvp-none EMPTY>

<!ELEMENT ifvp-oam EMPTY>

<!ELEMENT ifvp-passiveoam EMPTY>

<!ELEMENT ifvp-shaping EMPTY>

<!ELEMENT ifvp-tunnel EMPTY>

<!ELEMENT ih-parent (#PCDATA)>
```

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```
<!ELEMENT illegal-rx-packets (#PCDATA)>

<!ELEMENT ima-alarm-blocked EMPTY>

<!ELEMENT ima-alarm-blocked-fe EMPTY>

<!ELEMENT ima-alarm-config-abort EMPTY>

<!ELEMENT ima-alarm-config-abort-fe EMPTY>

<!ELEMENT ima-alarm-fault EMPTY>

<!ELEMENT ima-alarm-insufficient-links EMPTY>

<!ELEMENT ima-alarm-insufficient-links-fe EMPTY>

<!ELEMENT ima-alarm-lif EMPTY>

<!ELEMENT ima-alarm-lods EMPTY>

<!ELEMENT ima-alarm-rdi EMPTY>

<!ELEMENT ima-alarm-rx-misconnected EMPTY>

<!ELEMENT ima-alarm-rx-unusable-fe EMPTY>

<!ELEMENT ima-alarm-startup-fe EMPTY>

<!ELEMENT ima-alarm-timing-mismatch EMPTY>

<!ELEMENT ima-alarm-tx-misconnected EMPTY>

<!ELEMENT ima-alarm-tx-unusable-fe EMPTY>

<!ELEMENT ima-alarm-version-mismatch EMPTY>

<!ELEMENT ima-differential-delay (#PCDATA)>

<!ELEMENT ima-frame-length (#PCDATA)>

<!ELEMENT ima-frame-sync-alpha (#PCDATA)>

<!ELEMENT ima-frame-sync-beta (#PCDATA)>

<!ELEMENT ima-frame-sync-gamma (#PCDATA)>

<!ELEMENT ima-group-id (#PCDATA)>

<!ELEMENT ima-group-information (media-alarm)*>

<!ELEMENT ima-group-link-enumerator (#PCDATA)>

<!ELEMENT ima-group-link-information (#PCDATA)>

<!ELEMENT ima-group-properties (ima-version | ima-frame-length |
ima-differential-delay | ima-symmetry | ima-transmit-clock | ima-tx-minimum-links
 | ima-rx-minimum-links | ima-frame-sync-alpha | ima-frame-sync-beta |
ima-frame-sync-gamma | ima-group-link-enumerator | ima-group-link-information |
ima-test-period | ima-test-elapsed | ima-test-status | ima-test-pattern |
ima-test-link | ima-test-result-pattern | ima-test-result-status |
ima-test-result-miscon | ima-test-result-mispat)*>
```


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```
<!ELEMENT ima-link-direction (#PCDATA)>

<!ELEMENT ima-link-information (media-alarm)*>

<!ELEMENT ima-link-properties (ima-group-id | ima-link-direction)*>

<!ELEMENT ima-rx-minimum-links (#PCDATA)>

<!ELEMENT ima-state (media-type | ima-state-line | ima-state-near-end |
ima-state-far-end)*>

<!ELEMENT ima-state-far-end (#PCDATA)>

<!ELEMENT ima-state-line (#PCDATA)>

<!ELEMENT ima-state-near-end (#PCDATA)>

<!ELEMENT ima-symmetry (#PCDATA)>

<!ELEMENT ima-test-elapsed (#PCDATA)>

<!ELEMENT ima-test-link (#PCDATA)>

<!ELEMENT ima-test-pattern (#PCDATA)>

<!ELEMENT ima-test-period (#PCDATA)>

<!ELEMENT ima-test-result-miscon (#PCDATA)>

<!ELEMENT ima-test-result-mispat (#PCDATA)>

<!ELEMENT ima-test-result-pattern (#PCDATA)>

<!ELEMENT ima-test-result-status (#PCDATA)>

<!ELEMENT ima-test-status (#PCDATA)>

<!ELEMENT ima-transmit-clock (#PCDATA)>

<!ELEMENT ima-tx-minimum-links (#PCDATA)>

<!ELEMENT ima-version (#PCDATA)>

<!ELEMENT in-arp-statistics (received-count | transmitted-count | denied-count |
 operation-not-supported-count | bad-packet-length-count | bad-protocol-count |
bad-protocol-length-count | bad-hardware-length-count | dropped-count |
last-received | last-transmitted)*>

<!ELEMENT in6-addr-flags (in6-anycast | in6-tentative | in6-duplicate |
in6-detached | in6-deprecated | in6-nodad | in6-temporary | in6-autoconf |
in6-nopfxmgmt)*>

<!ELEMENT in6-anycast EMPTY>

<!ELEMENT in6-autoconf EMPTY>

<!ELEMENT in6-deprecated EMPTY>

<!ELEMENT in6-detached EMPTY>
```

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```
<!ELEMENT in6-duplicate EMPTY>

<!ELEMENT in6-nodad EMPTY>

<!ELEMENT in6-nopfxmgmt EMPTY>

<!ELEMENT in6-temporary EMPTY>

<!ELEMENT in6-tentative EMPTY>

<!ELEMENT ingress-queue-counters (interface-chassis-cos-summary | queue |
interface-cos-summary | interface-cos-short-summary |
queue-num-forwarding-class-name-map)*>
<!ATTLIST ingress-queue-counters junos:style CDATA #IMPLIED>

<!ELEMENT ingress-rate-limit (#PCDATA)>

<!ELEMENT ingress-traffic-statistics (input-bytes | input-bps | input-packets |
input-pps | input-drop-bytes | input-drop-packets | input-drop-bps |
input-drop-pps)*>
<!ATTLIST ingress-traffic-statistics junos:style CDATA #IMPLIED>

<!ELEMENT init-command-str (#PCDATA)>

<!ELEMENT init-status (#PCDATA)>

<!ELEMENT initial-route-check (#PCDATA)>

<!ELEMENT input-bps (#PCDATA)>

<!ELEMENT input-broadcasts (#PCDATA)>

<!ELEMENT input-bucket-drops (#PCDATA)>

<!ELEMENT input-bytes (#PCDATA)>

<!ELEMENT input-code-violations (#PCDATA)>

<!ELEMENT input-crc-errors (#PCDATA)>

<!ELEMENT input-disabled-bundle (#PCDATA)>

<!ELEMENT input-discards (#PCDATA)>

<!ELEMENT input-drop-bps (#PCDATA)>

<!ELEMENT input-drop-bytes (#PCDATA)>

<!ELEMENT input-drop-packets (#PCDATA)>

<!ELEMENT input-drop-pps (#PCDATA)>

<!ELEMENT input-drops (#PCDATA)>

<!ELEMENT input-error-count (#PCDATA)>

<!ELEMENT input-error-frames (#PCDATA)>

<!ELEMENT input-error-list (input-errors | input-drops | invalid-vcs |
framing-errors | input-runts | input-giants | input-bucket-drops | input-discards
 | input-l3-incompletes | input-l2-channel-errors | input-l2-mismatch-timeouts |
```


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```
 input-fifo-errors | hs-link-crc-errors | hs-link-fifo-overflows | sram-errors |
 input-resource-errors)*>

<!ELEMENT input-errors (#PCDATA)>

<!ELEMENT input-fifo-errors (#PCDATA)>

<!ELEMENT input-fps (#PCDATA)>

<!ELEMENT input-fragment-frames (#PCDATA)>

<!ELEMENT input-frames (#PCDATA)>

<!ELEMENT input-giants (#PCDATA)>

<!ELEMENT input-jabber-frames (#PCDATA)>

<!ELEMENT input-l2-channel-errors (#PCDATA)>

<!ELEMENT input-l2-mismatch-timeouts (#PCDATA)>

<!ELEMENT input-l3-incompletes (#PCDATA)>

<!ELEMENT input-mac-control-frames (#PCDATA)>

<!ELEMENT input-mac-pause-frames (#PCDATA)>

<!ELEMENT input-mac-pfc-frames (#PCDATA)>

<!ELEMENT input-multicasts (#PCDATA)>

<!ELEMENT input-oversized-frames (#PCDATA)>

<!ELEMENT input-packets (#PCDATA)>

<!ELEMENT input-policer-byte-drops (#PCDATA)>

<!ELEMENT input-policer-frame-drops (#PCDATA)>

<!ELEMENT input-pps (#PCDATA)>

<!ELEMENT input-reject-count (#PCDATA)>

<!ELEMENT input-reject-destination-address-count (#PCDATA)>

<!ELEMENT input-reject-source-address-count (#PCDATA)>

<!ELEMENT input-resource-errors (#PCDATA)>

<!ELEMENT input-runts (#PCDATA)>

<!ELEMENT input-undersized-frames (#PCDATA)>

<!ELEMENT input-unicasts (#PCDATA)>

<!ELEMENT input-vlan-tagged-frames (#PCDATA)>

<!ELEMENT inputv6-bytes (#PCDATA)>

<!ELEMENT inputv6-packets (#PCDATA)>
```

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```
<!ELEMENT instant-usage-weight-exponent (#PCDATA)>
<!ATTLIST instant-usage-weight-exponent junos:format CDATA #IMPLIED>

<!ELEMENT interesting-detected EMPTY>

<!ELEMENT interface-address (ifa-flags | generation | ifa-destination | ifa-local
 | in6-addr-flags | ifa-broadcast | ifa-primary-dns | ifa-primary-nbns |
ifa-secondary-dns | ifa-secondary-nbns | ifa-address-pool)*>
<!ATTLIST interface-address heading CDATA #IMPLIED>

<!ELEMENT interface-alarms (alarm-not-present | sonet-alarm-lol | sonet-alarm-pll
 | sonet-alarm-lof | sonet-alarm-los | sonet-alarm-sef | sonet-alarm-lais |
sonet-alarm-pais | sonet-alarm-lop | sonet-alarm-berr-sd | sonet-alarm-berr-sf |
 sonet-alarm-lrdi | sonet-alarm-prdi | sonet-alarm-rei | sonet-alarm-uneq |
sonet-alarm-pmis | sonet-alarm-loc | sonet-alarm-vais | sonet-alarm-vlop |
sonet-alarm-vrdi | sonet-alarm-vuneq | sonet-alarm-vmis | sonet-alarm-vloc |
sdh-alarm-lol | sdh-alarm-pll | sdh-alarm-lof | sdh-alarm-los | sdh-alarm-oof |
sdh-alarm-msais | sdh-alarm-hpais | sdh-alarm-lop | sdh-alarm-berr-sd |
sdh-alarm-berr-sf | sdh-alarm-msferf | sdh-alarm-hpferf | sdh-alarm-hpfebe |
sdh-alarm-hpuneq | sdh-alarm-hpplm | sdh-alarm-loc | sdh-alarm-tuais |
sdh-alarm-tulop | sdh-alarm-turdi | sdh-alarm-tuuneq | sdh-alarm-tumis |
sdh-alarm-tuloc | ds3-alarm-pll | ds3-alarm-ais | ds3-alarm-lof | ds3-alarm-los
| ds3-alarm-lcv | ds3-alarm-exz | ds3-alarm-ferf | ds3-alarm-ylw | ds3-alarm-idle
 | ds1-alarm-ais | ds1-alarm-lof | ds1-alarm-los | ds1-alarm-ylw |
ds1-alarm-crc-major | ds1-alarm-crc-minor | dsl-alarm-lof | dsl-alarm-los |
dsl-alarm-lom | dsl-alarm-locdi | dsl-alarm-locdni | dsl-alarm-lop |
dsl-alarm-far-lof | dsl-alarm-far-los | dsl-alarm-far-locdi | dsl-alarm-far-locdni
 | fibrechannel-alarm-link-down | ethernet-alarm-link-down | ethernet-alarm-lcdp
 | isdn-alarm-los | isdn-alarm-lof | shdsl-alarm-losd | shdsl-alarm-losw |
shdsl-alarm-line1-losd | shdsl-alarm-line1-losw | shdsl-alarm-line2-losd |
shdsl-alarm-line2-losw | otn-alarm-los | otn-alarm-lof | otn-alarm-lom |
otn-alarm-wavelength-lock | otn-alarm-otu-ais | otn-alarm-otu-bdi |
otn-alarm-otu-ttim | otn-alarm-otu-iae | otn-alarm-otu-sd | otn-alarm-otu-sf |
otn-alarm-otu-fec-excessive | otn-alarm-otu-fec-degraded |
otn-alarm-otu-threshold-bbe | otn-alarm-otu-threshold-es |
otn-alarm-otu-threshold-ses | otn-alarm-otu-threshold-uas | otn-alarm-odu-ais |
otn-alarm-odu-oci | otn-alarm-odu-lck | otn-alarm-odu-bdi | otn-alarm-odu-ttim |
 otn-alarm-odu-sd | otn-alarm-odu-sf | otn-alarm-odu-rx-aps-change |
otn-alarm-odu-threshold-bbe | otn-alarm-odu-threshold-es |
otn-alarm-odu-threshold-ses | otn-alarm-odu-threshold-uas | otn-alarm-opu-pmi |
ima-alarm-startup-fe | ima-alarm-config-abort | ima-alarm-config-abort-fe |
ima-alarm-insufficient-links | ima-alarm-insufficient-links-fe | ima-alarm-blocked
 | ima-alarm-blocked-fe | ima-alarm-timing-mismatch | ima-alarm-version-mismatch
 | ima-alarm-lif | ima-alarm-lods | ima-alarm-rdi | ima-alarm-tx-misconnected |
ima-alarm-rx-misconnected | ima-alarm-fault | ima-alarm-tx-unusable-fe |
ima-alarm-rx-unusable-fe | generic-value)*>

<!ELEMENT interface-chassis-cos-summary (intf-cos-chassis-num-queues-supported |
 intf-cos-chassis-num-queues-in-use)*>

<!ELEMENT interface-cos-short-summary (intf-cos-queue-type |
intf-cos-num-queues-supported | intf-cos-num-queues-in-use)*>

<!ELEMENT interface-cos-summary (intf-cos-forwarding-classes-supported |
intf-cos-forwarding-classes-in-use | intf-cos-queue-type |
intf-cos-num-queues-supported | intf-cos-num-queues-in-use |
intf-cos-burst-size-for-ifl)*>

<!ELEMENT interface-filter-information (physical-interface | logical-interface)*>
<!ATTLIST interface-filter-information heading CDATA #IMPLIED>
<!ATTLIST interface-filter-information junos:style CDATA #IMPLIED>
```


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```
<!ELEMENT interface-flapped (#PCDATA)>

<!ELEMENT interface-index (#PCDATA)>

<!ELEMENT interface-information (physical-interface | logical-interface |
controller | interface-set | docsis-information)*>
<!ATTLIST interface-information junos:style CDATA #IMPLIED>

<!ELEMENT interface-location-name-information (location-name-information)*>

<!ELEMENT interface-location-slot-information (location-slot-information)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-policer-information (physical-interface | logical-interface)*>
<!ATTLIST interface-policer-information heading CDATA #IMPLIED>
<!ATTLIST interface-policer-information junos:style CDATA #IMPLIED>

<!ELEMENT interface-set (name | interface-set-index | interface-set-member-list
| traffic-statistics | interface-set-queue-information)*>
<!ATTLIST interface-set junos:style CDATA #IMPLIED>

<!ELEMENT interface-set-index (#PCDATA)>

<!ELEMENT interface-set-member (#PCDATA)>

<!ELEMENT interface-set-member-list (interface-set-member)*>

<!ELEMENT interface-set-name (#PCDATA)>

<!ELEMENT interface-set-queue-information (queue-counters |
ingress-queue-counters)*>

<!ELEMENT interface-shared-with (#PCDATA)>

<!ELEMENT interface-transmit-statistics (#PCDATA)>

<!ELEMENT interface-tx-queue (name | bandwidth | wrr | output-packets |
output-bytes | output-drops | output-drops-bytes | output-errors)*>

<!ELEMENT interleave-fragments (#PCDATA)>

<!ELEMENT interleaved-rx-cells (#PCDATA)>

<!ELEMENT interleaved-tx-cells (#PCDATA)>

<!ELEMENT internal-flags (#PCDATA)>

<!ELEMENT interval (range | media-alarm)*>

<!ELEMENT interval-information (interval)*>

<!ELEMENT intf-cos-burst-size-for-ifl (#PCDATA)>

<!ELEMENT intf-cos-chassis-num-queues-in-use (#PCDATA)>

<!ELEMENT intf-cos-chassis-num-queues-supported (#PCDATA)>

<!ELEMENT intf-cos-forwarding-classes-in-use (#PCDATA)>
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<!ELEMENT intf-cos-forwarding-classes-supported (#PCDATA)>

<!ELEMENT intf-cos-num-queues-in-use (#PCDATA)>

<!ELEMENT intf-cos-num-queues-supported (#PCDATA)>

<!ELEMENT intf-cos-queue-type (#PCDATA)>

<!ELEMENT invalid-vcs (#PCDATA)>

<!ELEMENT ipv4-multicast-statistics (input-bytes | input-bps | output-bytes |
output-bps | input-packets | input-pps | output-packets | output-pps)*>

<!ELEMENT ipv6-multicast-statistics (input-bytes | input-bps | output-bytes |
output-bps | input-packets | input-pps | output-packets | output-pps)*>

<!ELEMENT ipv6-total-statistics (input-bytes | output-bytes | input-packets |
output-packets)*>

<!ELEMENT ipv6-transit-statistics (input-bytes | output-bytes | input-packets |
output-packets)*>

<!ELEMENT irb-bridge (#PCDATA)>

<!ELEMENT irb-domain (irb-routing-instance | irb-bridge)*>

<!ELEMENT irb-routing-instance (#PCDATA)>

<!ELEMENT isdn-alarm-lof EMPTY>

<!ELEMENT isdn-alarm-los EMPTY>

<!ELEMENT jswitch-port (physical-interface-name | port | admin-state |
physical-link | link-speed | auto-negotiation | link-duplexity | port-mtu |
ethernet-mac-statistics | ethernet-autonegotiation | vlan-id | default-vlan-id |
 cascade-port)*>

<!ELEMENT jswitch-port-information (jswitch-port)*>
<!ATTLIST jswitch-port-information junos:style CDATA #IMPLIED>

<!ELEMENT keepalive-config (keepalive-interval | keepalive-up-count |
keepalive-down-count)*>

<!ELEMENT keepalive-down-count (#PCDATA)>

<!ELEMENT keepalive-input-count (#PCDATA)>

<!ELEMENT keepalive-input-time (#PCDATA)>

<!ELEMENT keepalive-interval (#PCDATA)>

<!ELEMENT keepalive-lmi-descriptor (#PCDATA)>

<!ELEMENT keepalive-output-count (#PCDATA)>

<!ELEMENT keepalive-output-time (#PCDATA)>

<!ELEMENT keepalive-statistics (keepalive-lmi-descriptor | keepalive-input-count
 | keepalive-input-time | keepalive-output-count | keepalive-output-time)*>
<!ATTLIST keepalive-statistics junos:style CDATA #IMPLIED>
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<!ELEMENT keepalive-up-count (#PCDATA)>

<!ELEMENT key-length (#PCDATA)>

<!ELEMENT l2circuit-info (cell-bundle-size | cell-bundle-timeout |
cell-timeout-count | out-of-sequence)*>

<!ELEMENT l2circuit-mode (#PCDATA)>

<!ELEMENT l2pt-error (#PCDATA)>

<!ELEMENT lacp-activity (#PCDATA)>

<!ELEMENT lacp-aggregation (#PCDATA)>

<!ELEMENT lacp-collecting (#PCDATA)>

<!ELEMENT lacp-defaulted (#PCDATA)>

<!ELEMENT lacp-distributing (#PCDATA)>

<!ELEMENT lacp-expired (#PCDATA)>

<!ELEMENT lacp-mux-state (#PCDATA)>

<!ELEMENT lacp-port-key (#PCDATA)>

<!ELEMENT lacp-port-number (#PCDATA)>

<!ELEMENT lacp-port-priority (#PCDATA)>

<!ELEMENT lacp-receive-state (#PCDATA)>

<!ELEMENT lacp-role (#PCDATA)>

<!ELEMENT lacp-rx-packets (#PCDATA)>

<!ELEMENT lacp-synchronization (#PCDATA)>

<!ELEMENT lacp-sys-priority (#PCDATA)>

<!ELEMENT lacp-system-id (#PCDATA)>

<!ELEMENT lacp-timeout (#PCDATA)>

<!ELEMENT lacp-transmit-state (#PCDATA)>

<!ELEMENT lacp-tx-packets (#PCDATA)>

<!ELEMENT lag-bundle (input-packets | input-pps | input-bytes | input-bps |
output-packets | output-pps | output-bytes | output-bps)*>

<!ELEMENT lag-ipv4-multicast-statistics (input-packets | input-pps | input-bytes
 | input-bps | output-packets | output-pps | output-bytes | output-bps)*>

<!ELEMENT lag-ipv6-multicast-statistics (input-packets | input-pps | input-bytes
 | input-bps | output-packets | output-pps | output-bytes | output-bps)*>

<!ELEMENT lag-lacp-info (name | lacp-role | lacp-sys-priority | lacp-system-id |
 lacp-port-priority | lacp-port-number | lacp-port-key)*>
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<!ELEMENT lag-lacp-protocol (name | lacp-receive-state | lacp-transmit-state |
lacp-mux-state)*>

<!ELEMENT lag-lacp-state (name | lacp-role | lacp-expired | lacp-defaulted |
lacp-distributing | lacp-collecting | lacp-synchronization | lacp-aggregation |
lacp-timeout | lacp-activity)*>

<!ELEMENT lag-lacp-statistics (name | lacp-rx-packets | lacp-tx-packets |
unknown-rx-packets | illegal-rx-packets)*>

<!ELEMENT lag-link (name | down | input-packets | input-pps | input-bytes |
input-bps | output-packets | output-pps | output-bytes | output-bps)*>

<!ELEMENT lag-marker (name | marker-rx-packets | marker-response-tx-packets |
unknown-rx-packets | illegal-rx-packets)*>

<!ELEMENT lag-multicast-statistics (lag-multicast-statistics-header |
lag-ipv4-multicast-statistics | lag-ipv6-multicast-statistics)*>
<!ATTLIST lag-multicast-statistics junos:style CDATA #IMPLIED>

<!ELEMENT lag-multicast-statistics-header EMPTY>

<!ELEMENT lag-targeting-summary (targeting-intf-name | targeting-intf-type |
targeting-intf-link-state)*>

<!ELEMENT lag-traffic-statistics (lag-bundle | lag-multicast-statistics | lag-link
 | lag-targeting-summary | lag-marker | lag-lacp-statistics | lag-lacp-info |
lag-lacp-state | lag-lacp-protocol)*>

<!ELEMENT lane-index (#PCDATA)>

<!ELEMENT laser-bias-current (#PCDATA)>

<!ELEMENT laser-bias-current-alarm (#PCDATA)>

<!ELEMENT laser-bias-current-high-alarm (#PCDATA)>

<!ELEMENT laser-bias-current-high-alarm-threshold (#PCDATA)>

<!ELEMENT laser-bias-current-high-warn (#PCDATA)>

<!ELEMENT laser-bias-current-high-warn-threshold (#PCDATA)>

<!ELEMENT laser-bias-current-low-alarm (#PCDATA)>

<!ELEMENT laser-bias-current-low-alarm-threshold (#PCDATA)>

<!ELEMENT laser-bias-current-low-warn (#PCDATA)>

<!ELEMENT laser-bias-current-low-warn-threshold (#PCDATA)>

<!ELEMENT laser-bias-current-not-available (#PCDATA)>

<!ELEMENT laser-end-of-life-alarm (#PCDATA)>

<!ELEMENT laser-output-power (#PCDATA)>

<!ELEMENT laser-output-power-dbm (#PCDATA)>

<!ELEMENT laser-power-alarm (#PCDATA)>
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<!ELEMENT laser-rx-optical-power (#PCDATA)>

<!ELEMENT laser-rx-optical-power-dbm (#PCDATA)>

<!ELEMENT laser-rx-power-high-alarm (#PCDATA)>

<!ELEMENT laser-rx-power-high-alarm-threshold (#PCDATA)>

<!ELEMENT laser-rx-power-high-alarm-threshold-dbm (#PCDATA)>

<!ELEMENT laser-rx-power-high-warn (#PCDATA)>

<!ELEMENT laser-rx-power-high-warn-threshold (#PCDATA)>

<!ELEMENT laser-rx-power-high-warn-threshold-dbm (#PCDATA)>

<!ELEMENT laser-rx-power-low-alarm (#PCDATA)>

<!ELEMENT laser-rx-power-low-alarm-threshold (#PCDATA)>

<!ELEMENT laser-rx-power-low-alarm-threshold-dbm (#PCDATA)>

<!ELEMENT laser-rx-power-low-warn (#PCDATA)>

<!ELEMENT laser-rx-power-low-warn-threshold (#PCDATA)>

<!ELEMENT laser-rx-power-low-warn-threshold-dbm (#PCDATA)>

<!ELEMENT laser-rx-power-not-available (#PCDATA)>

<!ELEMENT laser-temp-high-alarm (#PCDATA)>

<!ELEMENT laser-temp-high-warn (#PCDATA)>

<!ELEMENT laser-temp-low-alarm (#PCDATA)>

<!ELEMENT laser-temp-low-warn (#PCDATA)>

<!ELEMENT laser-temperature (#PCDATA)>
<!ATTLIST laser-temperature junos:celsius CDATA #IMPLIED>

<!ELEMENT laser-temperature-high-alarm-threshold (#PCDATA)>
<!ATTLIST laser-temperature-high-alarm-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT laser-temperature-high-warn-threshold (#PCDATA)>
<!ATTLIST laser-temperature-high-warn-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT laser-temperature-low-alarm-threshold (#PCDATA)>
<!ATTLIST laser-temperature-low-alarm-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT laser-temperature-low-warn-threshold (#PCDATA)>
<!ATTLIST laser-temperature-low-warn-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT laser-tx-power-high-alarm (#PCDATA)>

<!ELEMENT laser-tx-power-high-alarm-threshold (#PCDATA)>

<!ELEMENT laser-tx-power-high-alarm-threshold-dbm (#PCDATA)>

<!ELEMENT laser-tx-power-high-warn (#PCDATA)>
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<!ELEMENT laser-tx-power-high-warn-threshold (#PCDATA)>

<!ELEMENT laser-tx-power-high-warn-threshold-dbm (#PCDATA)>

<!ELEMENT laser-tx-power-low-alarm (#PCDATA)>

<!ELEMENT laser-tx-power-low-alarm-threshold (#PCDATA)>

<!ELEMENT laser-tx-power-low-alarm-threshold-dbm (#PCDATA)>

<!ELEMENT laser-tx-power-low-warn (#PCDATA)>

<!ELEMENT laser-tx-power-low-warn-threshold (#PCDATA)>

<!ELEMENT laser-tx-power-low-warn-threshold-dbm (#PCDATA)>

<!ELEMENT laser-tx-power-not-available (#PCDATA)>

<!ELEMENT laser-wavelength-alarm (#PCDATA)>

<!ELEMENT last-down-time (#PCDATA)>

<!ELEMENT last-received (#PCDATA)>

<!ELEMENT last-transmitted (#PCDATA)>

<!ELEMENT layer2-input-policer (#PCDATA)>

<!ELEMENT layer2-input-policer-information (layer2-input-policer)*>

<!ELEMENT layer2-input-policer-statistics (policer-low-iq2-frames |
policer-medium-low-iq2-frames | policer-medium-high-iq2-frames |
policer-high-iq2-frames | policer-dropped-iq2-frames | policer-low-frames |
policer-medium-low-frames | policer-medium-high-frames | policer-high-frames |
policer-dropped-frames | policer-low-bytes | policer-medium-low-bytes |
policer-medium-high-bytes | policer-high-bytes | policer-dropped-bytes |
policer-low-rate | policer-medium-low-rate | policer-medium-high-rate |
policer-high-rate | policer-dropped-rate)*>

<!ELEMENT layer2-output-policer (#PCDATA)>

<!ELEMENT layer2-output-policer-information (layer2-output-policer)*>

<!ELEMENT layer2-output-policer-statistics (policer-low-iq2-frames |
policer-medium-low-iq2-frames | policer-medium-high-iq2-frames |
policer-high-iq2-frames | policer-dropped-iq2-frames | policer-low-frames |
policer-medium-low-frames | policer-medium-high-frames | policer-high-frames |
policer-dropped-frames | policer-low-bytes | policer-medium-low-bytes |
policer-medium-high-bytes | policer-high-bytes | policer-dropped-bytes |
policer-low-rate | policer-medium-low-rate | policer-medium-high-rate |
policer-high-rate | policer-dropped-rate)*>

<!ELEMENT lcc-number (#PCDATA)>

<!ELEMENT lcp-restart-timer (#PCDATA)>

<!ELEMENT lcp-state (#PCDATA)>

<!ELEMENT length-errors (#PCDATA)>

<!ELEMENT lfi (input-frames | input-fps | input-bytes | input-bps | output-frames
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 | output-fps | output-bytes | output-bps)*>

<!ELEMENT line-protocol (line-protocol-mode)*>

<!ELEMENT line-protocol-mode (#PCDATA)>

<!ELEMENT linear-red-drop-profile (queue-depth | low-red | high-red | max-low-red
 | max-high-red)*>

<!ELEMENT link (name | down | link-uptime | input-frames | input-fps | input-bytes
 | input-bps | output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT link-address (#PCDATA)>

<!ELEMENT link-duplexity (#PCDATA)>

<!ELEMENT link-entry (link-id | active-alarms | active-defects | sonet-errors |
sonet-physical-information | sonet-section-information | sonet-line-information
| sonet-path-information | sonet-payload-pointer-information |
sonet-payload-pointer-curptr | sonet-payload-pointer-ptrinc-count |
sonet-payload-pointer-ptrdec-count | sonet-payload-pointer-newptr-ndf-count |
sonet-vt-information | sonet-rx-overhead | sonet-tx-overhead | sonet-rx-path-trace
 | sonet-tx-path-trace | optics-diagnostics)*>

<!ELEMENT link-failures (#PCDATA)>

<!ELEMENT link-id (#PCDATA)>

<!ELEMENT link-layer-overhead (#PCDATA)>

<!ELEMENT link-level-type (#PCDATA)>

<!ELEMENT link-mode (#PCDATA)>

<!ELEMENT link-partner-duplexity (#PCDATA)>

<!ELEMENT link-partner-reason (#PCDATA)>

<!ELEMENT link-partner-speed (#PCDATA)>

<!ELEMENT link-partner-status (#PCDATA)>

<!ELEMENT link-speed (#PCDATA)>

<!ELEMENT link-type (#PCDATA)>

<!ELEMENT link-uptime (#PCDATA)>

<!ELEMENT links (link-entry)*>

<!ELEMENT lip-ack-retries (#PCDATA)>

<!ELEMENT lip-ack-timer (#PCDATA)>

<!ELEMENT lip-header-string (#PCDATA)>

<!ELEMENT lip-hello-timer (#PCDATA)>

<!ELEMENT lmi-asynchronous-updates-received (#PCDATA)>

<!ELEMENT lmi-dce-config (lmi-type | lmi-n392dce | lmi-n393dce | lmi-t392dce)*>
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<!ELEMENT lmi-dte-config (lmi-type | lmi-n391dte | lmi-n392dte | lmi-n393dte |
lmi-t391dte)*>

<!ELEMENT lmi-enquiries-received (#PCDATA)>

<!ELEMENT lmi-enquiries-sent (#PCDATA)>

<!ELEMENT lmi-enquiry-responses-received (#PCDATA)>

<!ELEMENT lmi-enquiry-responses-sent (#PCDATA)>

<!ELEMENT lmi-full-enquiries-received (#PCDATA)>

<!ELEMENT lmi-full-enquiries-sent (#PCDATA)>

<!ELEMENT lmi-full-enquiry-responses-received (#PCDATA)>

<!ELEMENT lmi-full-enquiry-responses-sent (#PCDATA)>

<!ELEMENT lmi-keepalive-responses-timeout (#PCDATA)>

<!ELEMENT lmi-n391dte (#PCDATA)>

<!ELEMENT lmi-n392dce (#PCDATA)>

<!ELEMENT lmi-n392dte (#PCDATA)>

<!ELEMENT lmi-n393dce (#PCDATA)>

<!ELEMENT lmi-n393dte (#PCDATA)>

<!ELEMENT lmi-out-of-sequence (#PCDATA)>

<!ELEMENT lmi-statistics (lmi-statistics-dte-descriptor | lmi-enquiries-sent |
lmi-full-enquiries-sent | lmi-enquiry-responses-received |
lmi-full-enquiry-responses-received | lmi-statistics-dce-descriptor |
lmi-enquiries-received | lmi-full-enquiries-received | lmi-enquiry-responses-sent
 | lmi-full-enquiry-responses-sent | lmi-statistics-common-descriptor |
lmi-unknown-messages-received | lmi-asynchronous-updates-received |
lmi-out-of-sequence | lmi-keepalive-responses-timeout)*>

<!ELEMENT lmi-statistics-common-descriptor (#PCDATA)>

<!ELEMENT lmi-statistics-dce-descriptor (#PCDATA)>

<!ELEMENT lmi-statistics-dte-descriptor (#PCDATA)>

<!ELEMENT lmi-t391dte (#PCDATA)>

<!ELEMENT lmi-t392dce (#PCDATA)>

<!ELEMENT lmi-type (#PCDATA)>

<!ELEMENT lmi-unknown-messages-received (#PCDATA)>

<!ELEMENT load-interval (#PCDATA)>

<!ELEMENT load-threshold (#PCDATA)>

<!ELEMENT local-flow-control (#PCDATA)>
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<!ELEMENT local-index (#PCDATA)>

<!ELEMENT local-info (local-flow-control | local-remote-fault | local-link-speed
 | local-link-duplexity)*>

<!ELEMENT local-link-duplexity (#PCDATA)>

<!ELEMENT local-link-speed (#PCDATA)>

<!ELEMENT local-remote-fault (#PCDATA)>

<!ELEMENT local-traffic-statistics (input-bytes | output-bytes | input-bps |
output-bps | input-packets | output-packets | input-pps | output-pps)*>

<!ELEMENT location-name-information (interface-name | fpc-number | lcc-number)*>

<!ELEMENT location-slot-information (global-fpc-number)*>

<!ELEMENT logical-interface (name | admin-status | oper-status | vrfname |
local-index | hardware-token | snmp-index | generation | description |
if-config-flags | multilink-flapped | link-address | encapsulation |
interface-set-name | demux-table-type | gre-keepalive-configured |
gre-keepalive-adj-state | copy-tos-to-outer-ip-header |
redundant-logical-interface-name | layer2-input-policer-information |
layer2-output-policer-information | atm-input-policer-information |
pppoe-information | pppoe-underlying-information | demux-interface |
demux-information | dialer-time-to-disconnect | dialer-information |
shared-interface-information | logical-interface-mac | mac-database |
logical-interface-bandwidth | queue-counters | ingress-queue-counters |
multilink-bundle-link-information | multilink-bundle-options |
multilink-bundle-errors | multilink-traffic-statistics | traffic-statistics |
multicast-statistics | ingress-traffic-statistics | local-traffic-statistics |
transit-traffic-statistics | keepalive-config | keepalive-statistics | ppp-flags
 | lcp-state | ncp-information | chap-state | pap-state |
virtual-circuit-information | filter-information | policer-information |
address-family | bridge-iff-properties | in-arp-statistics | l2circuit-info |
irb-domain | media-information | multilink-bundle-status | multilink-bundle-class
 | lag-traffic-statistics | layer2-input-policer-statistics |
layer2-output-policer-statistics | atm-input-policer-statistics |
mac-policer-information | ppp-parameters)*>

<!ELEMENT logical-interface-bandwidth (#PCDATA)>

<!ELEMENT logical-interface-mac (#PCDATA)>

<!ELEMENT loopback (#PCDATA)>

<!ELEMENT loopback-clear-timer (#PCDATA)>

<!ELEMENT loss-of-signal (#PCDATA)>

<!ELEMENT loss-of-sync (#PCDATA)>

<!ELEMENT low-red (#PCDATA)>

<!ELEMENT lsi-traffic-statistics (input-bytes | input-bps | input-packets |
input-pps)*>
<!ATTLIST lsi-traffic-statistics junos:style CDATA #IMPLIED>

<!ELEMENT mac-address (#PCDATA)>
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<!ELEMENT mac-database (mac-record | number-of-mac-record)*>

<!ELEMENT mac-entry-type (#PCDATA)>

<!ELEMENT mac-mode (#PCDATA)>

<!ELEMENT mac-pfc-dot1p (#PCDATA)>

<!ELEMENT mac-policer-information (mac-address | mac-entry-type | receive-bytes
| transmit-bytes | receive-frames | transmit-frames | ether-policer-list)*>

<!ELEMENT mac-record (mac-address | receive-frames | receive-bytes |
transmit-frames | transmit-bytes)*>

<!ELEMENT mac-validate-bytes (#PCDATA)>

<!ELEMENT mac-validate-packets (#PCDATA)>

<!ELEMENT mac-validate-statistics (mac-validate-packets | mac-validate-bytes)*>

<!ELEMENT marker-response-tx-packets (#PCDATA)>

<!ELEMENT marker-rx-packets (#PCDATA)>

<!ELEMENT max-high-red (#PCDATA)>

<!ELEMENT max-low-red (#PCDATA)>

<!ELEMENT max-sessions (#PCDATA)>

<!ELEMENT max-sessions-vsa-ignore (#PCDATA)>

<!ELEMENT max-speed (#PCDATA)>

<!ELEMENT maximum-labels (#PCDATA)>

<!ELEMENT mc-ae-status (#PCDATA)>

<!ELEMENT media-alarm (media-alarm-name | media-alarm-seconds | media-alarm-count
 | media-alarm-state | ce-counter-name | ce-counter-packets | ce-counter-bytes |
 ce-counter-count)*>

<!ELEMENT media-alarm-count (#PCDATA)>

<!ELEMENT media-alarm-name (#PCDATA)>

<!ELEMENT media-alarm-seconds (#PCDATA)>

<!ELEMENT media-alarm-state (#PCDATA)>

<!ELEMENT media-information (media-alarm | ds1-timeslots | ds1-line-encoding |
ds1-byte-encoding | ds1-data-inversion | ds1-buildout | ds0-byte-encoding |
ds0-data-inversion | idle-cycle-flag | start-end-flag | e3-data-inversion |
media-type)*>
<!ATTLIST media-information junos:style CDATA #IMPLIED>

<!ELEMENT media-state (media-state-name | media-state-state)*>

<!ELEMENT media-state-information (media-type | media-state)*>
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<!ELEMENT media-state-name (#PCDATA)>

<!ELEMENT media-state-state (#PCDATA)>

<!ELEMENT media-type (#PCDATA)>

<!ELEMENT minimum-bandwidth-in-aggregate (#PCDATA)>

<!ELEMENT minimum-links (#PCDATA)>

<!ELEMENT minimum-links-in-aggregate (#PCDATA)>

<!ELEMENT mlfr-uni-nni-bandwidth (#PCDATA)>

<!ELEMENT mlfr-uni-nni-bundle-options (mlfr-uni-nni-device-type | mlfr-uni-nni-mrru
 | mlfr-uni-nni-bandwidth | red-differential-delay | red-differential-delay-action
 | yellow-differential-delay | lip-hello-timer | lip-ack-timer | lip-ack-retries
 | bundle-class | mlfr-uni-nni-drop-timeout | mlfr-uni-nni-link-layer-overhead |
 mlfr-uni-nni-lmi-type | mlfr-uni-nni-fragment-threshold |
mlfr-uni-nni-minimum-links | t391 | t392 | n391 | n392 | n393)*>

<!ELEMENT mlfr-uni-nni-device-type (#PCDATA)>

<!ELEMENT mlfr-uni-nni-drop-timeout (#PCDATA)>

<!ELEMENT mlfr-uni-nni-fragment-threshold (#PCDATA)>

<!ELEMENT mlfr-uni-nni-link (name | down | link-uptime | input-frames | input-fps
 | input-bytes | input-bps | output-frames | output-fps | output-bytes | output-bps
 | lip-header-string | current-differential-delay | recent-high-differential-delay
 | over-red-differential | over-yellow-differential | rcv-lip-addlink |
rcv-lip-link-ack | rcv-lip-link-rej | rcv-lip-hello | rcv-lip-hello-ack |
rcv-lip-link-rem | rcv-lip-rem-ack | xmt-lip-addlink | xmt-lip-link-ack |
xmt-lip-link-rej | xmt-lip-hello | xmt-lip-hello-ack | xmt-lip-link-rem |
xmt-lip-rem-ack)*>

<!ELEMENT mlfr-uni-nni-link-information (active-bundle-links | removed-bundle-links
 | disabled-bundle-links)*>

<!ELEMENT mlfr-uni-nni-link-layer-overhead (#PCDATA)>

<!ELEMENT mlfr-uni-nni-lmi-type (#PCDATA)>

<!ELEMENT mlfr-uni-nni-minimum-links (#PCDATA)>

<!ELEMENT mlfr-uni-nni-mrru (#PCDATA)>

<!ELEMENT mlfr-uni-nni-traffic-statistics (bundle | mlfr-uni-nni-link-information
 | mlfr-uni-nni-link)*>

<!ELEMENT mlppp-inner-ppp-pfc (#PCDATA)>

<!ELEMENT mode (#PCDATA)>

<!ELEMENT modem-information (modem-type | init-command-str | init-status |
baud-rate | call-status | error-code | call-duration | call-direction)*>

<!ELEMENT modem-type (#PCDATA)>

<!ELEMENT modulator-bias-alarm (#PCDATA)>
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<!ELEMENT modulator-temperature-alarm (#PCDATA)>

<!ELEMENT module-fault-alarm (#PCDATA)>

<!ELEMENT module-not-high-power-on-alarm (#PCDATA)>

<!ELEMENT module-not-init-done-alarm (#PCDATA)>

<!ELEMENT module-not-ready-alarm (#PCDATA)>

<!ELEMENT module-power-down-alarm (#PCDATA)>

<!ELEMENT module-temperature (#PCDATA)>
<!ATTLIST module-temperature junos:celsius CDATA #IMPLIED>

<!ELEMENT module-temperature-alarm (#PCDATA)>

<!ELEMENT module-temperature-high-alarm (#PCDATA)>

<!ELEMENT module-temperature-high-alarm-threshold (#PCDATA)>
<!ATTLIST module-temperature-high-alarm-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT module-temperature-high-warn (#PCDATA)>

<!ELEMENT module-temperature-high-warn-threshold (#PCDATA)>
<!ATTLIST module-temperature-high-warn-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT module-temperature-low-alarm (#PCDATA)>

<!ELEMENT module-temperature-low-alarm-threshold (#PCDATA)>
<!ATTLIST module-temperature-low-alarm-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT module-temperature-low-warn (#PCDATA)>

<!ELEMENT module-temperature-low-warn-threshold (#PCDATA)>
<!ATTLIST module-temperature-low-warn-threshold junos:celsius CDATA #IMPLIED>

<!ELEMENT module-temperature-not-available (#PCDATA)>

<!ELEMENT module-voltage (#PCDATA)>

<!ELEMENT module-voltage-high-alarm (#PCDATA)>

<!ELEMENT module-voltage-high-alarm-threshold (#PCDATA)>

<!ELEMENT module-voltage-high-warn (#PCDATA)>

<!ELEMENT module-voltage-high-warn-threshold (#PCDATA)>

<!ELEMENT module-voltage-low-alarm (#PCDATA)>

<!ELEMENT module-voltage-low-alarm-threshold (#PCDATA)>

<!ELEMENT module-voltage-low-warn (#PCDATA)>

<!ELEMENT module-voltage-low-warn-threshold (#PCDATA)>

<!ELEMENT mrru (#PCDATA)>

<!ELEMENT mrru-exceeded (#PCDATA)>
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<!ELEMENT mtu (#PCDATA)>

<!ELEMENT mtu-errors (#PCDATA)>

<!ELEMENT multicast-statistics (multicast-statistics-header |
ipv4-multicast-statistics | ipv6-multicast-statistics)*>
<!ATTLIST multicast-statistics junos:style CDATA #IMPLIED>

<!ELEMENT multicast-statistics-header EMPTY>

<!ELEMENT multilink EMPTY>

<!ELEMENT multilink-active-bundle-links (#PCDATA)>

<!ELEMENT multilink-bundle-class (multilink-class-id | rx-sequence-number |
tx-sequence-number | packet-drops | packet-drop-bytes | fragment-drops |
fragment-drop-bytes | mrru-exceeded | processing-errors | fragment-timeout |
sequence-number-missing | out-of-order-sequence-number |
out-of-range-sequence-number | packet-buffer-overflow | fragment-buffer-overflow
 | multilink-class-drop-timeout)*>

<!ELEMENT multilink-bundle-errors (packet-drops | packet-drop-bytes |
fragment-drops | fragment-drop-bytes | mrru-exceeded | processing-errors)*>

<!ELEMENT multilink-bundle-link-information (multilink-active-bundle-links |
multilink-removed-bundle-links | multilink-disabled-bundle-links)*>

<!ELEMENT multilink-bundle-name (#PCDATA)>

<!ELEMENT multilink-bundle-options (mrru | remote-mrru | drop-timeout |
mlppp-inner-ppp-pfc | sequence-number-format | fragment-threshold | minimum-links
 | interleave-fragments | multilink-classes | link-layer-overhead)*>

<!ELEMENT multilink-bundle-status (rx-sequence-number | tx-sequence-number |
packet-drops | packet-drop-bytes | fragment-drops | fragment-drop-bytes |
mrru-exceeded | processing-errors | fragment-timeout | sequence-number-missing |
 out-of-order-sequence-number | out-of-range-sequence-number |
packet-buffer-overflow | fragment-buffer-overflow)*>

<!ELEMENT multilink-class-drop-timeout (#PCDATA)>

<!ELEMENT multilink-class-id (#PCDATA)>

<!ELEMENT multilink-classes (#PCDATA)>

<!ELEMENT multilink-detail-statistics (bundle-detail | class-detail)*>

<!ELEMENT multilink-disabled-bundle-links (#PCDATA)>

<!ELEMENT multilink-flapped (#PCDATA)>

<!ELEMENT multilink-frames (input-frames | input-fps | input-bytes | input-bps |
 output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT multilink-interface-errors (oversized-frames | input-error-frames |
input-disabled-bundle | output-disabled-bundle | queuing-drops |
packet-buffer-overflow | fragment-buffer-overflow | fragment-timeout |
sequence-number-missing | out-of-order-sequence-number |
out-of-range-sequence-number | data-memory-error | control-memory-error)*>

<!ELEMENT multilink-removed-bundle-links (#PCDATA)>
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```
<!ELEMENT multilink-traffic-statistics (bundle | class | link |
multilink-detail-statistics | crtp)*>

<!ELEMENT multipoint-address (#PCDATA)>

<!ELEMENT n391 (#PCDATA)>

<!ELEMENT n392 (#PCDATA)>

<!ELEMENT n393 (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT ncp-information (ncp-protocol | ncp-state)*>

<!ELEMENT ncp-protocol (#PCDATA)>

<!ELEMENT ncp-restart-timer (#PCDATA)>

<!ELEMENT ncp-state (#PCDATA)>

<!ELEMENT near-end-attainable-bitrate (#PCDATA)>

<!ELEMENT near-end-attenuation (#PCDATA)>

<!ELEMENT near-end-capacity-used (#PCDATA)>

<!ELEMENT near-end-fast-bitrate (#PCDATA)>

<!ELEMENT near-end-fast-crc (#PCDATA)>

<!ELEMENT near-end-fast-fec (#PCDATA)>

<!ELEMENT near-end-fast-hec (#PCDATA)>

<!ELEMENT near-end-fast-rx-cells (#PCDATA)>

<!ELEMENT near-end-fast-tx-cells (#PCDATA)>

<!ELEMENT near-end-interleaved-bitrate (#PCDATA)>

<!ELEMENT near-end-interleaved-crc (#PCDATA)>

<!ELEMENT near-end-interleaved-fec (#PCDATA)>

<!ELEMENT near-end-interleaved-hec (#PCDATA)>

<!ELEMENT near-end-interleaved-rx-cells (#PCDATA)>

<!ELEMENT near-end-interleaved-tx-cells (#PCDATA)>

<!ELEMENT near-end-noise-margin (#PCDATA)>

<!ELEMENT near-end-output-power (#PCDATA)>

<!ELEMENT network-frames (input-frames | input-fps | input-bytes | input-bps |
output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT network-v6-frames (inputv6-packets | inputv6-bytes | outputv6-packets
| outputv6-bytes)*>
```


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```
<!ELEMENT no-buffers (#PCDATA)>

<!ELEMENT no-mac-learning-status (#PCDATA)>

<!ELEMENT non-conform-clp0-cells (#PCDATA)>

<!ELEMENT non-conform-clp1-cells (#PCDATA)>

<!ELEMENT non-fragments (input-frames | input-fps | input-bytes | input-bps |
output-frames | output-fps | output-bytes | output-bps)*>

<!ELEMENT number-of-mac-record (#PCDATA)>

<!ELEMENT nxds0-information (interface-tx-queue)*>

<!ELEMENT oam-ais-received-count (#PCDATA)>

<!ELEMENT oam-ais-received-last (#PCDATA)>

<!ELEMENT oam-ais-transmitted-count (#PCDATA)>

<!ELEMENT oam-ais-transmitted-last (#PCDATA)>

<!ELEMENT oam-cell-no-buffers (#PCDATA)>

<!ELEMENT oam-loopback-received-count (#PCDATA)>

<!ELEMENT oam-loopback-received-last (#PCDATA)>

<!ELEMENT oam-loopback-transmitted-count (#PCDATA)>

<!ELEMENT oam-loopback-transmitted-last (#PCDATA)>

<!ELEMENT oam-parameters (period | up-count | down-count)*>

<!ELEMENT oam-rdi-received-count (#PCDATA)>

<!ELEMENT oam-rdi-received-last (#PCDATA)>

<!ELEMENT oam-rdi-transmitted-count (#PCDATA)>

<!ELEMENT oam-rdi-transmitted-last (#PCDATA)>

<!ELEMENT oam-statistics (oam-loopback-received-count | oam-loopback-received-last
 | oam-loopback-transmitted-count | oam-loopback-transmitted-last |
oam-rdi-received-count | oam-rdi-received-last | oam-rdi-transmitted-count |
oam-rdi-transmitted-last | oam-ais-received-count | oam-ais-received-last |
oam-ais-transmitted-count | oam-ais-transmitted-last | oam-total-transmitted-count
 | oam-total-received-count | oam-total-transmitted-count-4 |
oam-total-received-count-4)*>

<!ELEMENT oam-total-received-count (#PCDATA)>

<!ELEMENT oam-total-received-count-4 (#PCDATA)>

<!ELEMENT oam-total-transmitted-count (#PCDATA)>

<!ELEMENT oam-total-transmitted-count-4 (#PCDATA)>

<!ELEMENT oper-status (#PCDATA)>
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<!ELEMENT operation-not-supported-count (#PCDATA)>

<!ELEMENT optic-diagnostics-not-available (#PCDATA)>

<!ELEMENT optics-diagnostics (optic-diagnostics-not-available |
laser-bias-current-not-available | soa-bias-current-not-available |
laser-tx-power-not-available | module-temperature-not-available |
laser-rx-power-not-available | laser-bias-current | laser-output-power |
laser-output-power-dbm | module-temperature | module-voltage | soa-bias-current
| rx-signal-avg-optical-power | rx-signal-avg-optical-power-dbm |
laser-rx-optical-power | laser-rx-optical-power-dbm | laser-bias-current-high-alarm
 | laser-bias-current-low-alarm | laser-bias-current-high-warn |
laser-bias-current-low-warn | laser-tx-power-high-alarm | laser-tx-power-low-alarm
 | laser-tx-power-high-warn | laser-tx-power-low-warn | laser-rx-power-high-alarm
 | laser-rx-power-low-alarm | laser-rx-power-high-warn | laser-rx-power-low-warn
 | tx-loss-of-signal-functionality-alarm | tx-cdr-loss-of-lock-alarm |
rx-loss-of-signal-alarm | rx-cdr-loss-of-lock-alarm | apd-supply-fault-alarm |
tec-fault-alarm | wavelength-unlocked-alarm | module-voltage-high-alarm |
module-voltage-low-alarm | module-voltage-high-warn | module-voltage-low-warn |
module-temperature-high-alarm | module-temperature-low-alarm |
module-temperature-high-warn | module-temperature-low-warn |
soa-bias-current-high-alarm | soa-bias-current-low-alarm |
soa-bias-current-high-warn | soa-bias-current-low-warn | laser-end-of-life-alarm
 | laser-wavelength-alarm | laser-bias-current-alarm | module-temperature-alarm
| laser-power-alarm | modulator-temperature-alarm | modulator-bias-alarm |
module-not-ready-alarm | module-power-down-alarm | module-not-init-done-alarm |
module-not-high-power-on-alarm | module-fault-alarm | pld-flash-init-fault-alarm
 | power-supply-fault-alarm | checksum-fault-alarm | tx-mux-fifo-error-alarm |
tx-loss-of-pll-alarm | tx-data-not-ready-alarm | tx-not-ready-alarm |
tx-laser-fault-alarm | tx-laser-disabled-alarm | rx-loss-avg-opt-power-alarm |
rx-loss-ac-power-alarm | rx-loss-of-pll-alarm | rx-not-ready-alarm |
module-voltage-high-alarm-threshold | module-voltage-low-alarm-threshold |
module-voltage-high-warn-threshold | module-voltage-low-warn-threshold |
laser-bias-current-high-alarm-threshold | laser-bias-current-low-alarm-threshold
 | laser-bias-current-high-warn-threshold | laser-bias-current-low-warn-threshold
 | soa-bias-current-high-alarm-threshold | soa-bias-current-low-alarm-threshold
| soa-bias-current-high-warn-threshold | soa-bias-current-low-warn-threshold |
laser-tx-power-high-alarm-threshold | laser-tx-power-low-alarm-threshold |
laser-tx-power-high-warn-threshold | laser-tx-power-low-warn-threshold |
laser-tx-power-high-alarm-threshold-dbm | laser-tx-power-low-alarm-threshold-dbm
 | laser-tx-power-high-warn-threshold-dbm | laser-tx-power-low-warn-threshold-dbm
 | module-temperature-high-alarm-threshold | module-temperature-low-alarm-threshold
 | module-temperature-high-warn-threshold | module-temperature-low-warn-threshold
 | laser-temperature-high-alarm-threshold | laser-temperature-low-alarm-threshold
 | laser-temperature-high-warn-threshold | laser-temperature-low-warn-threshold
| laser-rx-power-high-alarm-threshold | laser-rx-power-low-alarm-threshold |
laser-rx-power-high-warn-threshold | laser-rx-power-low-warn-threshold |
laser-rx-power-high-alarm-threshold-dbm | laser-rx-power-low-alarm-threshold-dbm
 | laser-rx-power-high-warn-threshold-dbm | laser-rx-power-low-warn-threshold-dbm
 | optics-diagnostics-lane-values)*>

<!ELEMENT optics-diagnostics-lane-values (lane-index | laser-bias-current |
laser-output-power | laser-output-power-dbm | laser-temperature |
laser-rx-optical-power | laser-rx-optical-power-dbm | laser-bias-current-high-alarm
 | laser-bias-current-low-alarm | laser-bias-current-high-warn |
laser-bias-current-low-warn | laser-tx-power-high-alarm | laser-tx-power-low-alarm
 | laser-tx-power-high-warn | laser-tx-power-low-warn | laser-temp-high-alarm |
laser-temp-low-alarm | laser-temp-high-warn | laser-temp-low-warn |
laser-rx-power-high-alarm | laser-rx-power-low-alarm | laser-rx-power-high-warn
| laser-rx-power-low-warn | tec-fault-alarm | wavelength-unlocked-alarm |
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apd-supply-fault-alarm | tx-loss-of-signal-functionality-alarm |
tx-cdr-loss-of-lock-alarm | rx-loss-of-signal-alarm | rx-cdr-loss-of-lock-alarm)*>

<!ELEMENT optics-properties (wavelength | frequency)*>

<!ELEMENT otn-alarm-lof EMPTY>

<!ELEMENT otn-alarm-lom EMPTY>

<!ELEMENT otn-alarm-los EMPTY>

<!ELEMENT otn-alarm-odu-ais EMPTY>

<!ELEMENT otn-alarm-odu-bdi EMPTY>

<!ELEMENT otn-alarm-odu-lck EMPTY>

<!ELEMENT otn-alarm-odu-oci EMPTY>

<!ELEMENT otn-alarm-odu-rx-aps-change EMPTY>

<!ELEMENT otn-alarm-odu-sd EMPTY>

<!ELEMENT otn-alarm-odu-sf EMPTY>

<!ELEMENT otn-alarm-odu-threshold-bbe EMPTY>

<!ELEMENT otn-alarm-odu-threshold-es EMPTY>

<!ELEMENT otn-alarm-odu-threshold-ses EMPTY>

<!ELEMENT otn-alarm-odu-threshold-uas EMPTY>

<!ELEMENT otn-alarm-odu-ttim EMPTY>

<!ELEMENT otn-alarm-opu-pmi EMPTY>

<!ELEMENT otn-alarm-otu-ais EMPTY>

<!ELEMENT otn-alarm-otu-bdi EMPTY>

<!ELEMENT otn-alarm-otu-fec-degraded EMPTY>

<!ELEMENT otn-alarm-otu-fec-excessive EMPTY>

<!ELEMENT otn-alarm-otu-iae EMPTY>

<!ELEMENT otn-alarm-otu-sd EMPTY>

<!ELEMENT otn-alarm-otu-sf EMPTY>

<!ELEMENT otn-alarm-otu-threshold-bbe EMPTY>

<!ELEMENT otn-alarm-otu-threshold-es EMPTY>

<!ELEMENT otn-alarm-otu-threshold-ses EMPTY>

<!ELEMENT otn-alarm-otu-threshold-uas EMPTY>

<!ELEMENT otn-alarm-otu-ttim EMPTY>
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<!ELEMENT otn-alarm-wavelength-lock EMPTY>

<!ELEMENT otn-errors (media-alarm)*>
<!ATTLIST otn-errors junos:style CDATA #IMPLIED>

<!ELEMENT otn-fec-alarms (media-alarm)*>
<!ATTLIST otn-fec-alarms junos:style CDATA #IMPLIED>

<!ELEMENT otn-fec-mode (fec-mode)*>
<!ATTLIST otn-fec-mode junos:style CDATA #IMPLIED>

<!ELEMENT otn-fec-statistics (fec-corrected-errors | fec-valid-time |
fec-corrected-error-ratio)*>
<!ATTLIST otn-fec-statistics junos:style CDATA #IMPLIED>

<!ELEMENT otn-loopback (#PCDATA)>

<!ELEMENT otn-mode (#PCDATA)>

<!ELEMENT otn-oc-information (media-alarm)*>
<!ATTLIST otn-oc-information junos:style CDATA #IMPLIED>

<!ELEMENT otn-odu-information (media-alarm)*>
<!ATTLIST otn-odu-information junos:style CDATA #IMPLIED>

<!ELEMENT otn-otn-loopback (otn-loopback)*>
<!ATTLIST otn-otn-loopback junos:style CDATA #IMPLIED>

<!ELEMENT otn-otn-mode (otn-mode)*>
<!ATTLIST otn-otn-mode junos:style CDATA #IMPLIED>

<!ELEMENT otn-otn-rate (otn-rate)*>
<!ATTLIST otn-otn-rate junos:style CDATA #IMPLIED>

<!ELEMENT otn-otu-information (media-alarm)*>
<!ATTLIST otn-otu-information junos:style CDATA #IMPLIED>

<!ELEMENT otn-rate (#PCDATA)>

<!ELEMENT otn-rx-overhead (#PCDATA)>

<!ELEMENT otn-rx-tti (#PCDATA)>

<!ELEMENT otn-stats-counter (#PCDATA)>

<!ELEMENT otn-tx-overhead (#PCDATA)>

<!ELEMENT otn-tx-tti (#PCDATA)>

<!ELEMENT out-of-order-sequence-number (#PCDATA)>

<!ELEMENT out-of-range-sequence-number (#PCDATA)>

<!ELEMENT out-of-sequence (#PCDATA)>

<!ELEMENT out-of-spec-bytes (#PCDATA)>

<!ELEMENT out-of-spec-frames (#PCDATA)>

<!ELEMENT output-bps (#PCDATA)>
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<!ELEMENT output-broadcasts (#PCDATA)>

<!ELEMENT output-bytes (#PCDATA)>

<!ELEMENT output-collisions (#PCDATA)>

<!ELEMENT output-crc-errors (#PCDATA)>

<!ELEMENT output-disabled-bundle (#PCDATA)>

<!ELEMENT output-drops (#PCDATA)>

<!ELEMENT output-drops-bytes (#PCDATA)>

<!ELEMENT output-error-count (#PCDATA)>

<!ELEMENT output-error-list (carrier-transitions | output-errors | output-drops
| output-collisions | output-hs-link-fifo-overflows | aged-packets |
output-fifo-errors | hs-link-fifo-underflows | hs-link-crc-errors | mtu-errors |
 output-resource-errors)*>

<!ELEMENT output-errors (#PCDATA)>

<!ELEMENT output-fifo-errors (#PCDATA)>

<!ELEMENT output-fps (#PCDATA)>

<!ELEMENT output-frames (#PCDATA)>

<!ELEMENT output-hs-link-fifo-overflows (#PCDATA)>

<!ELEMENT output-mac-control-frames (#PCDATA)>

<!ELEMENT output-mac-pause-frames (#PCDATA)>

<!ELEMENT output-mac-pfc-frames (#PCDATA)>

<!ELEMENT output-multicasts (#PCDATA)>

<!ELEMENT output-packet-error-count (#PCDATA)>

<!ELEMENT output-packet-pad-count (#PCDATA)>

<!ELEMENT output-packets (#PCDATA)>

<!ELEMENT output-pps (#PCDATA)>

<!ELEMENT output-resource-errors (#PCDATA)>

<!ELEMENT output-unicasts (#PCDATA)>

<!ELEMENT outputv6-bytes (#PCDATA)>

<!ELEMENT outputv6-packets (#PCDATA)>

<!ELEMENT over-red-differential (#PCDATA)>

<!ELEMENT over-yellow-differential (#PCDATA)>

<!ELEMENT oversized-frames (#PCDATA)>
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<!ELEMENT ownership (#PCDATA)>

<!ELEMENT packet-buffer-overflow (#PCDATA)>

<!ELEMENT packet-drop-bytes (#PCDATA)>

<!ELEMENT packet-drops (#PCDATA)>

<!ELEMENT padg-credits (#PCDATA)>

<!ELEMENT padm-hurl (#PCDATA)>

<!ELEMENT padm-motm (#PCDATA)>

<!ELEMENT pap-state (#PCDATA)>

<!ELEMENT payload-scrambler (#PCDATA)>

<!ELEMENT peak (#PCDATA)>

<!ELEMENT peer-configuration-status (peer-nonmatching-dlci)*>
<!ATTLIST peer-configuration-status junos:style CDATA #IMPLIED>

<!ELEMENT peer-interface-name (#PCDATA)>

<!ELEMENT peer-nonmatching-dlci (#PCDATA)>

<!ELEMENT period (#PCDATA)>

<!ELEMENT pfe-information (destination-slot | destination-mask | stream-number |
 stream-mask | plp-byte | plp-byte-count | pop-all-label)*>

<!ELEMENT physical-burst (#PCDATA)>

<!ELEMENT physical-information (#PCDATA)>

<!ELEMENT physical-interface (name | mc-ae-status | admin-status | oper-status |
 local-index | snmp-index | generation | description | if-type | link-level-type
 | mtu | link-mode | mac-mode | speed | max-speed | duplex | clocking | sonet-mode
 | physical-mode | l2circuit-mode | ifd-cell-bundle-size | ifd-cell-bundle-timeout
 | loopback | ih-parent | atm-line-build-out | atm-encapsulation | atm-e3-framing
 | sonet-loopback | crc | payload-scrambler | ingress-rate-limit | source-filtering
 | if-flow-control | bpdu-error | l2pt-error | if-unidirectional |
if-auto-negotiation | if-remote-fault | if-media-type | if-speed-auto-negotiation
 | if-auto-mdix | minimum-links-in-aggregate | minimum-bandwidth-in-aggregate |
if-device-flags | if-config-flags | shared-interface-physical-interface | link-type
 | if-media-flags | optics-properties | keepalive-config | lmi-dce-config |
lmi-dte-config | queue-counters | keepalive-statistics | ppp-flags | lcp-state |
 ncp-information | chap-state | pap-state | physical-information | es-ifd-stats
| up-hold-time | down-hold-time | current-physical-address |
hardware-physical-address | alternate-physical-address | interface-flapped |
statistics-cleared | interface-transmit-statistics | preserve-interface |
preserve-interface-statistics | traffic-statistics | multicast-statistics |
ingress-traffic-statistics | multilink-interface-errors |
mlfr-uni-nni-bundle-options | multilink-bundle-errors | input-error-list |
input-error-count | output-error-list | output-error-count | ber-threshold |
ds1-crc-alarm-threshold | active-alarms | active-defects | media-state-information
 | sonet-errors | sonet-physical-information | sonet-section-information |
sonet-line-information | sonet-path-information | sonet-payload-pointer-information
 | sonet-payload-pointer-curptr | sonet-payload-pointer-ptrinc-count |
sonet-payload-pointer-ptrdec-count | sonet-payload-pointer-newptr-ndf-count |
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sonet-vt-information | sonet-rx-overhead | sonet-tx-overhead | sonet-rx-path-trace
 | sonet-tx-path-trace | otn-errors | otn-rx-overhead | otn-tx-overhead |
otn-stats-counter | otn-fec-statistics | otn-fec-alarms | otn-fec-mode |
otn-otn-mode | otn-otn-rate | otn-otn-loopback | otn-rx-tti | otn-tx-tti |
media-information | ethernet-pcs-statistics | ethernet-mac-statistics |
fibrechannel-port-flow-control | fibrechannel-mac-statistics |
ethernet-filter-statistics | ethernet-autonegotiation | link-partner-status |
local-info | mac-database | dsl-information | vdsl-information | shdsl-information
 | atm-information | modem-information | serial-information |
virtual-path-information | ct3-information | cds1-information | nxds0-information
 | ds3-mode | ds3-long-buildout | e3-framing | ds1-framing | dsu-information |
ds3-bert-information | e3-bert-information | ds1-bert-information |
ds0-bert-information | hdlc-information | pfe-information | logical-interface |
active-alarms-otn | active-defects-otn | links | src-information |
peer-configuration-status | lmi-statistics | lsi-traffic-statistics |
stp-traffic-statistics | queue-num-forwarding-class-name-map |
chassis-queue-counters | ingress-queue-counters | otn-oc-information |
otn-otu-information | otn-odu-information | ima-state | ima-group-information |
ima-link-information | ethernet-mac-pfc-statistics | satop-information |
cesopsn-information | ima-group-properties | ima-link-properties | cos-header |
cos-information | physical-interface-cos-information |
mlfr-uni-nni-traffic-statistics | interval-information)*>

<!ELEMENT physical-interface-cos-hw-max-queues (#PCDATA)>

<!ELEMENT physical-interface-cos-information (physical-interface-cos-hw-max-queues
 | physical-interface-cos-use-max-queues | physical-interface-schedulers |
physical-interface-red-buffer-occupancy)*>

<!ELEMENT physical-interface-cos-use-max-queues (#PCDATA)>

<!ELEMENT physical-interface-name (#PCDATA)>

<!ELEMENT physical-interface-red-buffer-occupancy (instant-usage-weight-exponent)*>

<!ELEMENT physical-interface-schedulers (#PCDATA)>

<!ELEMENT physical-link (#PCDATA)>

<!ELEMENT physical-mode (#PCDATA)>

<!ELEMENT plcp-defects (media-alarm)*>

<!ELEMENT plcp-statistics (ferr-count | ferr-seconds | bipe-count | bipe-seconds
 | febe-count | febe-seconds)*>

<!ELEMENT pld-flash-init-fault-alarm (#PCDATA)>

<!ELEMENT plp-byte (#PCDATA)>

<!ELEMENT plp-byte-count (#PCDATA)>

<!ELEMENT plp-to-clp EMPTY>

<!ELEMENT policer-dropped-bytes (#PCDATA)>

<!ELEMENT policer-dropped-frames (#PCDATA)>

<!ELEMENT policer-dropped-iq2-frames (#PCDATA)>

<!ELEMENT policer-dropped-rate (#PCDATA)>
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<!ELEMENT policer-family (#PCDATA)>

<!ELEMENT policer-high-bytes (#PCDATA)>

<!ELEMENT policer-high-frames (#PCDATA)>

<!ELEMENT policer-high-iq2-frames (#PCDATA)>

<!ELEMENT policer-high-rate (#PCDATA)>

<!ELEMENT policer-information (policer-family | policer-input | policer-output)*>

<!ELEMENT policer-input (#PCDATA)>

<!ELEMENT policer-low-bytes (#PCDATA)>

<!ELEMENT policer-low-frames (#PCDATA)>

<!ELEMENT policer-low-iq2-frames (#PCDATA)>

<!ELEMENT policer-low-rate (#PCDATA)>

<!ELEMENT policer-medium-high-bytes (#PCDATA)>

<!ELEMENT policer-medium-high-frames (#PCDATA)>

<!ELEMENT policer-medium-high-iq2-frames (#PCDATA)>

<!ELEMENT policer-medium-high-rate (#PCDATA)>

<!ELEMENT policer-medium-low-bytes (#PCDATA)>

<!ELEMENT policer-medium-low-frames (#PCDATA)>

<!ELEMENT policer-medium-low-iq2-frames (#PCDATA)>

<!ELEMENT policer-medium-low-rate (#PCDATA)>

<!ELEMENT policer-output (#PCDATA)>

<!ELEMENT policer-type (#PCDATA)>

<!ELEMENT pool-id (#PCDATA)>

<!ELEMENT pop-all-label (#PCDATA)>

<!ELEMENT port (#PCDATA)>

<!ELEMENT port-mtu (#PCDATA)>

<!ELEMENT power (#PCDATA)>

<!ELEMENT power-supply-fault-alarm (#PCDATA)>

<!ELEMENT ppp-flags (iff-ppp-flags-acfc | iff-ppp-flags-pfc)*>

<!ELEMENT ppp-parameters (lcp-restart-timer | ncp-restart-timer |
termination-requests | loopback-clear-timer)*>

<!ELEMENT pppoe-credit-scale-factor (#PCDATA)>
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<!ELEMENT pppoe-credits (#PCDATA)>

<!ELEMENT pppoe-information (pppoe-interface)*>

<!ELEMENT pppoe-interface (interface-name | interface-index |
underlying-interface-name | underlying-interface-index | state | ifl-type |
session-id | ac-name-config | ac-name-session | service-name | remote-mac |
auto-reconnect | idle-timeout | session-uptime | dynamic-profile | pppoe-credits
 | pppoe-credit-scale-factor | dynamic-interface-bandwidth | agent-circuit-id |
agent-remote-id | padm-motm | padm-hurl | padg-credits)*>

<!ELEMENT pppoe-underlying-information (pppoe-underlying-interface)*>

<!ELEMENT pppoe-underlying-interface (underlying-interface-name |
underlying-interface-index | state | dynamic-profile | max-sessions |
max-sessions-vsa-ignore | active-sessions | ac-name | service-name-table |
duplicate-protection | short-cycle-protection)*>

<!ELEMENT preserve-interface (#PCDATA)>

<!ELEMENT preserve-interface-statistics (if-switchover-total |
if-switchover-last-attempt | if-switchover-last-time |
if-switchover-min-max-avg-time)*>

<!ELEMENT primary-interface (#PCDATA)>

<!ELEMENT processing-errors (#PCDATA)>

<!ELEMENT psn-tag (#PCDATA)>

<!ELEMENT psn-vci (#PCDATA)>

<!ELEMENT psn-vpi (#PCDATA)>

<!ELEMENT queue (queue-number | forwarding-class-name |
queue-counters-queued-packets | queue-counters-queued-packets-na |
queue-counters-queued-bytes-na | queue-counters-queued-bytes |
queue-counters-queued-packets-rate | queue-counters-queued-bytes-rate |
queue-counters-trans-packets | queue-counters-trans-bytes |
queue-counters-trans-packets-rate | queue-counters-trans-bytes-rate |
queue-counters-tail-drop-packets | queue-counters-tail-drop-packets-rate |
queue-counters-tail-drop-packets-na | queue-counters-tail-drop-bytes |
queue-counters-tail-drop-bytes-rate | queue-counters-rate-limit-drop-packets |
queue-counters-rate-limit-drop-packets-rate |
queue-counters-rate-limit-drop-packets-na | queue-counters-rate-limit-drop-bytes
 | queue-counters-rate-limit-drop-bytes-rate |
queue-counters-rate-limit-drop-bytes-na | queue-counters-red-packets-na |
queue-counters-red-packets | queue-counters-red-bytes-na | queue-counters-red-bytes
 | queue-counters-red-packets-rate | queue-counters-red-bytes-rate |
queue-counters-red-packets-ln | queue-counters-red-bytes-ln |
queue-counters-red-packets-rate-ln | queue-counters-red-bytes-rate-ln |
queue-counters-red-packets-lt | queue-counters-red-bytes-lt |
queue-counters-red-packets-rate-lt | queue-counters-red-bytes-rate-lt |
queue-counters-red-packets-ht | queue-counters-red-bytes-ht |
queue-counters-red-packets-rate-ht | queue-counters-red-bytes-rate-ht |
queue-counters-red-packets-hn | queue-counters-red-bytes-hn |
queue-counters-red-packets-rate-hn | queue-counters-red-bytes-rate-hn |
queue-counters-red-packets-low | queue-counters-red-bytes-low |
queue-counters-red-packets-rate-low | queue-counters-red-bytes-rate-low |
queue-counters-red-packets-medium-low | queue-counters-red-bytes-medium-low |
```

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```
queue-counters-red-packets-rate-medium-low |
queue-counters-red-bytes-rate-medium-low | queue-counters-red-packets-medium-high
 | queue-counters-red-bytes-medium-high |
queue-counters-red-packets-rate-medium-high |
queue-counters-red-bytes-rate-medium-high | queue-counters-red-packets-medium |
queue-counters-red-bytes-medium | queue-counters-red-packets-rate-medium |
queue-counters-red-bytes-rate-medium | queue-counters-red-packets-high |
queue-counters-red-bytes-high | queue-counters-red-packets-rate-high |
queue-counters-red-bytes-rate-high | queue-counters-total-drop-packets |
queue-counters-total-drop-packets-rate | queue-counters-total-drop-bytes |
queue-counters-total-drop-bytes-rate)*>

<!ELEMENT queue-counters (queue-counters-error-message | queue |
interface-cos-short-summary | interface-cos-summary)*>
<!ATTLIST queue-counters junos:style CDATA #IMPLIED>

<!ELEMENT queue-counters-error-message (#PCDATA)>

<!ELEMENT queue-counters-queued-bytes (#PCDATA)>

<!ELEMENT queue-counters-queued-bytes-na (#PCDATA)>

<!ELEMENT queue-counters-queued-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-queued-packets (#PCDATA)>

<!ELEMENT queue-counters-queued-packets-na (#PCDATA)>

<!ELEMENT queue-counters-queued-packets-rate (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-bytes (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-bytes-na (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-packets (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-packets-na (#PCDATA)>

<!ELEMENT queue-counters-rate-limit-drop-packets-rate (#PCDATA)>

<!ELEMENT queue-counters-red-bytes (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-high (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-hn (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-ht (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-ln (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-low (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-lt (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-medium (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-medium-high (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-medium-low (#PCDATA)>
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<!ELEMENT queue-counters-red-bytes-na (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-high (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-hn (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-ht (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-ln (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-low (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-lt (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-medium (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-medium-high (#PCDATA)>
<!ELEMENT queue-counters-red-bytes-rate-medium-low (#PCDATA)>
<!ELEMENT queue-counters-red-packets (#PCDATA)>
<!ELEMENT queue-counters-red-packets-high (#PCDATA)>
<!ELEMENT queue-counters-red-packets-hn (#PCDATA)>
<!ELEMENT queue-counters-red-packets-ht (#PCDATA)>
<!ELEMENT queue-counters-red-packets-ln (#PCDATA)>
<!ELEMENT queue-counters-red-packets-low (#PCDATA)>
<!ELEMENT queue-counters-red-packets-lt (#PCDATA)>
<!ELEMENT queue-counters-red-packets-medium (#PCDATA)>
<!ELEMENT queue-counters-red-packets-medium-high (#PCDATA)>
<!ELEMENT queue-counters-red-packets-medium-low (#PCDATA)>
<!ELEMENT queue-counters-red-packets-na (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-high (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-hn (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-ht (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-ln (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-low (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-lt (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-medium (#PCDATA)>
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<!ELEMENT queue-counters-red-packets-rate-medium-high (#PCDATA)>

<!ELEMENT queue-counters-red-packets-rate-medium-low (#PCDATA)>

<!ELEMENT queue-counters-tail-drop-bytes (#PCDATA)>

<!ELEMENT queue-counters-tail-drop-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-tail-drop-packets (#PCDATA)>

<!ELEMENT queue-counters-tail-drop-packets-na (#PCDATA)>

<!ELEMENT queue-counters-tail-drop-packets-rate (#PCDATA)>

<!ELEMENT queue-counters-total-drop-bytes (#PCDATA)>

<!ELEMENT queue-counters-total-drop-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-total-drop-packets (#PCDATA)>

<!ELEMENT queue-counters-total-drop-packets-rate (#PCDATA)>

<!ELEMENT queue-counters-trans-bytes (#PCDATA)>

<!ELEMENT queue-counters-trans-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-trans-packets (#PCDATA)>

<!ELEMENT queue-counters-trans-packets-rate (#PCDATA)>

<!ELEMENT queue-depth (#PCDATA)>

<!ELEMENT queue-limit (#PCDATA)>

<!ELEMENT queue-num-forwarding-class-name-map (queue-number |
forwarding-class-name)*>

<!ELEMENT queue-number (#PCDATA)>

<!ELEMENT queuing-drops (#PCDATA)>

<!ELEMENT range (#PCDATA)>

<!ELEMENT ranging (#PCDATA)>

<!ELEMENT rcv-lip-addlink (#PCDATA)>

<!ELEMENT rcv-lip-hello (#PCDATA)>

<!ELEMENT rcv-lip-hello-ack (#PCDATA)>

<!ELEMENT rcv-lip-link-ack (#PCDATA)>

<!ELEMENT rcv-lip-link-rej (#PCDATA)>

<!ELEMENT rcv-lip-link-rem (#PCDATA)>

<!ELEMENT rcv-lip-rem-ack (#PCDATA)>

<!ELEMENT receive-bytes (#PCDATA)>
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<!ELEMENT receive-frames (#PCDATA)>

<!ELEMENT received-count (#PCDATA)>

<!ELEMENT recent-high-differential-delay (#PCDATA)>

<!ELEMENT red-differential-delay (#PCDATA)>

<!ELEMENT red-differential-delay-action (#PCDATA)>

<!ELEMENT redial-delay (#PCDATA)>

<!ELEMENT redundant-logical-interface-name (#PCDATA)>

<!ELEMENT reflective-relay-status (#PCDATA)>

<!ELEMENT remote-mac (#PCDATA)>

<!ELEMENT remote-mrru (#PCDATA)>

<!ELEMENT removed-bundle-links (#PCDATA)>

<!ELEMENT request-opportunity-burst (#PCDATA)>

<!ELEMENT resync-counter (#PCDATA)>

<!ELEMENT resync-history (resync-counter | resync-timestamp)*>

<!ELEMENT resync-timestamp (#PCDATA)>
<!ATTLIST resync-timestamp junos:seconds CDATA #IMPLIED>

<!ELEMENT route-rpf-bytes (#PCDATA)>

<!ELEMENT route-rpf-packets (#PCDATA)>

<!ELEMENT route-rpf-statistics (route-rpf-packets | route-rpf-bytes)*>

<!ELEMENT route-table (#PCDATA)>

<!ELEMENT rts (#PCDATA)>

<!ELEMENT rts-polarity (#PCDATA)>

<!ELEMENT rx-cdr-loss-of-lock-alarm (#PCDATA)>

<!ELEMENT rx-cell-count (#PCDATA)>

<!ELEMENT rx-cell-fifo-overruns (#PCDATA)>

<!ELEMENT rx-cell-fifo-underruns (#PCDATA)>

<!ELEMENT rx-class-2-frames (#PCDATA)>

<!ELEMENT rx-class-2-octets (#PCDATA)>

<!ELEMENT rx-class-3-frames (#PCDATA)>

<!ELEMENT rx-class-3-octets (#PCDATA)>

<!ELEMENT rx-class-f-frames (#PCDATA)>
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<!ELEMENT rx-class-f-octets (#PCDATA)>

<!ELEMENT rx-clock (#PCDATA)>

<!ELEMENT rx-delimiter-errors (#PCDATA)>

<!ELEMENT rx-encoding-disparity-errors (#PCDATA)>

<!ELEMENT rx-fe (#PCDATA)>

<!ELEMENT rx-frames-too-long (#PCDATA)>

<!ELEMENT rx-frames-too-short (#PCDATA)>

<!ELEMENT rx-input-buffers-full (#PCDATA)>

<!ELEMENT rx-invalid-crcs (#PCDATA)>

<!ELEMENT rx-invalid-ordered-sets (#PCDATA)>

<!ELEMENT rx-invalid-tx-words (#PCDATA)>

<!ELEMENT rx-invalid-vcs (#PCDATA)>

<!ELEMENT rx-link-reset-responses (#PCDATA)>

<!ELEMENT rx-link-resets (#PCDATA)>

<!ELEMENT rx-loss-ac-power-alarm (#PCDATA)>

<!ELEMENT rx-loss-avg-opt-power-alarm (#PCDATA)>

<!ELEMENT rx-loss-of-pll-alarm (#PCDATA)>

<!ELEMENT rx-loss-of-signal-alarm (#PCDATA)>

<!ELEMENT rx-missing-eof (#PCDATA)>

<!ELEMENT rx-nhid (#PCDATA)>

<!ELEMENT rx-not-operationals (#PCDATA)>

<!ELEMENT rx-not-ready-alarm (#PCDATA)>

<!ELEMENT rx-offlines (#PCDATA)>

<!ELEMENT rx-other-errors (#PCDATA)>

<!ELEMENT rx-prim-seq-protocol-errors (#PCDATA)>

<!ELEMENT rx-sequence-number (#PCDATA)>

<!ELEMENT rx-signal-avg-optical-power (#PCDATA)>

<!ELEMENT rx-signal-avg-optical-power-dbm (#PCDATA)>

<!ELEMENT satop-information (ce-payload-size | ce-idle-pattern | ce-octet-aligned
 | ce-jitter-buffer-packets | ce-jitter-buffer-latency |
ce-jitter-buffer-auto-adjust | ce-excessive-packet-loss-rate-sample-period |
ce-excessive-packet-loss-rate-threshold)*>
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<!ELEMENT scheduling-priority (#PCDATA)>
<!ELEMENT scu-class-bps (#PCDATA)>
<!ELEMENT scu-class-bytes (#PCDATA)>
<!ELEMENT scu-class-name (#PCDATA)>
<!ELEMENT scu-class-packets (#PCDATA)>
<!ELEMENT scu-class-pps (#PCDATA)>
<!ELEMENT sdh-alarm-berr-sd EMPTY>
<!ELEMENT sdh-alarm-berr-sf EMPTY>
<!ELEMENT sdh-alarm-hpais EMPTY>
<!ELEMENT sdh-alarm-hpfebe EMPTY>
<!ELEMENT sdh-alarm-hpferf EMPTY>
<!ELEMENT sdh-alarm-hpplm EMPTY>
<!ELEMENT sdh-alarm-hpuneq EMPTY>
<!ELEMENT sdh-alarm-loc EMPTY>
<!ELEMENT sdh-alarm-lof EMPTY>
<!ELEMENT sdh-alarm-lol EMPTY>
<!ELEMENT sdh-alarm-lop EMPTY>
<!ELEMENT sdh-alarm-los EMPTY>
<!ELEMENT sdh-alarm-msais EMPTY>
<!ELEMENT sdh-alarm-msferf EMPTY>
<!ELEMENT sdh-alarm-oof EMPTY>
<!ELEMENT sdh-alarm-pll EMPTY>
<!ELEMENT sdh-alarm-tuais EMPTY>
<!ELEMENT sdh-alarm-tuloc EMPTY>
<!ELEMENT sdh-alarm-tulop EMPTY>
<!ELEMENT sdh-alarm-tumis EMPTY>
<!ELEMENT sdh-alarm-turdi EMPTY>
<!ELEMENT sdh-alarm-tuuneq EMPTY>
<!ELEMENT sequence-number-format (#PCDATA)>
<!ELEMENT sequence-number-missing (#PCDATA)>
<!ELEMENT serial-encoding (serial-encoding-conf)*>
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<!ELEMENT serial-encoding-conf (#PCDATA)>

<!ELEMENT serial-information (line-protocol | resync-history | clocking-mode |
clocking-rate | serial-encoding | dtr-circuit | eia530-signal-polarity |
x21-signal-polarity | serial-loopback | tx-clock | data-signal |
eia530-control-signal | x21-control-signal | dce-loopback-override)*>
<!ATTLIST serial-information heading CDATA #IMPLIED>

<!ELEMENT serial-loopback (serial-loopback-mode)*>

<!ELEMENT serial-loopback-mode (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT service-name-table (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-uptime (#PCDATA)>

<!ELEMENT shared-interface-information (shared-interface-logical-interface)*>

<!ELEMENT shared-interface-logical-interface (peer-interface-name |
interface-shared-with | rx-fe | rx-nhid | tx-fe | tx-nhid)*>

<!ELEMENT shared-interface-physical-interface (ownership)*>

<!ELEMENT shdsl-alarm-line1-losd EMPTY>

<!ELEMENT shdsl-alarm-line1-losw EMPTY>

<!ELEMENT shdsl-alarm-line2-losd EMPTY>

<!ELEMENT shdsl-alarm-line2-losw EMPTY>

<!ELEMENT shdsl-alarm-losd EMPTY>

<!ELEMENT shdsl-alarm-losw EMPTY>

<!ELEMENT shdsl-annex (#PCDATA)>

<!ELEMENT shdsl-bit-rate (#PCDATA)>

<!ELEMENT shdsl-cell-drop (#PCDATA)>

<!ELEMENT shdsl-chipset-version (#PCDATA)>

<!ELEMENT shdsl-crc (#PCDATA)>

<!ELEMENT shdsl-dying-gasp (#PCDATA)>

<!ELEMENT shdsl-firmware-version (#PCDATA)>

<!ELEMENT shdsl-framer-mode (#PCDATA)>

<!ELEMENT shdsl-framer-sync-status (#PCDATA)>

<!ELEMENT shdsl-hec (#PCDATA)>

<!ELEMENT shdsl-information (shdsl-line-termination | shdsl-annex | shdsl-line-mode
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 | shdsl-modem-status | shdsl-bit-rate | shdsl-last-fail-reason |
shdsl-last-fail-code | shdsl-framer-mode | shdsl-dying-gasp |
shdsl-framer-sync-status | shdsl-chipset-version | shdsl-firmware-version |
shdsl-statistics)*>

<!ELEMENT shdsl-last-fail-code (#PCDATA)>

<!ELEMENT shdsl-last-fail-reason (#PCDATA)>

<!ELEMENT shdsl-line-mode (#PCDATA)>

<!ELEMENT shdsl-line-termination (#PCDATA)>

<!ELEMENT shdsl-loop-attenuation (#PCDATA)>

<!ELEMENT shdsl-losw (#PCDATA)>

<!ELEMENT shdsl-modem-status (#PCDATA)>

<!ELEMENT shdsl-receiver-gain (#PCDATA)>

<!ELEMENT shdsl-rx-cells (#PCDATA)>

<!ELEMENT shdsl-sega (#PCDATA)>

<!ELEMENT shdsl-snr-sampling (#PCDATA)>

<!ELEMENT shdsl-statistics (shdsl-loop-attenuation | shdsl-transmit-power |
shdsl-receiver-gain | shdsl-snr-sampling | shdsl-rx-cells | shdsl-tx-cells |
shdsl-crc | shdsl-sega | shdsl-losw | shdsl-hec | shdsl-cell-drop)*>

<!ELEMENT shdsl-transmit-power (#PCDATA)>

<!ELEMENT shdsl-tx-cells (#PCDATA)>

<!ELEMENT short-cycle-protection (#PCDATA)>

<!ELEMENT signal-to-noise-ratio (#PCDATA)>

<!ELEMENT snmp-index (#PCDATA)>

<!ELEMENT soa-bias-current (#PCDATA)>

<!ELEMENT soa-bias-current-high-alarm (#PCDATA)>

<!ELEMENT soa-bias-current-high-alarm-threshold (#PCDATA)>

<!ELEMENT soa-bias-current-high-warn (#PCDATA)>

<!ELEMENT soa-bias-current-high-warn-threshold (#PCDATA)>

<!ELEMENT soa-bias-current-low-alarm (#PCDATA)>

<!ELEMENT soa-bias-current-low-alarm-threshold (#PCDATA)>

<!ELEMENT soa-bias-current-low-warn (#PCDATA)>

<!ELEMENT soa-bias-current-low-warn-threshold (#PCDATA)>

<!ELEMENT soa-bias-current-not-available (#PCDATA)>
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<!ELEMENT sonet-alarm-berr-sd EMPTY>

<!ELEMENT sonet-alarm-berr-sf EMPTY>

<!ELEMENT sonet-alarm-lais EMPTY>

<!ELEMENT sonet-alarm-loc EMPTY>

<!ELEMENT sonet-alarm-lof EMPTY>

<!ELEMENT sonet-alarm-lol EMPTY>

<!ELEMENT sonet-alarm-lop EMPTY>

<!ELEMENT sonet-alarm-los EMPTY>

<!ELEMENT sonet-alarm-lrdi EMPTY>

<!ELEMENT sonet-alarm-pais EMPTY>

<!ELEMENT sonet-alarm-pll EMPTY>

<!ELEMENT sonet-alarm-pmis EMPTY>

<!ELEMENT sonet-alarm-prdi EMPTY>

<!ELEMENT sonet-alarm-rei EMPTY>

<!ELEMENT sonet-alarm-sef EMPTY>

<!ELEMENT sonet-alarm-uneq EMPTY>

<!ELEMENT sonet-alarm-vais EMPTY>

<!ELEMENT sonet-alarm-vloc EMPTY>

<!ELEMENT sonet-alarm-vlop EMPTY>

<!ELEMENT sonet-alarm-vmis EMPTY>

<!ELEMENT sonet-alarm-vrdi EMPTY>

<!ELEMENT sonet-alarm-vuneq EMPTY>

<!ELEMENT sonet-errors (media-alarm)*>
<!ATTLIST sonet-errors junos:style CDATA #IMPLIED>

<!ELEMENT sonet-line-information (media-alarm)*>
<!ATTLIST sonet-line-information junos:style CDATA #IMPLIED>

<!ELEMENT sonet-loopback (#PCDATA)>

<!ELEMENT sonet-mode (#PCDATA)>

<!ELEMENT sonet-path-information (media-alarm)*>
<!ATTLIST sonet-path-information junos:style CDATA #IMPLIED>

<!ELEMENT sonet-payload-pointer-curptr (#PCDATA)>

<!ELEMENT sonet-payload-pointer-information (sonet-payload-pointer-curptr |
sonet-payload-pointer-ptrinc-count | sonet-payload-pointer-ptrdec-count |
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sonet-payload-pointer-newptr-ndf-count)*>

<!ELEMENT sonet-payload-pointer-newptr-ndf-count (#PCDATA)>

<!ELEMENT sonet-payload-pointer-ptrdec-count (#PCDATA)>

<!ELEMENT sonet-payload-pointer-ptrinc-count (#PCDATA)>

<!ELEMENT sonet-physical-information (media-alarm)*>
<!ATTLIST sonet-physical-information junos:style CDATA #IMPLIED>

<!ELEMENT sonet-rx-overhead (#PCDATA)>

<!ELEMENT sonet-rx-path-trace (#PCDATA)>

<!ELEMENT sonet-section-information (media-alarm)*>
<!ATTLIST sonet-section-information junos:style CDATA #IMPLIED>

<!ELEMENT sonet-tx-overhead (#PCDATA)>

<!ELEMENT sonet-tx-path-trace (#PCDATA)>

<!ELEMENT sonet-vt-information (media-alarm)*>
<!ATTLIST sonet-vt-information junos:style CDATA #IMPLIED>

<!ELEMENT source-class (scu-class-name | scu-class-packets | scu-class-bytes |
scu-class-pps | scu-class-bps)*>

<!ELEMENT source-class-statistics (source-class)*>

<!ELEMENT source-filtering (#PCDATA)>

<!ELEMENT speed (#PCDATA)>

<!ELEMENT sram-errors (#PCDATA)>

<!ELEMENT src-chassis-name (#PCDATA)>

<!ELEMENT src-fpc (#PCDATA)>

<!ELEMENT src-information (src-chassis-name | src-fpc | src-pfe-id)*>

<!ELEMENT src-pfe-id (#PCDATA)>

<!ELEMENT standard-long-grant (#PCDATA)>

<!ELEMENT standard-short-grant (#PCDATA)>

<!ELEMENT start-end-flag (#PCDATA)>

<!ELEMENT start-vci (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT statistics-cleared (#PCDATA)>

<!ELEMENT stp-input-bytes-dropped (#PCDATA)>

<!ELEMENT stp-input-packets-dropped (#PCDATA)>

<!ELEMENT stp-output-bytes-dropped (#PCDATA)>
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<!ELEMENT stp-output-packets-dropped (#PCDATA)>

<!ELEMENT stp-traffic-statistics (stp-input-bytes-dropped |
stp-output-bytes-dropped | stp-input-packets-dropped |
stp-output-packets-dropped)*>
<!ATTLIST stp-traffic-statistics junos:style CDATA #IMPLIED>

<!ELEMENT stream-mask (#PCDATA)>

<!ELEMENT stream-number (#PCDATA)>

<!ELEMENT sub-interface-list (sub-interface-name)*>
<!ATTLIST sub-interface-list junos:style CDATA #IMPLIED>

<!ELEMENT sub-interface-name (#PCDATA)>

<!ELEMENT sustained (#PCDATA)>

<!ELEMENT svlan-ethertype (#PCDATA)>

<!ELEMENT sw-link-resets (#PCDATA)>

<!ELEMENT swapping (#PCDATA)>

<!ELEMENT t391 (#PCDATA)>

<!ELEMENT t392 (#PCDATA)>

<!ELEMENT tagged-cells (#PCDATA)>

<!ELEMENT targeting-intf-link-state (#PCDATA)>

<!ELEMENT targeting-intf-name (#PCDATA)>

<!ELEMENT targeting-intf-type (#PCDATA)>

<!ELEMENT tec-fault-alarm (#PCDATA)>

<!ELEMENT termination-requests (#PCDATA)>

<!ELEMENT timeouts (#PCDATA)>

<!ELEMENT tm (#PCDATA)>

<!ELEMENT tm-polarity (#PCDATA)>

<!ELEMENT to-dce (dtr | rts | cts | dcd | dsr)*>

<!ELEMENT to-dte (dtr | rts | cts | dcd | dsr)*>

<!ELEMENT total-anti-replay-count (#PCDATA)>

<!ELEMENT total-authentication-failure-count (#PCDATA)>

<!ELEMENT traffic-statistics (input-bytes | output-bytes | input-bps | output-bps
 | input-packets | output-packets | input-pps | output-pps |
ipv6-transit-statistics | ipv6-total-statistics)*>
<!ATTLIST traffic-statistics junos:style CDATA #IMPLIED>

<!ELEMENT transit-traffic-statistics (input-bytes | output-bytes | input-bps |
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output-bps | input-packets | output-packets | input-pps | output-pps |
ipv6-transit-statistics | ipv6-total-statistics)*>

<!ELEMENT transmit-bytes (#PCDATA)>

<!ELEMENT transmit-frames (#PCDATA)>

<!ELEMENT transmit-weight-cells (#PCDATA)>

<!ELEMENT transmit-weight-percent (#PCDATA)>

<!ELEMENT transmitted-count (#PCDATA)>

<!ELEMENT trunk (#PCDATA)>

<!ELEMENT trunk-bandwidth (#PCDATA)>

<!ELEMENT tuner-frequency (#PCDATA)>

<!ELEMENT tx-bb-credit-zeroes (#PCDATA)>

<!ELEMENT tx-cdr-loss-of-lock-alarm (#PCDATA)>

<!ELEMENT tx-cell-count (#PCDATA)>

<!ELEMENT tx-cell-fifo-overruns (#PCDATA)>

<!ELEMENT tx-class-2-frames (#PCDATA)>

<!ELEMENT tx-class-2-octets (#PCDATA)>

<!ELEMENT tx-class-3-frames (#PCDATA)>

<!ELEMENT tx-class-3-octets (#PCDATA)>

<!ELEMENT tx-class-f-frames (#PCDATA)>

<!ELEMENT tx-class-f-octets (#PCDATA)>

<!ELEMENT tx-clock (tx-clock-mode)*>

<!ELEMENT tx-clock-mode (#PCDATA)>

<!ELEMENT tx-data-not-ready-alarm (#PCDATA)>

<!ELEMENT tx-fe (#PCDATA)>

<!ELEMENT tx-idle-cell-count (#PCDATA)>

<!ELEMENT tx-laser-disabled-alarm (#PCDATA)>

<!ELEMENT tx-laser-fault-alarm (#PCDATA)>

<!ELEMENT tx-link-reset-responses (#PCDATA)>

<!ELEMENT tx-link-resets (#PCDATA)>

<!ELEMENT tx-loss-of-pll-alarm (#PCDATA)>

<!ELEMENT tx-loss-of-signal-functionality-alarm (#PCDATA)>
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<!ELEMENT tx-mux-fifo-error-alarm (#PCDATA)>

<!ELEMENT tx-nhid (#PCDATA)>

<!ELEMENT tx-not-operationals (#PCDATA)>

<!ELEMENT tx-not-ready-alarm (#PCDATA)>

<!ELEMENT tx-offlines (#PCDATA)>

<!ELEMENT tx-other-errors (#PCDATA)>

<!ELEMENT tx-sequence-number (#PCDATA)>

<!ELEMENT type (#PCDATA)>

<!ELEMENT type-otn (#PCDATA)>

<!ELEMENT uncorrectable-hcs-errors (#PCDATA)>

<!ELEMENT underlying-interface-index (#PCDATA)>

<!ELEMENT underlying-interface-name (#PCDATA)>

<!ELEMENT unknown-rx-packets (#PCDATA)>

<!ELEMENT unnumbered-family-donor-interface-index (#PCDATA)>

<!ELEMENT unnumbered-family-donor-interface-name (#PCDATA)>

<!ELEMENT unnumbered-family-preferred-source-address (#PCDATA)>

<!ELEMENT up-count (#PCDATA)>

<!ELEMENT up-hold-time (#PCDATA)>

<!ELEMENT upstream-buffers-free (#PCDATA)>

<!ELEMENT upstream-buffers-used (#PCDATA)>

<!ELEMENT vc-cos-mode (#PCDATA)>

<!ELEMENT vc-queue-drops (#PCDATA)>

<!ELEMENT vci (#PCDATA)>

<!ELEMENT vci-range (vpi | start-vci | end-vci)*>

<!ELEMENT vdsl-annex-type (#PCDATA)>

<!ELEMENT vdsl-chipset-information (vtu-r-vendor-id | vtu-c-vendor-id |
vtu-r-vendor-specific | vtu-c-vendor-specific | vtu-r-country-code |
vtu-c-country-code)*>

<!ELEMENT vdsl-far-end-attainable-bitrate (#PCDATA)>

<!ELEMENT vdsl-far-end-attenuation (#PCDATA)>

<!ELEMENT vdsl-far-end-capacity-used (#PCDATA)>

<!ELEMENT vdsl-far-end-fast-bitrate (#PCDATA)>
```


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```
<!ELEMENT vdsl-far-end-fast-crc (#PCDATA)>

<!ELEMENT vdsl-far-end-fast-fec (#PCDATA)>

<!ELEMENT vdsl-far-end-fast-hec (#PCDATA)>

<!ELEMENT vdsl-far-end-interleaved-bitrate (#PCDATA)>

<!ELEMENT vdsl-far-end-interleaved-crc (#PCDATA)>

<!ELEMENT vdsl-far-end-interleaved-fec (#PCDATA)>

<!ELEMENT vdsl-far-end-interleaved-hec (#PCDATA)>

<!ELEMENT vdsl-far-end-noise-margin (#PCDATA)>

<!ELEMENT vdsl-far-end-output-power (#PCDATA)>

<!ELEMENT vdsl-information (vdsl-line-status | vdsl-line-profile-type |
vdsl-line-type | vdsl-annex-type | vdsl-last-fail-code | vdsl-subfunction |
vdsl-seconds-in-showtime | vdsl-chipset-information | vdsl-statistics)*>

<!ELEMENT vdsl-last-fail-code (#PCDATA)>

<!ELEMENT vdsl-line-profile-type (#PCDATA)>

<!ELEMENT vdsl-line-status (#PCDATA)>

<!ELEMENT vdsl-line-type (#PCDATA)>

<!ELEMENT vdsl-near-end-attainable-bitrate (#PCDATA)>

<!ELEMENT vdsl-near-end-attenuation (#PCDATA)>

<!ELEMENT vdsl-near-end-capacity-used (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-bitrate (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-crc (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-fec (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-hec (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-rx-cells (#PCDATA)>

<!ELEMENT vdsl-near-end-fast-tx-cells (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-bitrate (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-crc (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-fec (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-hec (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-rx-cells (#PCDATA)>

<!ELEMENT vdsl-near-end-interleaved-tx-cells (#PCDATA)>
```

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<!ELEMENT vdsl-near-end-noise-margin (#PCDATA)>

<!ELEMENT vdsl-near-end-output-power (#PCDATA)>

<!ELEMENT vdsl-seconds-in-showtime (#PCDATA)>

<!ELEMENT vdsl-statistics (vdsl-near-end-attainable-bitrate |
vdsl-far-end-attainable-bitrate | vdsl-near-end-attenuation |
vdsl-far-end-attenuation | vdsl-near-end-capacity-used | vdsl-far-end-capacity-used
 | vdsl-near-end-noise-margin | vdsl-far-end-noise-margin |
vdsl-near-end-output-power | vdsl-far-end-output-power |
vdsl-near-end-interleaved-bitrate | vdsl-near-end-fast-bitrate |
vdsl-far-end-interleaved-bitrate | vdsl-far-end-fast-bitrate |
vdsl-near-end-interleaved-crc | vdsl-near-end-fast-crc |
vdsl-far-end-interleaved-crc | vdsl-far-end-fast-crc |
vdsl-near-end-interleaved-hec | vdsl-near-end-fast-hec |
vdsl-far-end-interleaved-hec | vdsl-far-end-fast-hec |
vdsl-near-end-interleaved-fec | vdsl-near-end-fast-fec |
vdsl-far-end-interleaved-fec | vdsl-far-end-fast-fec |
vdsl-near-end-interleaved-rx-cells | vdsl-near-end-fast-rx-cells |
vdsl-near-end-interleaved-tx-cells | vdsl-near-end-fast-tx-cells)*>

<!ELEMENT vdsl-subfunction (#PCDATA)>

<!ELEMENT virtual-circuit-information (dlci-statistics | vpi | vci | vci-range |
 trunk | trunk-bandwidth | dlci | ifvc-flags | ifvc-multipoint-destination |
atm-tm-cbr | atm-tm-vbr | atm-tm-rtvbr | peak | sustained | burst | cdvt |
queue-limit | down-time | last-down-time | ifvc-epd | ifvc-epd-plp0 | ifvc-epd-plp1
 | ifvc-weight | oam-parameters | oam-statistics | traffic-statistics |
atm-policer-statistics | psn-tag | psn-vpi | psn-vci | swapping | atm-statistics
 | atm-cos-information | in-arp-statistics)*>

<!ELEMENT virtual-path-information (vpi | ifvp-flags | atm-tm-cbr | atm-tm-vbr |
 atm-tm-rtvbr | peak | sustained | burst | cdvt | queue-limit | down-time |
last-down-time | oam-parameters | oam-statistics | traffic-statistics)*>

<!ELEMENT vlan-id (#PCDATA)>

<!ELEMENT vpi (#PCDATA)>

<!ELEMENT vrfname (#PCDATA)>

<!ELEMENT vtu-c-country-code (#PCDATA)>

<!ELEMENT vtu-c-vendor-id (#PCDATA)>

<!ELEMENT vtu-c-vendor-specific (#PCDATA)>

<!ELEMENT vtu-r-country-code (#PCDATA)>

<!ELEMENT vtu-r-vendor-id (#PCDATA)>

<!ELEMENT vtu-r-vendor-specific (#PCDATA)>

<!ELEMENT watch-list (watch-route)*>
<!ATTLIST watch-list junos:style CDATA #IMPLIED>

<!ELEMENT watch-route (#PCDATA)>

<!ELEMENT watchlist EMPTY>
```


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```
<!ELEMENT wavelength (#PCDATA)>

<!ELEMENT wavelength-unlocked-alarm (#PCDATA)>

<!ELEMENT wrr (#PCDATA)>

<!ELEMENT x21-control-signal (rts | cts)*>

<!ELEMENT x21-signal-polarity (rts-polarity | cts-polarity)*>

<!ELEMENT xmt-lip-addlink (#PCDATA)>

<!ELEMENT xmt-lip-hello (#PCDATA)>

<!ELEMENT xmt-lip-hello-ack (#PCDATA)>

<!ELEMENT xmt-lip-link-ack (#PCDATA)>

<!ELEMENT xmt-lip-link-rej (#PCDATA)>

<!ELEMENT xmt-lip-link-rem (#PCDATA)>

<!ELEMENT xmt-lip-rem-ack (#PCDATA)>

<!ELEMENT yellow-differential-delay (#PCDATA)>
```

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CHAPTER 92

DTD for IPsec Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ipsec.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ipsec.dtd -->

<!ELEMENT active-entries (#PCDATA)>

<!ELEMENT ah-authentication-failures (#PCDATA)>

<!ELEMENT ah-input-bytes (#PCDATA)>

<!ELEMENT ah-input-packets (#PCDATA)>

<!ELEMENT ah-output-bytes (#PCDATA)>

<!ELEMENT ah-output-packets (#PCDATA)>

<!ELEMENT ah-statistics (ah-input-bytes | ah-output-bytes | ah-input-packets |
ah-output-packets)*>

<!ELEMENT alternate-subject (#PCDATA)>

<!ELEMENT alternate-subject-list (alternate-subject)*>

<!ELEMENT authorization-status (#PCDATA)>

<!ELEMENT auto-re-enrollment (auto-re-enrollment-status |
auto-re-enrollment-next-trigger-time)*>

<!ELEMENT auto-re-enrollment-next-trigger-time (#PCDATA)>

<!ELEMENT auto-re-enrollment-status (#PCDATA)>

<!ELEMENT bad-headers (#PCDATA)>
```

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```
<!ELEMENT bad-trailers (#PCDATA)>

<!ELEMENT ca-certificate-enroll (ca-subject | fingerprint)*>

<!ELEMENT ca-certificate-enroll-list (ca-certificate-enroll-msg |
ca-certificate-enroll)*>

<!ELEMENT ca-certificate-enroll-msg (#PCDATA)>

<!ELEMENT ca-file (#PCDATA)>

<!ELEMENT ca-name (#PCDATA)>

<!ELEMENT ca-profile-name (#PCDATA)>

<!ELEMENT ca-subject (#PCDATA)>

<!ELEMENT cert-after (#PCDATA)>

<!ELEMENT cert-before (#PCDATA)>

<!ELEMENT cert-ca-load-status (cert-ca-profile)*>

<!ELEMENT cert-ca-manual-load (fingerprint)*>

<!ELEMENT cert-ca-profile (#PCDATA)>

<!ELEMENT cert-certificate-id (#PCDATA)>

<!ELEMENT cert-crl (#PCDATA)>

<!ELEMENT cert-flag-info (cert-flag-trust | cert-flag-root)*>

<!ELEMENT cert-flag-root (#PCDATA)>

<!ELEMENT cert-flag-trust (#PCDATA)>

<!ELEMENT cert-id (#PCDATA)>

<!ELEMENT cert-issuer (#PCDATA)>

<!ELEMENT cert-key-pair (cert-key-pair-name | cert-key-pair-size)*>

<!ELEMENT cert-key-pair-name (#PCDATA)>

<!ELEMENT cert-key-pair-size (#PCDATA)>

<!ELEMENT cert-load-status (cert-certificate-id)*>

<!ELEMENT cert-references (#PCDATA)>

<!ELEMENT cert-request-dump (cert-request-dump-msg | cert-request-dump-file |
fingerprint)*>

<!ELEMENT cert-request-dump-file (cert-request-dump-file-content)*>

<!ELEMENT cert-request-dump-file-content (#PCDATA)>

<!ELEMENT cert-request-dump-msg (#PCDATA)>

<!ELEMENT cert-root (#PCDATA)>
```


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```
<!ELEMENT cert-serial (#PCDATA)>

<!ELEMENT cert-subject (#PCDATA)>

<!ELEMENT cert-trust (#PCDATA)>

<!ELEMENT certificate-alternate-subject (#PCDATA)>

<!ELEMENT certificate-cache-entry (#PCDATA)>

<!ELEMENT certificate-dns (#PCDATA)>

<!ELEMENT certificate-information (certificates | total-entries | active-entries
 | locked-entries | db-stats)*>
<!ATTLIST certificate-information junos:style CDATA #IMPLIED>

<!ELEMENT certificate-subject (#PCDATA)>

<!ELEMENT certificate-type (#PCDATA)>

<!ELEMENT certificates (cert-subject | cert-serial | cert-id | cert-references |
 cert-issuer | cert-trust | cert-root | cert-crl | cert-before | cert-after |
x509)*>

<!ELEMENT common-name (#PCDATA)>

<!ELEMENT country-name (#PCDATA)>

<!ELEMENT crl (cert-issuer | cert-id | cert-references | crl-list)*>

<!ELEMENT crl-information (crl)*>
<!ATTLIST crl-information junos:style CDATA #IMPLIED>

<!ELEMENT crl-issuer (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject-list (crl-issuer-alternate-subject)*>

<!ELEMENT crl-issuer-detail (distinguished-name)*>

<!ELEMENT crl-list (serial | revocation-date)*>

<!ELEMENT crl-load-status (ca-profile-name)*>

<!ELEMENT crl-number (#PCDATA)>

<!ELEMENT crl-revocation-date (#PCDATA)>

<!ELEMENT crl-revocation-list (revoked-cert-serial-number | crl-revocation-date)*>

<!ELEMENT crl-validity (effective-date | next-update)*>

<!ELEMENT crl-version (#PCDATA)>

<!ELEMENT db-stats (#PCDATA)>

<!ELEMENT distinguished-name (organization-name | organizational-unit-name |
country-name | state-or-province-name | locality-name | common-name | email-address
 | domain-component)*>
```

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```
<!ELEMENT distribution-crl (#PCDATA)>

<!ELEMENT distribution-crl-list (distribution-crl)*>

<!ELEMENT domain-component (#PCDATA)>

<!ELEMENT effective-date (#PCDATA)>

<!ELEMENT email-address (#PCDATA)>

<!ELEMENT encoding (#PCDATA)>

<!ELEMENT error-statistics (ah-authentication-failures | replay-errors |
esp-authentication-failures | esp-decryption-failures | replay-pkts |
replay-before-window-drops | bad-headers | bad-trailers | flow-errors |
no-sa-errors | ip-integrity-errors | exceeds-tunnel-mtu | rule-lookup-fail |
misc-errors)*>

<!ELEMENT esp-authentication-failures (#PCDATA)>

<!ELEMENT esp-decrypted-bytes (#PCDATA)>

<!ELEMENT esp-decrypted-packets (#PCDATA)>

<!ELEMENT esp-decryption-failures (#PCDATA)>

<!ELEMENT esp-encrypted-bytes (#PCDATA)>

<!ELEMENT esp-encrypted-packets (#PCDATA)>

<!ELEMENT esp-statistics (esp-encrypted-bytes | esp-decrypted-bytes |
esp-encrypted-packets | esp-decrypted-packets)*>

<!ELEMENT exceeds-tunnel-mtu (#PCDATA)>

<!ELEMENT fingerprint (fingerprint-hash-algorithm | fingerprint-content)*>

<!ELEMENT fingerprint-content (#PCDATA)>

<!ELEMENT fingerprint-hash-algorithm (#PCDATA)>

<!ELEMENT fips-pic-status (fpc-slot | pic-slot | serial-number |
authorization-status)*>

<!ELEMENT fips-pic-status-information (fips-pic-status)*>

<!ELEMENT flow-errors (#PCDATA)>

<!ELEMENT fpc-slot (#PCDATA)>

<!ELEMENT identifier (#PCDATA)>

<!ELEMENT ike-sa-algorithms (ike-sa-authentication-algorithm |
ike-sa-encryption-algorithm | ike-sa-prf-algorithm | ike-sa-dhgroup)*>

<!ELEMENT ike-sa-authentication-algorithm (#PCDATA)>

<!ELEMENT ike-sa-authentication-method (#PCDATA)>

<!ELEMENT ike-sa-dhgroup (#PCDATA)>
```


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```
<!ELEMENT ike-sa-encryption-algorithm (#PCDATA)>

<!ELEMENT ike-sa-exchange-type (#PCDATA)>

<!ELEMENT ike-sa-flags (#PCDATA)>

<!ELEMENT ike-sa-initiator-cookie (#PCDATA)>

<!ELEMENT ike-sa-input-bytes (#PCDATA)>

<!ELEMENT ike-sa-input-packets (#PCDATA)>

<!ELEMENT ike-sa-lifetime (#PCDATA)>

<!ELEMENT ike-sa-local-address (#PCDATA)>

<!ELEMENT ike-sa-local-id (#PCDATA)>

<!ELEMENT ike-sa-local-port (#PCDATA)>

<!ELEMENT ike-sa-misc (ike-sa-flags | ike-sa-num-ipsec-sas-created |
ike-sa-num-ipsec-sas-deleted | ike-sa-num-phase2-negotiations)*>

<!ELEMENT ike-sa-msg-id (#PCDATA)>

<!ELEMENT ike-sa-num-ipsec-sas-created (#PCDATA)>

<!ELEMENT ike-sa-num-ipsec-sas-deleted (#PCDATA)>

<!ELEMENT ike-sa-num-phase2-negotiations (#PCDATA)>

<!ELEMENT ike-sa-output-bytes (#PCDATA)>

<!ELEMENT ike-sa-output-packets (#PCDATA)>

<!ELEMENT ike-sa-phase2-information (ike-sa-phase2-type | ike-sa-role |
ike-sa-msg-id | ike-sa-local-address | ike-sa-local-port | ike-sa-remote-address
 | ike-sa-remote-port | ike-sa-local-id | ike-sa-remote-id | ike-sa-flags)*>

<!ELEMENT ike-sa-phase2-type (#PCDATA)>

<!ELEMENT ike-sa-prf-algorithm (#PCDATA)>

<!ELEMENT ike-sa-remote-address (#PCDATA)>

<!ELEMENT ike-sa-remote-id (#PCDATA)>

<!ELEMENT ike-sa-remote-port (#PCDATA)>

<!ELEMENT ike-sa-responder-cookie (#PCDATA)>

<!ELEMENT ike-sa-role (#PCDATA)>

<!ELEMENT ike-sa-routing-instance (#PCDATA)>

<!ELEMENT ike-sa-state (#PCDATA)>

<!ELEMENT ike-sa-traffic-statistics (ike-sa-input-packets | ike-sa-output-packets
 | ike-sa-input-bytes | ike-sa-output-bytes)*>
```

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```
<!ELEMENT ike-security-associations (ike-sa-role | ike-sa-state |
ike-sa-initiator-cookie | ike-sa-responder-cookie | ike-sa-exchange-type |
ike-sa-authentication-method | ike-sa-routing-instance | ike-sa-local-address |
ike-sa-local-port | ike-sa-remote-address | ike-sa-remote-port | ike-sa-lifetime
 | ike-sa-algorithms | ike-sa-traffic-statistics | ike-sa-misc |
ike-sa-phase2-information)*>

<!ELEMENT ike-security-associations-block (ike-sa-remote-address |
ike-security-associations)*>

<!ELEMENT ike-security-associations-information (ike-security-associations |
ike-sa-phase2-information | ike-security-associations-block)*>
<!ATTLIST ike-security-associations-information junos:style CDATA #IMPLIED>

<!ELEMENT ip-integrity-errors (#PCDATA)>

<!ELEMENT ipsec-pic-redundancy (ipsec-redundancy-counter |
ipsec-redundancy-pic-no-information | ipsec-pic-redundancy-primary-interface |
ipsec-pic-redundancy-backup-interface | ipsec-redundancy-primary-state |
ipsec-redundancy-backup-state)*>

<!ELEMENT ipsec-pic-redundancy-backup-interface (#PCDATA)>

<!ELEMENT ipsec-pic-redundancy-information (ipsec-pic-redundancy)*>

<!ELEMENT ipsec-pic-redundancy-primary-interface (#PCDATA)>

<!ELEMENT ipsec-redundancy-backup-state (#PCDATA)>

<!ELEMENT ipsec-redundancy-counter (#PCDATA)>

<!ELEMENT ipsec-redundancy-pic-no-information EMPTY>

<!ELEMENT ipsec-redundancy-primary-state (#PCDATA)>

<!ELEMENT ipsec-redundancy-tunnel-no-information EMPTY>

<!ELEMENT ipsec-service-set-statistics (pic-name | service-set-name |
ipsec-statistics)*>

<!ELEMENT ipsec-statistics (local-gateway | remote-gateway | tunnel-index |
esp-statistics | ah-statistics | error-statistics | statistics-no-information)*>

<!ELEMENT ipsec-total-statistics (ipsec-service-set-statistics)*>

<!ELEMENT ipsec-total-statistics-information (ipsec-service-set-statistics)*>
<!ATTLIST ipsec-total-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT ipsec-tunnel-redundancy (sa-name | ipsec-redundancy-counter |
ipsec-redundancy-tunnel-no-information | ipsec-tunnel-redundancy-local-address |
 ipsec-tunnel-redundancy-primary-remote-address |
ipsec-tunnel-redundancy-backup-remote-address | ipsec-redundancy-primary-state |
 ipsec-redundancy-backup-state)*>

<!ELEMENT ipsec-tunnel-redundancy-backup-remote-address (#PCDATA)>

<!ELEMENT ipsec-tunnel-redundancy-information (ipsec-tunnel-redundancy)*>

<!ELEMENT ipsec-tunnel-redundancy-local-address (#PCDATA)>

<!ELEMENT ipsec-tunnel-redundancy-primary-remote-address (#PCDATA)>
```


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```
<!ELEMENT issue-info (recipient | issued-by)*>

<!ELEMENT issued-by (#PCDATA)>

<!ELEMENT issuer (distinguished-name)*>

<!ELEMENT key (#PCDATA)>

<!ELEMENT key-contents (#PCDATA)>

<!ELEMENT key-usage (#PCDATA)>

<!ELEMENT key-usage-list (key-usage)*>

<!ELEMENT kmd-debug-memory-usage (#PCDATA)>

<!ELEMENT kmd-memory-usage (memory-block-type | memory-in-use)*>

<!ELEMENT kmd-memory-usage-information (kmd-memory-usage |
kmd-debug-memory-usage)*>
<!ATTLIST kmd-memory-usage-information junos:style CDATA #IMPLIED>

<!ELEMENT local-gateway (#PCDATA)>

<!ELEMENT locality-name (#PCDATA)>

<!ELEMENT locked-entries (#PCDATA)>

<!ELEMENT memory-block-type (#PCDATA)>

<!ELEMENT memory-in-use (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT misc-errors (#PCDATA)>

<!ELEMENT next-update (#PCDATA)>

<!ELEMENT no-sa-errors (#PCDATA)>

<!ELEMENT not-after (#PCDATA)>

<!ELEMENT not-before (#PCDATA)>

<!ELEMENT organization-name (#PCDATA)>

<!ELEMENT organizational-unit-name (#PCDATA)>

<!ELEMENT outside-service-interface-routing-instance (#PCDATA)>

<!ELEMENT pic-name (#PCDATA)>

<!ELEMENT pic-slot (#PCDATA)>

<!ELEMENT pki-scep (url | ca-name | ca-file | key | certificate-subject |
certificate-dns | certificate-alternate-subject | encoding | message)*>

<!ELEMENT public-key (public-key-algorithm | public-key-length |
public-key-verification-status)*>
```

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```
<!ELEMENT public-key-algorithm (#PCDATA)>
<!ELEMENT public-key-contents-list (key-contents)*>
<!ELEMENT public-key-length (#PCDATA)>
<!ELEMENT public-key-verification-status (#PCDATA)>
<!ELEMENT recipient (#PCDATA)>
<!ELEMENT remote-gateway (#PCDATA)>
<!ELEMENT replay-before-window-drops (#PCDATA)>
<!ELEMENT replay-errors (#PCDATA)>
<!ELEMENT replay-pkts (#PCDATA)>
<!ELEMENT revocation-date (#PCDATA)>
<!ELEMENT revoked-cert-serial-number (#PCDATA)>
<!ELEMENT rule-lookup-fail (#PCDATA)>
<!ELEMENT sa-anti-replay-service (#PCDATA)>
<!ELEMENT sa-authentication-algorithm (#PCDATA)>
<!ELEMENT sa-aux-spi (#PCDATA)>
<!ELEMENT sa-block-state (#PCDATA)>
<!ELEMENT sa-direction (#PCDATA)>
<!ELEMENT sa-encryption-algorithm (#PCDATA)>
<!ELEMENT sa-hard-lifetime (#PCDATA)>
<!ELEMENT sa-inside-interface (#PCDATA)>
<!ELEMENT sa-local-gateway (#PCDATA)>
<!ELEMENT sa-local-identity (#PCDATA)>
<!ELEMENT sa-mode (#PCDATA)>
<!ELEMENT sa-name (#PCDATA)>
<!ELEMENT sa-no-information EMPTY>
<!ELEMENT sa-protocol (#PCDATA)>
<!ELEMENT sa-remote-gateway (#PCDATA)>
<!ELEMENT sa-remote-identity (#PCDATA)>
<!ELEMENT sa-replay-window-size (#PCDATA)>
<!ELEMENT sa-rule-name (#PCDATA)>
<!ELEMENT sa-soft-lifetime (#PCDATA)>
```


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```
<!ELEMENT sa-spi (#PCDATA)>

<!ELEMENT sa-state (#PCDATA)>

<!ELEMENT sa-term-name (#PCDATA)>

<!ELEMENT sa-tunnel-index (#PCDATA)>

<!ELEMENT sa-tunnel-information (sa-rule-name | sa-term-name | sa-tunnel-index |
 sa-local-gateway | sa-remote-gateway | sa-local-identity | sa-remote-identity |
 sa-inside-interface | sa-tunnel-mtu | sa-no-information)*>

<!ELEMENT sa-tunnel-mtu (#PCDATA)>

<!ELEMENT sa-type (#PCDATA)>

<!ELEMENT security-associations (sa-direction | sa-spi | sa-aux-spi | sa-state |
 sa-mode | sa-type | sa-protocol | sa-authentication-algorithm |
sa-encryption-algorithm | sa-soft-lifetime | sa-hard-lifetime |
sa-anti-replay-service | sa-replay-window-size)*>

<!ELEMENT security-associations-block (sa-name | sa-block-state |
sa-tunnel-information | security-associations)*>

<!ELEMENT security-associations-information (security-associations-block |
sa-tunnel-information | security-associations)*>
<!ATTLIST security-associations-information junos:style CDATA #IMPLIED>

<!ELEMENT serial (#PCDATA)>

<!ELEMENT serial-number (#PCDATA)>

<!ELEMENT serial-number-list (serial-number-x509)*>

<!ELEMENT serial-number-x509 (#PCDATA)>

<!ELEMENT service-set-info (service-set-name | total-cert-entries)*>

<!ELEMENT service-set-name (#PCDATA)>

<!ELEMENT services-security-associations-block (svc-set-name |
outside-service-interface-routing-instance | sa-tunnel-information |
security-associations | tunnel-redundancy-extensive)*>

<!ELEMENT services-security-associations-information
(services-security-associations-block | sa-tunnel-information |
security-associations | tunnel-redundancy-extensive)*>
<!ATTLIST services-security-associations-information junos:style CDATA #IMPLIED>

<!ELEMENT signature-algorithm (#PCDATA)>

<!ELEMENT state-or-province-name (#PCDATA)>

<!ELEMENT statistics-no-information EMPTY>

<!ELEMENT status (#PCDATA)>

<!ELEMENT subject (distinguished-name)*>

<!ELEMENT svc-set-name (#PCDATA)>
```

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```
<!ELEMENT total-cert-entries (#PCDATA)>

<!ELEMENT total-entries (#PCDATA)>

<!ELEMENT tunnel-index (#PCDATA)>

<!ELEMENT tunnel-redundancy-extensive (ipsec-redundancy-counter |
ipsec-redundancy-tunnel-no-information |
ipsec-tunnel-redundancy-primary-remote-address |
ipsec-tunnel-redundancy-backup-remote-address | ipsec-redundancy-primary-state |
 ipsec-redundancy-backup-state)*>

<!ELEMENT url (#PCDATA)>

<!ELEMENT validity (not-before | not-after)*>

<!ELEMENT version (#PCDATA)>

<!ELEMENT x509 (x509-ip | x509-dns | x509-uri | x509-email)*>

<!ELEMENT x509-certificate-cache-info (service-set-info | cert-flag-info |
issue-info | serial-number-list | public-key | fingerprint |
public-key-contents-list | alternate-subject-list | key-usage-list |
distribution-crl-list | signature-algorithm | identifier | validity | version |
certificate-cache-entry)*>
<!ATTLIST x509-certificate-cache-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-certificate-cache-info-list (x509-certificate-cache-info)*>

<!ELEMENT x509-certificate-info (issue-info | serial-number-list | public-key |
fingerprint | public-key-contents-list | alternate-subject-list | key-usage-list
 | distribution-crl-list | signature-algorithm | identifier | validity | version
 | auto-re-enrollment | certificate-type | status | issuer | subject)*>
<!ATTLIST x509-certificate-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-crl-information (crl-number | crl-revocation-list | crl-validity
| crl-version | crl-issuer | identifier | crl-issuer-alternate-subject-list |
crl-issuer-detail)*>
<!ATTLIST x509-crl-information junos:style CDATA #IMPLIED>

<!ELEMENT x509-dns (#PCDATA)>

<!ELEMENT x509-email (#PCDATA)>

<!ELEMENT x509-ip (#PCDATA)>

<!ELEMENT x509-pki-certificate-info-list (x509-certificate-info)*>

<!ELEMENT x509-pki-crl-information-list (x509-crl-information)*>

<!ELEMENT x509-uri (#PCDATA)>
```


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CHAPTER 93

DTD for IPv6 Neighbor Discovery Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ipv6-nd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ipv6-nd.dtd -->

<!ELEMENT ipv6-modify-nd (ipv6-modify-nd-entry)*>

<!ELEMENT ipv6-modify-nd-entry (ipv6-nd-neighbor-address |
ipv6-nd-neighbor-l2-address | ipv6-nd-change)*>

<!ELEMENT ipv6-nd-change (#PCDATA)>

<!ELEMENT ipv6-nd-entry (ipv6-nd-neighbor-address | ipv6-nd-neighbor-l2-address
| ipv6-nd-total | ipv6-nd-state | ipv6-nd-expire | ipv6-nd-isrouter |
ipv6-nd-issecure | ipv6-nd-interface-name)*>

<!ELEMENT ipv6-nd-expire (#PCDATA)>

<!ELEMENT ipv6-nd-information (ipv6-nd-entry)*>

<!ELEMENT ipv6-nd-interface-name (#PCDATA)>

<!ELEMENT ipv6-nd-isrouter (#PCDATA)>

<!ELEMENT ipv6-nd-issecure (#PCDATA)>

<!ELEMENT ipv6-nd-neighbor-address (#PCDATA)>

<!ELEMENT ipv6-nd-neighbor-l2-address (#PCDATA)>

<!ELEMENT ipv6-nd-state (#PCDATA)>
```

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```
<!ELEMENT ipv6-nd-total (#PCDATA)>
```


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CHAPTER 94

DTD for DDOS System Process Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-jddosd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-jddosd.dtd -->

<!ELEMENT ddos-instance-config (policer-bandwidth | policer-bandwidth-scale |
policer-burst | policer-burst-scale | policer-enable | policer-bypass-aggregate)*>
<!ATTLIST ddos-instance-config junos:style CDATA #IMPLIED>

<!ELEMENT ddos-instance-stats (packet-received | packet-dropped |
packet-dropped-protocol | packet-dropped-aggr | packet-dropped-others |
packet-arrival-rate | packet-arrival-rate-max | policer-violation-start-time |
policer-violation-last-time | policer-violation-duration |
policer-violation-count)*>
<!ATTLIST ddos-instance-stats junos:style CDATA #IMPLIED>

<!ELEMENT ddos-parameters-brief (group-name | protocol-name | policer-bandwidth
| policer-burst | policer-priority | policer-bypass-aggregate |
policer-time-recover | policer-enable | policer-fpc-scaled)*>

<!ELEMENT ddos-policer-parameter-scale (policer-slot-name | policer-bandwidth-scale
 | policer-burst-scale)*>

<!ELEMENT ddos-protocol (protocol-name | protocol-description |
ddos-protocol-basic-config | ddos-system-stats | ddos-protocol-instance-info)*>

<!ELEMENT ddos-protocol-basic-config (policer-bandwidth | policer-burst |
policer-priority | policer-time-recover | policer-enable |
policer-bypass-aggregate)*>
<!ATTLIST ddos-protocol-basic-config junos:style CDATA #IMPLIED>

<!ELEMENT ddos-protocol-group (protocol-group-name | ddos-protocol)*>
```

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```
<!ELEMENT ddos-protocol-instance-info (protocol-states-locale |
ddos-instance-config | ddos-instance-stats)*>

<!ELEMENT ddos-protocol-states (protocol-enabled | protocol-violated)*>

<!ELEMENT ddos-protocols-information (total-changed-policers |
num-protocols-in-violation)*>
<!ATTLIST ddos-protocols-information junos:style CDATA #IMPLIED>

<!ELEMENT ddos-statistics-brief (group-name | protocol-name | packet-received |
packet-dropped | packet-arrival-rate | policer-violation-count | protocol-states)*>

<!ELEMENT ddos-statistics-information (num-protocols-seen-violation |
num-protocols-in-violation | num-total-violations)*>

<!ELEMENT ddos-status-information (total-policers | total-violated-policers)*>

<!ELEMENT ddos-system-stats (packet-received | packet-dropped | packet-arrival-rate
 | packet-arrival-rate-max | policer-violation-start-time |
policer-violation-last-time | policer-violation-duration | policer-violation-count
 | fpc-violation-count-current | fpc-violation-count)*>
<!ATTLIST ddos-system-stats junos:style CDATA #IMPLIED>

<!ELEMENT ddos-version (total-groups | total-policers)*>

<!ELEMENT ddos-violations-brief (group-name | protocol-name | policer-bandwidth
| packet-arrival-rate | packet-arrival-rate-max | policer-violation-start-time |
 protocol-states-locale)*>

<!ELEMENT fpc-violation-count (#PCDATA)>

<!ELEMENT fpc-violation-count-current (#PCDATA)>

<!ELEMENT group-name (#PCDATA)>

<!ELEMENT num-protocols-in-violation (#PCDATA)>

<!ELEMENT num-protocols-seen-violation (#PCDATA)>

<!ELEMENT num-total-violations (#PCDATA)>

<!ELEMENT packet-arrival-rate (#PCDATA)>

<!ELEMENT packet-arrival-rate-max (#PCDATA)>

<!ELEMENT packet-dropped (#PCDATA)>

<!ELEMENT packet-dropped-aggr (#PCDATA)>

<!ELEMENT packet-dropped-others (#PCDATA)>

<!ELEMENT packet-dropped-protocol (#PCDATA)>

<!ELEMENT packet-received (#PCDATA)>

<!ELEMENT policer-bandwidth (#PCDATA)>

<!ELEMENT policer-bandwidth-scale (#PCDATA)>

<!ELEMENT policer-burst (#PCDATA)>
```


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```
<!ELEMENT policer-burst-scale (#PCDATA)>

<!ELEMENT policer-bypass-aggregate (#PCDATA)>

<!ELEMENT policer-enable (#PCDATA)>

<!ELEMENT policer-fpc-scaled (#PCDATA)>

<!ELEMENT policer-priority (#PCDATA)>

<!ELEMENT policer-slot-name (#PCDATA)>

<!ELEMENT policer-time-recover (#PCDATA)>

<!ELEMENT policer-violation-count (#PCDATA)>

<!ELEMENT policer-violation-duration (#PCDATA)>
<!ATTLIST policer-violation-duration junos:seconds CDATA #IMPLIED>

<!ELEMENT policer-violation-last-time (#PCDATA)>
<!ATTLIST policer-violation-last-time junos:seconds CDATA #IMPLIED>

<!ELEMENT policer-violation-start-time (#PCDATA)>
<!ATTLIST policer-violation-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT protocol-description (#PCDATA)>

<!ELEMENT protocol-enabled (#PCDATA)>

<!ELEMENT protocol-group-name (#PCDATA)>

<!ELEMENT protocol-name (#PCDATA)>

<!ELEMENT protocol-states (#PCDATA)>

<!ELEMENT protocol-states-locale (#PCDATA)>

<!ELEMENT protocol-violated (#PCDATA)>

<!ELEMENT total-changed-policers (#PCDATA)>

<!ELEMENT total-groups (#PCDATA)>

<!ELEMENT total-policers (#PCDATA)>

<!ELEMENT total-violated-policers (#PCDATA)>
```

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CHAPTER 95

DTD for Junos OS Diameter Function Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-jdiameterd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-jdiameterd.dtd -->

<!ELEMENT jdiameterd-function-brief (jdiameterd-function-name |
jdiameterd-function-state | jdiameterd-function-upstream-transaction-utilization
 | jdiameterd-function-downstream-transaction-utilization |
jdiameterd-function-network-transmission-queue-memory-utilization |
jdiameterd-function-function-transmission-queue-memory-utilization |
jdiameterd-function-routed-dests)*>

<!ELEMENT jdiameterd-function-connection-count (#PCDATA)>

<!ELEMENT jdiameterd-function-data (jdiameterd-function-name |
jdiameterd-function-state | jdiameterd-function-upstream-transaction-utilization
 | jdiameterd-function-downstream-transaction-utilization |
jdiameterd-function-network-transmission-queue-memory-utilization |
jdiameterd-function-function-transmission-queue-memory-utilization |
jdiameterd-function-routed-dests |
jdiameterd-function-network-transmission-queue-requests |
jdiameterd-function-expected-answers-from-network |
jdiameterd-function-function-transmission-queue-answers |
jdiameterd-function-upstream-transaction-count |
jdiameterd-function-upstream-transaction-limit |
jdiameterd-function-function-transmission-queue-requests |
jdiameterd-function-expected-answers-from-function |
jdiameterd-function-network-transmission-queue-answers |
jdiameterd-function-downstream-transaction-count |
jdiameterd-function-downstream-transaction-limit |
jdiameterd-function-network-transmission-queue-memory |
jdiameterd-function-network-transmission-queue-memory-limit |
```

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```
jdiameterd-function-function-transmission-queue-memory |
jdiameterd-function-function-transmission-queue-memory-limit)*>

<!ELEMENT jdiameterd-function-downstream-transaction-count (#PCDATA)>

<!ELEMENT jdiameterd-function-downstream-transaction-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-downstream-transaction-utilization (#PCDATA)>

<!ELEMENT jdiameterd-function-error (#PCDATA)>

<!ELEMENT jdiameterd-function-expected-answers-from-function (#PCDATA)>

<!ELEMENT jdiameterd-function-expected-answers-from-network (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-answer-failures (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-answer-failures-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-message-failures (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-message-failures-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-request-failures (#PCDATA)>

<!ELEMENT jdiameterd-function-function-receive-request-failures-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-answers-forwarded (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-answers-forwarded-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-answers-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-answers-over-limit-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-messages-forwarded (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-messages-forwarded-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-messages-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-messages-over-limit-total
(#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-requests-forwarded (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-requests-forwarded-total (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-requests-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-function-received-requests-over-limit-total
(#PCDATA)>

<!ELEMENT jdiameterd-function-function-transmission-queue-answers (#PCDATA)>

<!ELEMENT jdiameterd-function-function-transmission-queue-memory (#PCDATA)>

<!ELEMENT jdiameterd-function-function-transmission-queue-memory-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-function-transmission-queue-memory-utilization
(#PCDATA)>
```


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```
<!ELEMENT jdiameterd-function-function-transmission-queue-requests (#PCDATA)>

<!ELEMENT jdiameterd-function-information (jdiameterd-function-list |
jdiameterd-function-brief | jdiameterd-function-data |
jdiameterd-function-not-found | jdiameterd-function-error)*>
<!ATTLIST jdiameterd-function-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-function-list (jdiameterd-function-name |
jdiameterd-function-state | jdiameterd-function-upstream-transaction-utilization
 | jdiameterd-function-downstream-transaction-utilization |
jdiameterd-function-network-transmission-queue-memory-utilization |
jdiameterd-function-function-transmission-queue-memory-utilization |
jdiameterd-function-routed-dests)*>

<!ELEMENT jdiameterd-function-name (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answer-deliveries (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answer-deliveries-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answer-delivery-fails (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answer-delivery-fails-total
(#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answers-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-answers-over-limit-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-message-deliveries (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-message-deliveries-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-message-delivery-fails (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-message-delivery-fails-total
(#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-messages-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-messages-over-limit-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-deliveries (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-deliveries-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-delivery-fails (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-delivery-fails-total
(#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-over-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-network-received-requests-over-limit-total (#PCDATA)>

<!ELEMENT jdiameterd-function-network-transmission-queue-answers (#PCDATA)>

<!ELEMENT jdiameterd-function-network-transmission-queue-memory (#PCDATA)>

<!ELEMENT jdiameterd-function-network-transmission-queue-memory-limit (#PCDATA)>
```

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```
<!ELEMENT jdiameterd-function-network-transmission-queue-memory-utilization
(#PCDATA)>

<!ELEMENT jdiameterd-function-network-transmission-queue-requests (#PCDATA)>

<!ELEMENT jdiameterd-function-not-found (#PCDATA)>

<!ELEMENT jdiameterd-function-routed-dests (#PCDATA)>

<!ELEMENT jdiameterd-function-state (#PCDATA)>

<!ELEMENT jdiameterd-function-statistics-brief (jdiameterd-function-name |
jdiameterd-function-connection-count |
jdiameterd-function-network-received-requests-deliveries |
jdiameterd-function-network-received-requests-deliveries-total |
jdiameterd-function-network-received-answer-deliveries |
jdiameterd-function-network-received-answer-deliveries-total |
jdiameterd-function-network-received-message-deliveries |
jdiameterd-function-network-received-message-deliveries-total |
jdiameterd-function-function-received-requests-forwarded |
jdiameterd-function-function-received-requests-forwarded-total |
jdiameterd-function-function-received-answers-forwarded |
jdiameterd-function-function-received-answers-forwarded-total |
jdiameterd-function-function-received-messages-forwarded |
jdiameterd-function-function-received-messages-forwarded-total)*>

<!ELEMENT jdiameterd-function-statistics-data (jdiameterd-function-name |
jdiameterd-function-connection-count |
jdiameterd-function-network-received-requests-deliveries |
jdiameterd-function-network-received-requests-deliveries-total |
jdiameterd-function-network-received-answer-deliveries |
jdiameterd-function-network-received-answer-deliveries-total |
jdiameterd-function-network-received-message-deliveries |
jdiameterd-function-network-received-message-deliveries-total |
jdiameterd-function-function-received-requests-forwarded |
jdiameterd-function-function-received-requests-forwarded-total |
jdiameterd-function-function-received-answers-forwarded |
jdiameterd-function-function-received-answers-forwarded-total |
jdiameterd-function-function-received-messages-forwarded |
jdiameterd-function-function-received-messages-forwarded-total |
jdiameterd-function-network-received-requests-over-limit |
jdiameterd-function-network-received-requests-over-limit-total |
jdiameterd-function-network-received-answers-over-limit |
jdiameterd-function-network-received-answers-over-limit-total |
jdiameterd-function-network-received-messages-over-limit |
jdiameterd-function-network-received-messages-over-limit-total |
jdiameterd-function-network-received-requests-delivery-fails |
jdiameterd-function-network-received-requests-delivery-fails-total |
jdiameterd-function-network-received-answer-delivery-fails |
jdiameterd-function-network-received-answer-delivery-fails-total |
jdiameterd-function-network-received-message-delivery-fails |
jdiameterd-function-network-received-message-delivery-fails-total |
jdiameterd-function-function-received-requests-over-limit |
jdiameterd-function-function-received-requests-over-limit-total |
jdiameterd-function-function-received-answers-over-limit |
jdiameterd-function-function-received-answers-over-limit-total |
jdiameterd-function-function-received-messages-over-limit |
jdiameterd-function-function-received-messages-over-limit-total |
jdiameterd-function-function-receive-request-failures |
jdiameterd-function-function-receive-request-failures-total |
```


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```
jdiameterd-function-function-receive-answer-failures |
jdiameterd-function-function-receive-answer-failures-total |
jdiameterd-function-function-receive-message-failures |
jdiameterd-function-function-receive-message-failures-total)*>

<!ELEMENT jdiameterd-function-statistics-error (#PCDATA)>

<!ELEMENT jdiameterd-function-statistics-information
(jdiameterd-function-statistics-list | jdiameterd-function-statistics-brief |
jdiameterd-function-statistics-data | jdiameterd-function-statistics-not-found |
 jdiameterd-function-statistics-error)*>
<!ATTLIST jdiameterd-function-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-function-statistics-list (jdiameterd-function-name |
jdiameterd-function-network-received-requests-deliveries |
jdiameterd-function-network-received-answer-deliveries |
jdiameterd-function-network-received-message-deliveries |
jdiameterd-function-function-received-requests-forwarded |
jdiameterd-function-function-received-answers-forwarded |
jdiameterd-function-function-received-messages-forwarded)*>

<!ELEMENT jdiameterd-function-statistics-not-found (#PCDATA)>

<!ELEMENT jdiameterd-function-upstream-transaction-count (#PCDATA)>

<!ELEMENT jdiameterd-function-upstream-transaction-limit (#PCDATA)>

<!ELEMENT jdiameterd-function-upstream-transaction-utilization (#PCDATA)>

<!ELEMENT jdiameterd-instance-brief (jdiameterd-instance-name |
jdiameterd-instance-origin-realm | jdiameterd-instance-origin-host |
jdiameterd-instance-total-network-elements |
jdiameterd-instance-connected-network-elements)*>

<!ELEMENT jdiameterd-instance-connected-network-elements (#PCDATA)>

<!ELEMENT jdiameterd-instance-error (#PCDATA)>

<!ELEMENT jdiameterd-instance-information (jdiameterd-instance-list |
jdiameterd-instance-brief | jdiameterd-instance-not-found |
jdiameterd-instance-error)*>
<!ATTLIST jdiameterd-instance-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-instance-list (jdiameterd-instance-name |
jdiameterd-instance-origin-realm | jdiameterd-instance-origin-host |
jdiameterd-instance-total-network-elements |
jdiameterd-instance-connected-network-elements)*>

<!ELEMENT jdiameterd-instance-name (#PCDATA)>

<!ELEMENT jdiameterd-instance-not-found (#PCDATA)>

<!ELEMENT jdiameterd-instance-origin-host (#PCDATA)>

<!ELEMENT jdiameterd-instance-origin-realm (#PCDATA)>

<!ELEMENT jdiameterd-instance-total-network-elements (#PCDATA)>

<!ELEMENT jdiameterd-network-element-activated-peers (#PCDATA)>

<!ELEMENT jdiameterd-network-element-brief (jdiameterd-network-element-name |
```

```
jdiameterd-network-element-instance-name | jdiameterd-network-element-state |
jdiameterd-network-element-primary-peer |
jdiameterd-network-element-secondary-peer)*>

<!ELEMENT jdiameterd-network-element-data (jdiameterd-network-element-name |
jdiameterd-network-element-instance-name | jdiameterd-network-element-state |
jdiameterd-network-element-primary-peer | jdiameterd-network-element-secondary-peer
 | jdiameterd-network-element-total-peers |
jdiameterd-network-element-activated-peers | jdiameterd-network-element-open-peers
 | jdiameterd-network-element-total-routes |
jdiameterd-network-element-invalid-routes |
jdiameterd-network-element-peer-activation-delay |
jdiameterd-network-element-first-selection-delay |
jdiameterd-network-element-post-selection-delay)*>

<!ELEMENT jdiameterd-network-element-error (#PCDATA)>

<!ELEMENT jdiameterd-network-element-first-selection-delay (#PCDATA)>

<!ELEMENT jdiameterd-network-element-information (jdiameterd-network-element-list
 | jdiameterd-network-element-brief | jdiameterd-network-element-data |
jdiameterd-network-element-not-found | jdiameterd-network-element-error)*>
<!ATTLIST jdiameterd-network-element-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-network-element-instance-name (#PCDATA)>

<!ELEMENT jdiameterd-network-element-invalid-routes (#PCDATA)>

<!ELEMENT jdiameterd-network-element-list (jdiameterd-network-element-name |
jdiameterd-network-element-instance-name | jdiameterd-network-element-state |
jdiameterd-network-element-primary-peer |
jdiameterd-network-element-secondary-peer)*>

<!ELEMENT jdiameterd-network-element-map-data (jdiameterd-network-element-name |
 jdiameterd-network-element-instance-name | jdiameterd-network-element-peer-name
 | jdiameterd-network-element-peer-priority |
jdiameterd-network-element-peer-usage)*>

<!ELEMENT jdiameterd-network-element-map-error (#PCDATA)>

<!ELEMENT jdiameterd-network-element-map-information
(jdiameterd-network-element-map-list | jdiameterd-network-element-map-data |
jdiameterd-network-element-map-not-found | jdiameterd-network-element-map-error)*>
<!ATTLIST jdiameterd-network-element-map-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-network-element-map-list (jdiameterd-network-element-name |
 jdiameterd-network-element-instance-name | jdiameterd-network-element-peer-name
 | jdiameterd-network-element-peer-priority |
jdiameterd-network-element-peer-usage)*>

<!ELEMENT jdiameterd-network-element-map-not-found (#PCDATA)>

<!ELEMENT jdiameterd-network-element-name (#PCDATA)>

<!ELEMENT jdiameterd-network-element-not-found (#PCDATA)>

<!ELEMENT jdiameterd-network-element-open-peers (#PCDATA)>

<!ELEMENT jdiameterd-network-element-peer-activation-delay (#PCDATA)>

<!ELEMENT jdiameterd-network-element-peer-name (#PCDATA)>
```


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```
<!ELEMENT jdiameterd-network-element-peer-priority (#PCDATA)>

<!ELEMENT jdiameterd-network-element-peer-usage (#PCDATA)>

<!ELEMENT jdiameterd-network-element-post-selection-delay (#PCDATA)>

<!ELEMENT jdiameterd-network-element-primary-peer (#PCDATA)>

<!ELEMENT jdiameterd-network-element-secondary-peer (#PCDATA)>

<!ELEMENT jdiameterd-network-element-state (#PCDATA)>

<!ELEMENT jdiameterd-network-element-total-peers (#PCDATA)>

<!ELEMENT jdiameterd-network-element-total-routes (#PCDATA)>

<!ELEMENT jdiameterd-node-activated-peers (#PCDATA)>

<!ELEMENT jdiameterd-node-connected-functions (#PCDATA)>

<!ELEMENT jdiameterd-node-connected-network-elements (#PCDATA)>

<!ELEMENT jdiameterd-node-expected-answers-from-function (#PCDATA)>

<!ELEMENT jdiameterd-node-expected-answers-from-network (#PCDATA)>

<!ELEMENT jdiameterd-node-function-transmission-queue-answers (#PCDATA)>

<!ELEMENT jdiameterd-node-function-transmission-queue-memory (#PCDATA)>

<!ELEMENT jdiameterd-node-function-transmission-queue-requests (#PCDATA)>

<!ELEMENT jdiameterd-node-information (jdiameterd-node-summary |
jdiameterd-function-list | jdiameterd-instance-list |
jdiameterd-network-element-list | jdiameterd-peer-list | jdiameterd-route-list)*>
<!ATTLIST jdiameterd-node-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-node-instances (#PCDATA)>

<!ELEMENT jdiameterd-node-network-transmission-queue-answers (#PCDATA)>

<!ELEMENT jdiameterd-node-network-transmission-queue-memory (#PCDATA)>

<!ELEMENT jdiameterd-node-network-transmission-queue-requests (#PCDATA)>

<!ELEMENT jdiameterd-node-open-peers (#PCDATA)>

<!ELEMENT jdiameterd-node-pid (#PCDATA)>

<!ELEMENT jdiameterd-node-summary (jdiameterd-node-pid |
jdiameterd-node-total-functions | jdiameterd-node-connected-functions |
jdiameterd-node-instances | jdiameterd-node-total-network-elements |
jdiameterd-node-connected-network-elements | jdiameterd-node-total-peers |
jdiameterd-node-activated-peers | jdiameterd-node-open-peers |
jdiameterd-node-total-transports |
jdiameterd-node-network-transmission-queue-requests |
jdiameterd-node-network-transmission-queue-answers |
jdiameterd-node-expected-answers-from-network |
jdiameterd-node-function-transmission-queue-requests |
jdiameterd-node-function-transmission-queue-answers |
```

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jdiameterd-node-expected-answers-from-function |
jdiameterd-node-network-transmission-queue-memory |
jdiameterd-node-function-transmission-queue-memory)*>

<!ELEMENT jdiameterd-node-total-functions (#PCDATA)>

<!ELEMENT jdiameterd-node-total-network-elements (#PCDATA)>

<!ELEMENT jdiameterd-node-total-peers (#PCDATA)>

<!ELEMENT jdiameterd-node-total-transports (#PCDATA)>

<!ELEMENT jdiameterd-peer-activated-count (#PCDATA)>

<!ELEMENT jdiameterd-peer-active-connection-terminations (#PCDATA)>

<!ELEMENT jdiameterd-peer-active-connection-terminations-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-active-disconnects (#PCDATA)>

<!ELEMENT jdiameterd-peer-active-disconnects-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-answer-count (#PCDATA)>

<!ELEMENT jdiameterd-peer-brief (jdiameterd-peer-name | jdiameterd-instance-name
 | jdiameterd-peer-state | jdiameterd-peer-network-element-count |
jdiameterd-peer-activated-count | jdiameterd-peer-primary-count |
jdiameterd-peer-secondary-count | jdiameterd-peer-vrf |
jdiameterd-peer-remote-address | jdiameterd-peer-remote-port |
jdiameterd-peer-remote-realm | jdiameterd-peer-remote-host)*>

<!ELEMENT jdiameterd-peer-cea-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-cea-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-cea-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-cea-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-cer-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-cer-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-cer-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-cer-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-closed-timeout (#PCDATA)>

<!ELEMENT jdiameterd-peer-connect-timeout (#PCDATA)>

<!ELEMENT jdiameterd-peer-connection-attempts (#PCDATA)>

<!ELEMENT jdiameterd-peer-connection-attempts-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-connection-failures (#PCDATA)>

<!ELEMENT jdiameterd-peer-connection-failures-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-connection-successes (#PCDATA)>
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<!ELEMENT jdiameterd-peer-connection-successes-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-data (jdiameterd-peer-name | jdiameterd-instance-name
| jdiameterd-peer-state | jdiameterd-peer-network-element-count |
jdiameterd-peer-activated-count | jdiameterd-peer-primary-count |
jdiameterd-peer-secondary-count | jdiameterd-peer-vrf |
jdiameterd-peer-remote-address | jdiameterd-peer-remote-port |
jdiameterd-peer-remote-realm | jdiameterd-peer-remote-host |
jdiameterd-peer-local-address | jdiameterd-peer-local-port |
jdiameterd-peer-local-transport | jdiameterd-peer-post-enable-time |
jdiameterd-peer-in-state-time | jdiameterd-peer-in-state-remain-time |
jdiameterd-peer-missed-watch-dogs | jdiameterd-peer-transmission-queue-length |
jdiameterd-peer-answer-count | jdiameterd-peer-post-rx-time |
jdiameterd-peer-post-rx-remain | jdiameterd-peer-op-timeout |
jdiameterd-peer-suspended-timeout | jdiameterd-peer-closed-timeout |
jdiameterd-peer-connect-timeout)*>

<!ELEMENT jdiameterd-peer-dpa-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpa-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpa-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpa-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpr-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpr-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpr-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-dpr-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwa-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwa-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwa-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwa-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwr-received (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwr-received-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwr-transmitted (#PCDATA)>

<!ELEMENT jdiameterd-peer-dwr-transmitted-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-error (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarded-messages (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarded-messages-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-dropped-messages (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-dropped-messages-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-failures (#PCDATA)>
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<!ELEMENT jdiameterd-peer-forwarding-failures-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-moved-in-messages (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-moved-in-messages-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-moved-out-messages (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-moved-out-messages-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-rerouted-messages (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-rerouted-messages-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-successes (#PCDATA)>

<!ELEMENT jdiameterd-peer-forwarding-successes-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-in-state-remain-time (#PCDATA)>
<!ATTLIST jdiameterd-peer-in-state-remain-time junos:seconds CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-in-state-time (#PCDATA)>
<!ATTLIST jdiameterd-peer-in-state-time junos:seconds CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-information (jdiameterd-peer-list | jdiameterd-peer-brief
 | jdiameterd-peer-data | jdiameterd-peer-not-found | jdiameterd-peer-error)*>
<!ATTLIST jdiameterd-peer-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-instance-name (#PCDATA)>

<!ELEMENT jdiameterd-peer-list (jdiameterd-peer-name |
jdiameterd-peer-instance-name | jdiameterd-peer-state |
jdiameterd-peer-network-element-count | jdiameterd-peer-activated-count |
jdiameterd-peer-primary-count | jdiameterd-peer-secondary-count)*>

<!ELEMENT jdiameterd-peer-local-address (#PCDATA)>

<!ELEMENT jdiameterd-peer-local-port (#PCDATA)>

<!ELEMENT jdiameterd-peer-local-transport (#PCDATA)>

<!ELEMENT jdiameterd-peer-map-data (jdiameterd-peer-name |
jdiameterd-peer-instance-name | jdiameterd-peer-network-element-name |
jdiameterd-peer-network-element-priority | jdiameterd-peer-network-element-usage)*>

<!ELEMENT jdiameterd-peer-map-error (#PCDATA)>

<!ELEMENT jdiameterd-peer-map-information (jdiameterd-peer-map-list |
jdiameterd-peer-map-data | jdiameterd-peer-map-not-found |
jdiameterd-peer-map-error)*>
<!ATTLIST jdiameterd-peer-map-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-map-list (jdiameterd-peer-name |
jdiameterd-peer-instance-name | jdiameterd-peer-network-element-name |
jdiameterd-peer-network-element-priority | jdiameterd-peer-network-element-usage)*>

<!ELEMENT jdiameterd-peer-map-not-found (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-forwarded-to-peer (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-forwarded-to-peer-connection (#PCDATA)>
```


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<!ELEMENT jdiameterd-peer-messages-forwarded-to-peer-connection-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-forwarded-to-peer-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-forwarded-to-routed-destination (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-forwarded-to-routed-destination-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-transmitted-by-self (#PCDATA)>

<!ELEMENT jdiameterd-peer-messages-transmitted-by-self-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-missed-watch-dogs (#PCDATA)>

<!ELEMENT jdiameterd-peer-name (#PCDATA)>

<!ELEMENT jdiameterd-peer-network-element-count (#PCDATA)>

<!ELEMENT jdiameterd-peer-network-element-name (#PCDATA)>

<!ELEMENT jdiameterd-peer-network-element-priority (#PCDATA)>

<!ELEMENT jdiameterd-peer-network-element-usage (#PCDATA)>

<!ELEMENT jdiameterd-peer-not-found (#PCDATA)>

<!ELEMENT jdiameterd-peer-op-timeout (#PCDATA)>

<!ELEMENT jdiameterd-peer-passive-connection-terminations (#PCDATA)>

<!ELEMENT jdiameterd-peer-passive-connection-terminations-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-passive-disconnects (#PCDATA)>

<!ELEMENT jdiameterd-peer-passive-disconnects-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-post-enable-time (#PCDATA)>
<!ATTLIST jdiameterd-peer-post-enable-time junos:seconds CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-post-rx-remain (#PCDATA)>

<!ELEMENT jdiameterd-peer-post-rx-time (#PCDATA)>

<!ELEMENT jdiameterd-peer-primary-count (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-answers-dropped (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-answers-dropped-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-blocking-requests (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-blocking-requests-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-blocking-timeouts (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-blocking-timeouts-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-errors (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-errors-total (#PCDATA)>
```

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```
<!ELEMENT jdiameterd-peer-receive-messages-delivered-to-node (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-messages-delivered-to-node-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-messages-dropped (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-messages-dropped-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-messages-handled-by-peer (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-messages-handled-by-peer-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-successes (#PCDATA)>

<!ELEMENT jdiameterd-peer-receive-successes-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-received-answers (#PCDATA)>

<!ELEMENT jdiameterd-peer-received-answers-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-received-requests (#PCDATA)>

<!ELEMENT jdiameterd-peer-received-requests-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-remote-address (#PCDATA)>

<!ELEMENT jdiameterd-peer-remote-host (#PCDATA)>

<!ELEMENT jdiameterd-peer-remote-port (#PCDATA)>

<!ELEMENT jdiameterd-peer-remote-realm (#PCDATA)>

<!ELEMENT jdiameterd-peer-secondary-count (#PCDATA)>

<!ELEMENT jdiameterd-peer-state (#PCDATA)>

<!ELEMENT jdiameterd-peer-statistics-brief (jdiameterd-peer-name |
jdiameterd-peer-instance-name | jdiameterd-peer-receive-errors |
jdiameterd-peer-receive-successes |
jdiameterd-peer-receive-messages-handled-by-peer |
jdiameterd-peer-receive-messages-dropped | jdiameterd-peer-receive-answers-dropped
 | jdiameterd-peer-received-answers | jdiameterd-peer-received-requests |
jdiameterd-peer-receive-messages-delivered-to-node |
jdiameterd-peer-receive-errors-total | jdiameterd-peer-receive-successes-total |
 jdiameterd-peer-receive-messages-handled-by-peer-total |
jdiameterd-peer-receive-messages-dropped-total |
jdiameterd-peer-receive-answers-dropped-total |
jdiameterd-peer-received-answers-total | jdiameterd-peer-received-requests-total
 | jdiameterd-peer-receive-messages-delivered-to-node-total |
jdiameterd-peer-messages-forwarded-to-peer-connection |
jdiameterd-peer-messages-forwarded-to-peer |
jdiameterd-peer-messages-forwarded-to-routed-destination |
jdiameterd-peer-forwarded-messages | jdiameterd-peer-forwarding-failures |
jdiameterd-peer-forwarding-successes | jdiameterd-peer-forwarding-moved-in-messages
 | jdiameterd-peer-forwarding-moved-out-messages |
jdiameterd-peer-forwarding-rerouted-messages |
jdiameterd-peer-forwarding-dropped-messages |
jdiameterd-peer-messages-transmitted-by-self | jdiameterd-peer-transmit-errors |
 jdiameterd-peer-transmit-successes |
jdiameterd-peer-messages-forwarded-to-peer-connection-total |
```


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jdiameterd-peer-messages-forwarded-to-peer-total |
jdiameterd-peer-messages-forwarded-to-routed-destination-total |
jdiameterd-peer-forwarded-messages-total |
jdiameterd-peer-forwarding-failures-total |
jdiameterd-peer-forwarding-successes-total |
jdiameterd-peer-forwarding-moved-in-messages-total |
jdiameterd-peer-forwarding-moved-out-messages-total |
jdiameterd-peer-forwarding-rerouted-messages-total |
jdiameterd-peer-forwarding-dropped-messages-total |
jdiameterd-peer-messages-transmitted-by-self-total |
jdiameterd-peer-transmit-errors-total | jdiameterd-peer-transmit-successes-total
 | jdiameterd-peer-connection-attempts | jdiameterd-peer-connection-failures |
jdiameterd-peer-connection-successes |
jdiameterd-peer-passive-connection-terminations |
jdiameterd-peer-active-connection-terminations |
jdiameterd-peer-passive-disconnects | jdiameterd-peer-active-disconnects |
jdiameterd-peer-connection-attempts-total |
jdiameterd-peer-connection-failures-total |
jdiameterd-peer-connection-successes-total |
jdiameterd-peer-passive-connection-terminations-total |
jdiameterd-peer-active-connection-terminations-total |
jdiameterd-peer-passive-disconnects-total |
jdiameterd-peer-active-disconnects-total |
jdiameterd-peer-receive-blocking-requests |
jdiameterd-peer-receive-blocking-timeouts |
jdiameterd-peer-receive-blocking-requests-total |
jdiameterd-peer-receive-blocking-timeouts-total)*>

<!ELEMENT jdiameterd-peer-statistics-data (jdiameterd-peer-receive-errors |
jdiameterd-peer-receive-successes |
jdiameterd-peer-receive-messages-handled-by-peer |
jdiameterd-peer-receive-messages-dropped | jdiameterd-peer-receive-answers-dropped
 | jdiameterd-peer-received-answers | jdiameterd-peer-received-requests |
jdiameterd-peer-receive-messages-delivered-to-node |
jdiameterd-peer-receive-errors-total | jdiameterd-peer-receive-successes-total |
 jdiameterd-peer-receive-messages-handled-by-peer-total |
jdiameterd-peer-receive-messages-dropped-total |
jdiameterd-peer-receive-answers-dropped-total |
jdiameterd-peer-received-answers-total | jdiameterd-peer-received-requests-total
 | jdiameterd-peer-receive-messages-delivered-to-node-total |
jdiameterd-peer-messages-forwarded-to-peer-connection |
jdiameterd-peer-messages-forwarded-to-peer |
jdiameterd-peer-messages-forwarded-to-routed-destination |
jdiameterd-peer-forwarded-messages | jdiameterd-peer-forwarding-failures |
jdiameterd-peer-forwarding-successes | jdiameterd-peer-forwarding-moved-in-messages
 | jdiameterd-peer-forwarding-moved-out-messages |
jdiameterd-peer-forwarding-rerouted-messages |
jdiameterd-peer-forwarding-dropped-messages |
jdiameterd-peer-messages-transmitted-by-self | jdiameterd-peer-transmit-errors |
 jdiameterd-peer-transmit-successes |
jdiameterd-peer-messages-forwarded-to-peer-connection-total |
jdiameterd-peer-messages-forwarded-to-peer-total |
jdiameterd-peer-messages-forwarded-to-routed-destination-total |
jdiameterd-peer-forwarded-messages-total |
jdiameterd-peer-forwarding-failures-total |
jdiameterd-peer-forwarding-successes-total |
jdiameterd-peer-forwarding-moved-in-messages-total |
jdiameterd-peer-forwarding-moved-out-messages-total |
jdiameterd-peer-forwarding-rerouted-messages-total |
jdiameterd-peer-forwarding-dropped-messages-total |
jdiameterd-peer-messages-transmitted-by-self-total |
```

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jdiameterd-peer-transmit-errors-total | jdiameterd-peer-transmit-successes-total
 | jdiameterd-peer-connection-attempts | jdiameterd-peer-connection-failures |
jdiameterd-peer-connection-successes |
jdiameterd-peer-passive-connection-terminations |
jdiameterd-peer-active-connection-terminations |
jdiameterd-peer-passive-disconnects | jdiameterd-peer-active-disconnects |
jdiameterd-peer-connection-attempts-total |
jdiameterd-peer-connection-failures-total |
jdiameterd-peer-connection-successes-total |
jdiameterd-peer-passive-connection-terminations-total |
jdiameterd-peer-active-connection-terminations-total |
jdiameterd-peer-passive-disconnects-total |
jdiameterd-peer-active-disconnects-total |
jdiameterd-peer-receive-blocking-requests |
jdiameterd-peer-receive-blocking-timeouts |
jdiameterd-peer-receive-blocking-requests-total |
jdiameterd-peer-receive-blocking-timeouts-total | jdiameterd-peer-cer-transmitted
 | jdiameterd-peer-cer-received | jdiameterd-peer-cea-transmitted |
jdiameterd-peer-cea-received | jdiameterd-peer-dwr-transmitted |
jdiameterd-peer-dwr-received | jdiameterd-peer-dwa-transmitted |
jdiameterd-peer-dwa-received | jdiameterd-peer-dpr-transmitted |
jdiameterd-peer-dpr-received | jdiameterd-peer-dpa-transmitted |
jdiameterd-peer-dpa-received | jdiameterd-peer-cer-transmitted-total |
jdiameterd-peer-cer-received-total | jdiameterd-peer-cea-transmitted-total |
jdiameterd-peer-cea-received-total | jdiameterd-peer-dwr-transmitted-total |
jdiameterd-peer-dwr-received-total | jdiameterd-peer-dwa-transmitted-total |
jdiameterd-peer-dwa-received-total | jdiameterd-peer-dpr-transmitted-total |
jdiameterd-peer-dpr-received-total | jdiameterd-peer-dpa-transmitted-total |
jdiameterd-peer-dpa-received-total)*>

<!ELEMENT jdiameterd-peer-statistics-error (#PCDATA)>

<!ELEMENT jdiameterd-peer-statistics-information (jdiameterd-peer-statistics-list
 | jdiameterd-peer-statistics-brief | jdiameterd-peer-statistics-data |
jdiameterd-peer-statistics-not-found | jdiameterd-peer-statistics-error)*>
<!ATTLIST jdiameterd-peer-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-peer-statistics-list (jdiameterd-peer-name |
jdiameterd-peer-instance-name | jdiameterd-peer-receive-successes |
jdiameterd-peer-receive-messages-handled-by-peer |
jdiameterd-peer-receive-messages-delivered-to-node |
jdiameterd-peer-forwarding-successes | jdiameterd-peer-messages-transmitted-by-self
 | jdiameterd-peer-transmit-successes)*>

<!ELEMENT jdiameterd-peer-statistics-not-found (#PCDATA)>

<!ELEMENT jdiameterd-peer-suspended-timeout (#PCDATA)>

<!ELEMENT jdiameterd-peer-transmission-queue-length (#PCDATA)>

<!ELEMENT jdiameterd-peer-transmit-errors (#PCDATA)>

<!ELEMENT jdiameterd-peer-transmit-errors-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-transmit-successes (#PCDATA)>

<!ELEMENT jdiameterd-peer-transmit-successes-total (#PCDATA)>

<!ELEMENT jdiameterd-peer-vrf (#PCDATA)>

<!ELEMENT jdiameterd-route-brief (jdiameterd-route-name |
```


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```
jdiameterd-route-network-element-name | jdiameterd-route-instance-name |
jdiameterd-route-valid | jdiameterd-route-up)*>

<!ELEMENT jdiameterd-route-data (jdiameterd-route-name |
jdiameterd-route-network-element-name | jdiameterd-route-instance-name |
jdiameterd-route-valid | jdiameterd-route-up | jdiameterd-route-function |
jdiameterd-route-function-part | jdiameterd-route-dest-realm |
jdiameterd-route-dest-host | jdiameterd-route-metric | jdiameterd-route-score)*>

<!ELEMENT jdiameterd-route-dest-host (#PCDATA)>

<!ELEMENT jdiameterd-route-dest-realm (#PCDATA)>

<!ELEMENT jdiameterd-route-error (#PCDATA)>

<!ELEMENT jdiameterd-route-function (#PCDATA)>

<!ELEMENT jdiameterd-route-function-part (#PCDATA)>

<!ELEMENT jdiameterd-route-information (jdiameterd-route-list |
jdiameterd-route-brief | jdiameterd-route-data | jdiameterd-route-not-found |
jdiameterd-route-error)*>
<!ATTLIST jdiameterd-route-information junos:style CDATA #IMPLIED>

<!ELEMENT jdiameterd-route-instance-name (#PCDATA)>

<!ELEMENT jdiameterd-route-list (jdiameterd-route-name |
jdiameterd-route-network-element-name | jdiameterd-route-instance-name |
jdiameterd-route-valid | jdiameterd-route-up)*>

<!ELEMENT jdiameterd-route-metric (#PCDATA)>

<!ELEMENT jdiameterd-route-name (#PCDATA)>

<!ELEMENT jdiameterd-route-network-element-name (#PCDATA)>

<!ELEMENT jdiameterd-route-not-found (#PCDATA)>

<!ELEMENT jdiameterd-route-score (#PCDATA)>

<!ELEMENT jdiameterd-route-up (#PCDATA)>

<!ELEMENT jdiameterd-route-valid (#PCDATA)>
```

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CHAPTER 96

DTD for JNX Example Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-jnx-example.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-jnx-example.dtd -->

<!ELEMENT cpu-usage (#PCDATA)>

<!ELEMENT jnx-example-data (jnx-example-data-name | jnx-example-data-description
 | jnx-example-data-type | jnx-example-data-value)*>

<!ELEMENT jnx-example-data-description (#PCDATA)>

<!ELEMENT jnx-example-data-information (jnx-example-data)*>
<!ATTLIST jnx-example-data-information junos:style CDATA #IMPLIED>

<!ELEMENT jnx-example-data-name (#PCDATA)>

<!ELEMENT jnx-example-data-type (#PCDATA)>

<!ELEMENT jnx-example-data-value (#PCDATA)>

<!ELEMENT jnx-example-statistics (cpu-usage | memory-usage)*>

<!ELEMENT memory-usage (#PCDATA)>
```

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CHAPTER 97

DTD for L2AL Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-l2al.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
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<!-- junos-l2al.dtd -->

<!ELEMENT bd-name (#PCDATA)>

<!ELEMENT bridge-domain-name (#PCDATA)>

<!ELEMENT bridge-statistics-information (l2ald-rtb-entry | interface-statistics)*>

<!ELEMENT bridging-domain (#PCDATA)>

<!ELEMENT broadcast-bytes (#PCDATA)>

<!ELEMENT broadcast-packets (#PCDATA)>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT component-nhindex (#PCDATA)>

<!ELEMENT event-error (#PCDATA)>

<!ELEMENT event-name (#PCDATA)>

<!ELEMENT event-op (#PCDATA)>

<!ELEMENT event-owner (#PCDATA)>

<!ELEMENT event-type (#PCDATA)>

<!ELEMENT flood-group-composite-function (#PCDATA)>

<!ELEMENT flood-nh-components (interface-name | interface-type | nhtype |
nhindex)*>
```

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```
<!ATTLIST flood-nh-components junos:style CDATA #IMPLIED>

<!ELEMENT flood-nh-group (flood-nh-group-name | flood-nh-group-type | nhtype |
nhindex | flood-group-composite-function | flood-nh-components |
flood-nh-p2mp-components)*>
<!ATTLIST flood-nh-group junos:style CDATA #IMPLIED>

<!ELEMENT flood-nh-group-name (#PCDATA)>

<!ELEMENT flood-nh-group-type (#PCDATA)>

<!ELEMENT flood-nh-p2mp-components (component-nhindex)*>

<!ELEMENT flood-route (route-prefix | route-type | owner | route-flood-group-name
 | route-flood-group-index | nhtype | nhindex | flood-nh-p2mp-components |
flood-nh-components | flood-nh-group)*>
<!ATTLIST flood-route junos:style CDATA #IMPLIED>

<!ELEMENT flooded-bytes (#PCDATA)>

<!ELEMENT flooded-packets (#PCDATA)>

<!ELEMENT global-mac-count (#PCDATA)>

<!ELEMENT instance-name (#PCDATA)>

<!ELEMENT interface (interface-name | interface-id | interface-description |
local-interface-index | interface-flags | interface-flags-description)*>

<!ELEMENT interface-description (#PCDATA)>

<!ELEMENT interface-flags (#PCDATA)>

<!ELEMENT interface-flags-description (#PCDATA)>

<!ELEMENT interface-id (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-statistics (interface | remote-pe | broadcast-packets |
broadcast-bytes | multicast-packets | multicast-bytes | flooded-packets |
flooded-bytes | unicast-packets | unicast-bytes | mac-limit | num-mac-count)*>

<!ELEMENT interface-type (#PCDATA)>

<!ELEMENT l2-bridge-isid (#PCDATA)>

<!ELEMENT l2-bridge-vlan (#PCDATA)>

<!ELEMENT l2-mac-address (#PCDATA)>

<!ELEMENT l2-mac-bridging-domain (#PCDATA)>

<!ELEMENT l2-mac-entry-flags (#PCDATA)>

<!ELEMENT l2-mac-epoch (#PCDATA)>

<!ELEMENT l2-mac-flags (#PCDATA)>

<!ELEMENT l2-mac-ifl-generation (#PCDATA)>
```


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```
<!ELEMENT l2-mac-interface-device (#PCDATA)>

<!ELEMENT l2-mac-learn-mask (#PCDATA)>

<!ELEMENT l2-mac-logical-interface (#PCDATA)>

<!ELEMENT l2-mac-logical-system (#PCDATA)>

<!ELEMENT l2-mac-routing-instance (#PCDATA)>

<!ELEMENT l2-mac-sequence-number (#PCDATA)>

<!ELEMENT l2-mac-stp-index (#PCDATA)>

<!ELEMENT l2-mac-vlan (#PCDATA)>

<!ELEMENT l2-rbeb-flags (#PCDATA)>

<!ELEMENT l2-rbeb-le-index (#PCDATA)>

<!ELEMENT l2-rbeb-logical-system (#PCDATA)>

<!ELEMENT l2-rbeb-mac-address (#PCDATA)>

<!ELEMENT l2-rbeb-routing-instance (#PCDATA)>

<!ELEMENT l2-rbeb-state-flags (#PCDATA)>

<!ELEMENT l2-rbeb-time-left-msec (#PCDATA)>

<!ELEMENT l2-rbeb-time-left-sec (#PCDATA)>

<!ELEMENT l2-remote-beb-mac-address (#PCDATA)>

<!ELEMENT l2ald-bridge-domain-flood-event-info (event-name | event-type |
event-owner | event-op | event-error)*>
<!ATTLIST l2ald-bridge-domain-flood-event-info junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-bridge-domain-flood-event-list
(l2ald-bridge-domain-flood-event-info)*>

<!ELEMENT l2ald-bridge-domain-flood-event-queue
(l2ald-bridge-domain-flood-next-event | l2ald-bridge-domain-flood-event-list)*>

<!ELEMENT l2ald-bridge-domain-flood-instance (l2ald-bridge-domain-lr-information)*>

<!ELEMENT l2ald-bridge-domain-flood-instance-information (instance-name |
num-active-ce-iffs | num-active-ve-iffs | flood-route)*>
<!ATTLIST l2ald-bridge-domain-flood-instance-information junos:style CDATA
#IMPLIED>

<!ELEMENT l2ald-bridge-domain-flood-next-event
(l2ald-bridge-domain-flood-event-info)*>

<!ELEMENT l2ald-bridge-domain-flood-route-information (flood-route)*>

<!ELEMENT l2ald-bridge-domain-lr-information (logical-system-info |
l2ald-bridge-domain-flood-instance-information)*>

<!ELEMENT l2ald-bridge-instance-group (l2rtb-name | l2rtb-bridging-domain |
l2rtb-instance-description | l2rtb-instance-type | l2rtb-instance-state |
```

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```
l2rtb-instance-restart-state | l2rtb-instance-pathse1-timeout |
l2rtb-interface-name | l2rtb-macs-learned | l2rtb-instance-flags |
l2rtb-bridge-vlan | l2rtb-brief-summary)*>

<!ELEMENT l2ald-bridge-instance-information (l2ald-bridge-instance-group)*>
<!ATTLIST l2ald-bridge-instance-information junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-config-flag (#PCDATA)>

<!ELEMENT l2ald-config-pbbn (l2ald-pbbn-entry)*>

<!ELEMENT l2ald-config-smac-count (#PCDATA)>

<!ELEMENT l2ald-global-configuration (l2ald-mac-aging-time | l2ald-config-flag |
 l2ald-mac-learning-status | l2ald-hardware-mac-learning-status |
l2ald-software-mac-learning-status | l2ald-statistics-status |
l2ald-sequence-number | l2ald-mac-learn-toggle-count |
l2ald-hardware-mac-learn-toggle-count | l2ald-software-mac-learn-toggle-count |
l2ald-statistics-toggle-count | l2ald-global-mac-limit-count |
l2ald-global-mac-limit | l2ald-global-packet-action-drop |
l2ald-interface-mac-limit-wm | l2ald-rtb-mac-limit-wm | l2ald-mac-limit-wm |
l2ald-interface-mac-limit-timeout | l2ald-rtb-mac-limit-timeout |
l2ald-mac-limit-timeout | l2ald-config-smac-count | l2ald-non-config-smac-count
| l2ald-le-aging-time | l2ald-le-bridge-domain-aging-time)*>
<!ATTLIST l2ald-global-configuration junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-global-mac-limit (#PCDATA)>

<!ELEMENT l2ald-global-mac-limit-count (#PCDATA)>

<!ELEMENT l2ald-global-macdb (l2ald-mac-entry)*>

<!ELEMENT l2ald-global-macdb-count (global-mac-count)*>

<!ELEMENT l2ald-global-packet-action-drop (#PCDATA)>

<!ELEMENT l2ald-hardware-mac-learn-toggle-count (#PCDATA)>

<!ELEMENT l2ald-hardware-mac-learning-status (#PCDATA)>

<!ELEMENT l2ald-if-mac-count-entry (interface-name | mac-count)*>
<!ATTLIST l2ald-if-mac-count-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-ifd-preconfig-entry (l2ald-ifd-preconfig-name |
l2ald-ifd-preconfig-vmap | l2ald-ifd-preconfig-vmap-count |
l2ald-ifd-tmp-resync-vmap | l2ald-ifd-tmp-resync-vmap-count)*>
<!ATTLIST l2ald-ifd-preconfig-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-ifd-preconfig-name (#PCDATA)>

<!ELEMENT l2ald-ifd-preconfig-vmap (#PCDATA)>

<!ELEMENT l2ald-ifd-preconfig-vmap-count (#PCDATA)>

<!ELEMENT l2ald-ifd-tmp-resync-vmap (#PCDATA)>

<!ELEMENT l2ald-ifd-tmp-resync-vmap-count (#PCDATA)>

<!ELEMENT l2ald-interface-mac-count (l2ald-total-intf-mac-count |
l2ald-if-mac-count-entry)*>
```


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```
<!ELEMENT l2ald-interface-mac-limit-timeout (#PCDATA)>

<!ELEMENT l2ald-interface-mac-limit-wm (#PCDATA)>

<!ELEMENT l2ald-interface-macdb (l2ald-macdb-if-name | l2ald-mac-entry)*>

<!ELEMENT l2ald-le-aging-time (#PCDATA)>

<!ELEMENT l2ald-le-bridge-domain-aging-time (#PCDATA)>

<!ELEMENT l2ald-mac-aging-time (#PCDATA)>

<!ELEMENT l2ald-mac-destination-address-statistics (packet-count | byte-count)*>

<!ELEMENT l2ald-mac-entry (l2-mac-address | l2-remote-beb-mac-address |
l2-mac-interface-device | l2-mac-logical-interface | l2-mac-routing-instance |
l2-mac-bridging-domain | l2-mac-logical-system | l2-mac-vlan | l2-mac-stp-index
| l2-mac-epoch | l2-mac-ifl-generation | l2-mac-sequence-number | l2-mac-learn-mask
 | l2-mac-entry-flags | l2-mac-flags | l2-bridge-vlan | l2-bridge-isid |
l2ald-mac-source-address-statistics | l2ald-mac-destination-address-statistics)*>
<!ATTLIST l2ald-mac-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-mac-learn-toggle-count (#PCDATA)>

<!ELEMENT l2ald-mac-learning-status (#PCDATA)>

<!ELEMENT l2ald-mac-limit-timeout (#PCDATA)>

<!ELEMENT l2ald-mac-limit-wm (#PCDATA)>

<!ELEMENT l2ald-mac-source-address-statistics (packet-count | byte-count)*>

<!ELEMENT l2ald-macdb-if-name (#PCDATA)>

<!ELEMENT l2ald-macdb-rtb-name (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-entry (l2ald-mc-ae-rg-id |
l2ald-mc-ae-arp-rx-count-from-line | l2ald-mc-ae-arp-tx-count-to-peer |
l2ald-mc-ae-arp-rx-count-from-peer | l2ald-mc-ae-arp-install-count |
l2ald-mc-ae-arp-local-drop-count | l2ald-mc-ae-arp-remote-drop-count)*>
<!ATTLIST l2ald-mc-ae-arp-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-mc-ae-arp-install-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-local-drop-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-remote-drop-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-rx-count-from-line (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-rx-count-from-peer (#PCDATA)>

<!ELEMENT l2ald-mc-ae-arp-tx-count-to-peer (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-flags (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-mac-address (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-mcae-id (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-peer-address (#PCDATA)>
```

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```
<!ELEMENT l2ald-mc-ae-mh-remote-mac-entry (l2ald-mc-ae-mh-service-id |
l2ald-mc-ae-mh-vlan-id | l2ald-mc-ae-mh-peer-address | l2ald-mc-ae-mh-mac-address
 | l2ald-mc-ae-mh-mcae-id | l2ald-mc-ae-mh-unit-num | l2ald-mc-ae-mh-rtm-op |
l2ald-mc-ae-mh-flags | l2ald-mc-ae-mh-status)*>
<!ATTLIST l2ald-mc-ae-mh-remote-mac-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-mc-ae-mh-rtm-op (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-service-id (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-status (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-unit-num (#PCDATA)>

<!ELEMENT l2ald-mc-ae-mh-vlan-id (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-disconnect-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-entry (l2ald-mc-ae-rg-id | l2ald-mc-ae-rg-flags |
l2ald-mc-ae-rg-ref-count | l2ald-mc-ae-rg-tx-count | l2ald-mc-ae-rg-rx-count |
l2ald-mc-ae-rg-disconnect-count)*>
<!ATTLIST l2ald-mc-ae-rg-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-mc-ae-rg-flags (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-id (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-ref-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-rx-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-rg-tx-count (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-flags (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-mac-address (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-peer-address (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-remote-mac-entry (l2ald-mc-ae-sh-service-id |
l2ald-mc-ae-sh-vlan-id | l2ald-mc-ae-sh-peer-address | l2ald-mc-ae-sh-mac-address
 | l2ald-mc-ae-sh-rtm-op | l2ald-mc-ae-sh-flags | l2ald-mc-ae-sh-status)*>
<!ATTLIST l2ald-mc-ae-sh-remote-mac-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-mc-ae-sh-rtm-op (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-service-id (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-status (#PCDATA)>

<!ELEMENT l2ald-mc-ae-sh-vlan-id (#PCDATA)>

<!ELEMENT l2ald-mvrp-information (l2ald-ifd-preconfig-entry |
l2ald-server-non-mvrp-ct | l2ald-server-mvrp-ct | l2ald-server-mvrp-join-ct |
l2ald-server-mvrp-leave-ct)*>

<!ELEMENT l2ald-non-config-smac-count (#PCDATA)>

<!ELEMENT l2ald-pbbn (l2ald-pbbn-entry)*>
```


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```
<!ELEMENT l2ald-pbbn-entry (l2pbbn-logical-system | l2pbbn-rtb | l2pbbn-rtb-bb |
 l2pbbn-rtb-pbbn-id | l2pbbn-pbn-bd | l2pbbn-svlan | l2pbbn-isid | l2pbbn-bvlan
| l2pbbn-flags | l2pbbn-pbn-bd-index | l2pbbn-pbbn-bd | l2pbbn-pbbn-bd-index |
l2pbbn-generation | l2pbbn-sequence-number | l2pbbn-handle | l2pbbn-mac-address)*>
<!ATTLIST l2ald-pbbn-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-pbn (l2ald-pbn-entry)*>

<!ELEMENT l2ald-pbn-entry (l2pbn-logical-system | l2pbn-rtb | l2pbn-rtb-bb |
l2pbn-bridging-domain | l2pbn-pbn-bd | l2pbn-pbbn-bd | l2pbn-svlan | l2pbn-isid
| l2pbn-bvlan | l2pbn-flags | l2pbn-pbn-bd-index | l2pbn-pbbn-bd-index |
l2pbn-generation | l2pbn-sequence-number | l2pbn-handle | l2pbn-mac-address)*>
<!ATTLIST l2ald-pbn-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-perf-counters (perf-desc | perf-count | perf-start-time-sec |
perf-start-time-usec | perf-end-time-sec | perf-end-time-usec | perf-diff-time-sec
 | perf-diff-time-usec)*>

<!ELEMENT l2ald-rbeb-entry (l2-rbeb-logical-system | l2-rbeb-routing-instance |
l2-rbeb-le-index | l2-rbeb-mac-address | l2-rbeb-time-left-sec |
l2-rbeb-time-left-msec | l2-rbeb-flags | l2-rbeb-state-flags)*>
<!ATTLIST l2ald-rbeb-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-rbeb-information (l2ald-rbeb-entry)*>

<!ELEMENT l2ald-rg-information (l2ald-mc-ae-rg-entry |
l2ald-mc-ae-sh-remote-mac-entry | l2ald-mc-ae-mh-remote-mac-entry |
l2ald-mc-ae-arp-entry)*>

<!ELEMENT l2ald-rtb-entry (l2rtb-name | l2rtb-bridging-domain | l2rtb-id | l2bd-id
 | l2rtb-l2irb-ifl-index | l2bd-vlan-id | l2rtb-logical-system |
l2rtb-sequence-number | l2rtb-mac-limit | l2rtb-macs-learned |
l2rtb-config-smacs-learned | l2rtb-non-config-smacs-learned | l2rtb-flags |
l2rtb-peer-pbbn-rtb-id | l2rtb-irb-interface | l2rtb-irb-interface-index |
l2rtb-handle | l2rtb-config-bd-vlan | l2rtb-config-operation | l2rtb-config-flags
 | l2rtb-config-params | l2rtb-config-ownership-flags | l2rtb-config-mvrp-ref-count
 | l2rtb-instance-type | l2rtb-config-smac-count | l2rtb-rtsock-write-errors |
l2rtb-ownership-flags | l2rtb-configured-service-id | l2rtb-active-service-id |
l2rtb-configured-bd-service-id | l2rtb-active-bd-service-id |
l2rtb-configured-rg-id | l2rtb-active-rg-id)*>
<!ATTLIST l2ald-rtb-entry junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-rtb-if-mac-count (l2ald-rtb-if-mac-count-entry)*>

<!ELEMENT l2ald-rtb-if-mac-count-entry (interface-name | mac-count)*>

<!ELEMENT l2ald-rtb-learn-vlan-mac-count (l2ald-rtb-learn-vlan-mac-count-entry)*>

<!ELEMENT l2ald-rtb-learn-vlan-mac-count-entry (learn-vlan | mac-count)*>

<!ELEMENT l2ald-rtb-mac-count (l2ald-rtb-mac-count-entry)*>

<!ELEMENT l2ald-rtb-mac-count-entry (rtb-name | bd-name | rtb-mac-count |
l2ald-rtb-if-mac-count | l2ald-rtb-learn-vlan-mac-count)*>

<!ELEMENT l2ald-rtb-mac-learn-address (#PCDATA)>

<!ELEMENT l2ald-rtb-mac-learn-count (l2ald-rtb-mac-learn-address |
l2ald-rtb-mac-learn-num-times)*>

<!ELEMENT l2ald-rtb-mac-learn-num-times (#PCDATA)>
```

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```
<!ELEMENT l2ald-rtb-mac-limit-timeout (#PCDATA)>

<!ELEMENT l2ald-rtb-mac-limit-wm (#PCDATA)>

<!ELEMENT l2ald-rtb-macdb (l2ald-macdb-rtb-name | l2ald-mac-entry)*>

<!ELEMENT l2ald-sequence-number (#PCDATA)>

<!ELEMENT l2ald-server-mvrp-ct (#PCDATA)>

<!ELEMENT l2ald-server-mvrp-join-ct (#PCDATA)>

<!ELEMENT l2ald-server-mvrp-leave-ct (#PCDATA)>

<!ELEMENT l2ald-server-non-mvrp-ct (#PCDATA)>

<!ELEMENT l2ald-software-mac-learn-toggle-count (#PCDATA)>

<!ELEMENT l2ald-software-mac-learning-status (#PCDATA)>

<!ELEMENT l2ald-statistics-status (#PCDATA)>

<!ELEMENT l2ald-statistics-toggle-count (#PCDATA)>

<!ELEMENT l2ald-total-intf-mac-count (#PCDATA)>

<!ELEMENT l2ald-vpls-flood-event-info (event-name | event-type | event-owner |
event-op | event-error)*>
<!ATTLIST l2ald-vpls-flood-event-info junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-vpls-flood-event-list (l2ald-vpls-flood-event-info)*>

<!ELEMENT l2ald-vpls-flood-event-queue (l2ald-vpls-flood-next-event |
l2ald-vpls-flood-event-list)*>

<!ELEMENT l2ald-vpls-flood-instance (l2ald-vpls-lr-information)*>

<!ELEMENT l2ald-vpls-flood-instance-information (instance-name | bridging-domain
 | num-active-ce-iffs | num-active-ve-iffs | bridge-domain-name | flood-route)*>
<!ATTLIST l2ald-vpls-flood-instance-information junos:style CDATA #IMPLIED>

<!ELEMENT l2ald-vpls-flood-next-event (l2ald-vpls-flood-event-info)*>

<!ELEMENT l2ald-vpls-flood-route-information (flood-route)*>

<!ELEMENT l2ald-vpls-lr-information (logical-system-info |
l2ald-vpls-flood-instance-information)*>

<!ELEMENT l2bd-id (#PCDATA)>

<!ELEMENT l2bd-vlan-id (#PCDATA)>

<!ELEMENT l2pbbn-bvlan (#PCDATA)>

<!ELEMENT l2pbbn-flags (#PCDATA)>

<!ELEMENT l2pbbn-generation (#PCDATA)>

<!ELEMENT l2pbbn-handle (#PCDATA)>
```


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```
<!ELEMENT l2pbbn-isid (#PCDATA)>
<!ELEMENT l2pbbn-logical-system (#PCDATA)>
<!ELEMENT l2pbbn-mac-address (#PCDATA)>
<!ELEMENT l2pbbn-pbbn-bd (#PCDATA)>
<!ELEMENT l2pbbn-pbbn-bd-index (#PCDATA)>
<!ELEMENT l2pbbn-pbn-bd (#PCDATA)>
<!ELEMENT l2pbbn-pbn-bd-index (#PCDATA)>
<!ELEMENT l2pbbn-rtb (#PCDATA)>
<!ELEMENT l2pbbn-rtb-bb (#PCDATA)>
<!ELEMENT l2pbbn-rtb-pbbn-id (#PCDATA)>
<!ELEMENT l2pbbn-sequence-number (#PCDATA)>
<!ELEMENT l2pbbn-svlan (#PCDATA)>
<!ELEMENT l2pbn-bridging-domain (#PCDATA)>
<!ELEMENT l2pbn-bvlan (#PCDATA)>
<!ELEMENT l2pbn-flags (#PCDATA)>
<!ELEMENT l2pbn-generation (#PCDATA)>
<!ELEMENT l2pbn-handle (#PCDATA)>
<!ELEMENT l2pbn-isid (#PCDATA)>
<!ELEMENT l2pbn-logical-system (#PCDATA)>
<!ELEMENT l2pbn-mac-address (#PCDATA)>
<!ELEMENT l2pbn-pbbn-bd (#PCDATA)>
<!ELEMENT l2pbn-pbbn-bd-index (#PCDATA)>
<!ELEMENT l2pbn-pbn-bd (#PCDATA)>
<!ELEMENT l2pbn-pbn-bd-index (#PCDATA)>
<!ELEMENT l2pbn-rtb (#PCDATA)>
<!ELEMENT l2pbn-rtb-bb (#PCDATA)>
<!ELEMENT l2pbn-sequence-number (#PCDATA)>
<!ELEMENT l2pbn-svlan (#PCDATA)>
<!ELEMENT l2rtb-active-bd-service-id (#PCDATA)>
<!ELEMENT l2rtb-active-rg-id (#PCDATA)>
<!ELEMENT l2rtb-active-service-id (#PCDATA)>
```

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```
<!ELEMENT l2rtb-bridge-vlan (#PCDATA)>
<!ELEMENT l2rtb-bridging-domain (#PCDATA)>
<!ELEMENT l2rtb-brief-summary EMPTY>
<!ELEMENT l2rtb-config-bd-vlan (#PCDATA)>
<!ELEMENT l2rtb-config-flags (#PCDATA)>
<!ELEMENT l2rtb-config-mvrp-ref-count (#PCDATA)>
<!ELEMENT l2rtb-config-operation (#PCDATA)>
<!ELEMENT l2rtb-config-ownership-flags (#PCDATA)>
<!ELEMENT l2rtb-config-params (#PCDATA)>
<!ELEMENT l2rtb-config-smac-count (#PCDATA)>
<!ELEMENT l2rtb-config-smacs-learned (#PCDATA)>
<!ELEMENT l2rtb-configured-bd-service-id (#PCDATA)>
<!ELEMENT l2rtb-configured-rg-id (#PCDATA)>
<!ELEMENT l2rtb-configured-service-id (#PCDATA)>
<!ELEMENT l2rtb-flags (#PCDATA)>
<!ELEMENT l2rtb-handle (#PCDATA)>
<!ELEMENT l2rtb-id (#PCDATA)>
<!ELEMENT l2rtb-instance-description (#PCDATA)>
<!ELEMENT l2rtb-instance-flags (#PCDATA)>
<!ELEMENT l2rtb-instance-pathse1-timeout (#PCDATA)>
<!ELEMENT l2rtb-instance-restart-state (#PCDATA)>
<!ELEMENT l2rtb-instance-state (#PCDATA)>
<!ELEMENT l2rtb-instance-type (#PCDATA)>
<!ELEMENT l2rtb-interface-name (#PCDATA)>
<!ELEMENT l2rtb-irb-interface (#PCDATA)>
<!ELEMENT l2rtb-irb-interface-index (#PCDATA)>
<!ELEMENT l2rtb-l2irb-ifl-index (#PCDATA)>
<!ELEMENT l2rtb-logical-system (#PCDATA)>
<!ELEMENT l2rtb-mac-limit (#PCDATA)>
<!ELEMENT l2rtb-macs-learned (#PCDATA)>
```


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```
<!ELEMENT l2rtb-name (#PCDATA)>
<!ELEMENT l2rtb-non-config-smacs-learned (#PCDATA)>
<!ELEMENT l2rtb-ownership-flags (#PCDATA)>
<!ELEMENT l2rtb-peer-pbbn-rtb-id (#PCDATA)>
<!ELEMENT l2rtb-rtsock-write-errors (#PCDATA)>
<!ELEMENT l2rtb-sequence-number (#PCDATA)>
<!ELEMENT learn-vlan (#PCDATA)>
<!ELEMENT local-interface-index (#PCDATA)>
<!ELEMENT logical-system-info (logical-system-name)*>
<!ELEMENT logical-system-name (#PCDATA)>
<!ELEMENT mac-count (#PCDATA)>
<!ELEMENT mac-limit (#PCDATA)>
<!ELEMENT multicast-bytes (#PCDATA)>
<!ELEMENT multicast-packets (#PCDATA)>
<!ELEMENT nhindex (#PCDATA)>
<!ELEMENT nhtype (#PCDATA)>
<!ELEMENT num-active-ce-iffs (#PCDATA)>
<!ELEMENT num-active-ve-iffs (#PCDATA)>
<!ELEMENT num-mac-count (#PCDATA)>
<!ELEMENT owner (#PCDATA)>
<!ELEMENT packet-count (#PCDATA)>
<!ELEMENT perf-count (#PCDATA)>
<!ELEMENT perf-desc (#PCDATA)>
<!ELEMENT perf-diff-time-sec (#PCDATA)>
<!ELEMENT perf-diff-time-usec (#PCDATA)>
<!ELEMENT perf-end-time-sec (#PCDATA)>
<!ELEMENT perf-end-time-usec (#PCDATA)>
<!ELEMENT perf-start-time-sec (#PCDATA)>
<!ELEMENT perf-start-time-usec (#PCDATA)>
<!ELEMENT remote-pe (#PCDATA)>
<!ELEMENT route-flood-group-index (#PCDATA)>
```

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```
<!ELEMENT route-flood-group-name (#PCDATA)>

<!ELEMENT route-prefix (#PCDATA)>

<!ELEMENT route-type (#PCDATA)>

<!ELEMENT rtb-mac-count (#PCDATA)>

<!ELEMENT rtb-name (#PCDATA)>

<!ELEMENT unicast-bytes (#PCDATA)>

<!ELEMENT unicast-packets (#PCDATA)>
```


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CHAPTER 98

DTD for L2CP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-l2cp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-l2cp.dtd -->

<!ELEMENT administrative-mode (#PCDATA)>

<!ELEMENT administrative-state (#PCDATA)>

<!ELEMENT aps-event (#PCDATA)>

<!ELEMENT aps-state (#PCDATA)>

<!ELEMENT authentication-failed-interface (#PCDATA)>

<!ELEMENT authentication-failed-mac-addr (#PCDATA)>

<!ELEMENT authentication-failed-user (#PCDATA)>

<!ELEMENT boundary-port (#PCDATA)>

<!ELEMENT bpdu-destination-mac-address (#PCDATA)>

<!ELEMENT bpdus-received-5seconds (#PCDATA)>

<!ELEMENT bpdus-sent-5seconds (#PCDATA)>

<!ELEMENT bridge-mac (#PCDATA)>

<!ELEMENT bridge-priority (#PCDATA)>

<!ELEMENT cist-bridge-parameters (cist-id | root-bridge | root-port | root-cost
| regional-root-bridge | internal-root-cost | hello-time-learned | max-age-learned
 | forward-delay-learned | msg-age | hop-count | time-since-last-tc |
topology-change-count | extended-system-id | this-bridge | hello-time-configured
```

```
 | max-age-configured | forward-delay-configured | max-hop-count-configured |
path-cost-method)*>

<!ELEMENT cist-id (#PCDATA)>

<!ELEMENT control-channel-name (#PCDATA)>

<!ELEMENT data-channel-forward-state (#PCDATA)>

<!ELEMENT data-channel-interface-name (#PCDATA)>

<!ELEMENT data-channel-stp-index (#PCDATA)>

<!ELEMENT designated-bridge-mac (#PCDATA)>
<!ATTLIST designated-bridge-mac junos:format CDATA #IMPLIED>

<!ELEMENT designated-bridge-priority (#PCDATA)>

<!ELEMENT designated-port-number (#PCDATA)>
<!ATTLIST designated-port-number junos:format CDATA #IMPLIED>

<!ELEMENT designated-port-priority (#PCDATA)>

<!ELEMENT dnf-flag (#PCDATA)>

<!ELEMENT dot1x-authentication-failed-users (authentication-failed-interface |
authentication-failed-mac-addr | authentication-failed-user)*>

<!ELEMENT dot1x-interface-information (interface | dot1x-static-mac-address |
dot1x-authentication-failed-users)*>

<!ELEMENT dot1x-static-mac-address (static-mac-address | static-mac-vlan-assignment
 | static-mac-interface)*>

<!ELEMENT epoch (#PCDATA)>

<!ELEMENT erp-data-channel-entry (data-channel-interface-name |
data-channel-stp-index | data-channel-forward-state)*>

<!ELEMENT erp-data-channel-information (erp-data-channels)*>

<!ELEMENT erp-data-channel-interfaces (erp-data-channel-entry)*>
<!ATTLIST erp-data-channel-interfaces junos:style CDATA #IMPLIED>

<!ELEMENT erp-data-channel-protection-group-name (#PCDATA)>

<!ELEMENT erp-data-channels (erp-data-channel-protection-group-name |
erp-data-channel-interfaces)*>

<!ELEMENT erp-ifbd-bridge-domain (#PCDATA)>

<!ELEMENT erp-ifbd-entries (erp-ifbd-entry)*>
<!ATTLIST erp-ifbd-entries junos:style CDATA #IMPLIED>

<!ELEMENT erp-ifbd-entry (erp-ifbd-interface-name | erp-ifbd-vlan |
erp-ifbd-stp-index | erp-ifbd-bridge-domain)*>

<!ELEMENT erp-ifbd-information (erp-ifbds)*>

<!ELEMENT erp-ifbd-interface-name (#PCDATA)>
```


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```
<!ELEMENT erp-ifbd-protection-group-name (#PCDATA)>

<!ELEMENT erp-ifbd-stp-index (#PCDATA)>

<!ELEMENT erp-ifbd-vlan (#PCDATA)>

<!ELEMENT erp-ifbds (erp-ifbd-protection-group-name | erp-ifbd-entries)*>

<!ELEMENT erp-interface-entry (erp-interface-name | control-channel-name |
forward-state | rpl-end | sf-flag | interface-state)*>

<!ELEMENT erp-interface-information (ethernet-ring-pg)*>

<!ELEMENT erp-interface-name (#PCDATA)>

<!ELEMENT erp-interfaces (erp-interface-entry)*>
<!ATTLIST erp-interfaces junos:style CDATA #IMPLIED>

<!ELEMENT erp-protection-group-name (#PCDATA)>

<!ELEMENT erp-raps (erp-raps-entry)*>
<!ATTLIST erp-raps junos:style CDATA #IMPLIED>

<!ELEMENT erp-raps-entry (protection-group-name | aps-state | aps-event | rpl-owner
 | wtr-timer | guard-timer | operation-state)*>

<!ELEMENT erp-raps-information (erp-raps)*>

<!ELEMENT erp-rpdu-entry (protection-group-name | request-state | dnf-flag |
rb-flag | originator | remote-node-id)*>

<!ELEMENT erp-rpdu-information (erp-rpdus)*>

<!ELEMENT erp-rpdus (erp-rpdu-entry)*>
<!ATTLIST erp-rpdus junos:style CDATA #IMPLIED>

<!ELEMENT ethernet-ring-pg (erp-protection-group-name | erp-interfaces)*>

<!ELEMENT ethernet-ring-statistics (protection-group-name | raps-event-sent |
raps-event-received | raps-local-sf | raps-remote-sf | raps-nr | raps-nr-rb)*>

<!ELEMENT extended-system-id (#PCDATA)>

<!ELEMENT fnp-action-result (#PCDATA)>

<!ELEMENT fnp-disabled-interface-entry (fnp-disabled-interface-name | fnp-vlan-id
 | fnp-time-ifl-down | fnp-time-ifl-down-event)*>

<!ELEMENT fnp-disabled-interface-name (#PCDATA)>

<!ELEMENT fnp-domain-id (#PCDATA)>

<!ELEMENT fnp-effected-vlans (#PCDATA)>

<!ELEMENT fnp-enabled-interface-entry (fnp-interface-name | fnp-domain-id |
fnp-stp-root-id | fnp-num-messages)*>

<!ELEMENT fnp-interface-entry (fnp-interface-name | fnp-vlan-id |
fnp-interface-state | fnp-source-interface-name | fnp-source-mac)*>

<!ELEMENT fnp-interface-information (fnp-interface-entry)*>
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```
<!ELEMENT fnp-interface-messages (fnp-interface-name | fnp-message-entry)*>

<!ELEMENT fnp-interface-name (#PCDATA)>

<!ELEMENT fnp-interface-state (#PCDATA)>

<!ELEMENT fnp-interval (#PCDATA)>

<!ELEMENT fnp-loss-threshold (#PCDATA)>

<!ELEMENT fnp-message-entry (fnp-source-mac | fnp-port-number |
fnp-time-since-last-message | fnp-time-created | fnp-time-since-last-update |
fnp-total-messages-received | fnp-domain-id | fnp-stp-root-id | fnp-trigger-reason
 | fnp-effected-vlans | fnp-disabled-interface-entry)*>

<!ELEMENT fnp-messages-information (fnp-interface-messages)*>

<!ELEMENT fnp-num-messages (#PCDATA)>

<!ELEMENT fnp-port-number (#PCDATA)>

<!ELEMENT fnp-source-interface-name (#PCDATA)>

<!ELEMENT fnp-source-mac (#PCDATA)>

<!ELEMENT fnp-status-information (fnp-interval | fnp-loss-threshold |
fnp-enabled-interface-entry)*>

<!ELEMENT fnp-stp-root-id (#PCDATA)>

<!ELEMENT fnp-time-created (#PCDATA)>

<!ELEMENT fnp-time-ifl-down (#PCDATA)>

<!ELEMENT fnp-time-ifl-down-event (#PCDATA)>

<!ELEMENT fnp-time-since-last-message (#PCDATA)>

<!ELEMENT fnp-time-since-last-update (#PCDATA)>

<!ELEMENT fnp-total-messages-received (#PCDATA)>

<!ELEMENT fnp-trigger-reason (#PCDATA)>

<!ELEMENT fnp-vlan-id (#PCDATA)>

<!ELEMENT forward-delay-configured (#PCDATA)>

<!ELEMENT forward-delay-learned (#PCDATA)>

<!ELEMENT forward-state (#PCDATA)>

<!ELEMENT frame-control (#PCDATA)>

<!ELEMENT guard-timer (#PCDATA)>

<!ELEMENT guest-vlan (#PCDATA)>

<!ELEMENT hardware-learning (#PCDATA)>
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```
<!ELEMENT hello-time-configured (#PCDATA)>

<!ELEMENT hello-time-learned (#PCDATA)>

<!ELEMENT hop-count (#PCDATA)>

<!ELEMENT interface (user-name | user-mac-address | role | state |
administrative-state | administrative-mode | number-of-retries | quiet-period |
transmit-period | reauthentication | reauthentication-interval | supplicant-timeout
 | server-timeout | max-eapol-request | frame-control | guest-vlan |
number-of-authentication-bypassed-clients | static-mac-bypass |
number-of-connected-supplicants | reauthentication-due)*>
<!ATTLIST interface junos:style CDATA #IMPLIED>

<!ELEMENT interface-state (#PCDATA)>

<!ELEMENT internal-root-cost (#PCDATA)>

<!ELEMENT kernel-action (#PCDATA)>

<!ELEMENT kernel-if-name (#PCDATA)>

<!ELEMENT kernel-state (#PCDATA)>

<!ELEMENT kernel-stp-instance (#PCDATA)>

<!ELEMENT l2pt-interface-entry (protocols)*>

<!ELEMENT l2pt-interface-list (l2pt-interface-entry)*>

<!ELEMENT link-type (#PCDATA)>

<!ELEMENT max-age-configured (#PCDATA)>

<!ELEMENT max-age-learned (#PCDATA)>

<!ELEMENT max-eapol-request (#PCDATA)>

<!ELEMENT max-hop-count-configured (#PCDATA)>

<!ELEMENT message-type (#PCDATA)>

<!ELEMENT mmrp-applicant-entry (mmrp-applicant-mac-address |
mmrp-applicant-interface-name | mmrp-applicant-state)*>

<!ELEMENT mmrp-applicant-entry-information (mmrp-applicant-entry)*>
<!ATTLIST mmrp-applicant-entry-information junos:style CDATA #IMPLIED>

<!ELEMENT mmrp-applicant-information (mmrp-applicant-mmrp-instance)*>

<!ELEMENT mmrp-applicant-instance-name (#PCDATA)>

<!ELEMENT mmrp-applicant-interface-name (#PCDATA)>

<!ELEMENT mmrp-applicant-mac-address (#PCDATA)>
<!ATTLIST mmrp-applicant-mac-address junos:format CDATA #IMPLIED>

<!ELEMENT mmrp-applicant-mmrp-instance (mmrp-applicant-instance-name |
mmrp-applicant-entry-information)*>

<!ELEMENT mmrp-applicant-state (#PCDATA)>
```

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```
<!ELEMENT mmrp-interface-entry (mmrp-interface-interface-name |
mmrp-interface-state)*>

<!ELEMENT mmrp-interface-entry-information (mmrp-interface-entry)*>

<!ELEMENT mmrp-interface-information (mmrp-interface-mmrp-instance)*>

<!ELEMENT mmrp-interface-instance-name (#PCDATA)>

<!ELEMENT mmrp-interface-interface-name (#PCDATA)>

<!ELEMENT mmrp-interface-mmrp-instance (mmrp-interface-instance-name |
mmrp-interface-entry-information)*>

<!ELEMENT mmrp-interface-state (#PCDATA)>

<!ELEMENT mmrp-maclist-entry (mmrp-maclist-mac-address | mmrp-maclist-mac-type |
 mmrp-maclist-mac-isid | mmrp-maclist-mac-map_count)*>

<!ELEMENT mmrp-maclist-entry-information (mmrp-maclist-entry)*>

<!ELEMENT mmrp-maclist-information (mmrp-maclist-mmrp-instance)*>

<!ELEMENT mmrp-maclist-instance-name (#PCDATA)>

<!ELEMENT mmrp-maclist-mac-address (#PCDATA)>
<!ATTLIST mmrp-maclist-mac-address junos:format CDATA #IMPLIED>

<!ELEMENT mmrp-maclist-mac-isid (#PCDATA)>
<!ATTLIST mmrp-maclist-mac-isid junos:format CDATA #IMPLIED>

<!ELEMENT mmrp-maclist-mac-map_count (#PCDATA)>

<!ELEMENT mmrp-maclist-mac-type (#PCDATA)>
<!ATTLIST mmrp-maclist-mac-type junos:format CDATA #IMPLIED>

<!ELEMENT mmrp-maclist-mmrp-instance (mmrp-maclist-instance-name |
mmrp-maclist-entry-information)*>

<!ELEMENT mmrp-mactable-bridge-domain-name (#PCDATA)>

<!ELEMENT mmrp-mactable-entry (mmrp-mactable-mac-address | mmrp-mactable-nexthop
 | mmrp-mactable-token | mmrp-mactable-interface)*>

<!ELEMENT mmrp-mactable-entry-information (mmrp-mactable-entry)*>

<!ELEMENT mmrp-mactable-information (mmrp-mactable-mmrp-instance)*>

<!ELEMENT mmrp-mactable-instance-name (#PCDATA)>

<!ELEMENT mmrp-mactable-interface (mmrp-mactable-interface-name |
mmrp-mactable-interface-action)*>

<!ELEMENT mmrp-mactable-interface-action (#PCDATA)>

<!ELEMENT mmrp-mactable-interface-name (#PCDATA)>

<!ELEMENT mmrp-mactable-mac-address (#PCDATA)>
<!ATTLIST mmrp-mactable-mac-address junos:format CDATA #IMPLIED>
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<!ELEMENT mmrp-mactable-mmrp-instance (mmrp-mactable-instance-name |
mmrp-mactable-bridge-domain-name | mmrp-mactable-vlan-id |
mmrp-mactable-entry-information)*>
<!ATTLIST mmrp-mactable-mmrp-instance junos:style CDATA #IMPLIED>

<!ELEMENT mmrp-mactable-nexthop (#PCDATA)>

<!ELEMENT mmrp-mactable-token (#PCDATA)>

<!ELEMENT mmrp-mactable-vlan-id (#PCDATA)>

<!ELEMENT mmrp-registration-entry (mmrp-registration-mac-address |
mmrp-registration-interface-name | mmrp-registration-state |
mmrp-registration-forced-state | mmrp-registration-manage-state |
mmrp-registration-stp-state)*>

<!ELEMENT mmrp-registration-entry-information (mmrp-registration-entry)*>
<!ATTLIST mmrp-registration-entry-information junos:style CDATA #IMPLIED>

<!ELEMENT mmrp-registration-forced-state (#PCDATA)>

<!ELEMENT mmrp-registration-information (mmrp-registration-mmrp-instance)*>

<!ELEMENT mmrp-registration-instance-name (#PCDATA)>

<!ELEMENT mmrp-registration-interface-name (#PCDATA)>

<!ELEMENT mmrp-registration-mac-address (#PCDATA)>
<!ATTLIST mmrp-registration-mac-address junos:format CDATA #IMPLIED>

<!ELEMENT mmrp-registration-manage-state (#PCDATA)>

<!ELEMENT mmrp-registration-mmrp-instance (mmrp-registration-instance-name |
mmrp-registration-entry-information)*>

<!ELEMENT mmrp-registration-state (#PCDATA)>

<!ELEMENT mmrp-registration-stp-state (#PCDATA)>

<!ELEMENT mmrp-statistics-entry (mmrp-statistics-interface-name |
mmrp-statistics-mac-registered | mmrp-statistics-sent-pdu |
mmrp-statistics-received-pdu | mmrp-statistics-error-pdu)*>

<!ELEMENT mmrp-statistics-entry-information (mmrp-statistics-entry)*>

<!ELEMENT mmrp-statistics-error-pdu (#PCDATA)>

<!ELEMENT mmrp-statistics-information (mmrp-statistics-mmrp-instance)*>

<!ELEMENT mmrp-statistics-instance-name (#PCDATA)>

<!ELEMENT mmrp-statistics-interface-name (#PCDATA)>

<!ELEMENT mmrp-statistics-mac-registered (#PCDATA)>

<!ELEMENT mmrp-statistics-mmrp-instance (mmrp-statistics-instance-name |
mmrp-statistics-entry-information)*>

<!ELEMENT mmrp-statistics-received-pdu (#PCDATA)>

<!ELEMENT mmrp-statistics-sent-pdu (#PCDATA)>
```

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```
<!ELEMENT msg-age (#PCDATA)>

<!ELEMENT msti-bridge-parameters (msti-id | msti-regional-root-bridge | root-port
 | root-cost | hello-time-learned | max-age-learned | forward-delay-learned |
max-hop-count-configured | hop-count | time-since-last-tc | topology-change-count
 | extended-system-id | this-bridge | hello-time-configured | max-age-configured
 | forward-delay-configured | path-cost-method)*>

<!ELEMENT msti-id (#PCDATA)>

<!ELEMENT msti-regional-root-bridge (bridge-priority | bridge-mac)*>

<!ELEMENT mstp-configuration (mstp-name | mstp-revision | mstp-configuration-digest
 | vlan-map)*>

<!ELEMENT mstp-configuration-digest (#PCDATA)>

<!ELEMENT mstp-name (#PCDATA)>

<!ELEMENT mstp-revision (#PCDATA)>

<!ELEMENT mvrp-applicant-information (mvrp-applicant-instance)*>

<!ELEMENT mvrp-applicant-instance (mvrp-routing-instance-name |
mvrp-applicant-vlan-entry)*>

<!ELEMENT mvrp-applicant-interface-entry (mvrp-interface-name |
mvrp-applicant-state)*>

<!ELEMENT mvrp-applicant-state (#PCDATA)>

<!ELEMENT mvrp-applicant-vlan-entry (mvrp-vlan-id |
mvrp-applicant-interface-entry)*>

<!ELEMENT mvrp-bpdu-mac-address (#PCDATA)>

<!ELEMENT mvrp-clear-statistics (#PCDATA)>

<!ELEMENT mvrp-dynamic-vlan (#PCDATA)>

<!ELEMENT mvrp-fixed-registration EMPTY>

<!ELEMENT mvrp-information (mvrp-information-entry)*>

<!ELEMENT mvrp-information-entry (mvrp-routing-instance-name | mvrp-dynamic-vlan
 | mvrp-bpdu-mac-address | mvrp-interface-timers)*>

<!ELEMENT mvrp-interface-applicant-mode (#PCDATA)>

<!ELEMENT mvrp-interface-entry (mvrp-interface-name | mvrp-interface-status |
mvrp-interface-registration-mode | mvrp-interface-applicant-mode)*>

<!ELEMENT mvrp-interface-information (mvrp-interface-instance)*>

<!ELEMENT mvrp-interface-instance (mvrp-routing-instance-name |
mvrp-interface-entry)*>

<!ELEMENT mvrp-interface-name (#PCDATA)>

<!ELEMENT mvrp-interface-registration-mode (#PCDATA)>
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<!ELEMENT mvrp-interface-statistics (mvrp-statistics-instance)*>

<!ELEMENT mvrp-interface-status (#PCDATA)>

<!ELEMENT mvrp-interface-timers (mvrp-interface-name | mvrp-timer-join |
mvrp-timer-leave | mvrp-timer-leaveall)*>

<!ELEMENT mvrp-registration-forced-state (#PCDATA)>

<!ELEMENT mvrp-registration-information (mvrp-registration-instance)*>

<!ELEMENT mvrp-registration-instance (mvrp-routing-instance-name |
mvrp-registration-vlan-entry)*>

<!ELEMENT mvrp-registration-interface-entry (mvrp-interface-name |
mvrp-registration-state | mvrp-registration-forced-state |
mvrp-registration-manage-state | mvrp-registration-stp-state)*>

<!ELEMENT mvrp-registration-manage-state (#PCDATA)>

<!ELEMENT mvrp-registration-state (#PCDATA)>

<!ELEMENT mvrp-registration-stp-state (#PCDATA)>

<!ELEMENT mvrp-registration-vlan-entry (mvrp-vlan-id |
mvrp-registration-interface-entry)*>

<!ELEMENT mvrp-routing-instance-name (#PCDATA)>

<!ELEMENT mvrp-static-vlan EMPTY>

<!ELEMENT mvrp-statistics-error-pdu (#PCDATA)>

<!ELEMENT mvrp-statistics-instance (mvrp-routing-instance-name |
mvrp-statistics-interface-entry)*>

<!ELEMENT mvrp-statistics-interface-entry (mvrp-interface-name |
mvrp-statistics-vlan-registered | mvrp-statistics-sent-pdu |
mvrp-statistics-received-pdu | mvrp-statistics-error-pdu)*>

<!ELEMENT mvrp-statistics-received-pdu (#PCDATA)>

<!ELEMENT mvrp-statistics-sent-pdu (#PCDATA)>

<!ELEMENT mvrp-statistics-vlan-registered (#PCDATA)>

<!ELEMENT mvrp-timer-join (#PCDATA)>

<!ELEMENT mvrp-timer-leave (#PCDATA)>

<!ELEMENT mvrp-timer-leaveall (#PCDATA)>

<!ELEMENT mvrp-vlan-entry (mvrp-vlan-id | mvrp-static-vlan |
mvrp-vlan-interface-entry)*>

<!ELEMENT mvrp-vlan-id (#PCDATA)>

<!ELEMENT mvrp-vlan-information (mvrp-vlan-instance)*>

<!ELEMENT mvrp-vlan-instance (mvrp-routing-instance-name | mvrp-vlan-entry)*>
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```
<!ELEMENT mvrp-vlan-interface-entry (mvrp-interface-name |
mvrp-fixed-registration)*>

<!ELEMENT next-bpdu-time (#PCDATA)>

<!ELEMENT number-of-authentication-bypassed-clients (#PCDATA)>

<!ELEMENT number-of-connected-supplicants (#PCDATA)>

<!ELEMENT number-of-retries (#PCDATA)>

<!ELEMENT operation-state (#PCDATA)>

<!ELEMENT originator (#PCDATA)>

<!ELEMENT path-cost-method (#PCDATA)>

<!ELEMENT port-cost (#PCDATA)>

<!ELEMENT port-migrated-protocol (#PCDATA)>

<!ELEMENT port-priority (#PCDATA)>

<!ELEMENT port-role (#PCDATA)>

<!ELEMENT port-state (#PCDATA)>

<!ELEMENT protection-group-name (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT protocols (#PCDATA)>

<!ELEMENT quiet-period (#PCDATA)>

<!ELEMENT raps-event-received (#PCDATA)>

<!ELEMENT raps-event-sent (#PCDATA)>

<!ELEMENT raps-local-sf (#PCDATA)>

<!ELEMENT raps-nr (#PCDATA)>

<!ELEMENT raps-nr-rb (#PCDATA)>

<!ELEMENT raps-remote-sf (#PCDATA)>

<!ELEMENT rb-flag (#PCDATA)>

<!ELEMENT reauthentication (#PCDATA)>

<!ELEMENT reauthentication-due (#PCDATA)>

<!ELEMENT reauthentication-interval (#PCDATA)>

<!ELEMENT regional-root-bridge (bridge-priority | bridge-mac)*>

<!ELEMENT remote-node-id (#PCDATA)>
<!ATTLIST remote-node-id junos:format CDATA #IMPLIED>
```


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```
<!ELEMENT request-state (#PCDATA)>

<!ELEMENT role (#PCDATA)>

<!ELEMENT root-bridge (bridge-priority | bridge-mac)*>

<!ELEMENT root-cost (#PCDATA)>

<!ELEMENT root-port (#PCDATA)>

<!ELEMENT routing-instance-name (#PCDATA)>

<!ELEMENT rpl-end (#PCDATA)>

<!ELEMENT rpl-owner (#PCDATA)>

<!ELEMENT server-timeout (#PCDATA)>

<!ELEMENT sf-flag (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT static-mac-address (#PCDATA)>

<!ELEMENT static-mac-bypass (#PCDATA)>

<!ELEMENT static-mac-interface (#PCDATA)>

<!ELEMENT static-mac-vlan-assignment (#PCDATA)>

<!ELEMENT stp-bridge (routing-instance-name | bpdu-destination-mac-address |
protocol | cist-bridge-parameters | msti-bridge-parameters |
vst-bridge-parameters)*>

<!ELEMENT stp-context-statistics-information (message-type | total-bpdus-sent |
total-bpdus-received | bpdus-sent-5seconds | bpdus-received-5seconds |
vstp-statistics)*>

<!ELEMENT stp-index (#PCDATA)>

<!ELEMENT stp-instance (stp-interfaces)*>

<!ELEMENT stp-interface-entry (port-priority | designated-port-priority |
designated-port-number | port-cost | port-state | designated-bridge-priority |
designated-bridge-mac | port-role | link-type | port-migrated-protocol |
boundary-port)*>

<!ELEMENT stp-interface-information (stp-instance)*>

<!ELEMENT stp-interface-statistics (stp-interface-statistics-entry |
vstp-interface-statistics)*>

<!ELEMENT stp-interface-statistics-entry (total-bpdus-sent | total-bpdus-received
 | next-bpdu-time)*>

<!ELEMENT stp-interfaces (stp-interface-entry)*>
<!ATTLIST stp-interfaces junos:style CDATA #IMPLIED>

<!ELEMENT stp-kernel-table (stp-kernel-table-entry)*>

<!ELEMENT stp-kernel-table-entry (stp-index | kernel-if-name | kernel-stp-instance
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```
 | kernel-state | kernel-action | epoch | hardware-learning | vpls-flush-sequence
 | stp-peer-ip)*>

<!ELEMENT stp-peer-ip (#PCDATA)>

<!ELEMENT supplicant-timeout (#PCDATA)>

<!ELEMENT task (task-name | task-no-information | task-timer)*>

<!ELEMENT task-block (tb-name | tb-size | tb-alloc-size | tb-terse-transient |
tb-terse-fullpage | tb-terse-debug | tb-alloc-blocks | tb-alloc-bytes |
tb-max-alloc-blocks | tb-max-alloc-bytes)*>

<!ELEMENT task-block-list (task-block)*>

<!ELEMENT task-gres-state (#PCDATA)>

<!ELEMENT task-information (task)*>

<!ELEMENT task-lite-page (tlp-name | tlp-alloc-pages | tlp-alloc-bytes |
tlp-max-alloc-pages | tlp-max-alloc-bytes)*>

<!ELEMENT task-lite-page-list (task-lite-page)*>

<!ELEMENT task-malloc (tm-name | tm-allocs | tm-alloc-bytes | tm-max-allocs |
tm-max-alloc-bytes | tm-function-calls)*>

<!ELEMENT task-malloc-list (task-malloc)*>

<!ELEMENT task-memory-allocator-report (task-block-list | task-lite-page-list |
task-memory-total-bytes | task-memory-total-max-bytes)*>

<!ELEMENT task-memory-bss-bytes (#PCDATA)>

<!ELEMENT task-memory-dir-bytes (#PCDATA)>

<!ELEMENT task-memory-dynamic-allocs (#PCDATA)>

<!ELEMENT task-memory-free-size (#PCDATA)>

<!ELEMENT task-memory-in-use-avail (#PCDATA)>

<!ELEMENT task-memory-in-use-size (#PCDATA)>

<!ELEMENT task-memory-information (task-memory-in-use-size |
task-memory-in-use-avail | task-memory-max-size | task-memory-max-avail |
task-memory-max-when | task-memory-free-size | task-memory-overall-report |
task-memory-allocator-report | task-memory-malloc-usage-report |
task-memory-dynamic-allocs | task-memory-max-dynamic-allocs | task-memory-bss-bytes
 | task-memory-max-bss-bytes | task-memory-page-data-bytes |
task-memory-max-page-data-bytes | task-memory-dir-bytes | task-memory-max-dir-bytes
 | task-memory-total-bytes-in-use | task-memory-total-bytes-percent)*>
<!ATTLIST task-memory-information junos:style CDATA #IMPLIED>

<!ELEMENT task-memory-malloc-usage-report (task-malloc-list |
task-memory-total-bytes | task-memory-total-max-bytes)*>

<!ELEMENT task-memory-max-avail (#PCDATA)>

<!ELEMENT task-memory-max-bss-bytes (#PCDATA)>
```


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```
<!ELEMENT task-memory-max-dir-bytes (#PCDATA)>

<!ELEMENT task-memory-max-dynamic-allocs (#PCDATA)>

<!ELEMENT task-memory-max-page-data-bytes (#PCDATA)>

<!ELEMENT task-memory-max-size (#PCDATA)>

<!ELEMENT task-memory-max-when (#PCDATA)>

<!ELEMENT task-memory-overall-report (task-size-block-list | task-memory-stats-list
 | task-memory-total-bytes | task-memory-total-max-bytes |
task-memory-total-free-bytes)*>

<!ELEMENT task-memory-page-data-bytes (#PCDATA)>

<!ELEMENT task-memory-stats (tms-name | tms-allocs | tms-mallocs | tms-alloc-bytes
 | tms-max-allocs | tms-max-bytes | tms-free-bytes)*>

<!ELEMENT task-memory-stats-list (task-memory-stats)*>

<!ELEMENT task-memory-total-bytes (#PCDATA)>

<!ELEMENT task-memory-total-bytes-in-use (#PCDATA)>

<!ELEMENT task-memory-total-bytes-percent (#PCDATA)>

<!ELEMENT task-memory-total-free-bytes (#PCDATA)>

<!ELEMENT task-memory-total-max-bytes (#PCDATA)>

<!ELEMENT task-name (#PCDATA)>

<!ELEMENT task-no-information EMPTY>

<!ELEMENT task-protocol-replication-name (#PCDATA)>

<!ELEMENT task-protocol-replication-state (#PCDATA)>

<!ELEMENT task-re-mode (#PCDATA)>

<!ELEMENT task-replication-state (task-gres-state | task-re-mode |
task-protocol-replication-state | task-protocol-replication-name)*>

<!ELEMENT task-size-block (tsb-size | tsb-terse-transient | tsb-terse-fullpage |
 tsb-allocs | tsb-mallocs | tsb-alloc-bytes | tsb-max-allocs | tsb-max-bytes |
tsb-free-bytes)*>

<!ELEMENT task-size-block-list (task-size-block)*>

<!ELEMENT task-timer (timer-name | timer-late | timer-expires | timer-jitter |
timer-interval | timer-flags)*>

<!ELEMENT task-timer-information (task)*>

<!ELEMENT tb-alloc-blocks (#PCDATA)>

<!ELEMENT tb-alloc-bytes (#PCDATA)>

<!ELEMENT tb-alloc-size (#PCDATA)>
```

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```
<!ELEMENT tb-max-alloc-blocks (#PCDATA)>
<!ELEMENT tb-max-alloc-bytes (#PCDATA)>
<!ELEMENT tb-name (#PCDATA)>
<!ELEMENT tb-size (#PCDATA)>
<!ELEMENT tb-terse-debug EMPTY>
<!ELEMENT tb-terse-fullpage EMPTY>
<!ELEMENT tb-terse-transient EMPTY>
<!ELEMENT this-bridge (bridge-priority | bridge-mac)*>
<!ELEMENT time-since-last-tc (#PCDATA)>
<!ELEMENT timer-expires (#PCDATA)>
<!ELEMENT timer-flags (#PCDATA)>
<!ELEMENT timer-interval (#PCDATA)>
<!ELEMENT timer-jitter (#PCDATA)>
<!ELEMENT timer-late EMPTY>
<!ELEMENT timer-name (#PCDATA)>
<!ELEMENT tlp-alloc-bytes (#PCDATA)>
<!ELEMENT tlp-alloc-pages (#PCDATA)>
<!ELEMENT tlp-max-alloc-bytes (#PCDATA)>
<!ELEMENT tlp-max-alloc-pages (#PCDATA)>
<!ELEMENT tlp-name (#PCDATA)>
<!ELEMENT tm-alloc-bytes (#PCDATA)>
<!ELEMENT tm-allocs (#PCDATA)>
<!ELEMENT tm-function-calls (#PCDATA)>
<!ELEMENT tm-max-alloc-bytes (#PCDATA)>
<!ELEMENT tm-max-allocs (#PCDATA)>
<!ELEMENT tm-name (#PCDATA)>
<!ELEMENT tms-alloc-bytes (#PCDATA)>
<!ELEMENT tms-allocs (#PCDATA)>
<!ELEMENT tms-free-bytes (#PCDATA)>
<!ELEMENT tms-mallocs (#PCDATA)>
<!ELEMENT tms-max-allocs (#PCDATA)>
```


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```
<!ELEMENT tms-max-bytes (#PCDATA)>

<!ELEMENT tms-name (#PCDATA)>

<!ELEMENT topology-change-count (#PCDATA)>

<!ELEMENT total-bpdus-received (#PCDATA)>

<!ELEMENT total-bpdus-sent (#PCDATA)>

<!ELEMENT transmit-period (#PCDATA)>

<!ELEMENT tsb-alloc-bytes (#PCDATA)>

<!ELEMENT tsb-allocs (#PCDATA)>

<!ELEMENT tsb-free-bytes (#PCDATA)>

<!ELEMENT tsb-mallocs (#PCDATA)>

<!ELEMENT tsb-max-allocs (#PCDATA)>

<!ELEMENT tsb-max-bytes (#PCDATA)>

<!ELEMENT tsb-size (#PCDATA)>

<!ELEMENT tsb-terse-fullpage EMPTY>

<!ELEMENT tsb-terse-transient EMPTY>

<!ELEMENT user-mac-address (#PCDATA)>

<!ELEMENT user-name (#PCDATA)>

<!ELEMENT vlan-map (vlan-map-entry)*>

<!ELEMENT vlan-map-entry (msti-id | vlan-string)*>

<!ELEMENT vlan-string (#PCDATA)>

<!ELEMENT vpls-flush-sequence (#PCDATA)>

<!ELEMENT vst-bridge-parameters (root-bridge | root-port | root-cost |
hello-time-learned | max-age-learned | forward-delay-learned | msg-age |
time-since-last-tc | topology-change-count | extended-system-id | this-bridge |
hello-time-configured | max-age-configured | forward-delay-configured |
path-cost-method)*>

<!ELEMENT vstp-interface-statistics (stp-interface-statistics-entry)*>

<!ELEMENT vstp-statistics (message-type | total-bpdus-sent | total-bpdus-received
 | bpdus-sent-5seconds | bpdus-received-5seconds)*>

<!ELEMENT wtr-timer (#PCDATA)>
```

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CHAPTER 99

DTD for LACPD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-lacpd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-lacpd.dtd -->

<!ELEMENT aggregate-name (#PCDATA)>

<!ELEMENT clink-state (#PCDATA)>

<!ELEMENT clink-type (#PCDATA)>

<!ELEMENT illegal-rx-packets (#PCDATA)>

<!ELEMENT init-sm-state (#PCDATA)>

<!ELEMENT la-status (#PCDATA)>

<!ELEMENT lacp-activity (#PCDATA)>

<!ELEMENT lacp-aggregation (#PCDATA)>

<!ELEMENT lacp-collecting (#PCDATA)>

<!ELEMENT lacp-defaulted (#PCDATA)>

<!ELEMENT lacp-distributing (#PCDATA)>

<!ELEMENT lacp-expired (#PCDATA)>

<!ELEMENT lacp-interface-information (lag-lacp-header | lag-lacp-info |
lag-lacp-state | lag-lacp-protocol)*>

<!ELEMENT lacp-interface-information-list (lacp-interface-information)*>

<!ELEMENT lacp-interface-statistics (lag-lacp-header | lag-lacp-statistics)*>
```

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```
<!ELEMENT lacp-interface-statistics-list (lacp-interface-statistics)*>

<!ELEMENT lacp-link-switchover (aggregate-name | lacp-status)*>

<!ELEMENT lacp-mux-state (#PCDATA)>

<!ELEMENT lacp-port-key (#PCDATA)>

<!ELEMENT lacp-port-number (#PCDATA)>

<!ELEMENT lacp-port-priority (#PCDATA)>

<!ELEMENT lacp-receive-state (#PCDATA)>

<!ELEMENT lacp-role (#PCDATA)>

<!ELEMENT lacp-rx-packets (#PCDATA)>

<!ELEMENT lacp-status (#PCDATA)>

<!ELEMENT lacp-synchronization (#PCDATA)>

<!ELEMENT lacp-sys-priority (#PCDATA)>

<!ELEMENT lacp-system-id (#PCDATA)>

<!ELEMENT lacp-timeout (#PCDATA)>

<!ELEMENT lacp-transmit-state (#PCDATA)>

<!ELEMENT lacp-tx-packets (#PCDATA)>

<!ELEMENT lag-lacp-header (aggregate-name)*>

<!ELEMENT lag-lacp-info (name | lacp-role | lacp-sys-priority | lacp-system-id |
 lacp-port-priority | lacp-port-number | lacp-port-key)*>

<!ELEMENT lag-lacp-protocol (name | lacp-receive-state | lacp-transmit-state |
lacp-mux-state)*>

<!ELEMENT lag-lacp-state (name | lacp-role | lacp-expired | lacp-defaulted |
lacp-distributing | lacp-collecting | lacp-synchronization | lacp-aggregation |
lacp-timeout | lacp-activity)*>

<!ELEMENT lag-lacp-statistics (name | lacp-rx-packets | lacp-tx-packets |
unknown-rx-packets | illegal-rx-packets)*>

<!ELEMENT local-ip (#PCDATA)>

<!ELEMENT local-logical-interface-state (#PCDATA)>

<!ELEMENT local-state (#PCDATA)>

<!ELEMENT local-status (#PCDATA)>

<!ELEMENT logical-interface (#PCDATA)>

<!ELEMENT mc-ae-clink (local-ip | remote-ip | clink-type | la-status | pa-status
 | clink-state | vc-id)*>
```


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```
<!ELEMENT mc-ae-ifl-list (logical-interface | topology-type |
local-logical-interface-state | peer-logical-interface-state | mcp-state)*>

<!ELEMENT mc-ae-status (member-link | init-sm-state | local-status | local-state
 | peer-status | peer-state)*>

<!ELEMENT mc-ae-status-information (mc-ae-status | mc-ae-ifl-list |
mc-ae-stitching-peer | mc-ae-clink)*>

<!ELEMENT mc-ae-status-information-list (mc-ae-status-information)*>

<!ELEMENT mc-ae-stitching-peer (stitching-peer)*>

<!ELEMENT mcp-state (#PCDATA)>

<!ELEMENT member-link (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT pa-status (#PCDATA)>

<!ELEMENT peer-logical-interface-state (#PCDATA)>

<!ELEMENT peer-state (#PCDATA)>

<!ELEMENT peer-status (#PCDATA)>

<!ELEMENT remote-ip (#PCDATA)>

<!ELEMENT stitching-peer (#PCDATA)>

<!ELEMENT topology-type (#PCDATA)>

<!ELEMENT unknown-rx-packets (#PCDATA)>

<!ELEMENT vc-id (#PCDATA)>
```

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CHAPTER 100

DTD for LFM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-lfm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-lfm.dtd -->

<!ELEMENT lfmd-action-profile-execution-count (#PCDATA)>

<!ELEMENT lfmd-action-profile-information (lfmd-action-profile-name |
lfmd-action-profile-invoke-count | lfmd-action-profile-execution-count)*>

<!ELEMENT lfmd-action-profile-invoke-count (#PCDATA)>

<!ELEMENT lfmd-action-profile-name (#PCDATA)>

<!ELEMENT lfmd-clear-output (#PCDATA)>

<!ELEMENT lfmd-critical-event-received (#PCDATA)>

<!ELEMENT lfmd-discovery-flags (lfmd-flag-remote-stable |
lfmd-flag-remote-evaluating | lfmd-flag-remote-state-valid |
lfmd-flag-local-satisfied | lfmd-flag-local-stable | lfmd-pdu-flags)*>

<!ELEMENT lfmd-discovery-state (#PCDATA)>

<!ELEMENT lfmd-dying-gasp-received (#PCDATA)>

<!ELEMENT lfmd-event-current-frame-error (lfmd-event-frame-error-window |
lfmd-event-frame-error-threshold | lfmd-event-frame-error-count |
lfmd-event-frame-error-total-count | lfmd-event-frame-count)*>

<!ELEMENT lfmd-event-current-symbol-error (lfmd-event-symbol-error-window |
lfmd-event-symbol-error-threshold | lfmd-event-symbol-error-count |
lfmd-event-symbol-error-total-count | lfmd-event-symbol-count)*>

<!ELEMENT lfmd-event-frame-count (#PCDATA)>
```

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```
<!ELEMENT lfmd-event-frame-error-count (#PCDATA)>

<!ELEMENT lfmd-event-frame-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-frame-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-frame-error-window (#PCDATA)>

<!ELEMENT lfmd-event-pdus-received (#PCDATA)>

<!ELEMENT lfmd-event-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-error (lfmd-event-received-frame-error-window
 | lfmd-event-received-frame-error-threshold |
lfmd-event-received-frame-error-count | lfmd-event-received-frame-error-total-count
 | lfmd-event-received-frame-count)*>

<!ELEMENT lfmd-event-received-frame-error-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-error-window (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-period-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-period-error
(lfmd-event-received-frame-period-error-window |
lfmd-event-received-frame-period-error-threshold |
lfmd-event-received-frame-period-error-count |
lfmd-event-received-frame-period-error-total-count |
lfmd-event-received-frame-period-count)*>

<!ELEMENT lfmd-event-received-frame-period-error-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-period-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-period-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-period-error-window (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-seconds-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-seconds-error
(lfmd-event-received-frame-seconds-error-window |
lfmd-event-received-frame-seconds-error-threshold |
lfmd-event-received-frame-seconds-error-count |
lfmd-event-received-frame-seconds-error-total-count |
lfmd-event-received-frame-seconds-count)*>

<!ELEMENT lfmd-event-received-frame-seconds-error-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-seconds-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-seconds-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-received-frame-seconds-error-window (#PCDATA)>
```


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```
<!ELEMENT lfmd-event-received-symbol-count (#PCDATA)>

<!ELEMENT lfmd-event-received-symbol-error (lfmd-event-received-symbol-error-window
 | lfmd-event-received-symbol-error-threshold |
lfmd-event-received-symbol-error-count |
lfmd-event-received-symbol-error-total-count | lfmd-event-received-symbol-count)*>

<!ELEMENT lfmd-event-received-symbol-error-count (#PCDATA)>

<!ELEMENT lfmd-event-received-symbol-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-received-symbol-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-received-symbol-error-window (#PCDATA)>

<!ELEMENT lfmd-event-symbol-count (#PCDATA)>

<!ELEMENT lfmd-event-symbol-error-count (#PCDATA)>

<!ELEMENT lfmd-event-symbol-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-symbol-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-symbol-error-window (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-frame-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-frame-error
(lfmd-event-transmitted-frame-error-window |
lfmd-event-transmitted-frame-error-threshold |
lfmd-event-transmitted-frame-error-count |
lfmd-event-transmitted-frame-error-total-count |
lfmd-event-transmitted-frame-count)*>

<!ELEMENT lfmd-event-transmitted-frame-error-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-frame-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-frame-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-frame-error-window (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-symbol-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-symbol-error
(lfmd-event-transmitted-symbol-error-window |
lfmd-event-transmitted-symbol-error-threshold |
lfmd-event-transmitted-symbol-error-count |
lfmd-event-transmitted-symbol-error-total-count |
lfmd-event-transmitted-symbol-count)*>

<!ELEMENT lfmd-event-transmitted-symbol-error-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-symbol-error-threshold (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-symbol-error-total-count (#PCDATA)>

<!ELEMENT lfmd-event-transmitted-symbol-error-window (#PCDATA)>

<!ELEMENT lfmd-events (lfmd-events-received | lfmd-events-transmitted |
```

```
lfmd-events-current)*>

<!ELEMENT lfmd-events-current (lfmd-event-current-symbol-error |
lfmd-event-current-frame-error)*>

<!ELEMENT lfmd-events-received (lfmd-event-received-symbol-error |
lfmd-event-received-frame-error | lfmd-event-received-frame-period-error |
lfmd-event-received-frame-seconds-error)*>

<!ELEMENT lfmd-events-transmitted (lfmd-event-transmitted-symbol-error |
lfmd-event-transmitted-frame-error)*>

<!ELEMENT lfmd-flag-local-satisfied EMPTY>

<!ELEMENT lfmd-flag-local-stable EMPTY>

<!ELEMENT lfmd-flag-remote-evaluating EMPTY>

<!ELEMENT lfmd-flag-remote-stable EMPTY>

<!ELEMENT lfmd-flag-remote-state-valid EMPTY>

<!ELEMENT lfmd-information (lfmd-interface-information |
lfmd-action-profile-information)*>
<!ATTLIST lfmd-information junos:style CDATA #IMPLIED>

<!ELEMENT lfmd-information-pdus-received (#PCDATA)>

<!ELEMENT lfmd-information-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-interface-information (lfmd-interface-name | lfmd-status |
lfmd-discovery-state | lfmd-discovery-flags | lfmd-peer-address |
lfmd-peer-mux-action | lfmd-peer-parser-action | lfmd-peer-config-mode |
lfmd-peer-config-unidirectional | lfmd-peer-config-loopback |
lfmd-peer-config-link-events | lfmd-peer-config-variable-request |
lfmd-loopback-local-enabled | lfmd-loopback-remote-enabled | lfmd-statistics |
lfmd-events)*>

<!ELEMENT lfmd-interface-name (#PCDATA)>

<!ELEMENT lfmd-link-fault-received (#PCDATA)>

<!ELEMENT lfmd-loopback-control-pdus-received (#PCDATA)>

<!ELEMENT lfmd-loopback-control-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-loopback-local-enabled EMPTY>

<!ELEMENT lfmd-loopback-remote-enabled EMPTY>

<!ELEMENT lfmd-organization-pdus-received (#PCDATA)>

<!ELEMENT lfmd-organization-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-pdu-flags (#PCDATA)>

<!ELEMENT lfmd-peer-address (#PCDATA)>

<!ELEMENT lfmd-peer-config-link-events (#PCDATA)>

<!ELEMENT lfmd-peer-config-loopback (#PCDATA)>
```


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```
<!ELEMENT lfmd-peer-config-mode (#PCDATA)>

<!ELEMENT lfmd-peer-config-unidirectional (#PCDATA)>

<!ELEMENT lfmd-peer-config-variable-request (#PCDATA)>

<!ELEMENT lfmd-peer-mux-action (#PCDATA)>

<!ELEMENT lfmd-peer-parser-action (#PCDATA)>

<!ELEMENT lfmd-statistics (lfmd-statistics-received |
lfmd-statistics-transmitted)*>

<!ELEMENT lfmd-statistics-received (lfmd-information-pdus-received |
lfmd-event-pdus-received | lfmd-variable-request-pdus-received |
lfmd-variable-response-pdus-received | lfmd-loopback-control-pdus-received |
lfmd-organization-pdus-received | lfmd-unknown-pdus-received |
lfmd-critical-event-received | lfmd-dying-gasp-received |
lfmd-link-fault-received)*>

<!ELEMENT lfmd-statistics-transmitted (lfmd-information-pdus-transmitted |
lfmd-event-pdus-transmitted | lfmd-variable-request-pdus-transmitted |
lfmd-variable-response-pdus-transmitted | lfmd-loopback-control-pdus-transmitted
 | lfmd-organization-pdus-transmitted | lfmd-unknown-pdus-transmitted)*>

<!ELEMENT lfmd-status (#PCDATA)>

<!ELEMENT lfmd-unknown-pdus-received (#PCDATA)>

<!ELEMENT lfmd-unknown-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-variable-request-pdus-received (#PCDATA)>

<!ELEMENT lfmd-variable-request-pdus-transmitted (#PCDATA)>

<!ELEMENT lfmd-variable-response-pdus-received (#PCDATA)>

<!ELEMENT lfmd-variable-response-pdus-transmitted (#PCDATA)>
```

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CHAPTER 101

DTD for License Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-license.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-license.dtd -->

<!ELEMENT add-error-count (#PCDATA)>

<!ELEMENT add-individual-result (operation-status | filename | line-number | name
 | message)*>

<!ELEMENT add-license-results (add-individual-result | add-error-count |
add-success)*>

<!ELEMENT add-success EMPTY>

<!ELEMENT cumulative-usage (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT device-reference (#PCDATA)>

<!ELEMENT end-date (#PCDATA)>
<!ATTLIST end-date junos:seconds CDATA #IMPLIED>

<!ELEMENT feature (name | description | validity-information)*>
<!ATTLIST feature junos:style CDATA #IMPLIED>

<!ELEMENT feature-block (feature)*>

<!ELEMENT feature-summary (name | description | licensed | used-licensed |
used-given | needed | validity-type | remaining-time | end-date)*>

<!ELEMENT features-used EMPTY>

<!ELEMENT filename (#PCDATA)>
```

```
<!ELEMENT grace-usage (#PCDATA)>

<!ELEMENT group-define (#PCDATA)>

<!ELEMENT group-reference (#PCDATA)>

<!ELEMENT key-data (#PCDATA)>

<!ELEMENT last-update-time (#PCDATA)>
<!ATTLIST last-update-time junos:seconds CDATA #IMPLIED>

<!ELEMENT license (name | license-state | license-version | license-type |
device-reference | group-reference | group-define | unsupported-attribute |
feature-block)*>

<!ELEMENT license-information (no-licenses-installed | licenses-installed |
license)*>

<!ELEMENT license-key (name | key-data)*>

<!ELEMENT license-key-information (license-key)*>

<!ELEMENT license-state (#PCDATA)>

<!ELEMENT license-summary-information (license-usage-summary |
license-information)*>

<!ELEMENT license-type (#PCDATA)>

<!ELEMENT license-usage-summary (features-used | no-feature-used |
feature-summary)*>

<!ELEMENT license-usage-time-information (total-features | features-used |
no-feature-used | usage-time-summary)*>

<!ELEMENT license-version (#PCDATA)>

<!ELEMENT licensed (#PCDATA)>

<!ELEMENT licenses-installed EMPTY>

<!ELEMENT line-number (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT needed (#PCDATA)>

<!ELEMENT no-feature-used EMPTY>

<!ELEMENT no-licenses-installed EMPTY>

<!ELEMENT operation-status (#PCDATA)>
<!ATTLIST operation-status junos:format CDATA #IMPLIED>

<!ELEMENT original-validity (original-validity-value |
original-validity-time-unit)*>

<!ELEMENT original-validity-time-unit (#PCDATA)>
```


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```
<!ELEMENT original-validity-value (#PCDATA)>
<!ATTLIST original-validity-value junos:seconds CDATA #IMPLIED>

<!ELEMENT remaining-time (remaining-validity-value |
remaining-validity-time-unit)*>

<!ELEMENT remaining-validity-time-unit (#PCDATA)>

<!ELEMENT remaining-validity-value (#PCDATA)>
<!ATTLIST remaining-validity-value junos:seconds CDATA #IMPLIED>

<!ELEMENT start-date (#PCDATA)>
<!ATTLIST start-date junos:seconds CDATA #IMPLIED>

<!ELEMENT total-features (#PCDATA)>

<!ELEMENT unsupported-attribute (#PCDATA)>

<!ELEMENT usage-time-summary (name | cumulative-usage | grace-usage |
last-update-time)*>

<!ELEMENT used-given (#PCDATA)>
<!ATTLIST used-given junos:format CDATA #IMPLIED>

<!ELEMENT used-licensed (#PCDATA)>

<!ELEMENT validity-information (validity-type | original-validity | remaining-time
 | start-date | end-date | license-state)*>

<!ELEMENT validity-type (#PCDATA)>
```

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CHAPTER 102

DTD for Licensed Feature Metadata Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-licensed-feature-metadata.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-licensed-feature-metadata.dtd -->

<!ELEMENT alias (base-feature | cummulative-value)*>

<!ELEMENT base-feature (#PCDATA)>

<!ELEMENT cummulative-value (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT flag (#PCDATA)>

<!ELEMENT id (#PCDATA)>

<!ELEMENT licensed-feature (id | name | description | flag | alias)*>

<!ELEMENT licensed-feature-metadata-information (licensed-feature)*>

<!ELEMENT name (#PCDATA)>
```

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CHAPTER 103

DTD for MIP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-mip.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-mip.dtd -->

<!ELEMENT addr-pool (start-addr | end-addr)*>

<!ELEMENT address (#PCDATA)>

<!ELEMENT address-list (address)*>

<!ELEMENT administrative-prohibited (#PCDATA)>

<!ELEMENT authentication (#PCDATA)>

<!ELEMENT bad-lifetime (#PCDATA)>

<!ELEMENT bad-request (#PCDATA)>

<!ELEMENT count (#PCDATA)>

<!ELEMENT end-addr (#PCDATA)>

<!ELEMENT failed-fa (#PCDATA)>

<!ELEMENT failed-ha (#PCDATA)>

<!ELEMENT failed-mn (#PCDATA)>

<!ELEMENT ha-unreachable (#PCDATA)>

<!ELEMENT id-mismatch (#PCDATA)>

<!ELEMENT identification (#PCDATA)>
```

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```
<!ELEMENT interface (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT lifetime-granted (#PCDATA)>

<!ELEMENT lifetime-remaining (#PCDATA)>

<!ELEMENT mip-binding (mip-home-address | mip-nai | mip-home-agent |
mip-care-of-address | lifetime-granted | lifetime-remaining | tunnel-type |
tunnel-id | tunnel-source | tunnel-destination | identification |
revocation-support | revocation-inform | count | state | session-id)*>

<!ELEMENT mip-binding-information (mip-binding)*>
<!ATTLIST mip-binding-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-care-of-address (#PCDATA)>

<!ELEMENT mip-error (mip-error-message)*>

<!ELEMENT mip-error-message (#PCDATA)>

<!ELEMENT mip-fa (mip-fa-status | mip-fa-max-pending-request |
mip-fa-request-timeout | mip-fa-registration-required |
mip-fa-registration-lifetime | mip-fa-coa | mip-fa-serice-enabled |
mip-fa-reverse-tunnel)*>

<!ELEMENT mip-fa-coa (#PCDATA)>

<!ELEMENT mip-fa-information (mip-fa)*>
<!ATTLIST mip-fa-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-fa-max-pending-request (#PCDATA)>

<!ELEMENT mip-fa-registration-lifetime (#PCDATA)>

<!ELEMENT mip-fa-registration-required (#PCDATA)>

<!ELEMENT mip-fa-request-timeout (#PCDATA)>

<!ELEMENT mip-fa-reverse-tunnel (#PCDATA)>

<!ELEMENT mip-fa-serice-enabled (#PCDATA)>

<!ELEMENT mip-fa-status (#PCDATA)>

<!ELEMENT mip-home-address (#PCDATA)>

<!ELEMENT mip-home-agent (#PCDATA)>

<!ELEMENT mip-home-agent-interface-network (interface | mip-home-agent |
registration-lifetime | time-tolerance | addr-pool | number-of-mn |
mip-home-address | range | mip-nai | mip-care-of-address | lifetime-granted |
lifetime-remaining)*>

<!ELEMENT mip-home-agent-interface-network-information
(mip-home-agent-interface-network)*>
<!ATTLIST mip-home-agent-interface-network-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-home-agent-overview (status | service-enabled-on | address-list |
authentication)*>
```


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```
<!ELEMENT mip-home-agent-overview-information (mip-home-agent-overview)*>
<!ATTLIST mip-home-agent-overview-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-home-agent-traffic (request-received | request-forwarded |
request-denied | replies-forwarded | unspecified | administrative-prohibited |
no-resource | bad-request | too-many-bindings | unknown-ha | id-mismatch |
unavailable-reverse-tunnel | unavailable-encapsulation | failed-mn | failed-fa)*>

<!ELEMENT mip-home-agent-traffic-information (mip-home-agent-traffic)*>
<!ATTLIST mip-home-agent-traffic-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-home-agent-virtual-network (mip-home-agent | registration-lifetime
 | time-tolerance | addr-pool | number-of-mn | mip-home-address | mip-nai |
mip-care-of-address | lifetime-granted | lifetime-remaining)*>

<!ELEMENT mip-home-agent-virtual-network-information
(mip-home-agent-virtual-network)*>
<!ATTLIST mip-home-agent-virtual-network-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-memory (mip-memory-size | mip-memory-file-name |
mip-memory-line-number | mip-memory-allocated-memory)*>

<!ELEMENT mip-memory-allocated-memory (#PCDATA)>

<!ELEMENT mip-memory-file-name (#PCDATA)>

<!ELEMENT mip-memory-information (mip-memory)*>
<!ATTLIST mip-memory-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-memory-line-number (#PCDATA)>

<!ELEMENT mip-memory-size (#PCDATA)>

<!ELEMENT mip-nai (#PCDATA)>

<!ELEMENT mip-statistics-information (registration-request-received |
registration-request-accepted | registration-request-rejected)*>

<!ELEMENT mip-traffic (request-received | request-forwarded | request-denied |
replies-received | replies-forwarded | replies-denied | unspecified |
ha-unreachable | administrative-prohibited | no-resource | bad-lifetime |
bad-request | unavailable-encapsulation | unavailable-reverse-tunnel | failed-mn
 | failed-ha | unknown-challenge | missing-challenge | stale-challenge)*>

<!ELEMENT mip-traffic-information (mip-traffic)*>
<!ATTLIST mip-traffic-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-tunnel (mip-tunnel-source | mip-tunnel-destination |
mip-tunnel-type)*>

<!ELEMENT mip-tunnel-destination (#PCDATA)>

<!ELEMENT mip-tunnel-information (mip-tunnel)*>
<!ATTLIST mip-tunnel-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-tunnel-source (#PCDATA)>

<!ELEMENT mip-tunnel-type (#PCDATA)>

<!ELEMENT mip-violation (mip-nai | mip-home-address | mip-violation-code |
```

```
mip-violation-time | mip-violation-spi | mip-violation-error-code |
mip-violation-reason | mip-violation-count-per-peer | mip-violation-totol-count)*>

<!ELEMENT mip-violation-code (#PCDATA)>

<!ELEMENT mip-violation-count-per-peer (#PCDATA)>

<!ELEMENT mip-violation-error-code (#PCDATA)>

<!ELEMENT mip-violation-information (mip-violation)*>
<!ATTLIST mip-violation-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-violation-reason (#PCDATA)>

<!ELEMENT mip-violation-spi (#PCDATA)>

<!ELEMENT mip-violation-time (#PCDATA)>

<!ELEMENT mip-violation-totol-count (#PCDATA)>

<!ELEMENT mip-visitor (mip-nai | mip-home-address | mip-home-agent |
mip-care-of-address | mip-visitor-time-requested | mip-visitor-time-alloted |
mip-visitor-time-remaining | mip-visitor-count | mip-visitor-pending-count)*>

<!ELEMENT mip-visitor-count (#PCDATA)>

<!ELEMENT mip-visitor-information (mip-visitor)*>
<!ATTLIST mip-visitor-information junos:style CDATA #IMPLIED>

<!ELEMENT mip-visitor-pending-count (#PCDATA)>

<!ELEMENT mip-visitor-time-alloted (#PCDATA)>

<!ELEMENT mip-visitor-time-remaining (#PCDATA)>

<!ELEMENT mip-visitor-time-requested (#PCDATA)>

<!ELEMENT mip-wimax-release (release)*>

<!ELEMENT mip-wimax-release-information (mip-wimax-release)*>
<!ATTLIST mip-wimax-release-information junos:style CDATA #IMPLIED>

<!ELEMENT missing-challenge (#PCDATA)>

<!ELEMENT no-resource (#PCDATA)>

<!ELEMENT number-of-mn (#PCDATA)>

<!ELEMENT range (#PCDATA)>

<!ELEMENT registration-lifetime (#PCDATA)>

<!ELEMENT registration-request-accepted (#PCDATA)>

<!ELEMENT registration-request-received (#PCDATA)>

<!ELEMENT registration-request-rejected (#PCDATA)>

<!ELEMENT release (#PCDATA)>

<!ELEMENT replies-denied (#PCDATA)>
```


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```
<!ELEMENT replies-forwarded (#PCDATA)>

<!ELEMENT replies-received (#PCDATA)>

<!ELEMENT request-denied (#PCDATA)>

<!ELEMENT request-forwarded (#PCDATA)>

<!ELEMENT request-received (#PCDATA)>

<!ELEMENT revocation-inform (#PCDATA)>

<!ELEMENT revocation-support (#PCDATA)>

<!ELEMENT service-enabled-on (interface-name)*>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT stale-challenge (#PCDATA)>

<!ELEMENT start-addr (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT status (#PCDATA)>

<!ELEMENT time-tolerance (#PCDATA)>

<!ELEMENT too-many-bindings (#PCDATA)>

<!ELEMENT tunnel-destination (#PCDATA)>

<!ELEMENT tunnel-id (#PCDATA)>

<!ELEMENT tunnel-source (#PCDATA)>

<!ELEMENT tunnel-type (#PCDATA)>

<!ELEMENT unavailable-encapsulation (#PCDATA)>

<!ELEMENT unavailable-reverse-tunnel (#PCDATA)>

<!ELEMENT unknown-challenge (#PCDATA)>

<!ELEMENT unknown-ha (#PCDATA)>

<!ELEMENT unspecified (#PCDATA)>
```

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CHAPTER 104

DTD for Mirror Response Tags (TBD)

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-mirror.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-mirror.dtd -->
```

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CHAPTER 105

DTD for MPLS OAM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-mplsoamd.dtd. To review reference pages for the tags, see:

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-mplsoamd.dtd -->

<!ELEMENT address (#PCDATA)>

<!ELEMENT address-range-index (#PCDATA)>

<!ELEMENT count (#PCDATA)>

<!ELEMENT database (#PCDATA)>

<!ELEMENT date-time (#PCDATA)>
<!ATTLIST date-time junos:seconds CDATA #IMPLIED>

<!ELEMENT depth (#PCDATA)>

<!ELEMENT fec (fec-prefix)*>

<!ELEMENT fec-prefix (#PCDATA)>

<!ELEMENT high-address (#PCDATA)>

<!ELEMENT instance (count)*>

<!ELEMENT interface (#PCDATA)>

<!ELEMENT label-depth (#PCDATA)>

<!ELEMENT label-protocol (#PCDATA)>

<!ELEMENT label-value (#PCDATA)>

<!ELEMENT last-trace-time (date-time)*>

<!ELEMENT low-address (#PCDATA)>

<!ELEMENT mtu (#PCDATA)>

<!ELEMENT multipath-information (multipath-type | address-range-index | low-address
 | high-address)*>
```

```
<!ELEMENT multipath-type (#PCDATA)>

<!ELEMENT next-scheduled-trace (timer-expiry)*>

<!ELEMENT options (probe-ttl | probe-retries | probe-wait | probe-paths |
probe-source | probe-destination | probe-exp | probe-fanout)*>

<!ELEMENT parent (#PCDATA)>

<!ELEMENT path-index (#PCDATA)>

<!ELEMENT path-status (#PCDATA)>

<!ELEMENT probe-destination (#PCDATA)>

<!ELEMENT probe-exp (#PCDATA)>

<!ELEMENT probe-fanout (#PCDATA)>

<!ELEMENT probe-options (probe-ttl | probe-retries | probe-wait | probe-paths |
probe-source | probe-destination | probe-exp | probe-fanout)*>

<!ELEMENT probe-paths (#PCDATA)>

<!ELEMENT probe-retries (#PCDATA)>

<!ELEMENT probe-source (#PCDATA)>

<!ELEMENT probe-ttl (#PCDATA)>

<!ELEMENT probe-wait (#PCDATA)>

<!ELEMENT receiver-timestamp (#PCDATA)>
<!ATTLIST receiver-timestamp junos:seconds CDATA #IMPLIED>
<!ATTLIST receiver-timestamp junos:microseconds CDATA #IMPLIED>

<!ELEMENT response-time (#PCDATA)>

<!ELEMENT return-code (#PCDATA)>

<!ELEMENT scan-status (status)*>

<!ELEMENT sender-timestamp (#PCDATA)>
<!ATTLIST sender-timestamp junos:seconds CDATA #IMPLIED>
<!ATTLIST sender-timestamp junos:microseconds CDATA #IMPLIED>

<!ELEMENT status (#PCDATA)>

<!ELEMENT test (#PCDATA)>

<!ELEMENT timer-expiry (#PCDATA)>

<!ELEMENT tracelsp (#PCDATA)>

<!ELEMENT tracelsp-label (label-value | label-depth | label-protocol)*>
<!ATTLIST tracelsp-label junos:style CDATA #IMPLIED>

<!ELEMENT tracelsp-node (depth | label-value | label-protocol | address | parent
 | response-time | return-code | multipath-type | sender-timestamp |
receiver-timestamp | status | path-index | path-status | probe-destination | mtu
 | interface)*>
```


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```
<!ATTLIST tracelsp-node junos:style CDATA #IMPLIED>
```

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CHAPTER 106

DTD for MSP Info Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-mspinfo.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-mspinfo.dtd -->

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT mspinfo-raw-output (interface-name | raw-output)*>

<!ELEMENT raw-output (#PCDATA)>
```

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CHAPTER 107

DTD for OAM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-oam.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-oam.dtd -->

<!ELEMENT oam-information (oam-interface-information)*>

<!ELEMENT oam-interface-information (oam-interface-name | oam-statistics |
oam-status)*>

<!ELEMENT oam-interface-name (#PCDATA)>

<!ELEMENT oam-keepalive-status (#PCDATA)>

<!ELEMENT oam-pdus-received (#PCDATA)>

<!ELEMENT oam-pdus-transmitted (#PCDATA)>

<!ELEMENT oam-statistics (oam-pdus-received | oam-pdus-transmitted)*>

<!ELEMENT oam-status (oam-keepalive-status)*>
```

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CHAPTER 108

DTD for Packet Triggered Subscribers Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-packet-triggered-subscribers.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-packet-triggered-subscribers.dtd -->

<!ELEMENT a-f (#PCDATA)>

<!ELEMENT a-fc (#PCDATA)>

<!ELEMENT a-fu (#PCDATA)>

<!ELEMENT a-p-bw (#PCDATA)>

<!ELEMENT a-p-i (#PCDATA)>

<!ELEMENT a-p-mbs (#PCDATA)>

<!ELEMENT a-s (#PCDATA)>

<!ELEMENT agl (#PCDATA)>

<!ELEMENT anl (#PCDATA)>

<!ELEMENT application-id (#PCDATA)>

<!ELEMENT attribute-name (#PCDATA)>

<!ELEMENT attribute-value (#PCDATA)>

<!ELEMENT bytes (#PCDATA)>
```

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```
<!ELEMENT clear-session-result (num-logout-initiated)*>

<!ELEMENT client-id (#PCDATA)>

<!ELEMENT d (#PCDATA)>

<!ELEMENT extra-statistics (statistics-string)*>

<!ELEMENT fast-sync-in-progress (#PCDATA)>

<!ELEMENT first-down-pic-client-id (#PCDATA)>

<!ELEMENT five-tuple (#PCDATA)>

<!ELEMENT flows (five-tuple | application-id | policy-name | policy-action |
policy-direction | packets | bytes | offload)*>

<!ELEMENT full-sync-in-progress (#PCDATA)>

<!ELEMENT hwm (#PCDATA)>

<!ELEMENT input-bps (#PCDATA)>

<!ELEMENT input-bytes (#PCDATA)>

<!ELEMENT input-packets (#PCDATA)>

<!ELEMENT input-pps (#PCDATA)>

<!ELEMENT interface (#PCDATA)>

<!ELEMENT login-time (#PCDATA)>

<!ELEMENT lph (#PCDATA)>

<!ELEMENT lpl (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT name-id (#PCDATA)>

<!ELEMENT nanl (#PCDATA)>

<!ELEMENT num-aaa-received (#PCDATA)>

<!ELEMENT num-aar-queued (#PCDATA)>

<!ELEMENT num-aar-send-failure (#PCDATA)>

<!ELEMENT num-aar-timeout (#PCDATA)>

<!ELEMENT num-aca-queued (#PCDATA)>

<!ELEMENT num-aca-send-failure (#PCDATA)>

<!ELEMENT num-accounting-request-send-failure (#PCDATA)>

<!ELEMENT num-acctounting-off (#PCDATA)>

<!ELEMENT num-acctounting-on (#PCDATA)>
```


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```
<!ELEMENT num-acctounting-start-response (#PCDATA)>
<!ELEMENT num-acctounting-stop-response (#PCDATA)>
<!ELEMENT num-acr-received (#PCDATA)>
<!ELEMENT num-asa-queued (#PCDATA)>
<!ELEMENT num-asa-send-failure (#PCDATA)>
<!ELEMENT num-asr-received (#PCDATA)>
<!ELEMENT num-clear-profile (#PCDATA)>
<!ELEMENT num-clear-profile-failure (#PCDATA)>
<!ELEMENT num-clients (#PCDATA)>
<!ELEMENT num-connection-up-event (#PCDATA)>
<!ELEMENT num-data-sessions (#PCDATA)>
<!ELEMENT num-diameterd-connected (#PCDATA)>
<!ELEMENT num-diameterd-disconnected (#PCDATA)>
<!ELEMENT num-down-pic-clients (#PCDATA)>
<!ELEMENT num-fast-sync-abort (#PCDATA)>
<!ELEMENT num-fast-sync-queued (#PCDATA)>
<!ELEMENT num-fpc-update (#PCDATA)>
<!ELEMENT num-fpc-update-failure (#PCDATA)>
<!ELEMENT num-full-sync-abort (#PCDATA)>
<!ELEMENT num-idle-timeout-update (#PCDATA)>
<!ELEMENT num-idle-timeout-update-send-failure (#PCDATA)>
<!ELEMENT num-interim-acctounting-response (#PCDATA)>
<!ELEMENT num-invalid-acctounting-start (#PCDATA)>
<!ELEMENT num-invalid-acctounting-stop (#PCDATA)>
<!ELEMENT num-invalid-interim-acctounting (#PCDATA)>
<!ELEMENT num-login-done (#PCDATA)>
<!ELEMENT num-login-done-send-failure (#PCDATA)>
<!ELEMENT num-login-retry (#PCDATA)>
<!ELEMENT num-logout-initiated (#PCDATA)>
<!ELEMENT num-logout-request-send-failure (#PCDATA)>
<!ELEMENT num-logout-request-timeout (#PCDATA)>
```

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```
<!ELEMENT num-outstanding-diameter-message (#PCDATA)>
<!ELEMENT num-partition-update-send (#PCDATA)>
<!ELEMENT num-partition-update-send-failure (#PCDATA)>
<!ELEMENT num-pconn (#PCDATA)>
<!ELEMENT num-pending-response (#PCDATA)>
<!ELEMENT num-pic-login (#PCDATA)>
<!ELEMENT num-pic-logout (#PCDATA)>
<!ELEMENT num-pic-logout-response (#PCDATA)>
<!ELEMENT num-policy-change (#PCDATA)>
<!ELEMENT num-policy-change-response (#PCDATA)>
<!ELEMENT num-ppa-queued (#PCDATA)>
<!ELEMENT num-ppa-send-failure (#PCDATA)>
<!ELEMENT num-ppr-received (#PCDATA)>
<!ELEMENT num-pre-announcement (#PCDATA)>
<!ELEMENT num-pre-announcement-send-failure (#PCDATA)>
<!ELEMENT num-queued-diameter-task (#PCDATA)>
<!ELEMENT num-queued-pic-task (#PCDATA)>
<!ELEMENT num-response-timeout (#PCDATA)>
<!ELEMENT num-sending-message (#PCDATA)>
<!ELEMENT num-sending-queue-full (#PCDATA)>
<!ELEMENT num-sending-timeout (#PCDATA)>
<!ELEMENT num-service-request-send-failure (#PCDATA)>
<!ELEMENT num-service-request-timeout (#PCDATA)>
<!ELEMENT num-service-set-subscriber-profiles-mapping-update (#PCDATA)>
<!ELEMENT num-service-set-subscriber-profiles-mapping-update-failure (#PCDATA)>
<!ELEMENT num-service-set-update (#PCDATA)>
<!ELEMENT num-service-set-update-send-failure (#PCDATA)>
<!ELEMENT num-services (#PCDATA)>
<!ELEMENT num-set-profile (#PCDATA)>
<!ELEMENT num-set-profile-failure (#PCDATA)>
```


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```
<!ELEMENT num-src-logout (#PCDATA)>
<!ELEMENT num-srq-fast-sync (#PCDATA)>
<!ELEMENT num-srq-full-sync (#PCDATA)>
<!ELEMENT num-srq-queued (#PCDATA)>
<!ELEMENT num-srq-send-failure (#PCDATA)>
<!ELEMENT num-srq-single-sync (#PCDATA)>
<!ELEMENT num-srq-timeout (#PCDATA)>
<!ELEMENT num-srr-failure (#PCDATA)>
<!ELEMENT num-srr-queued (#PCDATA)>
<!ELEMENT num-srr-received (#PCDATA)>
<!ELEMENT num-srr-send-failure (#PCDATA)>
<!ELEMENT num-sta-received (#PCDATA)>
<!ELEMENT num-statistics-polling (#PCDATA)>
<!ELEMENT num-str-queued (#PCDATA)>
<!ELEMENT num-str-send-failure (#PCDATA)>
<!ELEMENT num-str-timeout (#PCDATA)>
<!ELEMENT num-subscriber-profiles-update (#PCDATA)>
<!ELEMENT num-subscriber-profiles-update-failure (#PCDATA)>
<!ELEMENT num-sync-aaa-received (#PCDATA)>
<!ELEMENT num-sync-aar-queued (#PCDATA)>
<!ELEMENT num-sync-aar-send-failure (#PCDATA)>
<!ELEMENT num-sync-aar-timeout (#PCDATA)>
<!ELEMENT num-sync-request (#PCDATA)>
<!ELEMENT num-sync-sta-received (#PCDATA)>
<!ELEMENT num-sync-start (#PCDATA)>
<!ELEMENT num-sync-str-queued (#PCDATA)>
<!ELEMENT num-sync-str-send-failure (#PCDATA)>
<!ELEMENT num-sync-str-timeout (#PCDATA)>
<!ELEMENT num-tagging (#PCDATA)>
<!ELEMENT num-update-username (#PCDATA)>
<!ELEMENT num-username-update-send-failure (#PCDATA)>
```

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```
<!ELEMENT num-valid-acctounting-start (#PCDATA)>

<!ELEMENT num-valid-acctounting-stop (#PCDATA)>

<!ELEMENT num-valid-interim-acctounting (#PCDATA)>

<!ELEMENT num-waiting-message (#PCDATA)>

<!ELEMENT offload (#PCDATA)>

<!ELEMENT opt-profile (#PCDATA)>

<!ELEMENT output-bps (#PCDATA)>

<!ELEMENT output-bytes (#PCDATA)>

<!ELEMENT output-packets (#PCDATA)>

<!ELEMENT output-pps (#PCDATA)>

<!ELEMENT p (#PCDATA)>

<!ELEMENT packet-triggered-subscribers-information (message | process-status |
subscriber-session-summary | subscriber-session | session-statistics |
extra-statistics | subscriber-policy | subscriber-flows | subscriber-bandwidth |
 clear-session-result | service-subscribers-request-result)*>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT partition (#PCDATA)>

<!ELEMENT pic-name (#PCDATA)>

<!ELEMENT pic-status (pic-name | num-pic-login | num-pic-logout-response |
num-login-done | num-pic-logout | num-policy-change | num-policy-change-response
 | num-src-logout | num-statistics-polling | num-sync-start | num-sync-request |
 num-update-username | num-connection-up-event | num-queued-pic-task |
num-pending-response | num-service-request-timeout | num-logout-request-timeout
| num-logout-request-send-failure | num-service-request-send-failure |
num-accounting-request-send-failure | num-login-done-send-failure |
num-username-update-send-failure | num-pre-announcement |
num-pre-announcement-send-failure | num-idle-timeout-update |
num-idle-timeout-update-send-failure | num-service-set-update |
num-service-set-update-send-failure | num-partition-update-send |
num-partition-update-send-failure | num-subscriber-profiles-update |
num-subscriber-profiles-update-failure |
num-service-set-subscriber-profiles-mapping-update |
num-service-set-subscriber-profiles-mapping-update-failure | num-set-profile |
num-set-profile-failure | num-clear-profile | num-clear-profile-failure |
num-fpc-update | num-fpc-update-failure)*>

<!ELEMENT policy-action (#PCDATA)>

<!ELEMENT policy-attribute (attribute-name | attribute-value)*>

<!ELEMENT policy-direction (#PCDATA)>

<!ELEMENT policy-name (#PCDATA)>

<!ELEMENT process-status (num-clients | num-down-pic-clients |
```


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```
first-down-pic-client-id | src-connection-state | num-srr-received |
num-ppr-received | num-asr-received | num-acr-received | num-aaa-received |
num-sta-received | num-sync-aaa-received | num-sync-sta-received | num-srr-queued
 | num-srq-queued | num-aar-queued | num-ppa-queued | num-str-queued |
num-asa-queued | num-aca-queued | num-sync-aar-queued | num-sync-str-queued |
num-sending-message | num-waiting-message | num-sending-queue-full |
num-sending-timeout | num-response-timeout | num-sync-aar-timeout |
num-sync-str-timeout | num-aar-timeout | num-str-timeout | num-srq-timeout |
num-aar-send-failure | num-asa-send-failure | num-aca-send-failure |
num-ppa-send-failure | num-str-send-failure | num-srq-send-failure |
num-srr-send-failure | num-sync-aar-send-failure | num-sync-str-send-failure |
num-srq-full-sync | num-srq-fast-sync | num-srq-single-sync | num-fast-sync-queued
 | num-queued-diameter-task | fast-sync-in-progress | full-sync-in-progress |
num-full-sync-abort | num-fast-sync-abort | num-outstanding-diameter-message |
num-login-retry | num-diameterd-connected | num-diameterd-disconnected |
num-srr-failure | num-pconn | pic-status | radius-partition-status)*>

<!ELEMENT profile (#PCDATA)>

<!ELEMENT ra (#PCDATA)>

<!ELEMENT radius-partition-status (partition | num-valid-acctounting-start |
num-valid-acctounting-stop | num-valid-interim-acctounting |
num-invalid-acctounting-start | num-invalid-acctounting-stop |
num-invalid-interim-acctounting | num-acctounting-on | num-acctounting-off |
num-acctounting-start-response | num-acctounting-stop-response |
num-interim-acctounting-response | num-tagging)*>

<!ELEMENT radius-policy (policy-attribute)*>

<!ELEMENT request_failure (#PCDATA)>

<!ELEMENT request_success EMPTY>

<!ELEMENT rm (#PCDATA)>

<!ELEMENT routing-instance (#PCDATA)>

<!ELEMENT rph (#PCDATA)>

<!ELEMENT rpl (#PCDATA)>

<!ELEMENT rpr (#PCDATA)>

<!ELEMENT service-interface (#PCDATA)>

<!ELEMENT service-policy (policy-name | rpr | d | term)*>

<!ELEMENT service-session (policy-name | service-state)*>

<!ELEMENT service-state (#PCDATA)>

<!ELEMENT service-subscribers-request-result (request_success | request_failure)*>
<!ATTLIST service-subscribers-request-result junos:style CDATA #IMPLIED>

<!ELEMENT session-statistics (session-type | name-id | input-bytes | output-bytes
 | input-packets | output-packets)*>

<!ELEMENT session-type (#PCDATA)>

<!ELEMENT src-connection-state (#PCDATA)>
```

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```
<!ELEMENT statistics-string (#PCDATA)>

<!ELEMENT subscriber-bandwidth (client-id | input-bps | output-bps | input-pps |
 output-pps)*>

<!ELEMENT subscriber-flows (client-id | num-data-sessions | hwm | flows)*>

<!ELEMENT subscriber-policy (client-id | service-policy | radius-policy)*>

<!ELEMENT subscriber-session (username | user-ip-address | interface |
service-interface | subscriber-state | login-time | routing-instance | partition
 | profile | num-services | client-id | service-session)*>
<!ATTLIST subscriber-session junos:style CDATA #IMPLIED>

<!ELEMENT subscriber-session-summary (num-clients)*>

<!ELEMENT subscriber-state (#PCDATA)>

<!ELEMENT template-name (#PCDATA)>

<!ELEMENT term (template-name | tpr | ra | rm | lpl | lph | rpl | rph | p | anl
| agl | nanl | a-f | a-s | a-fc | a-p-i | a-p-bw | a-p-mbs | a-fu | opt-profile)*>

<!ELEMENT tpr (#PCDATA)>

<!ELEMENT user-ip-address (#PCDATA)>

<!ELEMENT username (#PCDATA)>
```


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CHAPTER 109

DTD for Passive Monitoring Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-passive-monitoring.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-passive-monitoring.dtd -->

<!ELEMENT active-flows (#PCDATA)>

<!ELEMENT allocation-count (#PCDATA)>

<!ELEMENT allocations-per-second (#PCDATA)>

<!ELEMENT error-allocation-failures (#PCDATA)>

<!ELEMENT error-bytes-per-second-overload (#PCDATA)>

<!ELEMENT error-free-failures (#PCDATA)>

<!ELEMENT error-free-list-failures (#PCDATA)>

<!ELEMENT error-information (error-packets-dropped-no-memory |
error-packets-dropped-not-ip | error-packets-dropped-not-ipv4 |
error-packets-too-small | error-allocation-failures | error-free-failures |
error-free-list-failures | error-memory-warning | error-memory-overload |
error-packets-per-second-overload | error-bytes-per-second-overload)*>

<!ELEMENT error-memory-overload (#PCDATA)>

<!ELEMENT error-memory-warning (#PCDATA)>

<!ELEMENT error-packets-dropped-no-memory (#PCDATA)>

<!ELEMENT error-packets-dropped-not-ip (#PCDATA)>
```

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```
<!ELEMENT error-packets-dropped-not-ipv4 (#PCDATA)>

<!ELEMENT error-packets-per-second-overload (#PCDATA)>

<!ELEMENT error-packets-too-small (#PCDATA)>

<!ELEMENT five-second-load (#PCDATA)>

<!ELEMENT flow-bytes (#PCDATA)>

<!ELEMENT flow-bytes-ten-second-rate (#PCDATA)>

<!ELEMENT flow-information (flow-packets | flow-bytes |
flow-packets-ten-second-rate | flow-bytes-ten-second-rate | active-flows | flows
 | flows-exported | flow-packets-exported | flows-expired | flows-aged)*>

<!ELEMENT flow-packets (#PCDATA)>

<!ELEMENT flow-packets-exported (#PCDATA)>

<!ELEMENT flow-packets-ten-second-rate (#PCDATA)>

<!ELEMENT flows (#PCDATA)>

<!ELEMENT flows-aged (#PCDATA)>

<!ELEMENT flows-expired (#PCDATA)>

<!ELEMENT flows-exported (#PCDATA)>

<!ELEMENT free-count (#PCDATA)>

<!ELEMENT frees-per-second (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT inttime (#PCDATA)>

<!ELEMENT local-index (#PCDATA)>

<!ELEMENT maximum-allocated (#PCDATA)>

<!ELEMENT memory-free (#PCDATA)>

<!ELEMENT memory-information (allocation-count | free-count | maximum-allocated
| allocations-per-second | frees-per-second | memory-used | memory-free)*>

<!ELEMENT memory-used (#PCDATA)>

<!ELEMENT one-minute-load (#PCDATA)>

<!ELEMENT passive-monitoring-information (interface-name | local-index | pic-status
 | usage-information | memory-information | flow-information | error-information
 | status-information)*>

<!ELEMENT pic-status (#PCDATA)>

<!ELEMENT status-as-count (#PCDATA)>

<!ELEMENT status-engine-id (#PCDATA)>
```


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```
<!ELEMENT status-engine-type (#PCDATA)>

<!ELEMENT status-export-format (#PCDATA)>

<!ELEMENT status-export-interval (#PCDATA)>

<!ELEMENT status-group-index (#PCDATA)>

<!ELEMENT status-ifl-snmp-map-count (#PCDATA)>

<!ELEMENT status-information (status-group-index | status-export-interval |
status-export-format | status-proto | status-engine-type | status-engine-id |
status-route-record-count | status-ifl-snmp-map-count | status-as-count |
status-monitor-time-set | status-monitor-config-set |
status-monitor-route-record-set | status-monitor-ifl-snmp-set)*>

<!ELEMENT status-monitor-config-set (#PCDATA)>

<!ELEMENT status-monitor-ifl-snmp-set (#PCDATA)>

<!ELEMENT status-monitor-route-record-set (#PCDATA)>

<!ELEMENT status-monitor-time-set (#PCDATA)>

<!ELEMENT status-proto (#PCDATA)>

<!ELEMENT status-route-record-count (#PCDATA)>

<!ELEMENT uptime (#PCDATA)>

<!ELEMENT usage-information (uptime | inttime | five-second-load |
one-minute-load)*>
```

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CHAPTER 110

DTD for PGM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-pgm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-pgm.dtd -->

<!ELEMENT bad-checksum (#PCDATA)>

<!ELEMENT bad-nak-family (#PCDATA)>

<!ELEMENT bad-nak-length (#PCDATA)>

<!ELEMENT bad-ncf-family (#PCDATA)>

<!ELEMENT bad-ncf-length (#PCDATA)>

<!ELEMENT bad-rdata-length (#PCDATA)>

<!ELEMENT bad-spm-family (#PCDATA)>

<!ELEMENT bad-spm-length (#PCDATA)>

<!ELEMENT bad-tsdu-length (#PCDATA)>

<!ELEMENT clear-pgm-nak EMPTY>

<!ELEMENT clear-pgm-spm EMPTY>

<!ELEMENT clear-pgm-statistics EMPTY>

<!ELEMENT errors (short-pgm-header | bad-checksum | zero-checksum | bad-tsdu-length
 | bad-spm-length | bad-spm-family | bad-nak-length | bad-nak-family |
nak-unknown-tsi | nak-throttled | bad-ncf-length | bad-ncf-family | ncf-unknown-tsi
 | bad-rdata-length | rdata-unknown-tsi | odata-with-ra)*>

<!ELEMENT nak (received | sent)*>
```

```
<!ELEMENT nak-throttled (#PCDATA)>

<!ELEMENT nak-unknown-tsi (#PCDATA)>

<!ELEMENT ncf (received | sent)*>

<!ELEMENT ncf-unknown-tsi (#PCDATA)>

<!ELEMENT nullnak (received | sent)*>

<!ELEMENT odata-with-ra (#PCDATA)>

<!ELEMENT other (received | sent)*>

<!ELEMENT packet-counters (spm | poll | polr | rdata | nak | nullnak | ncf | spmr
 | other | errors)*>

<!ELEMENT pgm-nak-group (#PCDATA)>

<!ELEMENT pgm-nak-interface (pgm-nak-interface-name | pgm-nak-interface-sender)*>

<!ELEMENT pgm-nak-interface-name (#PCDATA)>

<!ELEMENT pgm-nak-interface-sender (#PCDATA)>

<!ELEMENT pgm-nak-sequence (#PCDATA)>

<!ELEMENT pgm-nak-source (#PCDATA)>

<!ELEMENT pgm-spm-gsid (#PCDATA)>

<!ELEMENT pgm-spm-information (pgm-spm-tsi)*>
<!ATTLIST pgm-spm-information junos:style CDATA #IMPLIED>

<!ELEMENT pgm-spm-lead (#PCDATA)>

<!ELEMENT pgm-spm-nak (pgm-nak-sequence | pgm-nak-source | pgm-nak-group |
pgm-nak-interface)*>

<!ELEMENT pgm-spm-nla (#PCDATA)>

<!ELEMENT pgm-spm-seq (#PCDATA)>

<!ELEMENT pgm-spm-sport (#PCDATA)>

<!ELEMENT pgm-spm-trail (#PCDATA)>

<!ELEMENT pgm-spm-tsi (pgm-spm-gsid | pgm-spm-sport | pgm-spm-seq | pgm-spm-trail
 | pgm-spm-lead | pgm-spm-nla | pgm-spm-nak)*>

<!ELEMENT pgm-statistics-information (packet-counters)*>

<!ELEMENT poll (received | sent)*>

<!ELEMENT polr (received | sent)*>

<!ELEMENT rdata (received | sent)*>

<!ELEMENT rdata-unknown-tsi (#PCDATA)>
```


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```
<!ELEMENT received (#PCDATA)>

<!ELEMENT sent (#PCDATA)>

<!ELEMENT short-pgm-header (#PCDATA)>

<!ELEMENT spm (received | sent)*>

<!ELEMENT spmr (received | sent)*>

<!ELEMENT zero-checksum (#PCDATA)>
```

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CHAPTER 111

DTD for PKI Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-pki.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-pki.dtd -->

<!ELEMENT alternate-subject (#PCDATA)>

<!ELEMENT alternate-subject-list (alternate-subject)*>

<!ELEMENT auto-re-enrollment (auto-re-enrollment-status |
auto-re-enrollment-next-trigger-time)*>

<!ELEMENT auto-re-enrollment-next-trigger-time (#PCDATA)>

<!ELEMENT auto-re-enrollment-status (#PCDATA)>

<!ELEMENT ca-certificate-enroll (ca-subject | fingerprint)*>

<!ELEMENT ca-certificate-enroll-list (ca-certificate-enroll-msg |
ca-certificate-enroll)*>

<!ELEMENT ca-certificate-enroll-msg (#PCDATA)>

<!ELEMENT ca-file (#PCDATA)>

<!ELEMENT ca-name (#PCDATA)>

<!ELEMENT ca-profile-name (#PCDATA)>

<!ELEMENT ca-subject (#PCDATA)>

<!ELEMENT cert-ca-load-status (cert-ca-profile)*>

<!ELEMENT cert-ca-manual-load (fingerprint)*>
```

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```
<!ELEMENT cert-ca-profile (#PCDATA)>

<!ELEMENT cert-certificate-id (#PCDATA)>

<!ELEMENT cert-flag-info (cert-flag-trust | cert-flag-root)*>

<!ELEMENT cert-flag-root (#PCDATA)>

<!ELEMENT cert-flag-trust (#PCDATA)>

<!ELEMENT cert-key-pair (cert-key-pair-name | cert-key-pair-size)*>

<!ELEMENT cert-key-pair-name (#PCDATA)>

<!ELEMENT cert-key-pair-size (#PCDATA)>

<!ELEMENT cert-load-status (cert-certificate-id)*>

<!ELEMENT cert-request-dump (cert-request-dump-msg | cert-request-dump-file |
fingerprint)*>

<!ELEMENT cert-request-dump-file (cert-request-dump-file-content)*>

<!ELEMENT cert-request-dump-file-content (#PCDATA)>

<!ELEMENT cert-request-dump-msg (#PCDATA)>

<!ELEMENT cert-verification-status (#PCDATA)>

<!ELEMENT certificate-alternate-subject (#PCDATA)>

<!ELEMENT certificate-cache-entry (#PCDATA)>

<!ELEMENT certificate-dns (#PCDATA)>

<!ELEMENT certificate-subject (#PCDATA)>

<!ELEMENT certificate-type (#PCDATA)>

<!ELEMENT common-name (#PCDATA)>

<!ELEMENT country-name (#PCDATA)>

<!ELEMENT crl-issuer (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject-list (crl-issuer-alternate-subject)*>

<!ELEMENT crl-issuer-detail (distinguished-name)*>

<!ELEMENT crl-load-status (ca-profile-name)*>

<!ELEMENT crl-number (#PCDATA)>

<!ELEMENT crl-revocation-date (#PCDATA)>

<!ELEMENT crl-revocation-list (revoked-cert-serial-number | crl-revocation-date)*>

<!ELEMENT crl-validity (effective-date | next-update)*>
```


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```
<!ELEMENT crl-version (#PCDATA)>

<!ELEMENT distinguished-name (organization-name | organizational-unit-name |
country-name | state-or-province-name | locality-name | common-name | email-address
 | domain-component)*>

<!ELEMENT distribution-crl (#PCDATA)>

<!ELEMENT distribution-crl-list (distribution-crl)*>

<!ELEMENT domain-component (#PCDATA)>

<!ELEMENT effective-date (#PCDATA)>

<!ELEMENT email-address (#PCDATA)>

<!ELEMENT encoding (#PCDATA)>

<!ELEMENT fingerprint (fingerprint-hash-algorithm | fingerprint-content)*>

<!ELEMENT fingerprint-content (#PCDATA)>

<!ELEMENT fingerprint-hash-algorithm (#PCDATA)>

<!ELEMENT identifier (#PCDATA)>

<!ELEMENT int-check-verification-status (#PCDATA)>

<!ELEMENT issue-info (recipient | issued-by)*>

<!ELEMENT issued-by (#PCDATA)>

<!ELEMENT issuer (distinguished-name)*>

<!ELEMENT issuer-name (distinguished-name)*>

<!ELEMENT key (#PCDATA)>

<!ELEMENT key-contents (#PCDATA)>

<!ELEMENT key-usage (#PCDATA)>

<!ELEMENT key-usage-list (key-usage)*>

<!ELEMENT load-status (#PCDATA)>

<!ELEMENT locality-name (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT next-update (#PCDATA)>

<!ELEMENT not-after (#PCDATA)>

<!ELEMENT not-before (#PCDATA)>

<!ELEMENT organization-name (#PCDATA)>

<!ELEMENT organizational-unit-name (#PCDATA)>

<!ELEMENT pki-scep (url | ca-name | ca-file | key | certificate-subject |
```

```
certificate-dns | certificate-alternate-subject | encoding | message)*>

<!ELEMENT pki-status (running)*>

<!ELEMENT pkid-status-messages (load-status)*>

<!ELEMENT pkid-x509-certificate-information (issue-info | serial-number-list |
public-key | fingerprint | public-key-contents-list | alternate-subject-list |
key-usage-list | distribution-crl-list | signature-algorithm | identifier |
validity | version | certificate-type | status | auto-re-enrollment | issuer-name
 | subject-name)*>
<!ATTLIST pkid-x509-certificate-information junos:style CDATA #IMPLIED>

<!ELEMENT pkid-x509-certificate-request-information (issue-info |
serial-number-list | public-key | fingerprint | public-key-contents-list |
alternate-subject-list | key-usage-list | signature-algorithm | identifier |
version | status)*>
<!ATTLIST pkid-x509-certificate-request-information junos:style CDATA #IMPLIED>

<!ELEMENT pkid-x509-crl-information (crl-number | crl-revocation-list |
crl-validity | crl-version | crl-issuer | identifier |
crl-issuer-alternate-subject-list)*>
<!ATTLIST pkid-x509-crl-information junos:style CDATA #IMPLIED>

<!ELEMENT public-key (public-key-algorithm | public-key-length |
public-key-verification-status)*>

<!ELEMENT public-key-algorithm (#PCDATA)>

<!ELEMENT public-key-contents-list (key-contents)*>

<!ELEMENT public-key-length (#PCDATA)>

<!ELEMENT public-key-verification-status (#PCDATA)>

<!ELEMENT recipient (#PCDATA)>

<!ELEMENT revoked-cert-serial-number (#PCDATA)>

<!ELEMENT running EMPTY>

<!ELEMENT serial-number-list (serial-number-x509)*>

<!ELEMENT serial-number-x509 (#PCDATA)>

<!ELEMENT service-set-info (service-set-name | total-cert-entries)*>

<!ELEMENT service-set-name (#PCDATA)>

<!ELEMENT signature-algorithm (#PCDATA)>

<!ELEMENT state-or-province-name (#PCDATA)>

<!ELEMENT status (#PCDATA)>

<!ELEMENT subject (distinguished-name)*>

<!ELEMENT subject-name (distinguished-name)*>

<!ELEMENT total-cert-entries (#PCDATA)>
```


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```
<!ELEMENT url (#PCDATA)>

<!ELEMENT validity (not-before | not-after)*>

<!ELEMENT verify-cert-status (cert-verification-status)*>

<!ELEMENT verify-integrity-status (int-check-verification-status)*>

<!ELEMENT version (#PCDATA)>

<!ELEMENT x509-certificate-cache-info (service-set-info | cert-flag-info |
issue-info | serial-number-list | public-key | fingerprint |
public-key-contents-list | alternate-subject-list | key-usage-list |
distribution-crl-list | signature-algorithm | identifier | validity | version |
certificate-cache-entry)*>
<!ATTLIST x509-certificate-cache-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-certificate-cache-info-list (x509-certificate-cache-info)*>

<!ELEMENT x509-certificate-info (issue-info | serial-number-list | public-key |
fingerprint | public-key-contents-list | alternate-subject-list | key-usage-list
 | distribution-crl-list | signature-algorithm | identifier | validity | version
 | auto-re-enrollment | certificate-type | status | issuer | subject)*>
<!ATTLIST x509-certificate-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-crl-information (crl-number | crl-revocation-list | crl-validity
| crl-version | crl-issuer | identifier | crl-issuer-alternate-subject-list |
crl-issuer-detail)*>
<!ATTLIST x509-crl-information junos:style CDATA #IMPLIED>

<!ELEMENT x509-pki-certificate-info-list (x509-certificate-info)*>

<!ELEMENT x509-pki-crl-information-list (x509-crl-information)*>

<!ELEMENT x509-pkid-crl-information-list (pkid-x509-crl-information)*>
```

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CHAPTER 112

DTD for PMAP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-pmap.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
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<!-- junos-pmap.dtd -->
```

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CHAPTER 113

DTD for Process Monitoring Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-pmon.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
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<!-- junos-pmon.dtd -->
```

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CHAPTER 114

DTD for PPM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ppm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ppm.dtd -->

<!ELEMENT adjacency-bfd-discriminator (#PCDATA)>

<!ELEMENT adjacency-bfd-routing-table-index (#PCDATA)>

<!ELEMENT adjacency-cfm-source-key (#PCDATA)>

<!ELEMENT adjacency-data (protocol | adjacency-holdtime | adjacency-interface-index
 | adjacency-no-absorb | adjacency-no-refresh | adjacency-do-not-age |
adjacency-hello-dropped | adjacency-distributed | adjacency-ospf-src-key |
adjacency-ospf-area-id | adjacency-ospf-transit-area-id |
adjacency-ospf-routing-table-index | adjacency-isis-level | adjacency-isis-sysid
 | adjacency-esis-type | adjacency-bfd-discriminator |
adjacency-bfd-routing-table-index | adjacency-host | redirection-data |
adjacency-ldp-source | adjacency-ldp-routing-table-index | adjacency-stp-source-key
 | adjacency-cfm-source-key | adjacency-pfe-handle | adjacency-pfe-addr)*>

<!ELEMENT adjacency-distributed EMPTY>

<!ELEMENT adjacency-do-not-age EMPTY>

<!ELEMENT adjacency-esis-type (#PCDATA)>

<!ELEMENT adjacency-hello-dropped EMPTY>

<!ELEMENT adjacency-holdtime (#PCDATA)>

<!ELEMENT adjacency-host (#PCDATA)>

<!ELEMENT adjacency-interface-index (#PCDATA)>
```

```
<!ELEMENT adjacency-isis-level (#PCDATA)>

<!ELEMENT adjacency-isis-sysid (#PCDATA)>

<!ELEMENT adjacency-ldp-routing-table-index (#PCDATA)>

<!ELEMENT adjacency-ldp-source (#PCDATA)>

<!ELEMENT adjacency-no-absorb EMPTY>

<!ELEMENT adjacency-no-refresh EMPTY>

<!ELEMENT adjacency-ospf-area-id (#PCDATA)>

<!ELEMENT adjacency-ospf-routing-table-index (#PCDATA)>

<!ELEMENT adjacency-ospf-src-key (#PCDATA)>

<!ELEMENT adjacency-ospf-transit-area-id (#PCDATA)>

<!ELEMENT adjacency-pfe-addr (#PCDATA)>

<!ELEMENT adjacency-pfe-handle (#PCDATA)>

<!ELEMENT adjacency-stp-source-key (#PCDATA)>

<!ELEMENT connection-data (protocol | logical-system-id | number-adjacencies |
number-transmissions)*>

<!ELEMENT interface-data (interface-key | protocol | interface-index |
interface-distributed | interface-pfe-handle | interface-pfe-addr)*>

<!ELEMENT interface-distributed EMPTY>

<!ELEMENT interface-index (#PCDATA)>

<!ELEMENT interface-key (#PCDATA)>

<!ELEMENT interface-pfe-addr (#PCDATA)>

<!ELEMENT interface-pfe-handle (#PCDATA)>

<!ELEMENT logical-system-id (#PCDATA)>

<!ELEMENT number-adjacencies (#PCDATA)>

<!ELEMENT number-transmissions (#PCDATA)>

<!ELEMENT object-data (protocol | object-id | object-key)*>

<!ELEMENT object-id (#PCDATA)>

<!ELEMENT object-key (#PCDATA)>

<!ELEMENT ppm-adjacencies (adjacency-data | total-adjacencies |
remote-adjacencies)*>
<!ATTLIST ppm-adjacencies junos:style CDATA #IMPLIED>

<!ELEMENT ppm-connections (connection-data | total-connections |
remote-connections)*>
<!ATTLIST ppm-connections junos:style CDATA #IMPLIED>
```


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```
<!ELEMENT ppm-interfaces (interface-data | total-interfaces | remote-interfaces)*>
<!ATTLIST ppm-interfaces junos:style CDATA #IMPLIED>

<!ELEMENT ppm-objects (object-data | total-objects | remote-objects)*>
<!ATTLIST ppm-objects junos:style CDATA #IMPLIED>

<!ELEMENT ppm-transmissions (transmission-data | total-transmissions |
remote-transmissions)*>
<!ATTLIST ppm-transmissions junos:style CDATA #IMPLIED>

<!ELEMENT ppmd-rules (rule-data | total-rules)*>
<!ATTLIST ppmd-rules junos:style CDATA #IMPLIED>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT redirection-data (redirection-type | redirection-rule-type |
redirection-rule-term-src | redirection-rule-term-port |
redirection-rule-term-action)*>

<!ELEMENT redirection-rule-term-action (#PCDATA)>

<!ELEMENT redirection-rule-term-port (#PCDATA)>

<!ELEMENT redirection-rule-term-src (#PCDATA)>

<!ELEMENT redirection-rule-type (#PCDATA)>

<!ELEMENT redirection-type (#PCDATA)>

<!ELEMENT remote-adjacencies (#PCDATA)>

<!ELEMENT remote-connections (#PCDATA)>

<!ELEMENT remote-interfaces (#PCDATA)>

<!ELEMENT remote-objects (#PCDATA)>

<!ELEMENT remote-transmissions (#PCDATA)>

<!ELEMENT rule-data (rule-key-source | rule-key-port | rule-nexthop |
rule-program)*>

<!ELEMENT rule-key-port (#PCDATA)>

<!ELEMENT rule-key-source (#PCDATA)>

<!ELEMENT rule-nexthop (#PCDATA)>

<!ELEMENT rule-program (#PCDATA)>

<!ELEMENT total-adjacencies (#PCDATA)>

<!ELEMENT total-connections (#PCDATA)>

<!ELEMENT total-interfaces (#PCDATA)>

<!ELEMENT total-objects (#PCDATA)>

<!ELEMENT total-rules (#PCDATA)>
```

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```
<!ELEMENT total-transmissions (#PCDATA)>

<!ELEMENT transmission-data (transmission-destination | protocol |
transmission-interval | transmission-host | transmission-distributed |
transmission-pfe-handle | transmission-pfe-addr)*>

<!ELEMENT transmission-destination (#PCDATA)>

<!ELEMENT transmission-distributed EMPTY>

<!ELEMENT transmission-host (#PCDATA)>

<!ELEMENT transmission-interval (#PCDATA)>

<!ELEMENT transmission-pfe-addr (#PCDATA)>

<!ELEMENT transmission-pfe-handle (#PCDATA)>
```


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CHAPTER 115

DTD for PPP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-ppp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-ppp.dtd -->

<!ELEMENT assigned-address-list (pool-address-assignment)*>

<!ELEMENT assigned-addresses (#PCDATA)>

<!ELEMENT authentication-algorithm (#PCDATA)>

<!ELEMENT authentication-protocol-name (#PCDATA)>

<!ELEMENT bcp-mac-support (#PCDATA)>

<!ELEMENT bcp-tagged-frame (#PCDATA)>

<!ELEMENT bundles-pending (#PCDATA)>

<!ELEMENT configured-addresses (#PCDATA)>

<!ELEMENT endpoint-discriminator-class (#PCDATA)>

<!ELEMENT endpoint-discriminator-identifier (#PCDATA)>

<!ELEMENT high-address (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT ipcp-address (local-address | remote-address)*>

<!ELEMENT ipcp-compression-protocol EMPTY>

<!ELEMENT ipcp-primary-dns (#PCDATA)>
```

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```
<!ELEMENT ipcp-primary-wins (#PCDATA)>

<!ELEMENT ipcp-secondary-dns (#PCDATA)>

<!ELEMENT ipcp-secondary-wins (#PCDATA)>

<!ELEMENT ipv6cp-interface-identifier (local-interface-identifier |
remote-interface-identifier)*>

<!ELEMENT keepalive-down-count (#PCDATA)>

<!ELEMENT keepalive-input-count (#PCDATA)>

<!ELEMENT keepalive-input-time (#PCDATA)>

<!ELEMENT keepalive-interval (#PCDATA)>

<!ELEMENT keepalive-output-count (#PCDATA)>

<!ELEMENT keepalive-output-time (#PCDATA)>

<!ELEMENT keepalive-up-count (#PCDATA)>

<!ELEMENT lcp-address-compression-field-compression EMPTY>

<!ELEMENT lcp-async-map EMPTY>

<!ELEMENT lcp-authentication-protocol (authentication-protocol-name |
authentication-algorithm)*>

<!ELEMENT lcp-endpoint-discriminator (endpoint-discriminator-class |
endpoint-discriminator-identifier)*>

<!ELEMENT lcp-magic-number (#PCDATA)>

<!ELEMENT lcp-mrru (#PCDATA)>

<!ELEMENT lcp-mru (#PCDATA)>

<!ELEMENT lcp-multilink-header (multilink-header-code |
multilink-header-suspendable-classes)*>

<!ELEMENT lcp-peer-mru (#PCDATA)>

<!ELEMENT lcp-protocol-field-compression EMPTY>

<!ELEMENT lcp-short-sequence EMPTY>

<!ELEMENT local-address (#PCDATA)>

<!ELEMENT local-interface-identifier (#PCDATA)>

<!ELEMENT low-address (#PCDATA)>

<!ELEMENT multilink-header-code (#PCDATA)>

<!ELEMENT multilink-header-suspendable-classes (#PCDATA)>

<!ELEMENT pool-address (#PCDATA)>

<!ELEMENT pool-address-assignment (pool-address | session-name |
```


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```
pool-address-blocked)*>

<!ELEMENT pool-address-blocked EMPTY>

<!ELEMENT pool-address-list (pool-address)*>

<!ELEMENT pool-name (#PCDATA)>

<!ELEMENT pool-range (low-address | high-address)*>

<!ELEMENT ppp-address-pool-information (pool-name | assigned-addresses |
configured-addresses | pool-range | pool-address-list | assigned-address-list)*>

<!ELEMENT ppp-auth-proto (#PCDATA)>

<!ELEMENT ppp-auth-protocol-information (ppp-state | ppp-last-started |
ppp-last-completed | ppp-auth-proto)*>
<!ATTLIST ppp-auth-protocol-information junos:style CDATA #IMPLIED>

<!ELEMENT ppp-destination-profile (pool-name)*>

<!ELEMENT ppp-interface-information (interface-name | ppp-session)*>
<!ATTLIST ppp-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT ppp-l2tp-session-keepalive-config (keepalive-interval |
keepalive-down-count | keepalive-up-count)*>

<!ELEMENT ppp-l2tp-session-keepalive-statistics (keepalive-input-count |
keepalive-output-count | keepalive-input-time | keepalive-output-time)*>

<!ELEMENT ppp-last-completed (#PCDATA)>
<!ATTLIST ppp-last-completed junos:seconds CDATA #IMPLIED>

<!ELEMENT ppp-last-started (#PCDATA)>
<!ATTLIST ppp-last-started junos:seconds CDATA #IMPLIED>

<!ELEMENT ppp-memory-statistics (ppp-memory-tag)*>

<!ELEMENT ppp-memory-tag (ppp-memory-tag-name | ppp-memory-tag-size |
ppp-memory-tag-active | ppp-memory-tag-free | ppp-memory-tag-maximum-free |
ppp-memory-tag-requests | ppp-memory-tag-failures | ppp-memory-tag-total)*>

<!ELEMENT ppp-memory-tag-active (#PCDATA)>

<!ELEMENT ppp-memory-tag-failures (#PCDATA)>

<!ELEMENT ppp-memory-tag-free (#PCDATA)>

<!ELEMENT ppp-memory-tag-maximum-free (#PCDATA)>

<!ELEMENT ppp-memory-tag-name (#PCDATA)>

<!ELEMENT ppp-memory-tag-requests (#PCDATA)>

<!ELEMENT ppp-memory-tag-size (#PCDATA)>

<!ELEMENT ppp-memory-tag-total (#PCDATA)>

<!ELEMENT ppp-negotiated-options (ipcp-address | ipcp-compression-protocol |
ipcp-primary-dns | ipcp-primary-wins | ipcp-secondary-dns | ipcp-secondary-wins
| ipv6cp-interface-identifier | bcp-mac-support | bcp-tagged-frame |
```

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```
lcp-address-compression-field-compression | lcp-async-map |
lcp-authentication-protocol | lcp-endpoint-discriminator | lcp-magic-number |
lcp-mrru | lcp-mru | lcp-peer-mru | lcp-multilink-header |
lcp-protocol-field-compression | lcp-short-sequence)*>

<!ELEMENT ppp-protocol (#PCDATA)>

<!ELEMENT ppp-session (session-name | session-type | session-phase | session-flags
 | ppp-last-started | ppp-last-completed | ppp-auth-protocol-information |
ppp-session-protocol-information)*>

<!ELEMENT ppp-session-protocol-information (ppp-state | ppp-last-started |
ppp-last-completed | ppp-protocol | ppp-destination-profile |
ppp-negotiated-options)*>
<!ATTLIST ppp-session-protocol-information junos:style CDATA #IMPLIED>

<!ELEMENT ppp-session-statistics (sessions-total | sessions-disabled |
sessions-establish | sessions-authenticate | sessions-network | bundles-pending)*>

<!ELEMENT ppp-state (#PCDATA)>

<!ELEMENT ppp-statistics-information (ppp-session-statistics |
ppp-memory-statistics | ppp-subscriber-statistics)*>
<!ATTLIST ppp-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT ppp-subscriber-memory-pool (ppp-subscriber-memory-pool-name |
ppp-subscriber-memory-pool-entry-size | ppp-subscriber-memory-pool-entries |
ppp-subscriber-memory-pool-free | ppp-subscriber-memory-pool-maximum-free |
ppp-subscriber-memory-pool-requests | ppp-subscriber-memory-pool-failures |
ppp-subscriber-memory-pool-total)*>

<!ELEMENT ppp-subscriber-memory-pool-entries (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-entry-size (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-failures (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-free (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-maximum-free (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-name (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-requests (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-pool-total (#PCDATA)>

<!ELEMENT ppp-subscriber-memory-statistics (ppp-subscriber-memory-pool)*>

<!ELEMENT ppp-subscriber-recovery-statistics (subscriber-recovery-state |
subscriber-sessions-recovery-pending-retention |
subscriber-sessions-recovery-pending-removal | subscriber-sessions-recovery-ok |
 subscriber-sessions-recovery-failed)*>

<!ELEMENT ppp-subscriber-session-statistics (subscriber-sessions-total |
subscriber-sessions-disabled | subscriber-sessions-establish |
subscriber-sessions-authenticate | subscriber-sessions-network)*>

<!ELEMENT ppp-subscriber-statistics (ppp-subscriber-session-statistics |
ppp-subscriber-recovery-statistics | ppp-subscriber-memory-statistics)*>
```


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```
<!ELEMENT ppp-subscriber-summary-information (ppp-session)*>

<!ELEMENT ppp-subscriber-summary-noheader-information (ppp-session)*>

<!ELEMENT ppp-summary-information (ppp-session)*>

<!ELEMENT remote-address (#PCDATA)>

<!ELEMENT remote-interface-identifier (#PCDATA)>

<!ELEMENT session-always-up EMPTY>

<!ELEMENT session-bundled EMPTY>

<!ELEMENT session-flags (session-bundled | session-ncp-only | session-always-up
| session-tcc | session-looped | session-monitored)*>

<!ELEMENT session-looped EMPTY>

<!ELEMENT session-monitored EMPTY>

<!ELEMENT session-name (#PCDATA)>

<!ELEMENT session-ncp-only EMPTY>

<!ELEMENT session-phase (#PCDATA)>

<!ELEMENT session-tcc EMPTY>

<!ELEMENT session-type (#PCDATA)>

<!ELEMENT sessions-authenticate (#PCDATA)>

<!ELEMENT sessions-disabled (#PCDATA)>

<!ELEMENT sessions-establish (#PCDATA)>

<!ELEMENT sessions-network (#PCDATA)>

<!ELEMENT sessions-total (#PCDATA)>

<!ELEMENT subscriber-recovery-state (#PCDATA)>

<!ELEMENT subscriber-sessions-authenticate (#PCDATA)>

<!ELEMENT subscriber-sessions-disabled (#PCDATA)>

<!ELEMENT subscriber-sessions-establish (#PCDATA)>

<!ELEMENT subscriber-sessions-network (#PCDATA)>

<!ELEMENT subscriber-sessions-recovery-failed (#PCDATA)>

<!ELEMENT subscriber-sessions-recovery-ok (#PCDATA)>

<!ELEMENT subscriber-sessions-recovery-pending-removal (#PCDATA)>

<!ELEMENT subscriber-sessions-recovery-pending-retention (#PCDATA)>

<!ELEMENT subscriber-sessions-total (#PCDATA)>
```

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CHAPTER 116

DTD for UDP PPPoED Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-pppoed.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-pppoed.dtd -->

<!ELEMENT ac-name (#PCDATA)>

<!ELEMENT ac-name-config (#PCDATA)>

<!ELEMENT ac-name-session (#PCDATA)>

<!ELEMENT acsystem-err-received (#PCDATA)>

<!ELEMENT acsystem-err-sent (#PCDATA)>

<!ELEMENT active-sessions (#PCDATA)>

<!ELEMENT agent-circuit-id (#PCDATA)>

<!ELEMENT agent-remote-id (#PCDATA)>

<!ELEMENT auto-reconnect (#PCDATA)>

<!ELEMENT client-mac (#PCDATA)>

<!ELEMENT current-bandwidth (#PCDATA)>

<!ELEMENT current-time (#PCDATA)>

<!ELEMENT duplicate-protection (#PCDATA)>

<!ELEMENT dynamic-interface-bandwidth (#PCDATA)>

<!ELEMENT dynamic-profile (#PCDATA)>
```

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```
<!ELEMENT elapsed-time (#PCDATA)>
<!ELEMENT generic-err-received (#PCDATA)>
<!ELEMENT generic-err-sent (#PCDATA)>
<!ELEMENT idle-timeout (#PCDATA)>
<!ELEMENT ifl-type (#PCDATA)>
<!ELEMENT interface-index (#PCDATA)>
<!ELEMENT interface-name (#PCDATA)>
<!ELEMENT latency (#PCDATA)>
<!ELEMENT lockout-time-max (#PCDATA)>
<!ELEMENT lockout-time-min (#PCDATA)>
<!ELEMENT malformed-pkt-received (#PCDATA)>
<!ELEMENT max-ac-tmo (#PCDATA)>
<!ELEMENT max-bandwidth (#PCDATA)>
<!ELEMENT max-resend-tmo (#PCDATA)>
<!ELEMENT max-sessions (#PCDATA)>
<!ELEMENT max-sessions-vsa-ignore (#PCDATA)>
<!ELEMENT next-time (#PCDATA)>
<!ELEMENT padc-received (#PCDATA)>
<!ELEMENT padc-sent (#PCDATA)>
<!ELEMENT padg-credits (#PCDATA)>
<!ELEMENT padg-received (#PCDATA)>
<!ELEMENT padg-sent (#PCDATA)>
<!ELEMENT padi-received (#PCDATA)>
<!ELEMENT padi-recv-err (#PCDATA)>
<!ELEMENT padi-resend-tmo (#PCDATA)>
<!ELEMENT padi-sent (#PCDATA)>
<!ELEMENT padi-tmo (#PCDATA)>
<!ELEMENT padm-hurl (#PCDATA)>
<!ELEMENT padm-motm (#PCDATA)>
<!ELEMENT padm-received (#PCDATA)>
<!ELEMENT padm-sent (#PCDATA)>
```


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```
<!ELEMENT padn-received (#PCDATA)>

<!ELEMENT padn-sent (#PCDATA)>

<!ELEMENT pado-received (#PCDATA)>

<!ELEMENT pado-recv-err (#PCDATA)>

<!ELEMENT pado-sent (#PCDATA)>

<!ELEMENT pado-tmo (#PCDATA)>

<!ELEMENT padq (current-bandwidth | max-bandwidth | quality | resources |
latency)*>

<!ELEMENT padq-received (#PCDATA)>

<!ELEMENT padq-sent (#PCDATA)>

<!ELEMENT padr-received (#PCDATA)>

<!ELEMENT padr-recv-err (#PCDATA)>

<!ELEMENT padr-resend-tmo (#PCDATA)>

<!ELEMENT padr-sent (#PCDATA)>

<!ELEMENT padr-tmo (#PCDATA)>

<!ELEMENT pads-received (#PCDATA)>

<!ELEMENT pads-recv-err (#PCDATA)>

<!ELEMENT pads-sent (#PCDATA)>

<!ELEMENT padt-received (#PCDATA)>

<!ELEMENT padt-sent (#PCDATA)>

<!ELEMENT pppoe-aci-ari-entry (agent-circuit-id | agent-remote-id | service-action
 | dynamic-profile | routing-instance | static-interface)*>

<!ELEMENT pppoe-counters (padi-sent | padi-received | pado-sent | pado-received
| padr-sent | padr-received | pads-sent | pads-received | padt-sent | padt-received
 | padm-sent | padm-received | padn-sent | padn-received | padg-sent |
padg-received | padc-sent | padc-received | padq-sent | padq-received |
servname-err-sent | servname-err-received | acsystem-err-sent |
acsystem-err-received | generic-err-sent | generic-err-received |
malformed-pkt-received | unknown-pkt-received | padi-tmo | pado-tmo | padr-tmo |
 padi-recv-err | pado-recv-err | padr-recv-err | pads-recv-err)*>

<!ELEMENT pppoe-credit-scale-factor (#PCDATA)>

<!ELEMENT pppoe-credits (#PCDATA)>

<!ELEMENT pppoe-interface (interface-name | interface-index |
underlying-interface-name | underlying-interface-index | state | ifl-type |
session-id | ac-name-config | ac-name-session | service-name | remote-mac |
auto-reconnect | idle-timeout | session-uptime | dynamic-profile | pppoe-credits
 | pppoe-credit-scale-factor | dynamic-interface-bandwidth | agent-circuit-id |
```

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```
agent-remote-id | padm-motm | padm-hurl | padg-credits)*>

<!ELEMENT pppoe-interface-information (pppoe-interface)*>
<!ATTLIST pppoe-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT pppoe-lockout (lockout-time-min | lockout-time-max |
total-clients-in-lockout | total-clients-in-grace-period | client-mac |
current-time | elapsed-time | next-time)*>

<!ELEMENT pppoe-oper-states (state | dynamic-profile | max-sessions |
max-sessions-vsa-ignore | active-sessions | ac-name | duplicate-protection |
service-name-table)*>

<!ELEMENT pppoe-padq-received (padq)*>

<!ELEMENT pppoe-service-name (service-name | service-action | dynamic-profile |
routing-instance | max-sessions | active-sessions | pppoe-aci-ari-entry)*>

<!ELEMENT pppoe-service-name-table-information (service-name-table |
pppoe-service-name)*>

<!ELEMENT pppoe-statistics (active-sessions | pppoe-counters)*>

<!ELEMENT pppoe-statistics-information (pppoe-statistics)*>

<!ELEMENT pppoe-underlying-interface (underlying-interface-name |
underlying-interface-index | state | dynamic-profile | max-sessions |
max-sessions-vsa-ignore | active-sessions | ac-name | service-name-table |
duplicate-protection | short-cycle-protection)*>

<!ELEMENT pppoe-underlying-interface-information (pppoe-underlying-interface)*>
<!ATTLIST pppoe-underlying-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT pppoe-version (max-sessions | padi-resend-tmo | padr-resend-tmo |
max-resend-tmo | max-ac-tmo)*>

<!ELEMENT quality (#PCDATA)>

<!ELEMENT remote-mac (#PCDATA)>

<!ELEMENT resources (#PCDATA)>

<!ELEMENT routing-instance (#PCDATA)>

<!ELEMENT service-action (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT service-name-table (#PCDATA)>

<!ELEMENT servname-err-received (#PCDATA)>

<!ELEMENT servname-err-sent (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-uptime (#PCDATA)>

<!ELEMENT short-cycle-protection (#PCDATA)>

<!ELEMENT state (#PCDATA)>
```


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```
<!ELEMENT static-interface (#PCDATA)>

<!ELEMENT total-clients-in-grace-period (#PCDATA)>

<!ELEMENT total-clients-in-lockout (#PCDATA)>

<!ELEMENT underlying-interface-index (#PCDATA)>

<!ELEMENT underlying-interface-name (#PCDATA)>

<!ELEMENT unknown-pkt-received (#PCDATA)>
```

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CHAPTER 117

DTD for Probe Tests Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-probe-tests.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-probe-tests.dtd -->

<!ELEMENT date-determined (#PCDATA)>
<!ATTLIST date-determined junos:seconds CDATA #IMPLIED>

<!ELEMENT hop (ttl-value | percent-loss | icmp-extension | last-host-name |
last-ip-address | probe-result)*>

<!ELEMENT host-name (#PCDATA)>

<!ELEMENT icmp-code (icmp-code-none | icmp-unreach-net | icmp-unreach-host |
icmp-unreach-protocol | icmp-unreach-port | icmp-unreach-needfrag |
icmp-unreach-srcfail | icmp-unreach-net-unknown | icmp-unreach-host-unknown |
icmp-unreach-isolated | icmp-unreach-net-prohib | icmp-unreach-host-prohib |
icmp-unreach-tosnet | icmp-unreach-toshost | icmp-unreach-filter-prohib |
icmp-unreach-host-precedence | icmp-unreach-precedence-cutoff | icmp-redirect-net
 | icmp-redirect-host | icmp-redirect-tosnet | icmp-redirect-toshost |
icmp-timxceed-intrans | icmp-timxceed-reass | icmp-paramprob-optabsent |
icmp6-unreach-noroute | icmp6-unreach-admin | icmp6-unreach-beyond-scope |
icmp6-unreach-address | icmp6-unreach-port | icmp6-time-exceed-transit |
icmp6-time-exceed-reassembly | icmp6-parameter-problem-header |
icmp6-parameter-problem-nextheader | icmp6-parameter-problem-option |
icmp6-ni-subject-ipv6 | icmp6-ni-subject-fqdn | icmp6-ni-subject-ipv4 |
icmp6-ni-success | icmp6-ni-refused | icmp6-ni-unknown)*>
<!ATTLIST icmp-code integer-code-value CDATA #IMPLIED>

<!ELEMENT icmp-code-none EMPTY>

<!ELEMENT icmp-echo EMPTY>

<!ELEMENT icmp-echoreply EMPTY>
```

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```
<!ELEMENT icmp-extension (#PCDATA)>

<!ELEMENT icmp-ireq EMPTY>

<!ELEMENT icmp-ireqreply EMPTY>

<!ELEMENT icmp-maskreply EMPTY>

<!ELEMENT icmp-maskreq EMPTY>

<!ELEMENT icmp-paramprob EMPTY>

<!ELEMENT icmp-paramprob-optabsent EMPTY>

<!ELEMENT icmp-redirect EMPTY>

<!ELEMENT icmp-redirect-host EMPTY>

<!ELEMENT icmp-redirect-net EMPTY>

<!ELEMENT icmp-redirect-toshost EMPTY>

<!ELEMENT icmp-redirect-tosnet EMPTY>

<!ELEMENT icmp-routeradvert EMPTY>

<!ELEMENT icmp-routersolicit EMPTY>

<!ELEMENT icmp-sourcequench EMPTY>

<!ELEMENT icmp-timxceed EMPTY>

<!ELEMENT icmp-timxceed-intrans EMPTY>

<!ELEMENT icmp-timxceed-reass EMPTY>

<!ELEMENT icmp-tstamp EMPTY>

<!ELEMENT icmp-tstampreply EMPTY>

<!ELEMENT icmp-type (icmp-type-none | icmp-echoreply | icmp-unreach |
icmp-sourcequench | icmp-redirect | icmp-echo | icmp-routeradvert |
icmp-routersolicit | icmp-timxceed | icmp-paramprob | icmp-tstamp |
icmp-tstampreply | icmp-ireq | icmp-ireqreply | icmp-maskreq | icmp-maskreply |
icmp6-unreach | icmp6-packet-too-big | icmp6-time-exceeded |
icmp6-parameter-problem | icmp6-echo-request | icmp6-echo-reply |
icmp6-membership-query | icmp6-membership-report | icmp6-membership-reduction |
icmp6-router-solicit | icmp6-router-advert | icmp6-neighbor-solicit |
icmp6-neighbor-advert | icmp6-redirect | icmp6-router-renumbering | icmp6-ni-query
 | icmp6-ni-reply)*>
<!ATTLIST icmp-type integer-type-value CDATA #IMPLIED>

<!ELEMENT icmp-type-none EMPTY>

<!ELEMENT icmp-unreach EMPTY>

<!ELEMENT icmp-unreach-filter-prohib EMPTY>

<!ELEMENT icmp-unreach-host EMPTY>

<!ELEMENT icmp-unreach-host-precedence EMPTY>
```


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```
<!ELEMENT icmp-unreach-host-prohib EMPTY>

<!ELEMENT icmp-unreach-host-unknown EMPTY>

<!ELEMENT icmp-unreach-isolated EMPTY>

<!ELEMENT icmp-unreach-needfrag EMPTY>

<!ELEMENT icmp-unreach-net EMPTY>

<!ELEMENT icmp-unreach-net-prohib EMPTY>

<!ELEMENT icmp-unreach-net-unknown EMPTY>

<!ELEMENT icmp-unreach-port EMPTY>

<!ELEMENT icmp-unreach-precedence-cutoff EMPTY>

<!ELEMENT icmp-unreach-protocol EMPTY>

<!ELEMENT icmp-unreach-srcfail EMPTY>

<!ELEMENT icmp-unreach-toshost EMPTY>

<!ELEMENT icmp-unreach-tosnet EMPTY>

<!ELEMENT icmp6-echo-reply EMPTY>

<!ELEMENT icmp6-echo-request EMPTY>

<!ELEMENT icmp6-membership-query EMPTY>

<!ELEMENT icmp6-membership-reduction EMPTY>

<!ELEMENT icmp6-membership-report EMPTY>

<!ELEMENT icmp6-neighbor-advert EMPTY>

<!ELEMENT icmp6-neighbor-solicit EMPTY>

<!ELEMENT icmp6-ni-query EMPTY>

<!ELEMENT icmp6-ni-refused EMPTY>

<!ELEMENT icmp6-ni-reply EMPTY>

<!ELEMENT icmp6-ni-subject-fqdn EMPTY>

<!ELEMENT icmp6-ni-subject-ipv4 EMPTY>

<!ELEMENT icmp6-ni-subject-ipv6 EMPTY>

<!ELEMENT icmp6-ni-success EMPTY>

<!ELEMENT icmp6-ni-unknown EMPTY>

<!ELEMENT icmp6-packet-too-big EMPTY>

<!ELEMENT icmp6-parameter-problem EMPTY>
```

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```
<!ELEMENT icmp6-parameter-problem-header EMPTY>
<!ELEMENT icmp6-parameter-problem-nextheader EMPTY>
<!ELEMENT icmp6-parameter-problem-option EMPTY>
<!ELEMENT icmp6-redirect EMPTY>
<!ELEMENT icmp6-router-advert EMPTY>
<!ELEMENT icmp6-router-renumbering EMPTY>
<!ELEMENT icmp6-router-solicit EMPTY>
<!ELEMENT icmp6-time-exceed-reassembly EMPTY>
<!ELEMENT icmp6-time-exceed-transit EMPTY>
<!ELEMENT icmp6-time-exceeded EMPTY>
<!ELEMENT icmp6-unreach EMPTY>
<!ELEMENT icmp6-unreach-address EMPTY>
<!ELEMENT icmp6-unreach-admin EMPTY>
<!ELEMENT icmp6-unreach-beyond-scope EMPTY>
<!ELEMENT icmp6-unreach-noroute EMPTY>
<!ELEMENT icmp6-unreach-port EMPTY>
<!ELEMENT ingress-interface (#PCDATA)>
<!ELEMENT ip-address (#PCDATA)>
<!ELEMENT ip-options (record-route | loose-source-route | strict-source-route)*>
<!ELEMENT last-host-name (#PCDATA)>
<!ELEMENT last-ip-address (#PCDATA)>
<!ELEMENT loose-source-route (record-route-host)*>
<!ELEMENT lsping-error-packets (#PCDATA)>
<!ELEMENT lsping-failure (#PCDATA)>
<!ELEMENT lsping-interface-index (#PCDATA)>
<!ELEMENT lsping-ip-address (#PCDATA)>
<!ELEMENT lsping-label (#PCDATA)>
<!ELEMENT lsping-local-transmit-time (#PCDATA)>
<!ELEMENT lsping-local-transmit-time-us (#PCDATA)>
<!ELEMENT lsping-mtu (#PCDATA)>
<!ELEMENT lsping-packet-loss (#PCDATA)>
```


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```
<!ELEMENT lsping-packet-size (#PCDATA)>

<!ELEMENT lsping-packets-received (#PCDATA)>

<!ELEMENT lsping-packets-transmitted (#PCDATA)>

<!ELEMENT lsping-probe-reply (lsping-sequence-number | lsping-return-code |
lsping-ip-address | lsping-round-trip-time | lsping-local-transmit-time |
lsping-local-transmit-time-us | lsping-remote-receive-time |
lsping-remote-receive-time-us)*>

<!ELEMENT lsping-probe-request (lsping-sequence-number | lsping-interface-index
| lsping-label | lsping-packet-size)*>

<!ELEMENT lsping-remote-receive-time (#PCDATA)>

<!ELEMENT lsping-remote-receive-time-us (#PCDATA)>

<!ELEMENT lsping-results (lsping-route-comment | lsping-probe-request |
lsping-probe-reply | lsping-results-summary | vpls-ping-results-summary |
lsping-sweep-summary | lsping-success | lsping-failure)*>

<!ELEMENT lsping-results-summary (lsping-packets-transmitted |
lsping-packets-received | lsping-packet-loss | lsping-error-packets)*>

<!ELEMENT lsping-return-code (#PCDATA)>

<!ELEMENT lsping-round-trip-time (#PCDATA)>

<!ELEMENT lsping-route-comment (#PCDATA)>

<!ELEMENT lsping-sequence-number (#PCDATA)>

<!ELEMENT lsping-success EMPTY>

<!ELEMENT lsping-sweep-summary (lsping-mtu)*>

<!ELEMENT max-hop-index (#PCDATA)>

<!ELEMENT packet-loss (#PCDATA)>

<!ELEMENT packet-size (#PCDATA)>

<!ELEMENT percent-loss (#PCDATA)>

<!ELEMENT ping-failure (#PCDATA)>

<!ELEMENT ping-results (target-host | source | target-ip | packet-size |
probe-result | probe-results-summary | ping-success | ping-failure)*>

<!ELEMENT ping-success EMPTY>

<!ELEMENT probe-duplicate EMPTY>

<!ELEMENT probe-failure (#PCDATA)>

<!ELEMENT probe-index (#PCDATA)>

<!ELEMENT probe-reached EMPTY>
```

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```
<!ELEMENT probe-result (date-determined | probe-index | sequence-number |
time-to-live | response-size | rtt | ingress-interface | icmp-type | icmp-code |
 ip-address | host-name | ip-options | probe-success | probe-duplicate |
probe-reached | probe-failure)*>

<!ELEMENT probe-results-summary (probes-sent | responses-received | packet-loss
| response-duplicates | response-unexpected-sequence | rtt-minimum | rtt-average
 | rtt-maximum | rtt-stddev)*>

<!ELEMENT probe-success EMPTY>

<!ELEMENT probes-sent (#PCDATA)>

<!ELEMENT record-route (record-route-host)*>

<!ELEMENT record-route-host (ip-address | host-name)*>

<!ELEMENT response-duplicates (#PCDATA)>

<!ELEMENT response-size (#PCDATA)>

<!ELEMENT response-unexpected-sequence (#PCDATA)>

<!ELEMENT responses-received (#PCDATA)>

<!ELEMENT rtt (#PCDATA)>

<!ELEMENT rtt-average (#PCDATA)>

<!ELEMENT rtt-maximum (#PCDATA)>

<!ELEMENT rtt-minimum (#PCDATA)>

<!ELEMENT rtt-stddev (#PCDATA)>

<!ELEMENT sequence-number (#PCDATA)>

<!ELEMENT source (#PCDATA)>

<!ELEMENT strict-source-route (record-route-host)*>

<!ELEMENT target-host (#PCDATA)>

<!ELEMENT target-ip (#PCDATA)>

<!ELEMENT time-to-live (#PCDATA)>

<!ELEMENT traceroute-failure (#PCDATA)>

<!ELEMENT traceroute-results (target-host | source | target-ip | packet-size |
max-hop-index | hop | traceroute-success | traceroute-failure)*>

<!ELEMENT traceroute-success EMPTY>

<!ELEMENT ttl-value (#PCDATA)>

<!ELEMENT vpls-ping-results-summary (lsping-packets-transmitted |
lsping-packets-received | lsping-packet-loss | lsping-error-packets)*>
```


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CHAPTER 118

DTD for System Process Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-process.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-process.dtd -->

<!ELEMENT address (#PCDATA)>

<!ELEMENT advisory-lock EMPTY>

<!ELEMENT alias (#PCDATA)>

<!ELEMENT argument (#PCDATA)>

<!ELEMENT argument-index (#PCDATA)>

<!ELEMENT block-input-operation (#PCDATA)>

<!ELEMENT block-output-operation (#PCDATA)>

<!ELEMENT command (#PCDATA)>

<!ELEMENT command-line-argument (argument-index | argument)*>

<!ELEMENT command-line-argument-list (command-line-argument)*>

<!ELEMENT controlling-terminal EMPTY>

<!ELEMENT cpu-idle-time (#PCDATA)>

<!ELEMENT cpu-idle-time-percent (#PCDATA)>

<!ELEMENT cpu-interrupts-time (#PCDATA)>

<!ELEMENT cpu-interrupts-time-percent (#PCDATA)>
```

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```
<!ELEMENT cpu-load (#PCDATA)>

<!ELEMENT cpu-nice-time (#PCDATA)>

<!ELEMENT cpu-nice-time-percent (#PCDATA)>

<!ELEMENT cpu-system-time (#PCDATA)>

<!ELEMENT cpu-system-time-percent (#PCDATA)>

<!ELEMENT cpu-total-time (#PCDATA)>

<!ELEMENT cpu-user-time (#PCDATA)>

<!ELEMENT cpu-user-time-percent (#PCDATA)>

<!ELEMENT data-size (#PCDATA)>
<!ATTLIST data-size junos:pages CDATA #IMPLIED>

<!ELEMENT debug-trace EMPTY>

<!ELEMENT debug-wait EMPTY>

<!ELEMENT exec EMPTY>

<!ELEMENT exiting EMPTY>

<!ELEMENT external-identifier (#PCDATA)>

<!ELEMENT in-memory EMPTY>

<!ELEMENT interruptible EMPTY>

<!ELEMENT involuntary-context-switch (#PCDATA)>

<!ELEMENT load-average-fifteen-minute (#PCDATA)>

<!ELEMENT load-average-five-minute (#PCDATA)>

<!ELEMENT load-average-one-minute (#PCDATA)>

<!ELEMENT login-id (#PCDATA)>

<!ELEMENT maximum-resident-set (#PCDATA)>

<!ELEMENT memory-load (#PCDATA)>

<!ELEMENT memory-page-size (#PCDATA)>

<!ELEMENT memory-statistics (memory-load | virtual-size | resident-set-size |
resident-set-before-swap | text-size | data-size | stack-size)*>

<!ELEMENT messages-received (#PCDATA)>

<!ELEMENT messages-sent (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT nice (#PCDATA)>

<!ELEMENT page-faults (#PCDATA)>
```


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```
<!ELEMENT page-reclaims (#PCDATA)>

<!ELEMENT parent-process-id (#PCDATA)>

<!ELEMENT physical-memory-pages (#PCDATA)>

<!ELEMENT primary-instance EMPTY>

<!ELEMENT priority (#PCDATA)>

<!ELEMENT process (process-id | name | alias | external-identifier |
primary-instance | login-id | start-time | parent-process-id | process-group-id
| command | command-line-argument-list | terminal-device | priority | nice |
process-status | process-flags | sleep-information | resource-usage |
memory-statistics)*>

<!ELEMENT process-flags (interruptible | advisory-lock | controlling-terminal |
in-memory | wait-child | profiling | select | set-id-privileges | system-process
 | timing-out | debug-trace | debug-wait | exiting | exec)*>

<!ELEMENT process-group-id (#PCDATA)>

<!ELEMENT process-id (#PCDATA)>

<!ELEMENT process-information (scale-information | process | system-information)*>

<!ELEMENT process-run (#PCDATA)>

<!ELEMENT process-sleep (#PCDATA)>

<!ELEMENT process-start (#PCDATA)>

<!ELEMENT process-status (#PCDATA)>

<!ELEMENT process-stop (#PCDATA)>

<!ELEMENT process-total (#PCDATA)>

<!ELEMENT process-zombie (#PCDATA)>

<!ELEMENT profiling EMPTY>

<!ELEMENT reason (#PCDATA)>

<!ELEMENT resident-set-before-swap (#PCDATA)>
<!ATTLIST resident-set-before-swap junos:pages CDATA #IMPLIED>

<!ELEMENT resident-set-size (#PCDATA)>
<!ATTLIST resident-set-size junos:pages CDATA #IMPLIED>

<!ELEMENT resource-usage (cpu-load | user-time | system-time | maximum-resident-set
 | page-reclaims | page-faults | swaps | block-input-operation |
block-output-operation | messages-sent | messages-received | signals |
voluntary-context-switch | involuntary-context-switch)*>

<!ELEMENT scale-information (memory-page-size | physical-memory-pages)*>

<!ELEMENT select EMPTY>

<!ELEMENT set-id-privileges EMPTY>
```

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```
<!ELEMENT signals (#PCDATA)>

<!ELEMENT sleep-information (reason | address)*>

<!ELEMENT stack-size (#PCDATA)>
<!ATTLIST stack-size junos:pages CDATA #IMPLIED>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT swaps (#PCDATA)>

<!ELEMENT system-boot-device (#PCDATA)>

<!ELEMENT system-boot-next-device (#PCDATA)>

<!ELEMENT system-cpu-states (cpu-total-time | cpu-user-time | cpu-user-time-percent
 | cpu-nice-time | cpu-nice-time-percent | cpu-system-time |
cpu-system-time-percent | cpu-interrupts-time | cpu-interrupts-time-percent |
cpu-idle-time | cpu-idle-time-percent)*>

<!ELEMENT system-hardware-cpu-architecture (#PCDATA)>

<!ELEMENT system-hardware-cpu-count (#PCDATA)>

<!ELEMENT system-hardware-cpu-model (#PCDATA)>

<!ELEMENT system-hardware-page-available (#PCDATA)>

<!ELEMENT system-hardware-page-size (#PCDATA)>

<!ELEMENT system-hardware-physical-memory (#PCDATA)>

<!ELEMENT system-hardware-routing-engine-model (#PCDATA)>

<!ELEMENT system-hardware-routing-engine-name (#PCDATA)>

<!ELEMENT system-hardware-routing-engine-other-alive EMPTY>

<!ELEMENT system-hardware-routing-engine-other-present EMPTY>

<!ELEMENT system-hardware-routing-engine-serial-number (#PCDATA)>

<!ELEMENT system-hardware-user-memory (#PCDATA)>

<!ELEMENT system-information (system-hardware-cpu-architecture |
system-hardware-cpu-model | system-hardware-cpu-count | system-boot-device |
system-boot-next-device | system-hardware-physical-memory |
system-hardware-user-memory | system-hardware-page-size |
system-virtual-memory-page-size | system-hardware-page-available |
system-hardware-routing-engine-name | system-hardware-routing-engine-model |
system-hardware-routing-engine-serial-number |
system-hardware-routing-engine-other-present |
system-hardware-routing-engine-other-alive | system-virtual-memory-swap-enabled
| system-virtual-memory-context-switches | system-virtual-memory-trap |
system-virtual-memory-syscall | system-virtual-memory-hard-interrupts |
system-virtual-memory-soft-interrupts | system-virtual-memory-faults |
system-virtual-memory-copy-on-write-faults |
system-virtual-memory-copy-on-write-optimized | system-virtual-memory-zeroed-pages
 | system-virtual-memory-zeroed-pages-optimized | system-virtual-memory-swapin |
```


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```
 system-virtual-memory-swapout | system-virtual-memory-swapped-in-pages |
system-virtual-memory-swapped-out-pages | system-virtual-memory-reactivated-pages
 | system-virtual-memory-vnode-in | system-virtual-memory-vnode-out |
system-virtual-memory-vnode-page-ins | system-virtual-memory-vnode-page-outs |
system-virtual-memory-pager-wakes | system-virtual-memory-pager-scans |
system-virtual-memory-page-count | system-virtual-memory-free-reserved |
system-virtual-memory-free-minimum | system-virtual-memory-free-pages |
system-virtual-memory-wired-pages | system-virtual-memory-active-pages |
system-virtual-memory-cache-pages | system-virtual-memory-cache-pages-minimum |
system-virtual-memory-cache-pages-maximum | system-virtual-memory-load-averages
| system-last-pid | system-process-counts | system-cpu-states)*>

<!ELEMENT system-last-pid (#PCDATA)>

<!ELEMENT system-process EMPTY>

<!ELEMENT system-process-counts (process-total | process-run | process-sleep |
process-start | process-stop | process-zombie)*>

<!ELEMENT system-time (#PCDATA)>
<!ATTLIST system-time junos:seconds CDATA #IMPLIED>
<!ATTLIST system-time junos:microseconds CDATA #IMPLIED>

<!ELEMENT system-virtual-memory-active-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-cache-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-cache-pages-maximum (#PCDATA)>

<!ELEMENT system-virtual-memory-cache-pages-minimum (#PCDATA)>

<!ELEMENT system-virtual-memory-context-switches (#PCDATA)>

<!ELEMENT system-virtual-memory-copy-on-write-faults (#PCDATA)>

<!ELEMENT system-virtual-memory-copy-on-write-optimized (#PCDATA)>

<!ELEMENT system-virtual-memory-faults (#PCDATA)>

<!ELEMENT system-virtual-memory-free-minimum (#PCDATA)>

<!ELEMENT system-virtual-memory-free-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-free-reserved (#PCDATA)>

<!ELEMENT system-virtual-memory-hard-interrupts (#PCDATA)>

<!ELEMENT system-virtual-memory-load-averages (load-average-one-minute |
load-average-five-minute | load-average-fifteen-minute)*>

<!ELEMENT system-virtual-memory-page-count (#PCDATA)>

<!ELEMENT system-virtual-memory-page-size (#PCDATA)>

<!ELEMENT system-virtual-memory-pager-scans (#PCDATA)>

<!ELEMENT system-virtual-memory-pager-wakes (#PCDATA)>

<!ELEMENT system-virtual-memory-reactivated-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-soft-interrupts (#PCDATA)>
```

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```
<!ELEMENT system-virtual-memory-swap-enabled EMPTY>

<!ELEMENT system-virtual-memory-swapin (#PCDATA)>

<!ELEMENT system-virtual-memory-swapout (#PCDATA)>

<!ELEMENT system-virtual-memory-swapped-in-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-swapped-out-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-syscall (#PCDATA)>

<!ELEMENT system-virtual-memory-trap (#PCDATA)>

<!ELEMENT system-virtual-memory-vnode-in (#PCDATA)>

<!ELEMENT system-virtual-memory-vnode-out (#PCDATA)>

<!ELEMENT system-virtual-memory-vnode-page-ins (#PCDATA)>

<!ELEMENT system-virtual-memory-vnode-page-outs (#PCDATA)>

<!ELEMENT system-virtual-memory-wired-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-zeroed-pages (#PCDATA)>

<!ELEMENT system-virtual-memory-zeroed-pages-optimized (#PCDATA)>

<!ELEMENT terminal-device (#PCDATA)>

<!ELEMENT text-size (#PCDATA)>
<!ATTLIST text-size junos:pages CDATA #IMPLIED>

<!ELEMENT timing-out EMPTY>

<!ELEMENT user-time (#PCDATA)>
<!ATTLIST user-time junos:seconds CDATA #IMPLIED>
<!ATTLIST user-time junos:microseconds CDATA #IMPLIED>

<!ELEMENT virtual-size (#PCDATA)>

<!ELEMENT voluntary-context-switch (#PCDATA)>

<!ELEMENT wait-child EMPTY>
```


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CHAPTER 119

DTD for Product Metadata Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-productmetadata.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-productmetadata.dtd -->

<!ELEMENT defaults (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT factory (#PCDATA)>

<!ELEMENT flag (#PCDATA)>

<!ELEMENT max-chassis (#PCDATA)>

<!ELEMENT max-fpc-per-chassis (#PCDATA)>

<!ELEMENT max-fpc-per-router (#PCDATA)>

<!ELEMENT max-fwd-classes (#PCDATA)>

<!ELEMENT max-pem-per-chassis (#PCDATA)>

<!ELEMENT max-pfe-per-slot (#PCDATA)>

<!ELEMENT max-pics-per-slot (#PCDATA)>

<!ELEMENT max-re (#PCDATA)>

<!ELEMENT max-sfm (#PCDATA)>

<!ELEMENT max-sib-per-chassis (#PCDATA)>

<!ELEMENT max-spmb-per-chassis (#PCDATA)>
```

```
<!ELEMENT model (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT product (model | product-number | series | product-line | name |
description | flag | max-fpc-per-router | max-fpc-per-chassis | max-pics-per-slot
 | max-sfm | max-pfe-per-slot | max-re | max-chassis | max-spmb-per-chassis |
max-sib-per-chassis | max-pem-per-chassis | max-fwd-classes | defaults | factory)*>

<!ELEMENT product-line (#PCDATA)>

<!ELEMENT product-metadata-information (product)*>

<!ELEMENT product-number (#PCDATA)>

<!ELEMENT series (#PCDATA)>
```


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CHAPTER 120

DTD for R2CPD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-r2cpd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-r2cpd.dtd -->

<!ELEMENT below-threshold (#PCDATA)>

<!ELEMENT current-bandwidth (#PCDATA)>

<!ELEMENT effective-bandwidth (#PCDATA)>

<!ELEMENT heartbeat-err (#PCDATA)>

<!ELEMENT heartbeat-recv (#PCDATA)>

<!ELEMENT heartbeat-sent (#PCDATA)>

<!ELEMENT heartbeat-tmo (#PCDATA)>

<!ELEMENT iflctl-name (#PCDATA)>

<!ELEMENT ifldata-name (#PCDATA)>

<!ELEMENT items-cleared (#PCDATA)>

<!ELEMENT last-change (#PCDATA)>

<!ELEMENT last-received (#PCDATA)>

<!ELEMENT latency (#PCDATA)>

<!ELEMENT mac-address (#PCDATA)>

<!ELEMENT max-bandwidth (#PCDATA)>
```

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```
<!ELEMENT mim-err (#PCDATA)>

<!ELEMENT mim-recv (#PCDATA)>

<!ELEMENT node-client-address (#PCDATA)>

<!ELEMENT node-client-port (#PCDATA)>

<!ELEMENT node-count (#PCDATA)>

<!ELEMENT node-hbinterval (#PCDATA)>

<!ELEMENT node-hbtime (#PCDATA)>

<!ELEMENT node-name (#PCDATA)>

<!ELEMENT node-sessions (#PCDATA)>

<!ELEMENT node-status (#PCDATA)>

<!ELEMENT node-uptime (#PCDATA)>

<!ELEMENT nterm-ack-err (#PCDATA)>

<!ELEMENT nterm-ack-recv (#PCDATA)>

<!ELEMENT nterm-ack-sent (#PCDATA)>

<!ELEMENT nterm-err (#PCDATA)>

<!ELEMENT nterm-recv (#PCDATA)>

<!ELEMENT nterm-sent (#PCDATA)>

<!ELEMENT nterm-tmo (#PCDATA)>

<!ELEMENT packets-out (#PCDATA)>

<!ELEMENT quality (#PCDATA)>

<!ELEMENT r2cp-clear-result (#PCDATA)>

<!ELEMENT r2cp-counters (r2cp-node-counters | r2cp-session-counters)*>

<!ELEMENT r2cp-iflctl (iflctl-name | node-count)*>

<!ELEMENT r2cp-iflctl-information (r2cp-iflctl)*>
<!ATTLIST r2cp-iflctl-information junos:style CDATA #IMPLIED>

<!ELEMENT r2cp-ifldata (ifldata-name)*>

<!ELEMENT r2cp-ifldata-information (r2cp-ifldata)*>
<!ATTLIST r2cp-ifldata-information junos:style CDATA #IMPLIED>

<!ELEMENT r2cp-node (node-name | node-client-address | node-client-port |
node-sessions | node-uptime | node-status | node-hbinterval | node-hbtime)*>

<!ELEMENT r2cp-node-counters (mim-recv | heartbeat-recv | nterm-recv |
nterm-ack-recv | rom-sent | heartbeat-sent | nterm-sent | nterm-ack-sent | mim-err
 | heartbeat-err | nterm-err | nterm-ack-err | heartbeat-tmo | nterm-tmo)*>
```


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```
<!ELEMENT r2cp-node-information (r2cp-node)*>
<!ATTLIST r2cp-node-information junos:style CDATA #IMPLIED>

<!ELEMENT r2cp-session (session-id | vc-id | mac-address | uptime | vlan-ids |
term-vlan-ids | packets-out | session-status | r2cp-session-update |
r2cp-session-bandwidth)*>

<!ELEMENT r2cp-session-bandwidth (effective-bandwidth | last-change |
below-threshold)*>

<!ELEMENT r2cp-session-counters (sin-recv | sup-recv | sterm-recv | sterm-ack-recv
 | sin-ack-sent | sterm-sent | sterm-ack-sent | sin-err | sup-err | sterm-err |
sterm-ack-err | sterm-tmo)*>

<!ELEMENT r2cp-session-information (r2cp-session | r2cp-session-update)*>
<!ATTLIST r2cp-session-information junos:style CDATA #IMPLIED>

<!ELEMENT r2cp-session-update (last-received | current-bandwidth | max-bandwidth
 | quality | resources | latency)*>

<!ELEMENT r2cp-version (#PCDATA)>

<!ELEMENT resources (#PCDATA)>

<!ELEMENT rom-sent (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-status (#PCDATA)>

<!ELEMENT sin-ack-sent (#PCDATA)>

<!ELEMENT sin-err (#PCDATA)>

<!ELEMENT sin-recv (#PCDATA)>

<!ELEMENT sterm-ack-err (#PCDATA)>

<!ELEMENT sterm-ack-recv (#PCDATA)>

<!ELEMENT sterm-ack-sent (#PCDATA)>

<!ELEMENT sterm-err (#PCDATA)>

<!ELEMENT sterm-recv (#PCDATA)>

<!ELEMENT sterm-sent (#PCDATA)>

<!ELEMENT sterm-tmo (#PCDATA)>

<!ELEMENT sup-err (#PCDATA)>

<!ELEMENT sup-recv (#PCDATA)>

<!ELEMENT term-vlan-ids (#PCDATA)>

<!ELEMENT uptime (#PCDATA)>

<!ELEMENT vc-id (#PCDATA)>
```

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```
<!ELEMENT vlan-ids (#PCDATA)>
```


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CHAPTER 121

DTD for Redundant Interfaces Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-rdd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-rdd.dtd -->

<!ELEMENT current-status (#PCDATA)>

<!ELEMENT ha-type (#PCDATA)>

<!ELEMENT interface-load-balancing (interface-name | state | last-change |
member-count | ha-type)*>

<!ELEMENT interface-load-balancing-detail (interface-name | state | last-change
| member-count | ha-type)*>

<!ELEMENT interface-load-balancing-detail-information
(interface-load-balancing-detail | interface-load-balancing-member-detail)*>

<!ELEMENT interface-load-balancing-information (interface-load-balancing)*>

<!ELEMENT interface-load-balancing-member-detail (member-interface)*>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-redundancy (interface-name | state | last-change | primary |
 secondary | current-status)*>

<!ELEMENT interface-redundancy-detail (interface-name | state | last-change |
primary | secondary | current-status | mode | replication-state)*>

<!ELEMENT interface-redundancy-detail-information (interface-redundancy-detail)*>
```

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```
<!ELEMENT interface-redundancy-information (interface-redundancy)*>

<!ELEMENT last-change (#PCDATA)>

<!ELEMENT member-count (#PCDATA)>

<!ELEMENT member-interface (member-name | member-weight | member-state)*>

<!ELEMENT member-name (#PCDATA)>

<!ELEMENT member-state (#PCDATA)>

<!ELEMENT member-weight (#PCDATA)>

<!ELEMENT mode (#PCDATA)>

<!ELEMENT primary (#PCDATA)>

<!ELEMENT replication-state (#PCDATA)>

<!ELEMENT secondary (#PCDATA)>

<!ELEMENT state (#PCDATA)>
```


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CHAPTER 122

DTD for Relay Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-relay.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-relay.dtd -->

<!ELEMENT connection-state (#PCDATA)>

<!ELEMENT group-count (#PCDATA)>

<!ELEMENT group-id (#PCDATA)>

<!ELEMENT group-member-count (#PCDATA)>

<!ELEMENT group-state (#PCDATA)>

<!ELEMENT group-type (#PCDATA)>

<!ELEMENT member-local-index (#PCDATA)>

<!ELEMENT member-name (#PCDATA)>

<!ELEMENT member-state (#PCDATA)>

<!ELEMENT message-pending (#PCDATA)>

<!ELEMENT message-pending-size (#PCDATA)>

<!ELEMENT message-total (#PCDATA)>

<!ELEMENT message-total-size (#PCDATA)>

<!ELEMENT protocol-name (#PCDATA)>

<!ELEMENT relay-group (relay-vks-group)*>
<!ATTLIST relay-group junos:style CDATA #IMPLIED>
```

```
<!ELEMENT relay-group-information (group-id | group-state | group-type |
group-member-count | message-total | message-total-size | message-pending |
message-pending-size | socket-full-count)*>

<!ELEMENT relay-information (relay-state | relay-server-information)*>

<!ELEMENT relay-member (relay-member-vks)*>
<!ATTLIST relay-member junos:style CDATA #IMPLIED>

<!ELEMENT relay-member-information (member-name | member-local-index | member-state
 | message-total | message-total-size | message-pending | message-pending-size |
 reverse-message-total | reverse-message-total-size | reverse-message-pending |
reverse-message-pending-size | socket-full-count)*>

<!ELEMENT relay-member-vks (relay-vks | relay-member-information)*>

<!ELEMENT relay-server-information (relay-vks | relay-server-name | protocol-name
 | connection-state | group-count)*>

<!ELEMENT relay-server-name (#PCDATA)>

<!ELEMENT relay-state (#PCDATA)>

<!ELEMENT relay-vks (#PCDATA)>

<!ELEMENT relay-vks-group (relay-vks | relay-group-information)*>

<!ELEMENT reverse-message-pending (#PCDATA)>

<!ELEMENT reverse-message-pending-size (#PCDATA)>

<!ELEMENT reverse-message-total (#PCDATA)>

<!ELEMENT reverse-message-total-size (#PCDATA)>

<!ELEMENT socket-full-count (#PCDATA)>
```


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CHAPTER 123

DTD for Resource Cleanup Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-res-cleanup.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-res-cleanup.dtd -->

<!ELEMENT cleanup-resources (resource)*>

<!ELEMENT id (#PCDATA)>

<!ELEMENT key (#PCDATA)>

<!ELEMENT major-number (#PCDATA)>

<!ELEMENT minor-number (#PCDATA)>

<!ELEMENT pid (#PCDATA)>

<!ELEMENT process-name (#PCDATA)>

<!ELEMENT process-resource-cleanup (pid | process-name | cleanup-resources)*>

<!ELEMENT resource (type | major-number | minor-number | id | key)*>

<!ELEMENT resource-type (type)*>

<!ELEMENT system-resource-cleanup-processes-information
(process-resource-cleanup)*>
<!ATTLIST system-resource-cleanup-processes-information junos:style CDATA #IMPLIED>

<!ELEMENT system-resource-cleanup-resources-information (resource-type)*>

<!ELEMENT type (#PCDATA)>
```

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CHAPTER 124

DTD for Routing Protocols Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-routing.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-routing.dtd -->

<!ELEMENT accepted-external-prefix-count (#PCDATA)>

<!ELEMENT accepted-internal-prefix-count (#PCDATA)>

<!ELEMENT accepted-prefix-count (#PCDATA)>

<!ELEMENT accepted-prefix-limit (nlri-type | prefix-count | limit-action |
warning-percentage)*>

<!ELEMENT accepting-interface (pim-interface-name | df-state)*>

<!ELEMENT ack-flag (#PCDATA)>

<!ELEMENT active-control-channel (#PCDATA)>

<!ELEMENT active-count (#PCDATA)>

<!ELEMENT active-external-prefix-count (#PCDATA)>

<!ELEMENT active-holdtime (#PCDATA)>

<!ELEMENT active-internal-prefix-count (#PCDATA)>

<!ELEMENT active-key-id (#PCDATA)>

<!ELEMENT active-key-start-time (#PCDATA)>

<!ELEMENT active-path (#PCDATA)>

<!ELEMENT active-prefix-count (#PCDATA)>
```

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```
<!ELEMENT active-reservation (#PCDATA)>

<!ELEMENT active-route-count (#PCDATA)>

<!ELEMENT active-tag (#PCDATA)>

<!ELEMENT activity-timer (#PCDATA)>

<!ELEMENT actual-bandwidth (#PCDATA)>

<!ELEMENT actual-free-bytes (#PCDATA)>

<!ELEMENT add-messages (#PCDATA)>

<!ELEMENT addpath-receive (nlri-type | addpath-receive-type)*>

<!ELEMENT addpath-receive-type (#PCDATA)>

<!ELEMENT addpath-send (nlri-type | addpath-send-type | addpath-send-count |
addpath-send-policy)*>

<!ELEMENT addpath-send-count (#PCDATA)>

<!ELEMENT addpath-send-policy (#PCDATA)>

<!ELEMENT addpath-send-type (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT address-families (#PCDATA)>

<!ELEMENT address-family (#PCDATA)>

<!ELEMENT address-mask (#PCDATA)>

<!ELEMENT address-prefix (#PCDATA)>

<!ELEMENT adj-count (#PCDATA)>

<!ELEMENT adjacency-advertisement (#PCDATA)>

<!ELEMENT adjacency-count (#PCDATA)>

<!ELEMENT adjacency-down-reason (#PCDATA)>

<!ELEMENT adjacency-event (#PCDATA)>

<!ELEMENT adjacency-flag (#PCDATA)>

<!ELEMENT adjacency-restart-capable (#PCDATA)>

<!ELEMENT adjacency-state (#PCDATA)>

<!ELEMENT adjacency-topologies (#PCDATA)>

<!ELEMENT adjacency-when (#PCDATA)>
<!ATTLIST adjacency-when junos:seconds CDATA #IMPLIED>

<!ELEMENT adjust-threshold (#PCDATA)>
```


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```
<!ELEMENT adjust-timer (#PCDATA)>

<!ELEMENT admin-group-extended-name (#PCDATA)>

<!ELEMENT admin-group-extended-number (#PCDATA)>

<!ELEMENT admin-group-index (#PCDATA)>

<!ELEMENT admin-group-name (#PCDATA)>

<!ELEMENT admin-group-number (#PCDATA)>

<!ELEMENT admin-groups (color | no-group-flag | admin-group-name |
admin-group-number)*>
<!ATTLIST admin-groups heading CDATA #IMPLIED>

<!ELEMENT admin-groups-extended (admin-group-name | admin-group-number)*>
<!ATTLIST admin-groups-extended heading CDATA #IMPLIED>

<!ELEMENT adspec (#PCDATA)>

<!ELEMENT advertised-prefix-count (#PCDATA)>

<!ELEMENT advertising-router (#PCDATA)>

<!ELEMENT age (#PCDATA)>
<!ATTLIST age junos:seconds CDATA #IMPLIED>

<!ELEMENT aggregate (aggregate-flags | aggregate-depth | aggregate-active |
aggregate-as-path | contributing-route-count | aggregated-route)*>

<!ELEMENT aggregate-active EMPTY>

<!ELEMENT aggregate-as-path (as-path | reference-count)*>

<!ELEMENT aggregate-depth (#PCDATA)>

<!ELEMENT aggregate-flag (#PCDATA)>

<!ELEMENT aggregate-flags (#PCDATA)>

<!ELEMENT aggregated-route (destination-prefix | protocol-name)*>

<!ELEMENT agi (#PCDATA)>

<!ELEMENT aging-timer (#PCDATA)>

<!ELEMENT aigp (#PCDATA)>

<!ELEMENT aigp-mode (nlri-type)*>

<!ELEMENT allocated-length (#PCDATA)>

<!ELEMENT always-mark-connection-protection-tlv (#PCDATA)>

<!ELEMENT amt-active-tunnels (#PCDATA)>

<!ELEMENT amt-anycast-address (#PCDATA)>

<!ELEMENT amt-anycast-prefix (#PCDATA)>
```

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```
<!ELEMENT amt-gateways-timed-out (#PCDATA)>

<!ELEMENT amt-inactivity-timeout (#PCDATA)>

<!ELEMENT amt-incomplete-membership-request (#PCDATA)>

<!ELEMENT amt-incomplete-membership-update (#PCDATA)>

<!ELEMENT amt-incomplete-packet (#PCDATA)>

<!ELEMENT amt-incomplete-relay-discovery (#PCDATA)>

<!ELEMENT amt-instance-statistics (amt-relay-discovery-messages |
amt-relay-advertisement-messages | amt-membership-request-messages |
amt-membership-query-messages | amt-membership-update-messages |
amt-relay-discovery-invalid-address | amt-membership-request-invalid-address |
amt-membership-update-invalid-address | amt-incomplete-packet | amt-invalid-mac
| amt-unexpected-type | amt-incomplete-relay-discovery |
amt-incomplete-membership-request | amt-incomplete-membership-update |
amt-no-active-gateway | amt-invalid-inner-packet-checksum |
amt-gateways-timed-out)*>
<!ATTLIST amt-instance-statistics junos:style CDATA #IMPLIED>

<!ELEMENT amt-invalid-inner-packet-checksum (#PCDATA)>

<!ELEMENT amt-invalid-mac (#PCDATA)>

<!ELEMENT amt-local-address (#PCDATA)>

<!ELEMENT amt-membership-query-messages (#PCDATA)>

<!ELEMENT amt-membership-request-invalid-address (#PCDATA)>

<!ELEMENT amt-membership-request-messages (#PCDATA)>

<!ELEMENT amt-membership-update-invalid-address (#PCDATA)>

<!ELEMENT amt-membership-update-message (#PCDATA)>

<!ELEMENT amt-membership-update-messages (#PCDATA)>

<!ELEMENT amt-no-active-gateway (#PCDATA)>

<!ELEMENT amt-relay-advertisement-messages (#PCDATA)>

<!ELEMENT amt-relay-discovery-invalid-address (#PCDATA)>

<!ELEMENT amt-relay-discovery-messages (#PCDATA)>

<!ELEMENT amt-request-message (#PCDATA)>

<!ELEMENT amt-summary (amt-anycast-prefix | amt-anycast-address | amt-local-address
 | amt-tunnel-limit | amt-active-tunnels)*>

<!ELEMENT amt-tunnel (amt-tunnel-gateway-address | amt-tunnel-gateway-port |
amt-tunnel-interface | amt-tunnel-state | amt-inactivity-timeout |
amt-tunnel-gateway-nonce | amt-tunnel-gateway-mac | amt-tunnel-multicast-groups
| mgm-group | amt-tunnel-message-count)*>
<!ATTLIST amt-tunnel junos:style CDATA #IMPLIED>

<!ELEMENT amt-tunnel-gateway-address (#PCDATA)>
```


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```
<!ELEMENT amt-tunnel-gateway-mac (#PCDATA)>

<!ELEMENT amt-tunnel-gateway-nonce (#PCDATA)>

<!ELEMENT amt-tunnel-gateway-port (#PCDATA)>

<!ELEMENT amt-tunnel-information (amt-tunnel)*>

<!ELEMENT amt-tunnel-interface (#PCDATA)>

<!ELEMENT amt-tunnel-limit (#PCDATA)>

<!ELEMENT amt-tunnel-message-count (amt-request-message |
amt-membership-update-message)*>

<!ELEMENT amt-tunnel-multicast-groups (#PCDATA)>

<!ELEMENT amt-tunnel-state (#PCDATA)>

<!ELEMENT amt-unexpected-type (#PCDATA)>

<!ELEMENT announce-bits (#PCDATA)>

<!ELEMENT announce-tasks (#PCDATA)>

<!ELEMENT application-owner (#PCDATA)>

<!ELEMENT area-address-tlv (address | tlv-length)*>

<!ELEMENT area-mismatch-error (#PCDATA)>

<!ELEMENT arp_nh_null_addr (#PCDATA)>

<!ELEMENT arp_rt_add (#PCDATA)>

<!ELEMENT arp_rt_add_no_snpa (#PCDATA)>

<!ELEMENT arp_rt_chg (#PCDATA)>

<!ELEMENT arp_rt_del (#PCDATA)>

<!ELEMENT arp_rt_del_no_krtt (#PCDATA)>

<!ELEMENT arp_rt_del_not_found (#PCDATA)>

<!ELEMENT as-loops (#PCDATA)>

<!ELEMENT as-number (#PCDATA)>

<!ELEMENT as-path (#PCDATA)>

<!ELEMENT asn (#PCDATA)>

<!ELEMENT aspath-bucket (aspath-entry | bucket | count)*>

<!ELEMENT aspath-domain (identifier | domain-flags | primary | references |
path-count | local-asn)*>

<!ELEMENT aspath-entry (as-path | domain | path-references | length | segments |
 overhead | compare-length | neighbor-as | entry-state)*>
```

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```
<!ATTLIST aspath-entry junos:style CDATA #IMPLIED>

<!ELEMENT aspath-table (path-count | bucket-count | bucket-max-entries |
bucket-min-entries | bucket-avg-entries | bucket-std-deviation | aspath-bucket)*>
<!ATTLIST aspath-table junos:style CDATA #IMPLIED>

<!ELEMENT assert-state (#PCDATA)>

<!ELEMENT assert-timeout (#PCDATA)>

<!ELEMENT associated-bidirectional EMPTY>

<!ELEMENT atm-cell-bundle-size (#PCDATA)>

<!ELEMENT atm-vp-bundle-size (#PCDATA)>

<!ELEMENT attached-router (#PCDATA)>

<!ELEMENT attrset (attrset-as | med | local-preference | as-path | communities |
 cluster-id | pmsi | originator)*>

<!ELEMENT attrset-as (#PCDATA)>

<!ELEMENT authentication-algorithm (#PCDATA)>

<!ELEMENT authentication-configured EMPTY>

<!ELEMENT authentication-failure-error (#PCDATA)>

<!ELEMENT authentication-flag (#PCDATA)>

<!ELEMENT authentication-key (#PCDATA)>

<!ELEMENT authentication-key-chain (#PCDATA)>

<!ELEMENT authentication-mismatch-error (#PCDATA)>

<!ELEMENT authentication-tlv (tlv-length)*>

<!ELEMENT authentication-type (#PCDATA)>

<!ELEMENT auto-site-count (#PCDATA)>

<!ELEMENT auto-site-repository-state (#PCDATA)>

<!ELEMENT autobw-adjust-threshold (#PCDATA)>

<!ELEMENT autobw-adjust-timer (#PCDATA)>

<!ELEMENT autobw-high-watermark-bw (#PCDATA)>

<!ELEMENT autobw-last-bw (#PCDATA)>

<!ELEMENT autobw-max-average-bandwidth (#PCDATA)>

<!ELEMENT autobw-maximum-bandwidth (#PCDATA)>

<!ELEMENT autobw-minimum-bandwidth (#PCDATA)>

<!ELEMENT autobw-monitor-lsp-bandwidth EMPTY>
```


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```
<!ELEMENT autobw-requested-bw (#PCDATA)>

<!ELEMENT autobw-signaled-bw (#PCDATA)>

<!ELEMENT autobw-time-last-adjust (#PCDATA)>

<!ELEMENT autobw-time-to-adjust (#PCDATA)>

<!ELEMENT autobw-total-adjustments (#PCDATA)>

<!ELEMENT autobw-total-successful-adjustments (#PCDATA)>

<!ELEMENT autobw-total-unsuccessful-adjustments (#PCDATA)>

<!ELEMENT automatic-site-claim-id (#PCDATA)>

<!ELEMENT automatic-site-collision-detect-time (#PCDATA)>

<!ELEMENT automatic-site-collisions (#PCDATA)>

<!ELEMENT automatic-site-id-status (#PCDATA)>

<!ELEMENT automatic-site-name (#PCDATA)>

<!ELEMENT automatic-site-new-site-wait-time (#PCDATA)>

<!ELEMENT automatic-site-reclaim-wait-time (#PCDATA)>

<!ELEMENT automatic-site-startup-wait-time (#PCDATA)>

<!ELEMENT automatic-site-timer-status (#PCDATA)>

<!ELEMENT automatic-site-timers (automatic-site-startup-wait-time |
automatic-site-new-site-wait-time | automatic-site-collision-detect-time |
automatic-site-reclaim-wait-time)*>
<!ATTLIST automatic-site-timers heading CDATA #IMPLIED>

<!ELEMENT autonomous-system (#PCDATA)>

<!ELEMENT available-bandwidth (#PCDATA)>

<!ELEMENT average-per-run (#PCDATA)>

<!ELEMENT average-time (#PCDATA)>

<!ELEMENT backoff-period (#PCDATA)>

<!ELEMENT backup-next-hop-element (interface-name | isis-next-hop-type |
isis-next-hop | snpa)*>

<!ELEMENT backup-pe-group-name (#PCDATA)>

<!ELEMENT backup-pes (multicast-backup-pe-address)*>

<!ELEMENT backup-root (#PCDATA)>

<!ELEMENT backup-root-metric (#PCDATA)>

<!ELEMENT backup-root-preference (#PCDATA)>

<!ELEMENT bad-packettype-error (#PCDATA)>
```

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```
<!ELEMENT bad-version-error (#PCDATA)>

<!ELEMENT balance (#PCDATA)>

<!ELEMENT bandwidth (#PCDATA)>

<!ELEMENT bandwidth-for-admission-control (#PCDATA)>

<!ELEMENT bandwidth-model (#PCDATA)>

<!ELEMENT bandwidth-priority (#PCDATA)>

<!ELEMENT bandwidth-type (#PCDATA)>

<!ELEMENT bandwidth_ct0 (#PCDATA)>

<!ELEMENT bandwidth_ct1 (#PCDATA)>

<!ELEMENT bandwidth_ct2 (#PCDATA)>

<!ELEMENT bandwidth_ct3 (#PCDATA)>

<!ELEMENT bc (#PCDATA)>

<!ELEMENT bc-description (#PCDATA)>

<!ELEMENT bdr-address (#PCDATA)>

<!ELEMENT bdr-id (#PCDATA)>

<!ELEMENT bfd-configuration-state (#PCDATA)>

<!ELEMENT bfd-operational-state (#PCDATA)>

<!ELEMENT bgp-aigp (#PCDATA)>

<!ELEMENT bgp-bfd (bfd-configuration-state | bfd-operational-state)*>

<!ELEMENT bgp-bmp-information (bmp-addr-port | bmp-state | bmp-memory-consumed |
 bmp-statistics-timeout | bmp-memory-limit | bmp-memory-delay)*>

<!ELEMENT bgp-error (name | send-count | receive-count)*>

<!ELEMENT bgp-group (type | peer-as | local-as | group-index | group-state | name
 | bgp-options | bgp-options2 | group-flags | peer-count | established-count |
peer-address | flap-count | unconfigured-peers | igp-protocol | route-queue |
bgp-peer | bgp-option-information | tracing-information | bgp-rib)*>
<!ATTLIST bgp-group heading CDATA #IMPLIED>
<!ATTLIST bgp-group junos:style CDATA #IMPLIED>

<!ELEMENT bgp-group-information (bgp-group | bgp-information)*>

<!ELEMENT bgp-group-name (#PCDATA)>

<!ELEMENT bgp-information (group-count | peer-count | external-peer-count |
internal-peer-count | down-peer-count | unconfigured-peer-count |
half-open-peer-count | igp-converging | flap-count | bgp-rib | bgp-peer)*>

<!ELEMENT bgp-metric-flags (#PCDATA)>
```


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```
<!ELEMENT bgp-nlri-flag-aggregate-label EMPTY>

<!ELEMENT bgp-nlri-flag-explicit-null-for-all-routes EMPTY>

<!ELEMENT bgp-nlri-flag-explicit-null-for-connected-routes EMPTY>

<!ELEMENT bgp-nlri-flag-l2vpn-status-vector EMPTY>

<!ELEMENT bgp-nlri-flag-no-l2vpn-status-vector EMPTY>

<!ELEMENT bgp-nlri-flag-per-group-label EMPTY>

<!ELEMENT bgp-nlri-flag-per-prefix-label EMPTY>

<!ELEMENT bgp-nlri-flag-traffic-stats EMPTY>

<!ELEMENT bgp-no-label-reason (#PCDATA)>

<!ELEMENT bgp-option-information (export-policy | import-policy | bgp-options |
bgp-options2 | authentication-key | authentication-key-chain |
authentication-algorithm | authentication-configured | address-families |
drop-path-attributes | ignore-path-attributes | local-address | holdtime |
metric-out | preference | local-preference | prefix-limit | accepted-prefix-limit
 | addpath-send | addpath-receive | aigp-mode | nlri-information | local-as |
local-as-private | local-system-as | receive-buffer-size | send-buffer-size |
outbound-timer | med-action | ipsec-sa)*>

<!ELEMENT bgp-options (#PCDATA)>

<!ELEMENT bgp-options2 (#PCDATA)>

<!ELEMENT bgp-orf (peer-address | peer-type | group-name | bgp-orf-nlri-info)*>

<!ELEMENT bgp-orf-extcomm-filter (extended-community)*>

<!ELEMENT bgp-orf-filter-info (bgp-orf-extcomm-filter | bgp-orf-prefix-filter)*>

<!ELEMENT bgp-orf-filter-information (filter-type | filter-mode | filter-in-updates
 | filter-out-updates | filter-qcount | bgp-orf-filter-info)*>

<!ELEMENT bgp-orf-information (bgp-orf)*>

<!ELEMENT bgp-orf-nlri-info (nlri-name | filter-in-updates | filter-out-updates
| filter-qcount | immediate-count | bgp-orf-filter-information)*>

<!ELEMENT bgp-orf-prefix-filter (prefix-orf)*>

<!ELEMENT bgp-output-queue (number | count)*>

<!ELEMENT bgp-peer (peer-address | peer-as | local-address | local-as | description
 | peer-type | route-reflector-client | peer-state | peer-flags | last-state |
last-event | last-error | bgp-option-information | flap-count | last-flap-event
| peer-id | local-id | active-holdtime | keepalive-interval | peer-index | bgp-bfd
 | local-interface-name | local-interface-index | nlri-type-peer |
nlri-type-session | peer-no-refresh | peer-refresh-capability |
peer-4byte-as-capability-not-supported | peer-4byte-as-capability-advertised |
peer-addpath-not-supported | peer-addpath-ronly-nlri | peer-addpath-sonly-nlri |
 peer-addpath-rs-nlri | peer-restart-nlri-configured | peer-restart-time-configured
 | peer-stale-route-time-configured | peer-restart-time-received |
peer-restart-flags-received | peer-restart-nlri-received |
peer-restart-nlri-can-save-state | peer-restart-nlri-state-saved | peer-no-restart
```

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```
 | peer-restart-nlri-negotiated | peer-end-of-rib-received | peer-end-of-rib-sent
 | peer-no-helper | peer-end-of-rib-scheduled | last-received | last-sent |
last-checked | input-messages | input-checksum | input-checksum-err | input-updates
 | input-refreshes | input-octets | output-messages | output-checksum |
output-updates | output-refreshes | output-octets | input-drop-path-attributes |
 input-ignore-path-attributes | buffered-octets-rx | buffered-octets-tx |
bgp-output-queue | route-queue-count | bgp-rib | elapsed-time |
extended-information | bgp-error | route-queue | tracing-information)*>
<!ATTLIST bgp-peer heading CDATA #IMPLIED>
<!ATTLIST bgp-peer junos:style CDATA #IMPLIED>

<!ELEMENT bgp-prefix (#PCDATA)>

<!ELEMENT bgp-rib (name | rib-bit | bgp-rib-state | vpn-rib-state | send-state |
 total-external-prefix-count | active-external-prefix-count |
accepted-external-prefix-count | suppressed-external-prefix-count |
total-internal-prefix-count | active-internal-prefix-count |
accepted-internal-prefix-count | suppressed-internal-prefix-count |
total-prefix-count | active-prefix-count | received-prefix-count |
accepted-prefix-count | damped-prefix-count | suppressed-prefix-count |
history-prefix-count | pending-prefix-count | advertised-prefix-count)*>
<!ATTLIST bgp-rib junos:style CDATA #IMPLIED>

<!ELEMENT bgp-rib-state (#PCDATA)>

<!ELEMENT bgp-rsync-ack-queue (bgp-rsync-queue-entry)*>

<!ELEMENT bgp-rsync-ackwait (#PCDATA)>

<!ELEMENT bgp-rsync-error-queue (bgp-rsync-queue-entry)*>

<!ELEMENT bgp-rsync-estab-queue (bgp-rsync-queue-entry)*>

<!ELEMENT bgp-rsync-estab-tm (#PCDATA)>
<!ATTLIST bgp-rsync-estab-tm junos:seconds CDATA #IMPLIED>

<!ELEMENT bgp-rsync-estab-type (bgp-rsync-queue-entry)*>

<!ELEMENT bgp-rsync-flags (#PCDATA)>

<!ELEMENT bgp-rsync-master (bgp-rsync-session-state | bgp-rsync-session-time |
bgp-rsync-session-flaps | bgp-rsync-session-last-flap-reason |
bgp-rsync-session-last-flap-error | bgp-rsync-state | bgp-rsync-state-time |
bgp-rsync-flags | bgp-rsync-rt-state | bgp-rsync-ackwait | bgp-rsync-sowait |
bgp-rsync-sched | bgp-rsync-sendbuf-count | bgp-rsync-walker | bgp-rsync-walk |
bgp-rsync-estab-type | bgp-rsync-ack-queue | bgp-rsync-estab-tm |
bgp-rsync-error-queue | bgp-rsync-stats | bgp-rsync-estab-queue)*>

<!ELEMENT bgp-rsync-queue-entry (rsy-queue-instance | rsy-queue-addr |
rsy-queue-more)*>

<!ELEMENT bgp-rsync-rt-state (#PCDATA)>

<!ELEMENT bgp-rsync-sched (#PCDATA)>

<!ELEMENT bgp-rsync-sendbuf-count (#PCDATA)>

<!ELEMENT bgp-rsync-session-flaps (#PCDATA)>

<!ELEMENT bgp-rsync-session-last-flap-error (#PCDATA)>
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<!ELEMENT bgp-rsync-session-last-flap-reason (#PCDATA)>

<!ELEMENT bgp-rsync-session-state (#PCDATA)>

<!ELEMENT bgp-rsync-session-time (#PCDATA)>

<!ELEMENT bgp-rsync-sowait (#PCDATA)>

<!ELEMENT bgp-rsync-state (#PCDATA)>

<!ELEMENT bgp-rsync-state-time (#PCDATA)>

<!ELEMENT bgp-rsync-stats (open-send-count | estab-send-count | update-send-count
 | error-send-count | complete-send-count | open-receive-count |
request-wild-receive-count | request-tgt-receive-count | estab-ack-receive-count
 | complete-ack-receive-count)*>

<!ELEMENT bgp-rsync-walk (bgp-rsync-walk-table | bgp-rsync-walk-prefix |
bgp-rsync-walk-prefixlen | queue-count)*>

<!ELEMENT bgp-rsync-walk-prefix (#PCDATA)>

<!ELEMENT bgp-rsync-walk-prefixlen (#PCDATA)>

<!ELEMENT bgp-rsync-walk-table (#PCDATA)>

<!ELEMENT bgp-rsync-walker EMPTY>

<!ELEMENT bgp-rt-flag (#PCDATA)>

<!ELEMENT bgp-rtf-brief (group-name | table-name | bgp-rtf-state-flags |
bgp-rtf-entries)*>

<!ELEMENT bgp-rtf-entries (#PCDATA)>

<!ELEMENT bgp-rtf-entry (rtarget | rtarget-mask)*>

<!ELEMENT bgp-rtf-group (group-name | rtarget-recv-mask | default-mask |
bgp-rtf-state)*>

<!ELEMENT bgp-rtf-information (bgp-rtf-brief | bgp-rtf-group)*>

<!ELEMENT bgp-rtf-state (table-name | bgp-rtf-state-flags | bgp-rtf-entries |
bgp-rtf-entry)*>

<!ELEMENT bgp-rtf-state-flags (#PCDATA)>

<!ELEMENT bgp-standby (bgp-standby-state | bgp-standby-last-trans |
bgp-standby-sendbuf | bgp-unsync-timer | bgp-unsync-pending-tm | bgp-unsync-queue
 | bgp-unsync-pending | bgp-standby-sync-queue)*>

<!ELEMENT bgp-standby-last-trans (#PCDATA)>
<!ATTLIST bgp-standby-last-trans junos:seconds CDATA #IMPLIED>

<!ELEMENT bgp-standby-sendbuf (#PCDATA)>

<!ELEMENT bgp-standby-state (#PCDATA)>

<!ELEMENT bgp-standby-sync-entry (bstandby-iid | bstandby-addr)*>

<!ELEMENT bgp-standby-sync-queue (bgp-standby-sync-entry)*>
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<!ELEMENT bgp-sync-information (bgp-rsync-master | bgp-standby)*>

<!ELEMENT bgp-traffic-error (#PCDATA)>

<!ELEMENT bgp-traffic-statistics (bgp-prefix | bgp-traffic-type | bgp-traffic-error
 | bgp-traffic-statistics-packet-count | bgp-traffic-statistics-byte-count |
bgp-traffic-statistics-egress-as | bgp-traffic-statistics-advertised-fec-label)*>

<!ELEMENT bgp-traffic-statistics-advertised-fec-label (#PCDATA)>

<!ELEMENT bgp-traffic-statistics-byte-count (#PCDATA)>

<!ELEMENT bgp-traffic-statistics-egress-as (#PCDATA)>

<!ELEMENT bgp-traffic-statistics-error (bgp-traffic-error)*>

<!ELEMENT bgp-traffic-statistics-header (group-name | group-index | nlri-name)*>

<!ELEMENT bgp-traffic-statistics-information (bgp-traffic-statistics-header |
bgp-traffic-statistics | bgp-traffic-statistics-error)*>

<!ELEMENT bgp-traffic-statistics-packet-count (#PCDATA)>

<!ELEMENT bgp-traffic-type (#PCDATA)>

<!ELEMENT bgp-unsync-entry (usy-iid | usy-addr | usy-elapsed | usy-flags |
usy-more)*>

<!ELEMENT bgp-unsync-pending (bgp-unsync-entry)*>

<!ELEMENT bgp-unsync-pending-tm (#PCDATA)>
<!ATTLIST bgp-unsync-pending-tm junos:seconds CDATA #IMPLIED>

<!ELEMENT bgp-unsync-queue (bgp-unsync-entry)*>

<!ELEMENT bgp-unsync-timer (#PCDATA)>
<!ATTLIST bgp-unsync-timer junos:seconds CDATA #IMPLIED>

<!ELEMENT bidir EMPTY>

<!ELEMENT bidir-df-election-family (pim-instance | address-family |
bidir-df-election-rpa-list)*>

<!ELEMENT bidir-df-election-group-ranges (group-range)*>

<!ELEMENT bidir-df-election-interface (pim-interface-name | df-state | df)*>

<!ELEMENT bidir-df-election-interface-family (pim-instance | address-family |
bidir-df-election-interface-interface-list)*>

<!ELEMENT bidir-df-election-interface-interface-list (pim-interface-name |
robustness-count | offer-period | backoff-period |
bidir-df-election-interface-rpa-list)*>

<!ELEMENT bidir-df-election-interface-list (bidir-df-election-interface)*>

<!ELEMENT bidir-df-election-interface-rpa-list (rpa | df-state | df)*>

<!ELEMENT bidir-df-election-rp (rpa | bidir-df-election-group-ranges |
bidir-df-election-interface-list)*>
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<!ELEMENT bidir-df-election-rpa-list (bidir-df-election-rp)*>

<!ELEMENT bidir-group-prefix-length (#PCDATA)>

<!ELEMENT bidirectional EMPTY>

<!ELEMENT bits (#PCDATA)>

<!ELEMENT bmp-addr-port (#PCDATA)>

<!ELEMENT bmp-memory-consumed (#PCDATA)>

<!ELEMENT bmp-memory-delay (#PCDATA)>

<!ELEMENT bmp-memory-limit (#PCDATA)>

<!ELEMENT bmp-state (#PCDATA)>

<!ELEMENT bmp-statistics-timeout (#PCDATA)>

<!ELEMENT bootstrap-family (address-family | address | bootstrap-priority |
local-address | local-priority | bootstrap-state | bootstrap-timeout)*>

<!ELEMENT bootstrap-priority (#PCDATA)>

<!ELEMENT bootstrap-state (#PCDATA)>

<!ELEMENT bootstrap-timeout (#PCDATA)>

<!ELEMENT branch-lsp-count (#PCDATA)>

<!ELEMENT bridge_inh_del_no_msti (#PCDATA)>

<!ELEMENT bridge_inh_no_msti (#PCDATA)>

<!ELEMENT bridge_rt_add (#PCDATA)>

<!ELEMENT bridge_rt_add_force_updates (#PCDATA)>

<!ELEMENT bridge_rt_add_no_snpa (#PCDATA)>

<!ELEMENT bridge_rt_chg (#PCDATA)>

<!ELEMENT bridge_rt_del (#PCDATA)>

<!ELEMENT bridge_rt_del_not_found (#PCDATA)>

<!ELEMENT broadcast-bytes (#PCDATA)>

<!ELEMENT broadcast-packets (#PCDATA)>

<!ELEMENT bstandby-addr (#PCDATA)>

<!ELEMENT bstandby-iid (#PCDATA)>

<!ELEMENT bucket (#PCDATA)>

<!ELEMENT bucket-avg-entries (#PCDATA)>

<!ELEMENT bucket-count (#PCDATA)>
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<!ELEMENT bucket-max-entries (#PCDATA)>

<!ELEMENT bucket-min-entries (#PCDATA)>

<!ELEMENT bucket-std-deviation (#PCDATA)>

<!ELEMENT buffered-octets-rx (#PCDATA)>

<!ELEMENT buffered-octets-tx (#PCDATA)>

<!ELEMENT bulking-indicator (#PCDATA)>

<!ELEMENT bw-exact (#PCDATA)>

<!ELEMENT bypass-info (lp-status | lp-requested | lp-granted | lp-failure |
total-bypass | bypass-name | bypass-state | bypass-type | rsvp-lp-psb-cnt |
rsvp-lp-backup-lsp-cnt | lp-history)*>

<!ELEMENT bypass-name (#PCDATA)>

<!ELEMENT bypass-repl-avoid-addr (#PCDATA)>

<!ELEMENT bypass-repl-id (#PCDATA)>

<!ELEMENT bypass-repl-interface-id (#PCDATA)>

<!ELEMENT bypass-repl-lp-num (#PCDATA)>

<!ELEMENT bypass-repl-manual-bypass-name (#PCDATA)>

<!ELEMENT bypass-repl-psb-id (#PCDATA)>

<!ELEMENT bypass-repl-resolve-status (#PCDATA)>

<!ELEMENT bypass-repl-state (#PCDATA)>

<!ELEMENT bypass-repl-to-addr (#PCDATA)>

<!ELEMENT bypass-state (#PCDATA)>

<!ELEMENT bypass-type (#PCDATA)>

<!ELEMENT bytes-left (#PCDATA)>

<!ELEMENT c-multicast-address (#PCDATA)>

<!ELEMENT c-multicast-ipv4 (c-multicast-ipv4-entry)*>

<!ELEMENT c-multicast-ipv4-count (#PCDATA)>

<!ELEMENT c-multicast-ipv4-entry (c-multicast-address | provider-tunnel-id |
c-multicast-property)*>

<!ELEMENT c-multicast-ipv6 (c-multicast-ipv6-entry)*>

<!ELEMENT c-multicast-ipv6-count (#PCDATA)>

<!ELEMENT c-multicast-ipv6-entry (c-multicast-address | provider-tunnel-id |
c-multicast-property)*>
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<!ELEMENT c-multicast-ipv6-summary (c-multicast-ipv6-count)*>

<!ELEMENT c-multicast-property (#PCDATA)>

<!ELEMENT c-multicast-summary (c-multicast-ipv4-count)*>

<!ELEMENT cac-bandwidth-failure EMPTY>

<!ELEMENT cache-timeout (#PCDATA)>

<!ELEMENT cc-restarting EMPTY>

<!ELEMENT ccc-circuit-name (#PCDATA)>

<!ELEMENT ccc-circuit-status (#PCDATA)>

<!ELEMENT ccc-circuit-type (#PCDATA)>

<!ELEMENT ccc-connection (ccc-connection-name | ccc-connection-type |
ccc-connection-status | ccc-connection-last-uptime | ccc-connection-up-transitions
 | ccc-connection-circuit | ccc-connection-in-labels | ccc-connection-out-labels
 | ccc-connection-history)*>

<!ELEMENT ccc-connection-circuit (ccc-circuit-name | ccc-circuit-type |
ccc-circuit-status)*>

<!ELEMENT ccc-connection-history (ccc-connection-history-log)*>

<!ELEMENT ccc-connection-history-log (event-time | event-name |
interface-label-info | receive-lsp-count | transmit-lsp-count)*>

<!ELEMENT ccc-connection-in-labels (mpls-label | no-label)*>
<!ATTLIST ccc-connection-in-labels heading CDATA #IMPLIED>

<!ELEMENT ccc-connection-last-uptime (#PCDATA)>

<!ELEMENT ccc-connection-name (#PCDATA)>

<!ELEMENT ccc-connection-out-labels (mpls-label | no-label)*>
<!ATTLIST ccc-connection-out-labels heading CDATA #IMPLIED>

<!ELEMENT ccc-connection-status (#PCDATA)>

<!ELEMENT ccc-connection-type (#PCDATA)>

<!ELEMENT ccc-connection-up-transitions (#PCDATA)>

<!ELEMENT ccc-information (ccc-no-connections | ccc-link-monitoring-status |
ccc-restarting | ccc-connection)*>

<!ELEMENT ccc-link-monitoring-status (#PCDATA)>

<!ELEMENT ccc-no-connections EMPTY>

<!ELEMENT ccc-restarting EMPTY>

<!ELEMENT cell-bundle-size (#PCDATA)>

<!ELEMENT change-messages (#PCDATA)>

<!ELEMENT changed-entity (#PCDATA)>
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<!ELEMENT checksum (#PCDATA)>

<!ELEMENT checksum-error (#PCDATA)>

<!ELEMENT circuit-id (#PCDATA)>

<!ELEMENT circuit-type (#PCDATA)>

<!ELEMENT class-bandwidth (#PCDATA)>

<!ELEMENT class-id (#PCDATA)>

<!ELEMENT class-type (#PCDATA)>

<!ELEMENT cluster-id (#PCDATA)>

<!ELEMENT color (#PCDATA)>

<!ELEMENT color2 (#PCDATA)>

<!ELEMENT communities (community | extended-community)*>

<!ELEMENT community (#PCDATA)>

<!ELEMENT compare-length (#PCDATA)>

<!ELEMENT complete-ack-receive-count (#PCDATA)>

<!ELEMENT complete-send-count (#PCDATA)>

<!ELEMENT composite-nh (#PCDATA)>

<!ELEMENT composite-nh-count (#PCDATA)>

<!ELEMENT configuration-state (#PCDATA)>

<!ELEMENT connection (connection-id | connection-type | connection-status |
last-change | up-transitions | local-interface | remote-interface | remote-pe |
control-word | control-word-type | interface-encapsulation | inbound-label |
outbound-label | connection-bandwidth | vpls-rsvp-te-p2mp-lsp-information |
connection-protection | history | l2vpn-local-site-id | l2vpn-remote-site-id |
pw-status-tlv | local-pw-status-code | remote-pw-status-code | mesh-group-name |
 egress-protection-protector | egress-protection-protected-l2ckt)*>
<!ATTLIST connection heading CDATA #IMPLIED>

<!ELEMENT connection-bandwidth (bandwidth | class-type | class-bandwidth)*>
<!ATTLIST connection-bandwidth heading CDATA #IMPLIED>

<!ELEMENT connection-id (#PCDATA)>

<!ELEMENT connection-protection (#PCDATA)>

<!ELEMENT connection-status (#PCDATA)>

<!ELEMENT connection-type (#PCDATA)>

<!ELEMENT connections-summary (vc-up-count | vc-down-count)*>

<!ELEMENT context-id (#PCDATA)>
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<!ELEMENT context-id-local (#PCDATA)>

<!ELEMENT context-identifier (#PCDATA)>

<!ELEMENT context-level1-state (#PCDATA)>

<!ELEMENT context-level2-state (#PCDATA)>

<!ELEMENT context-lsp (#PCDATA)>

<!ELEMENT context-lsp-ingress-router (#PCDATA)>

<!ELEMENT context-lsp-is-detour EMPTY>

<!ELEMENT context-lsp-name (#PCDATA)>

<!ELEMENT context-lsps EMPTY>

<!ELEMENT context-status (#PCDATA)>

<!ELEMENT context-table (#PCDATA)>

<!ELEMENT context-total-count (#PCDATA)>

<!ELEMENT context-type (#PCDATA)>

<!ELEMENT contributing-route-count (#PCDATA)>

<!ELEMENT control-channel-unusable EMPTY>

<!ELEMENT control-word (#PCDATA)>

<!ELEMENT control-word-type (#PCDATA)>

<!ELEMENT cos (#PCDATA)>

<!ELEMENT cos-info (queue-number | tx-rate | tx-rate-percent | high-priority |
bw-exact)*>

<!ELEMENT count (#PCDATA)>

<!ELEMENT creation-time (#PCDATA)>

<!ELEMENT csnp-interval (#PCDATA)>

<!ELEMENT cspf-paths (total-paths | successful | no-route | sys-error | cspfs)*>

<!ELEMENT cspf-queue (current | maximum | dequeued)*>

<!ELEMENT cspf-status (#PCDATA)>

<!ELEMENT cspf-time (#PCDATA)>

<!ELEMENT cspf-timing (total-time | cspf-time | average-time | rpd-time)*>

<!ELEMENT cspfs (#PCDATA)>

<!ELEMENT ct-bw (#PCDATA)>

<!ELEMENT ct-bw0 (#PCDATA)>
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<!ELEMENT ct-bw1 (#PCDATA)>

<!ELEMENT ct-bw2 (#PCDATA)>

<!ELEMENT ct-bw3 (#PCDATA)>

<!ELEMENT ct-bw4 (#PCDATA)>

<!ELEMENT ct-bw5 (#PCDATA)>

<!ELEMENT ct-bw6 (#PCDATA)>

<!ELEMENT ct-bw7 (#PCDATA)>

<!ELEMENT ct-class (#PCDATA)>

<!ELEMENT ct-subscription (#PCDATA)>

<!ELEMENT current (#PCDATA)>

<!ELEMENT current-active EMPTY>

<!ELEMENT current-bandwidth-header EMPTY>

<!ELEMENT current-reserve-bandwidth (#PCDATA)>

<!ELEMENT damped-prefix-count (#PCDATA)>

<!ELEMENT damping-parameters (#PCDATA)>

<!ELEMENT database-entry-state (#PCDATA)>

<!ELEMENT database-telink-id (#PCDATA)>

<!ELEMENT dbd-retransmit-time (#PCDATA)>

<!ELEMENT dbds-retransmit (#PCDATA)>

<!ELEMENT dbds-retransmit-5seconds (#PCDATA)>

<!ELEMENT dead-interval (#PCDATA)>

<!ELEMENT dead-interval-mismatch-error (#PCDATA)>

<!ELEMENT default-damping-parameters EMPTY>

<!ELEMENT default-exclusion-mismatch-error (#PCDATA)>

<!ELEMENT default-mask (#PCDATA)>

<!ELEMENT delete EMPTY>

<!ELEMENT delete-messages (#PCDATA)>

<!ELEMENT deleted EMPTY>

<!ELEMENT dense EMPTY>

<!ELEMENT dense-event (dense-receive-prune | dense-send-prune | dense-join |
dense-graft)*>
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<!ELEMENT dense-graft (pim-interface-name | dense-timeout)*>

<!ELEMENT dense-join (pim-interface-name | dense-timeout)*>

<!ELEMENT dense-receive-prune (pim-interface-name | dense-timeout)*>

<!ELEMENT dense-send-prune (pim-interface-name | dense-timeout)*>

<!ELEMENT dense-timeout (#PCDATA)>

<!ELEMENT dep-active (#PCDATA)>

<!ELEMENT dep-entries (#PCDATA)>

<!ELEMENT dep-flags (#PCDATA)>

<!ELEMENT dep-rtnode-prefix (#PCDATA)>

<!ELEMENT dep-rtnode-prefixlen (#PCDATA)>

<!ELEMENT dequeued (#PCDATA)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT designated-forwarder (#PCDATA)>

<!ELEMENT designated-pe (#PCDATA)>

<!ELEMENT designated-router-address (#PCDATA)>

<!ELEMENT destination-address (#PCDATA)>

<!ELEMENT destination-count (#PCDATA)>

<!ELEMENT destination-network (prefix | destination-network-deleted |
dynamic-tunnel)*>

<!ELEMENT destination-network-deleted EMPTY>

<!ELEMENT destination-prefix (#PCDATA)>

<!ELEMENT destination-router-id (#PCDATA)>

<!ELEMENT destination-tna-address (#PCDATA)>

<!ELEMENT detour (lsp-state | sender-tspec | adspec | path-mtu | path-mtu-in-kernel
 | packet-information | explicit-route | record-route | label-out |
lsp-diffserv-info | ct-bw)*>

<!ELEMENT detour-bandwidth (bandwidth-priority | total-reserved-bandwidth |
interface-address)*>

<!ELEMENT detour-branch (source-address | skip-address | lsp-state | sender-tspec
 | adspec | path-mtu | explicit-route | record-route | packet-information |
detour-branch-labels)*>

<!ELEMENT detour-branch-labels (label-in | label-out)*>

<!ELEMENT detours (#PCDATA)>

<!ELEMENT df (#PCDATA)>
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<!ELEMENT df-state (#PCDATA)>

<!ELEMENT disconnected EMPTY>

<!ELEMENT display-count (#PCDATA)>

<!ELEMENT domain (#PCDATA)>

<!ELEMENT domain-flags (#PCDATA)>

<!ELEMENT down-count (#PCDATA)>

<!ELEMENT down-peer-count (#PCDATA)>

<!ELEMENT downstream-assert-neighbor (neighbor-address | neighbor-assert-metric
| neighbor-assert-preference | neighbor-assert-timeout)*>

<!ELEMENT downstream-if-uptime (#PCDATA)>

<!ELEMENT downstream-interface (pim-interface-name | pruned-timeout | register-rp
 | register-interface-name | pim-interface-state |
pim-pseudo-downstream-interface-name | downstream-neighbor |
downstream-assert-neighbor)*>

<!ELEMENT downstream-interface-names (interface-name | interface-nh-index |
sub-mcnh-index)*>

<!ELEMENT downstream-last-jp (downstream-last-jp-oper | downstream-last-jp-time)*>

<!ELEMENT downstream-last-jp-oper (#PCDATA)>

<!ELEMENT downstream-last-jp-time (#PCDATA)>

<!ELEMENT downstream-neighbor (neighbor-address | neighbor-state | terse-sparse
| terse-bidir | terse-rpt | terse-wc | neighbor-timeout | downstream-if-uptime |
 downstream-last-jp)*>

<!ELEMENT dr-address (#PCDATA)>

<!ELEMENT dr-flag (#PCDATA)>

<!ELEMENT dr-id (#PCDATA)>

<!ELEMENT dr-id-one (#PCDATA)>

<!ELEMENT dr-id-two (#PCDATA)>

<!ELEMENT drop-path-attributes (#PCDATA)>

<!ELEMENT dste-bc-bw (#PCDATA)>

<!ELEMENT dste-bc-count (#PCDATA)>

<!ELEMENT dste-bc-header EMPTY>

<!ELEMENT dste-bc-model (#PCDATA)>

<!ELEMENT dvmrp-cache-lifetime (#PCDATA)>

<!ELEMENT dvmrp-capability-flags (dvmrp-neighbor-one-way | dvmrp-neighbor-prune
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| dvmrp-neighbor-generation-id | dvmrp-neighbor-mtrace | dvmrp-neighbor-leave |
dvmrp-neighbor-snmp | dvmrp-neighbor-netmask)*>

<!ELEMENT dvmrp-designated-querier-information (#PCDATA)>

<!ELEMENT dvmrp-graft (multicast-group-address | multicast-source-address |
dvmrp-graft-expire-time | dvmrp-neighbor-address)*>

<!ELEMENT dvmrp-graft-expire-time (#PCDATA)>

<!ELEMENT dvmrp-graft-queue-information (dvmrp-instance)*>

<!ELEMENT dvmrp-grafts-sent (#PCDATA)>

<!ELEMENT dvmrp-group (multicast-group-address | dvmrp-prunes-sent |
dvmrp-grafts-sent | dvmrp-cache-lifetime | dvmrp-prune-time | dvmrp-prune-lifetime
 | dvmrp-prune)*>

<!ELEMENT dvmrp-instance (instance-name | dvmrp-interface | dvmrp-graft |
dvmrp-neighbor | dvmrp-prefix-entry | dvmrp-prune)*>

<!ELEMENT dvmrp-interface (interface-name | dvmrp-interface-state |
dvmrp-interface-leaf | dvmrp-interface-metric | dvmrp-interface-announcements |
dvmrp-interface-mode | dvmrp-interface-holdtime)*>

<!ELEMENT dvmrp-interface-announcements (#PCDATA)>

<!ELEMENT dvmrp-interface-holdtime (#PCDATA)>

<!ELEMENT dvmrp-interface-leaf (#PCDATA)>

<!ELEMENT dvmrp-interface-metric (#PCDATA)>

<!ELEMENT dvmrp-interface-mode (#PCDATA)>

<!ELEMENT dvmrp-interface-state (#PCDATA)>

<!ELEMENT dvmrp-interfaces-information (dvmrp-instance)*>

<!ELEMENT dvmrp-major-version (#PCDATA)>

<!ELEMENT dvmrp-minor-version (#PCDATA)>

<!ELEMENT dvmrp-neighbor (dvmrp-neighbor-address | interface-name |
dvmrp-major-version | dvmrp-minor-version | dvmrp-capability-flags |
dvmrp-neighbor-routes | dvmrp-neighbor-timeout | dvmrp-neighbor-transitions)*>

<!ELEMENT dvmrp-neighbor-address (#PCDATA)>

<!ELEMENT dvmrp-neighbor-generation-id EMPTY>

<!ELEMENT dvmrp-neighbor-leave EMPTY>

<!ELEMENT dvmrp-neighbor-mtrace EMPTY>

<!ELEMENT dvmrp-neighbor-netmask EMPTY>

<!ELEMENT dvmrp-neighbor-one-way EMPTY>

<!ELEMENT dvmrp-neighbor-prune EMPTY>
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<!ELEMENT dvmrp-neighbor-routes (#PCDATA)>

<!ELEMENT dvmrp-neighbor-snmp EMPTY>

<!ELEMENT dvmrp-neighbor-timeout (#PCDATA)>

<!ELEMENT dvmrp-neighbor-transitions (#PCDATA)>

<!ELEMENT dvmrp-neighbors-information (dvmrp-instance)*>

<!ELEMENT dvmrp-next-hop (#PCDATA)>

<!ELEMENT dvmrp-prefix (#PCDATA)>

<!ELEMENT dvmrp-prefix-age (#PCDATA)>
<!ATTLIST dvmrp-prefix-age junos:seconds CDATA #IMPLIED>

<!ELEMENT dvmrp-prefix-entry (dvmrp-prefix | dvmrp-prefix-length | dvmrp-next-hop
 | dvmrp-prefix-age | dvmrp-group)*>

<!ELEMENT dvmrp-prefix-information (dvmrp-instance)*>

<!ELEMENT dvmrp-prefix-length (#PCDATA)>

<!ELEMENT dvmrp-prune (dvmrp-neighbor-address | multicast-group-address |
multicast-source-address | multicast-source-prefix-length | dvmrp-prune-timeout)*>

<!ELEMENT dvmrp-prune-lifetime (#PCDATA)>

<!ELEMENT dvmrp-prune-time (#PCDATA)>

<!ELEMENT dvmrp-prune-timeout (#PCDATA)>

<!ELEMENT dvmrp-prunes-information (dvmrp-instance)*>

<!ELEMENT dvmrp-prunes-sent (#PCDATA)>

<!ELEMENT dynamic-tunnel (tunnel-destination | tunnel-state | tunnel-expiry |
tunnel-reference-count | tunnel-nexthop)*>

<!ELEMENT dynamic-tunnel-table (table-name | destination-network)*>

<!ELEMENT dynamic-tunnels-information (dynamic-tunnel-table)*>

<!ELEMENT egress-protection-protected-l2ckt (protected-l2ckt-state |
protected-l2ckt-ingress | protected-l2ckt-egress | protected-l2ckt-vcid)*>

<!ELEMENT egress-protection-protector (protector-state | protector-interface |
interface-status | protector-pe | protector-pe-status | protection-context |
context-status | context-lsp)*>

<!ELEMENT elapsed-time (#PCDATA)>
<!ATTLIST elapsed-time junos:seconds CDATA #IMPLIED>

<!ELEMENT element (#PCDATA)>

<!ELEMENT elnh-address (#PCDATA)>

<!ELEMENT encoding-type (#PCDATA)>

<!ELEMENT end-system-element (end-system-id | end-system-metric)*>
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<!ELEMENT end-system-id (#PCDATA)>

<!ELEMENT end-system-metric (#PCDATA)>

<!ELEMENT entry-state (#PCDATA)>

<!ELEMENT error-count (#PCDATA)>

<!ELEMENT error-count-5seconds (#PCDATA)>

<!ELEMENT error-message (#PCDATA)>

<!ELEMENT error-send-count (#PCDATA)>

<!ELEMENT es-neighbor-id (#PCDATA)>

<!ELEMENT es-neighbor-status (#PCDATA)>

<!ELEMENT esis-adjacency (esis-neighbor-type | esis-neighbor-id | holdtime |
esis-adjacency-advertised-holdtime | snpa | interface-name | esis-adjacency-log)*>

<!ELEMENT esis-adjacency-advertised-holdtime (#PCDATA)>

<!ELEMENT esis-adjacency-count (#PCDATA)>

<!ELEMENT esis-adjacency-down-reason (#PCDATA)>

<!ELEMENT esis-adjacency-event (#PCDATA)>

<!ELEMENT esis-adjacency-information (esis-adjacency)*>
<!ATTLIST esis-adjacency-information junos:style CDATA #IMPLIED>

<!ELEMENT esis-adjacency-log (esis-adjacency-when | esis-adjacency-state |
esis-adjacency-event | esis-adjacency-down-reason)*>

<!ELEMENT esis-adjacency-state (#PCDATA)>

<!ELEMENT esis-adjacency-when (#PCDATA)>
<!ATTLIST esis-adjacency-when junos:seconds CDATA #IMPLIED>

<!ELEMENT esis-esct (#PCDATA)>

<!ELEMENT esis-hello-interval (#PCDATA)>

<!ELEMENT esis-interface (interface-name | esis-interface-receives |
esis-interface-sends | interface-index | esis-interface-state-value |
esis-hello-interval | holdtime | esis-esct | esis-adjacency-count |
esis-interface-net)*>

<!ELEMENT esis-interface-information (esis-interface)*>
<!ATTLIST esis-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT esis-interface-net (#PCDATA)>

<!ELEMENT esis-interface-receives (#PCDATA)>

<!ELEMENT esis-interface-sends (#PCDATA)>

<!ELEMENT esis-interface-state-value (#PCDATA)>
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<!ELEMENT esis-neighbor-id (#PCDATA)>

<!ELEMENT esis-neighbor-type (#PCDATA)>

<!ELEMENT esis-pdu-statistics (esis-pdu-type | packets-received | packets-processed
 | packets-dropped | packets-sent | packets-retransmitted)*>

<!ELEMENT esis-pdu-type (#PCDATA)>

<!ELEMENT esis-statistics-information (esis-pdu-statistics |
esis-totals-information)*>

<!ELEMENT esis-totals-information (packets-received | packets-sent)*>

<!ELEMENT estab-ack-receive-count (#PCDATA)>

<!ELEMENT estab-send-count (#PCDATA)>

<!ELEMENT established-count (#PCDATA)>

<!ELEMENT estimated-free-bytes (#PCDATA)>

<!ELEMENT eswd_nh_notify_fail_iff (#PCDATA)>

<!ELEMENT eswd_nh_notify_fail_ifl (#PCDATA)>

<!ELEMENT event-name (#PCDATA)>

<!ELEMENT event-time (#PCDATA)>

<!ELEMENT everything (pim-statistics-global | pim-statistics-other)*>

<!ELEMENT expiration-time (#PCDATA)>

<!ELEMENT expire-time (#PCDATA)>
<!ATTLIST expire-time junos:seconds CDATA #IMPLIED>

<!ELEMENT explicit-route (address | explicit-route-type | telink-id)*>
<!ATTLIST explicit-route heading CDATA #IMPLIED>

<!ELEMENT explicit-route-type (#PCDATA)>

<!ELEMENT export-count (#PCDATA)>

<!ELEMENT export-list (#PCDATA)>

<!ELEMENT export-policy (#PCDATA)>

<!ELEMENT ext-int-intf-index (#PCDATA)>

<!ELEMENT ext-int-type (#PCDATA)>

<!ELEMENT ext_rt_add (#PCDATA)>

<!ELEMENT ext_rt_chg (#PCDATA)>

<!ELEMENT ext_rt_del (#PCDATA)>

<!ELEMENT ext_rt_del_not_found (#PCDATA)>

<!ELEMENT extended-community (#PCDATA)>
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<!ELEMENT extended-information (#PCDATA)>

<!ELEMENT external-peer-count (#PCDATA)>

<!ELEMENT external-prefix-metric (#PCDATA)>

<!ELEMENT fabric-statistics (vlan_add | vlan_del | vlan_chg | l2domain_null_vlan
 | fdb_add | fdb_del | fdb_no_vlan_idx | eswd_nh_notify_fail_ifl |
eswd_nh_notify_fail_iff | bridge_rt_add | bridge_rt_chg | bridge_rt_del |
bridge_rt_del_not_found | bridge_rt_add_no_snpa | bridge_rt_add_force_updates |
mstp_rt_add | mstp_rt_chg | mstp_rt_del | mstp_rt_del_not_found | ext_rt_add |
ext_rt_chg | ext_rt_del | ext_rt_del_not_found | grat_timer_no_l2domain |
grat_local_arp | grat_send_no_l2domain | grat_send_fail | grat_send_ok |
mac_event_grat_timer_started | mac_event_grat_timer_stopped |
rem_arp_grat_timer_started | rem_arp_grat_timer_stopped | rem_arp_no_mac_ip |
rem_arp_add_no_l2domain | rem_arp_del_no_l2domain | local_arp_grat_timer_stopped
 | rem_arp_del_no_mac_ip | rem_arp_del_no_tsi | l2l3map_rt_add | l2l3map_rt_del
| l2l3map_rt_del_not_found | ifd_notifications | ifd_rt_add | ifd_rt_chg |
ifd_rt_del | ifd_rt_del_not_found | ip_rt_add | ip_rt_add_no_nh | ip_rt_add_no_snpa
 | ip_rt_add_unsupp_inst | ip_rt_chg | ip_rt_del | ip_rt_del_not_found | inh_rt_add
 | inh_rt_add_no_fnh | inh_rt_add_no_snpa | inh_rt_add_unsupp_inst | inh_rt_chg
| inh_rt_del | inh_rt_del_not_found | arp_rt_add | arp_rt_add_no_snpa | arp_rt_chg
 | arp_nh_null_addr | arp_rt_del | arp_rt_del_no_krtt | arp_rt_del_not_found |
bridge_inh_no_msti | bridge_inh_del_no_msti | rt_inst_add | rt_inst_no_l3domain_tlv
 | rt_inst_null_l3domain | rt_inst_del | rt_inst_del_ignore)*>

<!ELEMENT fabric-summary-information (autonomous-system | ine-id | ine-type |
simulation-mode)*>

<!ELEMENT family (#PCDATA)>

<!ELEMENT fast-reroute-priority (#PCDATA)>

<!ELEMENT fc (#PCDATA)>

<!ELEMENT fdb_add (#PCDATA)>

<!ELEMENT fdb_del (#PCDATA)>

<!ELEMENT fdb_no_vlan_idx (#PCDATA)>

<!ELEMENT fdep-depnode (dep-rtnode-prefix | dep-rtnode-prefixlen | dep-entries |
 dep-active | dep-flags)*>

<!ELEMENT fdep-destination (#PCDATA)>

<!ELEMENT fdep-inode (fdep-inode-color | fdep-inode-consist | fdep-inode-asn)*>

<!ELEMENT fdep-inode-asn (#PCDATA)>

<!ELEMENT fdep-inode-color (#PCDATA)>

<!ELEMENT fdep-inode-consist (#PCDATA)>

<!ELEMENT fdep-node (fdep-destination | fdep-prefixlen | fdep-inode | fdep-rtnode
 | fdep-depnode)*>

<!ELEMENT fdep-prefixlen (#PCDATA)>

<!ELEMENT fdep-rtnode (rtnode-state | rtnode-refcount | rtnode-origin |
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rtnode-next-as | rtnode-flags)*>

<!ELEMENT filelimit (#PCDATA)>

<!ELEMENT filename (#PCDATA)>

<!ELEMENT filesize (#PCDATA)>

<!ELEMENT filter (#PCDATA)>

<!ELEMENT filter-in-updates (#PCDATA)>

<!ELEMENT filter-mode (#PCDATA)>

<!ELEMENT filter-out-updates (#PCDATA)>

<!ELEMENT filter-qcount (#PCDATA)>

<!ELEMENT filter-type (#PCDATA)>

<!ELEMENT first-hop-address (#PCDATA)>

<!ELEMENT first-update (#PCDATA)>
<!ATTLIST first-update junos:seconds CDATA #IMPLIED>

<!ELEMENT firstfrag-lsp-id (#PCDATA)>

<!ELEMENT flags (#PCDATA)>

<!ELEMENT flap-count (#PCDATA)>

<!ELEMENT flood-list-count (#PCDATA)>

<!ELEMENT flood-queue-depth (#PCDATA)>

<!ELEMENT flooded-bytes (#PCDATA)>

<!ELEMENT flooded-packets (#PCDATA)>

<!ELEMENT flow-bandwidth (#PCDATA)>

<!ELEMENT flow-dep-state (#PCDATA)>

<!ELEMENT flow-map-name (#PCDATA)>

<!ELEMENT flow-origin (#PCDATA)>

<!ELEMENT flow-rtn-dest (#PCDATA)>

<!ELEMENT flow-rtn-plen (#PCDATA)>

<!ELEMENT flow-rtn-state (#PCDATA)>

<!ELEMENT flow-ucast-rt (flow-rtn-dest | flow-rtn-plen | flow-rtn-state)*>

<!ELEMENT formatted-tlv-data (#PCDATA)>

<!ELEMENT forward-address (#PCDATA)>

<!ELEMENT forward-nz EMPTY>
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<!ELEMENT forward-rsvp EMPTY>
<!ELEMENT forwarded-packet-count (#PCDATA)>
<!ELEMENT forwarding-nh-count (#PCDATA)>
<!ELEMENT forwarding-rate-kilobytes (#PCDATA)>
<!ELEMENT forwarding-rate-packets (#PCDATA)>
<!ELEMENT fragments-rebuilt (#PCDATA)>
<!ELEMENT gateway (#PCDATA)>
<!ELEMENT gateway-addr (#PCDATA)>
<!ELEMENT gateway-snpa (gateway-addr)*>
<!ELEMENT generation-timer (#PCDATA)>
<!ELEMENT gpid (#PCDATA)>
<!ELEMENT graceful-deletion-timeout (#PCDATA)>
<!ELEMENT graceful-deletion-triggered EMPTY>
<!ELEMENT grat_local_arp (#PCDATA)>
<!ELEMENT grat_send_fail (#PCDATA)>
<!ELEMENT grat_send_no_l2domain (#PCDATA)>
<!ELEMENT grat_send_ok (#PCDATA)>
<!ELEMENT grat_timer_no_l2domain (#PCDATA)>
<!ELEMENT group-count (#PCDATA)>
<!ELEMENT group-flags (#PCDATA)>
<!ELEMENT group-index (#PCDATA)>
<!ELEMENT group-name (#PCDATA)>
<!ELEMENT group-range (#PCDATA)>
<!ELEMENT group-state (#PCDATA)>
<!ELEMENT hakr-key-algorithm (#PCDATA)>
<!ELEMENT hakr-key-id (#PCDATA)>
<!ELEMENT hakr-key-mode (#PCDATA)>
<!ELEMENT hakr-key-options (#PCDATA)>
<!ELEMENT hakr-key-secret (#PCDATA)>
<!ELEMENT hakr-key-start-time (#PCDATA)>
<!ELEMENT hakr-key-state (#PCDATA)>
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<!ELEMENT hakr-keychain (hakr-keychain-name | hakr-keychain-active-send-key |
hakr-keychain-active-receive-key | hakr-keychain-next-send-key |
hakr-keychain-next-receive-key | hakr-keychain-next-key-time |
hakr-keychain-tolerance | hakr-sa-clients | hakr-keys)*>

<!ELEMENT hakr-keychain-active-receive-key (#PCDATA)>

<!ELEMENT hakr-keychain-active-send-key (#PCDATA)>

<!ELEMENT hakr-keychain-information (hakr-keychain | hakr-keys)*>
<!ATTLIST hakr-keychain-information junos:style CDATA #IMPLIED>

<!ELEMENT hakr-keychain-name (#PCDATA)>

<!ELEMENT hakr-keychain-next-key-time (#PCDATA)>

<!ELEMENT hakr-keychain-next-receive-key (#PCDATA)>

<!ELEMENT hakr-keychain-next-send-key (#PCDATA)>

<!ELEMENT hakr-keychain-tolerance (#PCDATA)>

<!ELEMENT hakr-keys (hakr-key-id | hakr-key-secret | hakr-key-algorithm |
hakr-key-mode | hakr-key-state | hakr-key-options | hakr-key-start-time)*>

<!ELEMENT hakr-sa-clients (#PCDATA)>

<!ELEMENT half-open-peer-count (#PCDATA)>

<!ELEMENT hello-default-holdtime (#PCDATA)>

<!ELEMENT hello-default-holdtime-remaining (#PCDATA)>

<!ELEMENT hello-dr-priority (#PCDATA)>

<!ELEMENT hello-generation-id (#PCDATA)>

<!ELEMENT hello-holdtime (#PCDATA)>

<!ELEMENT hello-holdtime-remaining (#PCDATA)>

<!ELEMENT hello-interval (#PCDATA)>

<!ELEMENT hello-interval-mismatch-error (#PCDATA)>

<!ELEMENT hello-lanprune-delay (#PCDATA)>

<!ELEMENT hello-nbr-t-bit EMPTY>

<!ELEMENT hello-override-interval (#PCDATA)>

<!ELEMENT hello-padding (#PCDATA)>

<!ELEMENT hello-received-error (#PCDATA)>

<!ELEMENT hello-time (#PCDATA)>

<!ELEMENT hellos-received (#PCDATA)>

<!ELEMENT hellos-sent (#PCDATA)>
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<!ELEMENT helper-nhid (#PCDATA)>

<!ELEMENT helper-refcount (#PCDATA)>

<!ELEMENT helper-status (#PCDATA)>

<!ELEMENT hidden-route-count (#PCDATA)>

<!ELEMENT high-priority (#PCDATA)>

<!ELEMENT high-watermark (#PCDATA)>

<!ELEMENT history (log-time-stamp | log-event | changed-entity)*>
<!ATTLIST history category-heading CDATA #IMPLIED>
<!ATTLIST history heading CDATA #IMPLIED>

<!ELEMENT history-prefix-count (#PCDATA)>

<!ELEMENT hold-priority (#PCDATA)>

<!ELEMENT holddown-route-count (#PCDATA)>

<!ELEMENT holdtime (#PCDATA)>

<!ELEMENT hoplimit (#PCDATA)>

<!ELEMENT host-count (#PCDATA)>

<!ELEMENT host-interface (#PCDATA)>

<!ELEMENT host-record (record-type | receiver | record-timeout)*>

<!ELEMENT hostname (#PCDATA)>

<!ELEMENT hostname-tlv (hostname)*>

<!ELEMENT identifier (#PCDATA)>

<!ELEMENT idrp-tlv (tlv-length)*>

<!ELEMENT ifd_notifications (#PCDATA)>

<!ELEMENT ifd_rt_add (#PCDATA)>

<!ELEMENT ifd_rt_chg (#PCDATA)>

<!ELEMENT ifd_rt_del (#PCDATA)>

<!ELEMENT ifd_rt_del_not_found (#PCDATA)>

<!ELEMENT ifl-repository-state (#PCDATA)>

<!ELEMENT iflist-next-hop (next-hop-id | next-hop-ref-count |
next-hop-kernel-ref-count | next-hop-downstream-interface)*>

<!ELEMENT igmp-group-information (mgm-interface-groups)*>

<!ELEMENT igmp-hosts-information (mgm-disabled-interface-name | mgm-interface)*>

<!ELEMENT igmp-interface-information (mgm-interface | mgm-configured-parameters
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| mgm-derived-parameters | mgm-amt-configured-parameters |
mgm-amt-derived-parameters)*>

<!ELEMENT igmp-output-group-information (mgm-interface-output-groups)*>

<!ELEMENT igmp-statistics-information (mgm-statistics-interface |
mgm-statistics-other | mgm-statistics-global | mgm-statistics-all)*>

<!ELEMENT ignore-path-attributes (#PCDATA)>

<!ELEMENT igp-converging EMPTY>

<!ELEMENT igp-ldp-sync-holdtime (#PCDATA)>

<!ELEMENT igp-ldp-sync-last-change (#PCDATA)>

<!ELEMENT igp-ldp-sync-reason (#PCDATA)>

<!ELEMENT igp-ldp-sync-state (#PCDATA)>

<!ELEMENT igp-ldp-sync-timeleft (#PCDATA)>
<!ATTLIST igp-ldp-sync-timeleft junos:seconds CDATA #IMPLIED>

<!ELEMENT igp-protocol (#PCDATA)>

<!ELEMENT immediate-count (#PCDATA)>

<!ELEMENT import-count (#PCDATA)>

<!ELEMENT import-list (#PCDATA)>

<!ELEMENT import-policy (#PCDATA)>

<!ELEMENT inactive-reason (#PCDATA)>

<!ELEMENT inbound-label (#PCDATA)>

<!ELEMENT incoming-interface-list-id (#PCDATA)>

<!ELEMENT incoming-interface-list-names (#PCDATA)>

<!ELEMENT incomplete EMPTY>

<!ELEMENT index (#PCDATA)>

<!ELEMENT indication-lsa EMPTY>

<!ELEMENT indirect-nh (#PCDATA)>

<!ELEMENT indirect-nh-count (#PCDATA)>

<!ELEMENT ine-id (#PCDATA)>

<!ELEMENT ine-type (#PCDATA)>

<!ELEMENT ingress-replication-information (ir-tunnel | ir-unicast-tunnel)*>

<!ELEMENT inh-id (#PCDATA)>

<!ELEMENT inh-snpa (inh-id)*>
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<!ELEMENT inh_rt_add (#PCDATA)>

<!ELEMENT inh_rt_add_no_fnh (#PCDATA)>

<!ELEMENT inh_rt_add_no_snpa (#PCDATA)>

<!ELEMENT inh_rt_add_unsupp_inst (#PCDATA)>

<!ELEMENT inh_rt_chg (#PCDATA)>

<!ELEMENT inh_rt_del (#PCDATA)>

<!ELEMENT inh_rt_del_not_found (#PCDATA)>

<!ELEMENT input-checksum (#PCDATA)>

<!ELEMENT input-checksum-err (#PCDATA)>

<!ELEMENT input-drop-path-attributes (#PCDATA)>

<!ELEMENT input-ignore-path-attributes (#PCDATA)>

<!ELEMENT input-messages (#PCDATA)>

<!ELEMENT input-octets (#PCDATA)>

<!ELEMENT input-refreshes (#PCDATA)>

<!ELEMENT input-updates (#PCDATA)>

<!ELEMENT installation-time (#PCDATA)>

<!ELEMENT instance (instance-name | instance-display-error | reference-site |
ldp-vpls-reference-site | vpls-protocol-state | vpls-rsvp-te-ingress-p2mp-lsp)*>
<!ATTLIST instance junos:style CDATA #IMPLIED>

<!ELEMENT instance-core (instance-name | instance-description | router-id |
instance-type | instance-state | instance-restart-state | instance-pathsel-timeout
 | instance-rib | instance-interface | instance-vrf | instance-vpls-meshgroup)*>
<!ATTLIST instance-core heading CDATA #IMPLIED>

<!ELEMENT instance-description (#PCDATA)>

<!ELEMENT instance-display-error (#PCDATA)>

<!ELEMENT instance-entry (instance-name | ngen-mvpn-mode | instance-display-error
 | provider-tunnel | neighbor | c-multicast-ipv4 | c-multicast-ipv6)*>

<!ELEMENT instance-entry-summary (neighbor-summary | c-multicast-summary |
c-multicast-ipv6-summary)*>

<!ELEMENT instance-family (address-family | instance-entry |
instance-entry-summary)*>

<!ELEMENT instance-flags (#PCDATA)>

<!ELEMENT instance-id (#PCDATA)>

<!ELEMENT instance-id-mismatch-error (#PCDATA)>

<!ELEMENT instance-information (instance-core)*>
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<!ATTLIST instance-information junos:style CDATA #IMPLIED>

<!ELEMENT instance-interface (interface-name)*>

<!ELEMENT instance-name (#PCDATA)>

<!ELEMENT instance-options (#PCDATA)>

<!ELEMENT instance-pathsel-timeout (#PCDATA)>

<!ELEMENT instance-restart-state (#PCDATA)>

<!ELEMENT instance-rib (irib-name | irib-route-count | irib-active-count |
irib-holddown-count | irib-hidden-count | irib-restart-state)*>

<!ELEMENT instance-state (#PCDATA)>

<!ELEMENT instance-type (#PCDATA)>

<!ELEMENT instance-vpls-meshgroup (meshgroup-name | route-distinguisher |
meshgroup-vrf-import | meshgroup-vrf-export | meshgroup-vrf-import-target |
meshgroup-vrf-export-target)*>

<!ELEMENT instance-vrf (route-distinguisher | vrf-import | vrf-export |
vrf-import-target | vrf-export-target | vrf-label-allocation |
vrf-label-substitution | fast-reroute-priority)*>

<!ELEMENT interface (interface-name | interface-id | interface-description |
local-interface-index | interface-flags | interface-flags-description)*>

<!ELEMENT interface-address (#PCDATA)>

<!ELEMENT interface-cost (#PCDATA)>

<!ELEMENT interface-description (#PCDATA)>

<!ELEMENT interface-description-list (#PCDATA)>

<!ELEMENT interface-disabled-flag EMPTY>

<!ELEMENT interface-encapsulation (#PCDATA)>

<!ELEMENT interface-flags (#PCDATA)>

<!ELEMENT interface-flags-description (#PCDATA)>

<!ELEMENT interface-flood-list-count (#PCDATA)>

<!ELEMENT interface-flood-reduction EMPTY>

<!ELEMENT interface-id (#PCDATA)>

<!ELEMENT interface-index (#PCDATA)>

<!ELEMENT interface-join-sg-count (#PCDATA)>

<!ELEMENT interface-join-tsg-count (#PCDATA)>

<!ELEMENT interface-label-info (#PCDATA)>

<!ELEMENT interface-level-data (level | adjacency-count | interface-priority |
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metric | te-metric | passive | hello-time | holdtime | dr-id-one | dr-id-two |
dr-flag | isis-interface-level-topology)*>

<!ELEMENT interface-link-name (#PCDATA)>

<!ELEMENT interface-local-bandwidth-deduction (#PCDATA)>

<!ELEMENT interface-mapped-bandwidth-deduction (#PCDATA)>

<!ELEMENT interface-max-bandwidth (#PCDATA)>

<!ELEMENT interface-mismatch-count (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT interface-nh-index (#PCDATA)>

<!ELEMENT interface-no-qos-adjust (#PCDATA)>

<!ELEMENT interface-priority (#PCDATA)>

<!ELEMENT interface-protection-type (#PCDATA)>

<!ELEMENT interface-remaining-bandwidth (#PCDATA)>

<!ELEMENT interface-repository-state (#PCDATA)>

<!ELEMENT interface-reverse-oif-mapping (#PCDATA)>

<!ELEMENT interface-reverse-oif-mapping-no-qos-adjust (#PCDATA)>

<!ELEMENT interface-secondary EMPTY>

<!ELEMENT interface-state (interface-state-dr | interface-state-not-dr |
interface-state-p2p | interface-state-bidir-active |
interface-state-bidir-not-capable)*>

<!ELEMENT interface-state-bidir-active EMPTY>

<!ELEMENT interface-state-bidir-not-capable EMPTY>

<!ELEMENT interface-state-dr EMPTY>

<!ELEMENT interface-state-not-dr EMPTY>

<!ELEMENT interface-state-p2p EMPTY>

<!ELEMENT interface-state-value (#PCDATA)>

<!ELEMENT interface-statistics (interface | remote-pe | broadcast-packets |
broadcast-bytes | multicast-packets | multicast-bytes | flooded-packets |
flooded-bytes | unicast-packets | unicast-bytes | mac-limit | num-mac-count)*>

<!ELEMENT interface-status (#PCDATA)>

<!ELEMENT interface-subscriber-leave-timer (#PCDATA)>

<!ELEMENT interface-type (#PCDATA)>

<!ELEMENT internal-peer-count (#PCDATA)>
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<!ELEMENT ip-address (#PCDATA)>

<!ELEMENT ip-prefix-tlv (isis-topology-id | address-prefix | metric | prefix-status
 | subtlv-size | isis-prefix-subtlv)*>
<!ATTLIST ip-prefix-tlv heading CDATA #IMPLIED>

<!ELEMENT ip-protocol-version (#PCDATA)>

<!ELEMENT ip_rt_add (#PCDATA)>

<!ELEMENT ip_rt_add_no_nh (#PCDATA)>

<!ELEMENT ip_rt_add_no_snpa (#PCDATA)>

<!ELEMENT ip_rt_add_unsupp_inst (#PCDATA)>

<!ELEMENT ip_rt_chg (#PCDATA)>

<!ELEMENT ip_rt_del (#PCDATA)>

<!ELEMENT ip_rt_del_not_found (#PCDATA)>

<!ELEMENT ipaddress-tlv (address)*>

<!ELEMENT ipsec-sa (#PCDATA)>

<!ELEMENT ipv6-address (#PCDATA)>

<!ELEMENT ipv6-ra-advertisement (ipv6-source-address | ipv6-ra-time-since |
ipv6-ra-managed-flag | ipv6-ra-managed-flag-conflict | ipv6-ra-other-config-flag
 | ipv6-ra-other-config-flag-conflict | ipv6-ra-link-mtu |
ipv6-ra-link-mtu-conflict | ipv6-ra-reachable-time |
ipv6-ra-reachable-time-conflict | ipv6-ra-default-lifetime |
ipv6-ra-default-lifetime-conflict | ipv6-ra-retransmit-timer |
ipv6-ra-retransmit-timer-conflict | ipv6-ra-current-hop-limit |
ipv6-ra-current-hop-limit-conflict | ipv6-ra-prefix)*>

<!ELEMENT ipv6-ra-advertisement-sent-time (#PCDATA)>
<!ATTLIST ipv6-ra-advertisement-sent-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ipv6-ra-advertisements-received (#PCDATA)>

<!ELEMENT ipv6-ra-advertisements-sent (#PCDATA)>

<!ELEMENT ipv6-ra-current-hop-limit (#PCDATA)>

<!ELEMENT ipv6-ra-current-hop-limit-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-default-lifetime (#PCDATA)>

<!ELEMENT ipv6-ra-default-lifetime-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-information (ipv6-ra-interface)*>

<!ELEMENT ipv6-ra-interface (interface-name | ipv6-ra-advertisements-sent |
ipv6-ra-advertisement-sent-time | ipv6-ra-solicits-received |
ipv6-ra-solicit-receive-time | ipv6-ra-advertisements-received | vrrp-group |
ipv6-ra-advertisement)*>

<!ELEMENT ipv6-ra-link-mtu (#PCDATA)>
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<!ELEMENT ipv6-ra-link-mtu-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-managed-flag (#PCDATA)>

<!ELEMENT ipv6-ra-managed-flag-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-other-config-flag (#PCDATA)>

<!ELEMENT ipv6-ra-other-config-flag-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-prefix (ipv6-ra-prefix-address | ipv6-ra-prefix-valid-lifetime
 | ipv6-ra-prefix-valid-lifetime-conflict | ipv6-ra-prefix-preferred-lifetime |
ipv6-ra-prefix-preferred-lifetime-conflict | ipv6-ra-prefix-on-link |
ipv6-ra-prefix-on-link-conflict | ipv6-ra-prefix-autonomous |
ipv6-ra-prefix-autonomous-conflict)*>

<!ELEMENT ipv6-ra-prefix-address (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-autonomous (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-autonomous-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-on-link (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-on-link-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-preferred-lifetime (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-preferred-lifetime-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-valid-lifetime (#PCDATA)>

<!ELEMENT ipv6-ra-prefix-valid-lifetime-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-reachable-time (#PCDATA)>

<!ELEMENT ipv6-ra-reachable-time-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-retransmit-timer (#PCDATA)>

<!ELEMENT ipv6-ra-retransmit-timer-conflict (#PCDATA)>

<!ELEMENT ipv6-ra-solicit-receive-time (#PCDATA)>
<!ATTLIST ipv6-ra-solicit-receive-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ipv6-ra-solicits-received (#PCDATA)>

<!ELEMENT ipv6-ra-time-since (#PCDATA)>
<!ATTLIST ipv6-ra-time-since junos:seconds CDATA #IMPLIED>

<!ELEMENT ipv6-reachability-tlv (isis-topology-id | ipv6-address | metric |
prefix-extern | prefix-downflag | subtlv-size | isis-prefix-subtlv)*>
<!ATTLIST ipv6-reachability-tlv heading CDATA #IMPLIED>

<!ELEMENT ipv6-source-address (#PCDATA)>

<!ELEMENT ipv6address-tlv (address)*>

<!ELEMENT ir-tunnel (ir-tunnel-entry)*>
<!ATTLIST ir-tunnel junos:style CDATA #IMPLIED>
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<!ELEMENT ir-tunnel-application (#PCDATA)>

<!ELEMENT ir-tunnel-entry (ir-tunnel-name | ir-tunnel-application |
ir-unicast-tunnel)*>

<!ELEMENT ir-tunnel-name (#PCDATA)>

<!ELEMENT ir-unicast-tunnel (ir-unicast-tunnel-entry)*>

<!ELEMENT ir-unicast-tunnel-dst (#PCDATA)>

<!ELEMENT ir-unicast-tunnel-entry (ir-unicast-tunnel-dst | ir-unicast-tunnel-type
 | ir-unicast-tunnel-mode | ir-unicast-tunnel-state)*>

<!ELEMENT ir-unicast-tunnel-mode (#PCDATA)>

<!ELEMENT ir-unicast-tunnel-state (#PCDATA)>

<!ELEMENT ir-unicast-tunnel-type (#PCDATA)>

<!ELEMENT irb-present (#PCDATA)>

<!ELEMENT irib-active-count (#PCDATA)>

<!ELEMENT irib-hidden-count (#PCDATA)>

<!ELEMENT irib-holddown-count (#PCDATA)>

<!ELEMENT irib-name (#PCDATA)>

<!ELEMENT irib-restart-state (#PCDATA)>

<!ELEMENT irib-route-count (#PCDATA)>

<!ELEMENT is-detour EMPTY>

<!ELEMENT is-fastreroute EMPTY>

<!ELEMENT is-inter-domain-path EMPTY>

<!ELEMENT is-linkprotection EMPTY>

<!ELEMENT is-neighbor-id (#PCDATA)>

<!ELEMENT is-nodeprotection EMPTY>

<!ELEMENT is-primary EMPTY>

<!ELEMENT is-reachability (isis-fragment | isis-topology-id | is-neighbor-id |
flags | isis-pseudonode | interface-name | metric | subtlv-size | srlgtlv-size |
 te-metric | local-address | remote-address | local-ifindex | remote-ifindex |
level)*>

<!ELEMENT is-soft-preemption EMPTY>

<!ELEMENT isis-adjacency (interface-name | system-name | not-remote-address |
level | adjacency-state | holdtime | interface-priority | transition-count |
last-transition-time | circuit-type | adjacency-restart-capable |
adjacency-advertisement | adjacency-flag | adjacency-topologies | mac-address |
lan-id | ip-address | ipv6-address | snpa | isis-adjacency-log)*>
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<!ELEMENT isis-adjacency-holddown (#PCDATA)>

<!ELEMENT isis-adjacency-information (isis-adjacency)*>
<!ATTLIST isis-adjacency-information junos:style CDATA #IMPLIED>

<!ELEMENT isis-adjacency-log (adjacency-when | adjacency-state | adjacency-event
 | adjacency-down-reason)*>

<!ELEMENT isis-attached-bit-evaluation (#PCDATA)>

<!ELEMENT isis-authentication-information (isis-interface-authentication |
isis-lsp-authentication)*>

<!ELEMENT isis-backup-coverage (isis-topology-id | level | isis-node-coverage |
isis-route-coverage-ipv4 | isis-route-coverage-ipv6 | isis-route-coverage-clns)*>

<!ELEMENT isis-backup-coverage-information (isis-backup-coverage)*>

<!ELEMENT isis-backup-mplsp (lsp-name | lsp-status | lsp-addr | metric | te-metric
 | lsp-last-change | lsp-refcount)*>

<!ELEMENT isis-backup-mplsp-information (isis-backup-mplsp)*>

<!ELEMENT isis-backup-spf-result (node-id | no-first-fragment | backup-root |
backup-root-metric | metric | backup-root-preference | track-item |
next-hop-element | backup-next-hop-element | no-coverage-reason)*>

<!ELEMENT isis-context (isis-context-id | isis-context-level |
isis-context-owner-proto | isis-context-role | isis-context-primary |
isis-context-metric | isis-context-advertiser-router-id | isis-context-advertiser
 | isis-context-advertiser-metric | isis-context-advertiser-level)*>
<!ATTLIST isis-context heading CDATA #IMPLIED>

<!ELEMENT isis-context-advertiser (#PCDATA)>

<!ELEMENT isis-context-advertiser-level (#PCDATA)>

<!ELEMENT isis-context-advertiser-metric (#PCDATA)>

<!ELEMENT isis-context-advertiser-router-id (#PCDATA)>

<!ELEMENT isis-context-id (#PCDATA)>

<!ELEMENT isis-context-information (isis-context)*>
<!ATTLIST isis-context-information junos:style CDATA #IMPLIED>

<!ELEMENT isis-context-information-local (isis-context-local)*>
<!ATTLIST isis-context-information-local junos:style CDATA #IMPLIED>

<!ELEMENT isis-context-level (#PCDATA)>

<!ELEMENT isis-context-local (context-id-local | context-level1-state |
context-level2-state | metric-one | metric-two)*>
<!ATTLIST isis-context-local heading CDATA #IMPLIED>

<!ELEMENT isis-context-metric (#PCDATA)>

<!ELEMENT isis-context-owner-proto (#PCDATA)>

<!ELEMENT isis-context-primary (#PCDATA)>
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<!ELEMENT isis-context-role (#PCDATA)>

<!ELEMENT isis-database (level | isis-database-entry | lsp-count)*>

<!ELEMENT isis-database-entry (lsp-id | sequence-number | checksum |
remaining-lifetime | lsp-attributes | isis-neighbor | isis-prefix | isis-header
| isis-packet | lsp-stub | isis-tlv | transmission-status | isis-es-neighbor)*>

<!ELEMENT isis-database-information (isis-database)*>
<!ATTLIST isis-database-information junos:style CDATA #IMPLIED>

<!ELEMENT isis-database-local (level | isis-database-local-entry)*>

<!ELEMENT isis-database-local-data (isis-database-local-data-type |
isis-database-local-data-name | tlv-size | address | protocol | mtid | router-id
 | hostname | prefix-reachability | is-reachability | unknown-local-data)*>

<!ELEMENT isis-database-local-data-name (#PCDATA)>

<!ELEMENT isis-database-local-data-type (#PCDATA)>

<!ELEMENT isis-database-local-entry (lsp-id | sequence-number | checksum |
remaining-lifetime | lsp-attributes | isis-database-local-data |
estimated-free-bytes)*>

<!ELEMENT isis-database-local-information (isis-database-local)*>

<!ELEMENT isis-es-neighbor (es-neighbor-id | metric | reachability-delay |
reachability-expense | reachability-error | es-neighbor-status)*>

<!ELEMENT isis-external-preference (#PCDATA)>

<!ELEMENT isis-fragment (#PCDATA)>

<!ELEMENT isis-header (lsp-id | pdu-length | allocated-length | router-id |
remaining-lifetime | level | interface-index | estimated-free-bytes |
actual-free-bytes | lsdb-timer-type | lsdb-expiration-time | needs-rebuild |
protocol)*>

<!ELEMENT isis-hostname (system-id | system-name | isis-hostname-type)*>

<!ELEMENT isis-hostname-information (isis-hostname)*>

<!ELEMENT isis-hostname-type (#PCDATA)>

<!ELEMENT isis-ignore-lsp-metrics EMPTY>

<!ELEMENT isis-interface (interface-name | circuit-type | circuit-id |
isis-interface-state-one | isis-interface-state-two | interface-disabled-flag |
dr-id-one | dr-id-two | metric-one | metric-two | interface-index |
interface-state-value | lsp-interval | csnp-interval | hello-padding |
interface-protection-type | no-eligible-backup | system-name | mesh-group |
adjacency-advertisement | interface-level-data | igp-ldp-sync-holdtime |
igp-ldp-sync-state | igp-ldp-sync-last-change | igp-ldp-sync-reason |
igp-ldp-sync-timeleft)*>
<!ATTLIST isis-interface heading CDATA #IMPLIED>

<!ELEMENT isis-interface-authentication (interface-name |
isis-interface-level-authentication)*>

<!ELEMENT isis-interface-information (isis-interface)*>
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<!ATTLIST isis-interface-information junos:style CDATA #IMPLIED>

<!ELEMENT isis-interface-level-authentication (level |
isis-interface-level-iih-authentication | isis-interface-level-csn-authentication
 | isis-interface-level-psn-authentication)*>

<!ELEMENT isis-interface-level-csn-authentication (#PCDATA)>

<!ELEMENT isis-interface-level-iih-authentication (#PCDATA)>

<!ELEMENT isis-interface-level-psn-authentication (#PCDATA)>

<!ELEMENT isis-interface-level-topology (isis-topology-id | isis-topology-metric)*>

<!ELEMENT isis-interface-state-one (#PCDATA)>

<!ELEMENT isis-interface-state-two (#PCDATA)>

<!ELEMENT isis-ipv4-multicast-rpf-routes EMPTY>

<!ELEMENT isis-iso-prefix-tlv (metric | metric-flag | reachability-delay |
reachability-expense | reachability-error | prefix-status | iso-prefix)*>
<!ATTLIST isis-iso-prefix-tlv heading CDATA #IMPLIED>

<!ELEMENT isis-level (#PCDATA)>

<!ELEMENT isis-level-information (isis-level | isis-preference |
isis-external-preference | isis-prefix-export-limit | isis-narrow-metrics |
isis-wide-metrics)*>

<!ELEMENT isis-level-lsp-authentication (#PCDATA)>

<!ELEMENT isis-lsp-authentication (level | isis-level-lsp-authentication)*>

<!ELEMENT isis-lsp-lifetime (#PCDATA)>
<!ATTLIST isis-lsp-lifetime junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-max-areas (#PCDATA)>

<!ELEMENT isis-narrow-metrics EMPTY>

<!ELEMENT isis-neighbor (isis-topology-id | is-neighbor-id | metric |
two-way-lsp-id | firstfrag-lsp-id | reachability-delay | reachability-expense |
reachability-error)*>

<!ELEMENT isis-next-hop (#PCDATA)>

<!ELEMENT isis-next-hop-type (#PCDATA)>

<!ELEMENT isis-node-coverage (#PCDATA)>

<!ELEMENT isis-overload-allow-route-leaking (#PCDATA)>

<!ELEMENT isis-overload-enabled EMPTY>

<!ELEMENT isis-overload-high-metrics (#PCDATA)>

<!ELEMENT isis-overload-information (isis-overload-enabled |
isis-overload-high-metrics | isis-overload-allow-route-leaking |
isis-overload-timeout | isis-overload-remaining-time)*>
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<!ELEMENT isis-overload-remaining-time (#PCDATA)>
<!ATTLIST isis-overload-remaining-time junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-overload-timeout (#PCDATA)>
<!ATTLIST isis-overload-timeout junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-overview (instance-name | isis-router-id | isis-max-areas |
isis-lsp-lifetime | isis-reference-bandwidth | isis-adjacency-holddown |
isis-attached-bit-evaluation | isis-spf-information | isis-overload-information
| isis-routing | isis-traffic-engineering | isis-restart |
isis-level-information)*>

<!ELEMENT isis-overview-information (isis-overview)*>

<!ELEMENT isis-packet (lsp-id | pdu-length | pdu-lifetime | checksum |
sequence-number | lsp-attributes | nlp-id | mtid | lsp-length | pdu-version |
system-id-length | isis-packet-type | packet-version | maximum-area)*>

<!ELEMENT isis-packet-type (#PCDATA)>

<!ELEMENT isis-pdu-statistics (isis-pdu-type | packets-received | packets-processed
 | packets-dropped | packets-sent | packets-retransmitted)*>

<!ELEMENT isis-pdu-type (#PCDATA)>

<!ELEMENT isis-preference (#PCDATA)>

<!ELEMENT isis-prefix (protocol-name | isis-topology-id | address-prefix | metric
 | prefix-flag | prefix-status | reachability-delay | reachability-expense |
reachability-error)*>
<!ATTLIST isis-prefix junos:style CDATA #IMPLIED>

<!ELEMENT isis-prefix-export-limit (#PCDATA)>

<!ELEMENT isis-prefix-subtlv (isis-prefix-tag)*>

<!ELEMENT isis-prefix-tag (isis-prefix-tag-index | isis-prefix-tag-value)*>

<!ELEMENT isis-prefix-tag-index (#PCDATA)>

<!ELEMENT isis-prefix-tag-value (#PCDATA)>

<!ELEMENT isis-pseudonode (#PCDATA)>

<!ELEMENT isis-reachability-subtlv (isis-subtlv-type | subtlv-length |
max-bandwidth | max-reserve-bandwidth | current-bandwidth-header |
current-reserve-bandwidth | admin-groups | bandwidth-priority | local-ifindex |
remote-ifindex | address | neighbor-prefix | address-prefix | prefix-err-message
 | te-metric | dste-bc-header | dste-bc-model | dste-bc-count | dste-bc-bw)*>

<!ELEMENT isis-reference-bandwidth (#PCDATA)>

<!ELEMENT isis-replication-adjacency (interface-name | system-name | level |
adjacency-state | snpa | instance-name | interface-index | reference-count |
transition-count | last-transition-time | adjacency-event)*>

<!ELEMENT isis-replication-adjacency-information (isis-replication-adjacency)*>

<!ELEMENT isis-replication-database (instance-name | level |
isis-replication-database-entry | isis-replication-database-entry-count)*>
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<!ELEMENT isis-replication-database-entry (lsp-id | sequence-number | checksum |
 remaining-lifetime | replication-entry-in-use)*>

<!ELEMENT isis-replication-database-entry-count (#PCDATA)>

<!ELEMENT isis-replication-database-information (isis-replication-database)*>

<!ELEMENT isis-replication-interface (interface-name | instance-name | circuit-id
 | dr-id-one | dr-id-two | isis-interface-state-one | isis-interface-state-two |
 replication-entry-in-use)*>

<!ELEMENT isis-replication-interface-information (isis-replication-interface)*>

<!ELEMENT isis-replication-statistics (isis-replication-type | add-messages |
change-messages | delete-messages)*>

<!ELEMENT isis-replication-statistics-information (isis-replication-statistics)*>

<!ELEMENT isis-replication-system-id (instance-name | system-id |
replication-entry-in-use)*>

<!ELEMENT isis-replication-system-id-information (isis-replication-system-id)*>

<!ELEMENT isis-replication-type (#PCDATA)>

<!ELEMENT isis-restart (isis-restart-enabled | isis-restart-duration |
isis-restart-helper-mode-enabled)*>

<!ELEMENT isis-restart-duration (#PCDATA)>
<!ATTLIST isis-restart-duration junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-restart-enabled (#PCDATA)>

<!ELEMENT isis-restart-helper-mode-enabled (#PCDATA)>

<!ELEMENT isis-route (address-prefix | level | route-version | metric | metric-type
 | interface-name | isis-next-hop-type | isis-next-hop | snpa)*>
<!ATTLIST isis-route junos:style CDATA #IMPLIED>

<!ELEMENT isis-route-coverage-clns (#PCDATA)>

<!ELEMENT isis-route-coverage-ipv4 (#PCDATA)>

<!ELEMENT isis-route-coverage-ipv6 (#PCDATA)>

<!ELEMENT isis-route-information (isis-routing-table)*>

<!ELEMENT isis-router-id (#PCDATA)>

<!ELEMENT isis-routing (isis-routing-ipv4 | isis-routing-ipv6 |
isis-routing-clns)*>

<!ELEMENT isis-routing-clns EMPTY>

<!ELEMENT isis-routing-ipv4 EMPTY>

<!ELEMENT isis-routing-ipv6 EMPTY>

<!ELEMENT isis-routing-table (isis-topology-id | level-one-version |
level-two-version | isis-route)*>
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<!ELEMENT isis-spf (isis-spf-results-header | isis-spf-result | node-count |
isis-spf-log-header | isis-spf-log | isis-backup-spf-result)*>

<!ELEMENT isis-spf-delay (#PCDATA)>
<!ATTLIST isis-spf-delay junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-spf-holddown (#PCDATA)>
<!ATTLIST isis-spf-holddown junos:seconds CDATA #IMPLIED>

<!ELEMENT isis-spf-information (isis-spf-delay | isis-spf-holddown |
isis-spf-rapid-runs | isis-spf)*>

<!ELEMENT isis-spf-log (start-time | elapsed-time | spf-trigger-count |
logging-reason | lsp-name | system-name | interface-name)*>

<!ELEMENT isis-spf-log-header (level | isis-topology-id)*>

<!ELEMENT isis-spf-rapid-runs (#PCDATA)>

<!ELEMENT isis-spf-result (node-id | disconnected | metric | no-first-fragment |
 next-hop-element | prefix-element | end-system-element)*>

<!ELEMENT isis-spf-results-header (level | isis-topology-id)*>

<!ELEMENT isis-srlg-name (#PCDATA)>

<!ELEMENT isis-srlg-tlv (address-prefix | srlg-flag | srlg-local-ifindex |
srlg-remote-ifindex | srlg-address | srlg-neighbor-prefix | isis-srlg-value)*>
<!ATTLIST isis-srlg-tlv heading CDATA #IMPLIED>

<!ELEMENT isis-srlg-value (isis-srlg-name)*>
<!ATTLIST isis-srlg-value heading CDATA #IMPLIED>

<!ELEMENT isis-statistics (system-name | isis-pdu-statistics | totals-information
 | snp-queue-length | snp-queue-drops | lsp-queue-length | lsp-queue-drops |
spf-runs | fragments-rebuilt | lsps-regenerated | purges-initiated)*>

<!ELEMENT isis-statistics-information (isis-statistics)*>

<!ELEMENT isis-subtlv-type (#PCDATA)>

<!ELEMENT isis-te-shortcuts-clns EMPTY>

<!ELEMENT isis-te-shortcuts-ipv4 EMPTY>

<!ELEMENT isis-te-shortcuts-ipv6 EMPTY>

<!ELEMENT isis-te-status (#PCDATA)>

<!ELEMENT isis-ted-credibility-preference EMPTY>

<!ELEMENT isis-tlv (isis-tlv-overhead | area-address-tlv | protocols-tlv | mt-tlv
 | hostname-tlv | ipaddress-tlv | ipv6address-tlv | router-id-tlv |
reachability-tlv | isis-iso-prefix-tlv | isis-prefix-subtlv | ipv6-reachability-tlv
 | isis-reachability-subtlv | authentication-tlv | idrp-tlv | ip-prefix-tlv |
isis-srlg-tlv | unknown-tlv | tlv-stragglers)*>
<!ATTLIST isis-tlv heading CDATA #IMPLIED>

<!ELEMENT isis-tlv-overhead (isis-tlv-type | tlv-length | bytes-left)*>

<!ELEMENT isis-tlv-type (#PCDATA)>
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<!ELEMENT isis-topology-id (#PCDATA)>

<!ELEMENT isis-topology-metric (#PCDATA)>

<!ELEMENT isis-traffic-engineering (isis-te-status | isis-te-shortcuts-ipv4 |
isis-te-shortcuts-ipv6 | isis-te-shortcuts-clns | isis-ipv4-multicast-rpf-routes
 | isis-ignore-lsp-metrics | isis-ted-credibility-preference)*>

<!ELEMENT isis-wide-metrics EMPTY>

<!ELEMENT iso-prefix (#PCDATA)>

<!ELEMENT join-family (pim-instance | address-family | join-summary | join-group)*>
<!ATTLIST join-family junos:style CDATA #IMPLIED>

<!ELEMENT join-group (multicast-group-address | bidir-group-prefix-length |
multicast-source-address | rendezvous-point-address | pim-group-flags |
upstream-protocol-name | upstream-interface-name | pim-interface-state |
upstream-neighbor | upstream-neighbor-rpf-origin | dense-event |
upstream-state-flags | uptime | keepalive-timeout | no-keepalive-timeout |
accepting-interface | downstream-interface)*>
<!ATTLIST join-group junos:style CDATA #IMPLIED>

<!ELEMENT join-summary (multicast-route-type | multicast-route-count)*>

<!ELEMENT join-timeout (#PCDATA)>

<!ELEMENT join-to-rp EMPTY>

<!ELEMENT join-to-source EMPTY>

<!ELEMENT juniper-routing-aspath (aspath-domain | aspath-table)*>

<!ELEMENT keep-multiplier (#PCDATA)>

<!ELEMENT keepalive-interval (#PCDATA)>

<!ELEMENT keepalive-timeout (#PCDATA)>

<!ELEMENT l2circuit-connection-information (l2circuit-neighbor)*>
<!ATTLIST l2circuit-connection-information junos:style CDATA #IMPLIED>

<!ELEMENT l2circuit-neighbor (neighbor-address | neighbor-display-error |
lsw-interface-name | connection | connections-summary)*>

<!ELEMENT l2ckt-label-repository (neighbor-id | vc-id | vc-label |
label-repository-state)*>

<!ELEMENT l2ckt-label-repository-information (l2ckt-label-repository)*>

<!ELEMENT l2domain_null_vlan (#PCDATA)>

<!ELEMENT l2iw-domain (l2iw-domain-name)*>

<!ELEMENT l2iw-domain-name (#PCDATA)>

<!ELEMENT l2iw-peering-information (l2iw-domain)*>

<!ELEMENT l2l3map_rt_add (#PCDATA)>
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<!ELEMENT l2l3map_rt_del (#PCDATA)>

<!ELEMENT l2l3map_rt_del_not_found (#PCDATA)>

<!ELEMENT l2vpn-connection-information (instance)*>

<!ELEMENT l2vpn-id (#PCDATA)>

<!ELEMENT l2vpn-label-repository-information
(l2vpn-route-distinguisher-information)*>

<!ELEMENT l2vpn-labels (instance-id | site-id | label-block-offset |
label-block-base | label-block-range)*>

<!ELEMENT l2vpn-labels-information (l2vpn-labels)*>

<!ELEMENT l2vpn-local-site-id (#PCDATA)>

<!ELEMENT l2vpn-mesh-group (#PCDATA)>

<!ELEMENT l2vpn-nlri-advertisement (site-id | label-block-offset | label-block-base
 | label-block-range | label-repository-state)*>

<!ELEMENT l2vpn-remote-site-id (#PCDATA)>

<!ELEMENT l2vpn-route-distinguisher-information (route-distinguisher | instance-id
 | l2vpn-nlri-advertisement)*>

<!ELEMENT l2vpn-status-vector (#PCDATA)>

<!ELEMENT label-base (#PCDATA)>

<!ELEMENT label-block (label-block-base | label-block-offset | label-block-range
 | label-block-size | label-block-preference | label-block-status-vector)*>
<!ATTLIST label-block heading CDATA #IMPLIED>

<!ELEMENT label-block-base (#PCDATA)>

<!ELEMENT label-block-offset (#PCDATA)>

<!ELEMENT label-block-preference (#PCDATA)>

<!ELEMENT label-block-range (#PCDATA)>

<!ELEMENT label-block-size (#PCDATA)>

<!ELEMENT label-block-status-vector (#PCDATA)>

<!ELEMENT label-in (#PCDATA)>

<!ELEMENT label-operation (#PCDATA)>

<!ELEMENT label-out (#PCDATA)>

<!ELEMENT label-range (#PCDATA)>

<!ELEMENT label-repository-state (#PCDATA)>

<!ELEMENT label-ttl-action (#PCDATA)>

<!ELEMENT lan-id (#PCDATA)>
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<!ELEMENT lanp2p-cfgmismatch-error (#PCDATA)>

<!ELEMENT last-active EMPTY>

<!ELEMENT last-address (#PCDATA)>

<!ELEMENT last-change (#PCDATA)>

<!ELEMENT last-changed-time (#PCDATA)>
<!ATTLIST last-changed-time junos:seconds CDATA #IMPLIED>

<!ELEMENT last-checked (#PCDATA)>

<!ELEMENT last-error (#PCDATA)>

<!ELEMENT last-event (#PCDATA)>

<!ELEMENT last-flap-event (#PCDATA)>

<!ELEMENT last-member-query-interval (#PCDATA)>

<!ELEMENT last-merit (#PCDATA)>

<!ELEMENT last-received (#PCDATA)>

<!ELEMENT last-sent (#PCDATA)>

<!ELEMENT last-state (#PCDATA)>

<!ELEMENT last-transition (#PCDATA)>

<!ELEMENT last-transition-time (#PCDATA)>
<!ATTLIST last-transition-time junos:seconds CDATA #IMPLIED>

<!ELEMENT last-update (#PCDATA)>
<!ATTLIST last-update junos:seconds CDATA #IMPLIED>

<!ELEMENT layer2-connection (neighbor-address | interface-name | vc-id |
connection-bandwidth)*>

<!ELEMENT layer2-domain-port-snpa (port-id)*>

<!ELEMENT layer2-multicast-port-id (#PCDATA)>

<!ELEMENT layer2-multicast-port-snpa (layer2-multicast-port-id)*>

<!ELEMENT layer2-tspec (switching-granularity | mtu | atm-vp-bundle-size |
atm-cell-bundle-size)*>

<!ELEMENT ldp-auto-discovered-reference-count (#PCDATA)>

<!ELEMENT ldp-binding (ldp-label | ldp-prefix | ldp-binding-filtered |
ldp-binding-stale | ldp-binding-mtu | ldp-binding-cell-bundle-size |
ldp-binding-requested-vlan-id | ldp-binding-bitrate | ldp-binding-payload-size |
 ldp-binding-pw-status-code | ldp-binding-state | ldp-binding-age |
ldp-binding-delete-scheduled | ldp-binding-queued | ldp-binding-not-yet-sent |
ldp-binding-l2protec-context-id | ldp-binding-l2protec-ctrl-word |
ldp-binding-standby | ldp-l2circuit-vccv-cc-type | ldp-l2circuit-vccv-cv-type)*>

<!ELEMENT ldp-binding-age (#PCDATA)>
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<!ELEMENT ldp-binding-bitrate (#PCDATA)>

<!ELEMENT ldp-binding-cell-bundle-size (#PCDATA)>

<!ELEMENT ldp-binding-delete-scheduled (#PCDATA)>

<!ELEMENT ldp-binding-filtered EMPTY>

<!ELEMENT ldp-binding-l2protec-context-id (#PCDATA)>

<!ELEMENT ldp-binding-l2protec-ctrl-word (#PCDATA)>

<!ELEMENT ldp-binding-mtu (#PCDATA)>

<!ELEMENT ldp-binding-not-yet-sent EMPTY>

<!ELEMENT ldp-binding-payload-size (#PCDATA)>

<!ELEMENT ldp-binding-pw-status-code (#PCDATA)>

<!ELEMENT ldp-binding-queued EMPTY>

<!ELEMENT ldp-binding-requested-vlan-id (#PCDATA)>

<!ELEMENT ldp-binding-stale EMPTY>

<!ELEMENT ldp-binding-standby (ldp-binding-standby-map-count |
ldp-binding-standby-rel-count)*>

<!ELEMENT ldp-binding-standby-map-count (#PCDATA)>

<!ELEMENT ldp-binding-standby-rel-count (#PCDATA)>

<!ELEMENT ldp-binding-state (#PCDATA)>

<!ELEMENT ldp-block-time (#PCDATA)>

<!ELEMENT ldp-capability (#PCDATA)>

<!ELEMENT ldp-config-sequence (#PCDATA)>

<!ELEMENT ldp-configuration-sequence (#PCDATA)>

<!ELEMENT ldp-connection-state (#PCDATA)>

<!ELEMENT ldp-control-mode (#PCDATA)>

<!ELEMENT ldp-database (ldp-database-type | ldp-session-id | ldp-binding)*>

<!ELEMENT ldp-database-information (ldp-database)*>

<!ELEMENT ldp-database-type (#PCDATA)>

<!ELEMENT ldp-deaggregate (#PCDATA)>

<!ELEMENT ldp-distribution-mode (#PCDATA)>

<!ELEMENT ldp-down-reason (#PCDATA)>

<!ELEMENT ldp-egress-label EMPTY>
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<!ELEMENT ldp-egress-nh (ldp-egress-nh-type | interface-name)*>

<!ELEMENT ldp-egress-nh-type (#PCDATA)>

<!ELEMENT ldp-event-count (#PCDATA)>

<!ELEMENT ldp-event-count-5seconds (#PCDATA)>

<!ELEMENT ldp-event-statistics (ldp-event-type | ldp-event-count |
ldp-event-count-5seconds)*>

<!ELEMENT ldp-event-type (#PCDATA)>

<!ELEMENT ldp-explicit-null (#PCDATA)>

<!ELEMENT ldp-fec-filter (ldp-prefix | ldp-ingress-filter | ldp-ingress-filterid
 | ldp-transit-filter | ldp-transit-filterid)*>

<!ELEMENT ldp-fec-filters-information (ldp-fec-filter)*>

<!ELEMENT ldp-global-label (#PCDATA)>

<!ELEMENT ldp-gr-helper (#PCDATA)>

<!ELEMENT ldp-gr-max-neighbor-reconnect-time (#PCDATA)>

<!ELEMENT ldp-gr-max-neighbor-recovery-time (#PCDATA)>

<!ELEMENT ldp-gr-overview (ldp-gr-restart | ldp-gr-helper | ldp-gr-restarting |
ldp-gr-reconnect-time | ldp-gr-max-neighbor-reconnect-time | ldp-gr-recovery-time
 | ldp-gr-max-neighbor-recovery-time)*>

<!ELEMENT ldp-gr-reconnect-time (#PCDATA)>

<!ELEMENT ldp-gr-recovery-time (#PCDATA)>

<!ELEMENT ldp-gr-restart (#PCDATA)>

<!ELEMENT ldp-gr-restarting (#PCDATA)>

<!ELEMENT ldp-graceful-restart-local (#PCDATA)>

<!ELEMENT ldp-graceful-restart-remote (#PCDATA)>

<!ELEMENT ldp-graceful-restart-state (#PCDATA)>

<!ELEMENT ldp-hello-interval (#PCDATA)>

<!ELEMENT ldp-hello-received (#PCDATA)>

<!ELEMENT ldp-hello-sent (#PCDATA)>

<!ELEMENT ldp-helper-mode-state (#PCDATA)>

<!ELEMENT ldp-helper-mode-time (#PCDATA)>

<!ELEMENT ldp-holdtime (#PCDATA)>

<!ELEMENT ldp-igp-overview (ldp-tracking-igp-metric |
ldp-igp-sync-session-up-delay)*>
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<!ELEMENT ldp-igp-sync-session-up-delay (#PCDATA)>

<!ELEMENT ldp-ingress-filter (#PCDATA)>

<!ELEMENT ldp-ingress-filterid (#PCDATA)>

<!ELEMENT ldp-ingress-label EMPTY>

<!ELEMENT ldp-ingress-route-last-modified-time (#PCDATA)>
<!ATTLIST ldp-ingress-route-last-modified-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ldp-ingress-route-status (#PCDATA)>

<!ELEMENT ldp-inlib-label (#PCDATA)>

<!ELEMENT ldp-inlib-session (#PCDATA)>

<!ELEMENT ldp-instance-capability (ldp-capability)*>

<!ELEMENT ldp-instance-id (#PCDATA)>

<!ELEMENT ldp-instance-keepalive-interval (#PCDATA)>

<!ELEMENT ldp-instance-keepalive-timeout (#PCDATA)>

<!ELEMENT ldp-instance-label-withdraw-delay (#PCDATA)>

<!ELEMENT ldp-instance-link-hello-hold-time (#PCDATA)>

<!ELEMENT ldp-instance-link-hello-interval (#PCDATA)>

<!ELEMENT ldp-instance-name (#PCDATA)>

<!ELEMENT ldp-instance-targeted-hello-hold-time (#PCDATA)>

<!ELEMENT ldp-instance-targeted-hello-interval (#PCDATA)>

<!ELEMENT ldp-interface (interface-name | ldp-label-space-id | ldp-neighbor-count
 | ldp-next-hello | ldp-hello-interval | ldp-local-hello-interval | ldp-holdtime
 | ldp-transport-address | ldp-interface-index | ldp-block-time | ldp-hello-sent
 | ldp-hello-received)*>

<!ELEMENT ldp-interface-address (interface-address)*>

<!ELEMENT ldp-interface-index (#PCDATA)>

<!ELEMENT ldp-interface-information (ldp-interface)*>

<!ELEMENT ldp-ipv6-tunneling (#PCDATA)>

<!ELEMENT ldp-keepalive-interval (#PCDATA)>

<!ELEMENT ldp-keepalive-time (#PCDATA)>

<!ELEMENT ldp-l2circuit-vccv-cc-type (mpls-type-control-word |
mpls-type-router-alert | mpls-type-pw-label)*>

<!ELEMENT ldp-l2circuit-vccv-cv-type (mpls-type-icmp-ping | mpls-type-lsp-ping |
 mpls-type-bfd-pw-ach-fd | mpls-type-bfd-pw-ach-fd-fss | mpls-type-bfd-ip-udp-fd
 | mpls-type-bfd-ip-udp-fd-fss)*>
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<!ELEMENT ldp-label (#PCDATA)>

<!ELEMENT ldp-label-session (#PCDATA)>

<!ELEMENT ldp-label-space-id (#PCDATA)>

<!ELEMENT ldp-last-down-time (#PCDATA)>
<!ATTLIST ldp-last-down-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ldp-local-address (#PCDATA)>

<!ELEMENT ldp-local-hello-interval (#PCDATA)>

<!ELEMENT ldp-local-helper-mode (#PCDATA)>

<!ELEMENT ldp-local-maximum-reconnect (#PCDATA)>

<!ELEMENT ldp-local-maximum-recovery (#PCDATA)>

<!ELEMENT ldp-local-reconnect-time (#PCDATA)>

<!ELEMENT ldp-loopback-if-added (#PCDATA)>

<!ELEMENT ldp-merged-next-hop EMPTY>

<!ELEMENT ldp-message-id (#PCDATA)>

<!ELEMENT ldp-message-statistics (ldp-message-type | ldp-messages-sent |
ldp-messages-received | ldp-messages-sent-5seconds |
ldp-messages-received-5seconds)*>

<!ELEMENT ldp-message-type (#PCDATA)>

<!ELEMENT ldp-messages-received (#PCDATA)>

<!ELEMENT ldp-messages-received-5seconds (#PCDATA)>

<!ELEMENT ldp-messages-sent (#PCDATA)>

<!ELEMENT ldp-messages-sent-5seconds (#PCDATA)>

<!ELEMENT ldp-neighbor (ldp-neighbor-address | interface-name | ldp-label-space-id
 | ldp-remaining-time | ldp-transport-address | ldp-config-sequence | ldp-up-time
 | ldp-reference-count | ldp-auto-discovered-reference-count | ldp-holdtime |
ldp-proposed-local-holdtime | ldp-proposed-peer-holdtime | ldp-hello-interval |
ldp-neighbor-hello-flags | ldp-neighbor-types)*>

<!ELEMENT ldp-neighbor-address (#PCDATA)>

<!ELEMENT ldp-neighbor-count (#PCDATA)>

<!ELEMENT ldp-neighbor-hello-flag (#PCDATA)>

<!ELEMENT ldp-neighbor-hello-flags (ldp-neighbor-hello-flag)*>

<!ELEMENT ldp-neighbor-information (ldp-neighbor)*>

<!ELEMENT ldp-neighbor-replication (ldp-instance-id | ldp-neighbor-address |
interface-name | ldp-neighbor-replication-state | ldp-interface-index |
ldp-neighbor-replication-age | ldp-reference-count)*>
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<!ELEMENT ldp-neighbor-replication-age (#PCDATA)>

<!ELEMENT ldp-neighbor-replication-information (ldp-neighbor-replication)*>

<!ELEMENT ldp-neighbor-replication-state (#PCDATA)>

<!ELEMENT ldp-neighbor-type (#PCDATA)>

<!ELEMENT ldp-neighbor-types (ldp-neighbor-type)*>

<!ELEMENT ldp-next-hello (#PCDATA)>

<!ELEMENT ldp-nexthop (interface-name | lsp-name | lsp-no-ldp-tunneling |
interface-address | ldp-session-id)*>

<!ELEMENT ldp-no-label EMPTY>

<!ELEMENT ldp-oam-bfd-session (ldp-oam-destination-address |
ldp-oam-bfd-session-state | ldp-oam-lsp-ping-state | ldp-oam-nexthop-address |
ldp-oam-interface-name | ldp-oam-nexthop-lsp)*>

<!ELEMENT ldp-oam-bfd-session-state (#PCDATA)>

<!ELEMENT ldp-oam-destination-address (#PCDATA)>

<!ELEMENT ldp-oam-information (ldp-oam-status)*>

<!ELEMENT ldp-oam-interface-name (#PCDATA)>

<!ELEMENT ldp-oam-lsp-ping-state (#PCDATA)>

<!ELEMENT ldp-oam-nexthop-address (#PCDATA)>

<!ELEMENT ldp-oam-nexthop-lsp (#PCDATA)>

<!ELEMENT ldp-oam-path (ldp-oam-destination-address | ldp-oam-nexthop-address |
ldp-oam-interface-name | ldp-oam-nexthop-lsp | ldp-oam-bfd-session-state |
ldp-oam-lsp-ping-state | ldp-oam-path-address)*>

<!ELEMENT ldp-oam-path-address (#PCDATA)>

<!ELEMENT ldp-oam-prefix (#PCDATA)>

<!ELEMENT ldp-oam-status (ldp-oam-prefix | ldp-oam-time | ldp-oam-path)*>

<!ELEMENT ldp-oam-time (#PCDATA)>
<!ATTLIST ldp-oam-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ldp-outlib-label (#PCDATA)>

<!ELEMENT ldp-outlib-session (#PCDATA)>

<!ELEMENT ldp-overview (ldp-instance-name | ldp-router-id | ldp-message-id |
ldp-configuration-sequence | ldp-deaggregate | ldp-explicit-null |
ldp-ipv6-tunneling | ldp-strict-targeted-hellos | ldp-upstream-label-assignment
| ldp-loopback-if-added | ldp-route-preference | ldp-p2mp-max-branches |
ldp-unicast-transit-lsp-chaining | ldp-p2mp-transit-lsp-chaining |
ldp-transit-lsp-route-stats | ldp-instance-capability | ldp-protocol-modes |
ldp-session-count | ldp-timer-overview | ldp-gr-overview | ldp-te-overview |
ldp-igp-overview | ldp-session-protect-overview | ldp-interface-address)*>
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<!ELEMENT ldp-overview-information (ldp-overview)*>

<!ELEMENT ldp-p2mp-egress-label (#PCDATA)>

<!ELEMENT ldp-p2mp-inlib-label (ldp-label-session | ldp-label)*>

<!ELEMENT ldp-p2mp-max-branches (#PCDATA)>

<!ELEMENT ldp-p2mp-outlib-label (#PCDATA)>

<!ELEMENT ldp-p2mp-outlib-session (#PCDATA)>

<!ELEMENT ldp-p2mp-path (ldp-p2mp-path-type | ldp-p2mp-outlib-session |
ldp-p2mp-outlib-label | ldp-p2mp-egress-label | ldp-p2mp-inlib-label |
ldp-egress-nh | ldp-p2mp-path-fec | ldp-p2mp-path-transit-route |
ldp-p2mp-path-address | ldp-reference-count)*>

<!ELEMENT ldp-p2mp-path-address (#PCDATA)>

<!ELEMENT ldp-p2mp-path-fec (ldp-prefix | ldp-prefix-active)*>

<!ELEMENT ldp-p2mp-path-information (ldp-p2mp-path)*>

<!ELEMENT ldp-p2mp-path-transit-route EMPTY>

<!ELEMENT ldp-p2mp-path-type (#PCDATA)>

<!ELEMENT ldp-p2mp-traffic-statistics (ldp-prefix | ldp-traffic-branch-nexthop-addr
 | ldp-traffic-branch-nexthop-interface | ldp-traffic-error |
ldp-traffic-statistics-packet-count | ldp-traffic-statistics-byte-count |
ldp-traffic-multiple-fec)*>

<!ELEMENT ldp-p2mp-transit-lsp-chaining (#PCDATA)>

<!ELEMENT ldp-path (ldp-outlib-session | ldp-outlib-label | ldp-ingress-label |
ldp-inlib-session | ldp-inlib-label | ldp-egress-label | ldp-path-route |
ldp-reference-count | ldp-route-transit | ldp-global-label | ldp-merged-next-hop)*>

<!ELEMENT ldp-path-information (ldp-path)*>

<!ELEMENT ldp-path-replication (ldp-instance-id | ldp-label |
ldp-path-replication-ingress-selfid | ldp-path-replication-transit-selfid |
ldp-path-replication-state | ldp-reference-count)*>

<!ELEMENT ldp-path-replication-information (ldp-path-replication)*>

<!ELEMENT ldp-path-replication-ingress-selfid (#PCDATA)>

<!ELEMENT ldp-path-replication-state (#PCDATA)>

<!ELEMENT ldp-path-replication-transit-selfid (#PCDATA)>

<!ELEMENT ldp-path-route (ldp-prefix | ldp-route-ingress)*>

<!ELEMENT ldp-prefix (#PCDATA)>

<!ELEMENT ldp-prefix-active (#PCDATA)>

<!ELEMENT ldp-proposed-local-holdtime (#PCDATA)>
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<!ELEMENT ldp-proposed-peer-holdtime (#PCDATA)>

<!ELEMENT ldp-protocol-modes (ldp-distribution-mode | ldp-retention-mode |
ldp-control-mode)*>

<!ELEMENT ldp-reference-count (#PCDATA)>

<!ELEMENT ldp-remaining-time (#PCDATA)>

<!ELEMENT ldp-remote-address (#PCDATA)>

<!ELEMENT ldp-remote-helper-mode (#PCDATA)>

<!ELEMENT ldp-remote-reconnect-time (#PCDATA)>

<!ELEMENT ldp-restart-complete-time (#PCDATA)>

<!ELEMENT ldp-retention-mode (#PCDATA)>

<!ELEMENT ldp-retry-interval (#PCDATA)>

<!ELEMENT ldp-retry-time (#PCDATA)>

<!ELEMENT ldp-route (ldp-prefix | ldp-nexthop | ldp-route-flags | ldp-label |
ldp-no-label | ldp-topology-entry | ldp-ingress-route-status |
ldp-ingress-route-last-modified-time | ldp-merged-next-hop | ldp-oam-bfd-session)*>

<!ELEMENT ldp-route-flag (#PCDATA)>

<!ELEMENT ldp-route-flags (ldp-route-flag)*>

<!ELEMENT ldp-route-information (ldp-route)*>

<!ELEMENT ldp-route-ingress EMPTY>

<!ELEMENT ldp-route-preference (#PCDATA)>

<!ELEMENT ldp-route-transit EMPTY>

<!ELEMENT ldp-router-id (#PCDATA)>

<!ELEMENT ldp-session (ldp-neighbor-address | ldp-session-state |
ldp-connection-state | ldp-remaining-time | ldp-session-id | ldp-retry-time |
ldp-keepalive-time | ldp-session-role | ldp-session-max-pdu | ldp-holdtime |
ldp-neighbor-count | ldp-neighbor-types | ldp-keepalive-interval |
ldp-retry-interval | ldp-local-address | ldp-remote-address |
ldp-graceful-restart-state | ldp-local-reconnect-time | ldp-remote-reconnect-time
 | ldp-restart-complete-time | ldp-helper-mode-state | ldp-helper-mode-time |
ldp-local-helper-mode | ldp-remote-helper-mode | ldp-graceful-restart-local |
ldp-graceful-restart-remote | ldp-local-maximum-reconnect |
ldp-local-maximum-recovery | ldp-up-time | ldp-last-down-time | ldp-down-reason
| ldp-session-flap-count | ldp-session-capabilities-advertised |
ldp-session-capabilities-received | ldp-session-protection | ldp-session-nsr-state
 | ldp-session-address | ldp-session-deleted | ldp-session-close-pending |
ldp-session-queue-depth | ldp-session-read-pending | ldp-session-write-pending |
 ldp-session-receive-buffer-bytes | ldp-session-transmit-buffer-bytes |
ldp-session-no-connection | ldp-session-authentication | ldp-session-statistics)*>

<!ELEMENT ldp-session-address (interface-address | interface-name |
ldp-session-address-stale)*>
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<!ELEMENT ldp-session-address-stale EMPTY>

<!ELEMENT ldp-session-authentication (#PCDATA)>

<!ELEMENT ldp-session-capabilities-advertised (ldp-capability)*>

<!ELEMENT ldp-session-capabilities-received (ldp-capability)*>

<!ELEMENT ldp-session-close-pending EMPTY>

<!ELEMENT ldp-session-closing (#PCDATA)>

<!ELEMENT ldp-session-connecting (#PCDATA)>

<!ELEMENT ldp-session-count (ldp-session-operational | ldp-session-nonexistent |
 ldp-session-connecting | ldp-session-initialized | ldp-session-openrec |
ldp-session-opensent | ldp-session-closing)*>

<!ELEMENT ldp-session-deleted EMPTY>

<!ELEMENT ldp-session-flap-count (#PCDATA)>

<!ELEMENT ldp-session-id (#PCDATA)>

<!ELEMENT ldp-session-information (ldp-session)*>
<!ATTLIST ldp-session-information junos:style CDATA #IMPLIED>

<!ELEMENT ldp-session-initialized (#PCDATA)>

<!ELEMENT ldp-session-max-pdu (#PCDATA)>

<!ELEMENT ldp-session-no-connection EMPTY>

<!ELEMENT ldp-session-nonexistent (#PCDATA)>

<!ELEMENT ldp-session-nsr-state (#PCDATA)>

<!ELEMENT ldp-session-openrec (#PCDATA)>

<!ELEMENT ldp-session-opensent (#PCDATA)>

<!ELEMENT ldp-session-operational (#PCDATA)>

<!ELEMENT ldp-session-protect (#PCDATA)>

<!ELEMENT ldp-session-protect-overview (ldp-session-protect |
ldp-session-protect-timeout)*>

<!ELEMENT ldp-session-protect-timeout (#PCDATA)>

<!ELEMENT ldp-session-protection (ldp-session-protection-state |
ldp-session-protection-remaining-time)*>

<!ELEMENT ldp-session-protection-remaining-time (#PCDATA)>

<!ELEMENT ldp-session-protection-state (#PCDATA)>

<!ELEMENT ldp-session-queue-depth (#PCDATA)>

<!ELEMENT ldp-session-read-pending EMPTY>
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<!ELEMENT ldp-session-receive-buffer-bytes (#PCDATA)>

<!ELEMENT ldp-session-replication (ldp-instance-id | ldp-neighbor-address |
ldp-session-replication-state | ldp-reference-count |
ldp-session-replication-age)*>

<!ELEMENT ldp-session-replication-age (#PCDATA)>

<!ELEMENT ldp-session-replication-information (ldp-session-replication)*>

<!ELEMENT ldp-session-replication-state (#PCDATA)>

<!ELEMENT ldp-session-role (#PCDATA)>

<!ELEMENT ldp-session-state (#PCDATA)>

<!ELEMENT ldp-session-statistics (ldp-message-type | ldp-messages-sent |
ldp-messages-received | ldp-messages-sent-5seconds |
ldp-messages-received-5seconds)*>

<!ELEMENT ldp-session-transmit-buffer-bytes (#PCDATA)>

<!ELEMENT ldp-session-write-pending EMPTY>

<!ELEMENT ldp-standby-path (ldp-reference-count | ldp-label |
ldp-standby-path-prefix)*>

<!ELEMENT ldp-standby-path-information (ldp-standby-path)*>

<!ELEMENT ldp-standby-path-prefix (ldp-prefix | ldp-reference-count)*>

<!ELEMENT ldp-standby-path-reference (ldp-reference-count | ldp-label)*>

<!ELEMENT ldp-standby-route (ldp-prefix | ldp-standby-route-route |
ldp-standby-path-reference)*>

<!ELEMENT ldp-standby-route-information (ldp-standby-route)*>

<!ELEMENT ldp-standby-route-route EMPTY>

<!ELEMENT ldp-statistics (ldp-message-statistics | ldp-event-statistics)*>

<!ELEMENT ldp-statistics-information (ldp-statistics)*>

<!ELEMENT ldp-strict-targeted-hellos (#PCDATA)>

<!ELEMENT ldp-te-bgp-igp (#PCDATA)>

<!ELEMENT ldp-te-both-ribs (#PCDATA)>

<!ELEMENT ldp-te-mpls-forwarding (#PCDATA)>

<!ELEMENT ldp-te-overview (ldp-te-bgp-igp | ldp-te-both-ribs |
ldp-te-mpls-forwarding)*>

<!ELEMENT ldp-timer-overview (ldp-instance-keepalive-interval |
ldp-instance-keepalive-timeout | ldp-instance-link-hello-interval |
ldp-instance-link-hello-hold-time | ldp-instance-targeted-hello-interval |
ldp-instance-targeted-hello-hold-time | ldp-instance-label-withdraw-delay)*>

<!ELEMENT ldp-topology-entry (#PCDATA)>
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<!ELEMENT ldp-tracking-igp-metric (#PCDATA)>

<!ELEMENT ldp-traffic-branch-nexthop-addr (#PCDATA)>

<!ELEMENT ldp-traffic-branch-nexthop-interface (#PCDATA)>

<!ELEMENT ldp-traffic-error (#PCDATA)>

<!ELEMENT ldp-traffic-multiple-fec (#PCDATA)>

<!ELEMENT ldp-traffic-statistics (ldp-prefix | ldp-traffic-type | ldp-traffic-error
 | ldp-traffic-statistics-packet-count | ldp-traffic-statistics-byte-count |
ldp-traffic-multiple-fec)*>

<!ELEMENT ldp-traffic-statistics-byte-count (#PCDATA)>

<!ELEMENT ldp-traffic-statistics-error (ldp-traffic-error)*>

<!ELEMENT ldp-traffic-statistics-information (ldp-traffic-statistics |
ldp-p2mp-traffic-statistics | ldp-traffic-statistics-error)*>

<!ELEMENT ldp-traffic-statistics-packet-count (#PCDATA)>

<!ELEMENT ldp-traffic-type (#PCDATA)>

<!ELEMENT ldp-transit-filter (#PCDATA)>

<!ELEMENT ldp-transit-filterid (#PCDATA)>

<!ELEMENT ldp-transit-lsp-route-stats (#PCDATA)>

<!ELEMENT ldp-transport-address (#PCDATA)>

<!ELEMENT ldp-unicast-transit-lsp-chaining (#PCDATA)>

<!ELEMENT ldp-up-time (#PCDATA)>
<!ATTLIST ldp-up-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ldp-upstream-label-assignment (#PCDATA)>

<!ELEMENT ldp-vpls-reference-site (vpls-signaling-protocol-identifier |
local-site-id | remote-site-id | vpls-id | l2vpn-id | local-id |
num-local-interfaces | num-local-interfaces-up | irb-present | mesh-group-count
| mesh-group-up-count | mesh-group-interfaces | interface | connection |
mesh-group-connection | connections-summary)*>

<!ELEMENT learned-from (#PCDATA)>

<!ELEMENT length (#PCDATA)>

<!ELEMENT level (#PCDATA)>

<!ELEMENT level-one-version (#PCDATA)>

<!ELEMENT level-two-version (#PCDATA)>

<!ELEMENT limit-action (#PCDATA)>

<!ELEMENT link-count (#PCDATA)>
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<!ELEMENT link-data (#PCDATA)>

<!ELEMENT link-id (#PCDATA)>

<!ELEMENT link-intf-id (#PCDATA)>

<!ELEMENT link-local-te-tlv-type-name (#PCDATA)>

<!ELEMENT link-metric (#PCDATA)>

<!ELEMENT link-type-name (#PCDATA)>

<!ELEMENT link-type-value (#PCDATA)>

<!ELEMENT linklocal-address (#PCDATA)>

<!ELEMENT lm-allocated-bandwidth (#PCDATA)>

<!ELEMENT lm-allocated-lsp-name (#PCDATA)>

<!ELEMENT lm-avail-bandwidth (#PCDATA)>

<!ELEMENT lm-bad-version (#PCDATA)>

<!ELEMENT lm-control-channel (#PCDATA)>

<!ELEMENT lm-control-channel-info (lm-control-channel | lm-control-channel-state)*>

<!ELEMENT lm-control-channel-state (#PCDATA)>

<!ELEMENT lm-encoding (#PCDATA)>

<!ELEMENT lm-information (lm-peer-root-information | lm-te-link-root-information
 | lm-resource-root-information)*>

<!ELEMENT lm-input-statistics (lm-received-packets | lm-received-bad-packets |
lm-received-misordered-packets | lm-small-packets | lm-bad-version | lm-no-peer
| lm-no-cc | lm-wrong-state | lm-stale-ack | lm-stale-nack)*>

<!ELEMENT lm-lmp-control-channel-flags (cc-restarting)*>

<!ELEMENT lm-lmp-control-channel-local-id (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-rcv-seq-num (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-received-message-id (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-remote-id (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-sent-message-id (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-state (#PCDATA)>

<!ELEMENT lm-lmp-control-channel-tx-seq-num (#PCDATA)>

<!ELEMENT lm-local-address (#PCDATA)>

<!ELEMENT lm-local-id (#PCDATA)>

<!ELEMENT lm-local-label (#PCDATA)>
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<!ELEMENT lm-max-bandwidth (#PCDATA)>

<!ELEMENT lm-min-bandwidth (#PCDATA)>

<!ELEMENT lm-no-cc (#PCDATA)>

<!ELEMENT lm-no-peer (#PCDATA)>

<!ELEMENT lm-output-statistics (lm-sent-packets | lm-retransmit-packets |
lm-tossed-packets)*>

<!ELEMENT lm-packet-count (#PCDATA)>

<!ELEMENT lm-packet-type (#PCDATA)>

<!ELEMENT lm-peer-control-address (#PCDATA)>

<!ELEMENT lm-peer-control-channels (lm-control-channel-info)*>

<!ELEMENT lm-peer-hello-dead-interval (#PCDATA)>

<!ELEMENT lm-peer-hello-interval (#PCDATA)>

<!ELEMENT lm-peer-information (lm-source | lm-sys-id | lm-peer-name | lm-state |
 lm-peer-control-address | lm-peer-hello-interval | lm-peer-hello-dead-interval
| lm-peer-received-message-id | lm-peer-sent-message-id | lm-peer-control-channels
 | lm-peer-lmp-control-channels | lm-peer-te-links)*>

<!ELEMENT lm-peer-lmp-control-channel-information (lm-lmp-control-channel-local-id
 | lm-lmp-control-channel-remote-id | lm-lmp-control-channel-state |
lm-lmp-control-channel-flags | lm-lmp-control-channel-received-message-id |
lm-lmp-control-channel-sent-message-id | lm-lmp-control-channel-rcv-seq-num |
lm-lmp-control-channel-tx-seq-num)*>

<!ELEMENT lm-peer-lmp-control-channels (lm-peer-lmp-control-channel-information)*>

<!ELEMENT lm-peer-name (#PCDATA)>

<!ELEMENT lm-peer-received-message-id (#PCDATA)>

<!ELEMENT lm-peer-root-information (lm-peer-information)*>

<!ELEMENT lm-peer-sent-message-id (#PCDATA)>

<!ELEMENT lm-peer-statistics (lm-peer-name | lm-input-statistics |
lm-output-statistics)*>

<!ELEMENT lm-peer-te-link (#PCDATA)>

<!ELEMENT lm-peer-te-link-information (lm-peer-te-link)*>

<!ELEMENT lm-peer-te-links (lm-peer-te-link-information)*>

<!ELEMENT lm-received-bad-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-received-misordered-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-received-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-remote-address (#PCDATA)>
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<!ELEMENT lm-remote-id (#PCDATA)>

<!ELEMENT lm-remote-label (#PCDATA)>

<!ELEMENT lm-resource (lm-resource-name | lm-resource-type | lm-resource-state |
 lm-sys-id | lm-resource-max-allocations | lm-resource-bandwidth |
lm-resource-traffic-params)*>

<!ELEMENT lm-resource-allocation-context (lm-allocated-bandwidth |
lm-allocated-lsp-name | lm-local-label | lm-remote-label)*>

<!ELEMENT lm-resource-avail-bandwidth (#PCDATA)>

<!ELEMENT lm-resource-bandwidth (#PCDATA)>

<!ELEMENT lm-resource-flags (#PCDATA)>

<!ELEMENT lm-resource-in-use (#PCDATA)>

<!ELEMENT lm-resource-local-addr (#PCDATA)>

<!ELEMENT lm-resource-local-id (#PCDATA)>

<!ELEMENT lm-resource-lsp-name (#PCDATA)>

<!ELEMENT lm-resource-max-allocations (#PCDATA)>

<!ELEMENT lm-resource-name (#PCDATA)>

<!ELEMENT lm-resource-num-allocations (#PCDATA)>

<!ELEMENT lm-resource-remote-addr (#PCDATA)>

<!ELEMENT lm-resource-remote-id (#PCDATA)>

<!ELEMENT lm-resource-root-information (lm-source | lm-resource)*>

<!ELEMENT lm-resource-state (#PCDATA)>

<!ELEMENT lm-resource-traffic-params (#PCDATA)>

<!ELEMENT lm-resource-type (#PCDATA)>

<!ELEMENT lm-retransmit-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-sent-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-small-packets (#PCDATA)>

<!ELEMENT lm-source (#PCDATA)>

<!ELEMENT lm-stale-ack (#PCDATA)>

<!ELEMENT lm-stale-nack (#PCDATA)>

<!ELEMENT lm-state (#PCDATA)>

<!ELEMENT lm-statistics-information (lm-peer-statistics)*>

<!ELEMENT lm-switching (#PCDATA)>
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<!ELEMENT lm-sys-id (#PCDATA)>

<!ELEMENT lm-te-link-flags (#PCDATA)>

<!ELEMENT lm-te-link-information (lm-te-link-name | lm-local-id | lm-remote-id |
 lm-state | lm-te-link-flags | lm-te-link-local-flags | lm-local-address |
lm-remote-address | lm-encoding | lm-switching | lm-min-bandwidth |
lm-max-bandwidth | lm-total-bandwidth | lm-avail-bandwidth |
lm-te-link-resources)*>

<!ELEMENT lm-te-link-local-flags (lm-te-link-nack-sent-flag)*>

<!ELEMENT lm-te-link-nack-sent-flag EMPTY>

<!ELEMENT lm-te-link-name (#PCDATA)>

<!ELEMENT lm-te-link-resource (lm-resource-name | lm-resource-type | lm-sys-id |
 lm-resource-state | lm-resource-flags | lm-resource-local-id |
lm-resource-remote-id | lm-resource-local-addr | lm-resource-remote-addr |
lm-resource-bandwidth | lm-resource-avail-bandwidth | lm-resource-traffic-params
 | lm-resource-max-allocations | lm-resource-num-allocations | lm-resource-in-use
 | lm-resource-lsp-name | lm-resource-allocation-context)*>
<!ATTLIST lm-te-link-resource junos:style CDATA #IMPLIED>

<!ELEMENT lm-te-link-resources (lm-te-link-resource)*>

<!ELEMENT lm-te-link-root-information (lm-te-link-information)*>

<!ELEMENT lm-tossed-packets (lm-packet-type | lm-packet-count)*>

<!ELEMENT lm-total-bandwidth (#PCDATA)>

<!ELEMENT lm-wrong-state (#PCDATA)>

<!ELEMENT load-balance (#PCDATA)>

<!ELEMENT local-address (#PCDATA)>

<!ELEMENT local-as (#PCDATA)>

<!ELEMENT local-as-private EMPTY>

<!ELEMENT local-asn (asn | as-loops)*>

<!ELEMENT local-id (#PCDATA)>

<!ELEMENT local-ifindex (#PCDATA)>

<!ELEMENT local-interface (interface-name | interface-status |
interface-encapsulation | working-status | profile-name | profile-varset-name |
interface-description)*>

<!ELEMENT local-interface-index (#PCDATA)>

<!ELEMENT local-interface-name (#PCDATA)>

<!ELEMENT local-pe-address (#PCDATA)>

<!ELEMENT local-preference (#PCDATA)>

<!ELEMENT local-priority (#PCDATA)>
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<!ELEMENT local-pw-status-code (#PCDATA)>
<!ELEMENT local-rp EMPTY>
<!ELEMENT local-site-id (#PCDATA)>
<!ELEMENT local-source EMPTY>
<!ELEMENT local-system-as (#PCDATA)>
<!ELEMENT local_arp_grat_timer_stopped (#PCDATA)>
<!ELEMENT log (#PCDATA)>
<!ELEMENT log-element (timestamp | ospf-log-type | elapsed-time)*>
<!ELEMENT log-event (#PCDATA)>
<!ELEMENT log-time-stamp (#PCDATA)>
<!ELEMENT logging-reason (#PCDATA)>
<!ELEMENT loopback-address (#PCDATA)>
<!ELEMENT lp-bypass-name (#PCDATA)>
<!ELEMENT lp-failure (#PCDATA)>
<!ELEMENT lp-granted (#PCDATA)>
<!ELEMENT lp-history (sequence-number | time | log | route)*>
<!ELEMENT lp-requested (#PCDATA)>
<!ELEMENT lp-status (#PCDATA)>
<!ELEMENT lsa-change-count (#PCDATA)>
<!ELEMENT lsa-changed-time (#PCDATA)>
<!ELEMENT lsa-id (#PCDATA)>
<!ELEMENT lsa-length (#PCDATA)>
<!ELEMENT lsa-list (#PCDATA)>
<!ELEMENT lsa-type (#PCDATA)>
<!ELEMENT lsas-acknowledged (#PCDATA)>
<!ELEMENT lsas-acknowledged-5seconds (#PCDATA)>
<!ELEMENT lsas-flooded (#PCDATA)>
<!ELEMENT lsas-flooded-5seconds (#PCDATA)>
<!ELEMENT lsas-high-prio-flooded (#PCDATA)>
<!ELEMENT lsas-high-prio-flooded-5seconds (#PCDATA)>
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<!ELEMENT lsas-nbr-transmit (#PCDATA)>

<!ELEMENT lsas-nbr-transmit-5seconds (#PCDATA)>

<!ELEMENT lsas-requested (#PCDATA)>

<!ELEMENT lsas-requested-5seconds (#PCDATA)>

<!ELEMENT lsas-retransmit (#PCDATA)>

<!ELEMENT lsas-retransmit-5seconds (#PCDATA)>

<!ELEMENT lsdb-expiration-time (#PCDATA)>

<!ELEMENT lsdb-timer-type (#PCDATA)>

<!ELEMENT lsp-addr (#PCDATA)>

<!ELEMENT lsp-aggregation (#PCDATA)>

<!ELEMENT lsp-associated-lspname (#PCDATA)>

<!ELEMENT lsp-associated-lspsrc (#PCDATA)>

<!ELEMENT lsp-attribute-flags (non-php | oob)*>

<!ELEMENT lsp-attributes (#PCDATA)>

<!ELEMENT lsp-bandwidth (#PCDATA)>

<!ELEMENT lsp-bytes (#PCDATA)>

<!ELEMENT lsp-count (#PCDATA)>

<!ELEMENT lsp-creation-time (#PCDATA)>

<!ELEMENT lsp-description (#PCDATA)>

<!ELEMENT lsp-diffserv-info (#PCDATA)>

<!ELEMENT lsp-diffserv-te-info (#PCDATA)>

<!ELEMENT lsp-flags (#PCDATA)>

<!ELEMENT lsp-hold-priority (#PCDATA)>

<!ELEMENT lsp-hoplimit (#PCDATA)>

<!ELEMENT lsp-id (#PCDATA)>

<!ELEMENT lsp-interval (#PCDATA)>

<!ELEMENT lsp-last-change (#PCDATA)>
<!ATTLIST lsp-last-change junos:seconds CDATA #IMPLIED>

<!ELEMENT lsp-length (#PCDATA)>

<!ELEMENT lsp-name (#PCDATA)>

<!ELEMENT lsp-no-ldp-tunneling EMPTY>
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<!ELEMENT lsp-packets (#PCDATA)>
<!ELEMENT lsp-path-count (#PCDATA)>
<!ELEMENT lsp-path-type (#PCDATA)>
<!ELEMENT lsp-pktbytes (#PCDATA)>
<!ELEMENT lsp-queue-drops (#PCDATA)>
<!ELEMENT lsp-queue-length (#PCDATA)>
<!ELEMENT lsp-refcount (#PCDATA)>
<!ELEMENT lsp-retry-timer (#PCDATA)>
<!ELEMENT lsp-setup-priority (#PCDATA)>
<!ELEMENT lsp-soft-preemption-counter (#PCDATA)>
<!ELEMENT lsp-soft-preemption-time (#PCDATA)>
<!ELEMENT lsp-state (#PCDATA)>
<!ELEMENT lsp-status (#PCDATA)>
<!ELEMENT lsp-stub EMPTY>
<!ELEMENT lsp-sub-state (#PCDATA)>
<!ELEMENT lsp-to-pe-up (#PCDATA)>
<!ELEMENT lsp-type (#PCDATA)>
<!ELEMENT lsps-regenerated (#PCDATA)>
<!ELEMENT lsreq-active EMPTY>
<!ELEMENT lsreq-enqueued EMPTY>
<!ELEMENT lsreq-retransmit-time (#PCDATA)>
<!ELEMENT lsw-interface-name (#PCDATA)>
<!ELEMENT mac-address (#PCDATA)>
<!ELEMENT mac-limit (#PCDATA)>
<!ELEMENT mac_event_grat_timer_started (#PCDATA)>
<!ELEMENT mac_event_grat_timer_stopped (#PCDATA)>
<!ELEMENT master-slave (#PCDATA)>
<!ELEMENT max-available-bandwidth (#PCDATA)>
<!ELEMENT max-available-description (#PCDATA)>
<!ELEMENT max-bandwidth (#PCDATA)>
<!ELEMENT max-reserve-bandwidth (#PCDATA)>
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<!ELEMENT max-run (#PCDATA)>
<!ELEMENT maximum (#PCDATA)>
<!ELEMENT maximum-area (#PCDATA)>
<!ELEMENT maximum-bandwidth (#PCDATA)>
<!ELEMENT maximum-ecmp (#PCDATA)>
<!ELEMENT maximum-helper-recovery-time (#PCDATA)>
<!ELEMENT maximum-helper-restart-time (#PCDATA)>
<!ELEMENT maximum-lsp-bw0 (#PCDATA)>
<!ELEMENT maximum-lsp-bw1 (#PCDATA)>
<!ELEMENT maximum-lsp-bw2 (#PCDATA)>
<!ELEMENT maximum-lsp-bw3 (#PCDATA)>
<!ELEMENT maximum-lsp-bw4 (#PCDATA)>
<!ELEMENT maximum-lsp-bw5 (#PCDATA)>
<!ELEMENT maximum-lsp-bw6 (#PCDATA)>
<!ELEMENT maximum-lsp-bw7 (#PCDATA)>
<!ELEMENT mc-global-resolves-no-route (#PCDATA)>
<!ELEMENT mc-groups-no-mc-interface (#PCDATA)>
<!ELEMENT mc-input-kbytes (#PCDATA)>
<!ELEMENT mc-input-packets (#PCDATA)>
<!ELEMENT mc-mismatch-errors (#PCDATA)>
<!ELEMENT mc-mismatches (#PCDATA)>
<!ELEMENT mc-mismatches-no-mc-interface (#PCDATA)>
<!ELEMENT mc-mismatches-no-route (#PCDATA)>
<!ELEMENT mc-notifies-no-mc-interface (#PCDATA)>
<!ELEMENT mc-notifies-no-route (#PCDATA)>
<!ELEMENT mc-output-kbytes (#PCDATA)>
<!ELEMENT mc-output-packets (#PCDATA)>
<!ELEMENT mc-resolve-errors (#PCDATA)>
<!ELEMENT mc-resolves (#PCDATA)>
<!ELEMENT mc-resolves-filtered (#PCDATA)>
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<!ELEMENT mc-resolves-no-mc-interface (#PCDATA)>

<!ELEMENT mc-resolves-no-route (#PCDATA)>

<!ELEMENT mc-routing-notifies (#PCDATA)>

<!ELEMENT mc-routing-notifies-filtered (#PCDATA)>

<!ELEMENT mc-stats-interface (interface-name | protocol-name | mc-mismatch-errors
 | mc-mismatches | mc-mismatches-no-route | mc-resolves | mc-routing-notifies |
mc-resolves-no-route | mc-resolve-errors | mc-resolves-filtered |
mc-routing-notifies-filtered | mc-input-kbytes | mc-input-packets |
mc-output-kbytes | mc-output-packets)*>

<!ELEMENT mdt-active-tunnel (mdt-customer-source-address |
mdt-customer-group-address | mdt-provider-group-address | mdt-tunnel-interface-name
 | mdt-forwarding-rate-kilobits | mdt-forwarding-rate-kilobytes |
mdt-configured-threshold-rate | mdt-tunnel-uptime |
mdt-default-tunnel-information)*>

<!ELEMENT mdt-configured-threshold-rate (#PCDATA)>

<!ELEMENT mdt-customer-group-address (#PCDATA)>

<!ELEMENT mdt-customer-source-address (#PCDATA)>

<!ELEMENT mdt-default-group-address (#PCDATA)>

<!ELEMENT mdt-default-interface-name (#PCDATA)>

<!ELEMENT mdt-default-source-address (#PCDATA)>

<!ELEMENT mdt-default-tunnel-information (#PCDATA)>

<!ELEMENT mdt-default-tunnel-source (#PCDATA)>

<!ELEMENT mdt-forwarding-rate-kilobits (#PCDATA)>

<!ELEMENT mdt-forwarding-rate-kilobytes (#PCDATA)>

<!ELEMENT mdt-pim-instance (#PCDATA)>

<!ELEMENT mdt-provider-group-address (#PCDATA)>

<!ELEMENT mdt-tunnel-direction (#PCDATA)>

<!ELEMENT mdt-tunnel-interface-name (#PCDATA)>

<!ELEMENT mdt-tunnel-mode (#PCDATA)>

<!ELEMENT mdt-tunnel-uptime (#PCDATA)>
<!ATTLIST mdt-tunnel-uptime junos:seconds CDATA #IMPLIED>

<!ELEMENT med (#PCDATA)>

<!ELEMENT med-action (#PCDATA)>

<!ELEMENT med-plus-igp (#PCDATA)>

<!ELEMENT membership-timeout (#PCDATA)>
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<!ELEMENT merit (#PCDATA)>

<!ELEMENT mesh-group (#PCDATA)>

<!ELEMENT mesh-group-connection (mesh-group-name | connection |
connections-summary)*>

<!ELEMENT mesh-group-count (#PCDATA)>

<!ELEMENT mesh-group-id (#PCDATA)>

<!ELEMENT mesh-group-interfaces (mesh-group-name | mesh-group-id | mesh-group-state
 | interface)*>

<!ELEMENT mesh-group-name (#PCDATA)>

<!ELEMENT mesh-group-state (#PCDATA)>

<!ELEMENT mesh-group-up-count (#PCDATA)>

<!ELEMENT meshgroup-name (#PCDATA)>

<!ELEMENT meshgroup-vrf-export (#PCDATA)>

<!ELEMENT meshgroup-vrf-export-target (#PCDATA)>

<!ELEMENT meshgroup-vrf-import (#PCDATA)>

<!ELEMENT meshgroup-vrf-import-target (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT message-statistics (rsvp-message | messages-sent | messages-received |
 messages-sent-5seconds | messages-received-5seconds)*>

<!ELEMENT messages-received (#PCDATA)>

<!ELEMENT messages-received-5seconds (#PCDATA)>

<!ELEMENT messages-sent (#PCDATA)>

<!ELEMENT messages-sent-5seconds (#PCDATA)>

<!ELEMENT metric (#PCDATA)>

<!ELEMENT metric-flag (#PCDATA)>

<!ELEMENT metric-one (#PCDATA)>

<!ELEMENT metric-out (#PCDATA)>

<!ELEMENT metric-two (#PCDATA)>

<!ELEMENT metric-type (#PCDATA)>

<!ELEMENT metric2 (#PCDATA)>

<!ELEMENT mgm-amt-configured-parameters (query-interval | query-response-interval
 | last-member-query-interval | robustness-count)*>
<!ATTLIST mgm-amt-configured-parameters junos:style CDATA #IMPLIED>
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<!ELEMENT mgm-amt-derived-parameters (membership-timeout | query-other-timeout)*>
<!ATTLIST mgm-amt-derived-parameters junos:style CDATA #IMPLIED>

<!ELEMENT mgm-configured-parameters (query-interval | query-response-interval |
last-member-query-interval | robustness-count)*>
<!ATTLIST mgm-configured-parameters junos:style CDATA #IMPLIED>

<!ELEMENT mgm-derived-parameters (membership-timeout | query-other-timeout)*>
<!ATTLIST mgm-derived-parameters junos:style CDATA #IMPLIED>

<!ELEMENT mgm-disabled-interface-name (#PCDATA)>

<!ELEMENT mgm-group (multicast-group-address | multicast-source-address |
mgm-source-timeout | last-address | mgm-timeout | mgm-type | mgm-group-mode-type
 | host-record | reverse-oif | mgm-group-output-interface |
mgm-output-interface-status)*>
<!ATTLIST mgm-group junos:style CDATA #IMPLIED>

<!ELEMENT mgm-group-count (#PCDATA)>

<!ELEMENT mgm-group-input-interface (#PCDATA)>

<!ELEMENT mgm-group-limit (#PCDATA)>

<!ELEMENT mgm-group-mode-type (#PCDATA)>

<!ELEMENT mgm-group-output-interface (#PCDATA)>

<!ELEMENT mgm-group-policy (#PCDATA)>

<!ELEMENT mgm-host (mgm-host-address | mgm-host-record-count)*>
<!ATTLIST mgm-host junos:style CDATA #IMPLIED>

<!ELEMENT mgm-host-address (#PCDATA)>

<!ELEMENT mgm-host-record-count (#PCDATA)>

<!ELEMENT mgm-immediate-leave (#PCDATA)>

<!ELEMENT mgm-interface (interface-name | querier-address | mgm-interface-state
| querier-timeout | mgm-interface-version | mgm-group-count | mgm-ssm-map |
mgm-ssm-map-policy | mgm-mc-lag-state | mgm-immediate-leave | mgm-promiscuous-mode
 | mgm-passive | mgm-passive-allow-receive | mgm-passive-send-general-query |
mgm-passive-send-group-query | mgm-group-limit | mgm-group-policy | mgm-oif-map
| mgm-host)*>

<!ELEMENT mgm-interface-all EMPTY>

<!ELEMENT mgm-interface-groups (interface-name | mgm-group-count | mgm-group)*>

<!ELEMENT mgm-interface-output-groups (interface-name | mgm-output-interface-status
 | mgm-output-group)*>

<!ELEMENT mgm-interface-state (#PCDATA)>

<!ELEMENT mgm-interface-version (#PCDATA)>

<!ELEMENT mgm-mc-lag-state (#PCDATA)>

<!ELEMENT mgm-oif-map (#PCDATA)>
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<!ELEMENT mgm-other-statistic (statistic-name | statistic-count)*>
<!ATTLIST mgm-other-statistic junos:style CDATA #IMPLIED>

<!ELEMENT mgm-output-group (multicast-group-address | multicast-source-address |
 mgm-type | mgm-group-mode-type | mgm-group-input-interface)*>
<!ATTLIST mgm-output-group junos:style CDATA #IMPLIED>

<!ELEMENT mgm-output-interface-status (#PCDATA)>

<!ELEMENT mgm-passive (#PCDATA)>

<!ELEMENT mgm-passive-allow-receive EMPTY>

<!ELEMENT mgm-passive-send-general-query EMPTY>

<!ELEMENT mgm-passive-send-group-query EMPTY>

<!ELEMENT mgm-promiscuous-mode (#PCDATA)>

<!ELEMENT mgm-source-timeout (#PCDATA)>

<!ELEMENT mgm-ssm-map (#PCDATA)>

<!ELEMENT mgm-ssm-map-policy (#PCDATA)>

<!ELEMENT mgm-statistic (statistic-name | received-count | sent-count |
error-count)*>
<!ATTLIST mgm-statistic junos:style CDATA #IMPLIED>

<!ELEMENT mgm-statistics-all (mgm-statistics-group | mgm-statistics-other |
mgm-statistics-global)*>

<!ELEMENT mgm-statistics-global (mgm-other-statistic)*>

<!ELEMENT mgm-statistics-group (mgm-statistic)*>

<!ELEMENT mgm-statistics-interface (interface-name | mgm-disabled-interface-name
 | mgm-interface-all | mgm-statistics-group | mgm-statistics-other |
mgm-statistics-global | mgm-statistic | mgm-other-statistic)*>
<!ATTLIST mgm-statistics-interface junos:style CDATA #IMPLIED>

<!ELEMENT mgm-statistics-other (mgm-other-statistic)*>

<!ELEMENT mgm-timeout (#PCDATA)>

<!ELEMENT mgm-type (#PCDATA)>

<!ELEMENT minimum-bandwidth (#PCDATA)>

<!ELEMENT minimum-lsp-bw (#PCDATA)>

<!ELEMENT mld-group-information (mgm-interface-groups)*>

<!ELEMENT mld-hosts-information (mgm-disabled-interface-name | mgm-interface)*>

<!ELEMENT mld-interface-information (mgm-interface | mgm-configured-parameters |
 mgm-derived-parameters)*>

<!ELEMENT mld-output-group-information (mgm-interface-output-groups)*>

<!ELEMENT mld-statistics-information (mgm-statistics-interface |
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mgm-statistics-other | mgm-statistics-global | mgm-statistics-all)*>

<!ELEMENT monitor-lsp-bandwidth EMPTY>

<!ELEMENT mpls-admin-group (admin-group-name | index)*>

<!ELEMENT mpls-admin-group-extended (range | admin-group-name |
admin-group-index)*>

<!ELEMENT mpls-admin-group-extended-information (mpls-admin-group-extended)*>

<!ELEMENT mpls-admin-group-information (mpls-admin-group)*>

<!ELEMENT mpls-call-admission-control (mpls-lsp)*>

<!ELEMENT mpls-call-admission-control-information (mpls-call-admission-control)*>

<!ELEMENT mpls-context-identifier (context-identifier | context-type | metric |
context-table | context-lsps | context-lsp-ingress-router | context-lsp-name |
context-lsp-is-detour | context-total-count | primary-context-count |
protector-context-count)*>
<!ATTLIST mpls-context-identifier junos:style CDATA #IMPLIED>

<!ELEMENT mpls-context-identifier-information (mpls-context-identifier)*>

<!ELEMENT mpls-cspf (cspf-queue | cspf-paths | cspf-timing)*>
<!ATTLIST mpls-cspf heading CDATA #IMPLIED>

<!ELEMENT mpls-cspf-information (mpls-cspf)*>

<!ELEMENT mpls-diffserv-te-information (bandwidth-model | te-class-map)*>

<!ELEMENT mpls-error (mpls-error-msg)*>

<!ELEMENT mpls-error-msg (#PCDATA)>

<!ELEMENT mpls-interface (interface-name | mpls-interface-state | no-group-flag
| admin-group-name | admin-group-number)*>

<!ELEMENT mpls-interface-detail (interface-name | mpls-interface-state |
static-revert-time | always-mark-connection-protection-tlv |
mpls-interface-switch-away-lsps | no-group-flag | admin-group-name |
admin-group-number | admin-group-extended-name | admin-group-extended-number |
srlg-name)*>

<!ELEMENT mpls-interface-information (mpls-interface | mpls-interface-detail)*>

<!ELEMENT mpls-interface-state (#PCDATA)>

<!ELEMENT mpls-interface-switch-away-lsps (#PCDATA)>

<!ELEMENT mpls-label (#PCDATA)>

<!ELEMENT mpls-lsp (destination-address | source-address | lsp-state | route-count
 | active-path | is-primary | name | bidirectional | associated-bidirectional |
lsp-associated-lspname | lsp-associated-lspsrc | lsp-description | lsp-pktbytes
| lsp-packets | lsp-bytes | no-statistics | mpls-p2mp-name | lsp-type |
is-fastreroute | is-linkprotection | is-nodeprotection | is-inter-domain-path |
load-balance | lsp-diffserv-te-info | metric | revert-timer | revert-timer-remain
 | optimize-protection-timer | admin-groups | admin-groups-extended | mpls-srlg
| lsp-creation-time | lsp-soft-preemption-counter | lsp-soft-preemption-time |
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retry-timer | retry-limit | mpls-lsp-autobandwidth | mpls-lsp-path |
mpls-lsp-attributes)*>

<!ELEMENT mpls-lsp-attributes (signal-type | encoding-type | switching-type |
gpid | protection-type)*>

<!ELEMENT mpls-lsp-autobandwidth (monitor-lsp-bandwidth | minimum-bandwidth |
maximum-bandwidth | adjust-timer | bandwidth | time-to-adjust | adjust-threshold
 | overflow-limit | overflow-sample-count | underflow-limit |
underflow-sample-count)*>

<!ELEMENT mpls-lsp-autobandwidth-information (lsp-name | autobw-minimum-bandwidth
 | autobw-maximum-bandwidth | autobw-max-average-bandwidth | autobw-adjust-timer
 | autobw-time-to-adjust | autobw-time-last-adjust | autobw-adjust-threshold |
overflow-limit | overflow-sample-count | underflow-limit | underflow-sample-count
 | autobw-last-bw | autobw-requested-bw | autobw-signaled-bw |
autobw-high-watermark-bw | autobw-total-adjustments |
autobw-total-successful-adjustments | autobw-total-unsuccessful-adjustments |
autobw-monitor-lsp-bandwidth | destination-address | source-address | lsp-state)*>
<!ATTLIST mpls-lsp-autobandwidth-information junos:style CDATA #IMPLIED>

<!ELEMENT mpls-lsp-defaults (lsp-setup-priority | lsp-hold-priority |
lsp-retry-timer | lsp-hoplimit | lsp-bandwidth)*>

<!ELEMENT mpls-lsp-defaults-information (mpls-lsp-defaults)*>

<!ELEMENT mpls-lsp-information (rsvp-session-data)*>

<!ELEMENT mpls-lsp-path (path-active | title | name | path-state | cos |
no-decrement-ttl | preference | path-soft-preemption-pending | setup-priority |
hold-priority | bandwidth | actual-bandwidth | per-class-bandwidth-heading |
bandwidth_ct0 | bandwidth_ct1 | bandwidth_ct2 | bandwidth_ct3 | path-adaptive |
path-no-recordroute | hoplimit | optimize-timer | smart-optimize-timer |
admin-groups | admin-groups-extended | srlg | retry-timer | retry-limit |
cspf-status | explicit-route | received-rro | oam-state | path-history |
path-available-bandwidth | layer2-connection | mpls-srlg)*>

<!ELEMENT mpls-lsp-replication (mpls-pvc-name | mpls-pvc-state | mpls-pvc-resolved
 | mpls-path-resolved | mpls-pvc-replication | mpls-path-replication)*>
<!ATTLIST mpls-lsp-replication junos:style CDATA #IMPLIED>

<!ELEMENT mpls-lsp-replication-information (mpls-lsp-replication)*>

<!ELEMENT mpls-lsp-type (#PCDATA)>

<!ELEMENT mpls-mirror-ldp-oam-stale-entry (#PCDATA)>

<!ELEMENT mpls-mirror-oam-address (#PCDATA)>

<!ELEMENT mpls-mirror-oam-ext-tunnel-id (#PCDATA)>

<!ELEMENT mpls-mirror-oam-local-bfd-disc (#PCDATA)>

<!ELEMENT mpls-mirror-oam-lsp-id (#PCDATA)>

<!ELEMENT mpls-mirror-oam-lsp-name (#PCDATA)>

<!ELEMENT mpls-mirror-oam-mpls-oam-address (#PCDATA)>

<!ELEMENT mpls-mirror-oam-path-name (#PCDATA)>
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<!ELEMENT mpls-mirror-oam-path-type (#PCDATA)>

<!ELEMENT mpls-mirror-oam-refcount (#PCDATA)>

<!ELEMENT mpls-mirror-oam-remote-bfd-disc (#PCDATA)>

<!ELEMENT mpls-mirror-oam-tunnel-endpoint-addr (#PCDATA)>

<!ELEMENT mpls-mirror-oam-tunnel-id (#PCDATA)>

<!ELEMENT mpls-mirror-oam-tunnel-send-addr (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-address (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-local-bfd-disc (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-mpls-oam-address (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-refcount (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-remote-bfd-disc (#PCDATA)>

<!ELEMENT mpls-mirror-rsvp-oam-stale-entry (#PCDATA)>

<!ELEMENT mpls-oam-bfd-dest-addr (#PCDATA)>

<!ELEMENT mpls-oam-instance-id (#PCDATA)>

<!ELEMENT mpls-oam-ldp-fec (#PCDATA)>

<!ELEMENT mpls-oam-ldp-fec-len (#PCDATA)>

<!ELEMENT mpls-oam-ldp-replication (mpls-oam-instance-id | mpls-oam-type |
mpls-oam-ldp-fec | mpls-oam-ldp-fec-len | mpls-oam-bfd-dest-addr |
mpls-mirror-oam-local-bfd-disc | mpls-oam-ldp-source |
mpls-mirror-oam-remote-bfd-disc | mpls-mirror-oam-refcount |
mpls-mirror-oam-address | mpls-mirror-oam-mpls-oam-address |
mpls-mirror-ldp-oam-stale-entry)*>

<!ELEMENT mpls-oam-ldp-replication-information (mpls-oam-ldp-replication)*>

<!ELEMENT mpls-oam-ldp-source (#PCDATA)>

<!ELEMENT mpls-oam-rsvp-replication (mpls-rsvp-oam-type | mpls-mirror-oam-lsp-name
 | mpls-mirror-oam-path-name | mpls-mirror-oam-path-type | mpls-mirror-oam-lsp-id
 | mpls-mirror-oam-tunnel-id | mpls-mirror-oam-ext-tunnel-id |
mpls-mirror-oam-tunnel-endpoint-addr | mpls-mirror-oam-tunnel-send-addr |
mpls-rsvp-oam-bfd-dest-addr | mpls-mirror-rsvp-oam-local-bfd-disc |
mpls-oam-rsvp-source | mpls-mirror-rsvp-oam-remote-bfd-disc |
mpls-mirror-rsvp-oam-refcount | mpls-mirror-rsvp-oam-address |
mpls-mirror-rsvp-oam-mpls-oam-address | mpls-mirror-rsvp-oam-stale-entry)*>

<!ELEMENT mpls-oam-rsvp-replication-information (mpls-oam-rsvp-replication)*>

<!ELEMENT mpls-oam-rsvp-source (#PCDATA)>

<!ELEMENT mpls-oam-type (#PCDATA)>

<!ELEMENT mpls-p2mp-branch-count (#PCDATA)>

<!ELEMENT mpls-p2mp-lsp (mpls-p2mp-name | mpls-p2mp-branch-count)*>
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<!ELEMENT mpls-p2mp-lsp-name (#PCDATA)>

<!ELEMENT mpls-p2mp-name (#PCDATA)>

<!ELEMENT mpls-p2mp-restart-database (mpls-p2mp-restart-lsp)*>

<!ELEMENT mpls-p2mp-restart-database-information (mpls-p2mp-restart-database)*>

<!ELEMENT mpls-p2mp-restart-lsp (name | tunnel-id | lsp-id | lsp-flags |
subgroup-id | application-owner | branch-lsp-count | mpls-restart-lsp)*>

<!ELEMENT mpls-path (name | address | path-type | telink-id)*>

<!ELEMENT mpls-path-active-bw (#PCDATA)>

<!ELEMENT mpls-path-dst-port (#PCDATA)>

<!ELEMENT mpls-path-information (mpls-path)*>

<!ELEMENT mpls-path-inst-metric (#PCDATA)>

<!ELEMENT mpls-path-inst-p2mp-branch-id (#PCDATA)>

<!ELEMENT mpls-path-inst-repl (psb-id | explicit-route | mpls-path-inst-state |
mpls-path-inst-metric | mpls-path-inst-src-port | mpls-path-inst-p2mp-branch-id)*>

<!ELEMENT mpls-path-inst-src-port (#PCDATA)>

<!ELEMENT mpls-path-inst-state (#PCDATA)>

<!ELEMENT mpls-path-name (#PCDATA)>

<!ELEMENT mpls-path-pvc-name (#PCDATA)>

<!ELEMENT mpls-path-refcount (#PCDATA)>

<!ELEMENT mpls-path-replication (mpls-path-type | mpls-path-name |
mpls-path-pvc-name | mpls-path-resolved | mpls-path-replication-type |
mpls-path-active-bw | mpls-path-dst-port | mpls-path-refcount |
mpls-path-inst-repl)*>
<!ATTLIST mpls-path-replication junos:style CDATA #IMPLIED>

<!ELEMENT mpls-path-replication-information (mpls-path-replication)*>

<!ELEMENT mpls-path-replication-type (#PCDATA)>

<!ELEMENT mpls-path-resolved (#PCDATA)>

<!ELEMENT mpls-path-type (#PCDATA)>

<!ELEMENT mpls-pvc-active-path-name (#PCDATA)>

<!ELEMENT mpls-pvc-active-path-type (#PCDATA)>

<!ELEMENT mpls-pvc-autobw-max-avg (#PCDATA)>

<!ELEMENT mpls-pvc-dst-port (#PCDATA)>

<!ELEMENT mpls-pvc-id (#PCDATA)>
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<!ELEMENT mpls-pvc-name (#PCDATA)>

<!ELEMENT mpls-pvc-p2mp-dst-port (#PCDATA)>

<!ELEMENT mpls-pvc-p2mp-pvc-id (#PCDATA)>

<!ELEMENT mpls-pvc-refcount (#PCDATA)>

<!ELEMENT mpls-pvc-replication (mpls-pvc-name | mpls-pvc-id | mpls-pvc-dst-port
| mpls-pvc-src-addr | mpls-pvc-p2mp-pvc-id | mpls-pvc-p2mp-dst-port |
mpls-pvc-active-path-type | mpls-pvc-active-path-name | mpls-pvc-autobw-max-avg
| mpls-pvc-refcount | mpls-pvc-resolved)*>
<!ATTLIST mpls-pvc-replication junos:style CDATA #IMPLIED>

<!ELEMENT mpls-pvc-replication-information (mpls-pvc-replication)*>

<!ELEMENT mpls-pvc-resolved (#PCDATA)>

<!ELEMENT mpls-pvc-src-addr (#PCDATA)>

<!ELEMENT mpls-pvc-state (#PCDATA)>

<!ELEMENT mpls-restart-database (mpls-restart-lsp)*>

<!ELEMENT mpls-restart-database-information (mpls-restart-database)*>

<!ELEMENT mpls-restart-lsp (name | destination-address | source-address | lsp-state
 | lsp-flags | shared-port | shared-port-count | lsp-path-count |
mpls-lsp-attributes | mpls-restart-path)*>

<!ELEMENT mpls-restart-path (lsp-path-type | name | path-standby | path-active |
 path-state | lsp-id | tunnel-id | subgroup-id | path-flags | bandwidth |
per-class-bandwidth-heading | bandwidth_ct0 | bandwidth_ct1 | bandwidth_ct2 |
bandwidth_ct3 | explicit-route | mpls-restart-rsvp)*>

<!ELEMENT mpls-restart-rsvp (next-hop | interface-name | telink-name |
upstream-label-in | label-out | self-id | explicit-route)*>

<!ELEMENT mpls-rsvp-oam-bfd-dest-addr (#PCDATA)>

<!ELEMENT mpls-rsvp-oam-type (#PCDATA)>

<!ELEMENT mpls-srlg (srlg-name | srlg-value | srlg-cost)*>

<!ELEMENT mpls-srlg-information (mpls-srlg)*>

<!ELEMENT mpls-static-ingress-lsp-brief (lsp-name | destination-address |
lsp-state)*>

<!ELEMENT mpls-static-ingress-lsp-descriptions (lsp-name | destination-address |
 lsp-description)*>

<!ELEMENT mpls-static-ingress-lsp-statistics (lsp-name | destination-address |
lsp-state | lsp-pktbytes | lsp-packets | lsp-bytes)*>

<!ELEMENT mpls-static-lsp-detail (lsp-name | destination-address | label-in |
lsp-description | lsp-state | lsp-sub-state | next-hop | interface-name |
label-operation | label-out | creation-time | lp-bypass-name | np-bypass-name |
next-next-label | bandwidth_ct0 | spvc-id | self-id | lsp-pktbytes | lsp-packets
 | lsp-bytes)*>
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<!ELEMENT mpls-static-lsp-information (mpls-static-lsp-summary |
mpls-static-ingress-lsp-brief | mpls-static-transit-lsp-brief |
mpls-static-ingress-lsp-descriptions | mpls-static-transit-lsp-descriptions |
mpls-static-ingress-lsp-statistics | mpls-static-transit-lsp-statistics |
mpls-static-lsp-detail)*>

<!ELEMENT mpls-static-lsp-summary (session-type | count | display-count | up-count
 | down-count)*>

<!ELEMENT mpls-static-restart-database (mpls-static-restart-lsp)*>

<!ELEMENT mpls-static-restart-database-information (mpls-static-restart-database)*>

<!ELEMENT mpls-static-restart-lsp (name | spvc-type | spvc-id | self-id)*>

<!ELEMENT mpls-static-transit-lsp-brief (lsp-name | label-in | lsp-state)*>

<!ELEMENT mpls-static-transit-lsp-descriptions (lsp-name | label-in |
lsp-description)*>

<!ELEMENT mpls-static-transit-lsp-statistics (lsp-name | label-in | lsp-state |
lsp-pktbytes | lsp-packets | lsp-bytes)*>

<!ELEMENT mpls-type-bfd-ip-udp-fd (#PCDATA)>

<!ELEMENT mpls-type-bfd-ip-udp-fd-fss (#PCDATA)>

<!ELEMENT mpls-type-bfd-pw-ach-fd (#PCDATA)>

<!ELEMENT mpls-type-bfd-pw-ach-fd-fss (#PCDATA)>

<!ELEMENT mpls-type-control-word (#PCDATA)>

<!ELEMENT mpls-type-icmp-ping (#PCDATA)>

<!ELEMENT mpls-type-lsp-ping (#PCDATA)>

<!ELEMENT mpls-type-pw-label (#PCDATA)>

<!ELEMENT mpls-type-router-alert (#PCDATA)>

<!ELEMENT msdp-accept EMPTY>

<!ELEMENT msdp-active-source-limit-exceeded (#PCDATA)>

<!ELEMENT msdp-connect-retries (#PCDATA)>

<!ELEMENT msdp-errors-received (#PCDATA)>

<!ELEMENT msdp-filtered EMPTY>

<!ELEMENT msdp-global-active-source-limit-exceeded (#PCDATA)>

<!ELEMENT msdp-group-name (#PCDATA)>

<!ELEMENT msdp-instance (instance-name | msdp-no-routes | msdp-route |
msdp-no-source | msdp-source | msdp-global-active-source-limit-exceeded |
msdp-peer-statistics)*>

<!ELEMENT msdp-keepalives-received (#PCDATA)>
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<!ELEMENT msdp-keepalives-sent (#PCDATA)>

<!ELEMENT msdp-local-address (#PCDATA)>

<!ELEMENT msdp-message-received (#PCDATA)>
<!ATTLIST msdp-message-received junos:seconds CDATA #IMPLIED>

<!ELEMENT msdp-message-received-absolute (#PCDATA)>

<!ELEMENT msdp-no-peer (#PCDATA)>

<!ELEMENT msdp-no-peers EMPTY>

<!ELEMENT msdp-no-routes (#PCDATA)>

<!ELEMENT msdp-no-source (#PCDATA)>

<!ELEMENT msdp-originator (#PCDATA)>

<!ELEMENT msdp-peer (msdp-peer-address | msdp-local-address | msdp-state |
msdp-state-change | msdp-group-name | msdp-connect-retries | msdp-state-timeout
| msdp-peer-timeout | msdp-sa-accepted | msdp-sa-received | msdp-socket-primary
| msdp-socket-secondary | msdp-socket-handler)*>
<!ATTLIST msdp-peer junos:style CDATA #IMPLIED>

<!ELEMENT msdp-peer-address (#PCDATA)>

<!ELEMENT msdp-peer-information (msdp-no-peers | msdp-peer)*>

<!ELEMENT msdp-peer-statistics (msdp-peer-address | msdp-state-change-absolute |
 msdp-state-change | msdp-message-received-absolute | msdp-message-received |
msdp-rpf-failures | msdp-remote-closes | msdp-peer-timeouts | msdp-sa-messages-sent
 | msdp-sa-messages-received | msdp-sa-requests-sent | msdp-sa-requests-received
 | msdp-sa-responses-sent | msdp-sa-responses-received |
msdp-active-source-limit-exceeded | msdp-keepalives-sent | msdp-keepalives-received
 | msdp-unknowns-received | msdp-errors-received)*>

<!ELEMENT msdp-peer-timeout (#PCDATA)>

<!ELEMENT msdp-peer-timeouts (#PCDATA)>

<!ELEMENT msdp-reject EMPTY>

<!ELEMENT msdp-remote-closes (#PCDATA)>

<!ELEMENT msdp-route (multicast-group-address | multicast-source-address |
msdp-route-peer)*>

<!ELEMENT msdp-route-peer (msdp-peer-address | msdp-originator |
msdp-route-peer-flags)*>

<!ELEMENT msdp-route-peer-flags (msdp-accept | msdp-reject | msdp-filtered)*>

<!ELEMENT msdp-rpf-failures (#PCDATA)>

<!ELEMENT msdp-sa-accepted (#PCDATA)>

<!ELEMENT msdp-sa-messages-received (#PCDATA)>

<!ELEMENT msdp-sa-messages-sent (#PCDATA)>
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<!ELEMENT msdp-sa-received (#PCDATA)>

<!ELEMENT msdp-sa-requests-received (#PCDATA)>

<!ELEMENT msdp-sa-requests-sent (#PCDATA)>

<!ELEMENT msdp-sa-responses-received (#PCDATA)>

<!ELEMENT msdp-sa-responses-sent (#PCDATA)>

<!ELEMENT msdp-socket-handler (#PCDATA)>

<!ELEMENT msdp-socket-primary (#PCDATA)>

<!ELEMENT msdp-socket-secondary (#PCDATA)>

<!ELEMENT msdp-source (msdp-source-prefix | msdp-source-prefix-length |
msdp-source-type | msdp-source-limit-maximum | msdp-source-limit-threshold |
msdp-source-limit-exceeded)*>

<!ELEMENT msdp-source-active-information (msdp-instance)*>

<!ELEMENT msdp-source-information (msdp-instance)*>

<!ELEMENT msdp-source-limit-exceeded (#PCDATA)>

<!ELEMENT msdp-source-limit-maximum (#PCDATA)>

<!ELEMENT msdp-source-limit-threshold (#PCDATA)>

<!ELEMENT msdp-source-prefix (#PCDATA)>

<!ELEMENT msdp-source-prefix-length (#PCDATA)>

<!ELEMENT msdp-source-type (#PCDATA)>

<!ELEMENT msdp-state (#PCDATA)>

<!ELEMENT msdp-state-change (#PCDATA)>
<!ATTLIST msdp-state-change junos:seconds CDATA #IMPLIED>

<!ELEMENT msdp-state-change-absolute (#PCDATA)>

<!ELEMENT msdp-state-timeout (#PCDATA)>

<!ELEMENT msdp-statistics-information (msdp-no-peer | msdp-instance)*>

<!ELEMENT msdp-unknowns-received (#PCDATA)>

<!ELEMENT mstp-root-id (#PCDATA)>

<!ELEMENT mstp-root-snpa (mstp-root-id)*>

<!ELEMENT mstp_rt_add (#PCDATA)>

<!ELEMENT mstp_rt_chg (#PCDATA)>

<!ELEMENT mstp_rt_del (#PCDATA)>

<!ELEMENT mstp_rt_del_not_found (#PCDATA)>
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<!ELEMENT mt-tlv (mtid)*>

<!ELEMENT mtid (#PCDATA)>

<!ELEMENT mtu (#PCDATA)>

<!ELEMENT mtu-mismatch-error (#PCDATA)>

<!ELEMENT multicast-aux-interface (#PCDATA)>

<!ELEMENT multicast-aux-interface-ignored EMPTY>

<!ELEMENT multicast-aux-nh-index (#PCDATA)>

<!ELEMENT multicast-aux-nh-index-ignored EMPTY>

<!ELEMENT multicast-aux-oif (multicast-aux-interface | multicast-ref-count |
multicast-aux-nh-index)*>

<!ELEMENT multicast-aux-oif-agg-req (multicast-sg-address)*>

<!ELEMENT multicast-aux-oif-agg-req-join (multicast-host-address |
multicast-group-address | multicast-source-address | multicast-rcvd-interface |
multicast-output-interface | multicast-aux-interface | multicast-aux-nh-index |
multicast-synthetic | multicast-unresolved | multicast-blocked |
multicast-aux-interface-ignored | multicast-aux-nh-index-ignored)*>

<!ELEMENT multicast-aux-oif-data (multicast-aux-oif-agg-req |
multicast-aux-oif-hosts)*>

<!ELEMENT multicast-aux-oif-host (multicast-host-address | multicast-synthetic |
 host-interface)*>

<!ELEMENT multicast-aux-oif-hosts (multicast-aux-oif-host)*>

<!ELEMENT multicast-aux-oif-join (multicast-source-address |
multicast-group-address | multicast-rcvd-interface | multicast-output-interface
| multicast-aux-interface | multicast-unresolved | multicast-synthetic |
multicast-blocked | multicast-aux-nh-index | multicast-aux-interface-ignored |
multicast-aux-nh-index-ignored)*>

<!ELEMENT multicast-aux-oif-request (multicast-source-address |
multicast-group-address | multicast-unresolved | multicast-aux-interface |
multicast-aux-nh-index | multicast-aux-interface-ignored |
multicast-aux-nh-index-ignored)*>

<!ELEMENT multicast-backup-pe-address (#PCDATA)>

<!ELEMENT multicast-backup-pe-address-information (multicast-backup-pe-address |
 multicast-backup-pe-group-list | pe-address-local | lsp-to-pe-up)*>
<!ATTLIST multicast-backup-pe-address-information junos:style CDATA #IMPLIED>

<!ELEMENT multicast-backup-pe-group (multicast-backup-pe-group-name | designated-pe
 | transitions | last-transition | local-pe-address | backup-pes)*>
<!ATTLIST multicast-backup-pe-group junos:style CDATA #IMPLIED>

<!ELEMENT multicast-backup-pe-group-list (multicast-backup-pe-group-member)*>

<!ELEMENT multicast-backup-pe-group-member (multicast-backup-pe-group-name)*>

<!ELEMENT multicast-backup-pe-group-name (#PCDATA)>
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<!ELEMENT multicast-backup-pe-groups (instance-name | multicast-backup-pe-group)*>

<!ELEMENT multicast-backup-pe-groups-information (multicast-backup-pe-groups)*>

<!ELEMENT multicast-blocked EMPTY>

<!ELEMENT multicast-byte-count (#PCDATA)>

<!ELEMENT multicast-byte-count-not-available EMPTY>

<!ELEMENT multicast-bytes (#PCDATA)>

<!ELEMENT multicast-core-hash (#PCDATA)>

<!ELEMENT multicast-edge-hash (#PCDATA)>

<!ELEMENT multicast-flow-map (flow-map-name | policy-name | cache-timeout |
flow-bandwidth | bandwidth-type | redundant-sources)*>
<!ATTLIST multicast-flow-map junos:style CDATA #IMPLIED>

<!ELEMENT multicast-flow-maps (instance-name | multicast-flow-map)*>

<!ELEMENT multicast-flow-maps-information (multicast-flow-maps)*>

<!ELEMENT multicast-group (multicast-group-address | multicast-source-count |
multicast-packet-count | multicast-packet-count-not-available |
multicast-byte-count | multicast-byte-count-not-available |
multicast-group-source)*>
<!ATTLIST multicast-group junos:style CDATA #IMPLIED>

<!ELEMENT multicast-group-address (#PCDATA)>

<!ELEMENT multicast-group-count (#PCDATA)>

<!ELEMENT multicast-group-prefix (#PCDATA)>

<!ELEMENT multicast-group-prefix-length (#PCDATA)>

<!ELEMENT multicast-group-source (multicast-source-address |
multicast-source-prefix-length | multicast-packet-count |
multicast-packet-count-not-available | multicast-byte-count |
multicast-byte-count-not-available)*>
<!ATTLIST multicast-group-source junos:style CDATA #IMPLIED>

<!ELEMENT multicast-host-address (#PCDATA)>

<!ELEMENT multicast-instance (#PCDATA)>

<!ELEMENT multicast-interface (interface-name | interface-max-bandwidth |
interface-remaining-bandwidth | interface-local-bandwidth-deduction |
interface-mapped-bandwidth-deduction | interface-reverse-oif-mapping |
interface-reverse-oif-mapping-no-qos-adjust | interface-subscriber-leave-timer |
 interface-no-qos-adjust)*>

<!ELEMENT multicast-interface-information (multicast-interface)*>

<!ELEMENT multicast-member-map (#PCDATA)>

<!ELEMENT multicast-member-map-data (multicast-member-map | multicast-root-hash
| multicast-core-hash | multicast-edge-hash)*>
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<!ELEMENT multicast-next-hops-information (next-hops-family)*>

<!ELEMENT multicast-output-interface (#PCDATA)>

<!ELEMENT multicast-packet-count (#PCDATA)>

<!ELEMENT multicast-packet-count-not-available EMPTY>

<!ELEMENT multicast-packets (#PCDATA)>

<!ELEMENT multicast-pim-to-igmp-proxy (instance-name | proxy-state |
proxy-upstream-interface)*>

<!ELEMENT multicast-pim-to-igmp-proxy-information (multicast-pim-to-igmp-proxy)*>

<!ELEMENT multicast-pim-to-mld-proxy (instance-name | proxy-state |
proxy-upstream-interface)*>

<!ELEMENT multicast-pim-to-mld-proxy-information (multicast-pim-to-mld-proxy)*>

<!ELEMENT multicast-rcvd-interface (#PCDATA)>

<!ELEMENT multicast-ref-count (#PCDATA)>

<!ELEMENT multicast-root-hash (#PCDATA)>

<!ELEMENT multicast-route (multicast-group-address | multicast-source-address |
multicast-route-vlan-id | multicast-route-bridge-domain |
multicast-route-mesh-group | multicast-source-prefix-length |
multicast-group-prefix-length | multicast-route-source | session-name |
forwarding-rate-kilobytes | forwarding-rate-packets | forwarded-packet-count |
multicast-statistics-timed-out | bandwidth-for-admission-control |
upstream-interface-name | rpf-check-disabled | downstream-interface-names |
incoming-interface-list-names | rejected-downstream-interface-names | next-hop-id
 | incoming-interface-list-id | upstream-protocol |
multicast-route-forwarding-state | multicast-route-state | multicast-route-uptime
 | multicast-route-timeout | interface-mismatch-count | multicast-route-summary)*>
<!ATTLIST multicast-route junos:style CDATA #IMPLIED>

<!ELEMENT multicast-route-bridge-domain (#PCDATA)>

<!ELEMENT multicast-route-count (#PCDATA)>

<!ELEMENT multicast-route-forwarding-state (#PCDATA)>

<!ELEMENT multicast-route-information (multicast-route-no-group-prefix |
multicast-route-no-family | route-family)*>

<!ELEMENT multicast-route-mesh-group (#PCDATA)>

<!ELEMENT multicast-route-no-family (#PCDATA)>

<!ELEMENT multicast-route-no-group-prefix (#PCDATA)>

<!ELEMENT multicast-route-source (multicast-source-address)*>

<!ELEMENT multicast-route-state (#PCDATA)>

<!ELEMENT multicast-route-state-type (#PCDATA)>
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<!ELEMENT multicast-route-summary (multicast-route-type |
multicast-route-state-type | multicast-route-count)*>

<!ELEMENT multicast-route-timeout (#PCDATA)>

<!ELEMENT multicast-route-type (#PCDATA)>

<!ELEMENT multicast-route-uptime (#PCDATA)>

<!ELEMENT multicast-route-vlan-id (#PCDATA)>

<!ELEMENT multicast-rpf-information (rpf-family)*>

<!ELEMENT multicast-scope (scope-name | address-prefix | interface-name |
scope-rejects | scope-state)*>

<!ELEMENT multicast-scope-information (multicast-scope-policy |
multicast-scope-policy-interfaces | multicast-scope)*>
<!ATTLIST multicast-scope-information junos:style CDATA #IMPLIED>

<!ELEMENT multicast-scope-policy (#PCDATA)>

<!ELEMENT multicast-scope-policy-interface (interface-name | scope-rejects)*>

<!ELEMENT multicast-scope-policy-interfaces (instance-name | address-family |
multicast-scope-policy-interface)*>

<!ELEMENT multicast-session (session-announcement | session-name | session-version
 | session-origin | upstream-protocol | session-description | session-uri |
session-email | session-phone | session-connection-data | session-bandwidth |
session-start-time | session-stop-time | session-encryption-key | session-attribute
 | session-media)*>
<!ATTLIST multicast-session junos:style CDATA #IMPLIED>

<!ELEMENT multicast-session-count (#PCDATA)>

<!ELEMENT multicast-sessions-information (multicast-session |
multicast-session-count | multicast-sessions-type)*>

<!ELEMENT multicast-sessions-type (#PCDATA)>

<!ELEMENT multicast-sg-address (#PCDATA)>

<!ELEMENT multicast-source (multicast-source-address |
multicast-source-prefix-length | multicast-group-count | multicast-packet-count
| multicast-packet-count-not-available | multicast-byte-count |
multicast-byte-count-not-available | multicast-source-group)*>
<!ATTLIST multicast-source junos:style CDATA #IMPLIED>

<!ELEMENT multicast-source-address (#PCDATA)>

<!ELEMENT multicast-source-count (#PCDATA)>

<!ELEMENT multicast-source-group (multicast-group-address | multicast-packet-count
 | multicast-packet-count-not-available | multicast-byte-count |
multicast-byte-count-not-available)*>
<!ATTLIST multicast-source-group junos:style CDATA #IMPLIED>

<!ELEMENT multicast-source-prefix-length (#PCDATA)>

<!ELEMENT multicast-statistics (instance-name | address-family | mc-stats-interface
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 | mc-resolves-no-mc-interface | mc-global-resolves-no-route |
mc-notifies-no-mc-interface | mc-notifies-no-route | mc-mismatches-no-mc-interface
 | mc-groups-no-mc-interface)*>

<!ELEMENT multicast-statistics-information (multicast-statistics)*>

<!ELEMENT multicast-statistics-timed-out EMPTY>

<!ELEMENT multicast-synthetic EMPTY>

<!ELEMENT multicast-tunnel (interface-name | tunnel-local-address |
tunnel-remote-address | tunnel-ttl)*>

<!ELEMENT multicast-tunnels-information (multicast-tunnel)*>

<!ELEMENT multicast-unresolved EMPTY>

<!ELEMENT multicast-usage-information (multicast-usage-no-group-prefix |
multicast-usage-strange-family | multicast-usage-timed-out | multicast-group |
multicast-source)*>

<!ELEMENT multicast-usage-no-group-prefix (#PCDATA)>

<!ELEMENT multicast-usage-strange-family (#PCDATA)>

<!ELEMENT multicast-usage-timed-out EMPTY>

<!ELEMENT mvpn-instance (instance-family)*>
<!ATTLIST mvpn-instance junos:style CDATA #IMPLIED>

<!ELEMENT mvpn-instance-information (mvpn-instance | instance-family)*>

<!ELEMENT name (#PCDATA)>

<!ELEMENT nbr-intf-id (#PCDATA)>

<!ELEMENT nbr-rtr-id (#PCDATA)>

<!ELEMENT needs-rebuild EMPTY>

<!ELEMENT neighbor (neighbor-entry)*>

<!ELEMENT neighbor-address (#PCDATA)>

<!ELEMENT neighbor-adjacency-time (#PCDATA)>

<!ELEMENT neighbor-as (#PCDATA)>

<!ELEMENT neighbor-assert-metric (#PCDATA)>

<!ELEMENT neighbor-assert-preference (#PCDATA)>

<!ELEMENT neighbor-assert-timeout (#PCDATA)>

<!ELEMENT neighbor-cost (#PCDATA)>

<!ELEMENT neighbor-count (#PCDATA)>

<!ELEMENT neighbor-display-error (#PCDATA)>

<!ELEMENT neighbor-down-count (#PCDATA)>
```


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```
<!ELEMENT neighbor-entry (neighbor-identifier | provider-tunnel-id)*>

<!ELEMENT neighbor-flags (#PCDATA)>

<!ELEMENT neighbor-id (#PCDATA)>

<!ELEMENT neighbor-identifier (#PCDATA)>

<!ELEMENT neighbor-idle (#PCDATA)>
<!ATTLIST neighbor-idle junos:seconds CDATA #IMPLIED>

<!ELEMENT neighbor-interface (#PCDATA)>

<!ELEMENT neighbor-join-sg-count (#PCDATA)>

<!ELEMENT neighbor-join-tsg-count (#PCDATA)>

<!ELEMENT neighbor-last-out-of-band-resync-time (#PCDATA)>

<!ELEMENT neighbor-local-instance (#PCDATA)>

<!ELEMENT neighbor-prefix (#PCDATA)>

<!ELEMENT neighbor-priority (#PCDATA)>

<!ELEMENT neighbor-remote-instance (#PCDATA)>

<!ELEMENT neighbor-replication-sync-status (#PCDATA)>

<!ELEMENT neighbor-secondary EMPTY>

<!ELEMENT neighbor-state (#PCDATA)>

<!ELEMENT neighbor-status (#PCDATA)>

<!ELEMENT neighbor-summary (neighbor-summary-count)*>

<!ELEMENT neighbor-summary-count (#PCDATA)>

<!ELEMENT neighbor-suppress-hello (#PCDATA)>
<!ATTLIST neighbor-suppress-hello junos:seconds CDATA #IMPLIED>

<!ELEMENT neighbor-timeout (#PCDATA)>

<!ELEMENT neighbor-up-count (#PCDATA)>

<!ELEMENT neighbor-up-time (#PCDATA)>

<!ELEMENT netmask-mismatch-error (#PCDATA)>

<!ELEMENT network-element-id (#PCDATA)>

<!ELEMENT network-element-port-snpa (port-id)*>

<!ELEMENT next-hop (#PCDATA)>

<!ELEMENT next-hop-address (interface-address | lsp-name)*>

<!ELEMENT next-hop-downstream-interface (interface-name | interface-index |
interface-nh-index)*>
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<!ELEMENT next-hop-element (interface-name | isis-next-hop-type | isis-next-hop
| snpa)*>

<!ELEMENT next-hop-id (#PCDATA)>

<!ELEMENT next-hop-kernel-ref-count (#PCDATA)>

<!ELEMENT next-hop-name (interface-name | interface-link-name)*>

<!ELEMENT next-hop-ref-count (#PCDATA)>

<!ELEMENT next-hop-type (#PCDATA)>

<!ELEMENT next-hops-family (address-family | iflist-next-hop)*>

<!ELEMENT next-next-label (#PCDATA)>

<!ELEMENT ngen-mvpn-mode (#PCDATA)>

<!ELEMENT nh (selected-next-hop | nh-string | elnh-address | ext-int-type | weight
 | balance | uflags | fc | filter | via | nh-local-interface | nh-table-receive
| nh-table | nh-indirect-fnh-type | to | lsp-name | mpls-label | label-ttl-action
 | nh-service | nh-service-pkt-dist | nh-service-app-data | nh-address |
nh-index)*>

<!ELEMENT nh-address (#PCDATA)>

<!ELEMENT nh-flood-overflow EMPTY>

<!ELEMENT nh-index (#PCDATA)>

<!ELEMENT nh-indirect-fnh-type (#PCDATA)>

<!ELEMENT nh-kernel-id (#PCDATA)>

<!ELEMENT nh-local-interface (#PCDATA)>

<!ELEMENT nh-reference-count (#PCDATA)>

<!ELEMENT nh-service (#PCDATA)>

<!ELEMENT nh-service-app-data (#PCDATA)>

<!ELEMENT nh-service-pkt-dist (#PCDATA)>

<!ELEMENT nh-string (#PCDATA)>

<!ELEMENT nh-table (#PCDATA)>

<!ELEMENT nh-table-receive (#PCDATA)>

<!ELEMENT nh-type (#PCDATA)>

<!ELEMENT nhh (nh-type | nh-index | nh-address | nh-reference-count |
ext-int-intf-index | nh-flood-overflow)*>

<!ELEMENT nlp-id (#PCDATA)>

<!ELEMENT nlri-flags (bgp-nlri-flag-explicit-null-for-all-routes |
bgp-nlri-flag-explicit-null-for-connected-routes | bgp-nlri-flag-aggregate-label
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 | bgp-nlri-flag-per-prefix-label | bgp-nlri-flag-per-group-label |
bgp-nlri-flag-traffic-stats | bgp-nlri-flag-l2vpn-status-vector |
bgp-nlri-flag-no-l2vpn-status-vector)*>

<!ELEMENT nlri-flow-novalidate (#PCDATA)>

<!ELEMENT nlri-information (nlri-type | nlri-flags | nlri-traffic-stats |
nlri-flow-novalidate)*>

<!ELEMENT nlri-name (#PCDATA)>

<!ELEMENT nlri-traffic-stats (tracing-information | traffic-stats-interval)*>

<!ELEMENT nlri-type (#PCDATA)>

<!ELEMENT nlri-type-peer (#PCDATA)>

<!ELEMENT nlri-type-session (#PCDATA)>

<!ELEMENT no-coverage-reason (#PCDATA)>

<!ELEMENT no-decrement-ttl EMPTY>

<!ELEMENT no-eligible-backup EMPTY>

<!ELEMENT no-error EMPTY>

<!ELEMENT no-first-fragment EMPTY>

<!ELEMENT no-group-flag EMPTY>

<!ELEMENT no-interface-error (#PCDATA)>

<!ELEMENT no-keepalive-timeout EMPTY>

<!ELEMENT no-label EMPTY>

<!ELEMENT no-rfc-1583 EMPTY>

<!ELEMENT no-route (#PCDATA)>

<!ELEMENT no-router-id-error (#PCDATA)>

<!ELEMENT no-statistics EMPTY>

<!ELEMENT node (node-prefix | node-prefix-length | originating-rib | metric |
node-path-count | forwarding-nh-count | indirect-nh-count | composite-nh-count |
 protocol-nh)*>

<!ELEMENT node-count (#PCDATA)>

<!ELEMENT node-id (#PCDATA)>

<!ELEMENT node-path-count (#PCDATA)>

<!ELEMENT node-prefix (#PCDATA)>

<!ELEMENT node-prefix-length (#PCDATA)>

<!ELEMENT nodes (#PCDATA)>
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<!ELEMENT non-php EMPTY>
<!ELEMENT none EMPTY>
<!ELEMENT not-remote-address EMPTY>
<!ELEMENT note-network-services-mode (#PCDATA)>
<!ELEMENT np-bypass-name (#PCDATA)>
<!ELEMENT nssa-mismatch-error (#PCDATA)>
<!ELEMENT num-local-interfaces (#PCDATA)>
<!ELEMENT num-local-interfaces-up (#PCDATA)>
<!ELEMENT num-mac-count (#PCDATA)>
<!ELEMENT number (#PCDATA)>
<!ELEMENT number-events (#PCDATA)>
<!ELEMENT oam-bfd-session-state (#PCDATA)>
<!ELEMENT oam-lsp-ping-state (#PCDATA)>
<!ELEMENT oam-state (oam-bfd-session-state | oam-lsp-ping-state)*>
<!ELEMENT offer-period (#PCDATA)>
<!ELEMENT oif-name (#PCDATA)>
<!ELEMENT oob EMPTY>
<!ELEMENT open-receive-count (#PCDATA)>
<!ELEMENT open-send-count (#PCDATA)>
<!ELEMENT operational-routing-instance-information (instance-name)*>
<!ELEMENT operational-state (#PCDATA)>
<!ELEMENT optimize-protection-timer (#PCDATA)>
<!ELEMENT optimize-timer (#PCDATA)>
<!ELEMENT optional-capability (#PCDATA)>
<!ELEMENT options (#PCDATA)>
<!ELEMENT originating-rib (#PCDATA)>
<!ELEMENT originator (#PCDATA)>
<!ELEMENT ospf-abr EMPTY>
<!ELEMENT ospf-abr-count (#PCDATA)>
<!ELEMENT ospf-area (#PCDATA)>
<!ELEMENT ospf-area-dc-bit-clear-count (#PCDATA)>
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<!ELEMENT ospf-area-header (ospf-area)*>

<!ELEMENT ospf-area-indications-count (#PCDATA)>

<!ELEMENT ospf-area-overview (ospf-area | ospf-stub-type | ospf-stub-cost |
ospf-virtual-transit | authentication-type | ospf-abr-count | ospf-asbr-count |
ospf-nbr-overview | ospf-dna-uncapable | ospf-area-dc-bit-clear-count |
ospf-area-indications-count | ospf-area-self-indicating |
ospf-link-dc-bit-clear-count)*>

<!ELEMENT ospf-area-self-indicating EMPTY>

<!ELEMENT ospf-as-dc-bit-clear-count (#PCDATA)>

<!ELEMENT ospf-asbr EMPTY>

<!ELEMENT ospf-asbr-count (#PCDATA)>

<!ELEMENT ospf-backup-coverage-information (ospf-topology-backup-coverage)*>

<!ELEMENT ospf-backup-metric (#PCDATA)>

<!ELEMENT ospf-backup-mplsp (lsp-name | lsp-addr | lsp-status | metric | te-metric
 | lsp-last-change)*>

<!ELEMENT ospf-backup-mplsp-information (ospf-backup-mplsp)*>

<!ELEMENT ospf-backup-neighbor (#PCDATA)>

<!ELEMENT ospf-backup-neighbor-from-metric (#PCDATA)>

<!ELEMENT ospf-backup-neighbor-information (ospf-topology-backup-neighbor)*>

<!ELEMENT ospf-backup-neighbor-is-lsp-endpoint EMPTY>

<!ELEMENT ospf-backup-neighbor-node (ospf-backup-neighbor |
ospf-backup-neighbor-is-lsp-endpoint | ospf-backup-neighbor-from-metric |
ospf-backup-neighbor-to-metric | ospf-backup-next-hop)*>

<!ELEMENT ospf-backup-neighbor-to-metric (#PCDATA)>

<!ELEMENT ospf-backup-next-hop (ospf-backup-next-hop-type |
ospf-backup-next-hop-interface | ospf-backup-next-hop-address |
ospf-backup-next-hop-lsp)*>

<!ELEMENT ospf-backup-next-hop-address (#PCDATA)>

<!ELEMENT ospf-backup-next-hop-interface (#PCDATA)>

<!ELEMENT ospf-backup-next-hop-lsp (#PCDATA)>

<!ELEMENT ospf-backup-next-hop-type (#PCDATA)>

<!ELEMENT ospf-backup-node-coverage (ospf-area | ospf-covered-nodes |
ospf-total-nodes | ospf-node-coverage)*>

<!ELEMENT ospf-backup-preference (#PCDATA)>

<!ELEMENT ospf-backup-result-no-coverage-reason (#PCDATA)>
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<!ELEMENT ospf-backup-result-status (#PCDATA)>

<!ELEMENT ospf-backup-route-coverage (ospf-path-type | ospf-covered-routes |
ospf-total-routes | ospf-route-coverage)*>

<!ELEMENT ospf-backup-spf-downstream-only EMPTY>

<!ELEMENT ospf-backup-spf-information (ospf-topology-backup-spf)*>

<!ELEMENT ospf-backup-spf-node (ospf-node-id | ospf-node-metric |
ospf-parent-node-id | ospf-next-hop | ospf-backup-next-hop |
ospf-backup-spf-result)*>

<!ELEMENT ospf-backup-spf-result (ospf-backup-neighbor | ospf-backup-preference
| ospf-backup-neighbor-is-lsp-endpoint | ospf-backup-metric |
ospf-backup-neighbor-from-metric | ospf-backup-neighbor-to-metric | ospf-track-item
 | ospf-backup-result-status | ospf-backup-result-no-coverage-reason)*>

<!ELEMENT ospf-backup-spf-status (#PCDATA)>

<!ELEMENT ospf-configured-overload EMPTY>

<!ELEMENT ospf-configured-overload-remaining-time (#PCDATA)>
<!ATTLIST ospf-configured-overload-remaining-time junos:seconds CDATA #IMPLIED>

<!ELEMENT ospf-context-id (ospf-ctx-id | ospf-context-id-area |
ospf-context-id-type | ospf-context-id-metric | ospf-context-id-adv-metric |
ospf-context-id-pe-role | ospf-context-id-status |
ospf-context-id-advertising-router)*>

<!ELEMENT ospf-context-id-adv-metric (#PCDATA)>

<!ELEMENT ospf-context-id-advertising-router (#PCDATA)>

<!ELEMENT ospf-context-id-area (#PCDATA)>

<!ELEMENT ospf-context-id-information (ospf-context-id)*>

<!ELEMENT ospf-context-id-metric (#PCDATA)>

<!ELEMENT ospf-context-id-pe-role (#PCDATA)>

<!ELEMENT ospf-context-id-status (#PCDATA)>

<!ELEMENT ospf-context-id-type (#PCDATA)>

<!ELEMENT ospf-covered-nodes (#PCDATA)>

<!ELEMENT ospf-covered-routes (#PCDATA)>

<!ELEMENT ospf-ctx-id (#PCDATA)>

<!ELEMENT ospf-database (lsa-type | our-entry | lsa-id | advertising-router |
sequence-number | age | ospf-do-not-age | options | checksum | lsa-length |
ospf-router-lsa | ospf-network-lsa | ospf-opaque-area-lsa |
ospf-opaque-link-local-lsa | ospf-summary-lsa | ospf-external-lsa |
ospf-database-extensive)*>
<!ATTLIST ospf-database external-heading CDATA #IMPLIED>
<!ATTLIST ospf-database heading CDATA #IMPLIED>

<!ELEMENT ospf-database-extensive (generation-timer | aging-timer |
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installation-time | expiration-time | send-time | lsa-changed-time |
lsa-change-count | indication-lsa | database-entry-state | database-telink-id |
standby-flood-status)*>

<!ELEMENT ospf-database-information (ospf-area-header | ospf-intf-header |
ospf-database | ospf-database-summary)*>

<!ELEMENT ospf-database-replication (lsa-type | lsa-id | advertising-router |
sequence-number | age | ospf-do-not-age | ospf-synchronization-state |
ospf-route-table-index | ospf-area | ospf-router-id | ospf-ifl-index |
interface-address | installation-time | ospf-unsync-reason)*>

<!ELEMENT ospf-database-replication-information (ospf-database-replication)*>

<!ELEMENT ospf-database-summary (ospf-area | ospf-intf | ospf-lsa-count |
ospf-lsa-type)*>
<!ATTLIST ospf-database-summary external-heading CDATA #IMPLIED>

<!ELEMENT ospf-db-protection-ignore-current (#PCDATA)>

<!ELEMENT ospf-db-protection-ignore-maximum (#PCDATA)>

<!ELEMENT ospf-db-protection-ignore-time (#PCDATA)>

<!ELEMENT ospf-db-protection-lsa-current (#PCDATA)>

<!ELEMENT ospf-db-protection-lsa-maximum (#PCDATA)>

<!ELEMENT ospf-db-protection-lsa-warning (#PCDATA)>

<!ELEMENT ospf-db-protection-overview (ospf-db-protection-state |
ospf-db-protection-remaining-time | ospf-db-protection-warning-only |
ospf-db-protection-warning-threshold | ospf-db-protection-lsa-current |
ospf-db-protection-lsa-warning | ospf-db-protection-lsa-maximum |
ospf-db-protection-ignore-time | ospf-db-protection-reset-time |
ospf-db-protection-ignore-current | ospf-db-protection-ignore-maximum)*>

<!ELEMENT ospf-db-protection-remaining-time (#PCDATA)>

<!ELEMENT ospf-db-protection-reset-time (#PCDATA)>

<!ELEMENT ospf-db-protection-state (#PCDATA)>

<!ELEMENT ospf-db-protection-warning-only EMPTY>

<!ELEMENT ospf-db-protection-warning-threshold (#PCDATA)>

<!ELEMENT ospf-dna-uncapable EMPTY>

<!ELEMENT ospf-do-not-age EMPTY>

<!ELEMENT ospf-errors (runt-header-error | short-packets-error | bad-version-error
 | truncated-packets-error | checksum-error | subnet-mismatch-error |
virtual-link-error | area-mismatch-error | authentication-mismatch-error |
authentication-failure-error | bad-packettype-error | netmask-mismatch-error |
hello-interval-mismatch-error | dead-interval-mismatch-error |
stub-area-mismatch-error | nssa-mismatch-error | default-exclusion-mismatch-error
 | mtu-mismatch-error | hello-received-error | no-interface-error |
no-router-id-error | instance-id-mismatch-error | lanp2p-cfgmismatch-error |
no-error)*>
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<!ELEMENT ospf-external-lsa (address-mask | ospf-external-lsa-topology)*>

<!ELEMENT ospf-external-lsa-topology (ospf-topology-name | ospf-topology-id |
type-value | ospf-topology-metric | forward-address | tag)*>

<!ELEMENT ospf-full-spf-count (#PCDATA)>

<!ELEMENT ospf-ifl-index (#PCDATA)>

<!ELEMENT ospf-instance-name (#PCDATA)>

<!ELEMENT ospf-instance-neighbor (ospf-instance-name | ospf-neighbor)*>

<!ELEMENT ospf-interface (interface-name | ospf-interface-state | ospf-area |
dr-id | bdr-id | neighbor-count | interface-type | interface-address | address-mask
 | mtu | interface-cost | virtual-link-transit-area | virtual-link-destination |
 sham-link-local | sham-link-remote | dr-address | bdr-address | router-priority
 | adj-count | interface-secondary | interface-flood-reduction | passive |
hello-interval | poll-interval | dead-interval | retransmit-interval |
ospf-stub-type | ipsec-sa | authentication-type | ospf-interface-topology |
active-key-id | active-key-start-time | ospf-interface-protection-type |
ospf-interface-no-eligible-backup | igp-ldp-sync-holdtime | igp-ldp-sync-state |
 igp-ldp-sync-last-change | igp-ldp-sync-reason | igp-ldp-sync-timeleft |
interface-flood-list-count | flood-list-count | lsa-list |
interface-description-list)*>

<!ELEMENT ospf-interface-information (ospf-interface)*>

<!ELEMENT ospf-interface-no-eligible-backup EMPTY>

<!ELEMENT ospf-interface-protection-type (#PCDATA)>

<!ELEMENT ospf-interface-replication (interface-name | interface-address |
ospf-area | ospf-synchronization-state | ospf-ifl-index | ospf-router-id |
ospf-route-table-index | ospf-internal-index | ospf-sync-dr-id | ospf-sync-bdr-id
 | dr-address | bdr-address | ospf-sync-dr-status | ospf-sync-bdr-status |
ospf-unsync-reason)*>

<!ELEMENT ospf-interface-replication-information (ospf-interface-replication)*>

<!ELEMENT ospf-interface-state (#PCDATA)>

<!ELEMENT ospf-interface-topology (ospf-topology-name | ospf-topology-id |
ospf-topology-passive | ospf-topology-disabled | ospf-topology-down |
ospf-topology-metric)*>

<!ELEMENT ospf-internal-index (#PCDATA)>

<!ELEMENT ospf-intf (#PCDATA)>

<!ELEMENT ospf-intf-header (ospf-intf | ospf-area)*>

<!ELEMENT ospf-io-statistics (packets-read | average-per-run | max-run |
ospf-errors)*>

<!ELEMENT ospf-io-statistics-information (ospf-io-statistics)*>

<!ELEMENT ospf-link (link-id | link-data | link-type-name | link-type-value |
ospf-topology-count | metric | ospf-router-link-topology)*>

<!ELEMENT ospf-link-dc-bit-clear-count (#PCDATA)>
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<!ELEMENT ospf-link-local-grace-lsa (tlv-grace-type-name | tlv-grace-value)*>

<!ELEMENT ospf-link-local-te-lsa (ospf-link-local-te-tlv |
ospf-link-local-te-subtlv)*>

<!ELEMENT ospf-link-local-te-subtlv (link-local-te-tlv-type-name | tlv-type-value
 | tlv-length | bytes-left | formatted-tlv-data)*>

<!ELEMENT ospf-link-local-te-tlv (link-local-te-tlv-type-name | tlv-type-value |
 tlv-length | bytes-left | formatted-tlv-data)*>

<!ELEMENT ospf-log-events (log-element | number-events)*>

<!ELEMENT ospf-log-information (ospf-topology-log)*>

<!ELEMENT ospf-log-instance (log-element)*>

<!ELEMENT ospf-log-maximum-length (log-element)*>

<!ELEMENT ospf-log-type (#PCDATA)>

<!ELEMENT ospf-lsa-count (#PCDATA)>

<!ELEMENT ospf-lsa-refresh-time (#PCDATA)>

<!ELEMENT ospf-lsa-topology (ospf-topology-name | ospf-topology-id |
ospf-lsa-topology-link)*>

<!ELEMENT ospf-lsa-topology-link (link-type-name | ospf-lsa-topology-link-node-id
 | ospf-lsa-topology-link-metric | ospf-lsa-topology-link-state)*>

<!ELEMENT ospf-lsa-topology-link-metric (#PCDATA)>

<!ELEMENT ospf-lsa-topology-link-node-id (#PCDATA)>

<!ELEMENT ospf-lsa-topology-link-state (#PCDATA)>

<!ELEMENT ospf-lsa-type (#PCDATA)>

<!ELEMENT ospf-nbr-overview (ospf-nbr-up-count)*>

<!ELEMENT ospf-nbr-up-count (#PCDATA)>

<!ELEMENT ospf-neighbor (neighbor-address | interface-name | ospf-neighbor-state
 | neighbor-id | neighbor-priority | activity-timer | ospf-area | options |
neighbor-secondary | neighbor-cost | dr-address | bdr-address | neighbor-up-time
 | neighbor-adjacency-time | neighbor-last-out-of-band-resync-time |
neighbor-suppress-hello | master-slave | sequence-number | dbd-retransmit-time |
 lsreq-retransmit-time | lsreq-enqueued | lsreq-active | lsa-list |
ospf-neighbor-topology)*>

<!ELEMENT ospf-neighbor-information (ospf-neighbor)*>

<!ELEMENT ospf-neighbor-information-all (ospf-instance-neighbor)*>

<!ELEMENT ospf-neighbor-replication (interface-name | ospf-area | neighbor-id |
ospf-synchronization-state | ospf-neighbor-state | ospf-ifl-index |
ospf-route-table-index | ospf-unsync-reason)*>

<!ELEMENT ospf-neighbor-replication-information (ospf-neighbor-replication)*>
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<!ELEMENT ospf-neighbor-state (#PCDATA)>

<!ELEMENT ospf-neighbor-topology (ospf-topology-name | ospf-topology-id |
ospf-neighbor-topology-state)*>

<!ELEMENT ospf-neighbor-topology-state (#PCDATA)>

<!ELEMENT ospf-network-lsa (address-mask | attached-router | ospf-lsa-topology)*>

<!ELEMENT ospf-next-hop (next-hop-name | next-hop-address)*>

<!ELEMENT ospf-node-coverage (#PCDATA)>

<!ELEMENT ospf-node-id (advertising-router | lsa-id)*>

<!ELEMENT ospf-node-metric (#PCDATA)>

<!ELEMENT ospf-nssa-router EMPTY>

<!ELEMENT ospf-opaque-area-lsa (tlv-block | te-subtlv)*>

<!ELEMENT ospf-opaque-link-local-lsa (ospf-link-local-grace-lsa |
ospf-link-local-te-lsa)*>

<!ELEMENT ospf-overview (instance-name | ospf-router-id | ospf-route-table-index
 | ospf-configured-overload | ospf-configured-overload-remaining-time | ospf-abr
 | ospf-asbr | ospf-nssa-router | ospf-lsa-refresh-time | ospf-traffic-engineering
 | ospf-restart | ospf-restart-enabled | ospf-restart-duration |
ospf-restart-grace-period | ospf-standard-graceful-restart-helper-mode |
ospf-restart-signaling-helper-mode | no-rfc-1583 | ospf-dna-uncapable |
ospf-as-dc-bit-clear-count | ospf-area-dc-bit-clear-count |
ospf-area-indications-count | ospf-link-dc-bit-clear-count | tracing-information
 | ospf-db-protection-overview | ospf-area-overview | ospf-topology-overview)*>

<!ELEMENT ospf-overview-information (ospf-overview)*>

<!ELEMENT ospf-packet-type (#PCDATA)>

<!ELEMENT ospf-parent-advertising-router (#PCDATA)>

<!ELEMENT ospf-parent-lsa-id (#PCDATA)>

<!ELEMENT ospf-parent-node-id (ospf-parent-advertising-router |
ospf-parent-lsa-id)*>

<!ELEMENT ospf-path-type (#PCDATA)>

<!ELEMENT ospf-prefix-export-count (#PCDATA)>

<!ELEMENT ospf-prefix-export-limit (#PCDATA)>

<!ELEMENT ospf-restart (#PCDATA)>

<!ELEMENT ospf-restart-duration (#PCDATA)>

<!ELEMENT ospf-restart-enabled (#PCDATA)>

<!ELEMENT ospf-restart-grace-period (#PCDATA)>

<!ELEMENT ospf-restart-signaling-helper-mode (#PCDATA)>
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<!ELEMENT ospf-route (ospf-route-entry)*>

<!ELEMENT ospf-route-coverage (#PCDATA)>

<!ELEMENT ospf-route-entry (address-prefix | route-path-type | route-type |
next-hop-type | interface-cost | ospf-next-hop | ospf-backup-next-hop | ospf-area
 | optional-capability | route-origin | route-priority | type7 | pbit |
forward-nz)*>

<!ELEMENT ospf-route-information (ospf-topology-route-table)*>

<!ELEMENT ospf-route-table-index (#PCDATA)>

<!ELEMENT ospf-router-id (#PCDATA)>

<!ELEMENT ospf-router-link-topology (ospf-topology-name | ospf-topology-id |
ospf-topology-metric)*>

<!ELEMENT ospf-router-lsa (bits | link-count | ospf-link | ospf-lsa-topology)*>

<!ELEMENT ospf-spf-delay (#PCDATA)>
<!ATTLIST ospf-spf-delay junos:seconds CDATA #IMPLIED>

<!ELEMENT ospf-spf-holddown (#PCDATA)>
<!ATTLIST ospf-spf-holddown junos:seconds CDATA #IMPLIED>

<!ELEMENT ospf-spf-rapid-runs (#PCDATA)>

<!ELEMENT ospf-standard-graceful-restart-helper-mode (#PCDATA)>

<!ELEMENT ospf-statistics (packet-statistics | dbds-retransmit |
dbds-retransmit-5seconds | lsas-flooded | lsas-flooded-5seconds |
lsas-high-prio-flooded | lsas-high-prio-flooded-5seconds | lsas-retransmit |
lsas-retransmit-5seconds | lsas-nbr-transmit | lsas-nbr-transmit-5seconds |
lsas-requested | lsas-requested-5seconds | lsas-acknowledged |
lsas-acknowledged-5seconds | flood-queue-depth | total-retransmits |
total-database-summaries | total-linkstate-request | ospf-errors)*>

<!ELEMENT ospf-statistics-information (ospf-statistics)*>

<!ELEMENT ospf-stub-cost (#PCDATA)>

<!ELEMENT ospf-stub-type (#PCDATA)>

<!ELEMENT ospf-summary-lsa (address-mask | ospf-summary-lsa-topology)*>

<!ELEMENT ospf-summary-lsa-topology (ospf-topology-name | ospf-topology-id |
ospf-topology-metric)*>

<!ELEMENT ospf-sync-bdr-id (#PCDATA)>

<!ELEMENT ospf-sync-bdr-status (#PCDATA)>

<!ELEMENT ospf-sync-dr-id (#PCDATA)>

<!ELEMENT ospf-sync-dr-status (#PCDATA)>

<!ELEMENT ospf-synchronization-state (#PCDATA)>

<!ELEMENT ospf-te-shortcuts EMPTY>
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<!ELEMENT ospf-topology-area-backup-neighbor (ospf-area |
ospf-backup-neighbor-node)*>

<!ELEMENT ospf-topology-area-backup-spf (ospf-area | ospf-backup-spf-node)*>

<!ELEMENT ospf-topology-backup-coverage (ospf-topology-name |
ospf-backup-node-coverage | ospf-backup-route-coverage)*>

<!ELEMENT ospf-topology-backup-neighbor (ospf-topology-name |
ospf-topology-area-backup-neighbor)*>

<!ELEMENT ospf-topology-backup-spf (ospf-topology-name |
ospf-topology-area-backup-spf)*>

<!ELEMENT ospf-topology-configured-overload EMPTY>

<!ELEMENT ospf-topology-count (#PCDATA)>

<!ELEMENT ospf-topology-disabled EMPTY>

<!ELEMENT ospf-topology-down EMPTY>

<!ELEMENT ospf-topology-dynamic-overload EMPTY>

<!ELEMENT ospf-topology-id (#PCDATA)>

<!ELEMENT ospf-topology-log (ospf-topology-name | ospf-log-instance |
ospf-log-maximum-length | ospf-log-events)*>

<!ELEMENT ospf-topology-metric (#PCDATA)>

<!ELEMENT ospf-topology-name (#PCDATA)>

<!ELEMENT ospf-topology-overview (ospf-topology-name | ospf-topology-id |
ospf-topology-configured-overload | ospf-topology-dynamic-overload |
ospf-prefix-export-count | ospf-prefix-export-limit | ospf-full-spf-count |
ospf-spf-delay | ospf-spf-holddown | ospf-spf-rapid-runs | ospf-backup-spf-status
 | ospf-backup-spf-downstream-only | ospf-te-shortcuts)*>

<!ELEMENT ospf-topology-passive EMPTY>

<!ELEMENT ospf-topology-route-table (ospf-topology-name | ospf-route)*>

<!ELEMENT ospf-total-nodes (#PCDATA)>

<!ELEMENT ospf-total-routes (#PCDATA)>

<!ELEMENT ospf-track-item (#PCDATA)>

<!ELEMENT ospf-traffic-engineering EMPTY>

<!ELEMENT ospf-unsync-reason (#PCDATA)>

<!ELEMENT ospf-virtual-transit EMPTY>

<!ELEMENT ospf3-area-header (ospf-area)*>

<!ELEMENT ospf3-backup-coverage-information (ospf3-topology-backup-coverage)*>

<!ELEMENT ospf3-backup-mplsp (lsp-name | lsp-addr | lsp-status | metric | te-metric
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 | lsp-last-change)*>

<!ELEMENT ospf3-backup-mplsp-information (ospf3-backup-mplsp)*>

<!ELEMENT ospf3-backup-neighbor-information (ospf3-topology-backup-neighbor)*>

<!ELEMENT ospf3-backup-neighbor-node (ospf-backup-neighbor |
ospf-backup-neighbor-is-lsp-endpoint | ospf-backup-neighbor-from-metric |
ospf-backup-neighbor-to-metric | ospf-backup-next-hop)*>

<!ELEMENT ospf3-backup-node-coverage (ospf-area | ospf-covered-nodes |
ospf-total-nodes | ospf-node-coverage)*>

<!ELEMENT ospf3-backup-route-coverage (ospf-path-type | ospf-covered-routes |
ospf-total-routes | ospf-route-coverage)*>

<!ELEMENT ospf3-backup-spf-information (ospf3-topology-backup-spf)*>

<!ELEMENT ospf3-backup-spf-node (ospf-node-id | lsa-id | ospf-node-metric |
ospf-parent-node-id | ospf-next-hop | ospf-backup-next-hop |
ospf3-backup-spf-result)*>

<!ELEMENT ospf3-backup-spf-result (ospf-backup-neighbor |
ospf-backup-neighbor-is-lsp-endpoint | ospf-backup-metric |
ospf-backup-neighbor-from-metric | ospf-backup-neighbor-to-metric | ospf-track-item
 | ospf-backup-result-status | ospf-backup-result-no-coverage-reason)*>

<!ELEMENT ospf3-database (lsa-type | our-entry | lsa-id | advertising-router |
sequence-number | age | ospf-do-not-age | checksum | lsa-length | ospf3-router-lsa
 | ospf3-network-lsa | ospf3-inter-area-prefix-lsa | ospf3-inter-area-router-lsa
 | ospf3-external-lsa | ospf3-link-lsa | ospf3-intra-area-prefix-lsa |
ospf-database-extensive | ospf-opaque-link-local-lsa)*>
<!ATTLIST ospf3-database external-heading CDATA #IMPLIED>
<!ATTLIST ospf3-database heading CDATA #IMPLIED>

<!ELEMENT ospf3-database-information (ospf3-area-header | ospf3-intf-header |
ospf3-database | ospf3-database-summary)*>

<!ELEMENT ospf3-database-replication-information (ospf-database-replication)*>

<!ELEMENT ospf3-database-summary (ospf-area | ospf-intf | ospf-lsa-count |
ospf-lsa-type)*>
<!ATTLIST ospf3-database-summary external-heading CDATA #IMPLIED>

<!ELEMENT ospf3-external-lsa (ospf3-prefix | ospf3-prefix-options | type-value |
 metric | forward-address | tag)*>

<!ELEMENT ospf3-instance-neighbor (ospf-instance-name | ospf3-realm-neighbor)*>

<!ELEMENT ospf3-inter-area-prefix-lsa (ospf3-prefix | ospf3-prefix-options |
metric)*>

<!ELEMENT ospf3-inter-area-router-lsa (destination-router-id | ospf3-options |
metric)*>

<!ELEMENT ospf3-interface (interface-name | ospf-interface-state | ospf-area |
dr-id | bdr-id | neighbor-count | interface-address | prefix-length |
ospf3-interface-index | interface-type | mtu | interface-cost |
virtual-link-transit-area | virtual-link-destination | dr-address | bdr-address
| router-priority | adj-count | interface-secondary | interface-flood-reduction
| passive | hello-interval | poll-interval | dead-interval | retransmit-interval
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 | ospf-stub-type | ipsec-sa | ospf-interface-protection-type |
ospf-interface-no-eligible-backup | igp-ldp-sync-holdtime | igp-ldp-sync-state |
 igp-ldp-sync-last-change | igp-ldp-sync-reason | igp-ldp-sync-timeleft |
ospf3-router-lsa-id | interface-flood-list-count | flood-list-count | lsa-list |
 interface-description-list)*>

<!ELEMENT ospf3-interface-index (#PCDATA)>

<!ELEMENT ospf3-interface-information (ospf3-interface)*>

<!ELEMENT ospf3-interface-replication-information (ospf-interface-replication)*>

<!ELEMENT ospf3-intf-header (ospf-intf | ospf-area)*>

<!ELEMENT ospf3-intra-area-prefix-lsa (reference-lsa-type | reference-lsa-id |
reference-lsa-router-id | prefix-count | ospf3-prefix | ospf3-prefix-options |
ospf3-prefix-metric)*>

<!ELEMENT ospf3-io-statistics-information (ospf-io-statistics)*>

<!ELEMENT ospf3-link (link-type-name | link-type-value | link-intf-id | nbr-intf-id
 | nbr-rtr-id | link-metric)*>

<!ELEMENT ospf3-link-lsa (linklocal-address | ospf3-options | router-priority |
prefix-count | ospf3-prefix | ospf3-prefix-options)*>

<!ELEMENT ospf3-log-information (ospf-log-instance | ospf-log-maximum-length |
ospf-log-events)*>

<!ELEMENT ospf3-lsa-topology (ospf-topology-name | ospf-topology-id |
ospf-lsa-topology-link | ospf3-lsa-topology-link)*>

<!ELEMENT ospf3-lsa-topology-link (link-type-name | ospf-lsa-topology-link-node-id
 | ospf-lsa-topology-link-metric | ospf-lsa-topology-link-state)*>

<!ELEMENT ospf3-neighbor (neighbor-id | interface-name | ospf-neighbor-state |
neighbor-priority | activity-timer | neighbor-address | ospf-area | options |
neighbor-secondary | ospf3-interface-index | neighbor-cost | dr-id | bdr-id |
neighbor-up-time | neighbor-adjacency-time | neighbor-suppress-hello | master-slave
 | sequence-number | dbd-retransmit-time | lsreq-retransmit-time | lsreq-enqueued
 | lsreq-active | lsa-list)*>

<!ELEMENT ospf3-neighbor-information (ospf3-neighbor)*>

<!ELEMENT ospf3-neighbor-information-all (ospf3-instance-neighbor)*>

<!ELEMENT ospf3-neighbor-replication-information (ospf-neighbor-replication)*>

<!ELEMENT ospf3-network-lsa (ospf3-options | attached-router |
ospf3-lsa-topology)*>

<!ELEMENT ospf3-options (#PCDATA)>

<!ELEMENT ospf3-overview-information (ospf-overview)*>

<!ELEMENT ospf3-prefix (#PCDATA)>

<!ELEMENT ospf3-prefix-metric (#PCDATA)>

<!ELEMENT ospf3-prefix-options (#PCDATA)>
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<!ELEMENT ospf3-realm-name (#PCDATA)>

<!ELEMENT ospf3-realm-neighbor (ospf3-realm-name | ospf3-neighbor)*>

<!ELEMENT ospf3-route (ospf3-route-entry)*>

<!ELEMENT ospf3-route-entry (address-prefix | route-path-type | route-type |
next-hop-type | interface-cost | ospf-next-hop | ospf-backup-next-hop | ospf-area
 | optional-capability | route-origin | route-priority | type7 | pbit |
forward-nz)*>

<!ELEMENT ospf3-route-information (ospf3-route)*>

<!ELEMENT ospf3-router-lsa (bits | ospf3-options | ospf3-link |
ospf3-lsa-topology)*>

<!ELEMENT ospf3-router-lsa-id (#PCDATA)>

<!ELEMENT ospf3-statistics-information (ospf-statistics)*>

<!ELEMENT ospf3-topology-area-backup-neighbor (ospf-area |
ospf3-backup-neighbor-node)*>

<!ELEMENT ospf3-topology-area-backup-spf (ospf-area | ospf3-backup-spf-node)*>

<!ELEMENT ospf3-topology-backup-coverage (ospf3-backup-node-coverage |
ospf3-backup-route-coverage)*>

<!ELEMENT ospf3-topology-backup-neighbor (ospf-topology-name |
ospf3-topology-area-backup-neighbor)*>

<!ELEMENT ospf3-topology-backup-spf (ospf-topology-name |
ospf3-topology-area-backup-spf)*>

<!ELEMENT our-entry EMPTY>

<!ELEMENT outbound-label (#PCDATA)>

<!ELEMENT outbound-timer (#PCDATA)>

<!ELEMENT output-checksum (#PCDATA)>

<!ELEMENT output-messages (#PCDATA)>

<!ELEMENT output-octets (#PCDATA)>

<!ELEMENT output-refreshes (#PCDATA)>

<!ELEMENT output-updates (#PCDATA)>

<!ELEMENT overbooked-bandwidth (bandwidth-priority | total-reserved-bandwidth)*>

<!ELEMENT overbooked-ct-bandwidth (ct-class | ct-bw0 | ct-bw1 | ct-bw2 | ct-bw3
| ct-bw4 | ct-bw5 | ct-bw6 | ct-bw7)*>

<!ELEMENT overflow-limit (#PCDATA)>

<!ELEMENT overflow-sample-count (#PCDATA)>

<!ELEMENT overhead (#PCDATA)>
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<!ELEMENT p2mp-branch-id (#PCDATA)>

<!ELEMENT p2mp-remerge-state (#PCDATA)>

<!ELEMENT p2mp-self-id (#PCDATA)>

<!ELEMENT p2mp-subgroup-orig (#PCDATA)>

<!ELEMENT p2mp-transit-lsp-nexthop-mode (#PCDATA)>

<!ELEMENT p2p-transit-lsp-nexthop-mode (#PCDATA)>

<!ELEMENT packet-information (previous-hop | next-hop | interface-name | count)*>
<!ATTLIST packet-information heading CDATA #IMPLIED>

<!ELEMENT packet-statistics (ospf-packet-type | packets-sent | packets-received
| packets-sent-5seconds | packets-received-5seconds)*>

<!ELEMENT packet-version (#PCDATA)>

<!ELEMENT packets-dropped (#PCDATA)>

<!ELEMENT packets-processed (#PCDATA)>

<!ELEMENT packets-read (#PCDATA)>

<!ELEMENT packets-received (#PCDATA)>

<!ELEMENT packets-received-5seconds (#PCDATA)>

<!ELEMENT packets-retransmitted (#PCDATA)>

<!ELEMENT packets-sent (#PCDATA)>

<!ELEMENT packets-sent-5seconds (#PCDATA)>

<!ELEMENT passive (#PCDATA)>

<!ELEMENT path-active EMPTY>

<!ELEMENT path-adaptive EMPTY>

<!ELEMENT path-available-bandwidth (bandwidth | class-type | class-bandwidth)*>
<!ATTLIST path-available-bandwidth heading CDATA #IMPLIED>

<!ELEMENT path-count (#PCDATA)>

<!ELEMENT path-flags (#PCDATA)>

<!ELEMENT path-history (sequence-number | time | log | route)*>

<!ELEMENT path-id (#PCDATA)>

<!ELEMENT path-mtu (#PCDATA)>

<!ELEMENT path-mtu-in-kernel (#PCDATA)>

<!ELEMENT path-no-recordroute EMPTY>

<!ELEMENT path-references (#PCDATA)>
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<!ELEMENT path-soft-preemption-pending EMPTY>
<!ELEMENT path-standby EMPTY>
<!ELEMENT path-state (#PCDATA)>
<!ELEMENT path-state-address (#PCDATA)>
<!ELEMENT path-state-bypass-id (#PCDATA)>
<!ELEMENT path-state-id (#PCDATA)>
<!ELEMENT path-state-interface-id (#PCDATA)>
<!ELEMENT path-state-nh-avoid-address (#PCDATA)>
<!ELEMENT path-state-nh-ero (#PCDATA)>
<!ELEMENT path-state-nh-msg-id (#PCDATA)>
<!ELEMENT path-state-nh-outgoing-interface (#PCDATA)>
<!ELEMENT path-state-nh-peer-address (#PCDATA)>
<!ELEMENT path-state-nh-te-link-id (#PCDATA)>
<!ELEMENT path-state-nh-type (#PCDATA)>
<!ELEMENT path-state-nh-upstream-tag (#PCDATA)>
<!ELEMENT path-state-p2mp-remerge-head (#PCDATA)>
<!ELEMENT path-state-p2mp-self-id (#PCDATA)>
<!ELEMENT path-state-resv-msg-id (#PCDATA)>
<!ELEMENT path-state-rr-epoch (#PCDATA)>
<!ELEMENT path-state-self-id (#PCDATA)>
<!ELEMENT path-state-session-id (#PCDATA)>
<!ELEMENT path-state-tag (#PCDATA)>
<!ELEMENT path-type (#PCDATA)>
<!ELEMENT pbit EMPTY>
<!ELEMENT pdu-length (#PCDATA)>
<!ELEMENT pdu-lifetime (#PCDATA)>
<!ELEMENT pdu-version (#PCDATA)>
<!ELEMENT pe-address-local (#PCDATA)>
<!ELEMENT peer-4byte-as-capability-advertised (#PCDATA)>
<!ELEMENT peer-4byte-as-capability-not-supported EMPTY>
<!ELEMENT peer-addpath-not-supported EMPTY>
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<!ELEMENT peer-addpath-ronly-nlri (#PCDATA)>
<!ELEMENT peer-addpath-rs-nlri (#PCDATA)>
<!ELEMENT peer-addpath-sonly-nlri (#PCDATA)>
<!ELEMENT peer-address (#PCDATA)>
<!ELEMENT peer-as (#PCDATA)>
<!ELEMENT peer-count (#PCDATA)>
<!ELEMENT peer-end-of-rib-received (#PCDATA)>
<!ELEMENT peer-end-of-rib-scheduled (#PCDATA)>
<!ELEMENT peer-end-of-rib-sent (#PCDATA)>
<!ELEMENT peer-flags (#PCDATA)>
<!ELEMENT peer-id (#PCDATA)>
<!ELEMENT peer-index (#PCDATA)>
<!ELEMENT peer-no-helper EMPTY>
<!ELEMENT peer-no-refresh EMPTY>
<!ELEMENT peer-no-restart EMPTY>
<!ELEMENT peer-refresh-capability (#PCDATA)>
<!ELEMENT peer-restart-flags-received (#PCDATA)>
<!ELEMENT peer-restart-nlri-can-save-state (#PCDATA)>
<!ELEMENT peer-restart-nlri-configured (#PCDATA)>
<!ELEMENT peer-restart-nlri-negotiated (#PCDATA)>
<!ELEMENT peer-restart-nlri-received (#PCDATA)>
<!ELEMENT peer-restart-nlri-state-saved (#PCDATA)>
<!ELEMENT peer-restart-time-configured (#PCDATA)>
<!ELEMENT peer-restart-time-received (#PCDATA)>
<!ELEMENT peer-stale-route-time-configured (#PCDATA)>
<!ELEMENT peer-state (#PCDATA)>
<!ELEMENT peer-type (#PCDATA)>
<!ELEMENT pending-prefix-count (#PCDATA)>
<!ELEMENT per-class-bandwidth-heading (#PCDATA)>
<!ELEMENT pfe-id (#PCDATA)>
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<!ELEMENT pfe-port-snpa (pfe-id | port-id)*>

<!ELEMENT pim-anycast-register-state-origin (#PCDATA)>

<!ELEMENT pim-bidir-df-election-information (bidir-df-election-family)*>

<!ELEMENT pim-bidir-df-election-interface-information
(bidir-df-election-interface-family)*>

<!ELEMENT pim-bootstrap-information (pim-instance | bootstrap-family)*>

<!ELEMENT pim-data-mdt-cgroup-address (#PCDATA)>

<!ELEMENT pim-data-mdt-csource-address (#PCDATA)>

<!ELEMENT pim-data-mdt-join-information (pim-data-mdt-csource-address |
pim-data-mdt-cgroup-address | pim-data-mdt-psource-address |
pim-data-mdt-pgroup-address | pim-data-mdt-timeout)*>

<!ELEMENT pim-data-mdt-pgroup-address (#PCDATA)>

<!ELEMENT pim-data-mdt-psource-address (#PCDATA)>

<!ELEMENT pim-data-mdt-timeout (#PCDATA)>

<!ELEMENT pim-group-flags (sparse | bidir | dense | delete | rptree | wildcard |
 spt)*>

<!ELEMENT pim-instance (#PCDATA)>

<!ELEMENT pim-interface (pim-interface-name | status | pim-interface-mode |
pim-interface-mode-abbreviation | ip-protocol-version | protocol-version |
interface-state | neighbor-count | interface-join-sg-count |
interface-join-tsg-count | designated-router-address | pim-neighbor)*>

<!ELEMENT pim-interface-mode (#PCDATA)>

<!ELEMENT pim-interface-mode-abbreviation (pim-interface-mode-s |
pim-interface-mode-d | pim-interface-mode-b)*>

<!ELEMENT pim-interface-mode-b EMPTY>

<!ELEMENT pim-interface-mode-d EMPTY>

<!ELEMENT pim-interface-mode-s EMPTY>

<!ELEMENT pim-interface-name (#PCDATA)>

<!ELEMENT pim-interface-state (#PCDATA)>

<!ELEMENT pim-interfaces-information (pim-instance | pim-interface)*>

<!ELEMENT pim-join-information (join-family)*>

<!ELEMENT pim-mdt-information (pim-instance | mdt-default-group-address |
mdt-default-source-address | mdt-default-interface-name | mdt-default-tunnel-source
 | mdt-tunnel-direction | mdt-tunnel-mode | mdt-pim-instance |
mdt-default-tunnel-information | mdt-active-tunnel)*>
<!ATTLIST pim-mdt-information junos:style CDATA #IMPLIED>

<!ELEMENT pim-mvpn-address (#PCDATA)>
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<!ELEMENT pim-mvpn-information (pim-mvpn-instance-name | address-family |
pim-mvpn-address | pim-mvpn-mode | pim-mvpn-tunnel)*>

<!ELEMENT pim-mvpn-instance-name (#PCDATA)>

<!ELEMENT pim-mvpn-mode (#PCDATA)>

<!ELEMENT pim-mvpn-tunnel (#PCDATA)>

<!ELEMENT pim-neighbor (pim-interface-name | ip-protocol-version | protocol-version
 | pim-interface-mode | neighbor-join-sg-count | neighbor-join-tsg-count |
pim-neighbor-flags | pim-neighbor-uptime | pim-neighbor-address |
pim-neighbor-secondary-address | hello-holdtime | hello-holdtime-remaining |
hello-default-holdtime | hello-default-holdtime-remaining | hello-dr-priority |
hello-generation-id | hello-lanprune-delay | hello-override-interval |
hello-nbr-t-bit | pim-neighbor-bfd | pim-neighbor-join | pim-neighbor-assert |
pim-pktcache-count | pim-pktcache-time-remaining)*>

<!ELEMENT pim-neighbor-address (#PCDATA)>

<!ELEMENT pim-neighbor-assert (multicast-group-address | multicast-source-address
 | assert-state | pim-neighbor-address | assert-timeout)*>

<!ELEMENT pim-neighbor-bfd (configuration-state | operational-state)*>

<!ELEMENT pim-neighbor-bidirectional-flag EMPTY>

<!ELEMENT pim-neighbor-flags (pim-neighbor-hold-time-flag |
pim-neighbor-priority-flag | pim-neighbor-lan-prune-flag |
pim-neighbor-generation-id-flag | pim-neighbor-bidirectional-flag |
pim-neighbor-t-bit-flag)*>

<!ELEMENT pim-neighbor-generation-id-flag EMPTY>

<!ELEMENT pim-neighbor-hold-time-flag EMPTY>

<!ELEMENT pim-neighbor-join (multicast-group-address | multicast-source-address
| join-timeout)*>

<!ELEMENT pim-neighbor-lan-prune-flag EMPTY>

<!ELEMENT pim-neighbor-priority-flag EMPTY>

<!ELEMENT pim-neighbor-secondary-address (#PCDATA)>

<!ELEMENT pim-neighbor-t-bit-flag EMPTY>

<!ELEMENT pim-neighbor-uptime (#PCDATA)>
<!ATTLIST pim-neighbor-uptime junos:seconds CDATA #IMPLIED>

<!ELEMENT pim-neighbors-information (pim-instance | pim-interface)*>
<!ATTLIST pim-neighbors-information junos:style CDATA #IMPLIED>

<!ELEMENT pim-other-statistic (statistic-name | statistic-count)*>

<!ELEMENT pim-pktcache-count (#PCDATA)>

<!ELEMENT pim-pktcache-information (pim-instance | pim-interface)*>

<!ELEMENT pim-pktcache-time-remaining (#PCDATA)>
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<!ELEMENT pim-pseudo-downstream-interface-name (#PCDATA)>

<!ELEMENT pim-register-state (#PCDATA)>

<!ELEMENT pim-register-timeout (#PCDATA)>

<!ELEMENT pim-rps-information (pim-instance | rp-family |
rendezvous-point-address-info)*>

<!ELEMENT pim-source (multicast-source-address | route-prefix |
upstream-interface-name | upstream-neighbor | upstream-group)*>

<!ELEMENT pim-source-information (source-family)*>

<!ELEMENT pim-statistic (statistic-name | received-count | sent-count |
error-count)*>

<!ELEMENT pim-statistics-all (pim-instance | pim-statistics-global |
pim-statistics-other)*>

<!ELEMENT pim-statistics-global (pim-statistic)*>

<!ELEMENT pim-statistics-information (statistics-family | pim-statistics-all |
everything)*>

<!ELEMENT pim-statistics-interface (pim-interface-name | pim-statistic)*>

<!ELEMENT pim-statistics-other (pim-other-statistic)*>

<!ELEMENT pmsi (#PCDATA)>

<!ELEMENT policy-name (#PCDATA)>

<!ELEMENT poll-interval (#PCDATA)>

<!ELEMENT port-id (#PCDATA)>

<!ELEMENT preemption-count (#PCDATA)>

<!ELEMENT preemption-type (#PCDATA)>

<!ELEMENT preference (#PCDATA)>

<!ELEMENT preference2 (#PCDATA)>

<!ELEMENT prefix (#PCDATA)>

<!ELEMENT prefix-count (#PCDATA)>

<!ELEMENT prefix-downflag EMPTY>

<!ELEMENT prefix-element (address-prefix | prefix-metric |
external-prefix-metric)*>

<!ELEMENT prefix-err-message EMPTY>

<!ELEMENT prefix-extern EMPTY>

<!ELEMENT prefix-flag (#PCDATA)>
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<!ELEMENT prefix-length (#PCDATA)>

<!ELEMENT prefix-limit (nlri-type | prefix-count | limit-action |
warning-percentage)*>

<!ELEMENT prefix-metric (#PCDATA)>

<!ELEMENT prefix-orf (#PCDATA)>

<!ELEMENT prefix-reachability (address-prefix | route-type | metric | flags |
level | isis-fragment | tsi | isis-topology-id | isis-prefix-tag)*>

<!ELEMENT prefix-status (#PCDATA)>

<!ELEMENT previous-hop (#PCDATA)>

<!ELEMENT primary (#PCDATA)>

<!ELEMENT primary-context-count (#PCDATA)>

<!ELEMENT profile-name (#PCDATA)>

<!ELEMENT profile-varset-name (#PCDATA)>

<!ELEMENT protect-flag (#PCDATA)>

<!ELEMENT protected-l2ckt-egress (#PCDATA)>

<!ELEMENT protected-l2ckt-ingress (#PCDATA)>

<!ELEMENT protected-l2ckt-state (#PCDATA)>

<!ELEMENT protected-l2ckt-vcid (#PCDATA)>

<!ELEMENT protection-context (#PCDATA)>

<!ELEMENT protection-type (#PCDATA)>

<!ELEMENT protector-context-count (#PCDATA)>

<!ELEMENT protector-interface (#PCDATA)>

<!ELEMENT protector-pe (#PCDATA)>

<!ELEMENT protector-pe-status (#PCDATA)>

<!ELEMENT protector-state (#PCDATA)>

<!ELEMENT proto-id (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT protocol-name (#PCDATA)>

<!ELEMENT protocol-nh (to | metric | aigp | indirect-nh | composite-nh |
vpnlabel-nh | mpls-label | balance | flags | forwarding-nh-count | nh-type |
ext-int-type | nh)*>

<!ELEMENT protocol-route-count (#PCDATA)>

<!ELEMENT protocol-version (#PCDATA)>
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<!ELEMENT protocols (protocol-name | protocol-route-count | active-route-count)*>

<!ELEMENT protocols-tlv (protocol)*>

<!ELEMENT provider-tunnel (provider-tunnel-id)*>

<!ELEMENT provider-tunnel-id (#PCDATA)>

<!ELEMENT proxy-state (#PCDATA)>

<!ELEMENT proxy-upstream-interface (interface-name)*>

<!ELEMENT prune-to-rp EMPTY>

<!ELEMENT prune-to-source EMPTY>

<!ELEMENT pruned-timeout (#PCDATA)>

<!ELEMENT psb-creation-time (#PCDATA)>

<!ELEMENT psb-id (#PCDATA)>

<!ELEMENT psb-lifetime (#PCDATA)>

<!ELEMENT purges-initiated (#PCDATA)>

<!ELEMENT pw-status-code (#PCDATA)>

<!ELEMENT pw-status-tlv (#PCDATA)>

<!ELEMENT querier-address (#PCDATA)>

<!ELEMENT querier-timeout (#PCDATA)>

<!ELEMENT query-interval (#PCDATA)>

<!ELEMENT query-other-timeout (#PCDATA)>

<!ELEMENT query-response-interval (#PCDATA)>

<!ELEMENT queue-count (#PCDATA)>

<!ELEMENT queue-number (#PCDATA)>

<!ELEMENT range (#PCDATA)>

<!ELEMENT reachability-delay EMPTY>

<!ELEMENT reachability-error EMPTY>

<!ELEMENT reachability-expense EMPTY>

<!ELEMENT reachability-tlv (isis-topology-id | address-prefix | metric |
metric-flag | reachability-delay | reachability-expense | reachability-error |
prefix-status | address | neighbor-prefix | tlv-length |
isis-reachability-subtlv)*>
<!ATTLIST reachability-tlv heading CDATA #IMPLIED>

<!ELEMENT receive-buffer-size (#PCDATA)>
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<!ELEMENT receive-count (#PCDATA)>

<!ELEMENT receive-lsp-count (#PCDATA)>

<!ELEMENT receive-mode-ripng (#PCDATA)>

<!ELEMENT receive-mode-ripv2 (#PCDATA)>

<!ELEMENT received-count (#PCDATA)>

<!ELEMENT received-prefix-count (#PCDATA)>

<!ELEMENT received-rro (#PCDATA)>

<!ELEMENT receiver (#PCDATA)>

<!ELEMENT record-route (address | telink-id | self | incomplete)*>
<!ATTLIST record-route heading CDATA #IMPLIED>

<!ELEMENT record-timeout (#PCDATA)>

<!ELEMENT record-type (#PCDATA)>

<!ELEMENT recovery-label-in (#PCDATA)>

<!ELEMENT recovery-label-out (#PCDATA)>

<!ELEMENT recovery-time (#PCDATA)>

<!ELEMENT redundant-sources (multicast-source-address)*>

<!ELEMENT reference-count (#PCDATA)>

<!ELEMENT reference-lsa-id (#PCDATA)>

<!ELEMENT reference-lsa-router-id (#PCDATA)>

<!ELEMENT reference-lsa-type (#PCDATA)>

<!ELEMENT reference-site (vpls-signaling-protocol-identifier | local-site-id |
vpls-id | l2vpn-id | local-id | num-local-interfaces | num-local-interfaces-up |
 irb-present | mesh-group-count | mesh-group-up-count | remote-site-id |
mesh-group-interfaces | interface | label-block | connection |
mesh-group-connection | automatic-site-name | automatic-site-id-status |
automatic-site-claim-id | automatic-site-collisions | automatic-site-timer-status
 | automatic-site-timers | connections-summary)*>

<!ELEMENT references (#PCDATA)>

<!ELEMENT refresh-timer (#PCDATA)>

<!ELEMENT register-interface-name (#PCDATA)>

<!ELEMENT register-rp (#PCDATA)>

<!ELEMENT rejected-downstream-interface-names (#PCDATA)>

<!ELEMENT rem_arp_add_no_l2domain (#PCDATA)>

<!ELEMENT rem_arp_del_no_l2domain (#PCDATA)>
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<!ELEMENT rem_arp_del_no_mac_ip (#PCDATA)>

<!ELEMENT rem_arp_del_no_tsi (#PCDATA)>

<!ELEMENT rem_arp_grat_timer_started (#PCDATA)>

<!ELEMENT rem_arp_grat_timer_stopped (#PCDATA)>

<!ELEMENT rem_arp_no_mac_ip (#PCDATA)>

<!ELEMENT remaining-lifetime (#PCDATA)>

<!ELEMENT remote-address (#PCDATA)>

<!ELEMENT remote-ifindex (#PCDATA)>

<!ELEMENT remote-interface (interface-name | interface-status |
interface-encapsulation)*>

<!ELEMENT remote-pe (#PCDATA)>

<!ELEMENT remote-pw-status-code (#PCDATA)>

<!ELEMENT remote-site-id (#PCDATA)>

<!ELEMENT rendezvous-point (rendezvous-point-address | rp-flag-static |
rp-flag-autorp | rp-flag-bootstrap | rp-flag-embedded-rp | rp-flag-sparse |
rp-flag-bidirectional | rendezvous-point-static-override |
rendezvous-point-from-address | rendezvous-point-holdtime |
rendezvous-point-refcount | rendezvous-point-time-active |
rendezvous-point-holdtime-remaining | rp-interface-device-index |
rp-interface-device-subunit | pim-interface-name | rendezvous-point-timeout |
rendezvous-point-active-groups | rendezvous-point-group-prefixes |
rendezvous-point-active-group-prefixes | rendezvous-point-register-state |
rendezvous-point-anycast-pim-rpset | rendezvous-point-anycast-pim-local-address
| rendezvous-point-anycast-register-state)*>
<!ATTLIST rendezvous-point junos:style CDATA #IMPLIED>

<!ELEMENT rendezvous-point-active-group-prefix (multicast-group-address)*>

<!ELEMENT rendezvous-point-active-group-prefixes
(rendezvous-point-active-group-prefix | rendezvous-point-active-groups)*>

<!ELEMENT rendezvous-point-active-groups (#PCDATA)>

<!ELEMENT rendezvous-point-address (#PCDATA)>

<!ELEMENT rendezvous-point-address-info (pim-instance | rendezvous-point-dm-address
 | rendezvous-point-ssm-address | rendezvous-point-asm-override-ssm-address |
rendezvous-point-trees | rendezvous-point-address |
rendezvous-point-embedded-rp-address | rendezvous-point-no-address)*>

<!ELEMENT rendezvous-point-addresses (rendezvous-point-address |
rendezvous-point-mode-bidir | rendezvous-point-hash)*>

<!ELEMENT rendezvous-point-anycast-pim-local-address (#PCDATA)>

<!ELEMENT rendezvous-point-anycast-pim-rpset (multicast-group-address)*>

<!ELEMENT rendezvous-point-anycast-register-state (multicast-group-address |
multicast-source-address | pim-anycast-register-state-origin)*>
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<!ELEMENT rendezvous-point-asm-override-ssm-address (#PCDATA)>

<!ELEMENT rendezvous-point-dm-address (#PCDATA)>

<!ELEMENT rendezvous-point-embedded-rp-address EMPTY>

<!ELEMENT rendezvous-point-from-address (#PCDATA)>

<!ELEMENT rendezvous-point-group-prefixes (multicast-group-prefix |
rp-group-timeout | rp-group-state)*>

<!ELEMENT rendezvous-point-hash (#PCDATA)>

<!ELEMENT rendezvous-point-holdtime (#PCDATA)>

<!ELEMENT rendezvous-point-holdtime-remaining (#PCDATA)>

<!ELEMENT rendezvous-point-mode-bidir EMPTY>

<!ELEMENT rendezvous-point-no-address (#PCDATA)>

<!ELEMENT rendezvous-point-refcount (#PCDATA)>

<!ELEMENT rendezvous-point-register-state (multicast-group-address |
multicast-source-address | first-hop-address | rendezvous-point-address |
pim-register-state | pim-register-timeout)*>

<!ELEMENT rendezvous-point-ssm-address (#PCDATA)>

<!ELEMENT rendezvous-point-static-override (#PCDATA)>

<!ELEMENT rendezvous-point-time-active (#PCDATA)>
<!ATTLIST rendezvous-point-time-active junos:seconds CDATA #IMPLIED>

<!ELEMENT rendezvous-point-timeout (#PCDATA)>

<!ELEMENT rendezvous-point-trees (multicast-group-prefix |
rendezvous-point-addresses)*>

<!ELEMENT replication-block-id (#PCDATA)>

<!ELEMENT replication-block-snpa (replication-block-id)*>

<!ELEMENT replication-entry-in-use (#PCDATA)>

<!ELEMENT replication-neighbor-address (#PCDATA)>

<!ELEMENT replication-neighbor-up-count (#PCDATA)>

<!ELEMENT replication-route-snpa (network-element-id)*>

<!ELEMENT replication-state (#PCDATA)>

<!ELEMENT request-tgt-receive-count (#PCDATA)>

<!ELEMENT request-wild-receive-count (#PCDATA)>

<!ELEMENT reserved-bandwidth (bandwidth-priority | total-reserved-bandwidth)*>

<!ELEMENT reserved-ct-bandwidth (ct-class | ct-bw0 | ct-bw1 | ct-bw2 | ct-bw3 |
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ct-bw4 | ct-bw5 | ct-bw6 | ct-bw7)*>

<!ELEMENT restart-state (#PCDATA)>

<!ELEMENT restart-status (#PCDATA)>

<!ELEMENT restart-time (#PCDATA)>

<!ELEMENT resv-state-interface-id (#PCDATA)>

<!ELEMENT resv-state-self-id (#PCDATA)>

<!ELEMENT resv-state-session-id (#PCDATA)>

<!ELEMENT resv-style (#PCDATA)>

<!ELEMENT retransmit-interval (#PCDATA)>

<!ELEMENT retry-limit (#PCDATA)>

<!ELEMENT retry-timer (#PCDATA)>

<!ELEMENT reuse-preference (#PCDATA)>

<!ELEMENT reuse-time (#PCDATA)>
<!ATTLIST reuse-time junos:seconds CDATA #IMPLIED>

<!ELEMENT reverse-oif (oif-name | host-count)*>

<!ELEMENT revert-timer (#PCDATA)>

<!ELEMENT revert-timer-remain (#PCDATA)>

<!ELEMENT rib-bit (#PCDATA)>

<!ELEMENT rip-bad-messages (#PCDATA)>

<!ELEMENT rip-current-memory (#PCDATA)>

<!ELEMENT rip-error (rip-error-message)*>

<!ELEMENT rip-error-message (#PCDATA)>

<!ELEMENT rip-general-statistics (rip-protocol-name | rip-bad-messages |
rip-interface-count | rip-current-memory | rip-maximum-memory)*>

<!ELEMENT rip-general-statistics-information (rip-general-statistics)*>

<!ELEMENT rip-global-statistics (rip-routes-learned | rip-routes-holddown |
rip-requests-dropped | rip-responses-dropped)*>

<!ELEMENT rip-holddown (#PCDATA)>

<!ELEMENT rip-instance-name (#PCDATA)>

<!ELEMENT rip-instance-neighbor (rip-instance-name | rip-neighbor)*>

<!ELEMENT rip-instance-statistics (rip-instance-name | rip-timer-values |
rip-restart-values | rip-global-statistics | rip-neighbor-statistics)*>

<!ELEMENT rip-interface-count (#PCDATA)>
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<!ELEMENT rip-local-address-ipv4 (#PCDATA)>

<!ELEMENT rip-local-address-ipv6 (#PCDATA)>

<!ELEMENT rip-maximum-memory (#PCDATA)>

<!ELEMENT rip-message (#PCDATA)>

<!ELEMENT rip-message-last-5minutes (#PCDATA)>

<!ELEMENT rip-message-last-minute (#PCDATA)>

<!ELEMENT rip-message-statistics (rip-message | rip-message-total |
rip-message-last-5minutes | rip-message-last-minute)*>

<!ELEMENT rip-message-total (#PCDATA)>

<!ELEMENT rip-neighbor (rip-neighbor-name | rip-neighbor-state |
rip-neighbor-metric-in | rip-local-address-ipv4 | rip-remote-address-ipv4 |
send-mode-ripv2 | receive-mode-ripv2 | rip-local-address-ipv6 |
rip-remote-address-ipv6 | send-mode-ripng | receive-mode-ripng)*>
<!ATTLIST rip-neighbor junos:style CDATA #IMPLIED>

<!ELEMENT rip-neighbor-advertised-routes (#PCDATA)>

<!ELEMENT rip-neighbor-information (rip-neighbor)*>

<!ELEMENT rip-neighbor-information-all (rip-instance-neighbor)*>

<!ELEMENT rip-neighbor-learnt-routes (#PCDATA)>

<!ELEMENT rip-neighbor-metric-in (#PCDATA)>

<!ELEMENT rip-neighbor-name (#PCDATA)>

<!ELEMENT rip-neighbor-route-timeout (#PCDATA)>

<!ELEMENT rip-neighbor-state (#PCDATA)>

<!ELEMENT rip-neighbor-statistics (rip-neighbor-name | rip-neighbor-learnt-routes
 | rip-neighbor-advertised-routes | rip-neighbor-route-timeout |
rip-neighbor-update-interval | rip-message-statistics)*>

<!ELEMENT rip-neighbor-update-interval (#PCDATA)>

<!ELEMENT rip-port (#PCDATA)>

<!ELEMENT rip-protocol-name (#PCDATA)>

<!ELEMENT rip-remote-address-ipv4 (#PCDATA)>

<!ELEMENT rip-remote-address-ipv6 (#PCDATA)>

<!ELEMENT rip-requests-dropped (#PCDATA)>

<!ELEMENT rip-responses-dropped (#PCDATA)>

<!ELEMENT rip-restart-state (#PCDATA)>

<!ELEMENT rip-restart-time (#PCDATA)>
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<!ELEMENT rip-restart-timeout (#PCDATA)>

<!ELEMENT rip-restart-values (rip-restart-state | rip-restart-time |
rip-restart-timeout)*>

<!ELEMENT rip-routes-holddown (#PCDATA)>

<!ELEMENT rip-routes-learned (#PCDATA)>

<!ELEMENT rip-statistics-information (rip-timer-values | rip-restart-values |
rip-global-statistics | rip-neighbor-statistics)*>

<!ELEMENT rip-statistics-information-all (rip-instance-statistics)*>

<!ELEMENT rip-timer-values (rip-protocol-name | rip-port | rip-holddown)*>

<!ELEMENT robustness-count (#PCDATA)>

<!ELEMENT route (#PCDATA)>

<!ELEMENT route-control-word (#PCDATA)>

<!ELEMENT route-count (#PCDATA)>

<!ELEMENT route-distinguisher (#PCDATA)>

<!ELEMENT route-family (bulking-indicator | multicast-instance | address-family
| multicast-route-summary | multicast-route)*>

<!ELEMENT route-filter (address | flags | extended-information)*>

<!ELEMENT route-flap-count (#PCDATA)>

<!ELEMENT route-flap-damping (merit | last-merit | damping-parameters |
default-damping-parameters | last-update | first-update | route-flap-count |
suppressed | reuse-time | reuse-preference | expire-time)*>

<!ELEMENT route-information (as-number | router-id | maximum-ecmp |
note-network-services-mode | route-table | rt-martians | rt-ribgroup |
rt-test-policy-prefix | rt-test-policy)*>

<!ELEMENT route-label (#PCDATA)>

<!ELEMENT route-origin (#PCDATA)>

<!ELEMENT route-path-type (#PCDATA)>

<!ELEMENT route-prefix (#PCDATA)>

<!ELEMENT route-priority (#PCDATA)>

<!ELEMENT route-queue (timer | state | element)*>

<!ELEMENT route-queue-count (#PCDATA)>

<!ELEMENT route-reflector-client EMPTY>

<!ELEMENT route-resolution-information (route-resolution-tree)*>

<!ELEMENT route-resolution-tree (tree-index | nodes | tree-reference-count |
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tree-contributing-ribs | tree-policy | node)*>

<!ELEMENT route-summary-information (as-number | router-id | maximum-ecmp |
note-network-services-mode | route-table)*>

<!ELEMENT route-table (protocols | table-name | destination-count |
total-route-count | active-route-count | holddown-route-count | hidden-route-count
 | restart-state | rt)*>

<!ELEMENT route-type (#PCDATA)>

<!ELEMENT route-version (#PCDATA)>

<!ELEMENT router-id (#PCDATA)>

<!ELEMENT router-id-tlv (router-id)*>

<!ELEMENT router-priority (#PCDATA)>

<!ELEMENT rp-family (address-family | rendezvous-point)*>

<!ELEMENT rp-flag-autorp EMPTY>

<!ELEMENT rp-flag-bidirectional EMPTY>

<!ELEMENT rp-flag-bootstrap EMPTY>

<!ELEMENT rp-flag-embedded-rp EMPTY>

<!ELEMENT rp-flag-sparse EMPTY>

<!ELEMENT rp-flag-static EMPTY>

<!ELEMENT rp-group-state (#PCDATA)>

<!ELEMENT rp-group-timeout (#PCDATA)>

<!ELEMENT rp-interface-device-index (#PCDATA)>

<!ELEMENT rp-interface-device-subunit (#PCDATA)>

<!ELEMENT rpa (#PCDATA)>

<!ELEMENT rpd-time (#PCDATA)>

<!ELEMENT rpf-check-disabled EMPTY>

<!ELEMENT rpf-family (address-family | rpf-table-name | rpf-table-entry-count |
rpf-route)*>

<!ELEMENT rpf-route (prefix | rpf-route-inactive | rpf-route-protocol |
interface-name | rpf-route-neighbor)*>

<!ELEMENT rpf-route-inactive EMPTY>

<!ELEMENT rpf-route-neighbor (#PCDATA)>

<!ELEMENT rpf-route-protocol (#PCDATA)>

<!ELEMENT rpf-table-entry-count (#PCDATA)>
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<!ELEMENT rpf-table-name (#PCDATA)>

<!ELEMENT rptree EMPTY>

<!ELEMENT rsb-count (#PCDATA)>

<!ELEMENT rsvp-bypass-repl (bypass-repl-interface-id | bypass-repl-to-addr |
bypass-repl-avoid-addr | bypass-repl-lp-num | bypass-repl-id |
bypass-repl-resolve-status | bypass-repl-psb-id | bypass-repl-state |
bypass-repl-manual-bypass-name)*>
<!ATTLIST rsvp-bypass-repl junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-bypass-repl-information (rsvp-bypass-repl)*>

<!ELEMENT rsvp-error (error-message | error-count | error-count-5seconds)*>

<!ELEMENT rsvp-graceful-restart (restart-status | helper-status |
maximum-helper-restart-time | maximum-helper-recovery-time | restart-time |
recovery-time)*>

<!ELEMENT rsvp-interface (interface-name | rsvp-status | active-control-channel
| control-channel-unusable | index | authentication-flag | aggregate-flag |
ack-flag | protect-flag | hello-interval | forward-rsvp | interface-address |
loopback-address | rsvp-telink | message-statistics | bypass-info | cos-info)*>
<!ATTLIST rsvp-interface junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-interface-information (active-count | rsvp-interface)*>

<!ELEMENT rsvp-interface-replication-information (rsvp-replication-te-link)*>

<!ELEMENT rsvp-lp-backup-lsp-cnt (#PCDATA)>

<!ELEMENT rsvp-lp-backup-route-cnt (#PCDATA)>

<!ELEMENT rsvp-lp-psb-cnt (#PCDATA)>

<!ELEMENT rsvp-message (#PCDATA)>

<!ELEMENT rsvp-neighbor (rsvp-neighbor-address | rsvp-neighbor-interface |
rsvp-neighbor-status | rsvp-neighbor-remote | rsvp-neighbor-node | neighbor-idle
 | neighbor-up-count | neighbor-down-count | last-changed-time | hello-interval
| hellos-sent | hellos-received | messages-received | rsvp-neighbor-remote-instance
 | rsvp-neighbor-local-instance | rsvp-message | rsvp-refresh-reduct-status |
rsvp-refresh-reduct-remote-status | rsvp-refresh-reduct-ack-status |
rsvp-graceful-restart)*>
<!ATTLIST rsvp-neighbor heading CDATA #IMPLIED>
<!ATTLIST rsvp-neighbor junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-neighbor-address (#PCDATA)>

<!ELEMENT rsvp-neighbor-count (#PCDATA)>

<!ELEMENT rsvp-neighbor-information (rsvp-neighbor-count | rsvp-neighbor)*>

<!ELEMENT rsvp-neighbor-interface (#PCDATA)>

<!ELEMENT rsvp-neighbor-local-instance (#PCDATA)>

<!ELEMENT rsvp-neighbor-node EMPTY>

<!ELEMENT rsvp-neighbor-remote EMPTY>
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<!ELEMENT rsvp-neighbor-remote-instance (#PCDATA)>

<!ELEMENT rsvp-neighbor-replication-information (rsvp-replication-neighbor)*>

<!ELEMENT rsvp-neighbor-status (#PCDATA)>

<!ELEMENT rsvp-nsr-mode (#PCDATA)>

<!ELEMENT rsvp-nsr-state (#PCDATA)>

<!ELEMENT rsvp-path-state-replication-information (rsvp-replication-path-state)*>

<!ELEMENT rsvp-path-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-ack-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-remote-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-status (#PCDATA)>

<!ELEMENT rsvp-replication-neighbor (replication-neighbor-address |
neighbor-interface | neighbor-status | replication-neighbor-up-count |
neighbor-flags | neighbor-replication-sync-status | neighbor-remote-instance |
neighbor-local-instance | rsvp-graceful-restart)*>
<!ATTLIST rsvp-replication-neighbor heading CDATA #IMPLIED>
<!ATTLIST rsvp-replication-neighbor junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-replication-path-state (path-state-address | path-state-interface-id
 | path-state-session-id | path-state-id | path-state-self-id |
path-state-p2mp-self-id | path-state-tag | path-state-rr-epoch |
path-state-p2mp-remerge-head | path-state-resv-msg-id | path-state-bypass-id |
path-state-nh-type | path-state-nh-outgoing-interface | path-state-nh-upstream-tag
 | path-state-nh-te-link-id | path-state-nh-peer-address |
path-state-nh-avoid-address | path-state-nh-ero | path-state-nh-msg-id)*>
<!ATTLIST rsvp-replication-path-state heading CDATA #IMPLIED>
<!ATTLIST rsvp-replication-path-state junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-replication-resv-state (resv-state-interface-id |
resv-state-session-id | resv-state-self-id)*>
<!ATTLIST rsvp-replication-resv-state heading CDATA #IMPLIED>
<!ATTLIST rsvp-replication-resv-state junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-replication-session (destination-address | source-address | label-in
 | path-state-id | session-id | name | replication-state)*>
<!ATTLIST rsvp-replication-session heading CDATA #IMPLIED>
<!ATTLIST rsvp-replication-session junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-replication-te-link (te-link-id | te-link-interface-id |
te-link-reference-count)*>
<!ATTLIST rsvp-replication-te-link heading CDATA #IMPLIED>
<!ATTLIST rsvp-replication-te-link junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-restart-flag (#PCDATA)>

<!ELEMENT rsvp-resv-state-replication-information (rsvp-replication-resv-state)*>

<!ELEMENT rsvp-session (destination-address | is-detour | source-address |
lsp-state | lsp-pktbytes | bypass-name | no-statistics | route-count | rsb-count
 | resv-style | label-in | label-out | name | mpls-p2mp-lsp-name |
p2mp-remerge-state | lsp-description | lsp-path-type | mpls-lsp-type |
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lsp-aggregation | graceful-deletion-triggered | source-tna-address |
destination-tna-address | bidirectional | associated-bidirectional |
lsp-associated-lspname | lsp-associated-lspsrc | upstream-label-in |
upstream-label-out | suggested-label-in | suggested-label-out | recovery-label-in
 | recovery-label-out | psb-lifetime | psb-creation-time | path-mtu |
path-mtu-in-kernel | sender-tspec | layer2-tspec | adspec | ct-bw |
lsp-diffserv-info | lsp-id | tunnel-id | proto-id | p2mp-branch-id |
p2mp-subgroup-orig | self-id | p2mp-self-id | session-id | is-fastreroute |
is-linkprotection | is-nodeprotection | is-soft-preemption | rsvp-path-status |
rsvp-lp-backup-route-cnt | rsvp-lp-backup-lsp-cnt | packet-information |
explicit-route | record-route | lsp-attribute-flags | lp-history | rsvp-telink |
 detour | detour-branch | mpls-lsp)*>
<!ATTLIST rsvp-session junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-session-data (session-type | count | display-count | up-count |
down-count | detours | rsvp-session | mpls-p2mp-lsp)*>

<!ELEMENT rsvp-session-information (rsvp-session-data)*>

<!ELEMENT rsvp-session-replication-information (rsvp-replication-session)*>

<!ELEMENT rsvp-setup-protection (#PCDATA)>

<!ELEMENT rsvp-statistics-information (message-statistics | rsvp-error)*>

<!ELEMENT rsvp-status (#PCDATA)>

<!ELEMENT rsvp-telink (telink-name | telink-local-id | telink-state |
active-reservation | subscription | ct-subscription | static-bandwidth |
available-bandwidth | max-available-bandwidth | max-available-description |
static-bc-bandwidth | total-reserved-bandwidth | bc | bc-description | ct-class
| ct-bw0 | ct-bw1 | ct-bw2 | ct-bw3 | ct-bw4 | ct-bw5 | ct-bw6 | ct-bw7 |
high-watermark | preemption-count | soft-preemption-count | soft-preemption-pending
 | update-threshold | reserved-bandwidth | reserved-ct-bandwidth | detour-bandwidth
 | overbooked-bandwidth | overbooked-ct-bandwidth)*>

<!ELEMENT rsvp-transit-nexthop-chaining-mode (p2p-transit-lsp-nexthop-mode |
p2mp-transit-lsp-nexthop-mode)*>

<!ELEMENT rsvp-version (rsvp-status | rsvp-restart-flag | refresh-timer |
keep-multiplier | preemption-type | soft-preemption-cleanup-timer |
graceful-deletion-timeout | rsvp-nsr-mode | rsvp-nsr-state | rsvp-graceful-restart
 | rsvp-transit-nexthop-chaining-mode | rsvp-setup-protection)*>

<!ELEMENT rsvp-version-information (rsvp-version)*>

<!ELEMENT rsy-queue-addr (#PCDATA)>

<!ELEMENT rsy-queue-instance (#PCDATA)>

<!ELEMENT rsy-queue-more EMPTY>

<!ELEMENT rt (rt-destination | rt-prefix-length | rt-entry-count |
rt-announced-count | rt-state | rt-entry | tsi | communities)*>
<!ATTLIST rt junos:style CDATA #IMPLIED>

<!ELEMENT rt-aigp (#PCDATA)>

<!ELEMENT rt-announced-count (#PCDATA)>

<!ELEMENT rt-destination (#PCDATA)>
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<!ELEMENT rt-entry (active-tag | last-active | current-active | protocol-name |
preference | preference2 | route-distinguisher | pmsi | color | rt-isis-level |
color2 | rt-isis-downbit | age | metric | metric2 | med-plus-igp | rt-aigp |
rt-resolving-aigp | rt-tag | rt-tag2 | rt-ospf-area | learned-from | peer-as |
local-as | rt-entry-state | inactive-reason | task-name | announce-bits |
announce-tasks | bgp-rt-flag | label-base | label-range | l2vpn-status-vector |
l2vpn-mesh-group | vc-label | mtu | cell-bundle-size | vlan-id | tdm-payload-size
 | tdm-bitrate | pw-status-code | connection-bandwidth | cac-bandwidth-failure |
 context-id | route-control-word | vpn-label | route-label | bgp-no-label-reason
 | rtd-flow-dep | as-path | communities | helper-nhid | helper-refcount |
bgp-metric-flags | bgp-aigp | local-preference | med | peer-id | cluster-id |
path-id | originator | attrset | bgp-group-name | deleted | route-flap-damping |
 aggregate | gateway | indirect-nh-count | composite-nh-count | nh-type | nh-index
 | nh-address | nh-reference-count | nh-kernel-id | ext-int-intf-index |
nh-flood-overflow | nhh | nh | protocol-nh | rtrib-primary | rtrib-secondary |
backup-pe-group-name | designated-forwarder)*>

<!ELEMENT rt-entry-count (#PCDATA)>

<!ELEMENT rt-entry-state (#PCDATA)>

<!ELEMENT rt-flags (#PCDATA)>

<!ELEMENT rt-isis-downbit (#PCDATA)>

<!ELEMENT rt-isis-level (#PCDATA)>

<!ELEMENT rt-l2domain (#PCDATA)>

<!ELEMENT rt-mac-addr (#PCDATA)>

<!ELEMENT rt-martian-table-name (#PCDATA)>

<!ELEMENT rt-martians (rt-martian-table-name | route-filter)*>

<!ELEMENT rt-ospf-area (#PCDATA)>

<!ELEMENT rt-policy-name (#PCDATA)>

<!ELEMENT rt-policy-term-action (#PCDATA)>

<!ELEMENT rt-policy-term-name (#PCDATA)>

<!ELEMENT rt-policy-term-result (#PCDATA)>

<!ELEMENT rt-prefix-length (#PCDATA)>

<!ELEMENT rt-proto (#PCDATA)>

<!ELEMENT rt-resolving-aigp (#PCDATA)>

<!ELEMENT rt-ribgroup (rt-ribgroup-name | rt-ribgroup-address | rt-ribgroup-flags
 | rt-ribgroup-address-family | rt-ribgroup-refcount | rt-ribgroup-export-name |
 rt-ribgroup-import-name | rt-ribgroup-import-policy-name |
rt-ribgroup-import-secondary-name | rt-ribgroup-union-head-name |
rt-ribgroup-union-child-name)*>

<!ELEMENT rt-ribgroup-address (#PCDATA)>

<!ELEMENT rt-ribgroup-address-family (#PCDATA)>
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<!ELEMENT rt-ribgroup-export-name (#PCDATA)>

<!ELEMENT rt-ribgroup-flags (#PCDATA)>

<!ELEMENT rt-ribgroup-import-name (#PCDATA)>

<!ELEMENT rt-ribgroup-import-policy-name (#PCDATA)>

<!ELEMENT rt-ribgroup-import-secondary-name (#PCDATA)>

<!ELEMENT rt-ribgroup-name (#PCDATA)>

<!ELEMENT rt-ribgroup-refcount (#PCDATA)>

<!ELEMENT rt-ribgroup-union-child-name (#PCDATA)>

<!ELEMENT rt-ribgroup-union-head-name (#PCDATA)>

<!ELEMENT rt-route-accepted (#PCDATA)>

<!ELEMENT rt-route-rejected (#PCDATA)>

<!ELEMENT rt-state (#PCDATA)>

<!ELEMENT rt-tag (#PCDATA)>

<!ELEMENT rt-tag2 (#PCDATA)>

<!ELEMENT rt-test-policy (rt-policy-name | rt-route-accepted | rt-route-rejected)*>

<!ELEMENT rt-test-policy-prefix (rt-policy-name | rt-destination | rt-prefix-length
 | rt-test-policy-term)*>

<!ELEMENT rt-test-policy-term (rt-policy-term-name | rt-policy-term-result |
rt-policy-term-action)*>

<!ELEMENT rt-type (#PCDATA)>

<!ELEMENT rt_inst_add (#PCDATA)>

<!ELEMENT rt_inst_del (#PCDATA)>

<!ELEMENT rt_inst_del_ignore (#PCDATA)>

<!ELEMENT rt_inst_no_l3domain_tlv (#PCDATA)>

<!ELEMENT rt_inst_null_l3domain (#PCDATA)>

<!ELEMENT rtarget (#PCDATA)>

<!ELEMENT rtarget-mask (#PCDATA)>

<!ELEMENT rtarget-recv-mask (#PCDATA)>

<!ELEMENT rtd-flow-dep (flow-origin | flow-dep-state | flow-ucast-rt)*>

<!ELEMENT rte-instance (instance-name | rte-instance-type | instance-flags |
instance-options | import-policy | export-policy)*>
<!ATTLIST rte-instance junos:style CDATA #IMPLIED>
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<!ELEMENT rte-instance-type (#PCDATA)>

<!ELEMENT rte-table (table-name | table-export-on | import-list | table-flags |
table-usage)*>
<!ATTLIST rte-table junos:style CDATA #IMPLIED>

<!ELEMENT rte-target (target-string | family | subaf | import-count | export-count
 | import-list | export-list)*>
<!ATTLIST rte-target junos:style CDATA #IMPLIED>

<!ELEMENT rtexport-table-information (rte-table | rte-target | rte-instance)*>

<!ELEMENT rtflow-dep-information (rtflow-dep-table)*>

<!ELEMENT rtflow-dep-table (table-name | fdep-node)*>

<!ELEMENT rtnode-flags (#PCDATA)>

<!ELEMENT rtnode-next-as (#PCDATA)>

<!ELEMENT rtnode-origin (#PCDATA)>

<!ELEMENT rtnode-refcount (#PCDATA)>

<!ELEMENT rtnode-state (#PCDATA)>

<!ELEMENT rtrib-primary (#PCDATA)>

<!ELEMENT rtrib-secondary (#PCDATA)>

<!ELEMENT runt-header-error (#PCDATA)>

<!ELEMENT saii (#PCDATA)>

<!ELEMENT sap-listen (sap-listen-group | sap-listen-port)*>

<!ELEMENT sap-listen-group (#PCDATA)>

<!ELEMENT sap-listen-information (sap-listen)*>

<!ELEMENT sap-listen-port (#PCDATA)>

<!ELEMENT scope-name (#PCDATA)>

<!ELEMENT scope-rejects (#PCDATA)>

<!ELEMENT scope-state (#PCDATA)>

<!ELEMENT segments (#PCDATA)>

<!ELEMENT selected-next-hop EMPTY>

<!ELEMENT self EMPTY>

<!ELEMENT self-id (#PCDATA)>

<!ELEMENT send-buffer-size (#PCDATA)>

<!ELEMENT send-count (#PCDATA)>

<!ELEMENT send-mode-ripng (#PCDATA)>
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<!ELEMENT send-mode-ripv2 (#PCDATA)>

<!ELEMENT send-state (#PCDATA)>

<!ELEMENT send-time (#PCDATA)>

<!ELEMENT sender-tspec (#PCDATA)>

<!ELEMENT sent-count (#PCDATA)>

<!ELEMENT sequence-number (#PCDATA)>

<!ELEMENT session-address (#PCDATA)>

<!ELEMENT session-announcement (#PCDATA)>

<!ELEMENT session-attribute (#PCDATA)>

<!ELEMENT session-bandwidth (#PCDATA)>

<!ELEMENT session-connection-data (session-address | session-ttl |
session-layers)*>

<!ELEMENT session-description (#PCDATA)>

<!ELEMENT session-email (#PCDATA)>

<!ELEMENT session-encryption-key (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-layers (#PCDATA)>

<!ELEMENT session-media (#PCDATA)>

<!ELEMENT session-name (#PCDATA)>

<!ELEMENT session-origin (session-originator-username |
session-originator-address)*>

<!ELEMENT session-originator-address (#PCDATA)>

<!ELEMENT session-originator-username (#PCDATA)>

<!ELEMENT session-phone (#PCDATA)>

<!ELEMENT session-start-time (#PCDATA)>
<!ATTLIST session-start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT session-stop-time (#PCDATA)>
<!ATTLIST session-stop-time junos:seconds CDATA #IMPLIED>

<!ELEMENT session-ttl (#PCDATA)>

<!ELEMENT session-type (#PCDATA)>

<!ELEMENT session-uri (#PCDATA)>

<!ELEMENT session-version (#PCDATA)>
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<!ELEMENT setup-priority (#PCDATA)>

<!ELEMENT sham-link-local (#PCDATA)>

<!ELEMENT sham-link-remote (#PCDATA)>

<!ELEMENT shared-port (#PCDATA)>

<!ELEMENT shared-port-count (#PCDATA)>

<!ELEMENT short-packets-error (#PCDATA)>

<!ELEMENT signal-type (#PCDATA)>

<!ELEMENT simulation-mode (#PCDATA)>

<!ELEMENT site-id (#PCDATA)>

<!ELEMENT skip-address (#PCDATA)>

<!ELEMENT smart-optimize-timer (#PCDATA)>

<!ELEMENT snp-queue-drops (#PCDATA)>

<!ELEMENT snp-queue-length (#PCDATA)>

<!ELEMENT snpa (snpa-type | pfe-port-snpa | network-element-port-snpa |
mstp-root-snpa | gateway-snpa | layer2-domain-port-snpa | replication-block-snpa
 | replication-route-snpa | layer2-multicast-port-snpa | inh-snpa)*>

<!ELEMENT snpa-count (#PCDATA)>

<!ELEMENT snpa-length (#PCDATA)>

<!ELEMENT snpa-type (#PCDATA)>

<!ELEMENT soft-preemption-cleanup-timer (#PCDATA)>

<!ELEMENT soft-preemption-count (#PCDATA)>

<!ELEMENT soft-preemption-pending (#PCDATA)>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT source-family (pim-instance | address-family | pim-source)*>

<!ELEMENT source-tna-address (#PCDATA)>

<!ELEMENT sparse EMPTY>

<!ELEMENT spf-runs (#PCDATA)>

<!ELEMENT spf-trigger-count (#PCDATA)>

<!ELEMENT spt EMPTY>

<!ELEMENT spvc-id (#PCDATA)>

<!ELEMENT spvc-type (#PCDATA)>

<!ELEMENT srlg (srlg-name)*>
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<!ATTLIST srlg heading CDATA #IMPLIED>

<!ELEMENT srlg-address (#PCDATA)>

<!ELEMENT srlg-cost (#PCDATA)>

<!ELEMENT srlg-flag (#PCDATA)>

<!ELEMENT srlg-local-ifindex (#PCDATA)>

<!ELEMENT srlg-name (#PCDATA)>

<!ELEMENT srlg-neighbor-prefix (#PCDATA)>

<!ELEMENT srlg-remote-ifindex (#PCDATA)>

<!ELEMENT srlg-value (#PCDATA)>

<!ELEMENT srlgtlv-size (#PCDATA)>

<!ELEMENT standby-flood-status (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT state (#PCDATA)>

<!ELEMENT static-bandwidth (#PCDATA)>

<!ELEMENT static-bc-bandwidth (#PCDATA)>

<!ELEMENT static-revert-time (#PCDATA)>

<!ELEMENT statistic-count (#PCDATA)>

<!ELEMENT statistic-name (#PCDATA)>

<!ELEMENT statistics-family (pim-instance | address-family |
pim-statistics-interface)*>

<!ELEMENT status (#PCDATA)>

<!ELEMENT stub-area-mismatch-error (#PCDATA)>

<!ELEMENT sub-mcnh-index (#PCDATA)>

<!ELEMENT subaf (#PCDATA)>

<!ELEMENT subgroup-id (#PCDATA)>

<!ELEMENT subnet-mismatch-error (#PCDATA)>

<!ELEMENT subscription (#PCDATA)>

<!ELEMENT subtlv-length (#PCDATA)>

<!ELEMENT subtlv-size (#PCDATA)>

<!ELEMENT successful (#PCDATA)>

<!ELEMENT suggested-label-in (#PCDATA)>
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<!ELEMENT suggested-label-out (#PCDATA)>

<!ELEMENT suppressed EMPTY>

<!ELEMENT suppressed-external-prefix-count (#PCDATA)>

<!ELEMENT suppressed-internal-prefix-count (#PCDATA)>

<!ELEMENT suppressed-prefix-count (#PCDATA)>

<!ELEMENT switching-capability-descriptor (encoding-type | switching-type |
maximum-lsp-bw0 | maximum-lsp-bw1 | maximum-lsp-bw2 | maximum-lsp-bw3 |
maximum-lsp-bw4 | maximum-lsp-bw5 | maximum-lsp-bw6 | maximum-lsp-bw7 |
minimum-lsp-bw | mtu | tdm-indication)*>
<!ATTLIST switching-capability-descriptor heading CDATA #IMPLIED>

<!ELEMENT switching-granularity (#PCDATA)>

<!ELEMENT switching-type (#PCDATA)>

<!ELEMENT sys-error (#PCDATA)>

<!ELEMENT system-id (#PCDATA)>

<!ELEMENT system-id-length (#PCDATA)>

<!ELEMENT system-name (#PCDATA)>

<!ELEMENT table-export-on (#PCDATA)>

<!ELEMENT table-flags (#PCDATA)>

<!ELEMENT table-name (#PCDATA)>

<!ELEMENT table-usage (#PCDATA)>

<!ELEMENT tag (#PCDATA)>

<!ELEMENT taii (#PCDATA)>

<!ELEMENT target-string (#PCDATA)>

<!ELEMENT task (task-name | task-no-information | task-timer)*>

<!ELEMENT task-block (tb-name | tb-size | tb-alloc-size | tb-terse-transient |
tb-terse-fullpage | tb-terse-debug | tb-alloc-blocks | tb-alloc-bytes |
tb-max-alloc-blocks | tb-max-alloc-bytes)*>

<!ELEMENT task-block-list (task-block)*>

<!ELEMENT task-gres-state (#PCDATA)>

<!ELEMENT task-information (task)*>

<!ELEMENT task-lite-page (tlp-name | tlp-alloc-pages | tlp-alloc-bytes |
tlp-max-alloc-pages | tlp-max-alloc-bytes)*>

<!ELEMENT task-lite-page-list (task-lite-page)*>

<!ELEMENT task-malloc (tm-name | tm-allocs | tm-alloc-bytes | tm-max-allocs |
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tm-max-alloc-bytes | tm-function-calls)*>

<!ELEMENT task-malloc-list (task-malloc)*>

<!ELEMENT task-memory-allocator-report (task-block-list | task-lite-page-list |
task-memory-total-bytes | task-memory-total-max-bytes)*>

<!ELEMENT task-memory-bss-bytes (#PCDATA)>

<!ELEMENT task-memory-dir-bytes (#PCDATA)>

<!ELEMENT task-memory-dynamic-allocs (#PCDATA)>

<!ELEMENT task-memory-free-size (#PCDATA)>

<!ELEMENT task-memory-in-use-avail (#PCDATA)>

<!ELEMENT task-memory-in-use-size (#PCDATA)>

<!ELEMENT task-memory-information (task-memory-in-use-size |
task-memory-in-use-avail | task-memory-max-size | task-memory-max-avail |
task-memory-max-when | task-memory-free-size | task-memory-overall-report |
task-memory-allocator-report | task-memory-malloc-usage-report |
task-memory-dynamic-allocs | task-memory-max-dynamic-allocs | task-memory-bss-bytes
 | task-memory-max-bss-bytes | task-memory-page-data-bytes |
task-memory-max-page-data-bytes | task-memory-dir-bytes | task-memory-max-dir-bytes
 | task-memory-total-bytes-in-use | task-memory-total-bytes-percent)*>
<!ATTLIST task-memory-information junos:style CDATA #IMPLIED>

<!ELEMENT task-memory-malloc-usage-report (task-malloc-list |
task-memory-total-bytes | task-memory-total-max-bytes)*>

<!ELEMENT task-memory-max-avail (#PCDATA)>

<!ELEMENT task-memory-max-bss-bytes (#PCDATA)>

<!ELEMENT task-memory-max-dir-bytes (#PCDATA)>

<!ELEMENT task-memory-max-dynamic-allocs (#PCDATA)>

<!ELEMENT task-memory-max-page-data-bytes (#PCDATA)>

<!ELEMENT task-memory-max-size (#PCDATA)>

<!ELEMENT task-memory-max-when (#PCDATA)>

<!ELEMENT task-memory-overall-report (task-size-block-list | task-memory-stats-list
 | task-memory-total-bytes | task-memory-total-max-bytes |
task-memory-total-free-bytes)*>

<!ELEMENT task-memory-page-data-bytes (#PCDATA)>

<!ELEMENT task-memory-stats (tms-name | tms-allocs | tms-mallocs | tms-alloc-bytes
 | tms-max-allocs | tms-max-bytes | tms-free-bytes)*>

<!ELEMENT task-memory-stats-list (task-memory-stats)*>

<!ELEMENT task-memory-total-bytes (#PCDATA)>

<!ELEMENT task-memory-total-bytes-in-use (#PCDATA)>
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<!ELEMENT task-memory-total-bytes-percent (#PCDATA)>

<!ELEMENT task-memory-total-free-bytes (#PCDATA)>

<!ELEMENT task-memory-total-max-bytes (#PCDATA)>

<!ELEMENT task-name (#PCDATA)>

<!ELEMENT task-no-information EMPTY>

<!ELEMENT task-protocol-replication-name (#PCDATA)>

<!ELEMENT task-protocol-replication-state (#PCDATA)>

<!ELEMENT task-re-mode (#PCDATA)>

<!ELEMENT task-replication-state (task-gres-state | task-re-mode |
task-protocol-replication-state | task-protocol-replication-name)*>

<!ELEMENT task-size-block (tsb-size | tsb-terse-transient | tsb-terse-fullpage |
 tsb-allocs | tsb-mallocs | tsb-alloc-bytes | tsb-max-allocs | tsb-max-bytes |
tsb-free-bytes)*>

<!ELEMENT task-size-block-list (task-size-block)*>

<!ELEMENT task-timer (timer-name | timer-late | timer-expires | timer-jitter |
timer-interval | timer-flags)*>

<!ELEMENT task-timer-information (task)*>

<!ELEMENT tb-alloc-blocks (#PCDATA)>

<!ELEMENT tb-alloc-bytes (#PCDATA)>

<!ELEMENT tb-alloc-size (#PCDATA)>

<!ELEMENT tb-max-alloc-blocks (#PCDATA)>

<!ELEMENT tb-max-alloc-bytes (#PCDATA)>

<!ELEMENT tb-name (#PCDATA)>

<!ELEMENT tb-size (#PCDATA)>

<!ELEMENT tb-terse-debug EMPTY>

<!ELEMENT tb-terse-fullpage EMPTY>

<!ELEMENT tb-terse-transient EMPTY>

<!ELEMENT tdm-bitrate (#PCDATA)>

<!ELEMENT tdm-indication (#PCDATA)>

<!ELEMENT tdm-payload-size (#PCDATA)>

<!ELEMENT te-class (#PCDATA)>

<!ELEMENT te-class-map (te-class | traffic-class | te-prio)*>

<!ELEMENT te-link-id (#PCDATA)>
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<!ELEMENT te-link-interface-id (#PCDATA)>

<!ELEMENT te-link-reference-count (#PCDATA)>

<!ELEMENT te-metric (#PCDATA)>

<!ELEMENT te-prio (#PCDATA)>

<!ELEMENT te-subtlv (tlv-type-name | tlv-type-value | tlv-length | bytes-left |
formatted-tlv-data)*>

<!ELEMENT ted-database (ted-database-id | ted-database-id-overload |
ted-database-type | ted-database-age | ted-database-link-in | ted-database-link-out
 | ted-database-protocol | ted-link | ted-database-lcl-addr)*>
<!ATTLIST ted-database junos:style CDATA #IMPLIED>

<!ELEMENT ted-database-age (#PCDATA)>

<!ELEMENT ted-database-id (#PCDATA)>

<!ELEMENT ted-database-id-overload (#PCDATA)>

<!ELEMENT ted-database-inet-count (#PCDATA)>

<!ELEMENT ted-database-information (ted-database-summary | ted-database)*>

<!ELEMENT ted-database-iso-count (#PCDATA)>

<!ELEMENT ted-database-lcl-addr (ted-lcl-addr)*>

<!ELEMENT ted-database-link-in (#PCDATA)>

<!ELEMENT ted-database-link-out (#PCDATA)>

<!ELEMENT ted-database-protocol (#PCDATA)>

<!ELEMENT ted-database-summary (ted-database-iso-count | ted-database-inet-count)*>

<!ELEMENT ted-database-type (#PCDATA)>

<!ELEMENT ted-lcl-addr (#PCDATA)>

<!ELEMENT ted-link (ted-link-from | ted-link-to | ted-link-local-address |
ted-link-remote-address | ted-link-local-ifindex | ted-link-remote-ifindex |
admin-groups | ted-link-extended-admin-group | ted-link-metric | ted-link-link-out
 | ted-link-static-bandwidth | ted-link-reservable-bandwidth |
ted-link-forwarding-adjacency | ted-link-local-bw0 | ted-link-local-bw1 |
ted-link-local-bw2 | ted-link-local-bw3 | ted-link-local-bw4 | ted-link-local-bw5
 | ted-link-local-bw6 | ted-link-local-bw7 | ted-link-avail-bw0 |
ted-link-avail-bw1 | ted-link-avail-bw2 | ted-link-avail-bw3 | ted-link-avail-bw4
 | ted-link-avail-bw5 | ted-link-avail-bw6 | ted-link-avail-bw7 | ted-link-model
 | ted-link-ct-bw0 | ted-link-ct-bw1 | ted-link-ct-bw2 | ted-link-ct-bw3 |
ted-link-ct-bw4 | ted-link-ct-bw5 | ted-link-ct-bw6 | ted-link-ct-bw7 |
switching-capability-descriptor | ted-link-srlg |
ted-link-unreserved-bw-tlv-meaning | ted-link-dste-tlv-meaning)*>
<!ATTLIST ted-link junos:style CDATA #IMPLIED>

<!ELEMENT ted-link-avail-bw0 (#PCDATA)>

<!ELEMENT ted-link-avail-bw1 (#PCDATA)>
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<!ELEMENT ted-link-avail-bw2 (#PCDATA)>

<!ELEMENT ted-link-avail-bw3 (#PCDATA)>

<!ELEMENT ted-link-avail-bw4 (#PCDATA)>

<!ELEMENT ted-link-avail-bw5 (#PCDATA)>

<!ELEMENT ted-link-avail-bw6 (#PCDATA)>

<!ELEMENT ted-link-avail-bw7 (#PCDATA)>

<!ELEMENT ted-link-ct-bw0 (#PCDATA)>

<!ELEMENT ted-link-ct-bw1 (#PCDATA)>

<!ELEMENT ted-link-ct-bw2 (#PCDATA)>

<!ELEMENT ted-link-ct-bw3 (#PCDATA)>

<!ELEMENT ted-link-ct-bw4 (#PCDATA)>

<!ELEMENT ted-link-ct-bw5 (#PCDATA)>

<!ELEMENT ted-link-ct-bw6 (#PCDATA)>

<!ELEMENT ted-link-ct-bw7 (#PCDATA)>

<!ELEMENT ted-link-dste-tlv-meaning (#PCDATA)>

<!ELEMENT ted-link-extended-admin-group (admin-group-name)*>
<!ATTLIST ted-link-extended-admin-group heading CDATA #IMPLIED>

<!ELEMENT ted-link-forwarding-adjacency EMPTY>

<!ELEMENT ted-link-from (#PCDATA)>

<!ELEMENT ted-link-information (ted-link)*>

<!ELEMENT ted-link-link-out (#PCDATA)>

<!ELEMENT ted-link-local-address (#PCDATA)>

<!ELEMENT ted-link-local-bw0 (#PCDATA)>

<!ELEMENT ted-link-local-bw1 (#PCDATA)>

<!ELEMENT ted-link-local-bw2 (#PCDATA)>

<!ELEMENT ted-link-local-bw3 (#PCDATA)>

<!ELEMENT ted-link-local-bw4 (#PCDATA)>

<!ELEMENT ted-link-local-bw5 (#PCDATA)>

<!ELEMENT ted-link-local-bw6 (#PCDATA)>

<!ELEMENT ted-link-local-bw7 (#PCDATA)>

<!ELEMENT ted-link-local-ifindex (#PCDATA)>
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<!ELEMENT ted-link-metric (#PCDATA)>

<!ELEMENT ted-link-model (#PCDATA)>

<!ELEMENT ted-link-remote-address (#PCDATA)>

<!ELEMENT ted-link-remote-ifindex (#PCDATA)>

<!ELEMENT ted-link-reservable-bandwidth (#PCDATA)>

<!ELEMENT ted-link-srlg (srlg-name)*>
<!ATTLIST ted-link-srlg heading CDATA #IMPLIED>

<!ELEMENT ted-link-static-bandwidth (#PCDATA)>

<!ELEMENT ted-link-to (#PCDATA)>

<!ELEMENT ted-link-unreserved-bw-tlv-meaning (#PCDATA)>

<!ELEMENT ted-protocol (ted-protocol-name | ted-protocol-credibility |
ted-protocol-self-node)*>

<!ELEMENT ted-protocol-credibility (#PCDATA)>

<!ELEMENT ted-protocol-information (ted-protocol)*>

<!ELEMENT ted-protocol-name (#PCDATA)>

<!ELEMENT ted-protocol-self-node (#PCDATA)>

<!ELEMENT telink-id (#PCDATA)>

<!ELEMENT telink-local-id (#PCDATA)>

<!ELEMENT telink-name (#PCDATA)>

<!ELEMENT telink-state (#PCDATA)>

<!ELEMENT terse-bidir EMPTY>

<!ELEMENT terse-rpt EMPTY>

<!ELEMENT terse-sparse EMPTY>

<!ELEMENT terse-wc EMPTY>

<!ELEMENT time (#PCDATA)>

<!ELEMENT time-to-adjust (#PCDATA)>

<!ELEMENT timer (#PCDATA)>

<!ELEMENT timer-expires (#PCDATA)>

<!ELEMENT timer-flags (#PCDATA)>

<!ELEMENT timer-interval (#PCDATA)>

<!ELEMENT timer-jitter (#PCDATA)>
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<!ELEMENT timer-late EMPTY>

<!ELEMENT timer-name (#PCDATA)>

<!ELEMENT timestamp (#PCDATA)>

<!ELEMENT title (#PCDATA)>

<!ELEMENT tlp-alloc-bytes (#PCDATA)>

<!ELEMENT tlp-alloc-pages (#PCDATA)>

<!ELEMENT tlp-max-alloc-bytes (#PCDATA)>

<!ELEMENT tlp-max-alloc-pages (#PCDATA)>

<!ELEMENT tlp-name (#PCDATA)>

<!ELEMENT tlv-block (tlv-type-name | tlv-type-value | tlv-length | bytes-left |
formatted-tlv-data)*>

<!ELEMENT tlv-grace-type-name (#PCDATA)>

<!ELEMENT tlv-grace-value (#PCDATA)>

<!ELEMENT tlv-length (#PCDATA)>

<!ELEMENT tlv-size (#PCDATA)>

<!ELEMENT tlv-stragglers (bytes-left)*>

<!ELEMENT tlv-type-name (#PCDATA)>

<!ELEMENT tlv-type-value (#PCDATA)>

<!ELEMENT tm-alloc-bytes (#PCDATA)>

<!ELEMENT tm-allocs (#PCDATA)>

<!ELEMENT tm-function-calls (#PCDATA)>

<!ELEMENT tm-max-alloc-bytes (#PCDATA)>

<!ELEMENT tm-max-allocs (#PCDATA)>

<!ELEMENT tm-name (#PCDATA)>

<!ELEMENT tms-alloc-bytes (#PCDATA)>

<!ELEMENT tms-allocs (#PCDATA)>

<!ELEMENT tms-free-bytes (#PCDATA)>

<!ELEMENT tms-mallocs (#PCDATA)>

<!ELEMENT tms-max-allocs (#PCDATA)>

<!ELEMENT tms-max-bytes (#PCDATA)>

<!ELEMENT tms-name (#PCDATA)>
```


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```
<!ELEMENT to (#PCDATA)>

<!ELEMENT total-bypass (#PCDATA)>

<!ELEMENT total-database-summaries (#PCDATA)>

<!ELEMENT total-external-prefix-count (#PCDATA)>

<!ELEMENT total-internal-prefix-count (#PCDATA)>

<!ELEMENT total-linkstate-request (#PCDATA)>

<!ELEMENT total-paths (#PCDATA)>

<!ELEMENT total-prefix-count (#PCDATA)>

<!ELEMENT total-reserved-bandwidth (#PCDATA)>

<!ELEMENT total-retransmits (#PCDATA)>

<!ELEMENT total-route-count (#PCDATA)>

<!ELEMENT total-time (#PCDATA)>

<!ELEMENT totals-information (packets-received | packets-sent)*>

<!ELEMENT tracing-information (flags | filename | filesize | filelimit)*>

<!ELEMENT track-item (#PCDATA)>

<!ELEMENT traffic-class (#PCDATA)>

<!ELEMENT traffic-stats-interval (#PCDATA)>

<!ELEMENT transition-count (#PCDATA)>

<!ELEMENT transitions (#PCDATA)>

<!ELEMENT transmission-status (transmit-count | message | interface-name |
transmit-time)*>

<!ELEMENT transmit-count (#PCDATA)>

<!ELEMENT transmit-lsp-count (#PCDATA)>

<!ELEMENT transmit-time (#PCDATA)>
<!ATTLIST transmit-time junos:seconds CDATA #IMPLIED>

<!ELEMENT tree-contributing-ribs (#PCDATA)>

<!ELEMENT tree-index (#PCDATA)>

<!ELEMENT tree-policy (#PCDATA)>

<!ELEMENT tree-reference-count (#PCDATA)>

<!ELEMENT truncated-packets-error (#PCDATA)>

<!ELEMENT trunk-id (#PCDATA)>

<!ELEMENT ts (#PCDATA)>
```

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```
<!ELEMENT tsb-alloc-bytes (#PCDATA)>

<!ELEMENT tsb-allocs (#PCDATA)>

<!ELEMENT tsb-free-bytes (#PCDATA)>

<!ELEMENT tsb-mallocs (#PCDATA)>

<!ELEMENT tsb-max-allocs (#PCDATA)>

<!ELEMENT tsb-max-bytes (#PCDATA)>

<!ELEMENT tsb-size (#PCDATA)>

<!ELEMENT tsb-terse-fullpage EMPTY>

<!ELEMENT tsb-terse-transient EMPTY>

<!ELEMENT tsi (#PCDATA)>

<!ELEMENT tunnel-destination (#PCDATA)>

<!ELEMENT tunnel-expiry (#PCDATA)>

<!ELEMENT tunnel-id (#PCDATA)>

<!ELEMENT tunnel-local-address (#PCDATA)>

<!ELEMENT tunnel-nexthop (tunnel-nh-type | tunnel-nh-src | via | tunnel-nh-state
 | tunnel-nh-reason | tunnel-nh-lsp-name)*>

<!ELEMENT tunnel-nh-lsp-name (#PCDATA)>

<!ELEMENT tunnel-nh-reason (#PCDATA)>

<!ELEMENT tunnel-nh-src (#PCDATA)>

<!ELEMENT tunnel-nh-state (#PCDATA)>

<!ELEMENT tunnel-nh-type (#PCDATA)>

<!ELEMENT tunnel-reference-count (#PCDATA)>

<!ELEMENT tunnel-remote-address (#PCDATA)>

<!ELEMENT tunnel-state (#PCDATA)>

<!ELEMENT tunnel-ttl (#PCDATA)>

<!ELEMENT two-way-lsp-id (#PCDATA)>

<!ELEMENT tx-rate (#PCDATA)>

<!ELEMENT tx-rate-percent (#PCDATA)>

<!ELEMENT type (#PCDATA)>

<!ELEMENT type-value (#PCDATA)>

<!ELEMENT type7 EMPTY>
```


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```
<!ELEMENT uflags (#PCDATA)>

<!ELEMENT unconfigured-peer-count (#PCDATA)>

<!ELEMENT unconfigured-peers (route-filter)*>

<!ELEMENT underflow-limit (#PCDATA)>

<!ELEMENT underflow-sample-count (#PCDATA)>

<!ELEMENT unicast-bytes (#PCDATA)>

<!ELEMENT unicast-packets (#PCDATA)>

<!ELEMENT unknown-local-data (#PCDATA)>

<!ELEMENT unknown-tlv (isis-tlv-type | tlv-length)*>

<!ELEMENT up-count (#PCDATA)>

<!ELEMENT up-transitions (#PCDATA)>

<!ELEMENT update-send-count (#PCDATA)>

<!ELEMENT update-threshold (#PCDATA)>

<!ELEMENT upstream-group (multicast-group-address)*>

<!ELEMENT upstream-interface-name (#PCDATA)>

<!ELEMENT upstream-label-in (#PCDATA)>

<!ELEMENT upstream-label-out (#PCDATA)>

<!ELEMENT upstream-neighbor (#PCDATA)>

<!ELEMENT upstream-neighbor-rpf-origin (#PCDATA)>

<!ELEMENT upstream-protocol (#PCDATA)>

<!ELEMENT upstream-protocol-name (#PCDATA)>

<!ELEMENT upstream-state-flags (none | local-source | local-rp | join-to-rp |
join-to-source | prune-to-rp | prune-to-source)*>

<!ELEMENT uptime (#PCDATA)>
<!ATTLIST uptime junos:seconds CDATA #IMPLIED>

<!ELEMENT usy-addr (#PCDATA)>

<!ELEMENT usy-elapsed (#PCDATA)>
<!ATTLIST usy-elapsed junos:seconds CDATA #IMPLIED>

<!ELEMENT usy-flags (#PCDATA)>

<!ELEMENT usy-iid (#PCDATA)>

<!ELEMENT usy-more EMPTY>

<!ELEMENT vc-down-count (#PCDATA)>
```

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```
<!ELEMENT vc-id (#PCDATA)>

<!ELEMENT vc-label (#PCDATA)>

<!ELEMENT vc-up-count (#PCDATA)>

<!ELEMENT via (#PCDATA)>

<!ELEMENT virtual-link-destination (#PCDATA)>

<!ELEMENT virtual-link-error (#PCDATA)>

<!ELEMENT virtual-link-transit-area (#PCDATA)>

<!ELEMENT vlan-id (#PCDATA)>

<!ELEMENT vlan_add (#PCDATA)>

<!ELEMENT vlan_chg (#PCDATA)>

<!ELEMENT vlan_del (#PCDATA)>

<!ELEMENT vpls-auto-site-repository (route-distinguisher | instance-id |
local-site-id | auto-site-count | auto-site-repository-state)*>

<!ELEMENT vpls-auto-site-repository-information (vpls-auto-site-repository)*>

<!ELEMENT vpls-bgp-label-repository-information
(vpls-bgp-route-distinguisher-information)*>

<!ELEMENT vpls-bgp-route-distinguisher-information (route-distinguisher |
instance-id | l2vpn-nlri-advertisement)*>

<!ELEMENT vpls-connection-information (instance)*>

<!ELEMENT vpls-dyn-instance-name (#PCDATA)>

<!ELEMENT vpls-dyn-interface-name (#PCDATA)>

<!ELEMENT vpls-dyn-prof-session-information (vpls-dyn-session-entry)*>

<!ELEMENT vpls-dyn-profile-name (#PCDATA)>

<!ELEMENT vpls-dyn-session-entry (vpls-dyn-session-id | vpls-dyn-profile-name |
vpls-dyn-interface-name | vpls-dyn-instance-name)*>

<!ELEMENT vpls-dyn-session-id (#PCDATA)>

<!ELEMENT vpls-dynamic-interface-repository (instance-id | local-site-id |
remote-site-id | interface-name | local-interface-index | vpls-label |
interface-repository-state | mesh-group-id)*>

<!ELEMENT vpls-dynamic-interface-repository-information
(vpls-dynamic-interface-repository | vpls-fec129-dynamic-interface-repository |
vpls-ldp-dynamic-interface-repository-entity)*>

<!ELEMENT vpls-egress-p2mp-branch-lsp-name (#PCDATA)>

<!ELEMENT vpls-egress-p2mp-branch-lsp-state (#PCDATA)>
```


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```
<!ELEMENT vpls-fec129-dynamic-interface-repository (interface-name | neighbor-id
 | agi | saii | taii | vpls-label | interface-repository-state | mesh-group-id)*>

<!ELEMENT vpls-id (#PCDATA)>

<!ELEMENT vpls-ingress-p2mp-branch-lsp-name (#PCDATA)>

<!ELEMENT vpls-ingress-p2mp-branch-lsp-state (#PCDATA)>

<!ELEMENT vpls-ingress-p2mp-lsp-name (#PCDATA)>

<!ELEMENT vpls-label (#PCDATA)>

<!ELEMENT vpls-ldp-dynamic-interface-repository (vpls-id | neighbor-id |
interface-name | vpls-label | ifl-repository-state | mesh-group-id)*>

<!ELEMENT vpls-ldp-dynamic-interface-repository-entity (instance |
vpls-ldp-dynamic-interface-repository)*>

<!ELEMENT vpls-ldp-label-repository (neighbor-id | vpls-id | vpls-label |
label-repository-state)*>

<!ELEMENT vpls-ldp-label-repository-entity (instance-name |
vpls-ldp-label-repository)*>

<!ELEMENT vpls-ldp-label-repository-information
(vpls-ldp-label-repository-entity)*>

<!ELEMENT vpls-protocol-state (vpls-signaling-protocol-identifier |
num-local-interfaces | num-local-interfaces-up | irb-present | mesh-group-count
| mesh-group-up-count | mesh-group-interfaces | interface | mesh-group-connection
 | reference-site)*>

<!ELEMENT vpls-rsvp-te-ingress-p2mp-lsp (vpls-ingress-p2mp-lsp-name |
vpls-rsvp-te-p2mp-flood-nexthop-id)*>

<!ELEMENT vpls-rsvp-te-p2mp-flood-nexthop-id (#PCDATA)>

<!ELEMENT vpls-rsvp-te-p2mp-lsp-information (vpls-ingress-p2mp-branch-lsp-name |
 vpls-ingress-p2mp-branch-lsp-state | vpls-egress-p2mp-branch-lsp-name |
vpls-egress-p2mp-branch-lsp-state)*>

<!ELEMENT vpls-signaling-protocol-identifier (#PCDATA)>

<!ELEMENT vpls-statistics-information (instance | interface-statistics)*>

<!ELEMENT vpn-label (#PCDATA)>

<!ELEMENT vpn-rib-state (#PCDATA)>

<!ELEMENT vpnlabel-nh (#PCDATA)>

<!ELEMENT vrf-export (#PCDATA)>

<!ELEMENT vrf-export-target (#PCDATA)>

<!ELEMENT vrf-import (#PCDATA)>

<!ELEMENT vrf-import-target (#PCDATA)>

<!ELEMENT vrf-label-allocation (#PCDATA)>
```

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```
<!ELEMENT vrf-label-substitution (#PCDATA)>

<!ELEMENT vrrp-advertisement-sent-time (#PCDATA)>
<!ATTLIST vrrp-advertisement-sent-time junos:seconds CDATA #IMPLIED>

<!ELEMENT vrrp-advertisements-received (#PCDATA)>

<!ELEMENT vrrp-advertisements-sent (#PCDATA)>

<!ELEMENT vrrp-group (vrrp-group-id | vrrp-advertisements-sent |
vrrp-advertisement-sent-time | vrrp-solicits-received | vrrp-solicit-receive-time
 | vrrp-advertisements-received)*>

<!ELEMENT vrrp-group-id (#PCDATA)>

<!ELEMENT vrrp-solicit-receive-time (#PCDATA)>
<!ATTLIST vrrp-solicit-receive-time junos:seconds CDATA #IMPLIED>

<!ELEMENT vrrp-solicits-received (#PCDATA)>

<!ELEMENT warning-percentage (#PCDATA)>

<!ELEMENT weight (#PCDATA)>

<!ELEMENT wildcard EMPTY>

<!ELEMENT working-status (#PCDATA)>
```


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CHAPTER 125

DTD for RPM Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-rpm.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-rpm.dtd -->

<!ELEMENT accept-sessions-sent (#PCDATA)>

<!ELEMENT active-servers (configured-servers)*>

<!ELEMENT authentication-mode (#PCDATA)>

<!ELEMENT avg-delay (#PCDATA)>
<!ATTLIST avg-delay junos:format CDATA #IMPLIED>

<!ELEMENT client-address (#PCDATA)>

<!ELEMENT client-port (#PCDATA)>

<!ELEMENT configured-servers (protocol | port | destination-interface)*>

<!ELEMENT connection (connection-id | client-address | client-port | server-address
 | server-port | session-count | authentication-mode)*>

<!ELEMENT connection-id (#PCDATA)>

<!ELEMENT delay-thresh (#PCDATA)>

<!ELEMENT destination-interface (#PCDATA)>

<!ELEMENT egress (#PCDATA)>

<!ELEMENT egress-interarrival-jitter (#PCDATA)>

<!ELEMENT egress-jitter (#PCDATA)>
```

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```
<!ELEMENT egress-jitter-thresh (#PCDATA)>

<!ELEMENT egress-stddev-thresh (#PCDATA)>

<!ELEMENT egress-thresh (#PCDATA)>

<!ELEMENT hardware-timestamp-status (#PCDATA)>

<!ELEMENT history-results (history-test-results)*>

<!ELEMENT history-test-results (owner | test-name | target-address | target-url
| source-address | destination-interface | probe-type | probe-single-results |
probe-test-current-results | loss-thresh-total | loss-thresh-succ | delay-thresh
 | jitter-thresh | stddev-thresh | egress-thresh | egress-jitter-thresh |
ingress-thresh | ingress-jitter-thresh)*>
<!ATTLIST history-test-results junos:style CDATA #IMPLIED>

<!ELEMENT ingress (#PCDATA)>

<!ELEMENT ingress-interarrival-jitter (#PCDATA)>

<!ELEMENT ingress-jitter (#PCDATA)>

<!ELEMENT ingress-jitter-thresh (#PCDATA)>

<!ELEMENT ingress-stddev-thresh (#PCDATA)>

<!ELEMENT ingress-thresh (#PCDATA)>

<!ELEMENT internal-error (#PCDATA)>

<!ELEMENT ip-version (#PCDATA)>

<!ELEMENT jitter-delay (#PCDATA)>
<!ATTLIST jitter-delay junos:format CDATA #IMPLIED>

<!ELEMENT jitter-thresh (#PCDATA)>

<!ELEMENT last-sequence-number-received (#PCDATA)>

<!ELEMENT last-sequence-number-sent (#PCDATA)>

<!ELEMENT last-test-time (#PCDATA)>
<!ATTLIST last-test-time junos:seconds CDATA #IMPLIED>

<!ELEMENT loss-percentage (#PCDATA)>
<!ATTLIST loss-percentage junos:format CDATA #IMPLIED>

<!ELEMENT loss-thresh-succ (#PCDATA)>

<!ELEMENT loss-thresh-total (#PCDATA)>

<!ELEMENT max-delay (#PCDATA)>
<!ATTLIST max-delay junos:format CDATA #IMPLIED>

<!ELEMENT min-delay (#PCDATA)>
<!ATTLIST min-delay junos:format CDATA #IMPLIED>

<!ELEMENT owner (#PCDATA)>

<!ELEMENT packet-malformed (#PCDATA)>
```


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```
<!ELEMENT packet-statistics (request-sessions-received | accept-sessions-sent |
start-sessions-received | stop-sessions-received | test-packets-received |
test-packets-reflected | last-sequence-number-received | last-sequence-number-sent
 | test-packets-dropped | test-packets-dropped-details)*>

<!ELEMENT packet-unsupported (#PCDATA)>

<!ELEMENT padding-length (#PCDATA)>

<!ELEMENT port (#PCDATA)>

<!ELEMENT probe-last-test-info (last-test-time)*>

<!ELEMENT probe-last-test-results (probe-test-generic-results)*>

<!ELEMENT probe-responses (#PCDATA)>

<!ELEMENT probe-results (probe-test-results)*>

<!ELEMENT probe-results-type (#PCDATA)>

<!ELEMENT probe-single-results (owner | test-name | probe-time | probe-status |
hardware-timestamp-status | rtt | ingress | egress | egress-jitter | ingress-jitter
 | round-trip-jitter | egress-interarrival-jitter | ingress-interarrival-jitter
| round-trip-interarrival-jitter)*>
<!ATTLIST probe-single-results junos:style CDATA #IMPLIED>

<!ELEMENT probe-status (#PCDATA)>

<!ELEMENT probe-summary-results (probe-results-type | min-delay | max-delay |
avg-delay | jitter-delay | stddev-delay | sum-delay | samples)*>

<!ELEMENT probe-test-current-results (probe-test-generic-results)*>

<!ELEMENT probe-test-egress (probe-summary-results)*>

<!ELEMENT probe-test-generic-results (probes-sent | probe-responses |
loss-percentage | results-scope | probe-last-test-info | probe-test-rtt |
probe-test-egress | probe-test-ingress | probe-test-positive-egress-jitter |
probe-test-negative-egress-jitter | probe-test-positive-ingress-jitter |
probe-test-negative-ingress-jitter | probe-test-positive-round-trip-jitter |
probe-test-negative-round-trip-jitter)*>

<!ELEMENT probe-test-global-results (probe-test-generic-results)*>

<!ELEMENT probe-test-ingress (probe-summary-results)*>

<!ELEMENT probe-test-moving-results (probe-test-generic-results)*>

<!ELEMENT probe-test-negative-egress-jitter (probe-summary-results)*>

<!ELEMENT probe-test-negative-ingress-jitter (probe-summary-results)*>

<!ELEMENT probe-test-negative-round-trip-jitter (probe-summary-results)*>

<!ELEMENT probe-test-positive-egress-jitter (probe-summary-results)*>

<!ELEMENT probe-test-positive-ingress-jitter (probe-summary-results)*>

<!ELEMENT probe-test-positive-round-trip-jitter (probe-summary-results)*>
```

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```
<!ELEMENT probe-test-results (owner | test-name | target-address | target-url |
source-address | destination-interface | probe-type | test-size |
routing-instance-name | loss-thresh-total | loss-thresh-succ | delay-thresh |
jitter-thresh | stddev-thresh | egress-thresh | egress-jitter-thresh |
egress-stddev-thresh | ingress-thresh | ingress-jitter-thresh |
ingress-stddev-thresh | probe-single-results | probe-test-current-results |
probe-last-test-results | probe-test-moving-results | probe-test-global-results)*>

<!ELEMENT probe-test-rtt (probe-summary-results)*>

<!ELEMENT probe-time (#PCDATA)>
<!ATTLIST probe-time junos:seconds CDATA #IMPLIED>

<!ELEMENT probe-type (#PCDATA)>

<!ELEMENT probes-sent (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT reflector-address (#PCDATA)>

<!ELEMENT reflector-port (#PCDATA)>

<!ELEMENT request-sessions-received (#PCDATA)>

<!ELEMENT results-scope (#PCDATA)>

<!ELEMENT round-trip-interarrival-jitter (#PCDATA)>

<!ELEMENT round-trip-jitter (#PCDATA)>

<!ELEMENT routing-instance-name (#PCDATA)>

<!ELEMENT rtt (#PCDATA)>

<!ELEMENT samples (#PCDATA)>
<!ATTLIST samples junos:format CDATA #IMPLIED>

<!ELEMENT sender-address (#PCDATA)>

<!ELEMENT sender-port (#PCDATA)>

<!ELEMENT server (session)*>

<!ELEMENT server-address (#PCDATA)>

<!ELEMENT server-port (#PCDATA)>

<!ELEMENT server-statistics (packet-statistics)*>

<!ELEMENT session (session-id | connection-id | sender-address | sender-port |
reflector-address | reflector-port | session-state | authentication-mode |
ip-version | padding-length | start-time | timeout | packet-statistics)*>
<!ATTLIST session junos:style CDATA #IMPLIED>

<!ELEMENT session-count (#PCDATA)>

<!ELEMENT session-id (#PCDATA)>

<!ELEMENT session-nonexist (#PCDATA)>
```


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```
<!ELEMENT session-notactive (#PCDATA)>

<!ELEMENT session-state (#PCDATA)>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT start-sessions-received (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>

<!ELEMENT stddev-delay (#PCDATA)>
<!ATTLIST stddev-delay junos:format CDATA #IMPLIED>

<!ELEMENT stddev-thresh (#PCDATA)>

<!ELEMENT stop-sessions-received (#PCDATA)>

<!ELEMENT sum-delay (#PCDATA)>
<!ATTLIST sum-delay junos:format CDATA #IMPLIED>

<!ELEMENT target-address (#PCDATA)>

<!ELEMENT target-url (#PCDATA)>

<!ELEMENT test-name (#PCDATA)>

<!ELEMENT test-packets-dropped (#PCDATA)>

<!ELEMENT test-packets-dropped-details (session-nonexist | session-notactive |
packet-unsupported | packet-malformed | internal-error)*>

<!ELEMENT test-packets-received (#PCDATA)>

<!ELEMENT test-packets-reflected (#PCDATA)>

<!ELEMENT test-size (#PCDATA)>
<!ATTLIST test-size junos:format CDATA #IMPLIED>

<!ELEMENT timeout (#PCDATA)>

<!ELEMENT twamp-server-information (connection | server | server-statistics)*>
```

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CHAPTER 126

DTD for Routing and Fowarding Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-rtinfo.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-rtinfo.dtd -->

<!ELEMENT address-family (#PCDATA)>

<!ELEMENT address-family-number (#PCDATA)>

<!ELEMENT alt-fwdnh-index (#PCDATA)>

<!ELEMENT bd-name (#PCDATA)>

<!ELEMENT bridge-mac-destination-address-statistics (packet-count | byte-count)*>

<!ELEMENT bridge-mac-source-address-statistics (packet-count | byte-count)*>

<!ELEMENT bridge-table-deleted EMPTY>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT configuration-read-error EMPTY>

<!ELEMENT configured-fib-local (#PCDATA)>

<!ELEMENT configured-fib-remote (#PCDATA)>

<!ELEMENT configured-protocols (#PCDATA)>

<!ELEMENT destination-type (#PCDATA)>

<!ELEMENT epoch (#PCDATA)>
```

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```
<!ELEMENT fib-localization-configuration (configured-protocols |
configured-fib-local | configured-fib-remote | configuration-read-error)*>

<!ELEMENT fib-localization-information (fib-localization-configuration |
fib-localization-state | fpc-slot-to-forwarding-engine-addresses-map)*>
<!ATTLIST fib-localization-information junos:style CDATA #IMPLIED>

<!ELEMENT fib-localization-state (ready-fib-local | ready-fib-remote | ready-normal
 | state-read-failed-on-backup | state-read-error)*>

<!ELEMENT flood-token (#PCDATA)>

<!ELEMENT forwarding-table-information (route-table)*>

<!ELEMENT fpc-slot-to-forwarding-engine-addresses-map (map-entry |
map-read-error)*>

<!ELEMENT ifl-generation (#PCDATA)>

<!ELEMENT l2al-rtflags (#PCDATA)>

<!ELEMENT learn-mask (#PCDATA)>

<!ELEMENT learn-vlan (#PCDATA)>

<!ELEMENT logical-system-name (#PCDATA)>

<!ELEMENT mac-sequence-number (#PCDATA)>

<!ELEMENT map-entry (#PCDATA)>

<!ELEMENT map-read-error EMPTY>

<!ELEMENT nh (to | nh-type | nh-index | nh-reference-count | nh-cfi-index |
nh-key-flags | via | nh-weight | nh-balance | nh-uflags | nh-composite-num-nhs |
 nh-composite-nh-index | nh-composite-function | nh-composite-num-derived-nhs |
nh-composite-derived-nh-index | alt-fwdnh-index | nh-l3-interface | nh-l2-interface
 | nh-le-beb-mac)*>

<!ELEMENT nh-balance (#PCDATA)>

<!ELEMENT nh-cfi-index (#PCDATA)>

<!ELEMENT nh-composite-derived-nh-index (#PCDATA)>

<!ELEMENT nh-composite-function (#PCDATA)>

<!ELEMENT nh-composite-nh-index (#PCDATA)>

<!ELEMENT nh-composite-num-derived-nhs (#PCDATA)>

<!ELEMENT nh-composite-num-nhs (#PCDATA)>

<!ELEMENT nh-index (#PCDATA)>

<!ELEMENT nh-key-flags (#PCDATA)>

<!ELEMENT nh-l2-interface (nh-l2-interface-name)*>

<!ELEMENT nh-l2-interface-name (#PCDATA)>
```


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```
<!ELEMENT nh-l3-interface (#PCDATA)>

<!ELEMENT nh-le-beb-mac (#PCDATA)>

<!ELEMENT nh-reference-count (#PCDATA)>

<!ELEMENT nh-type (#PCDATA)>

<!ELEMENT nh-uflags (#PCDATA)>

<!ELEMENT nh-weight (#PCDATA)>

<!ELEMENT packet-count (#PCDATA)>

<!ELEMENT pbbn-route-table-deleted EMPTY>

<!ELEMENT pbbn-table-name (#PCDATA)>

<!ELEMENT ready-fib-local (#PCDATA)>

<!ELEMENT ready-fib-remote (#PCDATA)>

<!ELEMENT ready-normal (#PCDATA)>

<!ELEMENT route-count (#PCDATA)>

<!ELEMENT route-flags (#PCDATA)>

<!ELEMENT route-interface-index (#PCDATA)>

<!ELEMENT route-reference-count (#PCDATA)>

<!ELEMENT route-table (logical-system-name | table-name | bd-name | pbbn-table-name
 | route-table-deleted | pbbn-route-table-deleted | bridge-table-deleted |
address-family | address-family-number | rt-entry | route-table-summary)*>

<!ELEMENT route-table-deleted EMPTY>

<!ELEMENT route-table-summary (route-table-type | route-count)*>

<!ELEMENT route-table-type (#PCDATA)>

<!ELEMENT rpf-information (via)*>

<!ELEMENT rt-destination (#PCDATA)>

<!ELEMENT rt-entry (rt-destination | learn-vlan | destination-type |
route-reference-count | route-interface-index | ifl-generation | epoch |
flood-token | mac-sequence-number | learn-mask | l2al-rtflags | route-flags |
vlan-index | vlan-flags | nh | rpf-information | vpls-mac-source-address-statistics
 | vpls-mac-destination-address-statistics | bridge-mac-source-address-statistics
 | bridge-mac-destination-address-statistics)*>
<!ATTLIST rt-entry junos:style CDATA #IMPLIED>

<!ELEMENT state-read-error EMPTY>

<!ELEMENT state-read-failed-on-backup EMPTY>

<!ELEMENT table-name (#PCDATA)>
```

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```
<!ELEMENT to (#PCDATA)>

<!ELEMENT via (#PCDATA)>

<!ELEMENT vlan-flags (#PCDATA)>

<!ELEMENT vlan-index (#PCDATA)>

<!ELEMENT vpls-mac-destination-address-statistics (packet-count | byte-count)*>

<!ELEMENT vpls-mac-source-address-statistics (packet-count | byte-count)*>
```


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CHAPTER 127

DTD for SDX Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-sdx.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-sdx.dtd -->

<!ELEMENT address (#PCDATA)>

<!ELEMENT connection-status (state | address | port | date-time)*>

<!ELEMENT date-time (#PCDATA)>
<!ATTLIST date-time junos:seconds CDATA #IMPLIED>

<!ELEMENT elapsed-time (#PCDATA)>

<!ELEMENT interval (#PCDATA)>

<!ELEMENT keepalive-count (#PCDATA)>

<!ELEMENT keepalive-information (interval | keepalive-count | elapsed-time)*>

<!ELEMENT notification-count (#PCDATA)>

<!ELEMENT notification-information (notification-count | elapsed-time)*>

<!ELEMENT peer-information (elapsed-time)*>

<!ELEMENT port (#PCDATA)>

<!ELEMENT sdx-information (unconfigured | connection-status | keepalive-information
 | notification-information | peer-information)*>

<!ELEMENT state (#PCDATA)>

<!ELEMENT unconfigured EMPTY>
```

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CHAPTER 128

DTD for SecPolInfo Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-secpolinfo.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-secpolinfo.dtd -->

<!ELEMENT area (#PCDATA)>

<!ELEMENT current (#PCDATA)>
<!ATTLIST current junos:format CDATA #IMPLIED>

<!ELEMENT maximum (#PCDATA)>
<!ATTLIST maximum junos:format CDATA #IMPLIED>

<!ELEMENT resource (area | current | maximum)*>

<!ELEMENT resource-utilization (resource)*>

<!ELEMENT secpolinfo-policy (secpolinfo-policy-provider-prefix |
secpolinfo-policy-provider-id | secpolinfo-policy-applied-role |
secpolinfo-policy-applied-policy | secpolinfo-policy-inherited-role |
secpolinfo-policy-inherited-policy | resource-utilization)*>
<!ATTLIST secpolinfo-policy junos:style CDATA #IMPLIED>

<!ELEMENT secpolinfo-policy-applied-policy (#PCDATA)>

<!ELEMENT secpolinfo-policy-applied-role (#PCDATA)>

<!ELEMENT secpolinfo-policy-information (secpolinfo-policy)*>

<!ELEMENT secpolinfo-policy-inherited-policy (#PCDATA)>

<!ELEMENT secpolinfo-policy-inherited-role (#PCDATA)>

<!ELEMENT secpolinfo-policy-provider-id (#PCDATA)>
```

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```
<!ELEMENT secpolinfo-policy-provider-prefix (#PCDATA)>
```


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CHAPTER 129

DTD for Services Accounting Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-services-accounting.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-services-accounting.dtd -->

<!ELEMENT active-flows (#PCDATA)>

<!ELEMENT active-timeout-failures (#PCDATA)>

<!ELEMENT allocation-count (#PCDATA)>

<!ELEMENT allocations-per-second (#PCDATA)>

<!ELEMENT bgp-nexthop (#PCDATA)>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT destination-address (#PCDATA)>

<!ELEMENT destination-as (#PCDATA)>

<!ELEMENT destination-ipv6-address (#PCDATA)>

<!ELEMENT destination-mask (#PCDATA)>

<!ELEMENT destination-peer-as (#PCDATA)>

<!ELEMENT destination-port (#PCDATA)>
<!ATTLIST destination-port junos:format CDATA #IMPLIED>

<!ELEMENT destination-prefix-length (#PCDATA)>
```

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```
<!ELEMENT detail-entry (tos | protocol | tcp-flags | source-address |
source-prefix-length | destination-address | destination-prefix-length |
source-port | destination-port | input-snmp-interface-index |
output-snmp-interface-index | input-interface-name | output-interface-name |
source-as | destination-as | start-time | end-time | packet-count | byte-count |
 last-active-timeout | source-mask | destination-mask | icmp-type | mpls-label-1
 | mpls-label-2 | mpls-label-3 | top-label-address | source-ipv6-address |
destination-ipv6-address | destination-peer-as | bgp-nexthop | flow-count)*>

<!ELEMENT end-time (#PCDATA)>
<!ATTLIST end-time junos:seconds CDATA #IMPLIED>

<!ELEMENT error-allocation-failures (#PCDATA)>

<!ELEMENT error-bytes-per-second-overload (#PCDATA)>

<!ELEMENT error-free-failures (#PCDATA)>

<!ELEMENT error-free-list-failures (#PCDATA)>

<!ELEMENT error-information (error-packets-dropped-no-memory |
error-packets-dropped-not-ip | error-packets-dropped-not-ipv4 |
error-packets-too-small | error-allocation-failures | error-free-failures |
error-free-list-failures | error-memory-warning | error-memory-overload |
error-packets-per-second-overload | error-bytes-per-second-overload)*>

<!ELEMENT error-memory-overload (#PCDATA)>

<!ELEMENT error-memory-warning (#PCDATA)>

<!ELEMENT error-packets-dropped-no-memory (#PCDATA)>

<!ELEMENT error-packets-dropped-not-ip (#PCDATA)>

<!ELEMENT error-packets-dropped-not-ipv4 (#PCDATA)>

<!ELEMENT error-packets-per-second-overload (#PCDATA)>

<!ELEMENT error-packets-too-small (#PCDATA)>

<!ELEMENT export-packet-failures (#PCDATA)>

<!ELEMENT five-second-load (#PCDATA)>

<!ELEMENT flow-aggregate-as-detail (detail-entry)*>
<!ATTLIST flow-aggregate-as-detail junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-destination-prefix-detail (detail-entry)*>
<!ATTLIST flow-aggregate-destination-prefix-detail junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-protocol-port-detail (detail-entry)*>
<!ATTLIST flow-aggregate-protocol-port-detail junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-source-destination-prefix-detail (detail-entry)*>
<!ATTLIST flow-aggregate-source-destination-prefix-detail junos:style CDATA
#IMPLIED>

<!ELEMENT flow-aggregate-source-prefix-detail (detail-entry)*>
<!ATTLIST flow-aggregate-source-prefix-detail junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-template-detail (flow-aggregate-template-detail-ipv4 |
```


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```
flow-aggregate-template-detail-mpls | flow-aggregate-template-detail-mpls-ipv4 |
 flow-aggregate-template-detail-ipv6 |
flow-aggregate-template-detail-peer-as-billing)*>

<!ELEMENT flow-aggregate-template-detail-ipv4 (detail-entry)*>
<!ATTLIST flow-aggregate-template-detail-ipv4 junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-template-detail-ipv6 (detail-entry)*>
<!ATTLIST flow-aggregate-template-detail-ipv6 junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-template-detail-mpls (detail-entry)*>
<!ATTLIST flow-aggregate-template-detail-mpls junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-template-detail-mpls-ipv4 (detail-entry)*>
<!ATTLIST flow-aggregate-template-detail-mpls-ipv4 junos:style CDATA #IMPLIED>

<!ELEMENT flow-aggregate-template-detail-peer-as-billing (detail-entry)*>
<!ATTLIST flow-aggregate-template-detail-peer-as-billing junos:style CDATA
#IMPLIED>

<!ELEMENT flow-bytes (#PCDATA)>

<!ELEMENT flow-bytes-ten-second-rate (#PCDATA)>

<!ELEMENT flow-count (#PCDATA)>

<!ELEMENT flow-creation-failures (#PCDATA)>

<!ELEMENT flow-detail (detail-entry)*>
<!ATTLIST flow-detail junos:style CDATA #IMPLIED>

<!ELEMENT flow-information (interface-name | local_ifd_index | flow-packets |
flow-bytes | flow-packets-ten-second-rate | flow-bytes-ten-second-rate |
active-flows | flows | flows-exported | flow-packets-exported | flows-expired |
flows-aged)*>

<!ELEMENT flow-packets (#PCDATA)>

<!ELEMENT flow-packets-exported (#PCDATA)>

<!ELEMENT flow-packets-ten-second-rate (#PCDATA)>

<!ELEMENT flows (#PCDATA)>

<!ELEMENT flows-aged (#PCDATA)>

<!ELEMENT flows-expired (#PCDATA)>

<!ELEMENT flows-exported (#PCDATA)>

<!ELEMENT fpc-slot (#PCDATA)>

<!ELEMENT free-count (#PCDATA)>

<!ELEMENT frees-per-second (#PCDATA)>

<!ELEMENT icmp-type (#PCDATA)>

<!ELEMENT inline-active-flows (#PCDATA)>

<!ELEMENT inline-as-lookup-failures (#PCDATA)>
```

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```
<!ELEMENT inline-export-packet-failures (#PCDATA)>
<!ELEMENT inline-flow-bytes (#PCDATA)>
<!ELEMENT inline-flow-creation-failures (#PCDATA)>
<!ELEMENT inline-flow-packets (#PCDATA)>
<!ELEMENT inline-flow-packets-exported (#PCDATA)>
<!ELEMENT inline-flows (#PCDATA)>
<!ELEMENT inline-flows-aged (#PCDATA)>
<!ELEMENT inline-flows-expired (#PCDATA)>
<!ELEMENT inline-flows-exported (#PCDATA)>
<!ELEMENT inline-ipv4-active-flows (#PCDATA)>
<!ELEMENT inline-ipv4-as-lookup-failures (#PCDATA)>
<!ELEMENT inline-ipv4-errors (#PCDATA)>
<!ELEMENT inline-ipv4-export-packet-failures (#PCDATA)>
<!ELEMENT inline-ipv4-flow-bytes (#PCDATA)>
<!ELEMENT inline-ipv4-flow-creation-failures (#PCDATA)>
<!ELEMENT inline-ipv4-flow-packets (#PCDATA)>
<!ELEMENT inline-ipv4-flow-packets-exported (#PCDATA)>
<!ELEMENT inline-ipv4-flows (#PCDATA)>
<!ELEMENT inline-ipv4-flows-aged (#PCDATA)>
<!ELEMENT inline-ipv4-flows-expired (#PCDATA)>
<!ELEMENT inline-ipv4-flows-exported (#PCDATA)>
<!ELEMENT inline-ipv4-route-record-lookup-failure (#PCDATA)>
<!ELEMENT inline-ipv4-total-flows (#PCDATA)>
<!ELEMENT inline-ipv6-active-flows (#PCDATA)>
<!ELEMENT inline-ipv6-as-lookup-failures (#PCDATA)>
<!ELEMENT inline-ipv6-errors (#PCDATA)>
<!ELEMENT inline-ipv6-export-packet-failures (#PCDATA)>
<!ELEMENT inline-ipv6-flow-bytes (#PCDATA)>
<!ELEMENT inline-ipv6-flow-creation-failures (#PCDATA)>
<!ELEMENT inline-ipv6-flow-packets (#PCDATA)>
```


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```
<!ELEMENT inline-ipv6-flow-packets-exported (#PCDATA)>

<!ELEMENT inline-ipv6-flows (#PCDATA)>

<!ELEMENT inline-ipv6-flows-aged (#PCDATA)>

<!ELEMENT inline-ipv6-flows-expired (#PCDATA)>

<!ELEMENT inline-ipv6-flows-exported (#PCDATA)>

<!ELEMENT inline-ipv6-route-record-lookup-failure (#PCDATA)>

<!ELEMENT inline-ipv6-total-flows (#PCDATA)>

<!ELEMENT inline-jflow-error-information (fpc-slot | tfeb-slot |
inline-flow-creation-failures | ring-buffer-failures |
inline-route-record-lookup-failure | inline-as-lookup-failures |
inline-export-packet-failures | inline-ipv4-errors |
inline-ipv4-flow-creation-failures | inline-ipv4-route-record-lookup-failure |
inline-ipv4-as-lookup-failures | inline-ipv4-export-packet-failures |
inline-ipv6-errors | inline-ipv6-flow-creation-failures |
inline-ipv6-route-record-lookup-failure | inline-ipv6-as-lookup-failures |
inline-ipv6-export-packet-failures | inline-memory-overload)*>

<!ELEMENT inline-jflow-flow-information (fpc-slot | tfeb-slot | inline-flow-packets
 | inline-flow-bytes | inline-active-flows | inline-flows | inline-flows-exported
 | inline-flow-packets-exported | inline-flows-expired | inline-flows-aged |
inline-ipv4-flows | inline-ipv4-flow-packets | inline-ipv4-flow-bytes |
inline-ipv4-active-flows | inline-ipv4-total-flows | inline-ipv4-flows-exported
| inline-ipv4-flow-packets-exported | inline-ipv4-flows-expired |
inline-ipv4-flows-aged | inline-ipv6-flows | inline-ipv6-flow-packets |
inline-ipv6-flow-bytes | inline-ipv6-active-flows | inline-ipv6-total-flows |
inline-ipv6-flows-exported | inline-ipv6-flow-packets-exported |
inline-ipv6-flows-expired | inline-ipv6-flows-aged)*>

<!ELEMENT inline-jflow-status-information (fpc-slot | tfeb-slot |
inline-status-export-format | inline-status-route-record-count |
inline-status-ipv4-route-record-count | inline-status-ipv6-route-record-count |
inline-status-as-count | ring-buffer-entries | inline-status-route-record-set |
inline-status-config-set)*>

<!ELEMENT inline-memory-overload (#PCDATA)>

<!ELEMENT inline-route-record-lookup-failure (#PCDATA)>

<!ELEMENT inline-status-as-count (#PCDATA)>

<!ELEMENT inline-status-config-set (#PCDATA)>

<!ELEMENT inline-status-export-format (#PCDATA)>

<!ELEMENT inline-status-ipv4-route-record-count (#PCDATA)>

<!ELEMENT inline-status-ipv6-route-record-count (#PCDATA)>

<!ELEMENT inline-status-route-record-count (#PCDATA)>

<!ELEMENT inline-status-route-record-set (#PCDATA)>

<!ELEMENT input-interface-name (#PCDATA)>
```

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```
<!ELEMENT input-snmp-interface-index (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT inttime (#PCDATA)>

<!ELEMENT last-active-timeout (time-delta | last-packet-count | last-byte-count)*>

<!ELEMENT last-byte-count (#PCDATA)>

<!ELEMENT last-packet-count (#PCDATA)>

<!ELEMENT local-index (#PCDATA)>

<!ELEMENT local_ifd_index (#PCDATA)>

<!ELEMENT maximum-allocated (#PCDATA)>

<!ELEMENT memory-free (#PCDATA)>

<!ELEMENT memory-information (interface-name | allocation-count | free-count |
maximum-allocated | allocations-per-second | frees-per-second | memory-used |
memory-free | v9-memory-used)*>
<!ATTLIST memory-information junos:style CDATA #IMPLIED>

<!ELEMENT memory-overload (#PCDATA)>

<!ELEMENT memory-used (#PCDATA)>

<!ELEMENT mpls-label-1 (#PCDATA)>

<!ELEMENT mpls-label-2 (#PCDATA)>

<!ELEMENT mpls-label-3 (#PCDATA)>

<!ELEMENT one-minute-load (#PCDATA)>

<!ELEMENT output-interface-name (#PCDATA)>

<!ELEMENT output-snmp-interface-index (#PCDATA)>

<!ELEMENT packet-count (#PCDATA)>

<!ELEMENT packet-distribution-information (packet-size-range-start |
packet-size-range-end | range-number-packets | range-percentage-packets)*>

<!ELEMENT packet-size-range-end (#PCDATA)>

<!ELEMENT packet-size-range-start (#PCDATA)>

<!ELEMENT pic-status (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>
<!ATTLIST protocol junos:format CDATA #IMPLIED>

<!ELEMENT range-number-packets (#PCDATA)>

<!ELEMENT range-percentage-packets (#PCDATA)>

<!ELEMENT ring-buffer-entries (#PCDATA)>
```


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```
<!ELEMENT ring-buffer-failures (#PCDATA)>

<!ELEMENT service-name (#PCDATA)>

<!ELEMENT service-set-dropped (#PCDATA)>

<!ELEMENT services-accounting-information (service-name | interface-name |
pic-status | local-index | usage-information | memory-information |
flow-information | inline-jflow-flow-information | packet-distribution-information
 | error-information | inline-jflow-error-information | v9-error-information |
status-information | inline-jflow-status-information | flow-detail |
flow-aggregate-template-detail | flow-aggregate-as-detail |
flow-aggregate-protocol-port-detail | flow-aggregate-source-prefix-detail |
flow-aggregate-destination-prefix-detail |
flow-aggregate-source-destination-prefix-detail)*>
<!ATTLIST services-accounting-information junos:style CDATA #IMPLIED>

<!ELEMENT source-address (#PCDATA)>

<!ELEMENT source-as (#PCDATA)>

<!ELEMENT source-ipv6-address (#PCDATA)>

<!ELEMENT source-mask (#PCDATA)>

<!ELEMENT source-port (#PCDATA)>
<!ATTLIST source-port junos:format CDATA #IMPLIED>

<!ELEMENT source-prefix-length (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT status-as-count (#PCDATA)>

<!ELEMENT status-engine-id (#PCDATA)>

<!ELEMENT status-engine-type (#PCDATA)>

<!ELEMENT status-export-format (#PCDATA)>

<!ELEMENT status-export-interval (#PCDATA)>

<!ELEMENT status-ifl-snmp-map-count (#PCDATA)>

<!ELEMENT status-information (status-service-id | status-export-interval |
interface-name | status-export-format | status-proto | status-engine-type |
status-engine-id | status-route-record-count | status-ifl-snmp-map-count |
status-as-count | status-monitor-time-set | status-monitor-config-set |
status-monitor-route-record-set | status-monitor-ifl-snmp-set)*>
<!ATTLIST status-information junos:style CDATA #IMPLIED>

<!ELEMENT status-monitor-config-set (#PCDATA)>

<!ELEMENT status-monitor-ifl-snmp-set (#PCDATA)>

<!ELEMENT status-monitor-route-record-set (#PCDATA)>

<!ELEMENT status-monitor-time-set (#PCDATA)>

<!ELEMENT status-proto (#PCDATA)>
```

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```
<!ELEMENT status-route-record-count (#PCDATA)>

<!ELEMENT status-service-id (#PCDATA)>

<!ELEMENT tcp-flags (#PCDATA)>

<!ELEMENT tfeb-slot (#PCDATA)>

<!ELEMENT time-delta (#PCDATA)>
<!ATTLIST time-delta junos:seconds CDATA #IMPLIED>

<!ELEMENT top-label-address (#PCDATA)>

<!ELEMENT tos (#PCDATA)>

<!ELEMENT uptime (#PCDATA)>

<!ELEMENT usage-information (interface-name | uptime | inttime | five-second-load
 | one-minute-load)*>

<!ELEMENT v9-error-information (interface-name | service-set-dropped |
active-timeout-failures | export-packet-failures | flow-creation-failures |
memory-overload)*>

<!ELEMENT v9-memory-used (#PCDATA)>
```


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CHAPTER 130

DTD for Services Flow Collector Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-services-flow-collector.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-services-flow-collector.dtd -->

<!ELEMENT block-count (#PCDATA)>

<!ELEMENT blocks-allocated (#PCDATA)>

<!ELEMENT blocks-allocated-per-second (#PCDATA)>

<!ELEMENT blocks-freed (#PCDATA)>

<!ELEMENT blocks-freed-per-second (#PCDATA)>

<!ELEMENT blocks-unavailable (#PCDATA)>

<!ELEMENT blocks-unavailable-per-second (#PCDATA)>

<!ELEMENT bytes (#PCDATA)>

<!ELEMENT bytes-per-second (#PCDATA)>

<!ELEMENT clear-flow-collector-statistics-response (#PCDATA)>

<!ELEMENT compressed-block-count (#PCDATA)>

<!ELEMENT compressed-bytes (#PCDATA)>

<!ELEMENT compressed-bytes-per-second (#PCDATA)>
```

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```
<!ELEMENT current-server (#PCDATA)>

<!ELEMENT export-channel (export-channel-index | current-server |
primary-server-state | secondary-server-state)*>

<!ELEMENT export-channel-index (#PCDATA)>

<!ELEMENT file (file-name | flow-records | flow-records-per-second |
peak-flow-records-per-second | uncompressed-bytes | uncompressed-bytes-per-second
 | peak-uncompressed-bytes-per-second | compressed-bytes |
compressed-bytes-per-second | peak-compressed-bytes-per-second |
compressed-block-count | block-count | state | transfer-attempts)*>

<!ELEMENT file-information (file)*>
<!ATTLIST file-information junos:style CDATA #IMPLIED>

<!ELEMENT file-name (#PCDATA)>

<!ELEMENT files-created (#PCDATA)>

<!ELEMENT files-created-per-second (#PCDATA)>

<!ELEMENT files-destroyed (#PCDATA)>

<!ELEMENT files-destroyed-per-second (#PCDATA)>

<!ELEMENT files-exported (#PCDATA)>

<!ELEMENT files-exported-per-second (#PCDATA)>

<!ELEMENT flow-collector-destination-response (#PCDATA)>

<!ELEMENT flow-record-processed (#PCDATA)>

<!ELEMENT flow-record-processed-per-second (#PCDATA)>

<!ELEMENT flow-records (#PCDATA)>

<!ELEMENT flow-records-per-second (#PCDATA)>

<!ELEMENT ftp-bytes (#PCDATA)>

<!ELEMENT ftp-bytes-per-second (#PCDATA)>

<!ELEMENT ftp-failures (#PCDATA)>

<!ELEMENT ftp-files (#PCDATA)>

<!ELEMENT ftp-files-per-second (#PCDATA)>

<!ELEMENT input (input-interface | packets | bytes)*>

<!ELEMENT input-information (input)*>

<!ELEMENT input-interface (#PCDATA)>

<!ELEMENT interface-name (#PCDATA)>

<!ELEMENT memory-free (#PCDATA)>

<!ELEMENT memory-used (#PCDATA)>
```


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```
<!ELEMENT packet-icmp-drops (#PCDATA)>

<!ELEMENT packet-ip-fragment-drops (#PCDATA)>

<!ELEMENT packet-no-memory-drops (#PCDATA)>

<!ELEMENT packet-not-ip-drops (#PCDATA)>

<!ELEMENT packet-not-ipv4-drops (#PCDATA)>

<!ELEMENT packet-not-jflow-drops (#PCDATA)>

<!ELEMENT packet-tcp-drops (#PCDATA)>

<!ELEMENT packet-too-small-drops (#PCDATA)>

<!ELEMENT packet-unknown-drops (#PCDATA)>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT packets-per-second (#PCDATA)>

<!ELEMENT peak-blocks-allocated-per-second (#PCDATA)>

<!ELEMENT peak-blocks-freed-per-second (#PCDATA)>

<!ELEMENT peak-blocks-unavailable-per-second (#PCDATA)>

<!ELEMENT peak-bytes-per-second (#PCDATA)>

<!ELEMENT peak-compressed-bytes-per-second (#PCDATA)>

<!ELEMENT peak-files-created-per-second (#PCDATA)>

<!ELEMENT peak-files-destroyed-per-second (#PCDATA)>

<!ELEMENT peak-files-exported-per-second (#PCDATA)>

<!ELEMENT peak-flow-record-processed-per-second (#PCDATA)>

<!ELEMENT peak-flow-records-per-second (#PCDATA)>

<!ELEMENT peak-ftp-bytes-per-second (#PCDATA)>

<!ELEMENT peak-ftp-files-per-second (#PCDATA)>

<!ELEMENT peak-packets-per-second (#PCDATA)>

<!ELEMENT peak-uncompressed-bytes-per-second (#PCDATA)>

<!ELEMENT pic-status (#PCDATA)>

<!ELEMENT primary-server-state (#PCDATA)>

<!ELEMENT secondary-server-state (#PCDATA)>

<!ELEMENT services-flow-collector-information (interface-name | pic-status |
statistics-information | file-information | input-information |
flow-collector-destination-response | test-file-transfer-response |
clear-flow-collector-statistics-response)*>
```

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```
<!ELEMENT state (#PCDATA)>

<!ELEMENT statistics-information (memory-used | memory-free | packets |
packets-per-second | peak-packets-per-second | bytes | bytes-per-second |
peak-bytes-per-second | flow-record-processed | flow-record-processed-per-second
 | peak-flow-record-processed-per-second | blocks-allocated |
blocks-allocated-per-second | peak-blocks-allocated-per-second | blocks-freed |
blocks-freed-per-second | peak-blocks-freed-per-second | blocks-unavailable |
blocks-unavailable-per-second | peak-blocks-unavailable-per-second | files-created
 | files-created-per-second | peak-files-created-per-second | files-exported |
files-exported-per-second | peak-files-exported-per-second | files-destroyed |
files-destroyed-per-second | peak-files-destroyed-per-second | uncompressed-bytes
 | uncompressed-bytes-per-second | peak-uncompressed-bytes-per-second |
compressed-bytes | compressed-bytes-per-second | peak-compressed-bytes-per-second
 | packet-no-memory-drops | packet-not-ip-drops | packet-not-ipv4-drops |
packet-too-small-drops | packet-ip-fragment-drops | packet-icmp-drops |
packet-tcp-drops | packet-unknown-drops | packet-not-jflow-drops | ftp-bytes |
ftp-bytes-per-second | peak-ftp-bytes-per-second | ftp-files | ftp-files-per-second
 | peak-ftp-files-per-second | ftp-failures | export-channel)*>
<!ATTLIST statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT test-file-transfer-response (#PCDATA)>

<!ELEMENT transfer-attempts (#PCDATA)>

<!ELEMENT uncompressed-bytes (#PCDATA)>

<!ELEMENT uncompressed-bytes-per-second (#PCDATA)>
```


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CHAPTER 131

DTD for Shared Memory Event Library Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-shmlog.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-shmlog.dtd -->

<!ELEMENT shmlog-information (user-information)*>

<!ELEMENT user-information (#PCDATA)>
```

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CHAPTER 132

DTD for Shutdown Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-shutdown.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-shutdown.dtd -->

<!ELEMENT clear-reboot-status (reboot-information-results |
clear-reboot-status-results)*>

<!ELEMENT clear-reboot-status-results (#PCDATA)>

<!ELEMENT reboot-information (reboot-information-results)*>

<!ELEMENT reboot-information-results (#PCDATA)>

<!ELEMENT request-reboot-results (request-reboot-status)*>

<!ELEMENT request-reboot-status (#PCDATA)>
<!ATTLIST request-reboot-status reboot-time CDATA #IMPLIED>
```

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CHAPTER 133

DTD for Server Load Balancer Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-slbd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-slbd.dtd -->

<!ELEMENT ext-manager-information (slb-ext-manager-information)*>
<!ATTLIST ext-manager-information junos:style CDATA #IMPLIED>

<!ELEMENT ext-manager-statistics-information (slb-ext-manager-statistics)*>
<!ATTLIST ext-manager-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT hash-table-information (slb-hash-information)*>
<!ATTLIST hash-table-information junos:style CDATA #IMPLIED>

<!ELEMENT health-monitor-clear (slb-hm-stats-clear)*>
<!ATTLIST health-monitor-clear junos:style CDATA #IMPLIED>

<!ELEMENT health-monitor-information (slb-hm-information)*>
<!ATTLIST health-monitor-information junos:style CDATA #IMPLIED>

<!ELEMENT health-monitor-statistics-information (slb-hm-statistics)*>
<!ATTLIST health-monitor-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT real-server-group-information (slb-rsg-information)*>
<!ATTLIST real-server-group-information junos:style CDATA #IMPLIED>

<!ELEMENT real-server-group-statistics-information (slb-rsg-statistics)*>
<!ATTLIST real-server-group-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT real-server-information (slb-rs-information)*>
<!ATTLIST real-server-information junos:style CDATA #IMPLIED>
```

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```
<!ELEMENT real-server-statistics-information (slb-rs-statistics)*>
<!ATTLIST real-server-statistics-information junos:style CDATA #IMPLIED>

<!ELEMENT slb-ext-conn-err (#PCDATA)>

<!ELEMENT slb-ext-last-connection-time (#PCDATA)>

<!ELEMENT slb-ext-manager-information (slb-ext-manager-name |
slb-ext-manager-protocol | slb-ext-manager-ip | slb-ext-manager-port |
slb-ext-manager-status | slb-ext-last-connection-time | slb-ext-manager-rsg-count
 | slb-ext-manager-rsg-information)*>

<!ELEMENT slb-ext-manager-ip (#PCDATA)>

<!ELEMENT slb-ext-manager-name (#PCDATA)>

<!ELEMENT slb-ext-manager-port (#PCDATA)>

<!ELEMENT slb-ext-manager-protocol (#PCDATA)>

<!ELEMENT slb-ext-manager-rs-information (slb-rs-servername | slb-rs-ip |
slb-rs-port | slb-static-rs-weight | slb-sasp-rs-weight | slb-sasp-rs-contact-flag
 | slb-sasp-rs-quiesce-flag | slb-sasp-rs-registration-flag |
slb-sasp-rs-confident-flag | slb-ext-rs-last-update-time | slb-rs-admin-state |
slb-rs-hm-state)*>

<!ELEMENT slb-ext-manager-rsg-count (#PCDATA)>

<!ELEMENT slb-ext-manager-rsg-information (slb-rsg-servername | slb-rsg-algorithm
 | slb-rsg-rs-count | slb-ext-manager-rs-information)*>

<!ELEMENT slb-ext-manager-statistics (slb-ext-manager-name |
slb-ext-manager-protocol | slb-sasp-reg-req | slb-sasp-reg-reply | slb-sasp-reg-err
 | slb-sasp-dereg-req | slb-sasp-dereg-reply | slb-sasp-dereg-err |
slb-sasp-get-weights-req | slb-sasp-get-weights-reply | slb-sasp-get-weights-err
 | slb-sasp-set-mbr-state-req | slb-sasp-set-mbr-state-reply |
slb-sasp-set-mbr-state-err | slb-sasp-set-lb-state-req |
slb-sasp-set-lb-state-reply | slb-sasp-set-lb-state-err | slb-sasp-send-weights-req
 | slb-sasp-send-weights-err | slb-ext-conn-err | slb-ext-total-msg-sent |
slb-ext-total-msg-rcvd)*>

<!ELEMENT slb-ext-manager-status (#PCDATA)>

<!ELEMENT slb-ext-rs-last-update-time (#PCDATA)>

<!ELEMENT slb-ext-total-msg-rcvd (#PCDATA)>

<!ELEMENT slb-ext-total-msg-sent (#PCDATA)>

<!ELEMENT slb-hash-hits (#PCDATA)>

<!ELEMENT slb-hash-hits-total (#PCDATA)>

<!ELEMENT slb-hash-index (#PCDATA)>

<!ELEMENT slb-hash-information (slb-rsg-servername | slb-spu-slot | slb-spu-pic
| slb-hash-index | slb-rs-servername | slb-hash-hits | slb-hash-rs-servername |
slb-hash-keys-total | slb-hash-hits-total)*>

<!ELEMENT slb-hash-keys-total (#PCDATA)>
```


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```
<!ELEMENT slb-hash-rs-servername (#PCDATA)>

<!ELEMENT slb-hm-clear-percent (#PCDATA)>

<!ELEMENT slb-hm-http-request (#PCDATA)>

<!ELEMENT slb-hm-http-response (#PCDATA)>

<!ELEMENT slb-hm-information (slb-hm-rulename | slb-hm-protocol |
slb-hm-http-request | slb-hm-http-response | slb-hm-port | slb-hm-timeout |
slb-hm-itvl-down | slb-hm-itvl-up | slb-hm-max-retry | slb-hm-rs-count |
slb-hm-rsg-count | slb-rs-servername | slb-rs-hm-state | slb-spu-slot | slb-spu-pic
 | slb-rsg-servername | slb-rsg-rs-count)*>

<!ELEMENT slb-hm-itvl-down (#PCDATA)>

<!ELEMENT slb-hm-itvl-up (#PCDATA)>

<!ELEMENT slb-hm-max-retry (#PCDATA)>

<!ELEMENT slb-hm-packet-rx-err (#PCDATA)>

<!ELEMENT slb-hm-packet-rx-ok (#PCDATA)>

<!ELEMENT slb-hm-packet-tx-err (#PCDATA)>

<!ELEMENT slb-hm-packet-tx-ok (#PCDATA)>

<!ELEMENT slb-hm-port (#PCDATA)>

<!ELEMENT slb-hm-probe-down (#PCDATA)>

<!ELEMENT slb-hm-probe-tx-err (#PCDATA)>

<!ELEMENT slb-hm-probe-tx-ok (#PCDATA)>

<!ELEMENT slb-hm-probe-up (#PCDATA)>

<!ELEMENT slb-hm-protocol (#PCDATA)>

<!ELEMENT slb-hm-rs-count (#PCDATA)>

<!ELEMENT slb-hm-rsg-count (#PCDATA)>

<!ELEMENT slb-hm-rulename (#PCDATA)>

<!ELEMENT slb-hm-statistics (slb-hm-rulename | slb-rsg-servername |
slb-rs-servername | slb-spu-slot | slb-spu-pic | slb-rs-probe-state |
slb-hm-probe-up | slb-hm-probe-down | slb-hm-probe-tx-ok | slb-hm-probe-tx-err |
 slb-hm-packet-tx-ok | slb-hm-packet-tx-err | slb-hm-packet-rx-ok |
slb-hm-packet-rx-err)*>

<!ELEMENT slb-hm-stats-clear (slb-hm-clear-percent)*>

<!ELEMENT slb-hm-timeout (#PCDATA)>

<!ELEMENT slb-routing-instance (#PCDATA)>

<!ELEMENT slb-rs-active-conn (#PCDATA)>

<!ELEMENT slb-rs-admin-state (#PCDATA)>
```

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```
<!ELEMENT slb-rs-byte-rate (#PCDATA)>

<!ELEMENT slb-rs-bytes (#PCDATA)>

<!ELEMENT slb-rs-conn-rate (#PCDATA)>

<!ELEMENT slb-rs-cur-conn-limit (#PCDATA)>

<!ELEMENT slb-rs-hm-state (#PCDATA)>

<!ELEMENT slb-rs-information (slb-rs-servername | slb-rs-ip | slb-rs-protocol |
slb-rs-port | slb-rs-weight | slb-rs-admin-state | slb-rs-hm-state |
slb-static-rs-weight | slb-rs-ramp-up-time | slb-rs-cur-conn-limit |
slb-rs-max-conn-limit | slb-rs-min-conn-limit | slb-routing-instance |
slb-hm-rulename | slb-spu-slot | slb-spu-pic)*>

<!ELEMENT slb-rs-ip (#PCDATA)>

<!ELEMENT slb-rs-max-conn-limit (#PCDATA)>

<!ELEMENT slb-rs-min-conn-limit (#PCDATA)>

<!ELEMENT slb-rs-pkt-rate (#PCDATA)>

<!ELEMENT slb-rs-pkts (#PCDATA)>

<!ELEMENT slb-rs-port (#PCDATA)>

<!ELEMENT slb-rs-probe-state (#PCDATA)>

<!ELEMENT slb-rs-protocol (#PCDATA)>

<!ELEMENT slb-rs-ramp-up-time (#PCDATA)>

<!ELEMENT slb-rs-servername (#PCDATA)>

<!ELEMENT slb-rs-spu-active-conn (#PCDATA)>

<!ELEMENT slb-rs-spu-bytes (#PCDATA)>

<!ELEMENT slb-rs-spu-pkts (#PCDATA)>

<!ELEMENT slb-rs-spu-total-conn (#PCDATA)>

<!ELEMENT slb-rs-statistics (slb-rs-servername | slb-rs-total-conn |
slb-rs-active-conn | slb-rs-conn-rate | slb-rs-pkts | slb-rs-pkt-rate |
slb-rs-bytes | slb-rs-byte-rate | slb-rs-spu-total-conn | slb-rs-spu-active-conn
 | slb-rs-spu-pkts | slb-rs-spu-bytes | slb-spu-slot | slb-spu-pic |
slb-rs-probe-state | slb-hm-probe-up | slb-hm-probe-down | slb-hm-probe-tx-ok |
slb-hm-probe-tx-err | slb-hm-packet-tx-ok | slb-hm-packet-tx-err |
slb-hm-packet-rx-ok | slb-hm-packet-rx-err)*>

<!ELEMENT slb-rs-total-conn (#PCDATA)>

<!ELEMENT slb-rs-weight (#PCDATA)>

<!ELEMENT slb-rsg-active (#PCDATA)>

<!ELEMENT slb-rsg-active-conn (#PCDATA)>
```


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```
<!ELEMENT slb-rsg-algorithm (#PCDATA)>

<!ELEMENT slb-rsg-byte-rate (#PCDATA)>

<!ELEMENT slb-rsg-bytes (#PCDATA)>

<!ELEMENT slb-rsg-conn-rate (#PCDATA)>

<!ELEMENT slb-rsg-ent-statistics (slb-rs-servername | slb-rs-total-conn |
slb-rs-active-conn | slb-rs-pkts | slb-rs-bytes)*>

<!ELEMENT slb-rsg-ext-manager (#PCDATA)>

<!ELEMENT slb-rsg-failure-count (#PCDATA)>

<!ELEMENT slb-rsg-failure-ratio (#PCDATA)>

<!ELEMENT slb-rsg-information (slb-rsg-servername | slb-rsg-algorithm |
slb-rsg-sticky-mode | slb-routing-instance | slb-rsg-rs-count |
slb-rsg-failure-count | slb-rsg-failure-ratio | slb-hm-rulename |
slb-rsg-ext-manager | slb-rsg-rs-information)*>

<!ELEMENT slb-rsg-pkt-rate (#PCDATA)>

<!ELEMENT slb-rsg-pkts (#PCDATA)>

<!ELEMENT slb-rsg-rs-count (#PCDATA)>

<!ELEMENT slb-rsg-rs-information (slb-rs-servername | slb-rs-ip | slb-rs-protocol
 | slb-rs-port | slb-rs-weight | slb-rs-admin-state | slb-rs-hm-state)*>

<!ELEMENT slb-rsg-servername (#PCDATA)>

<!ELEMENT slb-rsg-spu-active-conn (#PCDATA)>

<!ELEMENT slb-rsg-spu-bytes (#PCDATA)>

<!ELEMENT slb-rsg-spu-pkts (#PCDATA)>

<!ELEMENT slb-rsg-spu-total-conn (#PCDATA)>

<!ELEMENT slb-rsg-statistics (slb-rsg-servername | slb-rsg-total-conn |
slb-rsg-active-conn | slb-rsg-conn-rate | slb-rsg-pkts | slb-rsg-pkt-rate |
slb-rsg-bytes | slb-rsg-byte-rate | slb-spu-slot | slb-spu-pic |
slb-rsg-spu-total-conn | slb-rsg-spu-active-conn | slb-rsg-spu-pkts |
slb-rsg-spu-bytes | slb-rsg-ent-statistics)*>

<!ELEMENT slb-rsg-sticky-mode (#PCDATA)>

<!ELEMENT slb-rsg-total-conn (#PCDATA)>

<!ELEMENT slb-sasp-dereg-err (#PCDATA)>

<!ELEMENT slb-sasp-dereg-reply (#PCDATA)>

<!ELEMENT slb-sasp-dereg-req (#PCDATA)>

<!ELEMENT slb-sasp-get-weights-err (#PCDATA)>

<!ELEMENT slb-sasp-get-weights-reply (#PCDATA)>
```

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```
<!ELEMENT slb-sasp-get-weights-req (#PCDATA)>

<!ELEMENT slb-sasp-reg-err (#PCDATA)>

<!ELEMENT slb-sasp-reg-reply (#PCDATA)>

<!ELEMENT slb-sasp-reg-req (#PCDATA)>

<!ELEMENT slb-sasp-rs-confident-flag (#PCDATA)>

<!ELEMENT slb-sasp-rs-contact-flag (#PCDATA)>

<!ELEMENT slb-sasp-rs-quiesce-flag (#PCDATA)>

<!ELEMENT slb-sasp-rs-registration-flag (#PCDATA)>

<!ELEMENT slb-sasp-rs-weight (#PCDATA)>

<!ELEMENT slb-sasp-send-weights-err (#PCDATA)>

<!ELEMENT slb-sasp-send-weights-req (#PCDATA)>

<!ELEMENT slb-sasp-set-lb-state-err (#PCDATA)>

<!ELEMENT slb-sasp-set-lb-state-reply (#PCDATA)>

<!ELEMENT slb-sasp-set-lb-state-req (#PCDATA)>

<!ELEMENT slb-sasp-set-mbr-state-err (#PCDATA)>

<!ELEMENT slb-sasp-set-mbr-state-reply (#PCDATA)>

<!ELEMENT slb-sasp-set-mbr-state-req (#PCDATA)>

<!ELEMENT slb-spu-pic (#PCDATA)>

<!ELEMENT slb-spu-slot (#PCDATA)>

<!ELEMENT slb-static-rs-weight (#PCDATA)>

<!ELEMENT slb-sticky-clear (slb-rsg-servername)*>

<!ELEMENT slb-sticky-hits (#PCDATA)>

<!ELEMENT slb-sticky-hits-total (#PCDATA)>

<!ELEMENT slb-sticky-index (#PCDATA)>

<!ELEMENT slb-sticky-information (slb-rsg-servername | slb-spu-slot | slb-spu-pic
 | slb-sticky-index | slb-sticky-key | slb-rs-servername | slb-sticky-hits |
slb-sticky-ttl | slb-sticky-rsg-servername | slb-sticky-rs-servername |
slb-sticky-keys-total | slb-sticky-hits-total)*>

<!ELEMENT slb-sticky-key (#PCDATA)>

<!ELEMENT slb-sticky-keys-total (#PCDATA)>

<!ELEMENT slb-sticky-rs-servername (#PCDATA)>

<!ELEMENT slb-sticky-rsg-servername (#PCDATA)>
```


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```
<!ELEMENT slb-sticky-ttl (#PCDATA)>

<!ELEMENT slb-vs-active-conn (#PCDATA)>

<!ELEMENT slb-vs-admin-state (#PCDATA)>

<!ELEMENT slb-vs-byte-rate (#PCDATA)>

<!ELEMENT slb-vs-bytes (#PCDATA)>

<!ELEMENT slb-vs-conn-rate (#PCDATA)>

<!ELEMENT slb-vs-dropped-conn (#PCDATA)>

<!ELEMENT slb-vs-failback-threshold (#PCDATA)>

<!ELEMENT slb-vs-failover-threshold (#PCDATA)>

<!ELEMENT slb-vs-information (slb-vs-servername | slb-vs-ip | slb-vs-protocol |
slb-vs-port | slb-vs-service-port | slb-vs-ssl-offload | slb-vs-mss |
slb-vs-sack-permitted | slb-vs-wind-scale | slb-vs-nat-mode | slb-vs-lb-mode |
slb-routing-instance | slb-vs-admin-state | slb-vs-op-state |
slb-vs-failover-threshold | slb-vs-failback-threshold | slb-vs-rsg-information)*>

<!ELEMENT slb-vs-ip (#PCDATA)>

<!ELEMENT slb-vs-lb-mode (#PCDATA)>

<!ELEMENT slb-vs-mss (#PCDATA)>

<!ELEMENT slb-vs-nat-mode (#PCDATA)>

<!ELEMENT slb-vs-op-state (#PCDATA)>

<!ELEMENT slb-vs-pkt-rate (#PCDATA)>

<!ELEMENT slb-vs-pkts (#PCDATA)>

<!ELEMENT slb-vs-port (#PCDATA)>

<!ELEMENT slb-vs-protocol (#PCDATA)>

<!ELEMENT slb-vs-rsg-information (slb-rsg-servername | slb-rsg-active |
slb-rsg-algorithm | slb-rsg-rs-count | slb-rsg-failure-count |
slb-rsg-failure-ratio)*>

<!ELEMENT slb-vs-sack-permitted (#PCDATA)>

<!ELEMENT slb-vs-servername (#PCDATA)>

<!ELEMENT slb-vs-service-port (#PCDATA)>

<!ELEMENT slb-vs-spu-active-conn (#PCDATA)>

<!ELEMENT slb-vs-spu-bytes (#PCDATA)>

<!ELEMENT slb-vs-spu-drop-misc (#PCDATA)>

<!ELEMENT slb-vs-spu-drop-no-mem (#PCDATA)>

<!ELEMENT slb-vs-spu-drop-no-nh (#PCDATA)>
```

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```
<!ELEMENT slb-vs-spu-drop-no-rs (#PCDATA)>

<!ELEMENT slb-vs-spu-drop-vs-down (#PCDATA)>

<!ELEMENT slb-vs-spu-pkts (#PCDATA)>

<!ELEMENT slb-vs-spu-total-conn (#PCDATA)>

<!ELEMENT slb-vs-ssl-offload (#PCDATA)>

<!ELEMENT slb-vs-statistics (slb-vs-servername | slb-vs-total-conn |
slb-vs-active-conn | slb-vs-dropped-conn | slb-vs-conn-rate | slb-vs-pkts |
slb-vs-pkt-rate | slb-vs-bytes | slb-vs-byte-rate | slb-vs-spu-total-conn |
slb-vs-spu-active-conn | slb-vs-spu-pkts | slb-vs-spu-bytes |
slb-vs-spu-drop-vs-down | slb-vs-spu-drop-no-rs | slb-vs-spu-drop-no-nh |
slb-vs-spu-drop-no-mem | slb-vs-spu-drop-misc | slb-spu-slot | slb-spu-pic)*>

<!ELEMENT slb-vs-total-conn (#PCDATA)>

<!ELEMENT slb-vs-wind-scale (#PCDATA)>

<!ELEMENT sticky-table-clear (slb-sticky-clear)*>
<!ATTLIST sticky-table-clear junos:style CDATA #IMPLIED>

<!ELEMENT sticky-table-information (slb-sticky-information)*>
<!ATTLIST sticky-table-information junos:style CDATA #IMPLIED>

<!ELEMENT virtual-server-information (slb-vs-information)*>
<!ATTLIST virtual-server-information junos:style CDATA #IMPLIED>

<!ELEMENT virtual-server-statistics-information (slb-vs-statistics)*>
<!ATTLIST virtual-server-statistics-information junos:style CDATA #IMPLIED>
```


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CHAPTER 134

DTD for SMPL Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-smpl.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-smpl.dtd -->

<!ELEMENT smpl-instance-id (#PCDATA)>

<!ELEMENT smpl-instance-input-maximum-packet-length (#PCDATA)>

<!ELEMENT smpl-instance-input-rate (#PCDATA)>

<!ELEMENT smpl-instance-input-run-length (#PCDATA)>

<!ELEMENT smpl-instance-name (#PCDATA)>

<!ELEMENT smpl-instance-nhid-header (#PCDATA)>

<!ELEMENT smpl-instance-state (#PCDATA)>

<!ELEMENT smpl-next-hop-group (smpl-nhgroup)*>

<!ELEMENT smpl-nexthop-index (#PCDATA)>

<!ELEMENT smpl-nhgroup (smpl-nhgroup-member-list | smpl-nhgroup-subgroup |
smpl-nhgroup-name | smpl-nhgroup-type | smpl-nhgroup-state |
smpl-nhgroup-nhid-header | smpl-nhgroup-num-members-configured |
smpl-nhgroup-num-members-up | smpl-nhgroup-subgroups-configured |
smpl-nhgroup-subgroups-up)*>
<!ATTLIST smpl-nhgroup junos:style CDATA #IMPLIED>

<!ELEMENT smpl-nhgroup-member-interface (#PCDATA)>

<!ELEMENT smpl-nhgroup-member-list (smpl-nhgroup-member-interface |
smpl-nhgroup-nexthop-address | smpl-nhgroup-nexthop-state | smpl-nexthop-index)*>
```

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```
<!ELEMENT smpl-nhgroup-name (#PCDATA)>

<!ELEMENT smpl-nhgroup-nexthop-address (#PCDATA)>

<!ELEMENT smpl-nhgroup-nexthop-state (#PCDATA)>

<!ELEMENT smpl-nhgroup-nhid-header (#PCDATA)>

<!ELEMENT smpl-nhgroup-num-members-configured (#PCDATA)>

<!ELEMENT smpl-nhgroup-num-members-up (#PCDATA)>

<!ELEMENT smpl-nhgroup-state (#PCDATA)>

<!ELEMENT smpl-nhgroup-subgroup (smpl-nhgroup-name | smpl-nhgroup-state |
smpl-nhgroup-nexthop-state | smpl-nexthop-index | smpl-nhgroup-nhid-header |
smpl-subgroup-num-members-configured | smpl-subgroup-num-members-up |
smpl-subgroup-member-list)*>

<!ELEMENT smpl-nhgroup-subgroups-configured (#PCDATA)>

<!ELEMENT smpl-nhgroup-subgroups-up (#PCDATA)>

<!ELEMENT smpl-nhgroup-type (#PCDATA)>

<!ELEMENT smpl-output-family-destination (#PCDATA)>

<!ELEMENT smpl-output-family-name (#PCDATA)>

<!ELEMENT smpl-output-family-state (#PCDATA)>

<!ELEMENT smpl-port-mirror-output-family-list (smpl-output-family-name |
smpl-output-family-state | smpl-output-family-destination | smpl-nexthop-index |
 smpl-nhgroup-member-list)*>

<!ELEMENT smpl-port-mirroring (smpl-port-mirroring-instance)*>

<!ELEMENT smpl-port-mirroring-instance (smpl-port-mirror-output-family-list |
smpl-instance-name | smpl-instance-state | smpl-instance-id |
smpl-instance-input-rate | smpl-instance-input-run-length |
smpl-instance-input-maximum-packet-length | smpl-instance-nhid-header)*>
<!ATTLIST smpl-port-mirroring-instance junos:style CDATA #IMPLIED>

<!ELEMENT smpl-subgroup-member-list (smpl-nhgroup-member-interface |
smpl-nhgroup-nexthop-address | smpl-nhgroup-nexthop-state | smpl-nexthop-index)*>

<!ELEMENT smpl-subgroup-num-members-configured (#PCDATA)>

<!ELEMENT smpl-subgroup-num-members-up (#PCDATA)>
```


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CHAPTER 135

DTD for SNMP Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-snmp.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-snmp.dtd -->

<!ELEMENT address (#PCDATA)>

<!ELEMENT alarm-creator (#PCDATA)>

<!ELEMENT alarm-index (#PCDATA)>

<!ELEMENT alarm-interval (#PCDATA)>

<!ELEMENT alarm-owner (#PCDATA)>

<!ELEMENT alarm-state (#PCDATA)>

<!ELEMENT alarm-subtag (#PCDATA)>

<!ELEMENT alarm-value (#PCDATA)>

<!ELEMENT asn-parse-errors (#PCDATA)>

<!ELEMENT auth-type (#PCDATA)>

<!ELEMENT bad-community-names (#PCDATA)>

<!ELEMENT bad-community-uses (#PCDATA)>

<!ELEMENT bad-values (#PCDATA)>

<!ELEMENT bad-versions (#PCDATA)>

<!ELEMENT commit-pending-drops (#PCDATA)>
```

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```
<!ELEMENT community (#PCDATA)>
<!ELEMENT community-index (#PCDATA)>
<!ELEMENT context-match (#PCDATA)>
<!ELEMENT context-name (#PCDATA)>
<!ELEMENT context-prefix (#PCDATA)>
<!ELEMENT current-queued (#PCDATA)>
<!ELEMENT current-throttled (#PCDATA)>
<!ELEMENT currently-active (#PCDATA)>
<!ELEMENT decrypt-errors (#PCDATA)>
<!ELEMENT duplicate-request-drops (#PCDATA)>
<!ELEMENT engine-boots (#PCDATA)>
<!ELEMENT engine-id (#PCDATA)>
<!ELEMENT engine-time (#PCDATA)>
<!ELEMENT error (#PCDATA)>
<!ELEMENT event-creator (#PCDATA)>
<!ELEMENT event-descr (#PCDATA)>
<!ELEMENT event-index (#PCDATA)>
<!ELEMENT event-owner (#PCDATA)>
<!ELEMENT event-state (#PCDATA)>
<!ELEMENT event-type (#PCDATA)>
<!ELEMENT falling-event-index (#PCDATA)>
<!ELEMENT falling-threshold (#PCDATA)>
<!ELEMENT filter-name (#PCDATA)>
<!ELEMENT filter-type (#PCDATA)>
<!ELEMENT general-errors (#PCDATA)>
<!ELEMENT get-nexts (#PCDATA)>
<!ELEMENT get-requests (#PCDATA)>
<!ELEMENT get-responses (#PCDATA)>
<!ELEMENT group-deregisters (#PCDATA)>
<!ELEMENT group-name (#PCDATA)>
<!ELEMENT group-registers (#PCDATA)>
```


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```
<!ELEMENT group-removes (#PCDATA)>

<!ELEMENT health-monitor-information (rmon-alarm-information | rmon-log-information
 | rmon-history-information)*>

<!ELEMENT history-index (#PCDATA)>

<!ELEMENT history-interface (#PCDATA)>

<!ELEMENT history-interval (#PCDATA)>

<!ELEMENT history-owner (#PCDATA)>

<!ELEMENT history-requested-buckets (#PCDATA)>

<!ELEMENT history-sample (history-sample-index | history-sample-start-time |
history-sample-drop-events | history-sample-octect | history-sample-packets |
history-sample-broadcast-packets | history-sample-multicast-packets |
history-sample-crc-errors | history-sample-undersize-packets |
history-sample-oversize-packets | history-sample-fragments | history-sample-jabbers
 | history-sample-collisions | history-sample-utilization)*>

<!ELEMENT history-sample-broadcast-packets (#PCDATA)>

<!ELEMENT history-sample-collisions (#PCDATA)>

<!ELEMENT history-sample-crc-errors (#PCDATA)>

<!ELEMENT history-sample-drop-events (#PCDATA)>

<!ELEMENT history-sample-fragments (#PCDATA)>

<!ELEMENT history-sample-index (#PCDATA)>

<!ELEMENT history-sample-jabbers (#PCDATA)>

<!ELEMENT history-sample-multicast-packets (#PCDATA)>

<!ELEMENT history-sample-octect (#PCDATA)>

<!ELEMENT history-sample-oversize-packets (#PCDATA)>

<!ELEMENT history-sample-packets (#PCDATA)>

<!ELEMENT history-sample-start-time (#PCDATA)>

<!ELEMENT history-sample-undersize-packets (#PCDATA)>

<!ELEMENT history-sample-utilization (#PCDATA)>

<!ELEMENT history-status (#PCDATA)>

<!ELEMENT index (index-name | index-value)*>

<!ELEMENT index-name (#PCDATA)>

<!ELEMENT index-value (#PCDATA)>

<!ELEMENT inst-description (#PCDATA)>
```

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```
<!ELEMENT inst-state (#PCDATA)>

<!ELEMENT inst-value (#PCDATA)>

<!ELEMENT inst-var-name (#PCDATA)>

<!ELEMENT invalid-msgs (#PCDATA)>

<!ELEMENT last-time-sent (#PCDATA)>
<!ATTLIST last-time-sent junos:seconds CDATA #IMPLIED>

<!ELEMENT max-active (#PCDATA)>

<!ELEMENT max-latency (#PCDATA)>

<!ELEMENT max-msg-size (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT no-such-names (#PCDATA)>

<!ELEMENT not-found (#PCDATA)>

<!ELEMENT not-in-timewindows (#PCDATA)>

<!ELEMENT notify-filter-name (#PCDATA)>

<!ELEMENT notify-name (#PCDATA)>

<!ELEMENT notify-tag (#PCDATA)>

<!ELEMENT notify-type (#PCDATA)>

<!ELEMENT notify-view (#PCDATA)>

<!ELEMENT nvs-commit-failures (#PCDATA)>

<!ELEMENT nvs-commit-pending (#PCDATA)>

<!ELEMENT nvs-conflock-failures (#PCDATA)>

<!ELEMENT nvs-journal-write-failures (#PCDATA)>

<!ELEMENT nvs-mgd-connect-failures (#PCDATA)>

<!ELEMENT nvs-rpc-mgd-failures (#PCDATA)>

<!ELEMENT object-value (#PCDATA)>

<!ELEMENT object-value-type (#PCDATA)>

<!ELEMENT oid (#PCDATA)>

<!ELEMENT packets (#PCDATA)>

<!ELEMENT port (#PCDATA)>

<!ELEMENT priv-type (#PCDATA)>

<!ELEMENT proxy-drops (#PCDATA)>
```


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```
<!ELEMENT read-onlys (#PCDATA)>

<!ELEMENT read-view (#PCDATA)>

<!ELEMENT rising-event-index (#PCDATA)>

<!ELEMENT rising-threshold (#PCDATA)>

<!ELEMENT rmon-alarm (alarm-index | var-name | var-oid | sample-type | alarm-value
 | startup | alarm-interval | rising-threshold | falling-threshold |
rising-event-index | falling-event-index | alarm-owner | alarm-subtag |
alarm-creator | alarm-state | rmon-alarm-instance-information)*>

<!ELEMENT rmon-alarm-information (rmon-alarm)*>
<!ATTLIST rmon-alarm-information junos:style CDATA #IMPLIED>

<!ELEMENT rmon-alarm-instance (inst-var-name | inst-description | inst-value |
inst-state)*>

<!ELEMENT rmon-alarm-instance-information (rmon-alarm-instance)*>

<!ELEMENT rmon-event (event-index | event-descr | event-type | community |
last-time-sent | event-owner | event-creator | event-state)*>

<!ELEMENT rmon-event-information (rmon-event)*>
<!ATTLIST rmon-event-information junos:style CDATA #IMPLIED>

<!ELEMENT rmon-history (history-index | history-interface |
history-requested-buckets | history-interval | history-owner | history-status)*>

<!ELEMENT rmon-history-information (rmon-history | history-sample)*>

<!ELEMENT rmon-information (rmon-alarm-information | rmon-event-information |
rmon-history-information)*>

<!ELEMENT rmon-log (rmon-log-event-index | rmon-log-index | rmon-log-descr |
rmon-log-time)*>

<!ELEMENT rmon-log-descr (#PCDATA)>

<!ELEMENT rmon-log-event-index (#PCDATA)>

<!ELEMENT rmon-log-index (#PCDATA)>

<!ELEMENT rmon-log-information (rmon-log)*>

<!ELEMENT rmon-log-time (#PCDATA)>
<!ATTLIST rmon-log-time junos:seconds CDATA #IMPLIED>

<!ELEMENT row-status (#PCDATA)>

<!ELEMENT sample-type (#PCDATA)>

<!ELEMENT security-level (#PCDATA)>

<!ELEMENT security-model (#PCDATA)>

<!ELEMENT security-name (#PCDATA)>

<!ELEMENT set-requests (#PCDATA)>
```

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```
<!ELEMENT silent-drops (#PCDATA)>

<!ELEMENT snmp-generate-trap-result (#PCDATA)>

<!ELEMENT snmp-generate-trap-results (snmp-generate-trap-result)*>

<!ELEMENT snmp-input-statistics (packets | bad-versions | bad-community-names |
bad-community-uses | asn-parse-errors | too-bigs | no-such-names | bad-values |
read-onlys | general-errors | total-request-varbinds | total-set-varbinds |
get-requests | get-nexts | set-requests | get-responses | traps | silent-drops |
 proxy-drops | throttle-drops | commit-pending-drops | duplicate-request-drops)*>

<!ELEMENT snmp-object (name | index | oid | object-value | object-value-type |
error)*>

<!ELEMENT snmp-object-information (snmp-object | snmp-request-error)*>

<!ELEMENT snmp-output-statistics (packets | too-bigs | no-such-names | bad-values
 | general-errors | get-requests | get-nexts | set-requests | get-responses |
traps)*>

<!ELEMENT snmp-req-error-value (#PCDATA)>

<!ELEMENT snmp-request-error (snmp-req-error-value)*>

<!ELEMENT snmp-set-stats (nvs-commit-pending | nvs-conflock-failures |
nvs-rpc-mgd-failures | nvs-journal-write-failures | nvs-mgd-connect-failures |
nvs-commit-failures)*>

<!ELEMENT snmp-spoof-trap-result (#PCDATA)>

<!ELEMENT snmp-spoof-trap-results (snmp-spoof-trap-result | snmp-spoofable-traps)*>

<!ELEMENT snmp-spoofable-traps (#PCDATA)>

<!ELEMENT snmp-statistics (snmp-input-statistics | snmp-v3-input-statistics |
snmp-output-statistics | sub-agent-control-blocks | sub-agent-registration |
trap-queue-stats | trap-throttle-stats | snmp-set-stats)*>

<!ELEMENT snmp-v3-access (group-name | context-prefix | security-model |
security-level | context-match | read-view | write-view | notify-view |
storage-type | row-status)*>

<!ELEMENT snmp-v3-access-information (snmp-v3-access)*>
<!ATTLIST snmp-v3-access-information junos:style CDATA #IMPLIED>

<!ELEMENT snmp-v3-community (community-index | security-name | context-name |
transport-tag | storage-type | row-status)*>

<!ELEMENT snmp-v3-community-information (snmp-v3-community)*>

<!ELEMENT snmp-v3-engine-information (engine-id | engine-boots | engine-time |
max-msg-size)*>

<!ELEMENT snmp-v3-general-information (snmp-v3-engine-information)*>

<!ELEMENT snmp-v3-group (group-name | security-model | security-name | storage-type
 | row-status)*>

<!ELEMENT snmp-v3-group-information (snmp-v3-group)*>
```


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```
<!ELEMENT snmp-v3-information (snmp-v3-general-information |
snmp-v3-usm-user-information | snmp-v3-group-information |
snmp-v3-access-information | snmp-v3-target-information |
snmp-v3-notify-information | snmp-v3-notify-filter-information |
snmp-v3-community-information)*>

<!ELEMENT snmp-v3-input-statistics (unknown-secmodels | invalid-msgs |
unknown-pduhandlers | unavail-contexts | unknown-contexts | unsupported-seclevels
 | not-in-timewindows | unknown-usernames | unknown-eids | wrong-digests |
decrypt-errors)*>

<!ELEMENT snmp-v3-notify (notify-name | notify-tag | notify-type | storage-type
| row-status)*>

<!ELEMENT snmp-v3-notify-filter (filter-name | subtree | filter-type | storage-type
 | row-status)*>

<!ELEMENT snmp-v3-notify-filter-information (snmp-v3-notify-filter)*>

<!ELEMENT snmp-v3-notify-information (snmp-v3-notify)*>

<!ELEMENT snmp-v3-target-address-information (snmp-v3-target_address)*>

<!ELEMENT snmp-v3-target-information (snmp-v3-target-address-information |
snmp-v3-target-parameters-information)*>

<!ELEMENT snmp-v3-target-parameters-information (snmp-v3-target_parameters)*>

<!ELEMENT snmp-v3-target_address (target-address-name | address | port |
target-parameters-name | storage-type | row-status)*>

<!ELEMENT snmp-v3-target_parameters (target-parameters-name | security-name |
security-model | security-level | notify-filter-name | storage-type | row-status)*>

<!ELEMENT snmp-v3-usm-user (user-name | auth-type | priv-type | storage-type |
row-status)*>

<!ELEMENT snmp-v3-usm-user-engine-id (user-engine-id)*>

<!ELEMENT snmp-v3-usm-user-information (snmp-v3-usm-user-engine-id |
snmp-v3-usm-user)*>

<!ELEMENT startup (#PCDATA)>

<!ELEMENT storage-type (#PCDATA)>

<!ELEMENT sub-agent-control-blocks (total | currently-active | max-active |
not-found | timed-out | max-latency)*>

<!ELEMENT sub-agent-registration (group-registers | group-deregisters |
group-removes)*>

<!ELEMENT subtree (#PCDATA)>

<!ELEMENT target-address-name (#PCDATA)>

<!ELEMENT target-parameters-name (#PCDATA)>

<!ELEMENT throttle-drops (#PCDATA)>

<!ELEMENT timed-out (#PCDATA)>
```

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```
<!ELEMENT too-bigs (#PCDATA)>

<!ELEMENT total (#PCDATA)>

<!ELEMENT total-discards (#PCDATA)>

<!ELEMENT total-overflows (#PCDATA)>

<!ELEMENT total-queued (#PCDATA)>

<!ELEMENT total-request-varbinds (#PCDATA)>

<!ELEMENT total-set-varbinds (#PCDATA)>

<!ELEMENT total-throttles (#PCDATA)>

<!ELEMENT transport-tag (#PCDATA)>

<!ELEMENT trap-queue-stats (current-queued | total-queued | total-discards |
total-overflows)*>

<!ELEMENT trap-throttle-stats (current-throttled | total-throttles)*>

<!ELEMENT traps (#PCDATA)>

<!ELEMENT unavail-contexts (#PCDATA)>

<!ELEMENT unknown-contexts (#PCDATA)>

<!ELEMENT unknown-eids (#PCDATA)>

<!ELEMENT unknown-pduhandlers (#PCDATA)>

<!ELEMENT unknown-secmodels (#PCDATA)>

<!ELEMENT unknown-usernames (#PCDATA)>

<!ELEMENT unsupported-seclevels (#PCDATA)>

<!ELEMENT user-engine-id (#PCDATA)>

<!ELEMENT user-name (#PCDATA)>

<!ELEMENT var-name (#PCDATA)>

<!ELEMENT var-oid (#PCDATA)>

<!ELEMENT write-view (#PCDATA)>

<!ELEMENT wrong-digests (#PCDATA)>
```


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CHAPTER 136

DTD for Static Subscribers Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-static-subscribers.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-static-subscribers.dtd -->

<!ELEMENT failure (#PCDATA)>

<!ELEMENT group (#PCDATA)>

<!ELEMENT interface (#PCDATA)>

<!ELEMENT results (success | failure)*>
<!ATTLIST results junos:style CDATA #IMPLIED>

<!ELEMENT state (#PCDATA)>

<!ELEMENT static-subscribers-information (results | subscriber-session)*>

<!ELEMENT subscriber-session (username | interface | group | state)*>

<!ELEMENT success EMPTY>

<!ELEMENT username (#PCDATA)>
```

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CHAPTER 137

DTD for Statistics Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-statistics.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-statistics.dtd -->

<!ELEMENT aborted (#PCDATA)>

<!ELEMENT ack-header-predictions (#PCDATA)>

<!ELEMENT acks-bytes (#PCDATA)>

<!ELEMENT acks-received (#PCDATA)>

<!ELEMENT acks-sent (#PCDATA)>

<!ELEMENT acks-sent-in-response-but-not-exact-rsts (#PCDATA)>

<!ELEMENT acks-sent-in-response-to-syns-on-established-connections (#PCDATA)>

<!ELEMENT acquire (#PCDATA)>

<!ELEMENT add (#PCDATA)>

<!ELEMENT address-fields-were-not-reasonable (#PCDATA)>

<!ELEMENT address-mask-reply (#PCDATA)>

<!ELEMENT address-mask-request (#PCDATA)>

<!ELEMENT address-scope (#PCDATA)>

<!ELEMENT address-unreachable (#PCDATA)>

<!ELEMENT administratively-prohibited (#PCDATA)>
```

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```
<!ELEMENT after-tagging-packets-can-not-fit-link-mtu (#PCDATA)>

<!ELEMENT aging-acks-from-pfe (#PCDATA)>

<!ELEMENT aging-non-acks-from-pfe (#PCDATA)>

<!ELEMENT aging-requests-over-max-rate (#PCDATA)>

<!ELEMENT aging-requests-timed-out-waiting-on-fes (#PCDATA)>

<!ELEMENT ahnames-aes-xcbc-mac (#PCDATA)>

<!ELEMENT ahnames-hmac-md5 (#PCDATA)>

<!ELEMENT ahnames-hmac-ripemd160 (#PCDATA)>

<!ELEMENT ahnames-hmac-sha1 (#PCDATA)>

<!ELEMENT ahnames-hmac-sha2-256 (#PCDATA)>

<!ELEMENT ahnames-hmac-sha2-384 (#PCDATA)>

<!ELEMENT ahnames-hmac-sha2-512 (#PCDATA)>

<!ELEMENT ahnames-md5 (#PCDATA)>

<!ELEMENT ahnames-none (#PCDATA)>

<!ELEMENT ahnames-null (#PCDATA)>

<!ELEMENT ahnames-sha (#PCDATA)>

<!ELEMENT arp (datagrams-received | arp-requests-received | arp-replies-received
 | resolution-request-received | unrestricted-proxy-requests |
restricted-proxy-requests | received-proxy-requests | proxy-requests-not-proxied
 | restricted-proxy-requests-not-proxied | datagrams-with-bogus-interface |
datagrams-with-incorrect-length | datagrams-for-non-ip-protocol |
datagrams-with-unsupported-opcode | datagrams-with-bad-protocol-address-length |
 datagrams-with-bad-hardware-address-length |
datagrams-with-multicast-source-address | datagrams-with-multicast-target-address
 | datagrams-with-my-own-hardware-address |
datagrams-for-an-address-not-on-the-interface |
datagrams-with-a-broadcast-source-address |
datagrams-with-source-address-duplicate-to-mine | datagrams-which-were-not-for-me
 | packets-discarded-waiting-for-resolution |
packets-sent-after-waiting-for-resolution | arp-requests-sent | arp-replies-sent
 | requests-for-memory-denied | requests-dropped-on-entry |
requests-dropped-during-retry | requests-dropped-due-to-interface-deletion |
requests-on-unnumbered-interfaces | new-requests-on-unnumbered-interfaces |
replies-from-unnumbered-interfaces |
requests-on-unnumbered-interface-with-non-subnetted-donor |
replies-from-unnumbered-interface-with-non-subnetted-donor)*>

<!ELEMENT arp-l3-packets-received (#PCDATA)>

<!ELEMENT arp-replies-received (#PCDATA)>

<!ELEMENT arp-replies-sent (#PCDATA)>

<!ELEMENT arp-requests-received (#PCDATA)>
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```
<!ELEMENT arp-requests-sent (#PCDATA)>

<!ELEMENT attempts (#PCDATA)>

<!ELEMENT bad-checksums (#PCDATA)>

<!ELEMENT bad-connection-attempts (#PCDATA)>

<!ELEMENT bad-header-checksums (#PCDATA)>

<!ELEMENT bad-version-packets (#PCDATA)>

<!ELEMENT badack (#PCDATA)>

<!ELEMENT beyond-scope (#PCDATA)>

<!ELEMENT blocked-ifl-discards (#PCDATA)>

<!ELEMENT bogus-address-in-aging-requests (#PCDATA)>

<!ELEMENT bridge (heading | bridge-packets-received | bridge-packets-forwarded |
 packets-failed-to-forward | bridge-packets-dropped |
packets-with-vmember-lookup-failures | packets-with-vlan-lookup-failures |
packets-with-stp-state-lookup-failures |
packets-dropped-due-to-stp-blocked-or-listening |
packets-dropped-due-to-stp-learning | packets-with-src-mac-learning-failures |
packets-with-input-control-processing-failures | packets-sent-successfully |
packets-with-send-failures | packets-with-receive-failures |
packets-forwarded-to-l3-interface | packets-with-l3-send-failures |
packets-discarded | packets-with-l2-ifl-store-failures |
packets-with-ifl-mismatch-failures | packets-with-packet-duplication-failures |
packets-with-tag-lookup-failures | packets-with-no-route-for-dmac |
packets-with-no-route-table | packets-with-no-nexthop | packets-with-dead-nexthop
 | packets-with-eof-reached-error | macs-learned | packets-sent-to-l3-interface
| packets-hit-hold-queue-while-learning | mac-moves |
packets-with-no-route-for-smac | packets-dropped-due-to-no-resolve-route |
packets-with-l3-ifd-lookup-failures | packets-with-l3-ifl-lookup-failures |
packets-with-l3-invalid-rnh | packets-with-no-route-for-smac-in-clone-learning |
 packets-with-no-nexthop-in-clone-learning |
packets-with-dead-nexthop-in-clone-learning |
packets-dropped-due-to-no-resolve-nh-in-clone-learning |
packets-dropped-due-to-interface-down | packets-with-dev-output-failures |
blocked-ifl-discards | packets-with-tag-insertion-failures |
packets-with-tag-removal-failures | packets-flooded | flood-failures |
packets-with-mpull-failures | packets-with-ifl-lookup-failures |
bridge-packets-with-size-smaller-than-minimum | packets-with-double-tags |
packets-with-no-ifl | packets-with-no-family)*>

<!ELEMENT bridge-packets-dropped (#PCDATA)>

<!ELEMENT bridge-packets-forwarded (#PCDATA)>

<!ELEMENT bridge-packets-received (#PCDATA)>

<!ELEMENT bridge-packets-with-size-smaller-than-minimum (#PCDATA)>

<!ELEMENT broadcast-or-multicast-datagrams-dropped-due-to-no-socket (#PCDATA)>

<!ELEMENT broadcast-packets-received (#PCDATA)>

<!ELEMENT broadcast-packets-sent (#PCDATA)>
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```
<!ELEMENT bucket-overflow (#PCDATA)>

<!ELEMENT byte-retransmits (#PCDATA)>

<!ELEMENT bytes (#PCDATA)>

<!ELEMENT bytes-sent-from-userland (#PCDATA)>

<!ELEMENT bytes-sent-to-userland (#PCDATA)>

<!ELEMENT cache-overflow (#PCDATA)>

<!ELEMENT calls-to-icmp-error (#PCDATA)>

<!ELEMENT calls-to-icmp6-error (#PCDATA)>

<!ELEMENT clnl (total-clnl-packets-received | packets-delivered | too-small-packets
 | packets-with-bad-header-length | packets-with-bad-checksum | bad-version-packets
 | unknown-or-unsupported-protocol-packets | packets-with-bogus-sdl-size |
no-free-memory-in-socket-buffer | send-packets-discarded | sbappend-failure |
mcopy-failure | address-fields-were-not-reasonable | segment-information-forgotten
 | forwarded-packets | total-packets-sent | output-packets-discarded |
non-forwarded-packets | packets-fragmented | fragments-sent | fragments-discarded
 | fragments-timed-out | fragmentation-prohibited | packets-reconstructed |
packets-destined-to-dead-nexthop | packets-discarded-due-to-no-route |
error-pdu-rate-drops | er-pdu-generation-failure)*>

<!ELEMENT clnp-l3-packets-received (#PCDATA)>

<!ELEMENT closes (#PCDATA)>

<!ELEMENT completed (#PCDATA)>

<!ELEMENT compnames-deflate (#PCDATA)>

<!ELEMENT compnames-lzs (#PCDATA)>

<!ELEMENT compnames-none (#PCDATA)>

<!ELEMENT compnames-oui (#PCDATA)>

<!ELEMENT connection-accepts (#PCDATA)>

<!ELEMENT connection-requests (#PCDATA)>

<!ELEMENT connections-closed (#PCDATA)>

<!ELEMENT connections-dropped-by-persist-timeout (#PCDATA)>

<!ELEMENT connections-dropped-by-retransmit-timeout (#PCDATA)>

<!ELEMENT connections-established (#PCDATA)>

<!ELEMENT connections-updated-rtt-on-close (#PCDATA)>

<!ELEMENT connections-updated-ssthresh-on-close (#PCDATA)>

<!ELEMENT connections-updated-variance-on-close (#PCDATA)>

<!ELEMENT connects (#PCDATA)>
```


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```
<!ELEMENT control-packets-received (#PCDATA)>
<!ELEMENT control-packets-sent (#PCDATA)>
<!ELEMENT cookies-received (#PCDATA)>
<!ELEMENT cookies-sent (#PCDATA)>
<!ELEMENT cyclotron-cycle-l3-packets-received (#PCDATA)>
<!ELEMENT cyclotron-send-l3-packets-received (#PCDATA)>
<!ELEMENT data-packet-header-predictions (#PCDATA)>
<!ELEMENT data-packets-bytes (#PCDATA)>
<!ELEMENT datagrams-delivered (#PCDATA)>
<!ELEMENT datagrams-dropped-due-to-full-socket-buffers (#PCDATA)>
<!ELEMENT datagrams-dropped-due-to-no-socket (#PCDATA)>
<!ELEMENT datagrams-for-an-address-not-on-the-interface (#PCDATA)>
<!ELEMENT datagrams-for-non-ip-protocol (#PCDATA)>
<!ELEMENT datagrams-not-for-hashed-pcb (#PCDATA)>
<!ELEMENT datagrams-output (#PCDATA)>
<!ELEMENT datagrams-received (#PCDATA)>
<!ELEMENT datagrams-that-can-not-be-fragmented (#PCDATA)>
<!ELEMENT datagrams-which-were-not-for-me (#PCDATA)>
<!ELEMENT datagrams-with-a-broadcast-source-address (#PCDATA)>
<!ELEMENT datagrams-with-bad-checksum (#PCDATA)>
<!ELEMENT datagrams-with-bad-data-length-field (#PCDATA)>
<!ELEMENT datagrams-with-bad-datalength-field (#PCDATA)>
<!ELEMENT datagrams-with-bad-hardware-address-length (#PCDATA)>
<!ELEMENT datagrams-with-bad-protocol-address-length (#PCDATA)>
<!ELEMENT datagrams-with-bogus-interface (#PCDATA)>
<!ELEMENT datagrams-with-incomplete-header (#PCDATA)>
<!ELEMENT datagrams-with-incorrect-length (#PCDATA)>
<!ELEMENT datagrams-with-multicast-source-address (#PCDATA)>
<!ELEMENT datagrams-with-multicast-target-address (#PCDATA)>
<!ELEMENT datagrams-with-my-own-hardware-address (#PCDATA)>
```

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```
<!ELEMENT datagrams-with-source-address-duplicate-to-mine (#PCDATA)>

<!ELEMENT datagrams-with-unsupported-opcode (#PCDATA)>

<!ELEMENT delete (#PCDATA)>

<!ELEMENT delivered (#PCDATA)>

<!ELEMENT destination-unreachable (#PCDATA)>

<!ELEMENT dialer-packets-received (#PCDATA)>

<!ELEMENT dialer-packets-transmitted (#PCDATA)>

<!ELEMENT dropped (#PCDATA)>

<!ELEMENT drops (#PCDATA)>

<!ELEMENT drops-at-server-ine (#PCDATA)>

<!ELEMENT drops-due-to-rate-limit (#PCDATA)>

<!ELEMENT dump (#PCDATA)>

<!ELEMENT duplicate-in-bytes (#PCDATA)>

<!ELEMENT duplicate-or-out-of-space-fragments-dropped (#PCDATA)>

<!ELEMENT dupsyn (#PCDATA)>

<!ELEMENT echo-drops-with-broadcast-or-multicast-destinaton-address (#PCDATA)>

<!ELEMENT embryonic-connections-dropped (#PCDATA)>

<!ELEMENT er-pdu-generation-failure (#PCDATA)>

<!ELEMENT erroneous-header-field (#PCDATA)>

<!ELEMENT error-pdu-rate-drops (#PCDATA)>

<!ELEMENT errors-finding-peer-fes (#PCDATA)>

<!ELEMENT errors-not-generated-because-old-message-was-icmp (#PCDATA)>

<!ELEMENT errors-not-generated-because-old-message-was-icmp-error (#PCDATA)>

<!ELEMENT errors-not-generated-because-rate-limitation (#PCDATA)>

<!ELEMENT esis (total-esis-packets-received | total-packets-consumed-by-protocol
 | pdus-received-with-bad-checksum | pdus-received-with-bad-version-number |
pdus-received-with-bad-type-field | short-pdus-received | pdus-with-bogus-sdl-size
 | pdus-with-bad-header-length | pdus-with-unknown-or-unsupport-protocol |
no-free-memory-in-socket-buffer | send-packets-discarded | sbappend-failure |
mcopy-failure | iso-family-not-configured)*>

<!ELEMENT espnames-3des-cbc (#PCDATA)>

<!ELEMENT espnames-aes-ctr (#PCDATA)>

<!ELEMENT espnames-blowfish-cbc (#PCDATA)>
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<!ELEMENT espnames-cast128-cbc (#PCDATA)>

<!ELEMENT espnames-des-cbc (#PCDATA)>

<!ELEMENT espnames-none (#PCDATA)>

<!ELEMENT espnames-null (#PCDATA)>

<!ELEMENT espnames-rijndael-cbc (#PCDATA)>

<!ELEMENT ethoamcfm (total-packets-received |
input-packets-drop-bad-interface-state | received-packets-forwarded |
total-packets-transmitted | packets-sent | output-packets-drop-bad-interface-state
 | flood-requests-forwarded-to-pfe | flood-requests-dropped)*>

<!ELEMENT ethoamlfm (total-packets-received |
input-packets-drop-bad-interface-state | received-packets-forwarded |
total-packets-transmitted | packets-sent |
output-packets-drop-bad-interface-state)*>

<!ELEMENT expire (#PCDATA)>

<!ELEMENT faboam-packets-dropped (#PCDATA)>

<!ELEMENT faboam-packets-received (#PCDATA)>

<!ELEMENT faboam-packets-transmitted (#PCDATA)>

<!ELEMENT failures-of-source-address-selection (#PCDATA)>

<!ELEMENT fibre-channel-packets-dropped (#PCDATA)>

<!ELEMENT fibre-channel-packets-received (#PCDATA)>

<!ELEMENT fibre-channel-packets-transmitted (#PCDATA)>

<!ELEMENT fip-packets-dropped (#PCDATA)>

<!ELEMENT fip-packets-received (#PCDATA)>

<!ELEMENT fip-packets-transmitted (#PCDATA)>

<!ELEMENT flood-failures (#PCDATA)>

<!ELEMENT flood-requests-dropped (#PCDATA)>

<!ELEMENT flood-requests-forwarded-to-pfe (#PCDATA)>

<!ELEMENT flush (#PCDATA)>

<!ELEMENT forward-cache-hit (#PCDATA)>

<!ELEMENT forward-cache-miss (#PCDATA)>

<!ELEMENT forwarded-packets (#PCDATA)>

<!ELEMENT fragment-reassembly-queue-flushes (#PCDATA)>

<!ELEMENT fragmentation-prohibited (#PCDATA)>

<!ELEMENT fragmented-packets-received (#PCDATA)>
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<!ELEMENT fragmented-packets-sent (#PCDATA)>

<!ELEMENT fragments-created (#PCDATA)>

<!ELEMENT fragments-discarded (#PCDATA)>

<!ELEMENT fragments-dropped-after-timeout (#PCDATA)>

<!ELEMENT fragments-dropped-due-to-outofspace-or-dup (#PCDATA)>

<!ELEMENT fragments-dropped-due-to-over-limit (#PCDATA)>

<!ELEMENT fragments-dropped-due-to-queueoverflow (#PCDATA)>

<!ELEMENT fragments-received (#PCDATA)>

<!ELEMENT fragments-sent (#PCDATA)>

<!ELEMENT fragments-that-exceeded-limit (#PCDATA)>

<!ELEMENT fragments-timed-out (#PCDATA)>

<!ELEMENT get (#PCDATA)>

<!ELEMENT getspi (#PCDATA)>

<!ELEMENT globals (#PCDATA)>

<!ELEMENT header-for-source-address-selection (#PCDATA)>

<!ELEMENT heading (#PCDATA)>

<!ELEMENT hello-packets-received (#PCDATA)>

<!ELEMENT hello-packets-sent (#PCDATA)>

<!ELEMENT hex-value (#PCDATA)>

<!ELEMENT histogram (type-of-histogram | icmp-echo-reply | destination-unreachable
 | source-quench | routing-redirect | icmp-echo | router-advertisement |
router-solicitation | time-exceeded | parameter-problem | time-stamp |
time-stamp-reply | information-request | information-request-reply |
address-mask-request | address-mask-reply)*>

<!ELEMENT histogram-of-error-messages-to-be-generated (#PCDATA)>

<!ELEMENT icmp (drops-due-to-rate-limit | drops-at-server-ine | calls-to-icmp-error
 | errors-not-generated-because-old-message-was-icmp | histogram |
messages-with-bad-code-fields | messages-less-than-the-minimum-length |
messages-with-bad-checksum | messages-with-bad-source-address |
messages-with-bad-length |
echo-drops-with-broadcast-or-multicast-destinaton-address |
timestamp-drops-with-broadcast-or-multicast-destination-address |
message-responses-generated)*>

<!ELEMENT icmp-echo (#PCDATA)>

<!ELEMENT icmp-echo-reply (#PCDATA)>

<!ELEMENT icmp-packets-ignored (#PCDATA)>
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<!ELEMENT icmp6 (calls-to-icmp6-error |
errors-not-generated-because-old-message-was-icmp-error |
errors-not-generated-because-rate-limitation | histogram |
unreachable-icmp6-packets | packet-too-big | time-exceeded-icmp6-packets |
parameter-problem-icmp6-packets | icmp6-echo | icmp6-echo-reply |
multicast-listener-query | multicast-listener-report | multicast-listener-done |
 router-solicitation-icmp6-packets | router-advertisement-icmp6-packets |
neighbor-solicitation | neighbor-advertisement | redirect | router-renumbering |
 node-information-request | node-information-reply |
icmp6-messages-with-bad-code-fields | messages-less-than-minimum-length |
bad-checksums | icmp6-messages-with-bad-length |
histogram-of-error-messages-to-be-generated | no-route |
administratively-prohibited | beyond-scope | address-unreachable | port-unreachable
 | time-exceed-transit | time-exceed-reassembly | erroneous-header-field |
unrecognized-next-header | unrecognized-option | unknown |
icmp6-message-responses-generated | messages-with-too-many-nd-options)*>

<!ELEMENT icmp6-echo (#PCDATA)>

<!ELEMENT icmp6-echo-reply (#PCDATA)>

<!ELEMENT icmp6-message-responses-generated (#PCDATA)>

<!ELEMENT icmp6-messages-with-bad-code-fields (#PCDATA)>

<!ELEMENT icmp6-messages-with-bad-length (#PCDATA)>

<!ELEMENT igmp (messages-received | messages-received-with-too-few-bytes |
messages-received-with-bad-checksum | membership-queries-received |
membership-queries-received-with-invalid-fields | membership-reports-received |
membership-reports-received-with-invalid-fields |
membership-reports-received-for-groups-to-which-we-belong |
membership-reports-sent)*>

<!ELEMENT igmpl2-packets-received (#PCDATA)>

<!ELEMENT igmpl2-packets-transmitted (#PCDATA)>

<!ELEMENT in-sequence-bytes (#PCDATA)>

<!ELEMENT inbound-esp-packets-considered-authentic (#PCDATA)>

<!ELEMENT inbound-esp-packets-failed-on-authentication (#PCDATA)>

<!ELEMENT inbound-packets-considered-authentic (#PCDATA)>

<!ELEMENT inbound-packets-failed-due-to-insufficient-memory (#PCDATA)>

<!ELEMENT inbound-packets-failed-getting-spi (#PCDATA)>

<!ELEMENT inbound-packets-failed-on-ah-replay-check (#PCDATA)>

<!ELEMENT inbound-packets-failed-on-authentication (#PCDATA)>

<!ELEMENT inbound-packets-failed-on-esp-replay-check (#PCDATA)>

<!ELEMENT inbound-packets-processed-successfully (#PCDATA)>

<!ELEMENT inbound-packets-violated-process-security-policy (#PCDATA)>
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<!ELEMENT inbound-packets-with-no-sa-available (#PCDATA)>

<!ELEMENT incoming-messages-with-memory-allocation-failure (#PCDATA)>

<!ELEMENT incoming-rawip-packets-dropped-no-socket-buffer (#PCDATA)>

<!ELEMENT incoming-ttpoip-packets-dropped (#PCDATA)>

<!ELEMENT incoming-ttpoip-packets-received (#PCDATA)>

<!ELEMENT information-request (#PCDATA)>

<!ELEMENT information-request-reply (#PCDATA)>

<!ELEMENT input-drops-due-to-bogus-protocol (#PCDATA)>

<!ELEMENT input-drops-due-to-no-mbufs-available (#PCDATA)>

<!ELEMENT input-drops-due-to-no-socket (#PCDATA)>

<!ELEMENT input-drops-due-to-no-space-in-socket (#PCDATA)>

<!ELEMENT input-packets (#PCDATA)>

<!ELEMENT input-packets-could-not-get-buffer (#PCDATA)>

<!ELEMENT input-packets-discarded-with-no-protocol (#PCDATA)>

<!ELEMENT input-packets-drop-bad-interface-state (#PCDATA)>

<!ELEMENT input-packets-for-which-route-lookup-is-bypassed (#PCDATA)>

<!ELEMENT input-packets-with-bad-type (#PCDATA)>

<!ELEMENT input-packets-with-discard-type (#PCDATA)>

<!ELEMENT invalid-inbound-packets (#PCDATA)>

<!ELEMENT invalid-outbound-packets (#PCDATA)>

<!ELEMENT ip (packets-received | bad-header-checksums |
packets-with-size-smaller-than-minimum |
packets-with-data-size-less-than-datalength |
packets-with-header-length-less-than-data-size |
packets-with-data-length-less-than-headerlength |
packets-with-incorrect-version-number | packets-destined-to-dead-next-hop |
fragments-received | fragments-dropped-due-to-outofspace-or-dup |
fragments-dropped-due-to-queueoverflow | fragments-dropped-after-timeout |
fragments-dropped-due-to-over-limit | packets-reassembled-ok |
packets-for-this-host | packets-for-unknown-or-unsupported-protocol |
packets-forwarded | packets-not-forwardable | redirects-sent |
packets-sent-from-this-host | packets-sent-with-fabricated-ip-header |
output-packets-dropped-due-to-no-bufs | output-packets-discarded-due-to-no-route
 | output-datagrams-fragmented | fragments-created |
datagrams-that-can-not-be-fragmented | packets-with-bad-options |
packets-with-options-handled-without-error | strict-source-and-record-route-options
 | loose-source-and-record-route-options | record-route-options | timestamp-options
 | timestamp-and-address-options | timestamp-and-prespecified-address-options |
option-packets-dropped-due-to-rate-limit | router-alert-options |
multicast-packets-dropped | packets-dropped |
transit-re-packets-dropped-on-mgmt-interface |
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packets-used-first-nexthop-in-ecmp-unilist | incoming-ttpoip-packets-received |
incoming-ttpoip-packets-dropped | outgoing-ttpoip-packets-sent |
outgoing-ttpoip-packets-dropped |
incoming-rawip-packets-dropped-no-socket-buffer)*>

<!ELEMENT ip6 (total-packets-received | ip6-packets-with-size-smaller-than-minimum
 | packets-with-datasize-less-than-data-length | ip6-packets-with-bad-options |
ip6-packets-with-incorrect-version-number | ip6-fragments-received |
duplicate-or-out-of-space-fragments-dropped | ip6-fragments-dropped-after-timeout
 | fragments-that-exceeded-limit | ip6-packets-reassembled-ok |
ip6-packets-for-this-host | ip6-packets-forwarded | ip6-packets-not-forwardable
| ip6-redirects-sent | ip6-packets-sent-from-this-host |
ip6-packets-sent-with-fabricated-ip-header |
ip6-output-packets-dropped-due-to-no-bufs |
ip6-output-packets-discarded-due-to-no-route | ip6-output-datagrams-fragmented |
 ip6-fragments-created | ip6-datagrams-that-can-not-be-fragmented |
packets-that-violated-scope-rules | multicast-packets-which-we-do-not-join |
histogram | ip6nh-hop-by-hop | ip6nh-icmp | ip6nh-igmp | ip6nh-ip | ip6nh-tcp |
ip6nh-udp | ip6nh-idp | ip6nh-tp | ip6nh-ip6 | ip6nh-routing | ip6nh-fragment |
ip6nh-esp | ip6nh-ah | ip6nh-icmp6 | ip6nh-no-next-header |
ip6nh-destination-option | ip6nh-isoip | ip6nh-ospf | ip6nh-ethernet | ip6nh-pim
 | mbuf-statistics | node-locals | link-locals | site-locals | globals |
address-scope | hex-value | header-for-source-address-selection |
packets-whose-headers-are-not-continuous | tunneling-packets-that-can-not-find-gif
 | packets-discarded-due-to-too-may-headers | failures-of-source-address-selection
 | forward-cache-hit | forward-cache-miss | ip6-packets-destined-to-dead-next-hop
 | ip6-option-packets-dropped-due-to-rate-limit | ip6-packets-dropped |
packets-dropped-due-to-bad-protocol | transit-re-packet-dropped-on-mgmt-interface
 | packet-used-first-nexthop-in-ecmp-unilist)*>

<!ELEMENT ip6-datagrams-that-can-not-be-fragmented (#PCDATA)>

<!ELEMENT ip6-fragments-created (#PCDATA)>

<!ELEMENT ip6-fragments-dropped-after-timeout (#PCDATA)>

<!ELEMENT ip6-fragments-received (#PCDATA)>

<!ELEMENT ip6-option-packets-dropped-due-to-rate-limit (#PCDATA)>

<!ELEMENT ip6-output-datagrams-fragmented (#PCDATA)>

<!ELEMENT ip6-output-packets-discarded-due-to-no-route (#PCDATA)>

<!ELEMENT ip6-output-packets-dropped-due-to-no-bufs (#PCDATA)>

<!ELEMENT ip6-packets-destined-to-dead-next-hop (#PCDATA)>

<!ELEMENT ip6-packets-dropped (#PCDATA)>

<!ELEMENT ip6-packets-for-this-host (#PCDATA)>

<!ELEMENT ip6-packets-forwarded (#PCDATA)>

<!ELEMENT ip6-packets-not-forwardable (#PCDATA)>

<!ELEMENT ip6-packets-reassembled-ok (#PCDATA)>

<!ELEMENT ip6-packets-sent-from-this-host (#PCDATA)>

<!ELEMENT ip6-packets-sent-with-fabricated-ip-header (#PCDATA)>
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<!ELEMENT ip6-packets-with-bad-options (#PCDATA)>

<!ELEMENT ip6-packets-with-incorrect-version-number (#PCDATA)>

<!ELEMENT ip6-packets-with-size-smaller-than-minimum (#PCDATA)>

<!ELEMENT ip6-redirects-sent (#PCDATA)>

<!ELEMENT ip6nh-ah (#PCDATA)>

<!ELEMENT ip6nh-destination-option (#PCDATA)>

<!ELEMENT ip6nh-esp (#PCDATA)>

<!ELEMENT ip6nh-ethernet (#PCDATA)>

<!ELEMENT ip6nh-fragment (#PCDATA)>

<!ELEMENT ip6nh-hop-by-hop (#PCDATA)>

<!ELEMENT ip6nh-icmp (#PCDATA)>

<!ELEMENT ip6nh-icmp6 (#PCDATA)>

<!ELEMENT ip6nh-idp (#PCDATA)>

<!ELEMENT ip6nh-igmp (#PCDATA)>

<!ELEMENT ip6nh-ip (#PCDATA)>

<!ELEMENT ip6nh-ip6 (#PCDATA)>

<!ELEMENT ip6nh-isoip (#PCDATA)>

<!ELEMENT ip6nh-no-next-header (#PCDATA)>

<!ELEMENT ip6nh-ospf (#PCDATA)>

<!ELEMENT ip6nh-pim (#PCDATA)>

<!ELEMENT ip6nh-routing (#PCDATA)>

<!ELEMENT ip6nh-tcp (#PCDATA)>

<!ELEMENT ip6nh-tp (#PCDATA)>

<!ELEMENT ip6nh-udp (#PCDATA)>

<!ELEMENT ipsec (inbound-packets-processed-successfully |
inbound-packets-violated-process-security-policy |
inbound-packets-with-no-sa-available | invalid-inbound-packets |
inbound-packets-failed-due-to-insufficient-memory |
inbound-packets-failed-getting-spi | inbound-packets-failed-on-ah-replay-check |
 inbound-packets-failed-on-esp-replay-check | inbound-packets-considered-authentic
 | inbound-packets-failed-on-authentication |
inbound-esp-packets-considered-authentic |
inbound-esp-packets-failed-on-authentication | histogram | ahnames-none |
ahnames-hmac-md5 | ahnames-hmac-sha1 | ahnames-md5 | ahnames-sha | ahnames-null
| ahnames-hmac-sha2-256 | ahnames-hmac-sha2-384 | ahnames-hmac-sha2-512 |
ahnames-hmac-ripemd160 | ahnames-aes-xcbc-mac | espnames-none | espnames-des-cbc
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 | espnames-3des-cbc | espnames-null | espnames-cast128-cbc | espnames-blowfish-cbc
 | espnames-rijndael-cbc | espnames-aes-ctr | compnames-none | compnames-oui |
compnames-deflate | compnames-lzs | protocol |
outbound-packets-processed-successfully |
outbound-packets-violated-process-security-policy |
outbound-packets-with-no-sa-available | invalid-outbound-packets |
outbound-packets-failed-due-to-insufficient-memory | outbound-packets-with-no-route
 | spd-cache-lookups | spd-cache-misses)*>

<!ELEMENT ipsec6 (inbound-packets-processed-successfully |
inbound-packets-violated-process-security-policy |
inbound-packets-with-no-sa-available | invalid-inbound-packets |
inbound-packets-failed-due-to-insufficient-memory |
inbound-packets-failed-getting-spi | inbound-packets-failed-on-ah-replay-check |
 inbound-packets-failed-on-esp-replay-check | inbound-packets-considered-authentic
 | inbound-packets-failed-on-authentication |
inbound-esp-packets-considered-authentic |
inbound-esp-packets-failed-on-authentication | histogram | ahnames-none |
ahnames-hmac-md5 | ahnames-hmac-sha1 | ahnames-md5 | ahnames-sha | ahnames-null
| ahnames-hmac-sha2-256 | ahnames-hmac-sha2-384 | ahnames-hmac-sha2-512 |
ahnames-hmac-ripemd160 | ahnames-aes-xcbc-mac | espnames-none | espnames-des-cbc
 | espnames-3des-cbc | espnames-null | espnames-cast128-cbc | espnames-blowfish-cbc
 | espnames-rijndael-cbc | espnames-aes-ctr | compnames-none | compnames-oui |
compnames-deflate | compnames-lzs | proto | outbound-packets-processed-successfully
 | outbound-packets-violated-process-security-policy |
outbound-packets-with-no-sa-available | invalid-outbound-packets |
outbound-packets-failed-due-to-insufficient-memory | outbound-packets-with-no-route
 | spd-cache-lookups | spd-cache-misses)*>

<!ELEMENT ipv4-l3-packets-received (#PCDATA)>

<!ELEMENT ipv4-to-mpls-l3-packets-received (#PCDATA)>

<!ELEMENT ipv6-l3-packets-received (#PCDATA)>

<!ELEMENT isdn-packets-received (#PCDATA)>

<!ELEMENT isdn-packets-transmitted (#PCDATA)>

<!ELEMENT iso-family-not-configured (#PCDATA)>

<!ELEMENT keepalive-connections-dropped (#PCDATA)>

<!ELEMENT keepalive-probes-sent (#PCDATA)>

<!ELEMENT keepalive-timeouts (#PCDATA)>

<!ELEMENT keepalives-received (#PCDATA)>

<!ELEMENT keepalives-sent (#PCDATA)>

<!ELEMENT l2-packets-received (#PCDATA)>

<!ELEMENT lacp-packets-dropped (#PCDATA)>

<!ELEMENT lacp-packets-received (#PCDATA)>

<!ELEMENT lacp-packets-transmitted (#PCDATA)>

<!ELEMENT learning-requests-over-capacity (#PCDATA)>
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<!ELEMENT learning-requests-while-learning-disabled-on-interface (#PCDATA)>
<!ELEMENT link-locals (#PCDATA)>
<!ELEMENT listen-queue-overflows (#PCDATA)>
<!ELEMENT loose-source-and-record-route-options (#PCDATA)>
<!ELEMENT lsp-ping-packets (#PCDATA)>
<!ELEMENT mac-moves (#PCDATA)>
<!ELEMENT mac-route-aging-requests (#PCDATA)>
<!ELEMENT mac-route-learning-requests (#PCDATA)>
<!ELEMENT mac-routes-aged (#PCDATA)>
<!ELEMENT mac-routes-learned (#PCDATA)>
<!ELEMENT mac-routes-moved (#PCDATA)>
<!ELEMENT macs-learned (#PCDATA)>
<!ELEMENT mbuf-statistics (#PCDATA)>
<!ELEMENT mcopy-failure (#PCDATA)>
<!ELEMENT membership-queries-received (#PCDATA)>
<!ELEMENT membership-queries-received-with-invalid-fields (#PCDATA)>
<!ELEMENT membership-reports-received (#PCDATA)>
<!ELEMENT membership-reports-received-for-groups-to-which-we-belong (#PCDATA)>
<!ELEMENT membership-reports-received-with-invalid-fields (#PCDATA)>
<!ELEMENT membership-reports-sent (#PCDATA)>
<!ELEMENT message-responses-generated (#PCDATA)>
<!ELEMENT messages-less-than-minimum-length (#PCDATA)>
<!ELEMENT messages-less-than-the-minimum-length (#PCDATA)>
<!ELEMENT messages-received (#PCDATA)>
<!ELEMENT messages-received-with-bad-checksum (#PCDATA)>
<!ELEMENT messages-received-with-too-few-bytes (#PCDATA)>
<!ELEMENT messages-too-short (#PCDATA)>
<!ELEMENT messages-toward-all-sockets (#PCDATA)>
<!ELEMENT messages-toward-registered-sockets (#PCDATA)>
<!ELEMENT messages-toward-single-socket (#PCDATA)>
<!ELEMENT messages-with-bad-checksum (#PCDATA)>
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<!ELEMENT messages-with-bad-code-fields (#PCDATA)>

<!ELEMENT messages-with-bad-length (#PCDATA)>

<!ELEMENT messages-with-bad-source-address (#PCDATA)>

<!ELEMENT messages-with-duplicate-extension (#PCDATA)>

<!ELEMENT messages-with-invalid-address-extension (#PCDATA)>

<!ELEMENT messages-with-invalid-extension-type (#PCDATA)>

<!ELEMENT messages-with-invalid-length-field (#PCDATA)>

<!ELEMENT messages-with-invalid-message-type-field (#PCDATA)>

<!ELEMENT messages-with-invalid-sa-type (#PCDATA)>

<!ELEMENT messages-with-invalid-version-field (#PCDATA)>

<!ELEMENT messages-with-too-many-nd-options (#PCDATA)>

<!ELEMENT mldl2-packets-received (#PCDATA)>

<!ELEMENT mldl2-packets-transmitted (#PCDATA)>

<!ELEMENT mpls (total-mpls-packets-received | packets-forwarded | packets-dropped
 | packets-with-header-too-small | after-tagging-packets-can-not-fit-link-mtu |
packets-with-ipv4-explicit-null-tag |
packets-with-ipv4-explicit-null-checksum-errors | packets-with-router-alert-tag
| lsp-ping-packets | packets-with-ttl-expired | packets-with-tag-encoding-error
| packets-discarded-due-to-no-route | packets-used-first-nexthop-in-ecmp-unilist)*>

<!ELEMENT mpls-l3-packets-received (#PCDATA)>

<!ELEMENT mpls-to-ipv4-l3-packets-received (#PCDATA)>

<!ELEMENT mpu-packets-received (#PCDATA)>

<!ELEMENT mpu-packets-transmitted (#PCDATA)>

<!ELEMENT multicast-listener-done (#PCDATA)>

<!ELEMENT multicast-listener-query (#PCDATA)>

<!ELEMENT multicast-listener-report (#PCDATA)>

<!ELEMENT multicast-packets-dropped (#PCDATA)>

<!ELEMENT multicast-packets-which-we-do-not-join (#PCDATA)>

<!ELEMENT neighbor-advertisement (#PCDATA)>

<!ELEMENT neighbor-solicitation (#PCDATA)>

<!ELEMENT new-requests-on-unnumbered-interfaces (#PCDATA)>

<!ELEMENT no-free-memory-in-socket-buffer (#PCDATA)>

<!ELEMENT no-route (#PCDATA)>
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<!ELEMENT node-information-reply (#PCDATA)>
<!ELEMENT node-information-request (#PCDATA)>
<!ELEMENT node-locals (#PCDATA)>
<!ELEMENT non-forwarded-packets (#PCDATA)>
<!ELEMENT null-l3-packets-received (#PCDATA)>
<!ELEMENT option-packets-dropped-due-to-rate-limit (#PCDATA)>
<!ELEMENT out-of-order-in-bytes (#PCDATA)>
<!ELEMENT out-of-sequence-segment-drops (#PCDATA)>
<!ELEMENT outbound-packets-failed-due-to-insufficient-memory (#PCDATA)>
<!ELEMENT outbound-packets-processed-successfully (#PCDATA)>
<!ELEMENT outbound-packets-violated-process-security-policy (#PCDATA)>
<!ELEMENT outbound-packets-with-no-route (#PCDATA)>
<!ELEMENT outbound-packets-with-no-sa-available (#PCDATA)>
<!ELEMENT outgoing-messages-with-memory-allocation-failure (#PCDATA)>
<!ELEMENT outgoing-segments-dropped (#PCDATA)>
<!ELEMENT outgoing-ttpoip-packets-dropped (#PCDATA)>
<!ELEMENT outgoing-ttpoip-packets-sent (#PCDATA)>
<!ELEMENT output-datagrams-fragmented (#PCDATA)>
<!ELEMENT output-drops-due-to-transmit-error (#PCDATA)>
<!ELEMENT output-packets (#PCDATA)>
<!ELEMENT output-packets-discarded (#PCDATA)>
<!ELEMENT output-packets-discarded-due-to-no-route (#PCDATA)>
<!ELEMENT output-packets-drop-bad-interface-state (#PCDATA)>
<!ELEMENT output-packets-dropped-due-to-no-bufs (#PCDATA)>
<!ELEMENT packet-too-big (#PCDATA)>
<!ELEMENT packet-used-first-nexthop-in-ecmp-unilist (#PCDATA)>
<!ELEMENT packets-delivered (#PCDATA)>
<!ELEMENT packets-destined-to-dead-next-hop (#PCDATA)>
<!ELEMENT packets-destined-to-dead-nexthop (#PCDATA)>
<!ELEMENT packets-discarded (#PCDATA)>
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<!ELEMENT packets-discarded-due-to-bad-sequence-number (#PCDATA)>
<!ELEMENT packets-discarded-due-to-no-route (#PCDATA)>
<!ELEMENT packets-discarded-due-to-too-may-headers (#PCDATA)>
<!ELEMENT packets-discarded-for-bad-checksum (#PCDATA)>
<!ELEMENT packets-discarded-waiting-for-resolution (#PCDATA)>
<!ELEMENT packets-dropped (#PCDATA)>
<!ELEMENT packets-dropped-due-to-bad-protocol (#PCDATA)>
<!ELEMENT packets-dropped-due-to-full-socket-buffers (#PCDATA)>
<!ELEMENT packets-dropped-due-to-interface-down (#PCDATA)>
<!ELEMENT packets-dropped-due-to-no-l3-route-table (#PCDATA)>
<!ELEMENT packets-dropped-due-to-no-local-ifl (#PCDATA)>
<!ELEMENT packets-dropped-due-to-no-resolve-nh-in-clone-learning (#PCDATA)>
<!ELEMENT packets-dropped-due-to-no-resolve-route (#PCDATA)>
<!ELEMENT packets-dropped-due-to-no-socket (#PCDATA)>
<!ELEMENT packets-dropped-due-to-stp-blocked-or-listening (#PCDATA)>
<!ELEMENT packets-dropped-due-to-stp-learning (#PCDATA)>
<!ELEMENT packets-dropped-full-repl-sock-buf (#PCDATA)>
<!ELEMENT packets-failed-to-forward (#PCDATA)>
<!ELEMENT packets-flooded (#PCDATA)>
<!ELEMENT packets-for-this-host (#PCDATA)>
<!ELEMENT packets-for-unknown-or-unsupported-protocol (#PCDATA)>
<!ELEMENT packets-forwarded (#PCDATA)>
<!ELEMENT packets-forwarded-to-l3-interface (#PCDATA)>
<!ELEMENT packets-fragmented (#PCDATA)>
<!ELEMENT packets-hit-hold-queue-while-learning (#PCDATA)>
<!ELEMENT packets-not-forwardable (#PCDATA)>
<!ELEMENT packets-of-version-unspecified-received (#PCDATA)>
<!ELEMENT packets-of-version-unspecified-sent (#PCDATA)>
<!ELEMENT packets-of-version1-received (#PCDATA)>
<!ELEMENT packets-of-version1-sent (#PCDATA)>
<!ELEMENT packets-of-version2-received (#PCDATA)>
```

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```
<!ELEMENT packets-of-version2-sent (#PCDATA)>
<!ELEMENT packets-of-version3-received (#PCDATA)>
<!ELEMENT packets-of-version3-sent (#PCDATA)>
<!ELEMENT packets-punted (#PCDATA)>
<!ELEMENT packets-reassembled-ok (#PCDATA)>
<!ELEMENT packets-received (#PCDATA)>
<!ELEMENT packets-received-after-close (#PCDATA)>
<!ELEMENT packets-received-from-unknown-ifl (#PCDATA)>
<!ELEMENT packets-received-in-sequence (#PCDATA)>
<!ELEMENT packets-received-while-unconnected (#PCDATA)>
<!ELEMENT packets-reconstructed (#PCDATA)>
<!ELEMENT packets-sent (#PCDATA)>
<!ELEMENT packets-sent-after-waiting-for-resolution (#PCDATA)>
<!ELEMENT packets-sent-could-not-find-neighbor (#PCDATA)>
<!ELEMENT packets-sent-could-not-get-buffer (#PCDATA)>
<!ELEMENT packets-sent-from-this-host (#PCDATA)>
<!ELEMENT packets-sent-successfully (#PCDATA)>
<!ELEMENT packets-sent-to-l3-interface (#PCDATA)>
<!ELEMENT packets-sent-while-interface-down (#PCDATA)>
<!ELEMENT packets-sent-while-unconnected (#PCDATA)>
<!ELEMENT packets-sent-with-fabricated-ip-header (#PCDATA)>
<!ELEMENT packets-sent-with-unknown-protocol (#PCDATA)>
<!ELEMENT packets-that-violated-scope-rules (#PCDATA)>
<!ELEMENT packets-used-first-nexthop-in-ecmp-unilist (#PCDATA)>
<!ELEMENT packets-whose-headers-are-not-continuous (#PCDATA)>
<!ELEMENT packets-with-bad-checksum (#PCDATA)>
<!ELEMENT packets-with-bad-header-length (#PCDATA)>
<!ELEMENT packets-with-bad-options (#PCDATA)>
<!ELEMENT packets-with-bogus-sdl-size (#PCDATA)>
<!ELEMENT packets-with-data-length-less-than-headerlength (#PCDATA)>
```


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```
<!ELEMENT packets-with-data-size-less-than-datalength (#PCDATA)>
<!ELEMENT packets-with-datasize-less-than-data-length (#PCDATA)>
<!ELEMENT packets-with-dead-nexthop (#PCDATA)>
<!ELEMENT packets-with-dead-nexthop-in-clone-learning (#PCDATA)>
<!ELEMENT packets-with-dev-output-failures (#PCDATA)>
<!ELEMENT packets-with-double-tags (#PCDATA)>
<!ELEMENT packets-with-eof-reached-error (#PCDATA)>
<!ELEMENT packets-with-header-length-less-than-data-size (#PCDATA)>
<!ELEMENT packets-with-header-too-small (#PCDATA)>
<!ELEMENT packets-with-ifl-lookup-failures (#PCDATA)>
<!ELEMENT packets-with-ifl-mismatch-failures (#PCDATA)>
<!ELEMENT packets-with-incorrect-version-number (#PCDATA)>
<!ELEMENT packets-with-input-control-processing-failures (#PCDATA)>
<!ELEMENT packets-with-ipv4-explicit-null-checksum-errors (#PCDATA)>
<!ELEMENT packets-with-ipv4-explicit-null-tag (#PCDATA)>
<!ELEMENT packets-with-l2-ifl-store-failures (#PCDATA)>
<!ELEMENT packets-with-l3-ifd-lookup-failures (#PCDATA)>
<!ELEMENT packets-with-l3-ifl-lookup-failures (#PCDATA)>
<!ELEMENT packets-with-l3-invalid-rnh (#PCDATA)>
<!ELEMENT packets-with-l3-send-failures (#PCDATA)>
<!ELEMENT packets-with-mpull-failures (#PCDATA)>
<!ELEMENT packets-with-no-auxiliary-table (#PCDATA)>
<!ELEMENT packets-with-no-ce-facing-entry (#PCDATA)>
<!ELEMENT packets-with-no-corefacing-entry (#PCDATA)>
<!ELEMENT packets-with-no-family (#PCDATA)>
<!ELEMENT packets-with-no-ifl (#PCDATA)>
<!ELEMENT packets-with-no-logical-interface (#PCDATA)>
<!ELEMENT packets-with-no-nexthop (#PCDATA)>
<!ELEMENT packets-with-no-nexthop-in-clone-learning (#PCDATA)>
<!ELEMENT packets-with-no-route-for-dmac (#PCDATA)>
<!ELEMENT packets-with-no-route-for-smac (#PCDATA)>
```

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```
<!ELEMENT packets-with-no-route-for-smac-in-clone-learning (#PCDATA)>

<!ELEMENT packets-with-no-route-table (#PCDATA)>

<!ELEMENT packets-with-options-handled-without-error (#PCDATA)>

<!ELEMENT packets-with-packet-duplication-failures (#PCDATA)>

<!ELEMENT packets-with-receive-failures (#PCDATA)>

<!ELEMENT packets-with-router-alert-tag (#PCDATA)>

<!ELEMENT packets-with-send-failures (#PCDATA)>

<!ELEMENT packets-with-size-smaller-than-minimum (#PCDATA)>

<!ELEMENT packets-with-src-mac-learning-failures (#PCDATA)>

<!ELEMENT packets-with-stp-state-lookup-failures (#PCDATA)>

<!ELEMENT packets-with-tag-encoding-error (#PCDATA)>

<!ELEMENT packets-with-tag-insertion-failures (#PCDATA)>

<!ELEMENT packets-with-tag-lookup-failures (#PCDATA)>

<!ELEMENT packets-with-tag-removal-failures (#PCDATA)>

<!ELEMENT packets-with-tnp-src-address-collision-received (#PCDATA)>

<!ELEMENT packets-with-ttl-expired (#PCDATA)>

<!ELEMENT packets-with-vlan-lookup-failures (#PCDATA)>

<!ELEMENT packets-with-vmember-lookup-failures (#PCDATA)>

<!ELEMENT parameter-problem (#PCDATA)>

<!ELEMENT parameter-problem-icmp6-packets (#PCDATA)>

<!ELEMENT pdus-received-with-bad-checksum (#PCDATA)>

<!ELEMENT pdus-received-with-bad-type-field (#PCDATA)>

<!ELEMENT pdus-received-with-bad-version-number (#PCDATA)>

<!ELEMENT pdus-with-bad-header-length (#PCDATA)>

<!ELEMENT pdus-with-bogus-sdl-size (#PCDATA)>

<!ELEMENT pdus-with-unknown-or-unsupport-protocol (#PCDATA)>

<!ELEMENT persist-timeouts (#PCDATA)>

<!ELEMENT pfkey (requests-sent-from-userland | bytes-sent-from-userland | histogram
 | reserved | getspi | update | add | delete | get | acquire | register | expire
 | flush | dump | x-promisc | x-pchange | x-spdupdate | x-spdadd | x-spddelete |
 x-spdget | x-spdacquire | x-spddump | x-spdflush | x-spdsetidx | x-spdexpire |
x-spddelete2 | messages-with-invalid-length-field |
messages-with-invalid-version-field | messages-with-invalid-message-type-field |
```


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```
 messages-too-short | outgoing-messages-with-memory-allocation-failure |
messages-with-duplicate-extension | messages-with-invalid-extension-type |
messages-with-invalid-sa-type | messages-with-invalid-address-extension |
requests-sent-to-userland | bytes-sent-to-userland | messages-toward-single-socket
 | messages-toward-all-sockets | messages-toward-registered-sockets |
incoming-messages-with-memory-allocation-failure)*>

<!ELEMENT port-unreachable (#PCDATA)>

<!ELEMENT ppoe-packets-transmitted (#PCDATA)>

<!ELEMENT ppp-packets-received-from-jppd (#PCDATA)>

<!ELEMENT ppp-packets-received-from-pppd (#PCDATA)>

<!ELEMENT ppp-packets-transmitted-to-jppd (#PCDATA)>

<!ELEMENT ppp-packets-transmitted-to-pppd (#PCDATA)>

<!ELEMENT pppoe-packets-received (#PCDATA)>

<!ELEMENT proto (#PCDATA)>

<!ELEMENT protocol (#PCDATA)>

<!ELEMENT proxy-requests-not-proxied (#PCDATA)>

<!ELEMENT raw-interface (raw-packets-transmitted | ppoe-packets-transmitted |
isdn-packets-transmitted | dialer-packets-transmitted |
ppp-packets-transmitted-to-pppd | ppp-packets-transmitted-to-jppd |
igmpl2-packets-transmitted | mldl2-packets-transmitted |
fibre-channel-packets-transmitted | fip-packets-transmitted |
stp-packets-transmitted | lacp-packets-transmitted | faboam-packets-transmitted
| output-drops-due-to-transmit-error | mpu-packets-transmitted |
pppoe-packets-received | isdn-packets-received | dialer-packets-received |
ppp-packets-received-from-pppd | mpu-packets-received |
ppp-packets-received-from-jppd | igmpl2-packets-received | mldl2-packets-received
 | fibre-channel-packets-received | fip-packets-received | stp-packets-received
| lacp-packets-received | faboam-packets-received | fibre-channel-packets-dropped
 | fip-packets-dropped | stp-packets-dropped | lacp-packets-dropped |
faboam-packets-dropped | input-drops-due-to-bogus-protocol |
input-drops-due-to-no-mbufs-available | input-drops-due-to-no-space-in-socket |
input-drops-due-to-no-socket)*>

<!ELEMENT raw-packets-transmitted (#PCDATA)>

<!ELEMENT rcv-packets-dropped (#PCDATA)>

<!ELEMENT rcv-packets-dropped-due-to-bad-address (#PCDATA)>

<!ELEMENT rdp (input-packets | packets-discarded-for-bad-checksum |
packets-discarded-due-to-bad-sequence-number | refused-connections | acks-received
 | packets-dropped-due-to-full-socket-buffers | packets-dropped-full-repl-sock-buf
 | retransmits | output-packets | acks-sent | connects | closes |
keepalives-received | keepalives-sent)*>

<!ELEMENT rdp-packets-received (#PCDATA)>

<!ELEMENT rdp-packets-sent (#PCDATA)>

<!ELEMENT received-acks (#PCDATA)>
```

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```
<!ELEMENT received-acks-for-unsent-data (#PCDATA)>
<!ELEMENT received-completely-duplicate-packet (#PCDATA)>
<!ELEMENT received-discarded-because-packet-too-short (#PCDATA)>
<!ELEMENT received-discarded-for-bad-checksum (#PCDATA)>
<!ELEMENT received-discarded-for-bad-header-offset (#PCDATA)>
<!ELEMENT received-duplicate-acks (#PCDATA)>
<!ELEMENT received-fragments-dropped (#PCDATA)>
<!ELEMENT received-hello-packets-dropped (#PCDATA)>
<!ELEMENT received-old-duplicate-packets (#PCDATA)>
<!ELEMENT received-out-of-order-packets (#PCDATA)>
<!ELEMENT received-packets-forwarded (#PCDATA)>
<!ELEMENT received-packets-of-data-after-window (#PCDATA)>
<!ELEMENT received-packets-with-some-dupliacte-data (#PCDATA)>
<!ELEMENT received-proxy-requests (#PCDATA)>
<!ELEMENT received-window-probes (#PCDATA)>
<!ELEMENT received-window-update-packets (#PCDATA)>
<!ELEMENT record-route-options (#PCDATA)>
<!ELEMENT redirect (#PCDATA)>
<!ELEMENT redirects-sent (#PCDATA)>
<!ELEMENT refused-connections (#PCDATA)>
<!ELEMENT register (#PCDATA)>
<!ELEMENT replies-from-unnumbered-interface-with-non-subnetted-donor (#PCDATA)>
<!ELEMENT replies-from-unnumbered-interfaces (#PCDATA)>
<!ELEMENT requests-dropped-due-to-interface-deletion (#PCDATA)>
<!ELEMENT requests-dropped-during-retry (#PCDATA)>
<!ELEMENT requests-dropped-on-entry (#PCDATA)>
<!ELEMENT requests-for-memory-denied (#PCDATA)>
<!ELEMENT requests-involving-multiple-peer-fes (#PCDATA)>
<!ELEMENT requests-on-unnumbered-interface-with-non-subnetted-donor (#PCDATA)>
<!ELEMENT requests-on-unnumbered-interfaces (#PCDATA)>
```


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```
<!ELEMENT requests-sent-from-userland (#PCDATA)>
<!ELEMENT requests-sent-to-userland (#PCDATA)>
<!ELEMENT requests-to-age-static-route (#PCDATA)>
<!ELEMENT requests-to-learn-an-existing-route (#PCDATA)>
<!ELEMENT requests-to-move-static-route (#PCDATA)>
<!ELEMENT requests-to-re-ageout-aged-route (#PCDATA)>
<!ELEMENT reserved (#PCDATA)>
<!ELEMENT reset (#PCDATA)>
<!ELEMENT resolution-request-received (#PCDATA)>
<!ELEMENT restricted-proxy-requests (#PCDATA)>
<!ELEMENT restricted-proxy-requests-not-proxied (#PCDATA)>
<!ELEMENT retransmit-timeouts (#PCDATA)>
<!ELEMENT retransmits (#PCDATA)>
<!ELEMENT retransmitted (#PCDATA)>
<!ELEMENT retransmitted-bytes (#PCDATA)>
<!ELEMENT router-advertisement (#PCDATA)>
<!ELEMENT router-advertisement-icmp6-packets (#PCDATA)>
<!ELEMENT router-alert-options (#PCDATA)>
<!ELEMENT router-renumbering (#PCDATA)>
<!ELEMENT router-solicitation (#PCDATA)>
<!ELEMENT router-solicitation-icmp6-packets (#PCDATA)>
<!ELEMENT routing-redirect (#PCDATA)>
<!ELEMENT rst-packets (#PCDATA)>
<!ELEMENT sack-opitions-sent (#PCDATA)>
<!ELEMENT sack-options-received (#PCDATA)>
<!ELEMENT sack-recovery-episodes (#PCDATA)>
<!ELEMENT sack-scoreboard-overflow (#PCDATA)>
<!ELEMENT sbappend-failure (#PCDATA)>
<!ELEMENT segment-information-forgotten (#PCDATA)>
<!ELEMENT segment-retransmits (#PCDATA)>
<!ELEMENT segments-updated-rtt (#PCDATA)>
```

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```
<!ELEMENT send-packets-discarded (#PCDATA)>

<!ELEMENT send-packets-dropped (#PCDATA)>

<!ELEMENT sent-ack-only-packets (#PCDATA)>

<!ELEMENT sent-control-packets (#PCDATA)>

<!ELEMENT sent-data-packets (#PCDATA)>

<!ELEMENT sent-data-packets-retransmitted (#PCDATA)>

<!ELEMENT sent-fragments-dropped (#PCDATA)>

<!ELEMENT sent-hello-packets-dropped (#PCDATA)>

<!ELEMENT sent-packets-delayed (#PCDATA)>

<!ELEMENT sent-resends-by-mtu-discovery (#PCDATA)>

<!ELEMENT sent-urg-only-packets (#PCDATA)>

<!ELEMENT sent-window-probe-packets (#PCDATA)>

<!ELEMENT sent-window-update-packets (#PCDATA)>

<!ELEMENT short-pdus-received (#PCDATA)>

<!ELEMENT site-locals (#PCDATA)>

<!ELEMENT some-duplicate-in-bytes (#PCDATA)>

<!ELEMENT source-quench (#PCDATA)>

<!ELEMENT spd-cache-lookups (#PCDATA)>

<!ELEMENT spd-cache-misses (#PCDATA)>

<!ELEMENT stale (#PCDATA)>

<!ELEMENT statistics (tcp | udp | ip | icmp | igmp | ipsec | raw-interface | arp
 | ip6 | icmp6 | ipsec6 | pfkey | clnl | esis | tnp | rdp | tudp | ttp | mpls |
vpls | bridge | ethoamcfm | ethoamlfm)*>

<!ELEMENT stp-packets-dropped (#PCDATA)>

<!ELEMENT stp-packets-received (#PCDATA)>

<!ELEMENT stp-packets-transmitted (#PCDATA)>

<!ELEMENT strict-source-and-record-route-options (#PCDATA)>

<!ELEMENT syncache-entries-added (#PCDATA)>

<!ELEMENT tcp (packets-sent | sent-data-packets | data-packets-bytes |
sent-data-packets-retransmitted | retransmitted-bytes |
sent-resends-by-mtu-discovery | sent-ack-only-packets | sent-packets-delayed |
sent-urg-only-packets | sent-window-probe-packets | sent-window-update-packets |
 sent-control-packets | packets-received | received-acks | acks-bytes |
received-duplicate-acks | received-acks-for-unsent-data |
```

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```
packets-received-in-sequence | in-sequence-bytes |
received-completely-duplicate-packet | duplicate-in-bytes |
received-old-duplicate-packets | received-packets-with-some-dupliacte-data |
some-duplicate-in-bytes | received-out-of-order-packets | out-of-order-in-bytes
| received-packets-of-data-after-window | bytes | received-window-probes |
received-window-update-packets | packets-received-after-close |
received-discarded-for-bad-checksum | received-discarded-for-bad-header-offset |
 received-discarded-because-packet-too-short | connection-requests |
connection-accepts | bad-connection-attempts | listen-queue-overflows |
connections-established | connections-closed | drops |
connections-updated-rtt-on-close | connections-updated-variance-on-close |
connections-updated-ssthresh-on-close | embryonic-connections-dropped |
segments-updated-rtt | attempts | retransmit-timeouts |
connections-dropped-by-retransmit-timeout | persist-timeouts |
connections-dropped-by-persist-timeout | keepalive-timeouts | keepalive-probes-sent
 | keepalive-connections-dropped | ack-header-predictions |
data-packet-header-predictions | syncache-entries-added | retransmitted | dupsyn
 | dropped | completed | bucket-overflow | cache-overflow | reset | stale | aborted
 | badack | unreach | zone-failures | cookies-sent | cookies-received |
sack-recovery-episodes | segment-retransmits | byte-retransmits |
sack-options-received | sack-opitions-sent | sack-scoreboard-overflow |
acks-sent-in-response-but-not-exact-rsts |
acks-sent-in-response-to-syns-on-established-connections |
rcv-packets-dropped-due-to-bad-address | out-of-sequence-segment-drops |
rst-packets | icmp-packets-ignored | send-packets-dropped | rcv-packets-dropped
| outgoing-segments-dropped)*>

<!ELEMENT time-exceed-reassembly (#PCDATA)>

<!ELEMENT time-exceed-transit (#PCDATA)>

<!ELEMENT time-exceeded (#PCDATA)>

<!ELEMENT time-exceeded-icmp6-packets (#PCDATA)>

<!ELEMENT time-stamp (#PCDATA)>

<!ELEMENT time-stamp-reply (#PCDATA)>

<!ELEMENT timestamp-and-address-options (#PCDATA)>

<!ELEMENT timestamp-and-prespecified-address-options (#PCDATA)>

<!ELEMENT timestamp-drops-with-broadcast-or-multicast-destination-address
(#PCDATA)>

<!ELEMENT timestamp-options (#PCDATA)>

<!ELEMENT tnp (unicast-packets-received | broadcast-packets-received |
fragmented-packets-received | received-hello-packets-dropped |
received-fragments-dropped | fragment-reassembly-queue-flushes |
packets-with-tnp-src-address-collision-received | hello-packets-received |
control-packets-received | rdp-packets-received | udp-packets-received |
tunnel-packets-received | input-packets-discarded-with-no-protocol |
packets-of-version-unspecified-received | packets-of-version1-received |
packets-of-version2-received | packets-of-version3-received | unicast-packets-sent
 | broadcast-packets-sent | fragmented-packets-sent | sent-hello-packets-dropped
 | sent-fragments-dropped | hello-packets-sent | control-packets-sent |
rdp-packets-sent | udp-packets-sent | tunnel-packets-sent |
packets-sent-with-unknown-protocol | packets-of-version-unspecified-sent |
packets-of-version1-sent | packets-of-version2-sent | packets-of-version3-sent)*>
```

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```
<!ELEMENT tnp-l3-packets-received (#PCDATA)>

<!ELEMENT too-small-packets (#PCDATA)>

<!ELEMENT total-clnl-packets-received (#PCDATA)>

<!ELEMENT total-esis-packets-received (#PCDATA)>

<!ELEMENT total-mpls-packets-received (#PCDATA)>

<!ELEMENT total-packets-consumed-by-protocol (#PCDATA)>

<!ELEMENT total-packets-received (#PCDATA)>

<!ELEMENT total-packets-sent (#PCDATA)>

<!ELEMENT total-packets-transmitted (#PCDATA)>

<!ELEMENT transit-re-packet-dropped-on-mgmt-interface (#PCDATA)>

<!ELEMENT transit-re-packets-dropped-on-mgmt-interface (#PCDATA)>

<!ELEMENT ttp (ttp-packets-sent | packets-sent-while-unconnected |
packets-sent-while-interface-down | packets-sent-could-not-get-buffer |
packets-sent-could-not-find-neighbor | l2-packets-received |
unknown-l3-packets-received | ipv4-l3-packets-received | mpls-l3-packets-received
 | mpls-to-ipv4-l3-packets-received | ipv4-to-mpls-l3-packets-received |
ipv6-l3-packets-received | arp-l3-packets-received | clnp-l3-packets-received |
tnp-l3-packets-received | null-l3-packets-received |
cyclotron-cycle-l3-packets-received | cyclotron-send-l3-packets-received |
packets-received-while-unconnected | packets-received-from-unknown-ifl |
input-packets-could-not-get-buffer | input-packets-with-bad-type |
input-packets-with-discard-type |
input-packets-for-which-route-lookup-is-bypassed)*>

<!ELEMENT ttp-packets-sent (#PCDATA)>

<!ELEMENT tudp (datagrams-received | datagrams-with-incomplete-header |
datagrams-with-bad-data-length-field | datagrams-with-bad-checksum |
datagrams-dropped-due-to-no-socket |
broadcast-or-multicast-datagrams-dropped-due-to-no-socket |
datagrams-dropped-due-to-full-socket-buffers | delivered | datagrams-output)*>

<!ELEMENT tunnel-packets-received (#PCDATA)>

<!ELEMENT tunnel-packets-sent (#PCDATA)>

<!ELEMENT tunneling-packets-that-can-not-find-gif (#PCDATA)>

<!ELEMENT type-of-histogram (#PCDATA)>

<!ELEMENT udp (datagrams-received | datagrams-with-incomplete-header |
datagrams-with-bad-datalength-field | datagrams-with-bad-checksum |
datagrams-dropped-due-to-no-socket |
broadcast-or-multicast-datagrams-dropped-due-to-no-socket |
datagrams-dropped-due-to-full-socket-buffers | datagrams-not-for-hashed-pcb |
datagrams-delivered | datagrams-output)*>

<!ELEMENT udp-packets-received (#PCDATA)>
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<!ELEMENT udp-packets-sent (#PCDATA)>

<!ELEMENT unicast-packets-received (#PCDATA)>

<!ELEMENT unicast-packets-sent (#PCDATA)>

<!ELEMENT unknown (#PCDATA)>

<!ELEMENT unknown-l3-packets-received (#PCDATA)>

<!ELEMENT unknown-or-unsupported-protocol-packets (#PCDATA)>

<!ELEMENT unreach (#PCDATA)>

<!ELEMENT unreachable-icmp6-packets (#PCDATA)>

<!ELEMENT unrecognized-next-header (#PCDATA)>

<!ELEMENT unrecognized-option (#PCDATA)>

<!ELEMENT unrestricted-proxy-requests (#PCDATA)>

<!ELEMENT unsupported-platform (#PCDATA)>

<!ELEMENT update (#PCDATA)>

<!ELEMENT vpls (total-packets-received |
vpls-packets-with-size-smaller-than-minimum |
vpls-packets-with-incorrect-version-number | vpls-packets-for-this-host |
packets-with-no-logical-interface | packets-with-no-family |
packets-with-no-route-table | packets-with-no-auxiliary-table |
packets-with-no-corefacing-entry | packets-with-no-ce-facing-entry |
mac-route-learning-requests | mac-routes-learned |
requests-to-learn-an-existing-route |
learning-requests-while-learning-disabled-on-interface |
learning-requests-over-capacity | mac-routes-moved | requests-to-move-static-route
 | mac-route-aging-requests | mac-routes-aged | bogus-address-in-aging-requests
| requests-to-age-static-route | requests-to-re-ageout-aged-route |
requests-involving-multiple-peer-fes | aging-acks-from-pfe |
aging-non-acks-from-pfe | aging-requests-timed-out-waiting-on-fes |
aging-requests-over-max-rate | errors-finding-peer-fes | unsupported-platform |
packets-dropped-due-to-no-l3-route-table | packets-dropped-due-to-no-local-ifl |
 packets-punted | packets-dropped-due-to-no-socket)*>

<!ELEMENT vpls-packets-for-this-host (#PCDATA)>

<!ELEMENT vpls-packets-with-incorrect-version-number (#PCDATA)>

<!ELEMENT vpls-packets-with-size-smaller-than-minimum (#PCDATA)>

<!ELEMENT x-pchange (#PCDATA)>

<!ELEMENT x-promisc (#PCDATA)>

<!ELEMENT x-spdacquire (#PCDATA)>

<!ELEMENT x-spdadd (#PCDATA)>

<!ELEMENT x-spddelete (#PCDATA)>

<!ELEMENT x-spddelete2 (#PCDATA)>
```

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```
<!ELEMENT x-spddump (#PCDATA)>
<!ELEMENT x-spdexpire (#PCDATA)>
<!ELEMENT x-spdflush (#PCDATA)>
<!ELEMENT x-spdget (#PCDATA)>
<!ELEMENT x-spdsetidx (#PCDATA)>
<!ELEMENT x-spdupdate (#PCDATA)>
<!ELEMENT zone-failures (#PCDATA)>
```


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CHAPTER 138

DTD for Subscriber Management Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-subscriber-management.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565


```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-subscriber-management.dtd -->

<!ELEMENT no-information (#PCDATA)>

<!ELEMENT subscriber-management-chassisd-issu-state (#PCDATA)>

<!ELEMENT subscriber-management-db (#PCDATA)>

<!ELEMENT subscriber-management-gres (#PCDATA)>

<!ELEMENT subscriber-management-issu-state (#PCDATA)>

<!ELEMENT subscriber-management-issu-wait (#PCDATA)>

<!ELEMENT subscriber-management-mastership (#PCDATA)>

<!ELEMENT subscriber-management-summary-information (subscriber-management-gres
| subscriber-management-mastership | subscriber-management-db |
subscriber-management-chassisd-issu-state | subscriber-management-issu-state |
subscriber-management-issu-wait | no-information)*>
```

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CHAPTER 139

DTD for Subscribers Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-subscribers.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-subscribers.dtd -->

<!ELEMENT access-type (#PCDATA)>

<!ELEMENT adfv4-input-filter-name (#PCDATA)>

<!ELEMENT adfv4-input-rule (#PCDATA)>

<!ELEMENT adfv4-input-rule-decoded (#PCDATA)>

<!ELEMENT adfv4-output-filter-name (#PCDATA)>

<!ELEMENT adfv4-output-rule (#PCDATA)>

<!ELEMENT adfv4-output-rule-decoded (#PCDATA)>

<!ELEMENT adfv6-input-filter-name (#PCDATA)>

<!ELEMENT adfv6-input-rule (#PCDATA)>

<!ELEMENT adfv6-input-rule-decoded (#PCDATA)>

<!ELEMENT adfv6-output-filter-name (#PCDATA)>

<!ELEMENT adfv6-output-rule (#PCDATA)>

<!ELEMENT adfv6-output-rule-decoded (#PCDATA)>

<!ELEMENT agent-circuit-id (#PCDATA)>

<!ELEMENT agent-remote-id (#PCDATA)>
```

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```
<!ELEMENT config-bit-access-internal (#PCDATA)>

<!ELEMENT config-bit-cos (#PCDATA)>

<!ELEMENT config-bit-ifl-filter (#PCDATA)>

<!ELEMENT config-bit-iflset (#PCDATA)>

<!ELEMENT config-bit-igmp (#PCDATA)>

<!ELEMENT config-bit-inet (#PCDATA)>

<!ELEMENT config-bit-inet-filter (#PCDATA)>

<!ELEMENT config-bit-inet-service (#PCDATA)>

<!ELEMENT config-bit-inet6 (#PCDATA)>

<!ELEMENT config-bit-inet6-filter (#PCDATA)>

<!ELEMENT config-bit-inet6-service (#PCDATA)>

<!ELEMENT config-bit-interface (#PCDATA)>

<!ELEMENT config-bit-li (#PCDATA)>

<!ELEMENT config-bit-mld (#PCDATA)>

<!ELEMENT config-bit-ra (#PCDATA)>

<!ELEMENT config-bit-routing-instance (#PCDATA)>

<!ELEMENT config-bit-routing-options (#PCDATA)>

<!ELEMENT config-bit-unknown (#PCDATA)>

<!ELEMENT config-bit-vpls (#PCDATA)>

<!ELEMENT counters (session-total | session-state-init | session-state-configured
 | session-state-active | session-state-terminating | session-state-terminated |
 session-state-unknown | session-state-total | session-type-none |
session-type-dhcp | session-type-vlan | session-type-generic |
session-type-mobileip | session-type-vpls-pw | session-type-ppp |
session-type-pppoe | session-type-l2tp | session-type-static | session-type-mlppp
 | session-type-xauth | session-type-fwauth | session-type-dot1x |
session-type-unknown | session-type-total | ifl-type-none | ifl-type-static |
ifl-type-dynamic | ifl-type-unknown | config-bit-interface | config-bit-inet |
config-bit-inet-filter | config-bit-inet-service | config-bit-routing-instance |
 config-bit-routing-options | config-bit-igmp | config-bit-cos | config-bit-inet6
 | config-bit-inet6-filter | config-bit-inet6-service | config-bit-mld |
config-bit-li | config-bit-ra | config-bit-ifl-filter | config-bit-access-internal
 | config-bit-iflset | config-bit-vpls | config-bit-unknown | lsri-name |
lsri-count | lsri-total)*>
<!ATTLIST counters junos:style CDATA #IMPLIED>

<!ELEMENT dhcp-options (#PCDATA)>

<!ELEMENT error (input-error-message)*>
<!ATTLIST error junos:style CDATA #IMPLIED>

<!ELEMENT gw-address (#PCDATA)>
```


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```
<!ELEMENT hex-data (#PCDATA)>
<!ELEMENT idle-timeout (#PCDATA)>
<!ELEMENT ifl-input-filter-name (#PCDATA)>
<!ELEMENT ifl-output-filter-name (#PCDATA)>
<!ELEMENT ifl-type-dynamic (#PCDATA)>
<!ELEMENT ifl-type-none (#PCDATA)>
<!ELEMENT ifl-type-static (#PCDATA)>
<!ELEMENT ifl-type-unknown (#PCDATA)>
<!ELEMENT input-error-message (#PCDATA)>
<!ELEMENT interface (#PCDATA)>
<!ELEMENT interface-set-name (#PCDATA)>
<!ELEMENT interface-set-type (#PCDATA)>
<!ELEMENT interface-type (#PCDATA)>
<!ELEMENT ip-address (#PCDATA)>
<!ELEMENT ip-netmask (#PCDATA)>
<!ELEMENT ipv4-input-filter-name (#PCDATA)>
<!ELEMENT ipv4-output-filter-name (#PCDATA)>
<!ELEMENT ipv6-address (#PCDATA)>
<!ELEMENT ipv6-address-pool (#PCDATA)>
<!ELEMENT ipv6-framed-interface-id (#PCDATA)>
<!ELEMENT ipv6-input-filter-name (#PCDATA)>
<!ELEMENT ipv6-interface-address (#PCDATA)>
<!ELEMENT ipv6-ndra-prefix (#PCDATA)>
<!ELEMENT ipv6-network-prefix-length (#PCDATA)>
<!ELEMENT ipv6-output-filter-name (#PCDATA)>
<!ELEMENT ipv6-prefix (#PCDATA)>
<!ELEMENT ipv6-primary-dns-address (#PCDATA)>
<!ELEMENT ipv6-secondary-dns-address (#PCDATA)>
<!ELEMENT ipv6-user-prefix (#PCDATA)>
<!ELEMENT l2pol-input-filter-name (#PCDATA)>
```

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```
<!ELEMENT l2pol-output-filter-name (#PCDATA)>
<!ELEMENT local-ip-address (#PCDATA)>
<!ELEMENT logical-system (#PCDATA)>
<!ELEMENT login-time (#PCDATA)>
<!ELEMENT lsri-count (#PCDATA)>
<!ELEMENT lsri-name (#PCDATA)>
<!ELEMENT lsri-total (#PCDATA)>
<!ELEMENT mac-address (#PCDATA)>
<!ELEMENT no-attributes (#PCDATA)>
<!ELEMENT number-of-active-subscribers (#PCDATA)>
<!ELEMENT number-of-service-sessions (#PCDATA)>
<!ELEMENT number-of-subscribers (#PCDATA)>
<!ELEMENT ppp-state (#PCDATA)>
<!ELEMENT primary-dns-address (#PCDATA)>
<!ELEMENT private-data (#PCDATA)>
<!ELEMENT profile (#PCDATA)>
<!ELEMENT profile-version (#PCDATA)>
<!ELEMENT radius-accounting-id (#PCDATA)>
<!ELEMENT remote-ip-address (#PCDATA)>
<!ELEMENT routing-instance (#PCDATA)>
<!ELEMENT secondary-dns-address (#PCDATA)>
<!ELEMENT server-dhcp-options (#PCDATA)>
<!ELEMENT service-session-id (#PCDATA)>
<!ELEMENT service-session-ids (#PCDATA)>
<!ELEMENT service-session-name (#PCDATA)>
<!ELEMENT service-session-version (#PCDATA)>
<!ELEMENT session-id (#PCDATA)>
<!ELEMENT session-state-active (#PCDATA)>
<!ELEMENT session-state-configured (#PCDATA)>
<!ELEMENT session-state-init (#PCDATA)>
<!ELEMENT session-state-terminated (#PCDATA)>
```


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```
<!ELEMENT session-state-terminating (#PCDATA)>

<!ELEMENT session-state-total (#PCDATA)>

<!ELEMENT session-state-unknown (#PCDATA)>

<!ELEMENT session-timeout (#PCDATA)>

<!ELEMENT session-total (#PCDATA)>

<!ELEMENT session-type-dhcp (#PCDATA)>

<!ELEMENT session-type-dot1x (#PCDATA)>

<!ELEMENT session-type-fwauth (#PCDATA)>

<!ELEMENT session-type-generic (#PCDATA)>

<!ELEMENT session-type-l2tp (#PCDATA)>

<!ELEMENT session-type-mlppp (#PCDATA)>

<!ELEMENT session-type-mobileip (#PCDATA)>

<!ELEMENT session-type-none (#PCDATA)>

<!ELEMENT session-type-ppp (#PCDATA)>

<!ELEMENT session-type-pppoe (#PCDATA)>

<!ELEMENT session-type-static (#PCDATA)>

<!ELEMENT session-type-total (#PCDATA)>

<!ELEMENT session-type-unknown (#PCDATA)>

<!ELEMENT session-type-vlan (#PCDATA)>

<!ELEMENT session-type-vpls-pw (#PCDATA)>

<!ELEMENT session-type-xauth (#PCDATA)>

<!ELEMENT stacked-vlan-id (#PCDATA)>

<!ELEMENT state (#PCDATA)>

<!ELEMENT subscriber (access-type | user-name | ip-address | ip-netmask |
ipv6-address | ipv6-network-prefix-length | ipv6-prefix | ipv6-address-pool |
logical-system | routing-instance | interface | interface-type | stacked-vlan-id
 | vlan-id | profile | profile-version | mac-address | login-time | state |
interface-set-name | interface-set-type | local-ip-address | remote-ip-address |
 ipv6-ndra-prefix | ipv6-interface-address | ipv6-framed-interface-id |
ipv6-user-prefix | ppp-state | gw-address | radius-accounting-id | session-id |
underlying-session-id | session-timeout | idle-timeout | agent-circuit-id |
agent-remote-id | ipv4-input-filter-name | ipv4-output-filter-name |
ipv6-input-filter-name | ipv6-output-filter-name | ifl-input-filter-name |
ifl-output-filter-name | adfv4-input-filter-name | adfv4-input-rule |
adfv4-input-rule-decoded | adfv4-output-filter-name | adfv4-output-rule |
adfv4-output-rule-decoded | adfv6-input-filter-name | adfv6-input-rule |
adfv6-input-rule-decoded | adfv6-output-filter-name | adfv6-output-rule |
```

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```
adfv6-output-rule-decoded | vpls-input-filter-name | vpls-output-filter-name |
l2pol-input-filter-name | l2pol-output-filter-name | subscriber-id |
service-session-ids | service-session-id | service-session-name |
service-session-version | number-of-service-sessions | number-of-subscribers |
number-of-active-subscribers | private-data | hex-data | dhcp-options |
server-dhcp-options | primary-dns-address | secondary-dns-address |
ipv6-primary-dns-address | ipv6-secondary-dns-address | no-attributes)*>
<!ATTLIST subscriber junos:style CDATA #IMPLIED>

<!ELEMENT subscriber-id (#PCDATA)>

<!ELEMENT subscribers-information (subscriber | error)*>

<!ELEMENT subscribers-summary-information (counters)*>

<!ELEMENT underlying-session-id (#PCDATA)>

<!ELEMENT user-name (#PCDATA)>

<!ELEMENT vlan-id (#PCDATA)>

<!ELEMENT vpls-input-filter-name (#PCDATA)>

<!ELEMENT vpls-output-filter-name (#PCDATA)>
```


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CHAPTER 140

DTD for Switchover Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-switchover.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-switchover.dtd -->

<!ELEMENT configuration-ready EMPTY>

<!ELEMENT configuration-state (configuration-ready | configuration-synchronizing
 | configuration-synchronize-error)*>

<!ELEMENT configuration-synchronize-error EMPTY>

<!ELEMENT configuration-synchronizing EMPTY>

<!ELEMENT gres-mode EMPTY>

<!ELEMENT multi-routing-engine-item (re-name | switchover-information)*>

<!ELEMENT multi-routing-engine-results (multi-routing-engine-item)*>

<!ELEMENT multichassis-mode EMPTY>

<!ELEMENT peer-connected EMPTY>

<!ELEMENT peer-in-steady-state EMPTY>

<!ELEMENT peer-transition-state (peer-connected | peer-in-steady-state)*>

<!ELEMENT re-name (#PCDATA)>

<!ELEMENT replication-connection-error EMPTY>

<!ELEMENT replication-error EMPTY>

<!ELEMENT replication-init-error EMPTY>
```

```
<!ELEMENT replication-ready EMPTY>

<!ELEMENT replication-reconnect-error EMPTY>

<!ELEMENT replication-relay-enable EMPTY>

<!ELEMENT replication-state (replication-ready | replication-synchronizing |
replication-error | replication-version-mismatch | replication-connection-error
| replication-reconnect-error | replication-init-error |
replication-relay-enable)*>

<!ELEMENT replication-synchronizing EMPTY>

<!ELEMENT replication-version-mismatch EMPTY>

<!ELEMENT switchover-information (switchover-state | switchover-mode |
configuration-state | replication-state | peer-transition-state)*>

<!ELEMENT switchover-mode (multichassis-mode | gres-mode | unknown-mode)*>

<!ELEMENT switchover-state (#PCDATA)>

<!ELEMENT unknown-mode EMPTY>
```


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CHAPTER 141

DTD for VRRPD Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-vrrpd.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-vrrpd.dtd -->

<!ELEMENT accept-data-mode (#PCDATA)>

<!ELEMENT active (#PCDATA)>

<!ELEMENT active-group (#PCDATA)>

<!ELEMENT active-inherit (vrrp-mode | active-node | active-group | accept-data-mode
 | vip-count | vip | active-router-ip | virtual-mac)*>
<!ATTLIST active-inherit junos:style CDATA #IMPLIED>

<!ELEMENT active-node (#PCDATA)>

<!ELEMENT active-router-ip (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT advertisement-interval (#PCDATA)>

<!ELEMENT advertisement-received (#PCDATA)>

<!ELEMENT advertisement-sent (#PCDATA)>

<!ELEMENT advertisement-threshold (#PCDATA)>

<!ELEMENT advertisement-timer (#PCDATA)>

<!ELEMENT authentication-type (#PCDATA)>

<!ELEMENT backup-master-transitions (#PCDATA)>
```

```
<!ELEMENT bad-advertisement-timer-received (#PCDATA)>

<!ELEMENT bad-authentication-type-received (#PCDATA)>

<!ELEMENT bad-md5-digest-received (#PCDATA)>

<!ELEMENT bad-password-received (#PCDATA)>

<!ELEMENT bad-vip-count-received (#PCDATA)>

<!ELEMENT bad-vipaddr-received (#PCDATA)>

<!ELEMENT bandwidth (bandwidth-threshold | bandwidth-priority-cost |
bandwidth-active | priority-down-status | priority-cost | priority-active)*>
<!ATTLIST bandwidth junos:style CDATA #IMPLIED>

<!ELEMENT bandwidth-active (#PCDATA)>

<!ELEMENT bandwidth-priority-cost (#PCDATA)>

<!ELEMENT bandwidth-threshold (#PCDATA)>

<!ELEMENT computed-send-rate (#PCDATA)>

<!ELEMENT configured-priority (#PCDATA)>

<!ELEMENT current-priority (#PCDATA)>

<!ELEMENT current-priority-cost (#PCDATA)>

<!ELEMENT dead-timer (#PCDATA)>

<!ELEMENT delay (#PCDATA)>

<!ELEMENT delay-violations (#PCDATA)>

<!ELEMENT delay-violations-rate (#PCDATA)>

<!ELEMENT expiration-rate (#PCDATA)>

<!ELEMENT expirations (#PCDATA)>

<!ELEMENT group (#PCDATA)>

<!ELEMENT group-priority (#PCDATA)>

<!ELEMENT group-vrrp-pdu-error-statistics (bad-authentication-type-received |
bad-password-received | bad-md5-digest-received | bad-advertisement-timer-received
 | bad-vip-count-received | bad-vipaddr-received)*>
<!ATTLIST group-vrrp-pdu-error-statistics junos:style CDATA #IMPLIED>

<!ELEMENT group-vrrp-pdu-statistics (advertisement-sent | advertisement-received)*>
<!ATTLIST group-vrrp-pdu-statistics junos:style CDATA #IMPLIED>

<!ELEMENT group-vrrp-state-transition-statistics (idle-master-transitions |
idle-backup-transitions | backup-master-transitions | master-backup-transitions)*>
<!ATTLIST group-vrrp-state-transition-statistics junos:style CDATA #IMPLIED>

<!ELEMENT groups (#PCDATA)>

<!ELEMENT idle-backup-transitions (#PCDATA)>
```


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```
<!ELEMENT idle-master-transitions (#PCDATA)>
<!ELEMENT index (#PCDATA)>
<!ELEMENT interface (#PCDATA)>
<!ELEMENT interface-count (#PCDATA)>
<!ELEMENT interface-index (#PCDATA)>
<!ELEMENT interface-speed (#PCDATA)>
<!ELEMENT interface-state (#PCDATA)>
<!ELEMENT interface-tracking-state (#PCDATA)>
<!ELEMENT invalid-ipah-next-type-received (#PCDATA)>
<!ELEMENT invalid-vrrp-authentication-type-received (#PCDATA)>
<!ELEMENT invalid-vrrp-checksum-received (#PCDATA)>
<!ELEMENT invalid-vrrp-ip-count-received (#PCDATA)>
<!ELEMENT invalid-vrrp-pdu-type-received (#PCDATA)>
<!ELEMENT invalid-vrrp-ttl-value-received (#PCDATA)>
<!ELEMENT invalid-vrrp-version-received (#PCDATA)>
<!ELEMENT local-interface-address (#PCDATA)>
<!ELEMENT master-backup-transitions (#PCDATA)>
<!ELEMENT master-priority (#PCDATA)>
<!ELEMENT master-router (#PCDATA)>
<!ELEMENT master-router-ip (#PCDATA)>
<!ELEMENT master-router-uptime (#PCDATA)>
<!ELEMENT message (#PCDATA)>
<!ELEMENT missed-three-consecutive-send (#PCDATA)>
<!ELEMENT no-group-match-received (#PCDATA)>
<!ELEMENT packets-received (#PCDATA)>
<!ELEMENT parse-time (#PCDATA)>
<!ELEMENT peak-delay-violations-rate (#PCDATA)>
<!ELEMENT peak-expiration-rate (#PCDATA)>
<!ELEMENT peak-receive-rate (#PCDATA)>
<!ELEMENT peak-send-rate (#PCDATA)>
```

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```
<!ELEMENT pending-priority (#PCDATA)>

<!ELEMENT physical-interface (#PCDATA)>

<!ELEMENT preempt (#PCDATA)>

<!ELEMENT preempt-hold (preempt | preempt-hold-time | accept-data-mode | vip-count
 | vip)*>
<!ATTLIST preempt-hold junos:style CDATA #IMPLIED>

<!ELEMENT preempt-hold-time (#PCDATA)>

<!ELEMENT priority-active (#PCDATA)>

<!ELEMENT priority-cost (#PCDATA)>

<!ELEMENT priority-down-status (#PCDATA)>

<!ELEMENT priority-hold-time (#PCDATA)>

<!ELEMENT receive-rate (#PCDATA)>

<!ELEMENT remaining-time (#PCDATA)>

<!ELEMENT route-addr (#PCDATA)>

<!ELEMENT route-count (#PCDATA)>

<!ELEMENT route-instance (#PCDATA)>

<!ELEMENT route-priority (#PCDATA)>

<!ELEMENT route-state (#PCDATA)>

<!ELEMENT route-tracking-state (#PCDATA)>

<!ELEMENT router-ip (#PCDATA)>

<!ELEMENT send-rate (#PCDATA)>

<!ELEMENT snmp-interface-index (#PCDATA)>

<!ELEMENT timer-name (#PCDATA)>

<!ELEMENT timer-value (#PCDATA)>

<!ELEMENT track-route-entry (route-addr | route-state | route-priority | interface
 | group | configured-priority | current-priority | vrrp-state)*>
<!ATTLIST track-route-entry junos:style CDATA #IMPLIED>

<!ELEMENT track-route-node-information (route-addr | route-instance | route-state
 | route-priority)*>
<!ATTLIST track-route-node-information junos:style CDATA #IMPLIED>

<!ELEMENT track-vrrpd-interface (tracked-interface | interface-state |
interface-speed | current-priority-cost | bandwidth)*>
<!ATTLIST track-vrrpd-interface junos:style CDATA #IMPLIED>

<!ELEMENT tracked-interface (#PCDATA)>

<!ELEMENT tracking (#PCDATA)>
```


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```
<!ELEMENT unit (#PCDATA)>

<!ELEMENT vip (#PCDATA)>

<!ELEMENT vip-count (#PCDATA)>

<!ELEMENT virtual-ip-address (#PCDATA)>

<!ELEMENT virtual-mac (#PCDATA)>

<!ELEMENT virtual-router-uptime (#PCDATA)>

<!ELEMENT vlan-address (#PCDATA)>

<!ELEMENT vlan-id (#PCDATA)>

<!ELEMENT vlan-tag (#PCDATA)>

<!ELEMENT vrrp-information (vrrp-interface)*>
<!ATTLIST vrrp-information junos:style CDATA #IMPLIED>

<!ELEMENT vrrp-interface (groups | active | physical-interface | interface |
address | interface-state | group | vrrp-state | timer-name | timer-value |
local-interface-address | vrrp-vlan | bandwidth | group-vrrp-pdu-statistics |
group-vrrp-pdu-error-statistics | group-vrrp-state-transition-statistics |
preempt-hold | virtual-ip-address | unit | index | interface-index |
snmp-interface-index | vrrp-traps | group-priority | advertisement-interval |
authentication-type | advertisement-threshold | computed-send-rate | preempt |
accept-data-mode | vip-count | vip | dead-timer | master-priority |
master-router-ip | active-router-ip | master-router | router-ip |
virtual-router-uptime | master-router-uptime | virtual-mac | tracking |
preempt-hold-time | current-priority | configured-priority | priority-hold-time
| remaining-time | pending-priority | interface-tracking-state | interface-count
 | route-tracking-state | route-count | interface-speed | current-priority-cost
| tracked-interface | track-route-node-information | track-vrrpd-interface |
track-route-entry | vrrp-message | invalid-ipah-next-type-received |
invalid-vrrp-ttl-value-received | invalid-vrrp-version-received |
invalid-vrrp-pdu-type-received | invalid-vrrp-authentication-type-received |
invalid-vrrp-ip-count-received | invalid-vrrp-checksum-received |
advertisement-timer | packets-received | no-group-match-received |
advertisement-sent | advertisement-received | vrrp-mode | active-node |
active-group | active-inherit)*>

<!ELEMENT vrrp-interface-profile (interface | unit | group | advertisement-timer
 | delay)*>

<!ELEMENT vrrp-message (message)*>

<!ELEMENT vrrp-mode (#PCDATA)>

<!ELEMENT vrrp-profile-statistics (vrrp-interface-profile | parse-time |
delay-violations | delay-violations-rate | peak-delay-violations-rate |
missed-three-consecutive-send | send-rate | peak-send-rate | receive-rate |
peak-receive-rate | expirations | expiration-rate | peak-expiration-rate)*>

<!ELEMENT vrrp-state (#PCDATA)>

<!ELEMENT vrrp-traps (#PCDATA)>

<!ELEMENT vrrp-vlan (physical-interface | unit | vlan-id | vlan-tag |
```

```
vlan-address)*>
<!ATTLIST vrrp-vlan junos:style CDATA #IMPLIED>
```


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CHAPTER 142

DTD for X.509 Certificate Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called junos-x509-certificate.dtd. To review reference pages for the tags, see:

- Operational Response Tag Elements Applicable to All Platforms on page 2181
- Operational Response Tag Elements Common to M, MX, T Series, and SRX Series on page 7159
- Operational Response Tag Elements Common to EX Series, QFX Series, and SRX Series on page 7405
- Operational Response Tag Elements Specific to SRX Series on page 7565

```
<!-- Copyright (c) 2000-2012, Juniper Networks, Inc. -->
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<!-- junos-x509-certificate.dtd -->

<!ELEMENT alternate-subject (#PCDATA)>

<!ELEMENT alternate-subject-list (alternate-subject)*>

<!ELEMENT auto-re-enrollment (auto-re-enrollment-status |
auto-re-enrollment-next-trigger-time)*>

<!ELEMENT auto-re-enrollment-next-trigger-time (#PCDATA)>

<!ELEMENT auto-re-enrollment-status (#PCDATA)>

<!ELEMENT certificate-type (#PCDATA)>

<!ELEMENT common-name (#PCDATA)>

<!ELEMENT country-name (#PCDATA)>

<!ELEMENT crl-issuer (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject-list (crl-issuer-alternate-subject)*>

<!ELEMENT crl-issuer-detail (distinguished-name)*>

<!ELEMENT crl-number (#PCDATA)>

<!ELEMENT crl-revocation-date (#PCDATA)>

<!ELEMENT crl-revocation-list (revoked-cert-serial-number | crl-revocation-date)*>
```

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```
<!ELEMENT crl-validity (effective-date | next-update)*>

<!ELEMENT crl-version (#PCDATA)>

<!ELEMENT distinguished-name (organization-name | organizational-unit-name |
country-name | state-or-province-name | locality-name | common-name | email-address
 | domain-component)*>

<!ELEMENT distribution-crl (#PCDATA)>

<!ELEMENT distribution-crl-list (distribution-crl)*>

<!ELEMENT domain-component (#PCDATA)>

<!ELEMENT effective-date (#PCDATA)>

<!ELEMENT email-address (#PCDATA)>

<!ELEMENT fingerprint (fingerprint-hash-algorithm | fingerprint-content)*>

<!ELEMENT fingerprint-content (#PCDATA)>

<!ELEMENT fingerprint-hash-algorithm (#PCDATA)>

<!ELEMENT identifier (#PCDATA)>

<!ELEMENT issue-info (recipient | issued-by)*>

<!ELEMENT issued-by (#PCDATA)>

<!ELEMENT issuer (distinguished-name)*>

<!ELEMENT key-contents (#PCDATA)>

<!ELEMENT key-usage (#PCDATA)>

<!ELEMENT key-usage-list (key-usage)*>

<!ELEMENT locality-name (#PCDATA)>

<!ELEMENT next-update (#PCDATA)>

<!ELEMENT not-after (#PCDATA)>

<!ELEMENT not-before (#PCDATA)>

<!ELEMENT organization-name (#PCDATA)>

<!ELEMENT organizational-unit-name (#PCDATA)>

<!ELEMENT public-key (public-key-algorithm | public-key-length |
public-key-verification-status)*>

<!ELEMENT public-key-algorithm (#PCDATA)>

<!ELEMENT public-key-contents-list (key-contents)*>

<!ELEMENT public-key-length (#PCDATA)>

<!ELEMENT public-key-verification-status (#PCDATA)>
```


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```
<!ELEMENT recipient (#PCDATA)>

<!ELEMENT revoked-cert-serial-number (#PCDATA)>

<!ELEMENT serial-number-list (serial-number-x509)*>

<!ELEMENT serial-number-x509 (#PCDATA)>

<!ELEMENT signature-algorithm (#PCDATA)>

<!ELEMENT state-or-province-name (#PCDATA)>

<!ELEMENT status (#PCDATA)>

<!ELEMENT subject (distinguished-name)*>

<!ELEMENT validity (not-before | not-after)*>

<!ELEMENT version (#PCDATA)>

<!ELEMENT x509-certificate-add-results (x509-certificate-add-success |
x509-certificate-info)*>

<!ELEMENT x509-certificate-add-success EMPTY>

<!ELEMENT x509-certificate-info (issue-info | serial-number-list | public-key |
fingerprint | public-key-contents-list | alternate-subject-list | key-usage-list
 | distribution-crl-list | signature-algorithm | identifier | validity | version
 | auto-re-enrollment | certificate-type | status | issuer | subject)*>
<!ATTLIST x509-certificate-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-certificate-info-list (x509-certificate-info)*>

<!ELEMENT x509-crl-information (crl-number | crl-revocation-list | crl-validity
| crl-version | crl-issuer | identifier | crl-issuer-alternate-subject-list |
crl-issuer-detail)*>
<!ATTLIST x509-crl-information junos:style CDATA #IMPLIED>
```

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